

https://dspace.org/

Prevalence and predictors of psychosocial outcomes amongst socioeconomically deprived primary school children in a rural setting in South Africa: the role of ecological factors

Hlungwani, Tintswalo Mercy

2015
http://hdl.handle.net/10539/18484

Downloaded from a DSpace repository. https://dspace.org/

Prevalence and predictors of psychosocial outcomes amongst socioeconomically deprived primary school children in a rural setting in South Africa: The role of ecological factors.

Tintswalo Mercy Hlungwani

A dissertation submitted for Doctor of Philosophy in the Faculty of Health Sciences: March 2015

ABSTRACT

Background

South Africa is passing through a phase of transition and children living in the country are still subject to many social and financial problems. They face high levels of social adversity, socio-economic deprivation, migration, displacement and morbidity. Rural South African children's right to education and physical and mental health remains unfulfilled because of exposure to on-going adversity including poverty, family disruption through labour migration, malnutrition, inter-personal violence, chronic illness and death of family members due to HIV/AIDS. Although numerous studies highlight psychosocial problems amongst these children in South Africa and even document risk factors, there is paucity of studies that have focused on rural children's mental health with consideration to both protective and risk factors. The study is focused on primary school children aged 8-12 in grades 5 and 6. It examines the prevalence of psychosocial problems among these children and determines the socio-demographic factors which can serve as predictors of psychological outcomes in these children. The study looks at both risk factors and protective factors as predictors of said psychological outcomes.

Methods

In terms of research methods, this research is divided into four components

- A quantitative component using questionnaire completed by learners and teachers with scales to assess psychosocial functioning and prevalence of difficulties.
- A quantitative component to examine risk and protective factors on children's psychosocial functioning. Data from the first component of the study has been linked to census data from the past 18 years in the study site in order to match each child to their household. This has allowed for examination of various risk and protective factors (i.e., migration, socioeconomic status, or parental education level).
- Qualitative and quantitative description of social networks for vulnerable children that exist in the study area. This was from questionnaires completed by members of school governing bodies measuring both ordinal and nominal variables.
- A qualitative component using semi-structured interviews with 20 learners to establish the beliefs about the help they need in the area.

Results

It was found that behavioural problems and anxiety are the most prevalent psychosocial problems among children of Agincourt. Age, gender and grade of children were found to be a very important factor for determining the psychosocial outcome in children. Age and gender, despite having strong correlation, were not controlled for each other in the statistical test and this limitation ought to be taken into account. Mothers' education can serve as an important protective factor for negative cognitive interpretation and emotional difficulties of children. In addition, the relationship status of the mother, irrespective of relationship type, is also an important determiner of behavioural problem in children. Other socio-demographic factors like perception of safety in school, nutrition, social support, knowledge about HIV and others are found to have significant correlations with psychological problems. However, through regression analysis it was found that the variables suffer from multicollinearity problem. The themes obtained from the thematic analysis indicate that the learners encounter different types of problems at home and at school interfering with learning. School management assessment showed that the majority of the schools were focused on learning and were efficiently managing time. Social network analysis showed that SGB members are working at varied positions within the schools.

Conclusion

The study has proved through its findings the importance of mother's education, social support from family, and availability of proper diet (nutrition) in protecting children from the psychosocial problems, in addition to the confirmation of the risk factors such as unsafe school environment, caregiver illness, and others. The study, thus, concludes that the environment in which a child develops play a vital role in the psychosocial development of children and changes are needed at social, familial, and school level to protect children from psychosocial problems.

DECLARATION

I declare that this research is my own unaided work. It is being submitted for the degree of Doctor of Philosophy in the Faculty of Health Sciences, University of the Witwatersrand, Johannesburg.

It has not been submitted for any other degree at the University of the Witwatersrand, nor at any other university before.

I have not fabricated data or falsified results and no portion or elements of another person's work have been taken as my own credit. Credits accurately reflect the individuals, organisations and/or institutions concerned.

……..

……day of…….2015

ACKNOWLEDGEMENTS

This project was only possible due to the common interests and collaboration of many people and institutions, especially Professor Debora Prothrow-Stith from Harvard University, Prof Steve Tollman and Prof Kathleen Kahn from the University of the Witwatersrand, Prof Alan Stein from Oxford University, Dr Sue Golstein, Dr Renay Weiner and Nelisiwe Hlophe from Soul City Institute for Health and Development Communication and Officials from Mpumalanga Department of Education.

Firstly, I would like to thank Professors Stephen Tollman and Kathleen Kahn for giving me the opportunity and support in order to carry out my research the at the Agincourt MRC/Wits Rural Public Health and Health Transitions Research Unit, School of Public Health, University of the Witwatersrand. My experience would not have been the same without them and the staff of the unit i.e. Dr Mark Collinson, Afolabi Sulaimon, Rhian Twine, Jeffrey Tibane, Doreen Nkuna, Violet Chela and Mildred Shabangu.

I would also like to thank Professor Merryll Voster and Dr Lucie Cluver for supervising the study and for looking over final drafts and for their overall input in my project.

A special thanks goes out to everyone who helped with my research out in the field: Nehemia Shilubane, Moses Mathabela, Reagan Gumede, Deborah Ncube, Samson Khosa and all principals, teachers, school governing body members and primary school children from participating schools in the Agincourt Demographic Surveillance Site, I owe a lot to these people and will never forget their efforts and the joy of being out in the field with them.

This project would not have been possible without the additional information that certain researchers gave me. Thank you very much to: Professor Leroy White, Dr Melissa Cortina, Dr Mina Fazel and Dr Lucie Cluver.

Special thanks go out to Soul City Institute for Health and Development Communication, for their support and providing the funds necessary for this project to be realised. I would also like to thank the School of Public Health at Wits University and especially all the members of staff and children affiliated to the Multidisciplinary PhD programme for their support throughout my studies.

I would like to thank my family, for both motivating me and granting me with an experience of a lifetime that I will always treasure; especially my mother, Mrs Anna Hlungwani who kept me well fed and looked after me both physically and spiritually throughout all the trials and tribulations in the journey of my study. I will not forget all the words of wisdom and encouragement from my father Advocate Misengi Abel Hlungwani and for always singing his favourite hymn, **"*Morena o mphe matla, ke se we mohlomong*"** which means "***God give me strength so that I do not stumble and fall".***

Table of Contents

ABSTRACT ii

DECLARATION iv

ACKNOWLEDGEMENTS v

LIST OF TABLES xviii

LIST OF FIGURES xix

CHAPTER 1: INTRODUCTION TO THE STUDY 22

1.2.1. Psychosocial Problems 24

1.2.2. Risk factors 25

1.2.3. Protective factors 25

1.2.4. Emotional and Behavioural Problems ..... 26_

1.2.5. Externalizing and Internalizing Problems 26

1.2.6. Cognitive Problems/Style 27

1.6. Hypotheses 29

CHAPTER 2: LITERATURE REVIEW 32

2.1. Introduction to the chapter 32

2.2. Theoretical Framework 33

2.2.1. Theory of Cumulative Disadvantage 33

2.2.2. Erikson's Theory of Psychosocial Development: 38

2.3. Conceptual Model – Social Ecological Model 43

2.3.1. Micro-system 45

2.3.2. Meso-system 46

2.3.3. Exo-system..... 46

2.3.4. Macro-system 46

2.3.5. Chrono-System..... 47

2.4. Prevalence of psychosocial problems in children..... 47

2.5. Predictors of psychosocial problems in children..... 48

2.5.1. Risk and Protective Factor – Micro-systems and Meso-Systems 49

2.5.2. Moderator – Exo-systems and Macro-systems: 51

2.5.3. Child Belief about the needed help..... 54

2.6. Summary and Hypothesis Building..... 54

CHAPTER 3: RESEARCH METHODOLOGY 56

3.1 Introduction..... 56

3.2. Research Aim, Questions and Hypotheses 56

3.3. Overview of Research Design 57

3.3.1. Components of Research Methods: 57

3.3.2. The Setting..... 58

3.3.3. The study population..... 59

3.3.4. Infrastructure and Housing 60

3.3.5 Healthcare Facilities..... 61

3.3.6 Schooling 62

3.3.7 Power Calculations and Sample Size..... 63

3.3.8. Sampling 64

3.4. Quantitative Component to Assess Prevalence of Psychosocial Difficulties 65

3.4.1 Child questionnaire 65

3.4.2 Teacher SDQ questionnaire 70

3.5. Quantitative Component to Examine Socio-Demographic, Protective and Risk Factors . 71

3.5.1. AHDSS Data 71

3.5.2. Children's Questionnaire 71

3.5.3. Translation and Back Translation 76

3.5.4. Piloting the questionnaire 76

3.6. Qualitative and Quantitative Component for Describing Social and School Support 78

3.6.1. School Governing Body Members Questionnaire 78

3.6.2. School Management Assessment 79

3.7. Qualitative Component Analysing Children's Beliefs about the Help They Need 80

3.7.1. Research Design 80

3.7.2. Sampling 80

3.7.3. Profile of participants 81

3.7.4 Interviews 82

3.7.5 Interview guide 83

3.8. Data 83

3.8.1. Data Quality 83

3.8.2. Data Entry 84

3.8.3. Data Cleaning 84
3.9. Research Ethics 85
3.9.1. Informed consent and voluntary participation 85
3.9.2 Confidentiality and Anonymity 87
3.9.3. Institutional approval 87
3.9.4. Minimising invasiveness 88
3.9.5. Ensuring Welfare of the Participant 88
3.10. Overview of Analytical Strategies 88
3.11. Summary 89
CHAPTER 4: RESULTS - PREVALENCE OF PSYCHOSOCIAL DIFFICULTIES AMONG CHILDREN 90
4.1. Introduction 90
4.2. Study Sample 90
4.3. Analytical Approach 91
4.4. Missing Values Analysis 91
4.5. Scales Measuring Different Domains of Psychosocial Problems 92
4.6. Child-Reported Prevalence of Psychosocial Problems 92
4.6.1. Behavioural Problems 93
4.6.2. Pro-social Behaviour 93
4.6.3. Self Esteem 94
4.6.4. Emotional Problems 94

4.7. Teacher-Reported Prevalence of Psychosocial Problems 94

4.8. Dimensional Examination of Psychosocial Difficulties 95

4.9. Summary 97

CHAPTER 5: RESULTS – IMPACT OF SOCIODEMOGRAPHIC AND BACKGROUND VARIABLES 99

5.1. Introduction 99

5.2. Analytical technique 99

5.3. Socio-demographic profile of the study sample 100

5.4. Socio-demographic data of the study sample obtained from AHDSS database 100

5.4.1. Household Head 101

5.4.2. Socio-Economic Status 101

5.4.3. Mothers status and location 101

5.4.4. Mothers' Education 101

5.4.5. Mother Union 102

3.4.6. Child's Birth-weight 102

5.4.7. Child Breastfeeding 102

5.4.8. Residence 102

5.4.9. Child Labour 102

5.5. Impact of socio-demographic variables on psychosocial outcome 104

5.5.1. Impact of Age on Prevalence of Psychosocial Problems 105

5.5.2. Impact of Gender on Prevalence of Psychosocial Problems 108

5.5.3. Impact of Grade on Prevalence of Psychosocial Problems 110

5.5.4. Impact of Socio-Demographic Factors on Mean Psychosocial Outcome 113

5.6. Summary 128

CHAPTER 6: RESULTS – FACTORS PREDICTING PSYCHOSOCIAL PROBLEMS IN CHILDREN 130

6.1. Introduction 130

6.2. Analytical techniques 130

6.3. Perception of School Environment 130

6.4. Safety at Schools 131

6.5. Social Support 135

6.6. Use of Alcohol 141

6.7. Attitude toward Violence and Alcohol Use 144

6.8. Nutrition 144

6.9. Grants 145

6.10. Stigma 146

6.11. Caregiver Illness 147

6.12. Caregiving responsibilities on child 150

6.13. Knowledge of and Attitude toward HIV/AIDS 152

6.14. Perception about Gender 154

6.15. Relationship between Factors and Psychosocial Problems in Children 155

6.15.1. Relationship with Perception of School Environment 155

6.15.2. Relationship with Safety at Schools 157

6.15.3. Relationship with Social Support 159

6.15.4. Relationship with Use of Alcohol 163

6.15.5. Relationship with Attitude toward Violence and Alcohol 164

6.15.6. Relationship with Nutrition 165

6.15.7. Relationship with Grants 165

6.15.8. Relationship with Stigma 165

6.15.9. Relationship with Caregiver Illness 167

6.15.10. Relationship with Caregiving Responsibilities on Children 167

6.15.11. Relationship with Knowledge of and Attitude toward HIV/AIDS 171

6.15.12. Relationship with Perception about Gender 173

6.16. Conclusion 173

CHAPTER 7: RESULTS – POTENTIAL PREDICTORS OF PSYCHOSOCIAL DIFFICULTIES 175

7.1. Analytical technique 175

7.2 Regression Analysis on Socio-demographic variables 176

7.2.1. Predictors of Behavioural Problems 176

7.2.2. Predictors of Pro-Social behaviour 177

7.2.3. Predictors of Self-Esteem 177

7.2.4. Predictors of Cognitive Problems 177

7.2.5. Predictors of Emotional Problems 178

7.3. Making inference of factors predicting psychosocial outcomes 178

7.4. Conclusion 179

CHAPTER 8: RESULTS – SCHOOL SUPPORT 180

8.1. Introduction 180

8.2. Analytical Approach 180

8.3. School Management Assessment 181

8.3.1. Results Obtained from Observation 181

8.3.2. Results Obtained from Interviews 182

8.3.3. Results Obtained from Document Review 185

8.4. Social Network Analysis 186

8.4.1. Survey Respondents 186

8.4.2. Types of Interaction 187

8.4.3. Frequency of Contact 189

8.4.4. Relationship Quality 189

8.4.5. Affiliation Network 189

8.4.6. Benefits of Interacting with organisations 190

8.4.7. Drawbacks of Interacting with organisations 191

8.5. Conclusion 192

CHAPTER 9: RESULTS – INTERVIEWS WITH CHILDREN 194

9.1. Introduction 194

9.2. Analytical Technique 194

9.3. Emerging Themes 195
9.4. Thematic Framework 196
9.4.1. Types of Problem Encountered by Learner 197
9.4.2. Deciding to Ask for Help 198
9.4.3. Concerns about Asking for Help 200
9.4.5. Qualities of Helper 202
9.4.6. Unhelpful Behaviours 203
9.4.7. Suitable Place to Talk 204
9.4.8. Help Outside School 204
9.5. Conclusion 205
CHAPTER 10: DISCUSSION 206
10.1. Introduction 206
10.2. Summary of Key Findings 206
10.3. Discussion 212
10.3.1. What is the prevalence of psychosocial difficulties amongst children in Grades 5 and 6 in the Agincourt area? 212
10.3.2. What are the risk factors that can increase the likelihood of psychosocial problems in these children? 215
10.3.3. What are the protective factors that can help children of Agincourt with psychosocial problems despite the presence of risk factors? 219
Chapter 11: Conclusion and Recommendations 222
11.1. Introduction 222

11.2. Conclusion 222

11.3. Recommendations Policy and Practice 222

11.4. Recommendations for Future Research 223

11.5. Limitations of the Study 223

References 225

APPENDICES

Appendix 1: Self report child questionnaire (English version)

Appendix 1(b): Self Report Questionnaire (Shangaan version)

Appendix 1(c): Summary of Components, Data sources and Domains of the Study: Self-Report Child Questionnaire

Appebix 1(d): Summary of Components, Data sources and Domains of the Study:Strenghts and Difficulties Questionnaire

Appendix 2: Strength and Difficulties questionnaire

Appendix 2 (b): Information obtained from the data base of the Agincourt Demographic

Surveillance Site matched to study participants variables

Appendix 3: Interview guide

Appendix 4: School Governing Body Social Network questionnaire

NGO'S for social Network analysis

Appendix 5: School Management Instrument

Appendix 6: Letter of permission from Department of Education

Appendix 7: Ethical Clearance from the University of the Witwatersrand

Appendix 8: Permission to conduct research at MRC/Wits Rural Public Health and Health Transitions Research Unit

Appendix 9: Information letter to parents and caregivers (English version)

Appendix 10: Consent form completed by parents and caregivers

Appendix 11: Information letter for learners (English version)

Appendix 12: Information sheet Parents and Caregivers about Learners interviews

Appendix 13: Letter to the School Principals

Appendix 14: Information letter to class teachers

Appendix 15: Information for Class teacher completeting Strengths and Difficulties Questionnaire

Appendix 16: Erikson Stages of Psychosocial Development

Appendix 17: Descriptive statistics

LIST OF TABLES

Table 2.1: Erikson's Stages of Psychosocial Development in Children

Table 3.1: Summary of Scales in the Child's Questionnaire for assessing psychosocial outcome

Table 3.2: Summary of Scales in the Child's Questionnaire for measuring risk, protective and moderating variables

Table 3.3: Component of School Management Assessment Instrument

Table 3.4: Profile of Participants of Interview

Table 4.1: Summary of different domains of psychosocial problems assessed

Table 4.2: Mean and Standard deviation of difference domains of psychosocial difficulties

Table 5.1: Age, gender, and grade distribution of study sample

Table 5.2: Demographic data of study sample collected from AHDSS database

Table 5.3: Chi-square results for psychosocial difficulties by age

Table 5.4: Chi-square results for psychosocial difficulties by gender

Table 5.5: Chi-square results for psychosocial difficulties by grade

Table 5.6: Effect of socio-demographic factors on mean behavioural problems by scale

Table 5.7: Effect of socio-demographic factors on mean score on pro-social behaviour

Table 5.8: Effect of socio-demographic factors on mean score of self-esteem

Table 5.9: Effect of socio-demographic factors on mean score of cognitive interpretation

Table 5.10: Effect of socio-demographic factors on mean score of emotional problems

Table 6.1: Sickness/Disability in the caregiver of children

Table 8.1: Data collected from Principal Interview

Table 8.2: Type of Interaction between School and Organisation

Table 9.1 Dominant Themes Emerged from the Transcripts

LIST OF FIGURES

Figure 2.1: Social Ecological Model

Figure 3.1: Cross-Sectional Survey Research Questions

Figure 3.2: Cross-Sectional Survey Research Hypotheses

Figure 3.3: Map showing the Eastern Border of South Africa

Figure 3.4: Map showing the Agincourt study site

Figure 3.5: Children in one of the participating schools reading the information sheet about the study with the guide of the researcher

Figure 3.6: Stages of Confirmatory Factor Analysis

Figure 3.7: Parents signing consent forms after the information session with the researcher

Figure 4.1: Prevalence of psychosocial difficulties reported by teachers

Figure 4.2: Prevalence of behavioural problems reported by children

Figure 4.3: Prevalence of pro-social behavioural reported by children

Figure 4.4: Prevalence of low self-esteem reported by children

Figure 4.5: Prevalence of emotional problems reported by children

Figure 5.1: Prevalence rates of behavioural problems with respect to age of children

Figure 5.2: Prevalence rates of pro-social behaviour with respect to age of children

Figure 5.3: Prevalence rates of low and high self-esteem with respect to age

Figure 5.4: Prevalence rates of emotional problems with respect to age

Figure 5.5: Prevalence rates of behavioural problems with respect to gender

Figure 5.6: Prevalence rates of pro-social behaviour with respect to gender

Figure 5.7: Prevalence rates of low and high self-esteem with respect to gender

Figure 5.8: Prevalence rates of emotional problems with respect to gender

Figure 5.9: Prevalence rates of behavioural problems with respect to grade

Figure 5.10: Prevalence rates of pro-social behaviour with respect to grade

Figure 5.11: Prevalence rates of low and high self-esteem with respect to grade

Figure 5.12: Prevalence rates of emotional problems with respect to grade

Figure 6.1: Children's perception of school environment

Figure 6.2: Children's views about safety at school

Figure 6.3: Help or support available in schools

Figure 6.4: Other things children were scared of

Figure 6.5: The person to report if child is victim of any crime

Figure 6.6: The person threatened to harm children

Figure 6.7: The person looking after children

Figure 6.8: Percentage of children dependent on others

Figure 6.9: People on whom children reported to be dependent on

Figure 6.10: This person is the person in my life

Figure 6.11: The other persons who were reported as the "person in my life"

Figure 6.12: This person is helpful when I have a personal problem

Figure 6.13: The other people who were reported to be helpful when children have a personal problem

Figure 6.14: This person is helpful when I need money or other thing

Figure 6.15: The other people who were reported to be helpful when children need money or other things

Figure 6.16: I have fun with this person

Figure 6.17: The other people with whom children reported to have fun

Figure 6.18: Percentage of children having drink ever in their life.

Figure 6.19: Percentage of children having drink in past month

Figure 6.20: How often children had drink in past month

Figure 6.21: Percentage of children agreeing that "it's easy to get alcohol at school"

Figure 6.22: What do children do if a cool kid offers them some alcohol

Figure 6.23: Children's attitude toward violence and alcohol use

Figure 6.24: Percentage of children having meals at school

Figure 6.25: How many days a week children do not have enough food

Figure 6.26: Grants received by children's families

Figure 6.27: Experience of Stigma

Figure 6.28: Feeling of Social Exclusion

Figure 6.28: Is there anyone who is ill at home?

Figure 6.29: Who is the person you look after most?

Figure 6.30: How often in the past month has this person been unwell?

Figure 6.31: Does your caregiver have any kind of sickness or disability?

Figure 6.32: Frequency with which various task were carried out by children

Figure 6.33: Children's attitude toward HIV

Figure 6.34: Children's knowledge of HIV/AIDS

Figure 6.35: Children's knowledge of HIV prevention

Figure 6.36: Children's perception about gender

Figure 8.1: Number of Learners per Grade in Selected School

Figure 8.2: Number of Teachers per Grade in Selected School

Figure 8.3: Number of Classes per Grade in Selected Schools

Figure 8.3: Number of Classes per Grade in Selected Schools

Figure 8.5: Years as a member of SGB

Figure 8.6: Years working in current role

Figure 8.7: Affiliation Network of Cited Organisations

Figure 8.8: Benefits of Interacting with Organisations

Figure 8.9: Drawbacks of Interacting with organisations

Figure 9.1 Thematic Framework

CHAPTER 1: INTRODUCTION TO THE STUDY

1.1. Study Background and Problem Statement

Children of South Africa, particularly the black majority, have been exposed to political and social violence for long, and this has significantly affected their psychosocial development (Lockhart & van Niekerk, 2000). According to estimates of 1994, 76.5% of children living in South Africa exhibited at least three stress-related symptoms and 39.4% showed five or more symptoms of depression and anxiety (Beukes & Heyns, 1994, as cited in Duncan & Rock, 1997). Duncan and Rock (1997) regarded this high occurrence of mental illness in children of South Africa as an outcome of their exposure to the political and social violence during the long period of the Apartheid. Though the period of the Apartheid ended in April 1994, scholars are of the opinion that the long-term impacts of social unrest and conflict of the period are still witnessed in South African society (Connolly & Eagle, 2009; Lockhart & van Niekerk, 2000).

Recent studies on children of South Africa have reported these children are still subject to many social problems that can influence their wellbeing (Barbarin & Ritcher, 2013; Lachman, *et al.* 2014). They face high levels of social adversity, socioeconomic deprivation, migration, displacement and morbidity (Collinson, 2008; Vorster, 2010). The high prevalence of HIV/AIDS in this region is further worsening the situation for children (Hosegood & Ford, 2003; Cluver, Orkin, Gardner, & Boyes, 2012). Aside from many children being infected by HIV/AIDS themselves, many are socioeconomically affected by it through parents and family members suffering from the illness (Richter, 2004; Boyes & Cluver, 2013). Many of children are exposed to chronic illness or death of family members, including parents, and they often take on care-giving roles themselves (Richter, 2004). They may live in child-run households, or have to work to support their families (Richter, 2004; Boyes & Cluver, 2013).

Such conditions may interfere with children's fundamental physical, emotional and behavioural development and may place them at risk of developing psychosocial problems

(Goodyer, 2002; Connolly & Eagle, 2009). Research on the psychosocial problems of children all over the world has established these problems are associated with several risk factors like exposure to violence in school or home (Barbarin & Ritcher, 2001; Barbarin, Chin & Wright, 2014; Dubow, Huesmann, & Boxer, 2009), poverty (Rose-Jacobs *et al.*, 2008; Slopen *et al.*, 2010), migration or displacement (Reijneveld *et al.*, 2005; Derluyn & Broekaert, 2007), and many others (Roy *et al.*, 2010; Kerr & Michalski, 2007). The role of parents is particularly important, and their illiteracy (Elhamid, Howe & Reading, 2009), physical or mental illness (Ramchandani, & Psychogiou, 2009; Whitaker, Orzol, & Kahn, 2006), or death, (Howard *et al.* 2006) can be a major cause of psychosocial problems in their children. With reported presence of these risk factors in South Africa (Cluver *et al.*, 2012; Barbarin & Ritcher, 2013), children living in the country are at high risk of suffering from many psychosocial problems.

Nevertheless, despite living in high-risk contexts, many children appear to overcome adversity and demonstrate healthy development. This is because there are also many factors operating in the same environment that can protect a child from the effect of the stated high-risk conditions. These protective factors are equally important for consideration while one examines the overall influence of this region's environment on a child's psychosocial development, but research has given much less attention to such possible factors. In case of South Africa, these protective factors are important to be evaluated because of the high-risk status of this country. Identifying the factors that can protect children of South Africa can be very useful in making this society safer for healthy development of children (Barbarin & Ritcher, 2013).

The statement of purpose of the present study is *to determine the prevalence of psychosocial problems in children living in rural South Africa as well as to identify the risk and protective factors affecting the psychosocial development in these children*. The study is focused on primary school children aged 8-12 in grades 5 and 6 living in a rural area of South Africa - Agincourt. Agincourt is a sub-district located in Mpumalanga Province. It is a

‘Demographic Surveillance Site’ where an annual census on the health of the population has been conducted since 1992.

The current study is a programmatic response to what has been learned in the context of research conducted on the Agincourt site for the last 17 years (MRC/Wits Rural Public Health and Health Transitions Research Unit, n.d.). These studies have shown that the mental health needs of children have been identified by teachers and health professionals in this region as a major problem, interfering with both education and individual development (Kahn *et al.,* 2007; Collinson, 2008). This problem is intensified due to the absence of public mental health services in this region to help the affected children with psychosocial problems (Kahn *et al.,* 2007; Kahn, 2006). In the absence of health services to treat affected children, the need for careful study of the protective factors is further heightened, which is partly fulfilled through the present study. The research adds up to the extensive studies on Agincourt region and provides methodological and conceptual guidance to the future researcher working on the psychosocial problems of post-Apartheid South Africa.

1.2. Operational Definitions

1.2.1. Psychosocial Problems

A psychosocial problem is a problem arising in the combined psychological and social context of a person. There is no consensus on the meaning of the term ‘psychosocial’. As a result of this confusion, most of the literature using the term ‘psychosocial’ differs significantly in the understanding of its meaning. According to Collins English Dictionary, the term *psychosocial* refers to the processes or factors that are both social and psychological in the context. The consistent overlapping of the social and psychological contexts led the scholars to combine them together in one category of factors (Roy, 2008). In the field of paediatric medicine, the roots of psychosocial problems can be traced back to the work of Haggerty *et al.,* (1975) who identified that children mostly suffer from psychological and social problems. In the present study, the term *psychosocial problems* refer to closely linked

psychological and social problems in children of rural South Africa. Based on the observation of Horwitz (1992), the research adopts a comprehensive approach in dealing with psychosocial problems and takes into account "broader range of behavioural, developmental, and adolescent adjustment" problems when referring to psychosocial problem in this research.

1.2.2. Risk factors

Risk factors include all factors that can increase the probability of occurrence of a disease or problem under consideration. In this study, risk factors are defined as ecological factors that are associated with psychosocial problems and can increase the probability of symptoms of psychosocial problems in children of rural South Africa.

1.2.3. Protective factors

Garmezy (1993) defined protective factors as the attributes of persons, environments, situations, and events that appear to temper predictions of psychopathology based upon that individual's at-risk status. Throughout the present study, protective factors refer to those ecological factors whose presence can lessen the impact of risk factors on the psychosocial development of children of rural South Africa.

1.2.4. Emotional and Behavioural Problems

The two terms - emotional problems and behavioural problems - have been used interchangeably to refer to the problems suffered by a child during his/her emotional development. It is important to understand that an emotional or behavioural problem is a general term to refer to a wide range of behavioural problems. It is not a diagnostic term and, therefore, various classification systems have come up with different typologies for these problems (Walker & Melvin, 2010). In the present research, the behavioural problems of children covered in Child Behavioural Checklist have been considered. In the text of this dissertation, no distinction is made between emotional problem and behavioural problem pertaining to the similar treatment of the terms in the DSM-IV and other reviewed literature.

1.2.5. Externalizing and Internalizing Problems

Internalizing and externalizing problems are specific types of emotional problems. Internalizing problems are the ones whose source is *within* the individual suffering (Merrell 2008). Thus, the patient himself or herself develops and maintains these problems, making them hard to detect. For these reasons, they are said to be associated with "over-controlled symptoms", as they are diagnosed by identifying the presence of maladaptive control mechanisms set by the patient in order to control his/her emotional state (Merrell, 2008). In the present study, two internalizing problems of children have been examined, namely *anxiety* and *depression*.

By contrast, externalizing problems are developed outside a person and are manifested through under-control mechanisms. Therefore, they are easy to diagnose, as the child - by poorly controlling their emotional state - would demonstrate them in behaviours that can be observed easily (Merrell, 2008). In the present study, *hyperactivity of children* is referred to as the externalizing problem of children.

1.2.6. Cognitive Problems/Style

Cognitive problems are the psychological problems that target learning abilities of children. DSM-IV defines it as "a significant impairment of cognition or memory that represents a marked deterioration from a previous level of function." In the present study, the term cognitive problem does not refer to a specific disorder but to a range of psychological problems that can affect learning abilities, such as memory, perception, or problem-solving abilities of the child. However, the term cognitive style does not refer to the problems but to the way in which a child interprets him-/herself and their environment. The negative cognitive style is used as a benchmark to the presence of some cognitive problem in the child.

1.2.7. Learners

In this study children who are attending school are referred to as learners.

1.3. Study Rationale

In South Africa, there is no valid or reliable prevalence data on children's mental health from samples that are representative of considerably large populations. The lack of national data in South Africa poses a challenge for service planning and for making the case that mental disorders are important. As a result, psychological health of children and adolescents remains an under-addressed public health concern. Less than a half of children with mental health problems get treatment, services, or support. Only one in five gets treatment from a mental health worker with special training to work with children. Families that are poor, that live in rural areas, or have children with other disabilities or health concerns, have an especially difficult time acquiring services that would identify, prevent, or treat mental health problems (Pillay & Lockhart, 1997; Lund *et al.*, 2009).

This absence of data on the prevalence of psychosocial problems amongst this high-risk population led the researcher to conduct a quantitative study on children of rural South Africa at high risk of psychosocial problems. The study is conducted on 8-12 years old children of Agincourt who have been concluded in previous scholarly studies as a high-risk population.

This study serves as the basis for further studies on the prevalence of psychosocial problems in other populations of rural South Africa. Such studies can highlight the critical situation in the rural areas of South Africa and can assist the government in making proactive policies with regard to the psychosocial problems of children of rural South Africa.

Another purpose of the study is to identify the socio-demographic factors that can predict the psychosocial problems in these children. Though a number of studies have looked at the predictors of psychosocial problems in these children, most of these studies looked at the risk factors alone (Richter, 2004; Mestrovic, 1985). The identification of the protective factors predicting positive outcome is important to assist the policy makers in providing protected environment to these children. The present study gives equal consideration to both risk and protective factors predicting the psychosocial problems in children of Agincourt. This consideration to both risk and protective factors comes out of the view that psychosocial problems in children are outcomes of the interplay of a number of factors – both risk and protective, and that psychosocial problems in these children cannot be predicted with consideration to only one factor without taking into account the others influencing the factor under consideration (Stouthamer-Loeber *et al.,* 1993).

1.4. Research Questions

1. What is the prevalence of psychosocial problems amongst children in Grades 5 and 6 in the Agincourt area?
2. What are the risk factors that can increase the likelihood of psychosocial problems in these children?
3. What are the protective factors that can help children of Agincourt with psychosocial problems despite the presence of risk factors?

1.5. Research Aim and Objectives

As part of a larger research, the study is aimed at enhancing the understanding of psychosocial problems faced by children living in South Africa, particularly the socio-demographically deprived children in the rural areas of South Africa with high HIV prevalence, and at informing the school-based intervention and policies geared against these psychosocial problems in the said population. The specific aim of the study is to investigate and report the psychosocial problems in a specific group of children in Agincourt along with the risk and protective factors associated with these problems.

To assist the researcher in achieving the aim of this research, the study sets out to adopt the following objectives:

(a) To report the prevalence and nature of psychosocial problems among Grade 5 and 6 primary school children in Agincourt,

(b) To examine the relationship of risk and protective factors identified in literature with the psychosocial problems of Grade 5 and 6 children in Agincourt,

(c) To identify the social problems faced by children in school and home and the nature of help available to mitigate the impacts of these problems,

(d) To compare the relationship of demographic variables with student-reported and teacher-reported psychosocial problems, and

(e) To describe the nature of social support available to children through schools and social networking organisations and its possible influence on their psychosocial development.

1.6. Hypotheses

After thorough review of the peer-reviewed scholarly literature on the subjects of prevalence and prediction of psychosocial problems in children of rural South Africa, the present study proposes the following hypotheses:

(a) *There will be high prevalence of psychosocial problems, especially internalising problems in grade 5 and 6 primary school children of Agincourt.*

(b) *A number of risk factors, such as family instability, unsafe school environment, and lack of social support, are positively related to the presence of psychosocial problems amongst these children.*

(c) *The protective factors, such as familial and social support and safe school environment are negatively related to the presence of psychosocial problems amongst these children.*

1.8. Nature of the study

The present study is a cross-sectional research employing a combination of qualitative and quantitative research methods to find the prevalence and prediction of psychosocial problems in the primary school children living in Agincourt, a sub-district of Bushbuckridge District, Mpumalanga Province, located in North-East South Africa. All children in grades 5 and 6 (ages 8-14) in 10 randomly selected primary schools in the study site were invited to take part. These children were surveyed to find the emotional and behavioural as well as cognitive problems they might suffer from with the help of pre-designed scales. Furthermore, the study also surveyed the teachers of children to identify the teachers' reported strengths and weaknesses in children. This was used to support the child's self-report of the emotional and behavioural problems. Children were also surveyed about the different social problems like exposure to violence, stigma, perception about HIV, and similar others to measure the presence of different risk and protective factors.

The semi-structured interviews were carried out on 20 children identified by teachers in one school. The inclusion criteria for the interviews ensured partaking of children between ages 8 and 12 in grade 6 who could speak English. The study also analysed the data related to social networks and school management. For this purpose, School Governing Body (SGB) members were asked to complete a social network questionnaire at each school. Principals of the

selected schools were interviewed and school documents were reviewed to understand the role of degree of social support provided by these schools and to understand the environment in which the child studies.

1.9. Summary

The chapter provides an overview of the present study on the prevalence and prediction of psychosocial problems in the primary school children living in rural areas of South Africa. The background of the research problem highlighted the critical situation in the rural areas of South Africa. Children living in this region are at high risk of developing a number of psychosocial problems, and it was expected that the prevalence of psychosocial problems amongst the selected population would be very high which the present research proved. The chapter also looks at the role played by the risk and protective factors on the prediction of psychosocial problems in children of rural areas of South Africa. A definition of these factors as well as their impact on psychosocial problems in children has been briefly introduced. In the following chapter, these problems and the role of risk and protective factors in the prediction of these problems will be discussed in detail with the help of a critical review of scholarly literature.

CHAPTER 2: LITERATURE REVIEW

2.1. Introduction to the chapter

The chapter presents the review of theoretical work and research published on the subject to relate the present study with the previous studies on the subject. This review is aimed at covering all the important aspects related to the issue and provides the reader with complete details that would help in understanding the topic and its background information. Another purpose of the review is to simplify the complex process of psychosocial development in children in a way that all the important aspects of this complex process remain in sight. For this purpose, the researcher went through the theories and models used in previous studies on the subject and selected the most suitable ones. Theoretical framework for the present study is a combination of two renowned theories on psychosocial development that define the study's perception of how children suffer from psychosocial problems and how these problems can be resolved. In addition, the social ecological model has been adopted as a conceptual model for the study which helped the researcher in creating the boundaries for the literature to be selected for review.

The theoretical and conceptual framework of the study provided the criteria for the selection of the literature. These frameworks identified the topics needed to be reviewed for answering the research questions and the researcher selected only that literature that particularly addresses those topics. Because of the critical importance of literature review for a study, only reliable and scholarly literature has been reviewed. The literature reviewed here mainly consists of articles from peer-reviewed journals and books written by the experts on the subject. The researcher critically reviewed the literature to examine the prevalence of psychosocial problems in children particularly children living in South Africa. The researcher also reviewed the literature to identify the important predictors of psychosocial problems in

children. The factors mediating and moderating the relationship between these predictors and the psychosocial problems have also been identified.

At the end of the chapter, a summary of the literature review has been presented. Based on what has been learnt from the review, the researcher developed the hypotheses to be tested through the empirical quantitative and qualitative research on primary school children in grades 5 and 6 living in Agincourt.

2.2. Theoretical Framework

Psychosocial development in children is a broad and complex concept on which a bulk of literature has been published. A number of theories have also been developed to explain the psychosocial development in human beings as well as to provide the ways through which psychological and social factors produce impact on human development. Before reviewing the literature on the subject, it was important to provide the theoretical framework for the study, which defined the boundaries for the selection of the literature to be reviewed. Another purpose of selecting the theories was to assist the researcher in predicting the possible outcome of the research.

The theoretical framework of the present study is the combination of two important scientific social theories – theory of cumulative disadvantage and Erikson's theory of psychosocial development. These theories have been combined to explain in detail how the social factors impacted upon the psychosocial development in children. Further detail of these theories and their application in the present study is provided in the following sections.

2.2.1. Theory of Cumulative Disadvantage

The theory of cumulative disadvantage was originally developed from the concept of accumulation of advantage and disadvantage in systems of social stratification (Merton, 1968, 1988; Allison & Stewart, 1974; Rosenbaum 1984; Crystal and Shea, 1990). Initially the term was used to describe the difference produced by the early reputation of the scientists in career achievements (Merton 1968; 1988; Allison & Stewart, 1974).

Merton was among the pioneers of this concept. Merton (1968) wrote about the means by which some specific psychosocial processes influence the career achievements in the field of scientific research. He explained how the earlier achievement and reputation of scientists help them in building their career in upcoming years. He termed this impact as Matthew effect which, according to him, "was constructed in terms of enhancement of the position of already eminent scientists who are given disproportionate credit in cases of collaboration or of independent multiple discoveries" (p. 62). He looked at the psychosocial basis of this Matthew effect and found that the eminence of the scientist plays a significant role in turning the focus of scientific society toward some phenomenon that have been described by some other less-eminent scientist or that have been "hit upon" by a number of scientists. This Matthew effect was found to influence not only the reward system of the science but also the communication system of science – an eminent scientist needs less effort to make his or her achievement visible to the scientific community (Merton, 1968).

Though Merton did not use the term cumulative advantage in his first article on Matthew effect, he did use the term in his second article which was published some 20 years after the first one (Merton, 1988). Since then the term has become quite popular and scholars have started to use it to explain the process of accumulation and successive increment of initial advantage (Allison & Stewart, 1974; Zukerman, 1987). For Merton, (1968; 1988) the cumulative advantage produces no significant impact on the intelligence or knowledge of the scientists; he was actually focussed on the cumulative advantage in the reward system. Therefore, the initial focus of the theory of cumulative advantage/disadvantage was on the external factors. Later on, however, with the growing popularity of this concept, scholars started to examine cumulative disadvantage of internal factors, such as health (Ferraro, & Kelley-Moore, 2003) and knowledge (Leydesdorff, & Scharnhorst, 2009).

It was Dale Dennefer (1984; 1987; 1988; 2003) who used the concept of cumulative advantage/disadvantage to develop a social scientific theory of cumulative disadvantage for explaining the life course inequality arising out of early life events. For him, cumulative

advantage/disadvantage is "the systematic tendency for interindividual divergence in a given characteristic (*e.g*., money, health, or status) with the passage of time" (Dannefer, 2003: p. S327). Thus, cumulative advantage or disadvantage is the outcome of a system of interconnection between different individual, not an individualistic characteristics resulted from the relative positioning of the individual at the point of origin (Dannefer, 2003). Cumulative advantage/disadvantage is a societal phenomenon and is based on the interplay of a number of social and psychological forces.

All societies are unequal in one way or other. This inequality is embedded systematically in the societies' structure through economic, social and cultural diversity and is sustained by the existence of this economic, social and cultural structure of societies (Ferraro, Irving & Shippee, 2006). Dehrandorf (1959) named this as power structure of the societies (as cited in Ferraro, Irving, & Shippee, 2006). A number of studies have looked into the impact of the inequality rotted in the power structure of societies on individuals living in the society (Dorling, Mitchell, & Pearce, 2007; Cronin, & King, 2010) and on overall society itself (Vornovytskyy & Boyee, 2010). Theory of cumulative disadvantage views this impact of societal inequality as growing with the growing age of individual or society. Thus, according to this theory, the social inequality's effects on one's early life influence the one's life-course development and survival (Dannefer, 2003). This led the scholars to look into the societal structure in childhood for predicting the developmental level and status in adulthood (Kariya and Rosenbaum 2003; Lyytikäinen, Jones, Huttly, & Abramsky, 2006).

The objective of this research study is to examine the social forces influencing the psychosocial development of children. Before examining the impact, it is important to understand the mechanism through which the impact is produced. The theory of cumulative disadvantage provides an excellent explanation of the said mechanism by looking into the complexity of social forces that exist throughout the process of psychosocial development, and how they play their role in accumulating the disadvantage or advantage with the course of development. This theory draws attention to the notion of societal control over the life-

course development of a person and explains the stability of the individual behaviour and thoughts over long period of time (Ferraro, Irving, & Shippee. 2006).

Previous studies have also used this theory in explaining the cumulative effects of societal inequality on child development. Lyytikäinen, *et al.* (2006) discussed the importance of understanding the impact of childhood poverty on its psychosocial development by looking into the cumulative nature of disadvantage. They argued that children who cannot receive education or health services due to poverty are likely to suffer from cumulative disadvantage due to deprivation of normal social activities and other basic infrastructure. Scholars have reported that childhood poverty not only limits access to educational and occupational attainment, it also promotes childhood delinquency and crime (Sampson & Laub, 1997; 2005).

Moreover, the accumulation of risks or social disadvantages in children is found to be related to poor health status, chronic illness, and withdrawal from active life (Bauman, Silver, & Stein, 2006). Poverty is often one prevailing rural occurrence that may be linked to cumulative risks in children. For instance, poverty can produce cumulative exposure to negative environmental conditions that result in physical, psychological, and developmental difficulties in poor children, as identified by Evans (2004).

Studies over the years have found an association between poverty and mental health problems among children. Mcleod and Shanaham (1996) conducted a study to understand the link between the continuous low socioeconomic status for many generations in the families of children and their mental development, and found that children having longer history of poverty are diagnosed with higher degree of depression, and have shown more anti-social behaviour as compared to children with shorter or no history of poverty. Similarly, the developmental stage during which a child experiences poverty was also shown to have particular effects on their life. Children who experience poverty at their earlier stages of development, before going to school or in the earlier years of schooling, are less likely to

complete school education than the ones who experience poverty in later years of schooling (Brooks-Gunn and Duncan, 1997). This relationship between experience of poverty and children's mental and social health needs more investigation, yet findings till now are enough to suggest that intervention in earlier stages of child development is critically needed to counter the higher effect of poverty on children's health at those stages.

Besides poverty, there are other social elements that can produce impact throughout the life span of an individual. For instance, early nutrition in childhood is a good determiner of health and development of the person in adulthood (Ferraro, & Kelley-Moore, 2003; Petrou, & Kupek, 2010). Children have also been found to face cumulative disadvantage in cognition due to persistent stunting (Himaz, 2009). The basic idea common in all these studies is the emphasis on the importance of childhood as the most critical stage of an individual's development, and the argument that the impact of social forces in this earliest stage of development served as the basis for psychosocial outcomes in the subsequent stages of their life.

The purpose of the present study is to search out the risk and protective factors that can determine the psychosocial outcomes in children. The basic assumption behind this thought of determining the psychosocial outcomes in children with the help of risk and protective factors has been derived from the theory of cumulative disadvantage. Based on the theory and a number of empirical studies mentioned above, it is assumed that the impacts of these risk and protective factors are cumulative in nature. Thus, for instance, the social and economic disturbance faced by a child due to the loss of father or mother, increases with the passage of time. Thus, the socio-economically deprived children living in rural areas of South Africa with high prevalence of HIV/AIDS and lack of social and financial support in the early years of their life are at higher risk of psychosocial problems than children living in the developed part of the world receiving relatively better financial and social support.

2.2.2. Erikson's Theory of Psychosocial Development:

Theoretical work on the human development has been categorised into six theoretical traditions namely *psychoanalytical* perspective, *learning* perspective, *cognitive-developmental* perspective, *information processing* perspective, *evolutionary perspective* and *ecological systems* perspective (Shaffer, 2010; Shaffer, & Kipp, 2010). The first of these perspectives i.e. psychoanalytical perspective was developed by Sigmund Freud through his theory of psychosexual development. He was the one who developed the idea of dividing the development process into several stages. However, his theory of psychosexual development was driven by the sexual instinct and all the stages of development were based on different sexual conflicts faced by a child during course of development (Shaffer, 2010; Shaffer & Kipp, 2010).

Erik Erikson, a student of Freud, learned the basic ideas of psychoanalytical viewpoint from his teacher and developed his own theory of human development based on this viewpoint. He named the theory as theory of psychosocial development. The theory is quite similar to Freud theory of psychosexual development. However, it contradicts from the theory of psychosexual development in two main points. First, for Erikson, children are adaptive to environment and, therefore, his theory was based on child development through active reaction to environmental factors. (Shaffer, 2010; Shaffer & Kipp, 2010) Second, Erikson's theory gives little emphasis on the role of sexual instinct in the development of children. Instead, he emphasised social and cultural factors (Shaffer, 2010; Shaffer & Kipp, 2010).

Erikson (1963), like Freud, viewed the psychosocial development in children as a series of stages that follow one another in a definite order. An overview of Erikson's stages of psychosocial development in children is provided in the appendix 16. Erikson (1963) claimed that every child has to go through the same series of stages and the stability and completeness of each stage depends on the stability and completeness of the previous stage. Therefore, the most important stage in the psychosocial development of a child is the earliest

stage of "Basic Trust" during which the child builds the earliest relation of trust with the environment (Robertson, 2008). The baby who experiences warm nurturing and effective care during this stage of the psychosocial development acquires stronger sense of trust and well-being.

Another important foundation laid at the earliest stage is the beginning of the development of concern for others (Robertson 2008). By experiencing the care given by their parents, children start to learn how to care for others. The emotional attachment between the child and the care giver in this early stage of life provides the base for the development of understanding in children of their own emotional make up and of other's emotional connection with them (Howe, 1998).

Other scholars also support Erikson's beliefs about the importance of the first few years of a child's life (Boree, 1997; Robertson 2008). Boeree (1997) argued that if parents can give a degree of familiarity, consistency and continuity to their child at the first few months of birth, the effect will be long term and the child will have more confidence and trust on the society. If these aspects are not present in the life of a young child, the social world will be experienced as threatening and approached with suspicion. At the other extreme, parents who are over protective of their children cause what Erikson calls sensory maladjustment. Children, whose balance tips over to the side of mistrust, develop the unhealthy tendency to withdraw, which is characterised by depression paranoia and possibly psychosis (Boeree, 1997).

Once a child crosses the stage of "Basic Trust", rapid development of language and motor skills during the second year of life makes the child ready to want to manage for themselves: increasing success leads to a sense of autonomy (Robertson, 2008; Erikson, 1963). If children are encouraged to take responsibility of some important personal activities like toileting and eating, they developed a strong sense of autonomy. Otherwise, if parents are overprotective and are not ready to give such control to their children, children will develop a

sense of shame and doubt. Autonomy of children has different meanings in different cultures (Newman & Newman, 2009). In Westerns states, children are expected to stop depending on their parents in performing daily tasks like sleeping, toileting, eating and playing with their peers (Newman & Newman, 2009). However, in non-western countries, children are expected to develop a sense of interdependence rather independence. They are expected to become sensitive to the needs of other people around them (Newman, & Newman, 2009).

Between 3 and 6 years of age the child has the opportunity to learn how to become assertive but also cooperative within the small circle of family and friends. Parents are there to encourage children when they develop language and muscle control. They are exposed to new information about world and self. If parents are overassertive or critical of their acts of independence, children will feel ashamed of their behaviour and develop doubts about their abilities. On the other hand, if children do not experience the protection and approval from their parents – either because of their death or because of their neglect and absence – they will most probably regress.

Stage three represents the crisis of *initiative versus guilt*. The task of the child in this stage is to gain confidence in taking initiatives without any guilt or fear. Boeree (1997) refers to initiative "as a positive response to the world challenge, taking on responsibilities, learning new skills, feeling purposeful" (p. 7). It is the attempt to convert an abstract idea to a practical reality. Parents should encourage children to experiment, but should also be consistent with their discipline so that children can understand the limitations of their freedom without being reluctant to work on their innovative ideas and participating in make believe role-play. However, if this process is approached harshly and too abruptly, children will have guilt about their feelings. The ideal is that children reach early school age with a strong sense of themselves as unique individuals. Without the achievement of basic trust, autonomy and assertiveness, the child is ill prepared to meet the demands of socialisation as required in the classroom, within the peer group, and in early contacts with the larger community.

At the fourth stage of development – also known as latency or school age - the psychosocial crisis is *industry versus inferiority*. Erikson (1963) held that during this stage of life, the child not only requires encouragement but also some sort of "coaching" and attentiveness to complete their tasks. During this stage of life, the child is testing its physical and mental abilities, and once the child becomes confident about the abilities of his or her body, it becomes easier for him or her to develop a sense of industriousness. Failure to accomplish the tasks – either due to extra protection or lack of care by parents – leads to the development of sense of inferiority, and the child experiences difficulty in becoming diligently involved in the tasks.

This relatively quiet and orderly period of development comes to an end with puberty, which heralds the onset of the more turbulent stage of adolescence, during which personal and sexual identity are forged (Erikson, 1963). At this final stage of a child's psychosocial development to an adolescent, the crisis that arises for the child is *identity versus identity confusion.* Since the child is now moving towards adulthood, there is a need to make a child aware of the responsibility he or she will have to bear in the future. For development of this sense of responsibility, Erikson (1963) believed, there is a need to develop a stable sense of identity which arises from the success of past stages.

Adolescents are in search of their ego identity, which are a conscious sense of individual uniqueness as well as psychosocial sense of well-being (Kroger, 2003). This stage is marked by rapid changes. Although these changes may make them feel like adults, they are not ready to assume the tasks of adults, such as for example being parents. Pennington and Hastie (1986) stated that the search for one's "true self", or attempts to answer the question "who am I?" preoccupy teenagers.

The theory of cumulative disadvantage, discussed above, held that the social and cultural factors have cumulative effects on the psychosocial development of children. The theory of psychosocial development provides in detail this cumulative effect across the

different stages of development. It explains the factors needed at different stages of development and held that the presence and absence of these factors in the relevant stages can cause serious problems in the next stages of development (Erikson, 1963). Since children selected for the present study are from 8 to 12 years in age, they are at the later stage of children' psychosocial development and the negative impacts of the social factors in the earlier stages of development are expected to produce negative psychosocial outcomes in these later stages.

In an African context mothers carry infants of up to 18 months or older on their backs, even when they are already able to walk. This is a way of protecting them from danger and can boost the sense of protection and trust in children. However, this may limit the child's exploratory behaviour, as well. By contrast, orphans who are responsible for the household and caring for siblings are inexperienced in child rearing. They cannot give infants what they need in terms of physical protection. In addition, though they are at the later stages of the psychosocial development, they also need parents for some reasons other than their younger siblings – the formation of social skill and development.

When parents die at the later stages of children's psychosocial development, adolescents have to take responsibility for siblings, which may be traumatic for both the adolescent and the younger children. While other youth are involved in dating relationships, orphans as heads of households have to look after siblings and assume adult roles and responsibility. However, adolescents rely more heavily on peers than on family and in situations of stress; they look for the support and care from peers rather than parents. The support provided by the South African collectivist society can play a significant role in the child's psychosocial development during later stages.

Nevertheless, children of HIV positive parents have to face stigma, discrimination, isolation and scorn by their peer group, the community, family members and also some teachers. If parents who are supposed to guide, encourage, nurture and teach the basics of life

are not there, these children are left to their own devices in extremely stressful circumstances. Therefore, these children are at higher risk and there is high probability of negative psychosocial outcomes in these children.

The theory is suitable for the present study because of its recognition of the importance of environmental factors. However, it is concentrated on the environment within which the child is in direct contact. The impact of these environmental factors is further explained in the conceptual model. Based on these theories and model, literature will be reviewed to further examine the impact of the important environmental factors on the psychosocial development of socio-economically deprived children of rural areas of South Africa.

2.3. Conceptual Model – Social Ecological Model

Psychosocial development in children is much complicated and is under influence of a number of factors at different stages of development, as discussed in the Erikson's theory of psychosocial development. Simeonsson and Rosenthal (2001) suggested that a researcher working on the problems associated with children's development to devise a conceptual model that can clarify the interaction of these environmental factors and the child. Furthermore, the conceptual model for studies on psychosocial development should facilitate the designing of intervention goals and strategies (Simeonsson & Rosenthal, 2001). Any intervention to improve psychosocial outcomes in children is more likely to be effective if it identifies important areas of intervention by examining the factors operating at different societal levels, and their impact on the psychosocial development (Power & Blom-Hoffman, 2004).

The psychosocial theoretical framework, discussed above, clarified a number of points related to the psychosocial development of children and the impact of society on this development. However, they are targeted at the individual level and cannot assist in determining the factors operating beyond interpersonal level (Elder, *et al.*, 2007). Social

ecological factors like government policies, culture, social environment that operate beyond interpersonal level are important to consider while examining the psychosocial problems in children (Jason *et al.*, 1992; Durlak & Status, 2001).

To comprehensively understand the dynamics of psychosocial development in children, the social ecological model has been adopted in the current study that situates an individual within a multi-level system of relationships, as shown in the figure below.

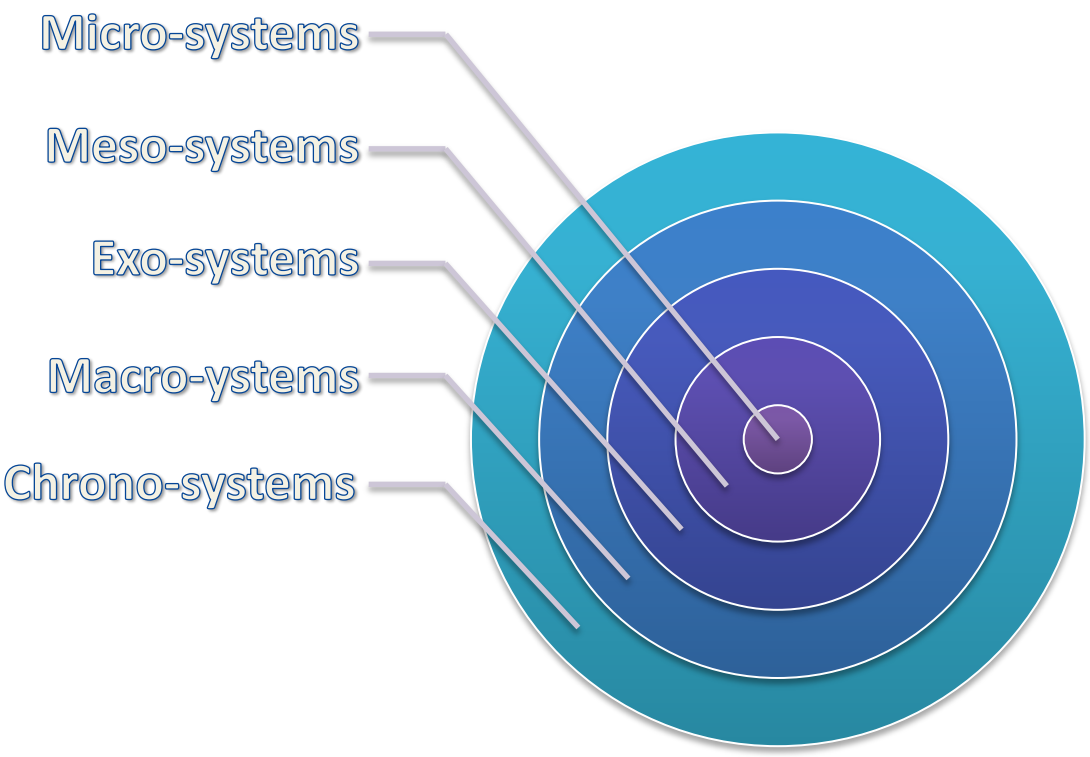


Figure 2.1: Social Ecological Model

The social ecological model, used in the present study, is an adaptation of the model that was developed in 1979 by Bronfenbrenner. His model was based on the relationship of human beings with their society, where society was conceptualised as a system consisting of five sub-systems namely *micro-systems, meso-systems, exo-systems, macro-systems* and *chrono-system* (Bronfenbrenner, 1979). Within these systems or levels of society, there are certain variables that exert influence of varying degree to the individual at the centre of the model. Bronfenbrenner (1979) developed this system to understand the developmental issues

in children. However, later on, the model became quite popular and has been used to understand the impact of socio-ecological factors on adults as well (Shapriro, Perez & Warden, 1998).

Scholars have affirmed the need to examine the psychosocial development in children in the context of multiple systems (Durlak & Status, 2001; Power & Blom-Hoffman, 2004; Elder *et al.*, 2007). This model allows incorporating the factors operating at different levels of society in the analysis of the psychosocial development so that the researcher can give consideration to all the important and relevant factors at their respective position in the society (Sallis & Owen, 2002; Wang, Matthew, Bellamy, & James, 2005). The model also simplifies the complexity of the interaction between a child and society and, consequently, made it easier for the researcher to understand the impact of this interaction on the psychosocial development of children (Wang, *et al.*, 2005). The psychosocial outcome in children is expected to be positive if all the systems in children's lives are in accordance to their needs and requirement (Power & Blom-Hoffman, 2004). However, there is one important limitation in the model. It does not provide the degree of importance of the factors within each system and it is the task of the researcher to sort out the most important factors from each of the four systems. For this reason, Elder *et al.*, (2007) suggested using this model along with other psychosocial theories, as is the case in this study.

2.3.1. Micro-system

Micro-system is the interpersonal system with which a child interacts immediately and directly (Berk, 2000). It includes "all the patterns of activities, social roles, and interpersonal relations experienced by a child" in the immediate environment (Bronfenbrenner, 1979, p. 39). Family and school are two important structures in the microsystem and a number of studies have shown their impact on the cognitive and psychological development of children (Power & Blom-Hoffman, 2004; Hoadley, 2007). Some other important microsystems at the higher stages of psychosocial development are friends and peers whose interaction with and impact on the child is direct.

2.3.2. Meso-system

Meso-system comprises the connection and association between the structures of microsystems (Berk, 2000). It is important that the interaction ought to be between the two structures having direct association with the child. The two way communication between important structures of microsystem like family and school has long been determined as important for the better development of children (Epstein, 1983). Recent studies have also pointed out the importance of this interaction in the psychosocial development of children and their better educational and cognitive performance (Miller, 2003; Arguea, & Conroy, 2003).

2.3.3. Exo-system

Exo-system include the connection and association between the structures, at least one of which is not directly associated with the child (Berk, 2000; Bronfenbrenner, 1979). Thus the impact of exo-system on the child development is indirect – through a structure locating in the microsystem (Berk, 2000). For instance, parent's status in the society is based on the interaction between parents and society and is not directly associated with child. However, the child does experience the impact of this interaction. Bronfenbrenner (1979) identified three important exo-systems that can produce significant impact on child development – parent's workplace, family social network and neighbourhood-community context.

2.3.4. Macro-system

Macro-system is composed of the ideological pattern of cultures and sub-cultures having cascading influence on the interaction between micro-, meso-, and exo-systems (Berk, 2000; Bronfenbrenner, 1979). It acts as a background of framework for all the other systems and defines the impact of other systems on the child development (Berk, 2000). Bronfenbrenner (1979) consider these systems as important to identify specific social and psychosocial feature, in addition to class and culture, which can produce significant impact on the conditions and processes of microsystem – directly influencing the child.

2.3.5. Chrono-System

Chrono-system includes changes or consistencies in the above mentioned system with the passage of time (Berk, 2000). These include external changes in the family structure, socio-economic status, government policies, place of residence, *etc.* and the internal changes in the physiology and psychology of the child. To examine these systems, longitudinal studies examining the difference in the variables at two different points of time and comparing the effects of these variables on children development at the two selected points of time are needed. Because the present study is not longitudinal in nature, it was not possible to give consideration to these chrono-systems. However, the importance of these systems is fully recognised and it is recommended to take into account these systems on any future longitudinal study on the subject.

2.4. Prevalence of psychosocial problems in children

The prevalence of psychological problems in children and adolescence has been reported to be very high (Abiodum, 1992; Thabet & Vostanis, 1998; Belfer, 2008). Belfer (2008) reported the worldwide prevalence of mental disorders in children and adolescents is as high as 20% and found that almost half of all adult mental disorders have their onset in adolescence.

Psychosocial problems among children are not a western phenomenon. It is present throughout the globe. For example, 15% of 500 children aged between 5-15 years were found to suffer from mental health problems in a rural community in Nigeria (Abiodun, 1992). In China, a study reported the prevalence of behavioural and emotional problems in 6-11 years old children as high as 12.5% for boys and 8.3% for girls (Liu *et al.*, 1999). 35% of the Brazilian children of age 6 to 12 years were found to suffer from clinical behavioural problems (Feitosa, *et al.*, in press).

The situation is South Africa is no different. Kleintjes and colleagues (2006) found the prevalence of psychological disorders in children of Western Cape to be 17%.

Generalised anxiety disorder was found to be the most prevalent mental disorder (11%) among children of South Africa followed by posttraumatic stress disorder and major depressive disorder/dysthymia (both 8%). Posttraumatic stress disorder has also been identified in some earlier studies as highly prevalent among children of South Africa (Seedat *et al.*, 2004; Cluver, Fincham, & Seedat, 2009).

Myer and colleagues (2009) also conducted a study on psychological problems of children. However, their study was different from other studies as they were interested in examining the negative effects of mental disorders in children on their socio-economic status and educational achievements. They found that children having psychological disorders have difficulties in completing their education, which later on affects their socio-economic position in society. Thus, the study was focussed on psychosocial problems rather psychological problems. Data on birth-to-twenty study is not yet publicly available because the study is still underway.

As evident, all the above mentioned studies on the prevalence of the psychological problems in children of South Africa were conducted in the urban areas of the country, and there is paucity of data on psychological health in rural children. Furthermore, there is lack of research in the area of prevalence of psychosocial problems and most of the studies are focussed on psychological and behavioural problems of children without examining their association with social factors.

2.5. Predictors of psychosocial problems in children

The theoretical framework for this study places emphasis on the identification of environmental risk and protective factors in informing the provision of services for children. In addition, the conceptual model of the current study applies multiple layer ecosystems perspective on rural children's realities. Research in the fields of psychosocial epidemiology and behavioural medicine has established that several psychological and environmental factors are associated with psychosocial development in children (Miller, Smith, & Turner

1996; Bothma, Schrijvers, & Mackenback 1999). Here, the researcher will attempt to sort out some of these factors that can significantly predict the psychosocial outcomes in children in a rural setting.

Cluver (2007) pointed out that it is crucial to explore not only the presence of risk factors which exacerbate the effects of an environmental hazard, but also the effects of protective factors. That is because protective factors lessen risk by compensating, challenging or immunizing children's adjustment (Werner, 2000). Also, there has been a shift in overemphasizing risk or vulnerability alone, to more composite forms of childhood resilience or positive pathways (Rutter, 1989). As noted by Radke-Yarrow & Sherman in Cluver (2007), of all children who grow up in difficult situations, only some develop mental health problems. Therefore, the study looks for both risk and protective factors, and the factors located in exo-systems and macro-systems have also given consideration by taking them as moderator variable.

2.5.1. Risk and Protective Factor – Micro-systems and Meso-Systems

Children who are exposed to particular highly stressful situations may be at heightened risk of experiencing mental health problems (Rutter, 2000). Poverty is an important risk factor causing increasing the risk of psychosocial problems in children. However, poverty itself produces no direct impact on the mental health of children; its impact is indirect and is through other social factors. Guo and Harris (2000) searched for the mediating factors that get influenced from the poverty and can influence child's intellectual development. With the help of structural equation model, the data on children intellectual development, poverty and other demographic was analysed. They found cognitive stimulation in the home, parenting style, physical environment, and poor health of child at birth as important factors that can mediate the impact of poverty on the child (Guo & Harris, 2000).

The role of family, particularly parents in the psychosocial development of children has been identified as important in the theoretical and conceptual framework of the study, and

its role as the predictor of psychosocial problems in children has been reported in several studies (*e.g*. Abiodum, 1992). Abiodun (1992) surveyed 500 children in rural community of Nigerian to examine the prevalence of psychiatric problems in children. The study found that children from disrupted families (due to divorce, separation and widowhood) are significantly more likely to suffer from psychiatric problems (Abiodun, 1992).

Due to the high prevalence of HIV/AIDS, children living in rural areas of South Africa are more likely to face death or illness of their family members. Empirical findings (*e.g*. Caillods, & Hallik, 2004; Richter *et al.*, 2006) point to the fact that a breadwinner diagnosed with HIV/AIDS results in numerous disadvantages for his/her dependants, such as increased poverty and AIDS-related stigma. This could, consequently result in mental health problems among children of affected families.

Studies have also looked into the role of schools in supporting vulnerable children (Power & Blom-Hoffman, 2004; Hoadley, 2007). Power and Blom-Hoffman (2004) discussed the role of schools in providing intervention services for children with health problems. Many of these interventions were closely associated with the psychosocial problems of children like problems associated with social and emotional functioning of children. They pointed out that schools not only provide the setting to study children - either through observing them or though talking with them or about them – but can also serves as a site to deal with these problems through providing the needed emotional and social support.

Hoadley (2007) examined the positive role that schools can play in supporting South African children in the context of HIV/AIDS. She suggested improving the quality of teaching and learning in the schools of South Africa to improve their role in supporting vulnerable children. She also recommended new ways of thinking about resourcing, proper monitoring and evaluation of school projects aimed to support children living in HIV epidemic areas.

Rural children and/or families in South Africa are often unable to afford school fees and are unaware of (or not encouraged) to apply for school fee exemptions, are unable to afford a school uniform, lack food as the school feeding schemes are inadequate, and experience difficulties in accessing enough (or any) money through the state social grants system. The remoteness of rural communities also affects children on a personal level such as schools being located very far from home. Most rural children often need to walk long distances to school in unsafe conditions.

In trying to find solutions to alleviate the psychosocial difficulties of children, many studies have emphasised the positive role of social support. Generally, social support works as a shield between exposure to distressing events and onset of psychosocial symptoms (Caffo, 2005). Similarly, Evans (2005) adds that social support promotes rural children's resilience and thereby helps to mitigate the impact of adversities such as the HIV/AIDS epidemic at the household level. In addition to support from caregivers, children can gain social support from their peer group, school, other family members, and other adults (Cluver, 2007).

Studies have also shown a positive relationship of lack of social support with risk of mortality, duration of recovery from illness, low morale and psychological problems, but how such an effect is produced is still unclear (White & Cant, 2003). Further research is needed to explain the trajectory of the relationship between social support and social networking on the chronic illness. Such research is particular needed for better planning of social support programs targeted at marginalised social groups like rural communities.

2.5.2. Moderator – Exo-systems and Macro-systems:

Social ecological perspective recognises the importance of factors operating beyond the interpersonal level. Nevertheless the impact of these factors is not direct but is through some other factors operating at interpersonal level. These exo-systems and macro-systems negate or increase the impact of protective and risk factor in the microsystem and are,

therefore, selected as moderators in the relation between predictor variables and psychosocial outcome in children.

Social support – discussed above as a protective factor – occurs at all levels of the ecological framework because the cultural or societal support to the other family members particularly parents also influence the psychosocial development in children. For that reason, it is fitting to expand the discussion on social support to the concept of social networks – the presence of which can increase the impact of protective factors on the psychosocial outcome. Seeman and Berkman (1988) have defined social network as "the web of identifiable social relationships which surround an individual and the characteristics of that phenomenon." Social networks can form part of a person's social capital which, in turn, form part of his/her livelihood or human development. Although social support cannot be benchmarked with mere membership in a social network, analysis of social networks in a society can be very helpful in identifying the marginalised groups.

According to White & Cant (2003), "networks are an important way for individuals to influence their environment and to indicate how the environment influences the individual." Therefore, social network analysis can serve as an important tool for measuring an individual social health. However, as pointed out by Dipple, & Evans' (1998), the importance of social networks for an individual's wellbeing depends primarily on the level of support provided by these networks.

Besides social network, other important factor that can impact upon the relationship of risk and protective factor with the psychosocial health of children are the governmental policies regarding food and health as well as the grants offered by the government to socio-economically deprived families. Several scholars have identified the importance of public policies for improving psychological health in children (Committee on Child Welfare, 1987; Bywaters, 1996; Caan & Jenkins, 2008). The policies related to income support and taxation directly or indirectly influence upon the level of poverty in the society which indirectly

influence upon the health of the child (Committee on Child Welfare, 1987; Caan & Jenkins, 2008).

Providing good nutrition and diet to children should be among the important priorities of the government (Caan & Jenkins, 2008). The food and nutrition policies of the government have wide influence on the overall health of the child including the psychological health (Bywaters, 1996; Caan & Jenkins, 2008). Government cannot only provide awareness to the society about the importance of child nutrition through their information channels but can also control the production of food for children and can ensure that the food products like milk and baby tin food should be of high quality.

Children in rural areas of South Africa often do not have enough food to eat and the food is usually unhygienic. School feeding schemes are not adequate to provide needed nutrition to children. In addition families often have difficulties in accessing enough support through the state grants system (Twine, Collinson, Polzer, & Kahn, 2007). This could be as a result of less political motivation or earnestness in providing services to the rural poor population, and the fact that the "construction of physical infrastructure in many remote areas can also be technically very difficult" (Bird *et al.*, 2002: p. 22). The lack of (or slow pace of macro-level intervention) may have devastating outcomes. Food security may be erratic, leading to under-nutrition, damaging children's mental and physical development (Lyytikäinen, Jones, Huttly, & Abramsky, 2006).

Another important problem associated with the rural areas of South Africa is the alcohol and drug use in the society which can indirectly produce critical impact on the sexual and psychological health of children (Pettifor, *et al.*, 2004). Particularly the use of drugs and alcohol in schools can damage the healthy environment of the schools and can significantly influence upon the psychosocial health of children (Leaf *et al.*, 1996).

2.5.3. Child Belief about the needed help

The human mind works as a filter through which environmental observation and experience pass through. That is why people living under similar circumstances can react differently to different situation. Masten *et al.* (1990) found that many children appear to overcome adversity and demonstrate healthy development in the highly risk areas. Besides the role of protective factors, the role of child beliefs and perception about the help they need from the environment is important to consider in this regard.

It is known that children's own perception of the environment plays a vital role in the impact their mental health and behaviour receive. Social commuting and mental comfort levels are also determined by the extent to which children perceive these elements in their environment (Panter, Jones, van Sluijs & Griffin, 2010). Children's and parents' perception of the environment and increased social interactivity of children play effective roles in the expectation of children's social behaviour and mental health by means of their learning experiences and how they perceive them (Davisson, Werder and Lawson, 2008). Any intervention programme for child health should always consider children's own views about their needs and requirement in the highly risked environment because Environmental factors affect the way children perceive their environment which in turn affect their mental health and behaviour. Thus, children perception about their environment serves as a mediator between the environmental factors – discussed above – and the psychosocial health of children.

2.6. Summary and Hypothesis Building

Theoretical framework of the present study established the importance of environmental factors in predicting the psychosocial outcomes in children. The impact of these environmental factors has been found to be cumulative, which signifies the need to introduce intervention programme at the earlier stages of development. It also justifies the selection of the research problem for the present study as the determination of predictors of

psychosocial problems in children can guide the intervention programmes to formulate strategies and goals for the improvement of rural society in South Africa.

There is lack of research on the prevalence of psychosocial problems in the rural children of South Africa. However, with the help of the data reported on the psychosocial problems in the urban children, it can be assumed that the prevalence in the rural areas of the South Africa will also be high. Based on this understanding, the first hypothesis to be tested on the school children of Agincourt is:

H1: *There will be high prevalence of psychosocial problems, especially internalising problems in the grade 5 and 6 primary school children of Agincourt*

Social ecological model suggests examining the ecological factors though multiple systems by understanding which factors produce direct influence and which factors can only mediate or moderate the influence of the other factors. Furthermore, the studies also established the importance of both risk and protective factors in predicting the psychosocial outcomes in children. Three important predictors that directly influence the prevalence of psychosocial problems in children were found to be family support, school environment and social support. According to Cluver (2007), risk and protective factors may be conceptualised as two sides of the same coin. For example, low socio-economic status may be seen as a risk for quality life, and high levels as a protective factor. Therefore, the presence of these predictors has been hypothesised to produce positive psychosocial outcomes whereas its absence is hypothesised to result in negative psychosocial outcomes.

H2: *A number of risk factors, such as family instability, unsafe school environment and lack of social support, will predict negative psychosocial outcomes amongst these children.*

H3: *The protective factors such as familial and social support and safe school environment will predict positive psychosocial outcomes amongst these children.*

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction

This chapter spells out the procedures and the methods that the researcher employed in achieving the objectives of the project. It defines geographical limitation of the study, research procedures and analysis plan that were addressed in the course of the study consideration when carrying out this particular research. The chapter begins with highlighting the research aim, questions and hypotheses that guides the designing of the present study. Success of the project was a factor of the provision of satisfying information in line with the objectives and hypotheses in the determination of the role of ecological factors in the prevalence and predictors of psychosocial outcomes amongst socioeconomically deprived primary school children in a rural setting in South Africa. It is followed by an overview of research design which includes the description of study setting, population and details about study area as well as a brief introduction of the four components of the study.

The chapter then divides into four sections – each allocated to each research component. In all four sections, (3.4-3.7), the researcher has provided details of the research instruments, their reliability and application in the study, and the analytical technique. The subsequent section describes the data handling procedure and is followed by section on the explanation of ethical considerations of the present study.

3.2. Research Aim, Questions and Hypotheses

The research methodology of the present study was guided by the research aim as well as the methodological gaps identified in the literature review (Chapter 2). The cross section survey study was aimed at enhancing the understanding of psychosocial problems faced by children living in South Africa, particularly the socio-demographically deprived children in the rural areas of South Africa with high HIV prevalence, and at informing the school-based intervention and policies aimed at addressing these psychosocial problems in the said population. To achieve this aim the survey study was designed to answer the following research questions:

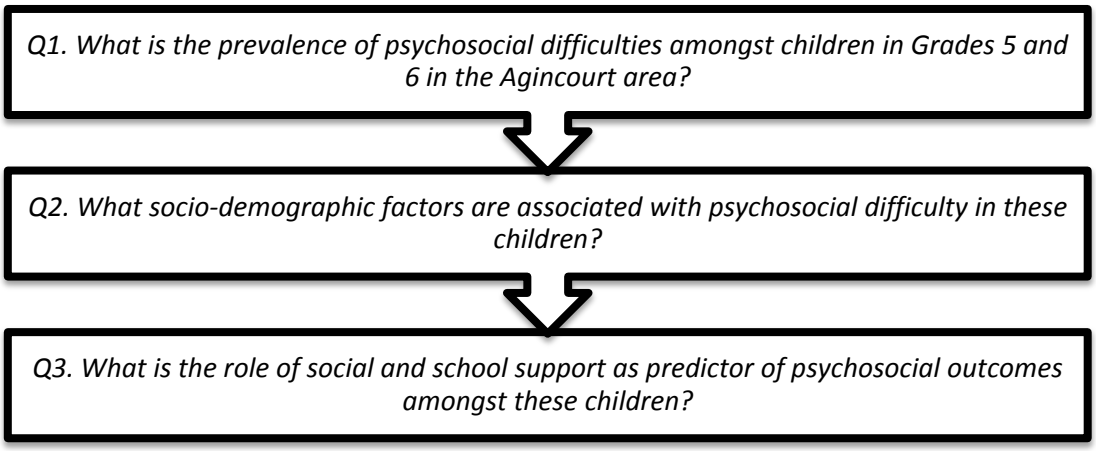


Figure 3.1: Cross-Sectional Survey Research Questions

Based on the review of the literature (Chapter 2) and the findings of pilot study, the following hypotheses were proposed for the study:

Hypotheses	*There will be high prevalence of psychosocial problems, especially internalising problems in the grade 5 and 6 primary school children of Agincourt.*
	A number of risk factors, such as family instability, unsafe school environment and lack of social support, will predict negative psychosocial outcome amongst these children.
	The protective factors such as familial and social support and safe school environment will predict positive psychosocial outcome amongst these children
	A number of factors like presence of social networks, alcohol use, nutrition, and grants can serve as moderator variable in the relationship between predictor variables and psychosocial outcomes

Figure 3.2: Cross-Sectional Survey Research Hypotheses

3.3. Overview of Research Design

The following subsections describe the important details of the study research design like the component of research methods, the setting in which the study occurred, the study population, and infrastructure and housing, healthcare facilities, and schooling in the study area.

3.3.1. Components of Research Methods:

This is a cross-sectional survey with a section of quantitative measures and another section on qualitative measures. This research has four major components:

- A quantitative component using questionnaire completed by learners and teachers with scales to assess psychosocial functioning and prevalence of difficulties.
- A quantitative component to examine risk and protective factors' effect on children's psychosocial functioning. Data from the first component of the study will be linked to census data from the past 18 years in the study site in order to match each child to their household. This will allow for examination of various risk and protective factors (ie, migration, socioeconomic status, or parental education level).
- Qualitative and quantitative description of social networks for vulnerable children that exist in the study area. This was from questionnaires completed by members of school governing bodies with ordinal and nominal scales.
- A qualitative component using semi-structured interviews with 20 learners to establish the beliefs about the help they need in the area.

3.3.2. The Setting

Mpumalanga is one of the nine provinces into which South Africa is divided. Mpumalanga province is home to over 7 per cent of the country's population (Argent, Finn, Leibbrandt & Woolard, 2009). The province has the third lowest total income of all the provinces in South Africa. As is true for most of the other provinces and the country in general, Mpumalanga province is characterised by high rates of poverty coupled with inequalities in income distribution between different social groups and high unemployment (Hunter, Twine & Johnson, 2011).

Compared to other provinces, Mpumalanga ranks among the fourth lowest in terms of *per capita* income. Poverty and unemployment in South Africa are severe mostly in rural areas (Anderson & Krathwohl, 2001), where agriculture is the chief economic activity, which is inlyadequate proficient due to various factors affecting farmers' inclusion in the process throughout Mpumalanga province (Kgosiemang & Oladele, 2012).

According to the census report of 2003, Mpumalanga province was home to 733,131 households with a total of three million people. The racial composition of the province is of a

mixed type with members of the African origin comprising nearly 90 per cent of the population. Coloureds comprise 0.7 per cent of the population while Indians and whites comprise 0.4 and 6.5 per cent respectively.

For the purpose of administration, Mpumalanga Province is divided into three municipal districts (Kgosiemang & Oladele, 2012): Ehlanzeni, Nkangala and Gert Sibande. The districts are further subdivided into 17 local municipalities. Most of these district municipalities were recently demarcated following directives by Local Government Municipal Structures. This study was conducted in Agincourt, which falls under the Bushbuckridge local municipality within the Ehlanzeni district. This area is located in north-east of South Africa bordering the Kruger National Park.



Figure 3.3: Map showing the Eastern Border of South Africa

3.3.3. The study population

The study is nested within the *MRC/Wits Rural Public Health and Health Transitions Research Unit, School of Public Health, University of the Witwatersrand* (The Agincourt Health and Demographic Surveilence System). The system has been regularly updated since it was started in 1992 (Kahn, *et al.* 2007).

Acording to Schatz *et al.* (2011),

"*The population in the study site amounts to nearly 84,000 people, living in 14,700 households in 26 villages. The setting is rural in terms of distance from urban centres and*

lack of infrastructure. The main ethnic group is Shangaan, although Mozambicans, originally refugees, comprise more than a quarter (29%) of the total population. Both groups are Shangaan-speaking and the Mozambicans are culturally affiliated to the South African host population. There are mainstream Christian churches, independent African churches and an amalgamation of traditional and Christian beliefs is often practiced."

Joblessness is estimated at 40 – 50% in this region (Indepth-network, 2009). Formal positions are usually filled by migrants who work in mines, manufacturing and service firms located in larger towns and in neighbouring farms and plantations. Among these migrant labours, a vast majority is of women. Public sector serves as an important source of employment but only for local residence of the country..The informal sectore provides numerous employment opportunities for people. A number of families rely on pension to run their daily life. Female headed households make up 32% of all households in the country (Indepth-network, 2009).

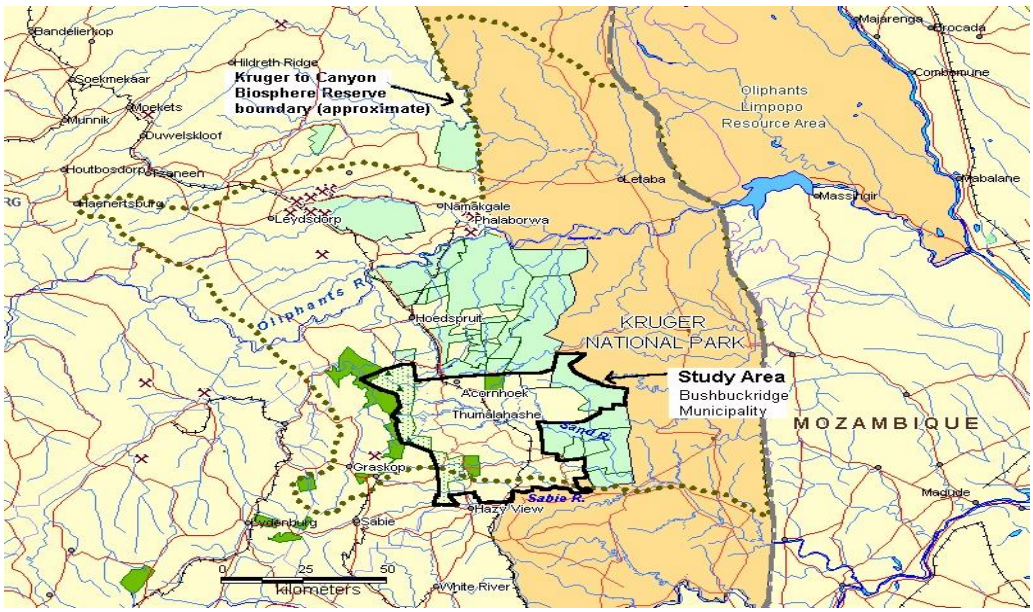


Figure 3.4: Map showing the Agincourt study site

3.3.4. Infrastructure and Housing

The study area covers about 402 km^2. Despite the current government's initiatives on development sector, infrastructure in the area is scarce (Goudge, Gilson, Russell, Gumede & Mills, 2009). Traditionally, mud huts were built in the area but now various

other materials, like brick, tin or tiles, are also used in building constructions. Agricultural industry is not flourishing, affecting the nutrition level of poor people in the society. Water is propelled through purification plants, but only in few cases, to the main reservoirs in the villages. From the reservoirs it is distributed to the public taps which serve as the main collection sites for villagers. Water is collected by hand, usually by women or children, in 25-litre drums and is conveyed either by wheelbarrows or carried on the head. Water shortage sets a serious problem in various villages (Goudge *et al.*, 2009).

Level of household sanitation is also very poor, and pit toilets of different effectiveness are the norm. Almost all roads are without proper pavements for pedestrians. Public transport is almost absent as buses are usually privately owned. Electricity and telephone services were the main target for recent developmental work (Goudge *et al*., 2009).

3.3.5 Healthcare Facilities

Health services are provided through one private hospital, one public hospital and six dispensaries. All services provided throgh these healthcare centres are free of charge. However, there are some serious shortcomings in the healthcare services in this area. There is a shortage of professional doctors in the field-site as all hospitals and dispensaries are run through nurses only. They also lack diagnostic facilities as the laboratory is not large enough to perform all major diagnostic tests. There is only one ambulance to tend to the medical emergencies of the entire field site (Goudge *et al*., 2009).

Although these health centres throughout the region provide neonatal and maternal care as well as family planning services, they are usually underutilised (Kimani-Murage *et al.*, 2011). Complicated cases that cannot be managed in the local hospitals are referred to the two nearest district hospitals. These district hospitals with better facilities are at a distance of about 25 km from the field area (Goudge *et al.*, 2009).

Children in this area suffer from some major health difficulties including diarrhoea, injuries in violence, kwashiorkor and HIV/AIDS and other chronic diseases (Kahn *et al* 1999; Tollman *et al.* 1999; Garenne *et al.* 2000). Garenne *et al.* (2000) also reported a regular

malarial epidemic during particular seasons. There is also high birth rate with poor sexual health awareness in people.

HIV prevalence is high in the district in which the study site is located; 24% in the adult population age 20-64 years and 22% among people aged 15-49 years. The 2005 report of the antenatal seroprevalence sentinel survey indicates an HIV prevalence of 35% among pregnant women visiting public health clinics in 2005, making this district with the second highest prevalence nationally (Shisana, Rehle, & Simbayi, 2005).

3.3.6 Schooling

All villages in the study area had at least one primary school for young children and fourteen of them also have at least one secondary school. The schools were relatively new as the adult population in age range 25-29 years had higher proportion of people with no formal schooling (40%) than those who were in age range 15-24 years (0%). In the former age group, 6% had completed secondary education and 3% had attended higher-secondary school as well. In the latter age group,46% were those who have attended secondary education. Among 10-14 years old, more than one third were enrolled in the primary schools. In all age groups the age of enrolment in schools is usually above the normal age of enrolment in other parts of the world (Tollman & Kahn, 2007).

Contrary to the published data on school enrolment; according to the unpublished data collected in the 2006 census in Agincourt, the school enrolment rates are above 95% from age 7 through 15, the years of compulsory education. Even after compulsory education is over, there is no significant decline in school enrolment (Eaton *et al.*, 2008).

The school buildings in most villages are old and dilapidated. The national norm for a number of children to be taught in one classroom is 36 children. Most of the classrooms in Agincourt have more than 50 children per classroom. Some children are taught under trees, in temporarily built wooden structures or in prefabricated-houses provided by the department of education.

The medium of instruction in all schools in the area is English. *Shangaan* is taught as a first language subject, and English as a second language.

All primary schools in Agincourt are part of the National Schools Nutrition Programme. This programme covers all children attending primary schools in 13 rural and eight urban poverty nodes identified by the government. Children receive a meal a day while at school. The programme was extended in 2009 to 1500 secondary schools around the country.

3.3.7 Power Calculations and Sample Size

The aim of this component of the project was to measure the prevalence of psychosocial problems in the socioeconomically deprived area. According to the systematic review on psychological problems amongst children by Cortina *et al.* (2012), the studies with relatively low risk populations, rates of disorders have varied between 4 to 8%. In high risk populations in Sub-Sahara Africa, rates have varied between 2.7 to 71% of children. The weighted averages were 19.1% across all of the studies and 28.6% for studies using screening questionnaires (Cortina, *et al.* 2012). Based on these findings the reported prevalence of psychological problems in children has a wide range, and it is difficult to have a predicted value for power calculation of sample size.

Previous studies on South African children that used similar scales for measuring behavioural and emotional problems were conducted on orphans (Cluver & Garnder 2006; Cluver *et al.* 2007). In one study, the prevalence of different problems was reported to range from 10%-17% for AIDS–orphans, 8%-10% for orphaned children not affected by AIDS, and 8-9% of non-orphans (Cluver & Gardner 2006). In another, the reported prevalence for SDQ score is 2.4%-8.8% for orphans and 2.8%-7.8% for non-orphans. Since these studies were conducted in urban centre and we expect the prevalence to be high among children in rural areas, we used the known prevalence score for power calculation to be 20%.

Using the 99% confidence intervals (an alpha of 0.01) with a width of 0.1 and a power of 80% (beta of 0.20), and a predicted prevalence of 26%, the minimum required sample size came out to be 339 to 426 using STATA version 11 software. Due to an anticipated high decrease in sample size following absenteeism and missing data, it was important to take a much larger sample. The sample size was increased to 1197 for all key variables.

As expected, the sample decreased during the study but not as much was thought and, by the end, the study used a sample of 988 children, which was sufficient to provide good estimates of the prevalence of psychosocial problems in this population and to allow for examination of risk and protective factors (explained in chapter 4).

3.3.8. Sampling

All children in grades 5 and 6 (ages 8-14) in 10 randomly selected primary schools in the study site were invited to take part. The schools were selected from a stratified random sample of the 28 primary schools in the study site. Stratification was based on recent school evaluations by the Mpumalanga Department of Education. The department rates schools from one to three (One being the lower performing schools and three being the higher performing schools). According to the evaluations, most schools in the study site fell into the top two categories. A representative sample consisted of four high- performing, four middle-performing and two low- performing schools. From these 10 randomly selected schools, 1197 children were selected as the sample of the study. 22 class teachers of the 1197 participating children completed the Strengths and Difficulties Questionnaire (SDQ) for each child. All 10 schools were sampled for school management assessment using documents review, interview with the principal, and observation of school management.



Figure 3.5: Children in one of the participating schools reading the information sheet about the study with the guide of the researcher

3.4. Quantitative Component to Assess Prevalence of Psychosocial Difficulties

Prevalence of psychosocial difficulties in the sample of learners was assessed using two questionnaires – one for children in the grade 5 and 6 of the selected school and the second for the 22 class teachers of the selected children.

3.4.1 Child questionnaire

Self-report questionnaires with standardised scales were used to measure the child's externalizing and internalizing difficulties, including peer difficulties, social relations problems, emotional problems like anxiety and depression, and cognitive problems. Children's self-report questionnaires were administered in Shangaan (see appendix 1B), in a child-friendly format with colours and pictures. Each sentence in the questionnaire booklet had a different colour (see appendix 1).The first sections of the questionnaire were aimed at measuring the psychosocial outcome of children while the remaining sections were composed of the scales measuring socio-demographic, protective and risk factors. In this section, details of the first section of the questionnaire are provided while the details of sections on risk and protective factors are present in the next section (Section 3.5.2).

Two field workers employed by the Agincourt DSS site worked with the researcher to administer the questionnaires. The researcher read out each question in front of children, first pronouncing the colour of the question being read, and children marking the appropriate answers individually. The fieldworkers ensured that children did not discuss nor share the

answers. The completion of the self-reported questionnaire lasted for an hour and a half with two fifteen minute breaks in between. The summary of the scales used in the child questionnaire for measuring psychosocial outcome in children is provided in table 3.1 below.

As can be seen, a number of scales are used in children-reported questionnaire. In addition to this, the questionnaire in this study also included scales for measuring socio-demographics, and risk and protective factors (table 3.2). With so many scales, the comprehensibility of the study increased but the questionnaire became too lengthy. One serious deficiencies of the questionnaire can be attributed toward this length, keeping the sample of children in mind. Attention span of children is usually small, and it may have detracted them from giving correct answers in the survey, thus affecting the quality of ratings.

There are several widely used and validated questionnaires for assessing general behavioural and emotional problems in Western countries. These include the Report Questionnaire for Children (RQC), the Strengths and Difficulties Questionnaire (SDQ; Goodman, 1999) and the Youth Self-Report (YSR; Achenbach, 1991). The RQC is commonly used in sub-Saharan Africa. It was developed by the World Health Organisation as a brief screening measure for general psychological problems and has been shown to be useful for screening psychological difficulties in many developing countries.

Robertson and colleagues (1999) found that, within a peri-urban South African population, the RQC had a sensitivity of 99% and a specificity of 41%. That is, the RQC yielded a high false positive rate (59% false positives and 1% false negatives, with a positive predictive value of only 23%; Robertson *et al.*, 1999). Also, as it comprises only 10 items, it assesses a restricted range of symptoms. Because this study is aimed to get a detailed picture of a range of symptoms experienced by children in this population, more comprehensive measures of general psychosocial difficulties were sought.

Domain	Scale	
Mental Health: The self-report questionnaires suitable for young people aged around 11-16	Internalizing problems	For anxiety items from the Revised Children Manifest Anxiety Scale the RCMAS For depression children's Depression Inventory the CDI
	Peer difficulties	5 items peer relationship problems subscale of the SDQ
	Externalizing problems	5 items hyperactivity/inattention subscale of the SDQ
	Social relations	5 items pro-social behaviour scale of the SDQ
	Cognitive style	36 items Cognitive Triad Inventory for Children CTI-C
	Self Esteem	9 items Global Self Esteem subscale of the DuBois Self-Esteem Questionnaire SEQ

Table 3.1: Summary of Scales in the Child's Questionnaire for assessing psychosocial outcome

The details of the scales used in the present study are provided as follows:

The Strength and Difficulties Questionnaire (SDQ)

The Strength and Difficulties Questionnaire (SDQ) has been used by a number of scholars in past to identify the cases of a broad range of psychosocial difficulties (Achenbach, *et al.*, 2008; Goodman, Ford, Simmons, Gatward, & Meltzer, 2000; "Questionnaires and related items in English and translation," 2010). A large number of these studies are conducted in the socioeconomically deprived setting and the questionnaire has been used in multiple languages. It is a 25-item scale with determined validity and reliability (Goodman, 1997) and assesses an array of symptoms through five subscales as well as giving a total difficulties score. In children questionnaire hyperactivity, peer problems and prosocial behaviour subscales were used to examine the externalising problems, peer difficulties and social relations of the recruited children.

The self-reported version is generally suitable for children aged around 11 to 16 depending on their level of literacy and comprehension (Goodman, Melzer and Bailey, 1998). This study, however , used the self-reported version on 10 year olds as well as 14 year olds

because their patterns response has been shown to be reliable (Mellor, 2004; Muris, Meesters, Eijkelenboom & Vinken, 2004). Following discussions with local researchers, the SDQ was determined to be the most appropriate tool to assess children's overall psychological difficulties. Each item was read aloud to avoid literacy issues and was piloted to determine it was suitable for the target group.

A study using the SDQ in Kinshasa, Democratic Republic of Congo, was the first epidemiological study using the SDQ to evaluate mental health in an African setting (Kashala, *et al.*, 2005). Factor analysis in that study revealed a similar five- factor structure of the SDQ in that setting. Kashala and colleagues (2005) found cut-off scores to be somewhat different from the UK norms detailed by Goodman and colleagues (Meltzer, *et al.*, 2000; "Normative SDQ Data from Britain,"2001). Nonetheless, they regarded the SDQ as a useful tool (Kashala, *et al.*, 2005).

In children's questionnaire, three of the five SDQ subscales (hyperactivity, peer problems, and prosocial behaviour) were used for examining externalising problems of the recruited children. Each subscale contained five items. This study used the self-reported version on 10 year olds as well as 14 year olds because their response patterns are shown to be reliable (Goodman, 2001).

As the child SDQ scales used focus on behaviour (hyperactivity and pro-social behaviour and peer problems) two additional scales were used to provide an assessment of emotional problems, specifically, anxiety and depression. For anxiety, items from the Revised Children Manifest Anxiety Scale (RCMAS) were used (Reynolds & Paget, 1981). Depressive symptoms were assessed using Children's Depression Inventory (CDI) (Twenge & Nolen-Hoeksema, 2002).

In addition to the above-mentioned scales assessing psychological functioning, two additional scales were used. The 36-item Cognitive Triad Inventory for Children(CTI-C) was

used to assess children's views of themselves, the world, and the future (Beck, 1976; Beck, Rush, Shaw, & Emery, 1979).

Cognitive Triad Inventory for Children (CTI-C)

An individual's cognitive interpretation of events has a known association with anxiety and depression in adults (Matthews and MacLeod, 2005) and in children (Dalgleish, *et al.*, 2003; Dalgleish, *et al.*, 1997). For example, children and adolescents with anxiety or PTSD have been shown to exhibit memory biases for negative self-encoded material (Dalgleish, *et al.*, 2003). Although this construct has not yet been tested in low and medium income countries, there is good theoretical evidence that suggests that people's cognitions are related to psychological difficulties and may play a mediating role (Meiser-Stedman, Dalgleish, Gluksman, Yule, & Smith, 2009). It was therefore decided to assess children's cognitive interpretations.

There are only two known published scales which assess cognitive interpretation in children. These include children's Attributions and Perceptions Scale (CAPS; Mannarino, Cohen, & Berman, 1994) and the Cognitive Triad Inventory for Children (CTI-C; Ksalow, Stark, Printz, Livingston, & Ling Tsai, 1992).

The CAPS is an interview based assessment focussing on sexual abuse related factors. Based on Beck's Cognitive Triad, the CTI-C assesses children's view of self, view of the world, and the view of the future (Beck, 1976; 1979). It was developed on a community sample of children in grade 4 to 7 (ages 9 to 14) and adequately distinguishes between anxious and depressed children. Low scores indicate a more positive cognitive interpretation and a higher score indicates a more negative cognitive interpretation.

The CTI-C has adequate internal consistency and convergent validity as well as adequate internal consistency and validity in western samples (Greening, Stoppelbein, Dossche, and Martin, 2005). The CTI-C was therefore selected to assess the potentially

negative cognitions of children and determine whether negative scores are associated with elevated behavioural and emotional problems.

Global Self-Esteem sub scale of the DuBois Self-Esteem Questionnaire.

According to Wild, Flisher, Bhana, & Lombard (2004), self-esteem and self-concept have been described in research and theory as hierarchical multidimensional constructs, and have often been used interchangeably. DuBois *et al.* (1996) noted that empirical efforts to validate psychometric properties of scores from self-esteem instruments have been deficient in comparison to measures of self- concept. Keeping in view the lack of content validity of scales measuring self-esteem, DuBois *et al.* (1996) designed an adolescent Self- Esteem Questionnaire (SEQ) which focuses exclusively on measuring self-esteem. Psychometric properties and factorial validity of the SEQ were explored by Dubois *et al.* 1996, who found acceptable internal consistency and test-retest reliability for SEQ. Factor analysis was also consistent for the measures across demographically diverse groups of young adolescents in the developed countries (DuBois, Bull, Sherman & Robertson, 1998; DuBois *et al.*, 1999; DuBois, *et al.*, 1994; Swenson & Hanson, 1998). This demonstrated that scores on the SEQ have showed theoretically predictable patterns of relationships with indicators of youth adjustment in a number of research investigations. No validation studies have been found from the developing countries.

In the present study children responded to questions on a 4-point scale (1 = strongly disagree, 4 = strongly agree). Some items on the scale were reverse scored to measure average self-esteem. The higher the score on the scale, the more self-esteem that individual would be.

3.4.2 Teacher SDQ questionnaire

Class teachers were asked to complete the *Strengths and Difficulties Questionnaire* (SDQ) on each of children (see appendix 2). It provides a good screening tool of emotional and behavioural problems displayed by children and has been used in many non-Western

contexts. This was used to support the child self-report. The details of the SDQ have been provided earlier. Here, it is important to mention that the teacher reported version was used in the teacher questionnaire. All the subscales were included and the class teachers were asked to fill the questionnaire for each child in their class.

3.5. Quantitative Component to Examine Socio-Demographic, Protective and Risk Factors

3.5.1. AHDSS Data

The Agincourt Health and Population Unit has developed a system namely "Agincourt Health and Demographic Surveillance System" (AHDSS) to monitor the health and demographics of Agincourt, a sub-district of Bushbuckridge in north-east of South Africa (figure 3.3). The aim of the system is to hold multi-round recording and updating of health and demographic data of all residents of Agincourt. Using a comprehensive registration system, data related to birth, deaths, migration, household relationship, residence, education, grants, socio-economic status, and health issues like diseases, immunisation, medical aid, and others is collected. The further details of this system can be found elsewhere (Kahn *et al.*, 2007).

In the present study data on the birth weight of children, duration of breast feeding received by children, head of family's age and sex, mothers' place of residence, number of days spent by the child in the household, type of residence of the child and mother in 2008 and 2009, socio-economic status of the families, education level of the mothers, and migration was used to examine the impact of socio-demographic variables on the psychosocial outcome of children.

3.5.2. Children's Questionnaire

In addition to the aforementioned scales on the psychosocial outcome of children, children questionnaire contained some other scales for examining protective and risk factors,

as described earlier. The details of these scales as well as type of the factor measured by these scales are provided in table 3.2 below.

Factors	Domain	Scale
Risk/Protective	Violence and School environment	• 11 items adapted from Peace Zone questionnaire Prothrow-Stith, Chéry, & Oliver (2001) [PeaceZone: A program for teaching social literacy]. • 16 items of the School Victimisation Scale(SVS) (Henry, 2000), assessing experience of Interpersonal violence were used
Moderator	Alcohol and substance use	• 1 items from Reproductive Health Research Unit(RHRU) for Alcohol Use • 1 item from RHRU for Alcohol Experience in School • 7 items from RHRU for Attitude/beliefs in relation to Violence and alcohol • 1 item from RHRU for social norm associated with alcohol use.
Protective	Social Support	• 6 item Social Support scale from Adolescent Pathways Project 1992
Moderator	Nutrition	• 2 Item from Orphan Children Study
Moderator	Grants	• 1 Item from Orphan Children Study
Risk	Stigma	• 4 item scale from Cluver, Gardner, and Operario, 2007 • 7 items from Mason and Berger, 2008
Risk	Caregiver illness	• 4 global questions from WHO 2003 International Classification of Functioning, Disability and Health (ICF)
Risk	Child care tasks	• 23 Item from Orphan Children Study
Moderator	HIV knowledge	• 17 items from Soul City

Table 3.2: Summary of Scales in the Child's Questionnaire for measuring risk, protective and moderating variables

Violence and School Environment

Violence in the school can heighten the psychosocial difficulties in the child and was, therefore, selected as the risk factor. For example, research has shown that poor school climate is associated with increased behavioural and emotional problems in children in grade six in Helsinski (Somersalo, 2002). In order to assess children's perception of the school environment, 11 items were selected from the Peace Zone questionnaire, a four-point likert scale developed for the US programme to teach social literacy in schools (Prothrow-Stith, Chery, & Oliver, 2001).

For examining the level of safety at the schools, 16 items adapted from Fein, Vosskuil, Pollack, Borum, Modzeleski and Reddy (2002) were used. The questions have been used in several studies in the US to assess threats of targeted violence in schools. There are several examples of how the threat assessment approach was used to develop guidelines for making decisions about safety in schools. However, there is no available research on the validity of the instruments (Van Dyke & Schroeder, 2006).

School environment can also serve as a protective factor examining the positive impact of safety in the schools on psychosocial outcome. Safe school environment was found to improve the psychosocial development of children (Power & Blom-Hoffman, 2004; Hoadley, 2007). A study examining school-related stress and psychosomatic symptoms of 10-15 year olds in Norwegian schools participating in the World Health Organisation's Health Promoting Schools project found that support from teachers and peers reduced a pupil's risk of psychosomatic symptoms (Natvig, Albreksen, Anderssen, & Qvarnstorm, 1999).

Alcohol and Substance Use

Items from a questionnaire developed by Mayer & Filstead (1979) were used to examine the frequency of alcohol use as well as the behavioural and perceptual aspects of alcohol and substance use related to the school environment. These are: Violence and alcohol experience at school and children's attitudes and beliefs related to violence and alcohol.

Social Support

Social support was measured in five domains, *i.e.* support provided by caregiver, siblings, teacher and principal, friends, and peers. All were measured with the help of Social Support Scale, developed in Adolescent Pathways Project (1992). The scale has previously been used to measure social support for adolescents in Cape Town (Van der Merwe & Dawes, 2000; Ward, 2005; Cluver, Bowes & Gardner, 2010). Cronbach's alpha was measured to be 0.85 for sibling support subscale, 0.67 for the teacher support subscale, 0.72

for the principal support subscale, and 0.76 for the friend support subscale. Protective factors of support used in the scale were identified through detailed qualitative research (Cluver *et al.* 2010).

Nutrition

In their study Gundersen and Kreider (2009) have shown that hunger has significant negative impact on children's development. According to Weaver and Hadley (2009) hunger also has associations with poor mental health. In their US-based study aimed to investigate relationship between food insufficiency and cognitive and psychosocial outcomes in children (6-11 years old) and teenagers (12-16 years old), Aliamo, Olson and Frongilo (2001) found that food insufficient children and teenagers had poorer performance in arithmetic, higher trend of repeating grades, more likelihood of seeing a psychologist and had greater difficulty in social relationship. Other studies done in the developing countries usually test the relationship between nutrition and education indicators like grade level, age at time of enrolment, rate of absenteeism, achievement test scores, IQ level, and cognitive performance in the classroom. Past studies have found significant relationship between nutritional status and these school indicators (Pollit 1990).

In the current study, to ascertain whether children had enough food, one item asking about food within the last week was included. This item has been used in previous studies in South Africa and provides a good indication of food security (Cluver & Gardner, 2007).

Grants

Several studies that were internationally have shown the impact of state grants on children and families (Millar, 2001; Meyer, 2002; Guthrie 2002). Results of these studies indicated that recipients of state grants were lifted from poverty due to funding received. In this study an item from the survey of orphaned children in Cape Town (Cluver & Gardner *et al.* 2007) on grant access was used.

Stigma

The items used fill the gaps in the stigma/discrimination indicator of community attitudes by capturing childrens' experience of stigma and social exclusion. A scale developed by Cluver *et al.* (2007) and improved by Cluver *et al.* (2008) and Gardner *et al.* (in press) was used. Cluver *et al.* (2008) adapted the scale from Snider (2006) and described that "all scales from Snider's (2006) work were developed and validated with children and adolescents of ages comparable with those in Zimbabwe and South Africa. The original scale has an alpha reliability of 0.758 and 0.531. The adapted scale has an alpha of 0.591, indicating increased reliability (Mueller *et al.* 2011, p. 59).

Caregiver Illness

Research has shown that illness can affect the parenting aptitude of any caregiver or parent (Nagler, Adnopoz & Forrsyth, 1995). Smart (2000) and Wild (2003) have both shown that parents' or caregiver's illness can result in reversal of normal parent-child roles, as children have to take care of the parents and are supposed to assume household responsibilities including taking care of younger siblings. According to Smart (2000), the process is associated with increased social isolation. In the present study, items from a scale from a study done in South Africa by Cluver, Operario and Gardner (2009) have been used. That study was aimed to test the mediating role of factors, like caregiver illness, monitoring and abuse between orphanhood status and psychological problems.

Childcare Tasks

Items from the Young Carers tasks and outcomes Questionnaire (Becker, 2009), Road to Life (Cluver & Gardner, 2007) were used in this study. The questionnaire was designed to assess the social, educational and health impact on young carers who are caring for ill parents in South Africa.

HIV knowledge

To measure HIV knowledge of children in Agincourt, items from scale used by the "National Survey of HIV and risk behaviour among young South Africans" (Reproductive Health Research Unit & Love Life, 2005) and the "Demographic and Health Survey" (Department of Health &Medical Research Council, 2007) were selected.

All scales from which items were taken, and the particular items that were selected, were chosen based on a number of factors. These factors included strong psychometric properties such as good internal validity, test-retest reliability and good alpha scores; standardised scales; cross-cultural validity and items considered successful in previous questionnaires designed for children in South Africa.

3.5.3. Translation and Back Translation

Since children were Shangaan speaking, the researcher, being a first language Shangaan speaker, translated their questionnaire into Shangaan language. Two field workers from the Agincourt study site, experienced in doing translations for different studies within the site, translated it back into English independently. The researcher and both fieldworkers then discussed all items to confirm words that best described each sentence. This was done in order to determine consensus on each item.

3.5.4. Piloting the questionnaire

A pilot study was conducted in one of the schools in the study site that had not been selected for the main study. This was done in order to determine ambiguity of wording, inappropriate responses and any flaws in the instruments.

The piloting involved administering the questionnaire on 110 learners and discussions with the class teachers and the school principal. Teachers completed the SDQ questionnaire and learners completed the child self-reported questionnaire.

The pilot revealed important information about administering questionnaires in schools, children's ability to answer items and the most appropriate format of assessment.

All of the schools in the area were English medium schools, and therefore should be taught in English. However, upon observation of classes and discussion with teachers it was determined that children were not comfortable answering questions in English.

Although the overall content of the questionnaire was found to be suitable, several methodological issues were revealed. For example, the questionnaire item format revealed that children were not accustomed to answer multiple choice questions and circling a response, but did better when each item choice had a number and which they were required to mark their response in a box next to each question.

Children found it easier to read the questions when the row for each item was presented in alternating colours, so they were less likely to get the rows confused and miss an item. Children were most comfortable reading the item number, colour of the row and the item aloud as a group. This method seemed to increase children's participation and focus as opposed to the researcher reading the item aloud.

Children's questions regarding particular items and their attention span time-frame before a break were noted. From a logistical perspective, it was noted that many of the schools lacked basic resources such as pens and pencils, which needed to be supplied by the researchers.

The pilot provided information on the structure of the school day, natural breaks, meal times and lesson times. Teachers and the principal advised the researchers to note that the larger research project needed to be flexible around school schedules.

The pilot revealed that children were eager to participate and enjoy the research process. Following the assessment children were debriefed and oral feedback was requested to ascertain whether they had any difficulties or experienced any distress. This revealed that children did not demonstrate any evident distress from the exercise. Arrangements were in place to ensure that any child received help if it was necessary; however none needed to be implemented.

Results from the pilot were not fully analysed but exploratory analysis revealed that responses on each scale were generally normally distributed. Correlations on items that overlapped provided an indication of convergent and discrimination validity suggesting that children understood the items.

The information gathered from the pilot played a critical role in informing the final version of the questionnaire and research procedure. Contact was made with school principals to get an idea of the daily schedule in order to the assessment around natural breaks in the day to minimise the disruption to the teachers and children's routine. This was particularly important around meal time, as this was often children's only meal of the day, and the other children not being assessed would be out in the school ground playing, providing a potential distraction.

3.6. Qualitative and Quantitative Component for Describing Social and School Support

3.6.1. School Governing Body Members Questionnaire

School Governing body members (SGB's) were asked to complete a social network questionnaire at each school. A list of organisations involved in supporting vulnerable children was compiled and was distributed together with the questionnaire to each member. SGB members were asked about four types of involvement with the organisations. These included links through:

- exchange of knowledge
- through shared resources
- through children referrals (sent or received)
- Frequency of interaction between school and the organisations
- Organisations not listed but valuable to the network in helping it address Safeguarding Children issues. (See appendix 4)

3.6.2. School Management Assessment

In February 2009 the research team undertook school observations in a sample of ten schools participating in the study.

The researcher and two fieldworkers went to each of the ten schools. The two fieldworkers collected data on school management practices which involved document reviews. The researcher interviewed the school principal and observed teachers as well as the school environment.

The instrument used for collecting data was adapted from Joint Education Trust School Management Instrument with components shown in Table 3.3 below:

Instrument	Component
Management	A. Observation of conditions at the school
	B. Interview with principal, including basic information about the school
	C. Document analysis

Table 3.3: Component of School Management Assessment Instrument

The purpose of the interview with the principal was to better understand resources available in the school to support vulnerable children and the efficiency of the school management in distributing the available resources among vulnerable children. Principles were also asked regarding school fees, number of teachers, learners and classes for each grade, staff development activities as well as the resources available for the schools.

School document reviews were done to establish availability of:

- school development plans
- teacher sign-in records
- learning material
- school timetable

- learner attendance registers

3.7. Qualitative Component Analysing Children's Beliefs about the Help They Need

This study, in acknowledging the inadequacy of quantitative approaches in fully understanding learners' perceptions about social support, took a qualitative approach. One-on-one interviews were conducted and the learners themselves participated directly in the research in ensuring that the themes emerging were not simply a reflection of an agenda imposed by the researcher. The interview context also facilitated broader communication patterns or deeper interaction that included non-verbal communication, which, although a vital form of communication, gets lost during quantitative research (Saunders, Lewis and Thornhill, 2007).

3.7.1. Research Design

The study design can be described as exploratory or naturalistic (Neale and Liebert, 1986). In line with exploratory research designs (Neale and Liebert, 1986) this was a qualitative study carried out with the intention of emphasizing the importance of the social context for understanding the social world of learners as well as allowing for the gathering of a large amount of information in a few cases and going into greater depth and getting more details in these cases.

3.7.2. Sampling

Based on a previous quantitative survey, the current study applied a purposeful sampling strategy (Creswell, 2002; Onwuegbuzie and Leech, 2007). This provided a unique opportunity to generate in-depth understanding of the perception of learners about the help they need in this resource poor environment (Saunders *et al.*, 2007).

A purposive sample of twenty learners aged between 8 and 14 years were recruited from a primary school in Agincourt after obtaining ethical clearance from the "University of the Witwatersrand ethics committee on human subjects". The principal of the school was contacted through letter containing information sheet about the study. The teachers were

requested to select learners who could speak English aged between 8 and 14 years. . The reasons for selecting only English-speaking children in interview were fall around the expectation that it will be hard to translate the responses of children. Since verbal interaction in a local language is in local discourses, translating them in a foreign language is more difficult than translating a questionnaire. 104 learners who can speak English were verbally asked to be the respondents of the study of which 20 approved – from whom written consent was taken. The learners were provided with copies of a letter about the study, and a consent form to be signed and returned to the school prior to the learner's participation in the study. Two researchers carried out the interviews using the same guide to ensure that the learners were asked similar questions. Later on, however, it was found that some children were not giving detailed replies due to language hurdle, and it was decided to take their interviews in Shangaan. Half the group was interviewed in English and the other half in Shangaan (Table 3.4).

3.7.3. Profile of participants

An overview of the socio-demographics including the language of interview, learner number, sex, age and grade of primary school learners is shown in the table 3.4.

Group	Language of interview	Learner number	Sex	Age	Grade
A	ENGLISH	1	Male	10	5
		2	Female		5
		3	Male	13	6
		4	Female	13	6
		5	Male	13	5
		6	Male	13	6
		7	Female	14	6
		8	Male	12	5
		9	Female	12	5
		10	Male	13	6
B	SHANGAAN	1	Female	12	5
		2	Male	13	6
		3	Female	11	5
		4	Female	13	6
		5	male	14	6
		6	Female	13	5
		7	Male	11	5
		8	Female	11	5
		9	Female	13	6
		10	Male	14	6

Table 3.4: Profile of Participants of Interview

In the English speaking group, there were 6 male and 4 female participants. They were around 10-14 years old. Half were in grade 5 while other half were in the grade 6. In contrast, there were 6 female and 4 males in the Shangaan speaking group. They were 11-14 years old, and half of them were in 5th while other half were in 6th grade at schools. Since no differentiation was made between the two groups during the analysis of data, it can be said that the 20 selected individual have equal distribution of gender and grade.

3.7.4 Interviews

The decision to employ interviews as the main tool for collecting qualitative data was made with the expectation that interviews would allow the participants to regulate the flow of communication and would enable the researcher in getting detailed account of their perceptions of the help needed as it will emerge naturally during the course of the conversation (Saunders *et al.*, 2007). This was particularly needed as previous work has been criticised for its limited and biased data on people's perception based on surveys having close-ended questions. Again, one-on-one interviews eliminate the potential risk of group influence that may modify responses.

The interviews were semi-structured in nature. The interviews were conducted in two spare offices at the schools' premises. Each interview lasted for 40 minutes on average, and this fitted well with the schools' timetables. The sessions took into account concentration abilities of the interviewees, and the need to engage each interviewee to saturation whereby no new information was anticipated should interviewing continue (Onwuegbuzie and Leech, 2007).

The aim of the interview was to examine children's perception of the help they needed in order to deal with their daily problems. Children were asked about the problems they usually face in the schools and in the home. They were asked about the person to whom they prefer to report the problem and their perception regarding the outcome of these reports.

Children were also enquired about the place at which they prefer to take help as well as the difference in the type of help needed in the schools and the home.

3.7.5 Interview guide

A semi-structured interview guide was used as a framework for data gathering to ensure that important aspects of the key concepts are addressed. The interview guide was developed by putting together probing phrases that reflected factors associated with help-seeking behaviour. The tool was piloted on four of the learners drawn from the study population. Two learners were interviewed in English and the other two in Shangaan.

The interview guide was used with the four learners to simulate the planned interviews and to determine if the items made sense to them. This was also done to see if it produced the similar responses when the two languages were used. Generally, there appeared to be no need to refine the tool. However, general logistical issues were considered, *e.g*. the interviewers ensured that the interview spaces were safe for private talk at both offices. The participants of the pilot study were not part of the final study. During the actual interview session, the items in the guide were introduced in a non-directive way to enrich communication. The interviews were recorded and transcribed verbatim. Some handwritten notes were also taken during the interviews to complement the verbal transcription.

3.8. Data

3.8.1. Data Quality

The content validity of the selected research instruments was maintained with the help of pre-testing the recent literature.

For the inter-rater reliability, the two fieldworkers were trained in administering the questionnaire and researcher co administered with each fieldworker during piloting. In addition, an expert researcher from Oxford observed data collection and recording process, pinpointing problems and assisting with solutions.

3.8.2. Data Entry

Data was entered into a Microsoft SQL server which is a software product used to store and retrieve data as requested by other software applications at the Agincourt Demographic surveillance. This system is used to enter census data for the past 18 years.

Participants were matched to their household using their first name, surname, their mother's first name and surname, their father's first name and surname, their date of birth and names of other household members using a computer matching programme. Information was categorised from 0 to 5 scores. The score of "0" was a perfect match.

The remaining unmatched children were matched by hand based on other names that children used, or other surnames that the members of the household used. After the matching was complete; the data base was converted to STATA format for analysis.

3.8.3. Data Cleaning

The data cleaning process included the exclusion of participants above the threshold of missing items, determination of the sample size if all such participants are excluded, deciding whether imputation is appropriate and impute. The selected models were also tested to indicate which model fit and which not. Since data was obtained in different datasets, the mismatching in the variables and ids were checked and corrected.

The psychometric properties for each scale were examined using a multi-stage procedure: 1) Confirmatory factor analysis for scales with published/known factor structures; 2) Assessment of model fit; 3) Exploratory principal components analysis where there was poor model fit or unknown factor structure; 4) Reliability analysis; 5) Assessment of validity; 6) Exclusion of scales with poor model fit. These stages are presented in figure 3.6 below.

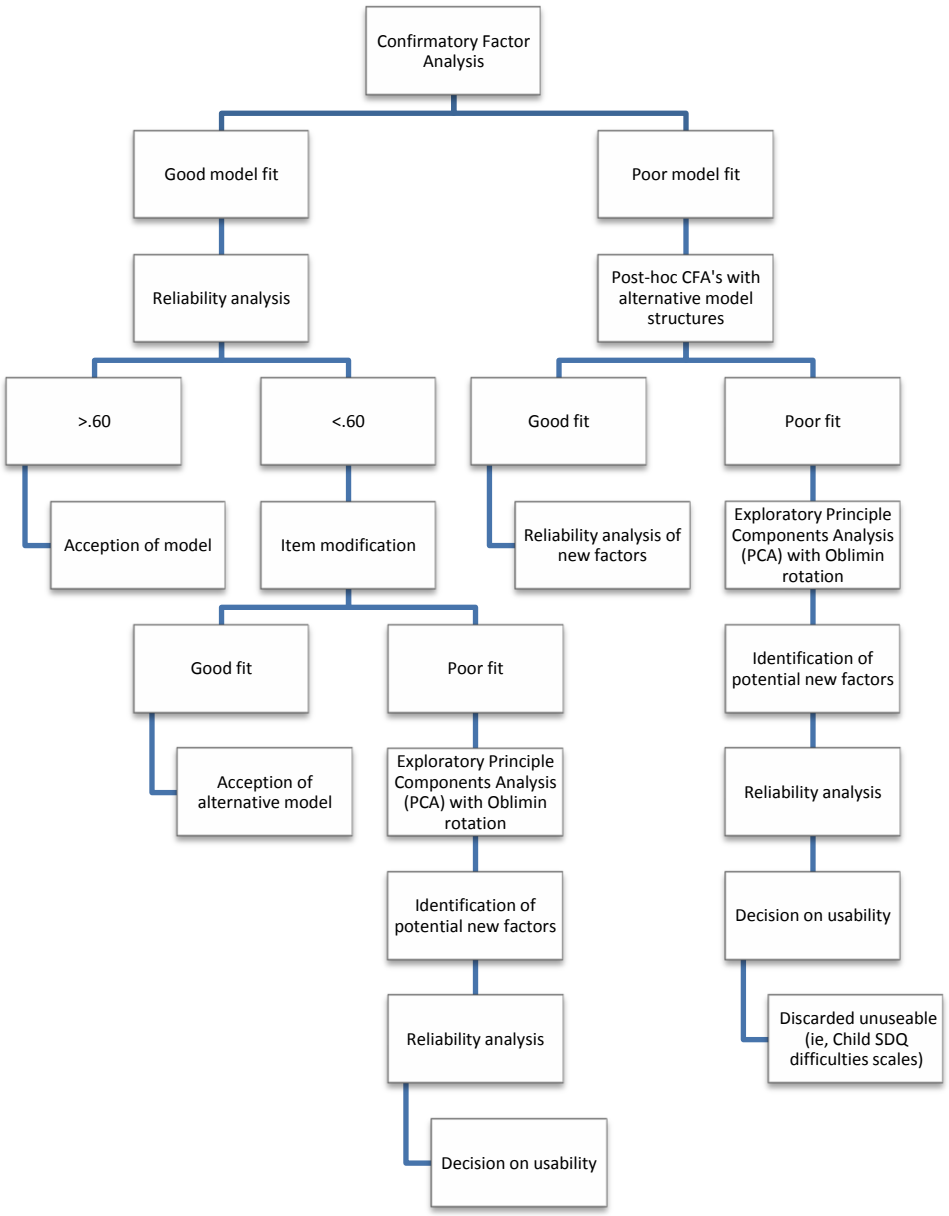


Figure 3.6: Stages of Confirmatory Factor Analysis

3.9. Research Ethics

3.9.1. Informed consent and voluntary participation

Prior to data collection the researcher met with the school principals, teachers and school governing body members and discussed the research and answered any questions. The school principal and the school governing body members of the school were briefed about the study after obtaining permission from the Mpumalanga Department of Education's district office.

Information sheets written in Shangaan were sent home with the learners in grade 5 and 6 from participating schools, explaining the research project to the families and carers

(see appendix 9). Written consent was obtained from the parents or guardian of children in years 5 and 6 at the parents meeting at the schools (see appendix 10).



Figure 3.7: Parents signing consent forms after the information session with the researcher

Assent was also obtained from the learners on the day of data collection (see appendix 11). Learners were informed verbally and in writing that participation would be voluntary and information given would be kept strictly confidential. They were also informed that they could withdraw from the study at any time if they wished to, and non-participation would not lead to any negative consequences.

Consent to do semi-structured interviews on 20 learners from one school to explore beliefs about the help they need, was obtained from parents and carers of the learners (see appendix 12). Before each interview, the researchers outlined the purpose and expected benefits of the exercise to the participant; and also sought permission to tape-record the session.

Members of the school governing bodies at each participating school were asked to volunteer to complete a questionnaire for analysing social networks that exist to support vulnerable children in the study area (see appendix 13).

3.9.2 Confidentiality and Anonymity

Confidentiality of each participant was protected by ensuring that, except for the researchers, no other person (including teachers) was involved in the interviews. Also, results are presented in such a manner that no participant is identifiable by anyone.

Prior to data collection the researcher obtained names of all children who had consent from parents to participate in the study. These children were matched with the census data from the Demographic Surveillance system. Data in relation to each child as reflected in Appedix 1(d) was obtained. Study numbers were then allocated to the Children.

The anonymity of the learners was maintained in the study. Their names and identification details were immediately covered after completing the questionnaires using stickers with the study number and were not used during the analysis.

3.9.3. Institutional approval

The research protocol was presented to the Mpumalanga Provincial Department of Education, district office and three circuit offices in the study area *i.e.* Lehukwe, Ximungwe and Agincourt circuit offices. A letter of permission to conduct the study was received from the district office (see appendix 6).

Letters were sent to the relevant school in order to get cooperation from the principal, school governing body and teachers, permission was granted. Approval for conducting the study was also granted by the Witwatersrand's Research Ethics Committee (see appendix 7). The purpose of this committee is to ensure that individual participants as subjects in research studies are protected and the ethical standards are adhered to throughout the study (Bailey 1996). Permission was also obtained from the Director of the Wits /MRC Health and Populations Transitions Research Unit (see appendix 8) and the Mpumalanga ethics committee within the Provincial Department of Health.

3.9.4. Minimising invasiveness

The researchers interfered with the participants or their milieu only to the extent that was warranted by the research design. Before providing them questionnaire for filling, the researcher explained the way the questionnaire needs to be filled. The participants were allowed to ask clarification and questions during the questionnaire filling but the researcher took special care that her clarification does not influence their markings.

3.9.5. Ensuring Welfare of the Participant

The researchers conducted the research with due concern for the dignity and welfare of the participants. Before conduction of the study, the researcher reviewed the previous studies on the similar subject to see if there is any detail on risk to the welfare of the participants. The research process is based on survey and interviews which did not involve any severe harm to the participants' well-being. Children involved in the study, were surveyed within school to ensure their security. Their names were kept anonymous to avoid any social harm to them.

There was a possibility that some children may have found some questions distressing. The chidren were informed that researchers who were trained in counselling were available to talk to them. In the event that the children needed a referral, arrangements were made with a local social worker to intervene. The social worker also worked with home based carers who were supportive and willing to help.

3.10. Overview of Analytical Strategies

Since the data was obtained from multiple sources using different data collection strategies, different strategies were used for analysis of the data. A brief overview of these strategies is described here. Further details of the strategies are provided in the following chapters on results. Version 2010 of *Microsoft Excel* was used to plot graphs and to find the descriptive statistics of the variables. Prevalence of psychosocial difficulty was measured with the help of the average score of children-reported and teacher-reported questionnaire. Graphs were plotted to compare the percentage of children having psychosocial difficulty

with the percentage of children having little or no difficulty. Association of the socio-demographic, protective and risk factor was analysed by computing the Pearson correlation between mean psychosocial outcome and the factors. In addition, multiple regression analysis was used to show the association of all risk factors with the psychosocial outcome of children. Partial correlation was used to examine the effect of moderator variables on the relationship between protective factors and psychosocial outcomes. Data obtained from interviews of the learners was analysed using thematic analysis strategy. A thematic framework was plotted using the themes emerged from the transcripts of the interview. *UCINET* version 6.354 was used to examine the composition of social networks between organisations supporting learning and development of children in the study area.

3.11. Summary

The design and methods employed in the present study are described in details in chapter 3. The chapter discussed in detail the study setting and population as well as the sampling strategy and the profile of the selected sample. The rationale behind the selection of the instrument in each component of research design has been explained. Data entry and cleaning process and the ethical consideration were also detailed at the end of the chapter. The next chapter 4 describes the study's results on the prevalence of psychosocial problem in children.

CHAPTER 4: RESULTS - PREVALENCE OF PSYCHOSOCIAL DIFFICULTIES AMONG CHILDREN

4.1. Introduction

The chapter presents the results obtained by the present research regarding first research question – What is the prevalence of psychosocial difficulties amongst children in Grades 5 and 6 in the Agincourt area? The chapter begins with the description of the analytical technique used by the researcher to find the prevalence of psychosocial difficulties among these children. Then the missing value analysis of the responses has been described followed by details of the prevalence of psychosocial difficulties among grade 5 and 6 children. First, prevalence of psychosocial difficulties has been examined using the results obtained from teachers' survey. It is followed by the description of prevalence of psychosocial difficulties as reported by children themselves. Psychosocial problems of children have also been examined in dimensional terms by computing mean score of each problem. At the end of the chapter, summary of the key findings has been reported.

4.2. Study Sample

Ten schools in the study site were randomly selected for the collection of data. The selection of school was based on the stratified random sample of 28 primary schools in the study site. Stratification was according to the school evaluation by the Department of Education which rated the schools from one to three in terms of quality. Most schools fell into the top two categories; the sample comprised four schools in the top category, four in the middle and two in the bottom category. There were 1197 children in the grade 5 and 6 of these selected schools. The researchers visited the selected schools and worked with children in grade 5 and 6. Total 1140 children provided the consent to participate in the study, of which 37 children were not present on the day of data gathering. The researches read the questionnaires together with children and they marked the answers on the questionnaire (For more details see Chapter 3).

28 cases were removed from child data set that had no child data attached. The cases seemed to be children who may have had school roster information. There were 37 children in the teacher-data set who completed teacher questionnaires, but did not have demographic site's identity number. It is likely that these children were on the school registers, but were not present on the day of assessment. It is unlikely that there was consent for these children because consent form was sent with respect to demographic site's identity number.

4.3. Analytical Approach

The results of the filled questionnaires were recorded and re-coded in the correct coding before calculation could be done. The statistical analysis of the collected data was conducted using SPSS version 19. Distribution of the scores of all psychosocial scales was determined by measuring descriptive statistics. It was found that some questionnaires were not completely filled. Due to the missing data, the validity of the results obtained from the analysis was uncertain. Therefore, missing value analysis was conducted to determine the amount of missing data and to remove the cases with data over threshold. Simple imputation technique was then used to impute the missing data. To examine the difference in the distribution of scores, means of all scales before and after imputation were compared.

The cut-off scores of all scales were applied to divide children in accordance to normal, borderline, and clinical/abnormal levels of difficultly. The prevalence of psychosocial difficulty in children was determined by the percentage of children at clinical/abnormal levels of psychosocial difficulty. Descriptive statistics (Frequencies) was used for dimensional examination of psychosocial difficulties.

4.4. Missing Values Analysis

Missing value analysis was conducted to analyse the amount of missing data in each scale. The cases above threshold of missing items were removed. The inclusion criterion for each case was 60% completion of the questionnaire (Wood, White & Thompson, 2004). To deal with missing data, imputation was conducted.

4.5. Scales Measuring Different Domains of Psychosocial Problems

Different domains of psychosocial problems, which were measured by the researcher using a number of scales, (explained in chapter 3) include behavioural problems including peer-difficulties and hyperactivity, pro-social behaviour, self-esteem, cognitive interpretation, and emotional problems such as anxiety and depression below.

Domain	Scale	Score Range	Cut-off score	Interpretation
Behavioural Problems	SDQ-total difficulties score (Teacher-reported)	0-40	20	Higher score indicates greater behavioural difficulty
	Peer relationship problems subscale of SDQ (Child-reported)	0-10	6	Higher score indicates greater behavioural difficulty
	Hyperactivity/inattention subscale of SDQ (Child-reported)	0-10	7	Higher score indicates greater behavioural difficulty
Pro-social Behaviour	Pro-social behaviour sub-scale of SDQ (Teacher and child-reported)	0-10	4	Lower score indicates greater difficulty in social-interaction
Self-Esteem	Global Self-Esteem sub scale of the DuBois Self-Esteem Questionnaire (child –reported)	1-32	21	Lower score indicates lower self-esteem. Median-split has been used for low/high self-esteem. The median of this sample is 21; therefore the researcher has used < 21 for low self-esteem.
Cognitive Interpretation	Total score CTI-C (child-reported)	0-72	N/A	Higher score indicates more negative cognitive interpretation. Since CTI-C is a continuous scale, it was not interpreted using clinical cut-off scores
Emotional Problems	Anxiety subscale of RCMAS	0-14	8	Higher score indicates more anxiety
	Child Depression Inventory	0-20	11	Higher score indicates higher depression

Table 4.1: Summary of different domains of psychosocial problems assessed

4.6. Child-Reported Prevalence of Psychosocial Problems

Children reported psychosocial problems across a number of domains including behavioural problems, pro-social behaviour, low self-esteem, and emotional problem (anxiety and depression).

4.6.1. Behavioural Problems

Children reported data on two important domains of behavioural problems – peer difficulties and hyperactivity. The prevalence of these two difficulties in children is shown in figure 4.2 below:

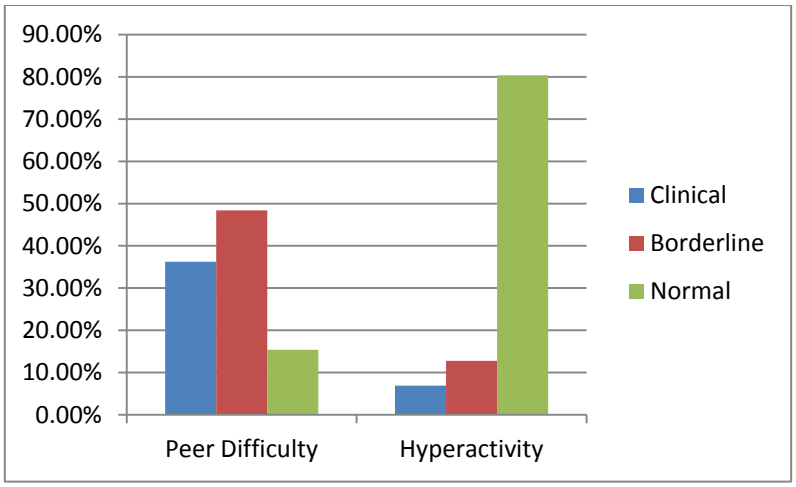


Figure 4.1: Prevalence of behavioural problems reported by children- N=988

Cut-off scores for each scale were applied to categorise the children in to normal, borderline, and clinical/abnormal levels of difficultly. As can be seen, children reported very high prevalence of peer difficulty with 36.23% of children at clinical level of peer difficulties. In contrast, only 6.88% of children were reported to be at clinical level of hyperactivity.

4.6.2. Pro-social Behaviour

Children-reported prevalence of problems in behaving pro-socially is shown in the figure 4.3 below. As can be seen, according to children-reported data, around 25% of children were at clinical level of having problems in behaving pro-socially.

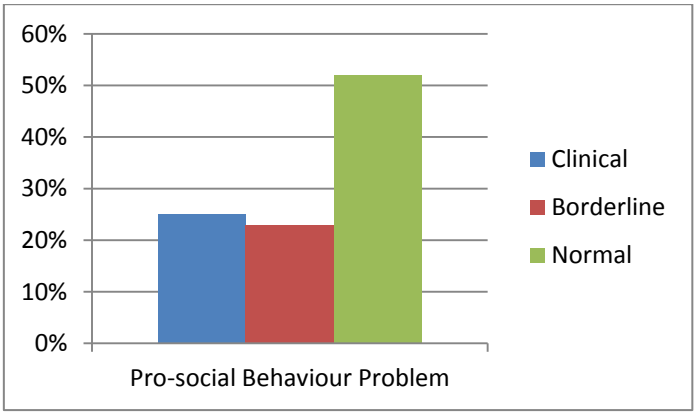


Figure 4.2: Prevalence of pro-social behavioural reported by children-N=988

4.6.3. Self Esteem

Using median split cut-off, around 41.3% of children were found to have low self-esteem, as shown in the figure 4.4 below.

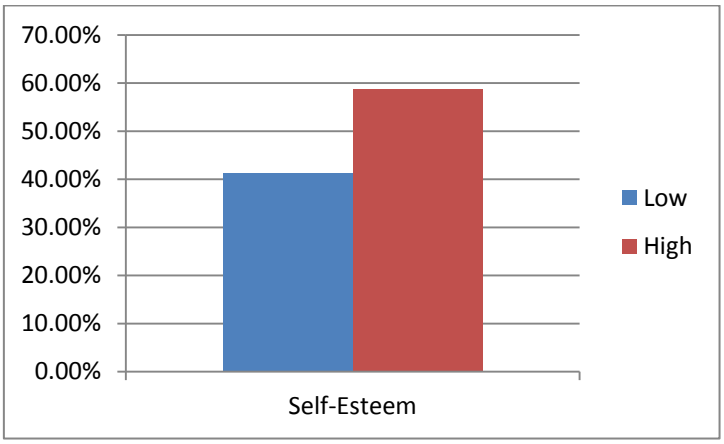


Figure 4.3: Prevalence of low self-esteem reported by children-N=988

4.6.4. Emotional Problems

Children also reported considerably high prevalence of emotional problems. On the anxiety subscale of RCMAS, 35.7% of children reported clinical level of anxiety. CDI scores indicated that 7.2% children scored in clinical range of depression scale (See Figure 4.5).

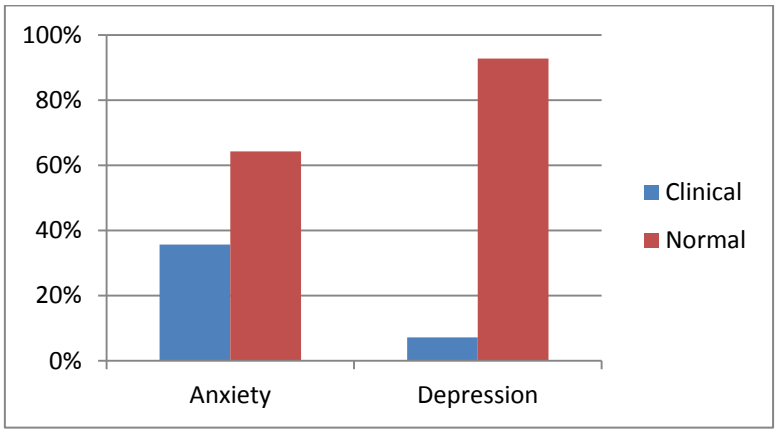


Figure 4.4: Prevalence of emotional problems reported by children-N=988

4.7. Teacher-Reported Prevalence of Psychosocial Problems

Prevalence of behavioural problems in children as reported by the teachers is shown in the figure 4.1 below. As can be seen, teacher-reported behavioural problems are quite high,

with teachers claiming that 21.2% of children had clinical level difficulties (as shown by SDQ total difficulties score). They reported considerably higher difficulties regarding conduct and peer-relationship as compared to emotional issues and hyperactivity.

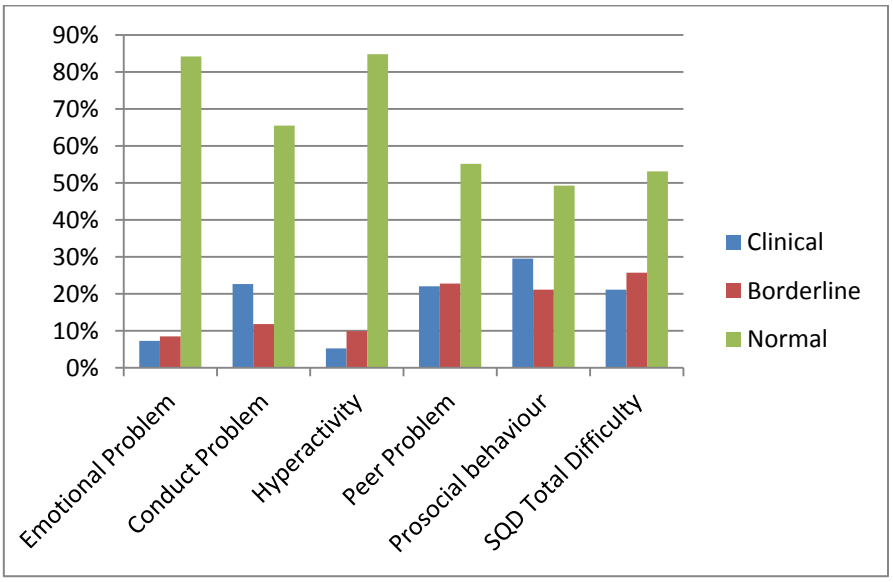


Figure 4.5: Prevalence of psychosocial difficulties reported by teachers-N=988

A high percentage of children having problems in behaving pro-socially was reported by the teachers. They reported 29.5% of children at clinical level of anti-social behaviour.

4.8. Dimensional Examination of Psychosocial Difficulties

All the domains of psychosocial difficulties were also assessed in dimensional terms by computing the mean score on these scales. Table 4.2 details the means and SD scores on each scale. The mean score of teacher-reported psychosocial difficulties in children was 10.80 (SD = 6.23), based on the SDQ total difficulties score. Children reported higher level of difficulty in peer relationships as compared to teachers. According to children reported data, peer difficulties in children were at mean score of 5.04 (SD=1.51) while according to teacher reported data, peer difficulties in children were at mean score of 3.12 (SD = 1.82). However, teachers (M =3.74, SD = 1.94) reported slightly higher level of hyperactivity as compared to children (M = 3.52, SD = 1.90). Teachers reported considerably lower emotional problems (M = 2.05, SD = 2.11) and conduct problems (M = 2.13, SD = 1.96) as compared to hyperactivity and peer-relationship problems.

With regard to pro-social behaviour, teacher-reported average score (M = 5.90, SD = 2.50) was slightly lower than children-reported average score (M = 6.01, SD = 2.49). Thus, teachers reported higher level of difficulty with respect to pro-social behaviour in children as compared to the level of difficulty reported by children.

Domain	Scale	Total *N* = 998	
		M	*SD*
Behavioural Problems	Emotional problem subscale of SDQ (Teacher-reported)	2.05	2.11
	Conduct problem subscale of SDQ (Teacher-reported)	2.13	1.96
	Peer relationship problem subscale of SDQ (Teacher-reported)	3.12	1.82
	Hyperactivity/inattention subscale of SDQ (Teacher-reported)	3.52	1.90
	SDQ-total difficulties score (Teacher-reported)	10.81	6.23
	Peer relationship problems subscale of SDQ (Child-reported)	5.04	1.51
	Hyperactivity/inattention subscale of SDQ (Child-reported)	3.74	1.94
Pro-social Behaviour	Pro-social behaviour sub-scale of SDQ (Teacher-reported)	5.90	2.50
	Pro-social behaviour sub-scale of SDQ (Child-reported)	6.01	2.49
Self-Esteem	Global Self-Esteem sub scale of the DuBois Self-Esteem Questionnaire (child –reported)	21.18	3.71
Cognitive Interpretation	Total score CTI-C (child-reported)	26.76	11.62
	View of self	8.17	4.81
	View of world	9.00	4.47
	View of future	9.59	3.92
Emotional Problems	14 items anxiety subscale of RCMAS	7.00	2.98
	Child Depression Inventory	5.64	3.06

Table 4.2: Mean and Standard deviation of difference domains of psychosocial difficulties-N=988

Mean score of self-esteem, as reported by children, was 21.18 (SD = 3.71) that shows moderate level of self-esteem in children, keeping in view the possible score range of 0-32 on this scale. The average score of CTIC (M= 26.76, SD = 11.62) is relatively lower given that the maximum score on this scale is 72, indicating positive cognitive interpretation by children in the sample, on average. The sample's average view of self (M = 8.17, SD = 4.81) was more positive than their average view of world (M = 9.00, SD = 4.47), which in turn was more positive than their average view of future (M = 9.59, SD = 3.92).

On average, children reported moderate level of emotional problems. The average score of anxiety scale was 7.00 (SD = 2.98), while the average score of CDI was 5.64 (3.06) indicating moderate level of anxiety and low level of depression in children.

4.9. Summary

The chapter provided an overview of the sample of children surveyed in the present study and the prevalence of psychosocial problems in these children. Teachers reported high prevalence of psychosocial difficulties in children with higher prevalence of conduct problems and peer-relations problems as compared to the prevalence of emotional problems and hyperactivity. Children also reported very high prevalence of peer-relations problems, but lesser prevalence of hyperactivity. Both teachers and children reported prevalence of difficulties with respect to pro-social behaviour to be higher than 25%. Around 41% of children had low self-esteem and around 25% of them were at clinical level of anxiety. However, prevalence of depression was quite low among the sample with only around 7% of children at clinical level of depression.

The average level of difficulty among the sample was obtained through the descriptive analysis of the scores on each scale. With regard to behavioural problems, teachers reported moderate level of difficulty among children. However, peer-relationship was reported by both children and teachers to be a big problem. The average pro-social behaviour of children was at moderate level of difficulty with respect to the cut-off scores. Similarly, children's average self-esteem was also moderately high and their cognition was

quite positive when using cut-off scores measured. Anxiety was reported to be at moderate level of difficulty, while depression was reported to be quite low among children in the sample.

CHAPTER 5: RESULTS – IMPACT OF SOCIODEMOGRAPHIC AND BACKGROUND VARIABLES

5.1. Introduction

The chapter is based on the second research question of the present study - What socio-demographic factors are associated with psychosocial difficulties in these children? A number of socio-demographic and background variables were selected to examine their impact on the psychosocial difficulties. The selection of these socio-demographic and background variables was based on the knowledge gained from the review of literature on the subject. In the beginning of this chapter, the analytical technique that was used to answer the second research question has been described in detail followed by the details of the socio-demographic distribution of the sample. This includes details from children-filled questionnaires as well as teachers-filled questionnaires. Finally, at the end of the chapter, the relationship between these socio-demographic factors and psychosocial outcome of children is presented to show the factors that can influence the psychosocial behaviour of children.

5.2. Analytical technique

Multiple methods have been used to examine the impact of socio-demographic factors on the psychosocial difficulty of children. Children were asked about the grade in which they were studying, their date of birth, and their sex. Gender, grade, and age differences in the prevalence rates of psychosocial difficulties have been examined using bar graphs and Chi-square. Next, the impact of gender, grade, and age and other socio-demographic factors – obtained from the Agincourt Health and Demographic Surveillance System (AHDSS) data – on means of each psychosocial scale has been analysed using univariate and multivariate analysis. ANOVAs were used to examine the impact of variables on the domains of psychosocial difficulties with one scale while MANOVAs were used to examine the impact of variables on the domains of psychosocial difficulties having more than one scale. Significance value was set at 0.05. Details of items studied are tabulated in Appendices 1(c),1(d) and Appendix 2(b).

5.3. Socio-demographic profile of the study sample

In the final sample of study, there were 988 children of which 487 (49.3%) were boys. 556 (56.3%) children were in grade 5 and 431 (43.6%) children were in grade 6. Children surveyed in the present study had age range of 9-19 years. The mean age of the sample was 12.12 years (*SD* = 1.39). A summary of the socio-demographic profile of the study sample, as reported by children, is shown in the table 5.1 below.

Socio-demographic factor		Frequency	%
Age	9-12 years	689	69.7
	13-16 years	294	29.8
	17-19 years	5	0.5
Gender	Male	487	49.3
	Female	501	50.7
Grade	5	557	56.4
	6	431	43.6

Table 5.1: Age, gender, and grade distribution of study sample

5.4. Socio-demographic data of the study sample obtained from AHDSS database

AHDSS database provided census data collected over past 10 years on the socio-demographics of children, as well as their parents and a number of environmental factors like socio-economic, education, and health conditions in the area. From the huge amount of background information available in this data, the researcher selected some important factors suggested in the literature review that can influence the psychosocial development of children. The census data of all selected variables was not available for all children, as some information is not applicable to some children while some information was missing. Table 5.2 details the distribution of the sample with respect to selected socio-demographic and background factors. Details of each factor are provided as follows:

5.4.1. Household Head

To examine children living under children-headed household, age of household head was determined. It was found that the age of household head ranged between 15 and 94 with only one child under 18 years old household head. Thus, except this one particular case no child was living in a children-headed house. Majority of the household heads were older than 35 years. With respect to gender, majority (52.5%) of the household heads were male.

5.4.2. Socio-Economic Status

Socio-economic status of children's families was determined through composition asset status score as per 2007. "Asset ownership has increased for typical rural households in the last decade in South Africa reflecting improvements in housing, electricity access and ownership of modern goods" (Collinson , 2010). There was almost equal proportion of families across all SES quintiles in Agincourt, though the least proportion was in the lowest SES quintile. Higher SES quintiles correspond to better socio-economic status, it can be said that only few children were from families of lower socio-economic status.

5.4.3. Mothers status and location

Keeping in view the important role of mothers in the psychosocial development of children, the living status and location of mother were determined. Around 9% of children's mothers were deceased. Of the living 794 mothers, 15 were living in Bushbuckridge, 30 in Agincourt, 25 in the same village, 696 in the same household, and 28 elsewhere. Therefore, majority of children were living with their mothers.

5.4.4. Mothers' Education

Around 35% of the mothers received education beyond primary level (over 7 years) and around 20% received education below primary level. Only 20% reported to have not received any education.

5.4.5. Mother Union

Only about 39% of the mothers claimed to be in union. Of the mothers who were in a marriage-type union, majority (30.1%) were formally married while only 7.4% reported informal union, 0.7% were remarried, and 1.0% were separated.

3.4.6. Child's Birth-weight

Birth-weight data of only 288 (29.1%) children was available, of which majority had weight lower than standard (2.5 kg). Considering the large number of missing values (70%), this variable has been omitted from the analysis and its effect on the psychosocial difficulties cannot been analysed.

5.4.7. Child Breastfeeding

Keeping in view the benefits of breastfeeding for the development of children (Gartner *et al.*, 2005), it was hypothesised that breastfeeding would have positive impact on psychosocial development of children. Data on child breastfeeding was available only for 47% of children in our sample, of which majority were breastfed at least once in their life. Of 40% children whose duration of breastfeeding was recorded, majority received breastfeeding for less than 6 months.

5.4.8. Residence

In our sample, more than three quarter (76.7%) of children reported to be the permanent residents of South Africa. Only 1% of them had migrated from other parts of the world. The data for the remaining children (22.3%) was missing.

5.4.9. Child Labour

Though child labour has been reported in previous study to be common in South Africa (Orkin, 2000), less than 1% of children in our sample have ever worked, which is understandable as the data has been collected from school-going children.

Variable	N	%	Min	Max	*M*	*SD*

Age of household head (years)	848	85.6	15	94	51.19	13.41
< 18	1	0.1				
18-25	10	1.07				
26-35	81	8.2				
> 35	756	76.4				
Gender of household head	848	85.7	0	1	0.39	0.49
Male	519	52.5				
Female	329	33.3				
SES quintiles for 2007	821	83.0	1	5	3.10	1.33
1	114	11.5				
2	182	18.4				
3	188	19.0				
4	179	18.1				
5	158	16.0				
Mother status	887	89.7	0	1	0.90	0.31
Deceased	93	9.4				
Alive	794	80.3				
Mother location	794	80.2	0	4	3.40	1.33
Bushbuckridge	15	1.5				
Agincourt	30	3.0				
Same household	696	70.4				
Same Village	25	2.5				
Elsewhere	28	2.8				
Mother Education (years)	733	74.1	0	15	6.55	4.91
0	197	19.9				
1-7	184	18.6				
8-15	352	35.6				
Mother Union Status	891	90.1	0	1	0.44	0.496
Not In union	503	50.9				
In union	388	39.2				
Mother Union Type	388	39.2	1	4	1.88	0.54

Informal	73	7.4				
Married	298	30.1				
Remarried	7	0.7				
Separated	10	1.0				
Child's birth weight (kg)	288	29.1	0	6.50	3.13	0.64
Low (≤ 2.5)	265	26.8				
High (> 2.5)	23	2.3				
Child's breastfeeding	466	47.1	0	1	0.95	0.22
Yes	443	44.8				
No	23	2.3				
Child's duration of breastfeed (months)	401	40.5	0	26	5.10	8.52
0-6	292	29.5				
7-13	14	1.4				
> 13	95	9.6				
Child's residence status 2009	769	77.7	0	1	0.99	0.11
Permanent	759	76.7				
Migrant	10	1.0				
Child labour 2008	625	63.2	0	1	0.01	0.08
Never worked	621	62.8				
Ever worked	4	0.4				

Table 5.2: Demographic data of study sample collected from AHDSS database

5.5. Impact of socio-demographic variables on psychosocial outcome

The impact of self-reported socio-demographic factors like age, gender, and grade on the prevalence of psychosocial problems in children was analysed graphically as there was no missing data in all of them and the sample size for all was equal and comparable. However, the socio-demographic data obtained from AHDSS has unequal sample size and, therefore, instead of prevalence, the impact of such variables on the mean score of each psychosocial scale was analysed by reducing the sample on each of these analysis to only those children about whom data was present. To further clarify the impact of age, gender, and grade, their association with mean score of each psychosocial scale was also computed.

5.5.1. Impact of Age on Prevalence of Psychosocial Problems

Prevalence rates of psychosocial problems were examined by age range with respect to all domains of psychosocial problems. Chi-square statistics were examined to determine the significance of the difference in the prevalence rates for children of different age ranges defined as 9-12, 13-16, and 17-19. The last age group of 17-19 only include 5 children and therefore is a small sub-sample to provide any significant results. The statistics are shown in table 5.3 below. As can be seen, there are significant differences in teacher reported SDQ total difficulties score and children-reported pro-social behaviour scores with respect to the age of the sample. Further results of Chi-square are available in Appendix 17.

Domain	Scale	X^2	*df*	*p*
Behavioural Problems	SDQ-total difficulties score (Teacher-reported)	11.524	4	0.021*
	Peer relationship problems subscale of SDQ (Child-reported)	4.041	4	0.401
	Hyperactivity/inattention subscale of SDQ (Child-reported)	4.393	4	0.355
Pro-social Behaviour	Pro-social behaviour sub-scale of SDQ (Teacher-reported)	11.324	4	0.023*
	Pro social behaviour sub-scale of SDQ (Child-reported)	4.980	4	0.289
Self-Esteem	Global Self-Esteem sub scale of the DuBois Self-Esteem Questionnaire (child –reported)	5.152	2	0.076
Emotional Problems	14 items anxiety subscale of RCMAS (Child-reported)	1.744	2	0.418
	Child Depression Inventory(Child-reported)	1.301	2	0.522

* $p > 0.05$

Table 5.3: Chi-square results for psychosocial difficulties by age

5.5.1.1. Behavioural Problems: There were significant age differences in the prevalence of teacher-reported behavioural problems in children while children-reported behavioural problems were not significantly different for children of different age range (See table 5.3). Teachers reported higher prevalence of behavioural problems in 13-16 years old children, where more than 25% of children were reported to have clinical level of behavioural problems (See figure 5.1). The prevalence of children-reported peer relationship problems

and hyperactivity was also highest for 13-16 years old children (See figure 5.1), but the difference was insignificant.

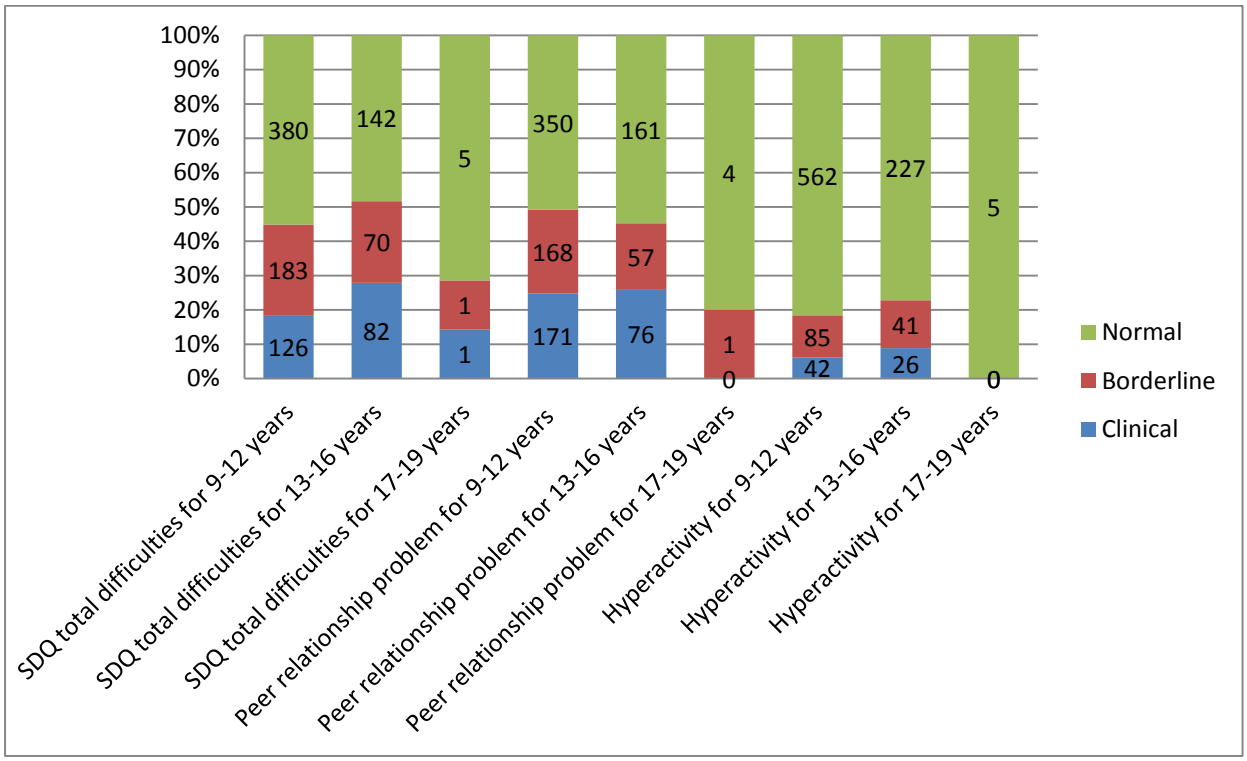


Figure 5.1: Prevalence rates of behavioural problems with respect to age of children

5.5.1.2. Pro-social Behaviour: There was significant age difference in the prevalence of difficulties with respect to pro-social behaviour as reported by teachers (See table 5.3), with children of 13-16 years having highest percentage with clinical level of anti-social behaviour (See figure 5.2). Children reported almost similar prevalence of difficulties with respect to pro-social behaviour in children of 9-12 years and in children of 13-16 years (See figure 5.2).

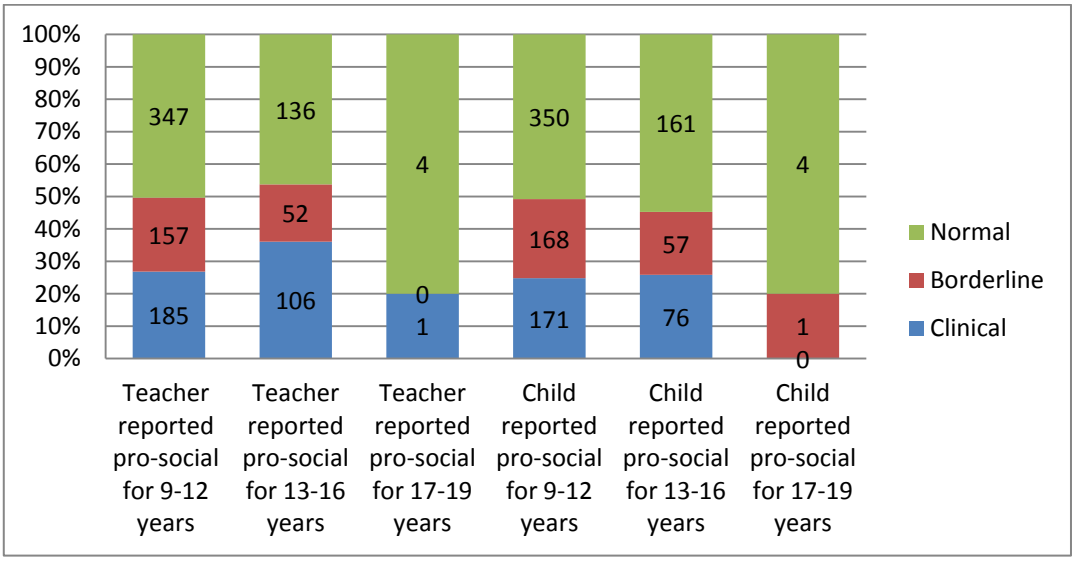


Figure 5.2: Prevalence rates of pro-social behaviour with respect to age of children

5.5.1.3. Self Esteem. Though most of children had high self-esteem, there was no significant age difference in the prevalence of low self-esteem among children (See table 5.3 and figure 5.3).

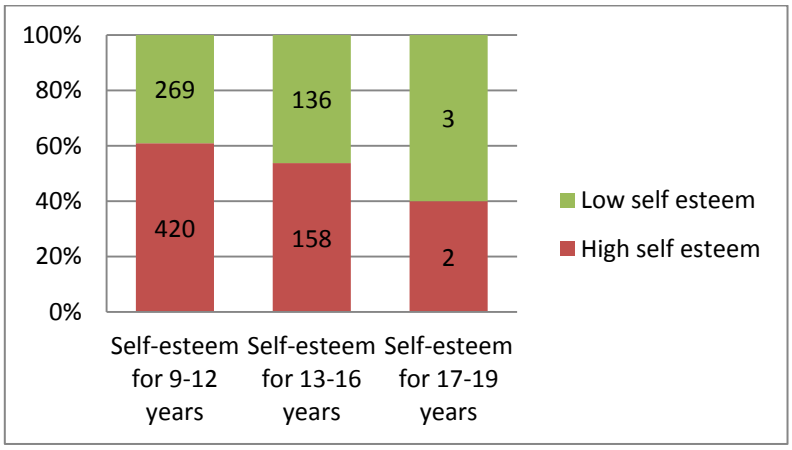


Figure 5.3: Prevalence rates of low and high self-esteem with respect to age

5.5.1.4. Emotional Problems. In the prevalence of depression and anxiety, there was insignificant age difference, though the prevalence was slightly high in children aged 17-19 years (See table 5.3 and figure 5.4).

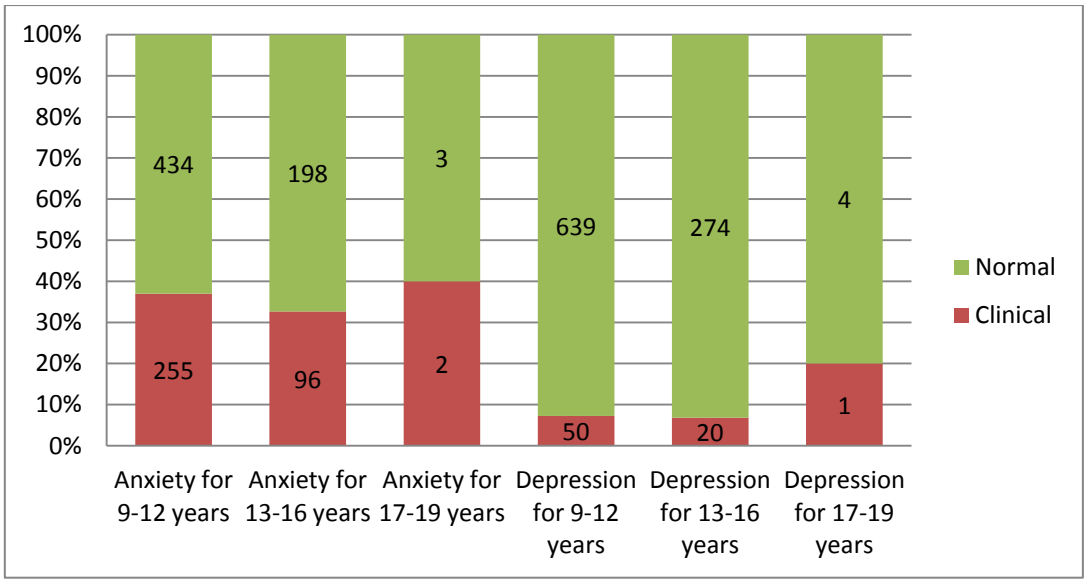


Figure 5.4: Prevalence rates of emotional problems with respect to age

5.5.2. Impact of Gender on Prevalence of Psychosocial Problems

The significance of the difference in the prevalence rates of different domains of psychosocial problems between boys and girls was examined through Chi-square statistics, shown in table 5.4 below. Gender was found to produce no significant impact on prevalence of psychosocial problems, as there were insignificant gender differences in the prevalence of all psychosocial problems except depression, where $p < 0.05$, where girls were found to be more depressed than boys. Percentage of boys and girls having clinical level of psychosocial difficulties are provided under the following sub-headings.

Domain	Scale	X^2	*df*	*P*
Behavioural Problems	SDQ-total difficulties score (Teacher-reported)	0.748	2	0.688
	Peer relationship problems subscale of SDQ (Child-reported)	3.046	2	0.218
	Hyperactivity/inattention subscale of SDQ (Child-reported)	5.491	2	0.064
Pro-social Behaviour	Pro-social behaviour sub-scale of SDQ (Teacher-reported)	0.093	2	0.954
	Pro social behaviour sub-scale of SDQ (Child-reported)	1.856	2	0.395
Self-Esteem	Global Self-Esteem sub scale of the DuBois Self-Esteem Questionnaire (Child –reported)	1.320	1	0.251
Emotional Problems	Anxiety subscale of RCMAS (Child-reported)	2.539	1	0.111
	Child Depression Inventory(Child-reported)	3.889	1	0.049*

* $p > 0.05$

Table 5.4: Chi-square results for psychosocial difficulties by gender

5.5.2.1. Behavioural Problems. Higher percentage of the boys, as compared to girls, has clinical level of behavioural problems (See figure 5.5) but the difference was not significant (See table 5.4).

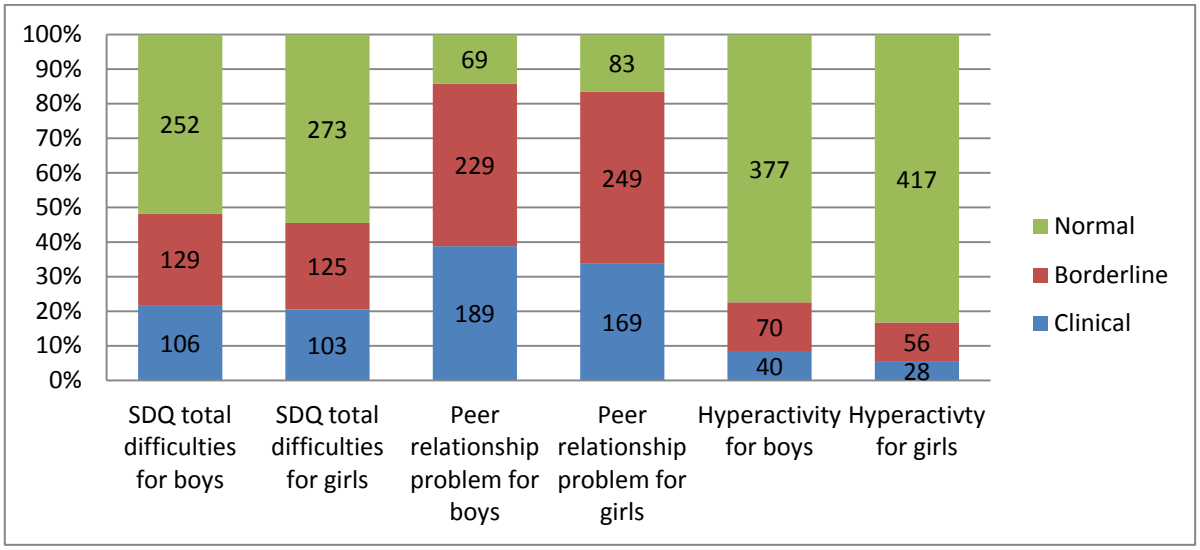


Figure 5.5: Prevalence rates of behavioural problems with respect to gender

5.5.2.2. Pro-social Behaviour. There were no significant gender differences in the prevalence of teacher-reported and child-reported pro-social behaviour (See table 5.4 and figure 5.6).

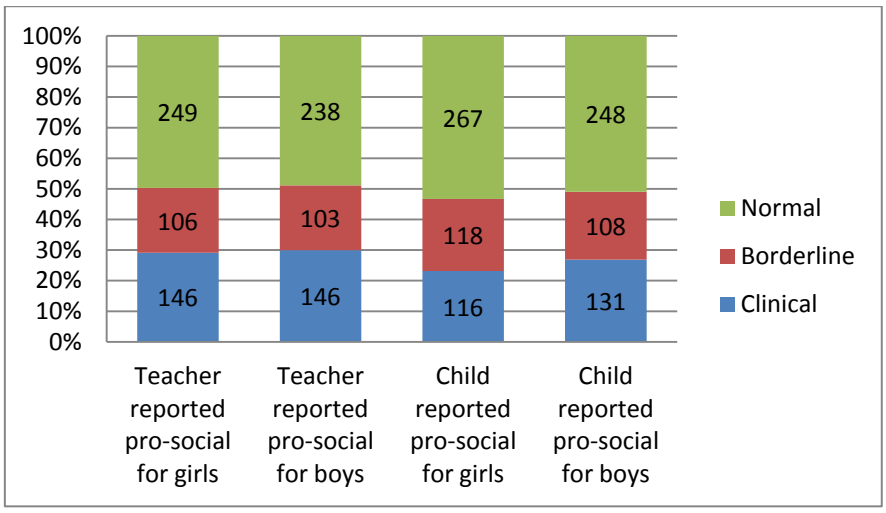


Figure 5.6: Prevalence rates of pro-social behaviour with respect to gender

5.5.2.3. Self-esteem. There was insignificant difference in the percentage of girls with low self-esteem and in the percentage of boys with low self-esteem (See table 5.4 and figure 5.7)



Figure 5.7: Prevalence rates of low and high self-esteem with respect to gender

5.5.2.4. Emotional Problems. There was no significant difference in the prevalence of anxiety in boys and girls (See table 5.4), as girls have only slightly high prevalence of anxiety. However, boys have statistically significant higher prevalence of depression than that of girls. (See figure 5.8).

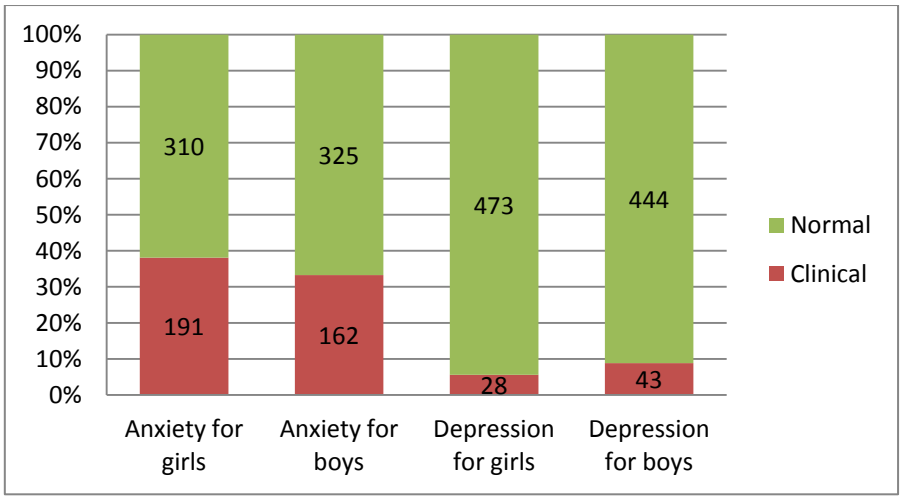


Figure 5.8: Prevalence rates of emotional problems with respect to gender

5.5.3. Impact of Grade on Prevalence of Psychosocial Problems

Similar to age and gender, the difference in the prevalence rate of psychosocial problems with respect of grade was examined using Chi-squares statistics, as shown in table 5.5. Grade was found to have significant impact on many domains of psychosocial problems with significant grade differences in the SDQ total difficulties, hyperactivity, pro-social behaviour (both child- and teacher-reported), and anxiety. However, the grade differences in the prevalence of peer-relationship problems and depression were insignificant, as shown in table 5.5 below. Furthermore, comparison of the percentage of grade 5 and 6 children having clinical, borderline or normal level of difficulties is provided in the following sub-sections.

Domain	Scale	X^2	*df*	*P*
Behavioural Problems	SDQ-total difficulties score (Teacher-reported)	39.822	2	0.000
	Peer relationship problems subscale of SDQ (Child-reported)	3.146	2	0.207
	Hyperactivity/inattention subscale of SDQ (Child-reported)	13.607	2	0.001

Pro-social Behaviour	Pro-social behaviour sub-scale of SDQ (Teacher-reported)	66.95	2	0.000
	Pro social behaviour sub-scale of SDQ (Child-reported)	77.223	2	0.000
Self-Esteem	Global Self-Esteem sub scale of the DuBois Self-Esteem Questionnaire (child –reported)	37.475	1	0.251
Emotional Problems	Anxiety subscale of RCMAS (Child-reported)	12.107	1	0.001
	Child Depression Inventory(Child-reported)	0.974	1	0.324

Table 5.5: Chi-square results for psychosocial difficulties by grade

5.5.3.1. Behavioural problems. Teacher-reported significant grade difference in the prevalence of behavioural problems, as reported through SDQ total difficulties score (See table 5.5). According to teacher-reported data, children of grade 6 have higher percentage of children having clinical level of difficulties as compared to children of grade 5 (See figure 5.9). Nevertheless, children of grade 5 have considerably higher percentage of children at the borderline level of difficulties as compared to children of grade 6.

Peer-relationship problems were reported by children to have higher prevalence in children of grade 5 but the difference was insignificant (See table 5.5 and figure 5.9). However, children reported significant grade difference in the prevalence of hyperactivity, with higher percentage of children having clinical or borderline level of hyperactivity in the grade 5 (See table 5.5 and figure 5.9).

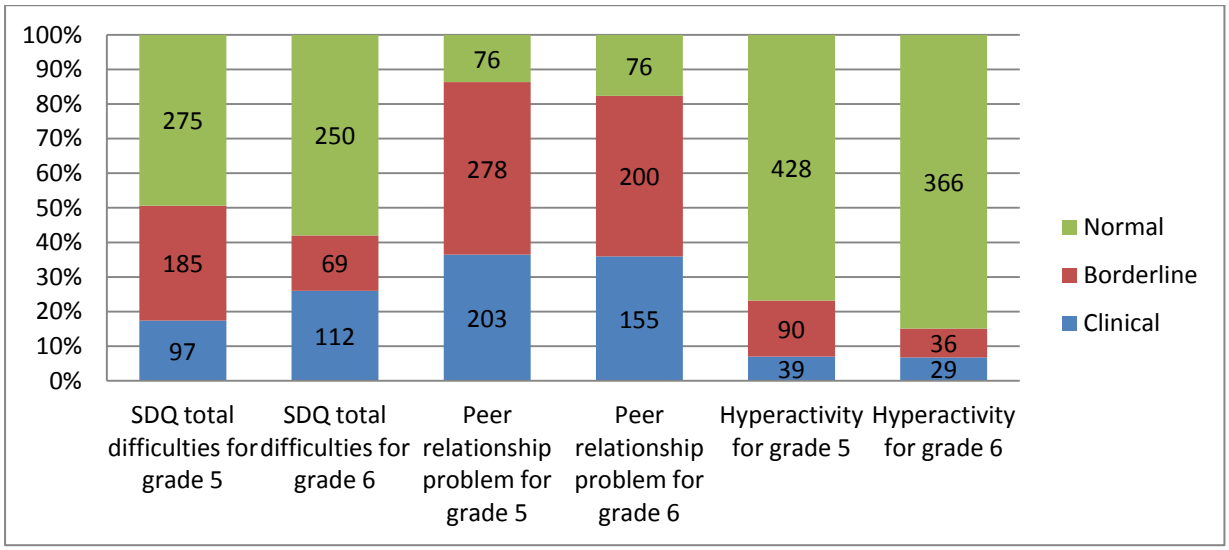


Figure 5.9: Prevalence rates of behavioural problems with respect to grade

5.5.3.2. Pro-social behaviour. Both children and teacher reported significant difference in the prevalence of difficulties with respect to pro-social behaviour (See table 5.5). Percentage of children having clinical level of difficulties in teacher-reported prevalence was quite similar but in children reported prevalence, there was higher percentage of children having clinical level of difficulties in pro-social behaviour (See figure 5.10). Teacher reported higher percentage of grade 5 children having borderline level of pro-social behaviour difficulties as compared to the percentage of grade 6 children (See figure 5.10). Children in grade 5 also reported higher percentages of children having borderline difficulties as compared to grade 6 (See figure 5.10).

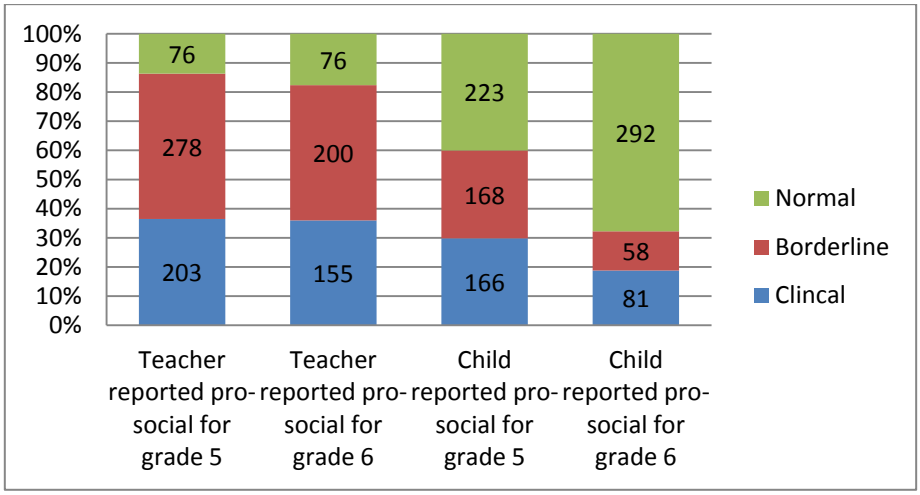


Figure 5.10: Prevalence rates of pro-social behaviour with respect to grade

5.5.3.3. Self-esteem. Children reported insignificant grade differences in the prevalence of high and low self-esteem (See table 5.5 and figure 5.11).



Figure 5.11: Prevalence rates of low and high self-esteem with respect to grade

5.5.3.4. Emotional Problems. With respect to grade, children reported significant difference in the prevalence rates of anxiety but insignificant difference in the prevalence rates of depression (See table 5.5). Prevalence rates of clinical level of anxiety in grade-5 children were significantly higher than those in grade 6.

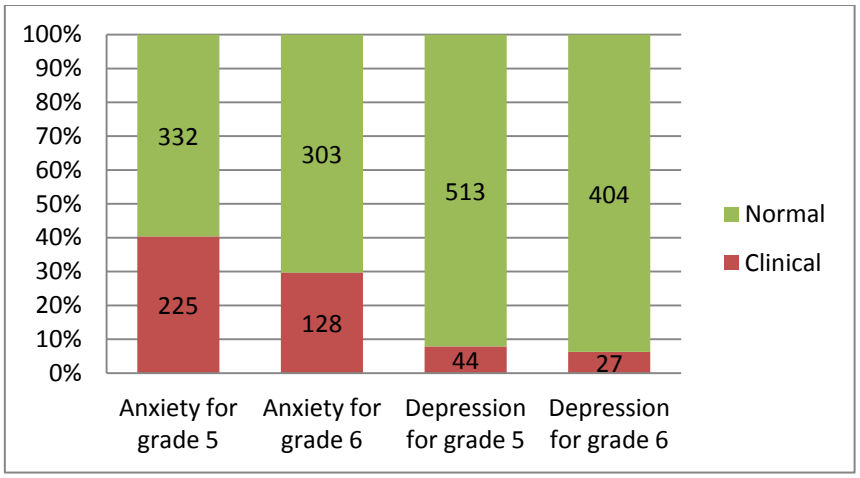


Figure 5.12: Prevalence rates of emotional problems with respect to grade

5.5.4. Impact of Socio-Demographic Factors on Mean Psychosocial Outcome

Impact of socio-demographic factors selected from AHDSS database as well as self-reported age, gender, and grade of children was examined through multivariate and univariate analysis. No control variable was included. The outcome of ANOVA and MANOVA is shown in appendix 17. The obtained results are discussed as follows:

5.5.4.1. Behavioural Problems: Mean score on three selected scale of behavioural problems – SDQ total, hyperactivity subscale and peer-problem subscale – with respect to the selected socio-demographic factors are shown in table 5.6. The table also shows the factors having significant impact on the respective scales, as obtained through MANOVA.

Although Chi-square test has been conducted on them, gender and age were also measured using MANOVA. Age of the child had significant impact on the behavioural problems ($p < 0.05$, $F = 3.28$). All three scales measuring behavioural problems were found to have significantly different outcome for children of different age ranges (See table 5.6). Teacher reported behavioural problems to be lower in children of 17-19 years old (M =8.60,

SD = 6.80) than those in children of 9-12 years (*M* =10.44 *SD* = 6.13) and 13-16 years old (*M* = 11.74 *SD* = 6.38) ($p < 0.05$). But since, there were only 5 children having age between 17 to 19 years, this finding is not conclusive. On average, children of 13-16 years old scored higher in peer-relationship problem scale, and in hyperactivity, than children of other age ranges ($p < 0.05$).

Gender of the child was significantly associated with behavioural problems ($p < 0.05$, F = 3.69). However, test of between-subject effects revealed that gender produced significant impact only on the scores of hyperactivity ($p < 0.05$), with males (*M* = 3.91, *SD* = 1.93) scoring significantly higher than females (*M* = 3.58 *SD* =1.93).

Multivariate test also provides significant impact of grade on mean score of behavioural problems ($p < 0.05$, F = 22.77). Children of grade 5 (*M* = 11.37, *SD* = 5.89) were reported by the teachers to show significantly more behavioural difficulties than children of grade 6 (*M* = 10.11, *SD* = 7.61) ($p < 0.05$). Children of grade 5 (*M* = 5.05, *SD* = 1.40) also score slightly higher on peer-relation problems than children of grade 6 (*M* = 5.03, *SD* = 1.64) but the difference was insignificant ($p = 0.882$). With regard to hyperactivity children of grade 5 (*M* = 4.16, *SD* = 1.72) have significantly higher score than children of grade 6 (*M* = 3.21, *SD* = 2.07) ($p < 0.05$).

The importance of household head has been proved in the present study as the age and gender of the household head were significantly associated with behavioural problems ($p < 0.05$). Age of the household head had significant impact on the peer-relationship problems ($p < 0.05$). The only child who was living under child-headed house scored lower than the other children but this cannot lead to any conclusion, knowing the smallest sample size. Children under male household head had significantly higher score of SDQ total difficulties (*M* = 11.08, *SD* = 6.16, $p < 0.05$) and insignificantly lower score of peer-relationship problems (*M* = 5.08, *SD* = 1.52, $p = 0.09$) and hyperactivity (*M* = 3.70, *SD* = 1.94, $p = 0.62$) as compared to children under female household head.

Socio-economic background of the child, as computed through SES quintiles for 2007, was showed by the multivariate analysis to be significantly associated with behavioural problems ($p < 0.05$). Children with lower SES quintiles scored significantly higher in SDQ total difficulties ($p < 0.05$) and hyperactivity ($p < 0.05$) but the difference in the score of peer-relationship was insignificant ($p = 0.55$).

Children of alive and deceased mothers had no significant difference in the behavioural problems ($p = 0.16$). There were no significant difference in the scores of children having mother in the same household and having mother in other household, in same village, region or province, or elsewhere ($p = 0.15$). However, mothers' education had significant association with behavioural problems in children. Children of uneducated mother were reported by the teachers to have significantly higher difficulties ($p < 0.05$) and by children themselves to have significantly higher hyperactivity ($p < 0.05$). Peer-relationship problem was also higher in children of uneducated mother than children of educated mothers but the difference was not significant ($p = 0.54$). In addition, children whose mothers were in union differed insignificantly with children whose mothers were not in any marriage type union, with former showing lesser behaviour problem than the latter. Nevertheless, the significant difference in the scores of such children was not revealed by test of between-subject effect as there was insignificant difference in the scores of children with in-union or with not-in-union mother for all three respective scales (See table 5.6). Mother's union type did not produce any significant impact on children scores of behavioural problems ($p = 0.55$).

Other selected factors related to child were found to be insignificant determiner of children's behavioural problems. Mean score of behavioural problem had insignificant association with child's breastfeeding ($p = 0.12$), child's duration of breastfeeding ($p = 0.94$), child's residence status ($p = 0.30$) and child's labour ($p = 0.22$). In case of child's labour, the cell size is lower than required for MANOVA, and therefore, this finding should be treated with caution.

Socio-demographic factor		*N*	SDQ total difficulties	Peer-relationship problem	Hyperactivity
			M (SD)	*M (SD)*	*M (SD)*
Age	9-12 years	689	10.44 (6.13)*	4.96 (1.48)*	3.64 (1.94)*
	13-16 years	294	11.74 (6.38)*	5.23 (1.55)*	3.99 (1.92)*
	17-19 years	5	08.60 (6.80)*	5.00 (2.00)*	3.80 (1.09)*
Gender	Male	487	11.07 (5.89)	5.15 (1.54)	3.91 (1.93)*
	Female	501	10.58 (6.55)	4.94 (1.47)	3.58 (1.93)*
Grade	5	557	11.37 (4.85)*	5.05 (1.40)	4.16 (1.72)*
	6	431	10.11 (7.61)*	5.03 (1.64)	3.21 (2.07)*
Age of household head	< 18	1	05.00 (0.00)	2.00 (0.00)*	6.00 (0.00)
	18-25	10	11.00 (6.85)	5.10 (1.85)*	3.80 (1.48)
	26-35	81	11.51 (6.73)	5.43 (1.40)*	4.00 (2.01)
	> 35	756	10.56 (6.10)	5.05 (1.52)*	3.72 (1.93)
Gender of household head	Male	519	11.08 (6.16)*	5.08 (1.52)	3.70 (1.94)
	Female	329	09.98 (6.13)*	5.09 (1.51)	3.82 (1.92)
SES quintiles for 2007	1	114	11.12 (5.78)*	5.25 (1.49)	4.04 (1.87)*
	2	182	11.47 (6.41)*	5.11 (1.43)	4.10 (2.01)*
	3	188	11.53 (5.71)*	4.94 (1.52)	3.81 (1.91)*
	4	179	10.37 (6.06)*	5.10 (1.51)	3.47 (1.87)*
	5	158	08.72 (6.38)*	5.07 (1.67)	3.33 (1.97)*
Mother status	Deceased	93	11.50 (6.61)	4.96 (1.59)	3.73 (1.74)
	Alive	794	10.59 (1.50)	5.08 (1.50)	3.75 (1.96)
Mother location	Bushbuckridge	15	10.40 (5.94)	5.47 (1.30)	4.20 (1.97)
	Agincourt	30	08.26 (5.66)	5.17 (1.53)	4.10 (1.86)
	Same household	696	10.62 (6.20)	5.07 (1.51)	3.70 (1.95)
	Same Village	25	12.40 (4.94)	5.52 (1.33)	4.16 (2.06)
	Elsewhere	28	10.75 (6.19)	4.68 (1.31)	4.00 (2.19)
Mother Education (years)	0	197	12.09 (6.23)*	5.15 (1.45)	4.12 (1.92)*
	1-7	184	10.42 (6.06)*	5.10 (1.57)	3.80 (1.90)*
	8-15	352	09.88 (6.13)*	4.97 (1.53)	3.42 (1.96)*

Mother Union Status	Not In union	503	10.44 (6.27)	5.08 (1.52)	3.85 (1.93)
	In union	388	11.01 (6.10)	5.07 (1.49)	3.64 (1.95)
Mother Union Type	Informal	73	10.83 (5.16)	5.18 (1.43)	3.82 (1.82)
	Married	298	11.10 (6.31)	5.03 (1.50)	3.59 (1.98)
	Remarried	7	07.86 (5.79)	5.57 (0.98)	2.57 (1.27)
	Separated	10	11.80 (6.32)	5.10 (1.97)	4.30 (2.21)
Child's breastfeeding	Yes	443	10.30 (6.01)*	5.06 (1.49)	3.74 (1.94)
	No	23	13.21 (8.91)*	5.30 (1.71)	3.43 (2.08)
Child's duration of breastfeed	0-6	292	10.57 (5.89)	5.06 (1.49)	3.77 (1.93)
	7-13	14	12.93 (7.12)	5.00 (1.52)	3.64 (1.95)
	> 13	95	10.31 (6.42)	4.96 (1.52)	3.74 (1.95)
Child's residence status 2009	Permanent	759	10.61 (6.06)	5.07 (1.49)	3.74 (1.94)
	Migrant	10	10.20 (7.07)	4.80 (1.93)	3.00 (2.05)
Child labour 2008	Never worked	621	10.59 (6.29)	5.07 (1.54)	3.68 (2.02)
	Ever worked	4	09.00 (6.48)	4.50 (1.29)	2.25 (1.71)

* Difference is significant as $p < 0.05$

Table 5.6: Effect of socio-demographic factors on mean behavioural problem by scale

5.5.4.2. Pro-social behaviour. Mean and standard deviation of child- and teacher- reported pro-social behaviour with respect to the selected socio-demographic factors are shown in the table 5.7. The significance of the difference in mean scores was examined through MANOVA and the cases where $p < 0.05$ are shown up in table 5.7.

Teacher reported significantly high pro-social behaviour in children of 17-19 years ($M = 8.00$, $SD = 2.54$) as compared to children of younger age ($p < 0.05$). But due to small sample size in this age group, this finding is inconclusive. On average , younger children also reported low pro-social behaviour as compared to children of elder age but the difference was insignificant ($p = 0.22$). Overall, age of children had significant positive relationship with pro-social behaviour of children ($p < 0.05$). However, gender ($p = 0.79$) and grade ($p = 0.08$) of children produce no significant impact on the mean score of pro-social behaviour.

Similarly, no significant difference was found in the mean scores of teacher- and children-reported pro-social behaviour with respect to age and gender of household head.

Socio-economic background of the child was reported by the teachers to have significant impact on their pro-social behaviour ($p > 0.05$). Children with moderate socio-economic background (SES quintiles = 3) ($M = 5.77$, $SD = 2.43$) were reported by the teachers to have lower score on pro-social behaviour while children with high socio-economic background (SES quintiles = 5) showed the highest score ($M = 6.54$, $SD = 2.50$). Children were lowest socio-economic background (SES quintiles = 1) had relatively moderate score ($M = 6.02$, $SD = 2.08$)

Teachers also reported significant difference in the pro-social behaviour of children with in-union and not-in-union mothers ($p < 0.05$). According to them, children whose mothers are not in any union have better pro-social behaviour than children whose mothers are in any formal or informal union. Teachers, however, reported no significant difference in the pro-social behaviour of children with respect to the type of union a child's mother had.

Migrant children ($M = 6.50$, $SD = 2.51$) were reported by the teachers to have significantly high pro-social behaviour as compared to children who were permanent residents ($M = 6.06$, $SD = 2.39$) ($p < 0.05$). Also, child labour was reported by the teachers to significantly affect the pro-social behaviour in children ($p < 0.05$), with working children ($M = 6.25$, $SD = 3.50$) having significantly better pro-social behaviour than children who had never worked ($M = 6.17$, $SD = 2.45$). Again the small cell size of children who worked needs to be taken into account while using this result. Nevertheless, no significant impact of migration or child labour was found in children-reported pro-social behaviour.

All other important socio-demographic factors related to mother, such as mother's living status, residence, and education, as well as children breastfeeding was found to have insignificant relationship with pro-social behaviour. As can be seen in table 5.7, no socio-

demographic factor produced any significant impact on the chid-reported pro-social behaviour. This is an important finding which will be discussed later.

Socio-demographic factor		*N*	Teacher-reported pro-social *M* (*SD*)	Child-reported pro-social *M* (*SD*)
Age	9-12 years	689	5.99 (2.47)*	5.98 (2.40)
	13-16 years	294	5.65 (2.55)*	6.08 (2.71)
	17-19 years	5	8.00 (2.54)*	6.80 (1.30)
Gender	Male	487	5.83 (2.39)	5.96 (2.50)
	Female	501	5.97 (2.60)	6.06 (2.49)
Grade	5	557	5.43 (1.89)	5.35 (2.08)
	6	431	6.51 (3.01)	6.86 (2.72)
Age of household head	< 18	1	9.00 (0.00)	4.00 (0.00)
	18-25	10	6.50 (3.10)	5.90 (2.18)
	26-35	81	6.27 (2.32)	5.92 (2.65)
	> 35	756	6.02 (2.41)	5.99 (2.50)
Gender of household head	Male	519	5.89 (2.43)	6.05 (2.53)
	Female	329	6.31 (2.35)	5.87 (2.47)
SES quintiles for 2007	1	114	6.02 (2.08)*	5.77 (2.52)
	2	182	5.91 (2.32)*	5.91 (2.48)
	3	188	5.77 (2.43)*	5.91 (2.55)
	4	179	6.02 (2.58)*	6.13 (2.52)
	5	158	6.54 (2.50)*	6.32 (2.52)
Mother status	Deceased	93	6.03 (2.58)	5.91 (2.74)
	Alive	794	6.05 (2.38)	5.98 (2.48)
Mother location	Bushbuckridge	15	5.87 (2.00)	5.27 (2.12)
	Agincourt	30	6.37 (2.70)	6.47 (2.57)
	Same household	696	6.05 (2.38)	5.96 (2.49)
	Same Village	25	5.36 (1.87)	6.36 (2.20)
	Elsewhere	28	6.47 (2.60)	5.86 (2.41)
Mother Education (years)	0	197	5.89 (2.28)	5.86 (2.38)

	1-7	184	6.08 (2.39)	5.98 (2.46)
	8-15	352	6.18 (2.45)	6.03 (2.52)
Mother Union Status	Not In union	503	6.18 (2.38)*	5.96 (2.48)
	In union	388	5.88 (2.41)*	5.98 (2.52)
Mother Union Type	Informal	73	5.89 (2.10)	6.07 (2.28)
	Married	298	5.86 (2.47)	5.95 (2.61)
	Remarried	7	7.14 (2.49)	5.71 (2.36)
	Separated	10	5.10 (2.81)	6.60 (1.90)
Child's breastfeeding	Yes	443	6.22 (2.39)	5.84 (2.47)
	No	23	5.86 (2.81)	6.30 (2.67)
Child's duration of breastfeed	0-6	292	6.10 (2.31)	5.77 (2.38)
	7-13	14	6.14 (2.60)	5.86 (2.93)
	> 13	95	6.22 (2.57)	5.88 (2.80)
Child's residence status 2009	Permanent	759	6.06 (2.39)*	6.06 (2.47)
	Migrant	10	6.50 (2.51)*	5.50 (3.10)
Child labour 2008	Never worked	621	6.17 (2.45)*	6.15 (2.57)
	Ever worked	4	6.25 (3.50)*	7.00 (1.83)

* Difference is significance as p < 0.05

Table 5.7: Effect of socio-demographic factors on mean score on pro-social behaviour

5.5.4.3. Self-esteem. The relationship between child-reported self-esteem and socio-demographic background of child was evaluated through ANOVA. Mean scores of self-esteem with respect to selected socio-demographic factors and the significance of the difference in mean score is shown in table 5.8 below.

Significant age differences were found in the self-esteem of children ($p < 0.05$); child-reported average self-esteem score decreases with the increase in age of the child. This shows that the younger children in the sample have higher self-esteem than elder ones. However, self-esteem of children was not found to get effected by the gender ($p = 0.38$) or grade ($p = 0.27$) of children.

Although age of the household head did not produce significant impact on the self-esteem of children ($p = 0.50$), gender of the household head was found to have significant relationship with child-reported self-esteem ($p < 0.05$). Children under male household reported only slightly high self-esteem ($M = 21.18$, $SD = 3.61$) than children under female household head ($M = 21.17$, $SD = 3.79$).

Socio-economic background of the child was also found to significantly affect the self-esteem of children ($p < 0.05$). Post-hoc test showed that children of moderate socio-economic status reported significantly low self-esteem than children of high socio-economic status. However, children of low socio-economic status had insignificant difference in the self-esteem when compared with self-esteem of high socio-economic status.

Socio-demographic factor		*N*	Self-esteem *M* (*SD*)
Age	9-12 years	689	21.33 (3.82)*
	13-16 years	294	20.86 (3.45)*
	17-19 years	5	20.00 (2.74)*
Gender	Male	487	21.01 (3.72)
	Female	501	21.35 (3.70)
Grade	5	557	20.52 (3.69)
	6	431	22.03 (3.57)
Age of household head	< 18	1	19.00 (0.00)
	18-25	10	22.10 (3.78)
	26-35	81	21.17 (4.22)
	> 35	756	21.17 (3.62)
Gender of household head	Male	519	21.18 (3.61)*
	Female	329	21.17 (3.79)*
SES quintiles for 2007	1	114	20.86 (3.49)*
	2	182	21.32 (3.91)*
	3	188	20.72 (3.58)*
	4	179	20.98 (3.58)*
	5	158	22.05 (3.56)*

Mother status	Deceased	93	20.85 (3.86)
	Alive	794	21.21 (3.68)
Mother location	Bushbuckridge	15	20.53 (3.09)
	Agincourt	30	21.23 (4.20)
	Same household	696	21.17 (3.67)
	Same Village	25	21.52 (3.85)
	Elsewhere	28	21.79 (3.57)
Mother Education (years)	0	197	21.22 (3.65)
	1-7	184	20.99 (3.91)
	8-15	352	21.26 (3.50)
Mother Union Status	Not In union	503	21.13 (3.85)
	In union	388	21.18 (3.50)
Mother Union Type	Informal	73	21.18 (3.19)
	Married	298	21.21 (3.59)
	Remarried	7	22.00 (3.41)
	Separated	10	19.90 (2.85)
Child's breastfeeding	Yes	443	21.10 (3.75)
	No	23	20.87 (3.71)
Child's duration of breastfeed	0-6	292	20.95 (3.69)
	7-13	14	22.14 (3.16)
	> 13	95	21.19 (4.16)
Child's residence status 2009	Permanent	759	21.24 (3.66)
	Migrant	10	20.80 (2.97)
Child labour 2008	Never worked	621	21.44 (3.65)
	Ever worked	4	21.00 (5.48)

* Difference is significance as $p < 0.05$

Table 5.8: Effect of socio-demographic factors on mean score of self-esteem

The socio-demographic factors related to mother such as mother residence and education were not found to produce any significant impact on self-esteem of children. Besides, the socio-demographic factor related to child health, residence status, and labour status were also found to produce insignificant impact on the child-reported self-esteem.

5.5.4.4. Cognitive Interpretation. Difference in the mean and standard deviation of children's cognitive interpretation, as computed through MANOVA are shown in table 5.9. Age of children was found to be an important determinant of cognitive interpretation. Children of different age differed significantly in their total CTI-C scores ($p < 0.05$) as well as scores on view of self ($p < 0.05$), view of world ($p < 0.05$), and view of future ($p < 0.05$). Elder children had more negative cognitive interpretation as compared to younger ones. No significant gender differences were noted in the child-reported cognitive interpretation but children of grade 5 were found to have significantly higher scores in cognitive interpretation as compared to children of grade 6. This showed that children of grade 5 had more negative cognitive interpretation than children of grade 6. Children of grade 5 also had significantly more negative interpretation of view of self ($p < 0.05$) and view of future ($p < 0.05$) but the grade difference in the view of world was insignificant ($p = 0.17$).

Age ($p = 0.69$) and gender of household head ($p = 0.37$) was not found to significantly influence the CTIC score of child. There were insignificant difference in the view of self, of world, and of future between children under household head of different age range and gender. Socio-economic status of children also produce insignificant impact on the overall cognitive interpretation ($p > 0.05$), view of self ($p > 0.05$), view of world ($p > 0.05$), and view of future ($p > 0.05$).

Socio-demographic factor		*N*	Total CTI-C *M (SD)*	View of self *M (SD)*	View of world *M (SD)*	View of future *M (SD)*
Age	9-12 years	689	25.28 (11.33)*	07.57 (4.71)*	08.42 (4.41)*	09.28 (3.85)*
	13-16 years	294	30.10 (11.55)*	09.51 (4.77)*	10.31 (4.30)*	10.28 (4.01)*
	17-19 years	5	34.40 (12.62)*	10.40 (5.12)*	12.80 (4.09)*	11.20 (3.90)*
Gender	Male	487	26.97 (11.34)	08.08 (4.93)	09.06 (4.30)	09.66 (3.89)
	Female	501	26.56 (11.89)	08.26 (4.68)	08.95 (4.62)	09.52 (3.94)
Grade	5	557	27.81 (09.94)*	08.48 (4.23)*	09.18 (4.12)	10.16 (3.42)*
	6	431	25.41 (13.36)*	07.77 (5.44)*	08.78 (4.88)	08.86 (4.38)*

Age of household head	< 18	1	39.00 (0.00)	10.00 (0.00)	14.00 (0.00)	15.00 (0.00)
	18-25	10	28.70 (17.48)	08.80 (7.20)	09.00 (6.15)	09.54 (3.86)
	26-35	81	27.20 (11.53)	08.26 (4.91)	09.27 (4.33)	10.90 (5.13)
	> 35	756	26.72 (11.52)	08.18 (4.78)	09.00 (4.47)	09.67 (3.72)
Gender of household head	Male	519	26.59 (11.11)	08.24 (4.67)	08.86 (4.47)	09.49 (3.80)
	Female	329	27.15 (12.33)	08.13 (5.03)	09.29 (4.78)	09.72 (3.97)
SES quintiles for 2007	1	114	28.29 (10.02)	08.92 (3.99)	09.24 (4.20)	10.13 (3.46)
	2	182	27.43 (10.84)	08.72 (4.60)	09.12 (4.30)	09.74 (3.68)
	3	188	27.37 (12.17)	08.40 (4.85)	09.53 (4.65)	09.43 (3.83)
	4	179	26.86 (12.06)	08.04 (5.16)	09.00 (4.55)	09.82 (3.85)
	5	158	24.47 (12.60)	07.39 (5.19)	08.21 (4.53)	08.87 (4.52)
Mother status	Deceased	93	26.29 (11.33)	08.05 (4.77)	09.02 (3.98)	09.21 (4.11)
	Alive	794	26.90 (11.62)	08.17 (4.81)	09.04 (4.52)	09.64 (3.86)
Mother location	Bushbuckridge	15	29.07 (10.10)	08.40 (4.32)	10.13 (4.60)	10.53 (2.69)
	Agincourt	30	27.43 (09.71)	08.83 (3.82)	08.67 (3.78)	09.93 (3.25)
	Same household	696	26.80 (11.66)	08.17 (4.87)	09.05 (4.52)	09.58 (3.85)
	Same Village	25	28.32 (14.47)	09.12 (5.92)	09.32 (5.33)	09.88 (4.64)
	Elsewhere	28	26.36 (11.11)	07.93 (3.59)	08.46 (4.69)	09.96 (4.48)
Mother Education (years)	0	197	28.22 (10.30)*	08.80 (4.43)*	09.52 (4.10)	09.90 (3.61)
	1-7	184	27.35 (12.12)*	08.58 (4.97)*	09.26 (4.77)	09.52 (3.91)
	8-15	352	25.42 (11.67)*	07.48 (4.81)*	08.59 (4.48)	09.34 (3.88)
Mother Union Status	Not In union	503	26.87 (11.73)	08.18 (4.84)	09.04 (4.56)	09.65 (3.89)
	In union	388	26.85 (11.39)	08.26 (4.77)	09.05 (4.35)	09.53 (3.87)
Mother Union Type	Informal	73	26.72 (10.29)	08.15 (4.27)	09.19 (4.14)	09.38 (3.38)
	Married	298	26.98 (11.82)	08.33 (4.94)	09.06 (4.43)	09.59 (4.02)
	Remarried	7	20.43 (07.46)	05.86 (4.18)	06.00 (3.51)	08.57 (2.64)
	Separated	10	28.10 (07.36)	08.40 (3.02)	10.00 (3.40)	09.70 (3.53)
Child's breastfeeding	Yes	443	26.98 (11.87)	08.33 (4.94)	09.10 (4.59)	09.54 (3.89)
	No	23	26.96 (13.81)	08.00 (5.41)	09.30 (5.29)	09.65 (4.46)
Child's duration of	0-6	292	26.89 (11.59)	08.24 (4.89)	08.99 (4.52)	09.65 (3.78)

breastfeed	7-13	14	24.79 (13.41)	06.78 (5.14)	08.71 (4.78)	09.28 (5.65)
	> 13	95	25.88 (12.01)	07.98 (4.98)	08.89 (4.62)	09.00 (3.83)
Child's residence status 2009	Permanent	759	26.68 (11.70)	08.15 (4.84)	09.01 (4.51)	09.52 (3.89)
	Migrant	10	30.40 (12.70)	10.30 (5.29)	09.90 (4.58)	10.20 (4.61)
Child labour 2008	Never worked	621	26.77 (12.08)	12.50 (7.05)	10.75 (7.80)	09.44 (4.04)
	Ever worked	4	33.00 (21.76)	08.18 (4.99)	09.13 (4.53)	09.75 (7.41)

* Difference is significant as $p < 0.05$

Table 5.9: Effect of socio-demographic factors on mean score of cognitive interpretation

All socio-demographic factor related to mother did not produce any significant impact on the cognitive interpretation of children except education of mother ($p < 0.05$). Children whose mother had received 8-15 years of education had more positive cognitive interpretation (M =25.42, SD = 11.67) than children whose mother had received 1-7 years of education (M = 27.35, SD = 12.12) and children whose mother had not received any education at all (M = 28.22, SD = 10.30). Mother's education also produced significant impact on children's view of self ($p < 0.05$); positivity of children's cognitive interpretation increases with the increase in the years of education received by children's mothers. However, child breastfeeding, residence status, and labour status did not produce any significant impact on children's cognitive interpretation.

5.5.4.5. Emotional Problems: The impact of socio-demographic factors on the emotional outcome of children is shown in the table 5.10 below. Age, gender, and grade of children produced significant impact on the depression of children but only grade produced significant impact on the level of anxiety in children. Children with age range 9-12 years had significantly lower depression (M = 5.42, SD = 3.02) than children with age range 13-16 years (M = 6.14, SD = 3.09) and children with age range 17-19 years (M = 8.40, SD = 2.19). Thus elder children were found to have higher level of depression than younger ones. Though anxiety was also found to be higher in elder children, the age difference in the level of anxiety was insignificant (p = 0.66). Similarly, depression was significantly different in girls

and boys ($p < 0.05$) – girls (M =6.06, SD = 3.12) were much highly depressive than boys (M = 5.24, SD = 2.94) – but the difference in their level of anxiety was not significant ($p = 0.85$), similar to what we have found earlier in Chi-square test.

Age and gender of household head produced no significant difference in the emotional problems of children. Also, socio-economic background of children produced insignificant impact on the anxiety in children. Nevertheless, socio-economic background produced significant impact on the depression in children. Children with SES quintile 3 and 4 had lower level of depression than children with SES quintile 1, 2, and 5. This shows that children of families with moderate income were much lesser depressive than children of very poor or well to do families (based on ownership of modern assets).

The role of mother in protecting children from emotional difficulties was not proved in our sample as all the selected socio-demographic factors associated with mothers were found to have insignificant relationship with emotional problem. However, mothers' education produced significant impact on the level of depression in children ($p < 0.05$) - with the increase in the years of education received by mother, children's level of depression decreases.

As can be noted in the table 5.10, against the expectation children who were breastfeed were more depressive and anxious than children who were never breastfeed. Nevertheless, the difference was found to be insignificant (For depression $p = 0.94$ and for anxiety $p = 0.48$). Children's duration of breastfeed also produced insignificant impact on the depression ($p = 0.18$) and anxiety ($p = 0.11$). Similarly children's residence status and labour status was found to be insignificant factors for predicting emotional problems in children.

Socio-demographic factor		*N*	Anxiety *M* (*SD*)	Depression *M* (*SD*)
Age	9-12 years	689	6.59 (2.99)	5.42 (3.02)*
	13-16 years	294	6.59 (2.95)	6.14 (3.09)*
	17-19 years	5	7.80 (2.17)	8.40 (2.19)*
Gender	Male	487	6.61 (2.86)	5.24 (2.94)*
	Female	501	6.58 (3.09)	6.06 (3.12)*
Grade	5	557	6.97 (2.79)*	5.99 (3.04)*
	6	431	6.11 (3.14)*	5.19 (3.03)*
Age of household head	< 18	1	7.00 (0.00)	4.00 (0.00)
	18-25	10	5.20 (2.44)	5.60 (2.76)
	26-35	81	7.21 (3.41)	5.93 (2.95)
	> 35	756	6.58 (2.90)	5.54 (2.98)
Gender of household head	Male	519	6.63 (3.05)	5.46 (2.99)
	Female	329	6.61 (2.81)	5.76 (2.95)
SES quintiles for 2007	1	114	6.98 (2.90)	5.94 (3.03)*
	2	182	6.57 (2.98)	5.98 (3.06)*
	3	188	6.55 (3.03)	5.73 (3.08)*
	4	179	6.57 (2.95)	5.30 (2.84)*
	5	158	6.55 (2.99)	4.98 (2.79)*
Mother status	Deceased	93	6.61 (3.34)	5.90 (3.22)
	Alive	794	6.64 (2.93)	5.56 (3.00)
Mother location	Bushbuckridge	15	6.33 (2.82)	5.87 (3.22)
	Agincourt	30	6.83 (3.40)	6.10 (2.15)
	Same household	696	6.66 (2.94)	5.58 (3.02)
	Same Village	25	5.96 (3.28)	4.76 (2.86)
	Elsewhere	28	6.71 (1.92)	4.86 (3.25)
Mother Education (years)	0	197	6.92 (2.71)	5.96 (3.16)*
	1-7	184	6.66 (3.04)	5.73 (2.92)*

	8-15	352	6.45 (3.08)	5.23 (2.86)*
Mother Union Status	Not In union	503	6.64 (3.00)	5.67 (3.01)
	In union	388	6.66 (2.96)	5.51 (3.05)
Mother Union Type	Informal	73	6.48 (3.10)	6.13 (3.38)
	Married	298	6.68 (2.95)	5.30 (2.92)
	Remarried	7	5.57 (2.64)	6.29 (2.93)
	Separated	10	8.00 (1.70)	6.80 (3.94)
Child's breastfeeding	Yes	443	6.72 (2.91)	5.64 (3.03)
	No	23	6.35 (2.64)	5.43 (2.57)
Child's duration of breastfeed	0-6	292	6.71 (2.88)	5.53 (2.97)
	7-13	14	4.79 (2.75)	4.07 (2.40)
	> 13	95	6.78 (2.66)	5.89 (2.90)
Child's residence status 2009	Permanent	759	6.58 (2.93)	5.57 (2.98)
	Migrant	10	7.40 (2.12)	4.60 (1.65)
Child labour 2008	Never worked	621	6.45 (2.97)	5.45 (3.02)
	Ever worked	4	6.25 (3.40)	8.00 (4.08)

* Difference is significant as $p < 0.05$

Table 5.10: Effect of socio-demographic factors on mean score of emotional problems

5.6. Summary

The chapter reported the impact of socio-demographic factor on the prevalence of psychosocial difficulties in children as well as their mean scores on different scales of psychosocial difficulties. Teachers reported significant impact of children's age on the prevalence of behavioural problem and pro-social behaviour. Gender of children was found to influence the prevalence of depression in children while grade of children did not produce any significant impact on the prevalence of any domain of psychosocial problem. Age was found to be a very important factor for determining the psychosocial outcomes in children. Gender and grade also produced significant impact on some domains of psychosocial outcome. The role of household was only partially proved by the study as children under male and female head and young and old head reported insignificant difference in most of the

domains of psychosocial outcome. From the results of multivariate analysis, it is quite clear that mere presence of mother cannot guarantee the protection of children from behavioural difficulties, as mother living status and location did not produce any significant impact on behavioural problems in children. Instead presence of educated mother is important for such protection. Similarly, mothers' education can also serve as an important protective factor for negative cognitive interpretation and emotional difficulties of children. In addition, the relationship status of the mother, irrespective of relationship type, is also an important determiner of behavioural problem in children but such impact was not noted in other domains of psychosocial difficulties.

CHAPTER 6: RESULTS – FACTORS PREDICTING PSYCHOSOCIAL PROBLEMS IN CHILDREN

6.1. Introduction

The chapter presents the results obtained by the present study regarding risk and protective factors that can predict the prevalence of psychosocial difficulties in children of Agincourt. Similar to the preceding chapters, the chapter also begins with the description of analytical technique employed by the researcher in examining the factors effecting psychosocial difficulties. The chapter then looks at each selected factor that was expected to influence the psychosocial development of children like child's perception of school environment and safety in the schools, nutrition, stigma and others. It is followed by the description of correlation between the selected factors and the psychosocial problems in children.

6.2. Analytical techniques

Each selected factor was analysed individually through bar graphs and pie charts to examine the response of sample on each item of the selected scales. Relationship between factors and psychosocial outcome in children was computed using Spearmen rank order correlation. Relationship was considered as significant at 0.05 and very significant at 0.01. The strength of the relationship was determined from the value of correlation coefficient – higher value indicates stronger relationship.

6.3. Perception of School Environment

Children's response about their perception of school environment is graphically shown in figure 6.1 below. As can be seen, majority of children reported that they always learn a lot at their schools (43.6%), feel closer to other people at school (42.2%), and feel safe at the school (47.0%). A large number of children also reported that either all the time or most of the time they share their problem with adults or other children at school, but an equal number of children reported that they never or only sometimes share their problems with adults and children at schools. Majority of children selected "never" for the negative items

like “There are lots of fights in my school” (31.6%), “Kids in my classroom yell at each other a lot” (29.7%), and “Kids in my classroom push or shove each other a lot” (38.5%). Taken together, the findings showed that although a good percentage of children have positive perception of school environment, yet the percentage of children having negative percentage is not so low to be termed as ignorable. See Appendix 1(c), Items QQG01-QQG11.

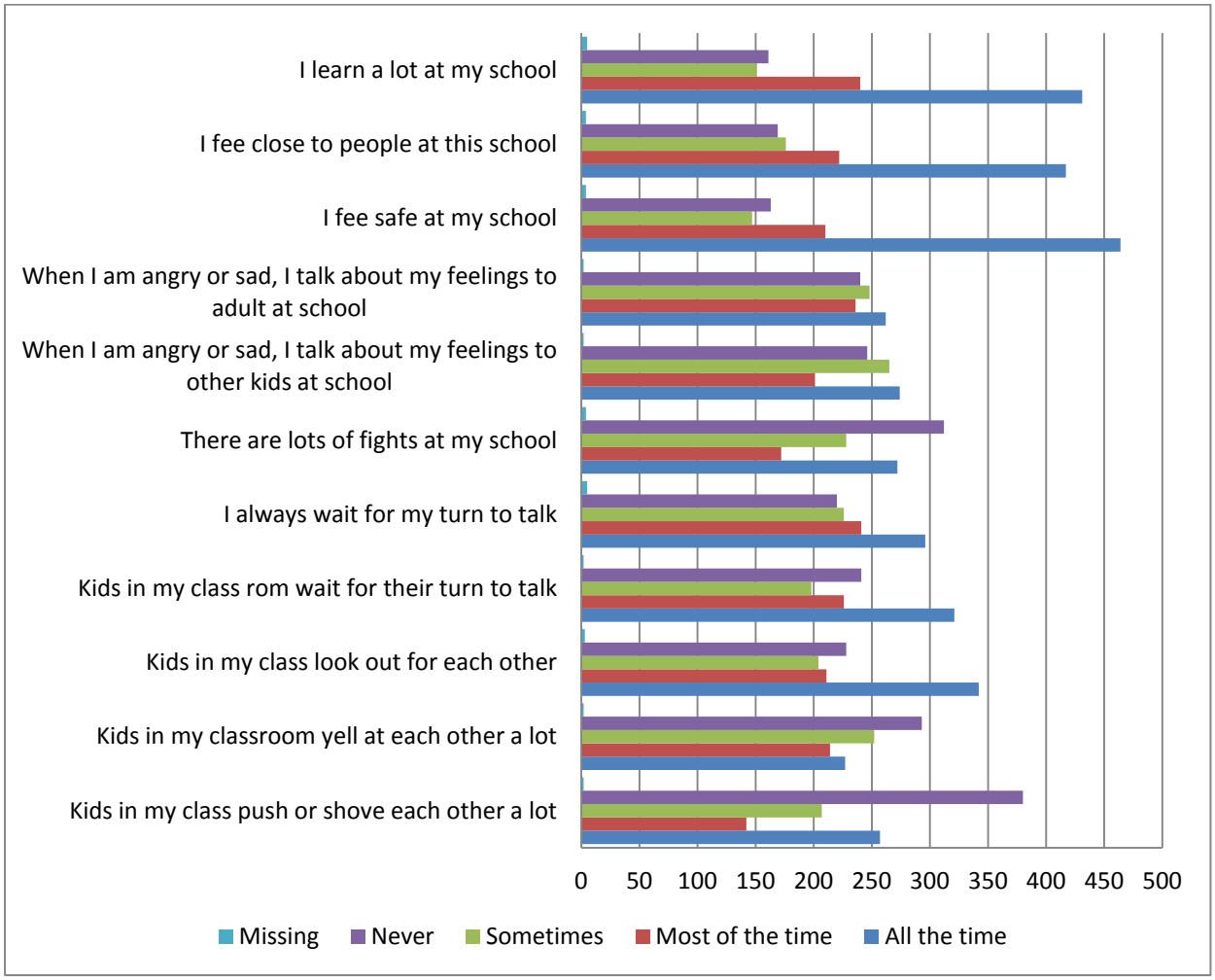


Figure 6.1: Children’s perception of school environment-N=988

6.4. Safety at Schools

Children were further asked about the extent to which they feel safe in the school. Children’s reported safety at school is shown in the figure 6.2 below.

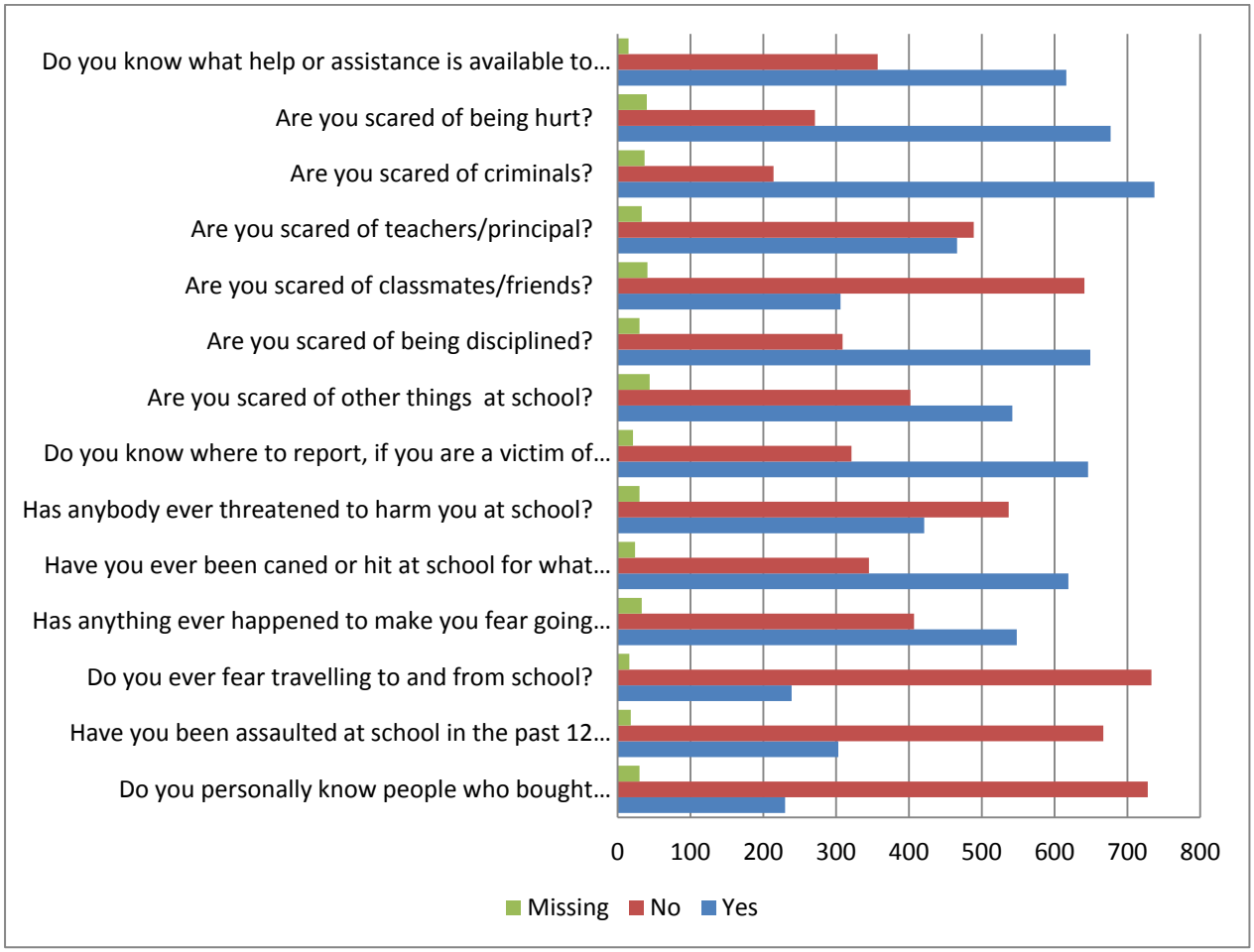


Figure 6.2: Children's views about safety at school-N=988

Majority of children reported to be aware of the help or assistance available in their school (62.3%). These children were further asked about the type of available help and, in reply, majority held that counselling and reporting services are available which can be utilised if they are victim of any crime at school (See Figure 6.3). Some of them also reported the availability of medical support. For examined items see Appendix 1(c) QQHO1-QQH17.

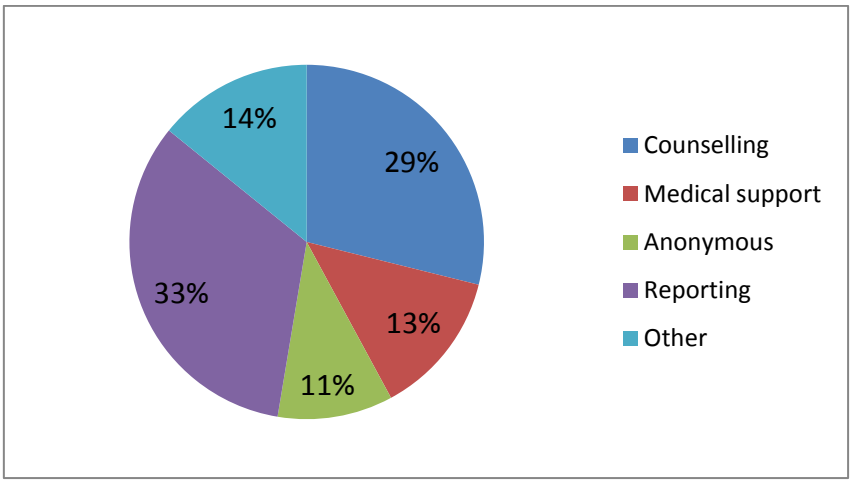


Figure 6.3: Help or support available in schools-N=988

Despite the knowledge of the available support, majority of children were scared of being hurt, of criminals, and of being disciplined (See Figure 6.2). Almost half of children were scared of teachers and principal which is a painful reality, but majority of them were not scared of their classmates or friends at school. They were scared of many other things as well as shown in Figure 6.4. Among the most reported ones are "being beaten," "Thugs," and "Animals."

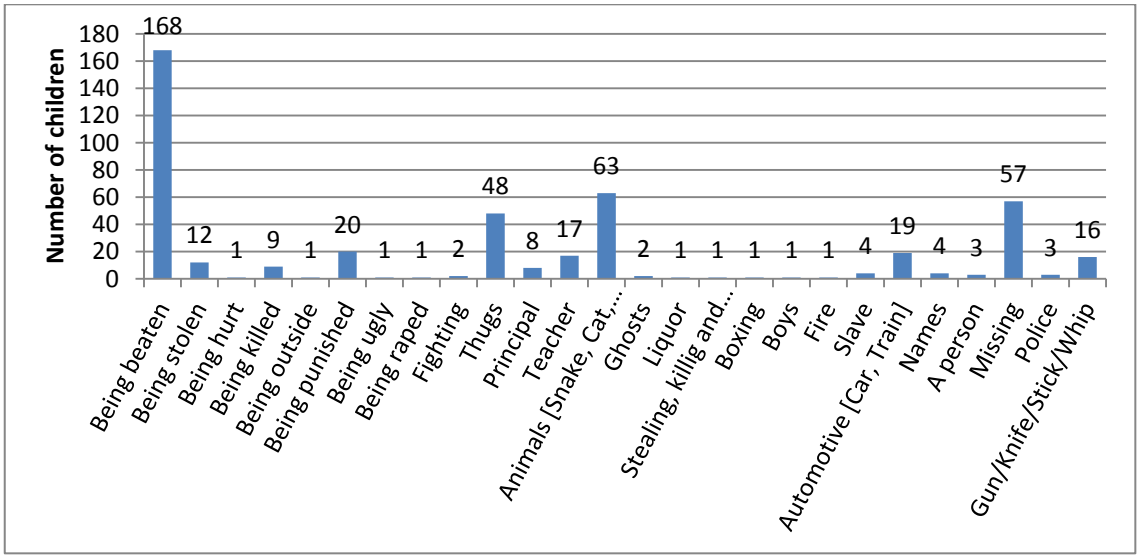


Figure 6.4: Other things children were scared of-N=988

Majority of children also knew the person to whom they should report if they are victim of any crime at school (65.4%). Police, Principal, Traditional leader, Teacher and Social worker were perceived by most of children as the people to whom such reporting should be made (See Figure 6.5).

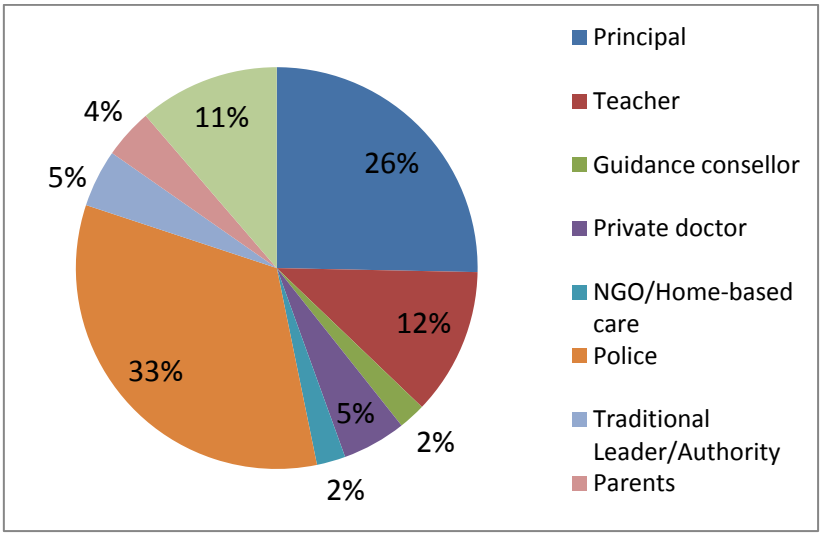


Figure 6.5: The person to report if child is victim of any crime-N=988

Though a large number of children reported that nobody ever threatened to harm them at school, around half reported that they were threatened (42.6%). Those children who reported to be threatened at school further reported the person from whom they received those threats. It was found that in most of the cases children were threatened by their classmates, other learners from school and other adults (See Figure 6.6). Some of them also reported to get threats from teachers or Principal and from learners of other schools. Majority of children reported to been canned or hit at school by the teachers and Principal as punishment. Many of children (7.8%) were fearful of being punished and cane/stick (See Figure 6.4) which shows that the teachers and principal are not supportive to children and are making children fearful through harsh punishments. This finding is critical to note as many of children also reported that some events have occurred in their schools that made them fear attending schools (55.5%). It is also interesting to note that though children fear going to school they are not fearful of traveling to and from school. This shows that the centre of fear is the school itself not the route to the school. In addition, although majority of children did not report of being assaulted at school in past 12 months, around 30% reported to experience assault which is a noticeable figure. Around 23% children reported to know the people who bring weapons at school.

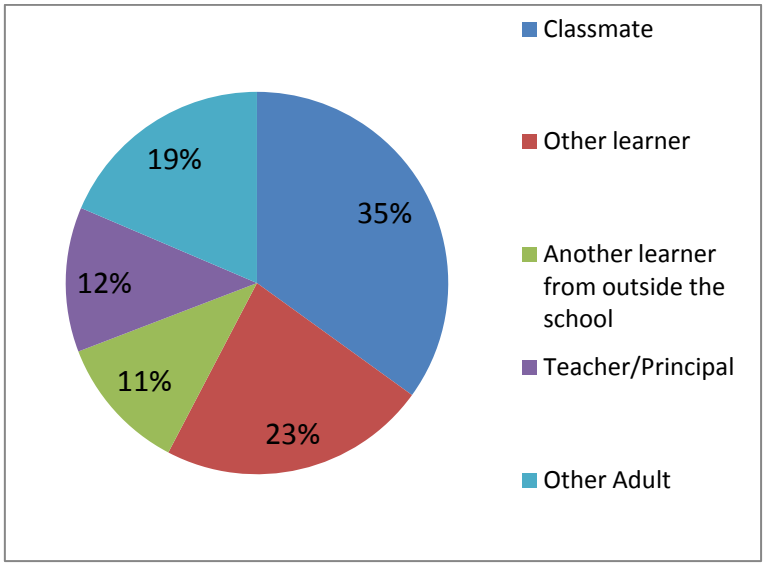


Figure 6.6: The person threatened to harm children –N=988

Taken together, the study showed that for majority of children schools is not a safe place to attend. Children are fearful of being punished and beaten at school not only by their classmates and other learners but by their teachers and principal as well.

6.5. Social Support

Majority of children reported to be looked after by their parents or grandparents with few of them under guardianship of their uncle, aunt or siblings (See Figure 6.7). Some of children reported names of the people instead of mentioning their relationship with those people and some reported to be looked after by more than one person like mother and brother, mother and aunt, and mother and granny. A child also reported to be looked after by "child" but he did not explain whose child he is talking about. Items examined see Appendix 1(c), QQL01-QQL31

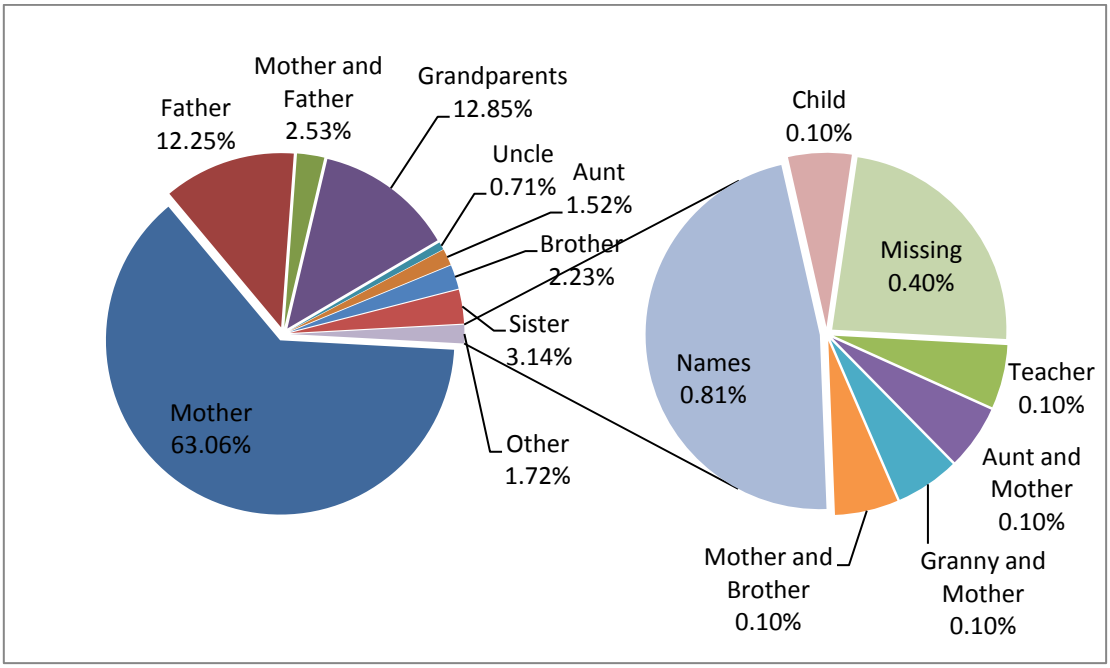


Figure 6.7: The person looking after children-N=988

Majority of children were financially dependent on other people with only few (10%) reported to be independent (See Figure 6.8).

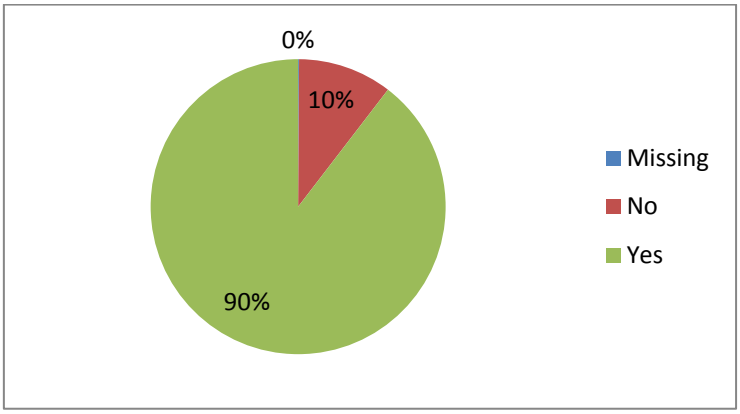


Figure 6.8: Percentage of children dependent on others-N=988

Children reported that they are dependent on their parents, grandparents and siblings while some also reported to be dependent on their uncle or aunt (See Figure 6.9).

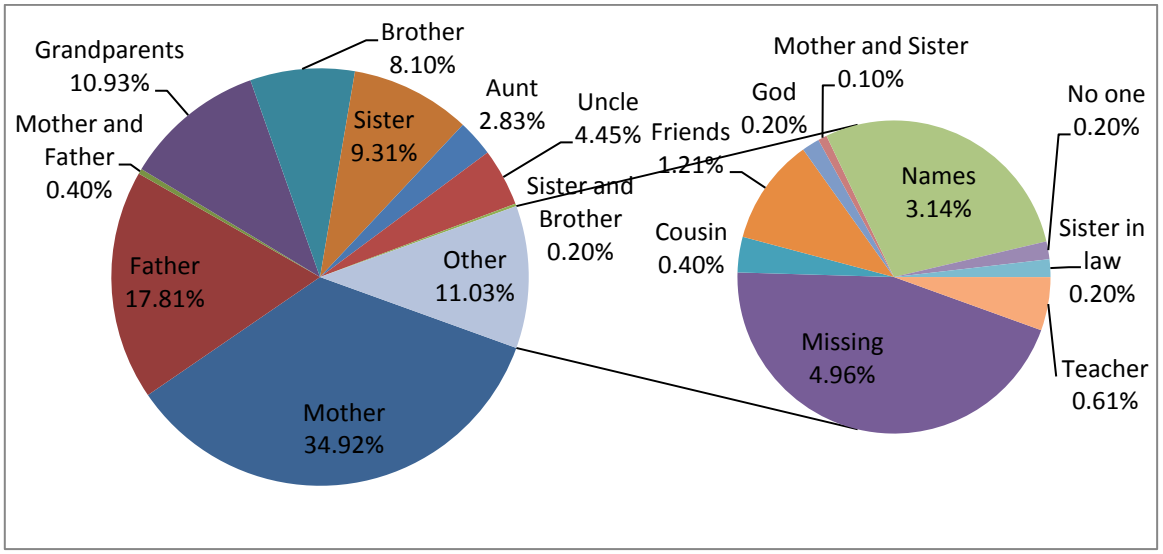


Figure 6.9: People on whom children reported to be financially dependent on-N=988

Majority of children consider their caregiver, siblings, teacher, Principal, best friend and group of close friends to be "a person in their life". In comparison, caregiver was considered by relatively more children to be "the person in their life" and Principal was considered by relatively lesser children as compared to other people.

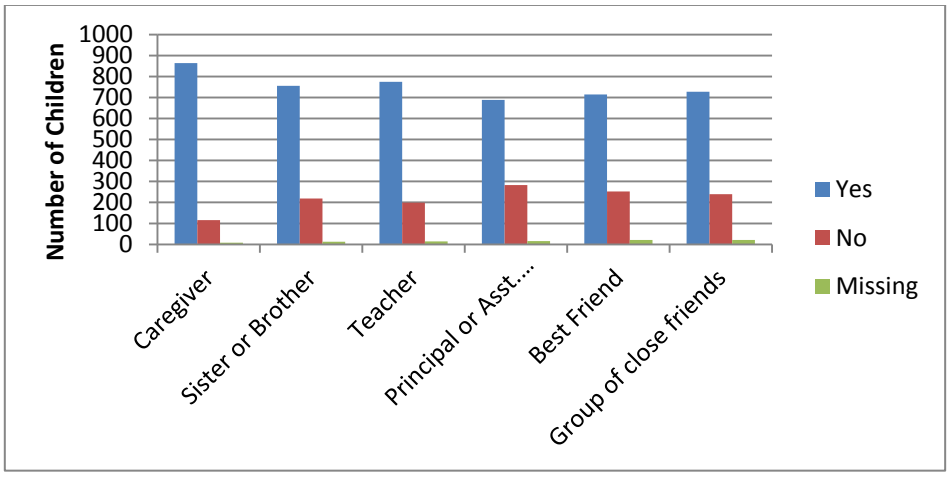


Figure 6.10: This person is a person in my life-N=988

When asked about the other people whom are the person in their life, majority of children reported parents, grandparents, siblings, uncle and aunt to be that person, as shown in figure 6.11 below. It appears that these people are actually the caregiver of these children and children only specify the relationship with caregiver in reply to this question. However, some of them also reported their friends and relatives to be the person in their life.

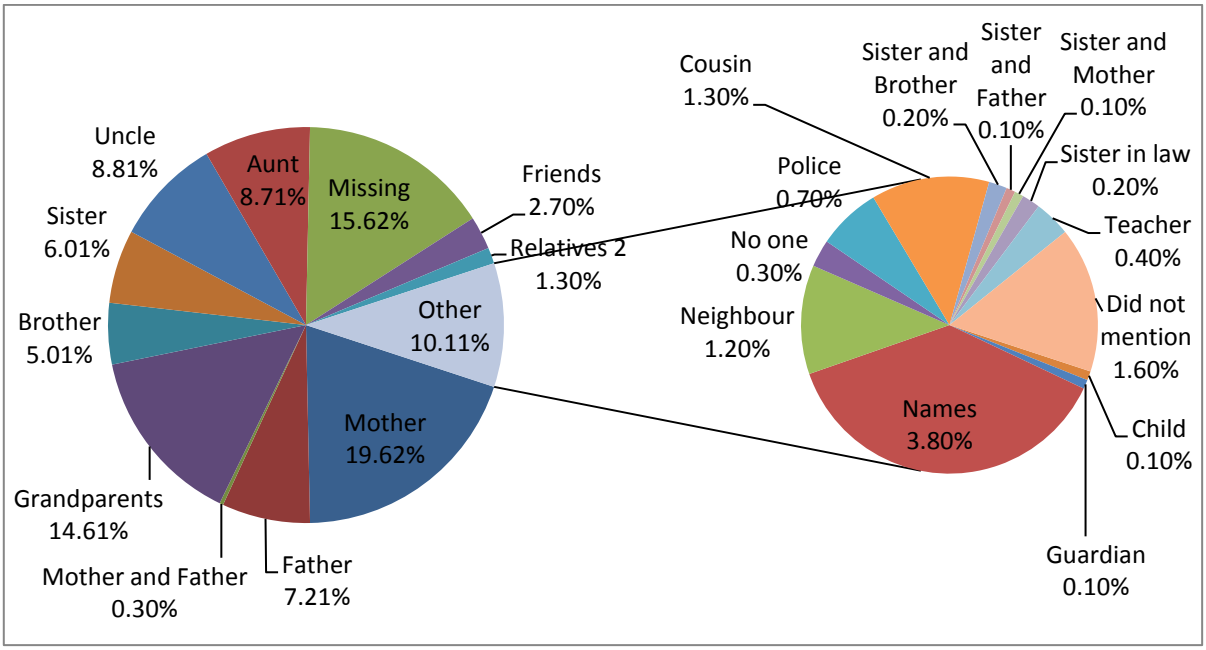


Figure 6.11: The other persons who were reported as the "person in my life"-N=988

Majority of children also reported that their caregiver, siblings, teacher, principal, best friend and group of close friends are very much helpful when they have any personal problem. In this case, relatively more children reported siblings to be helpful at times of problem while relatively lesser children reported group of close friends to be closer at such times, as compared to other people. The other main people reported by children to provide help when children face a personal problem include parents, grandparents, siblings, uncle and aunts and in some cases, police, friends, and cousins (See Figure 6.13).

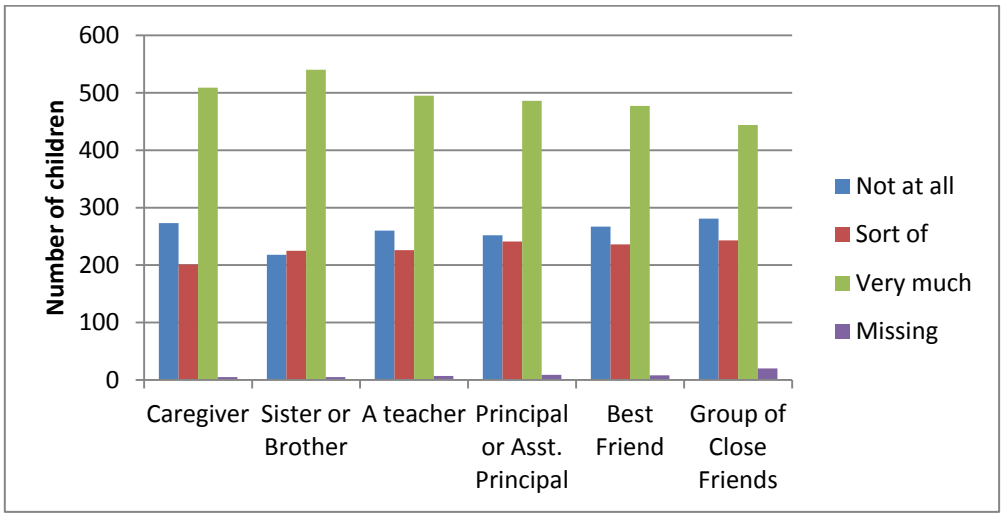


Figure 6.12: This person is helpful when I have a personal problem-N=988

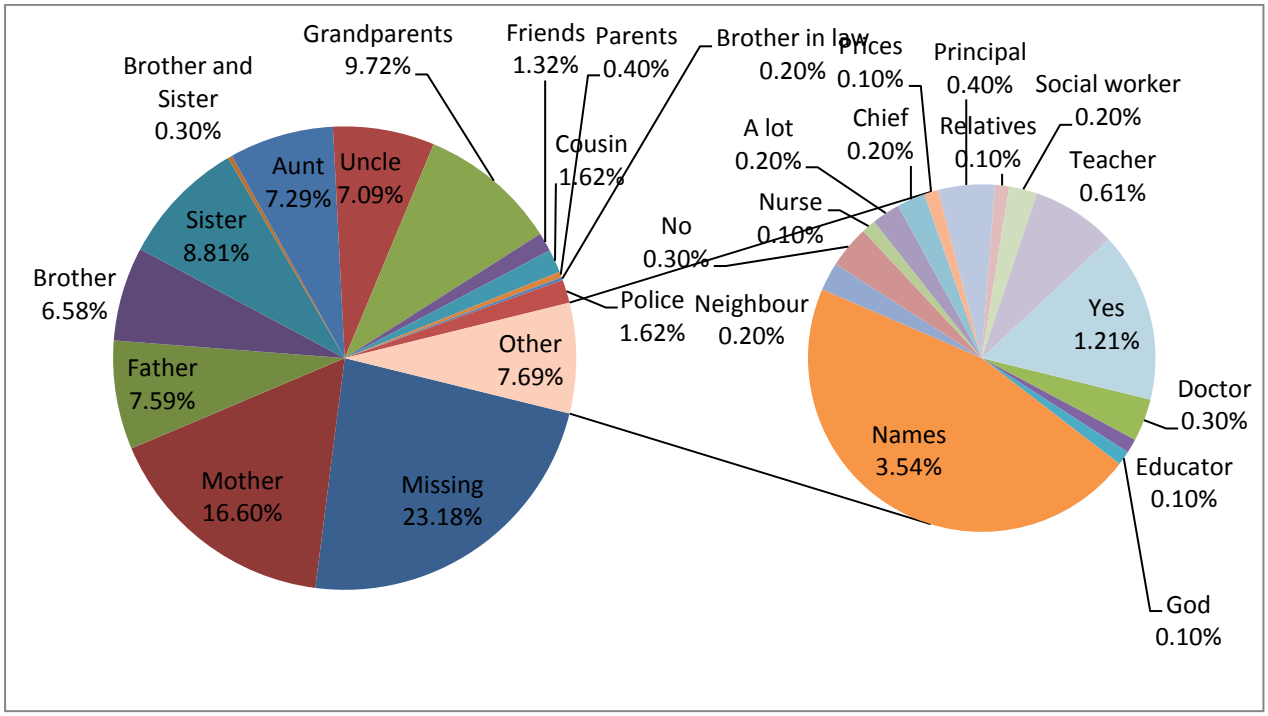


Figure 6.13: The other people who were reported to be helpful when children have a personal problem-N=988

Relatively more children reported siblings to be helpful when children need money or any other thing while relatively lesser children reported teacher and principal to be helpful in such situation (See Figure 6.14). Instead many of them reported that teacher and principal are not at all helpful when children need money or such things, which is quite understandable.

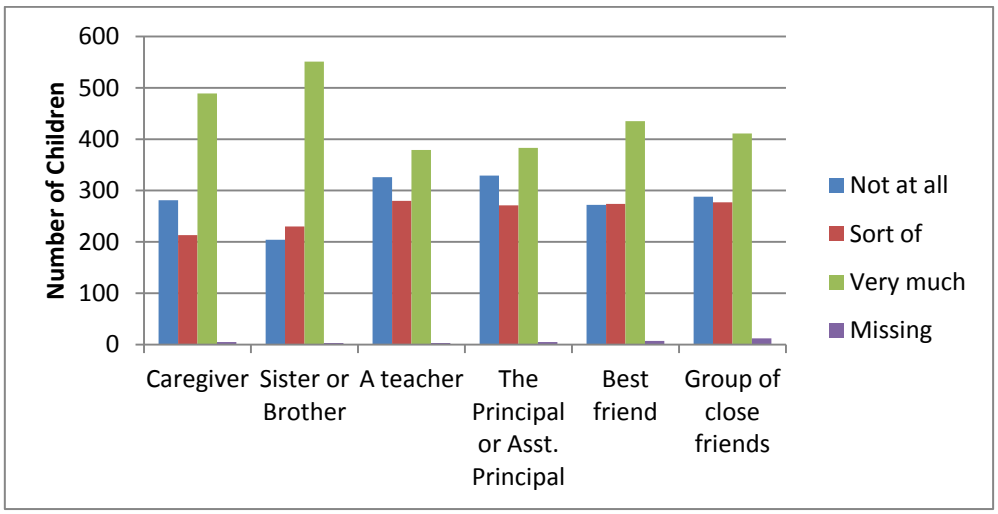


Figure 6.14: This person is helpful when I need money or other thing-N=988

Children reported their parents, grandparents, siblings, uncle and aunt to be the other person who was helpful when they need money or other things (See Figure 6.14). Similar to

previous cases, it was found that majority of children mentions their relationship with the caregiver in response to this question. Friends and cousins were other main people who were reported to be helpful in times of financial need.

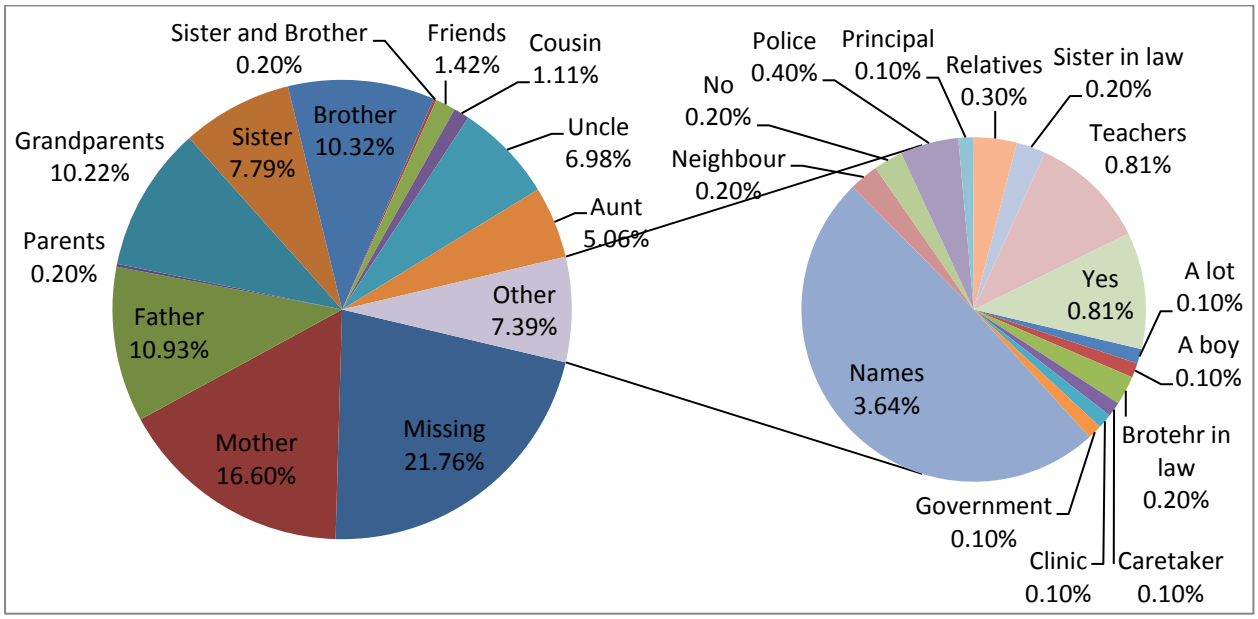


Figure 6.15: The other people who were reported to be helpful when children need money or other thing-N=988

Majority of children reported to have fun with their caregiver, siblings, teacher, principal, best friend and group of close friend, with relatively more children having fun with their sibling and relatively lesser children having fun with Principal and teacher (See Figure 6.16)

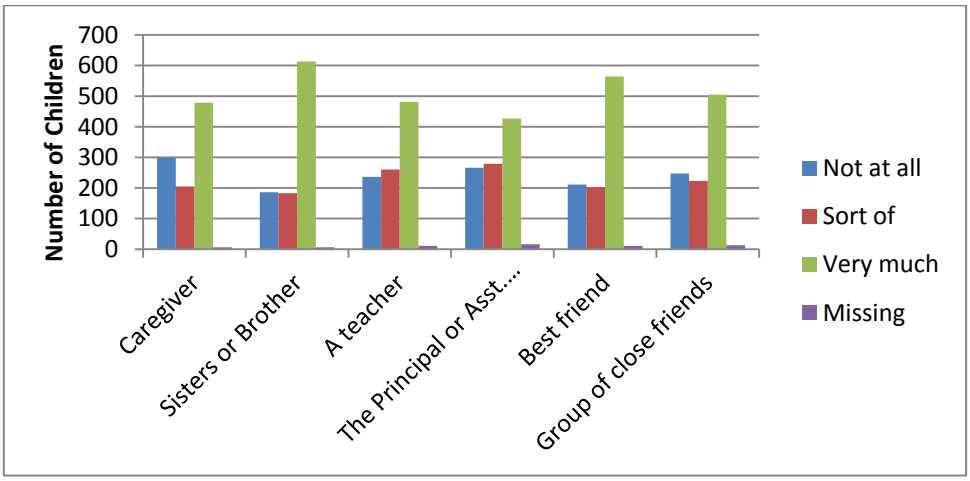


Figure 6.16: I have fun with this person-N=988

The other people with whom children reported to have fun include their parents, siblings, grandparents, uncle, aunt, friends and cousin (See Figure 6.17).

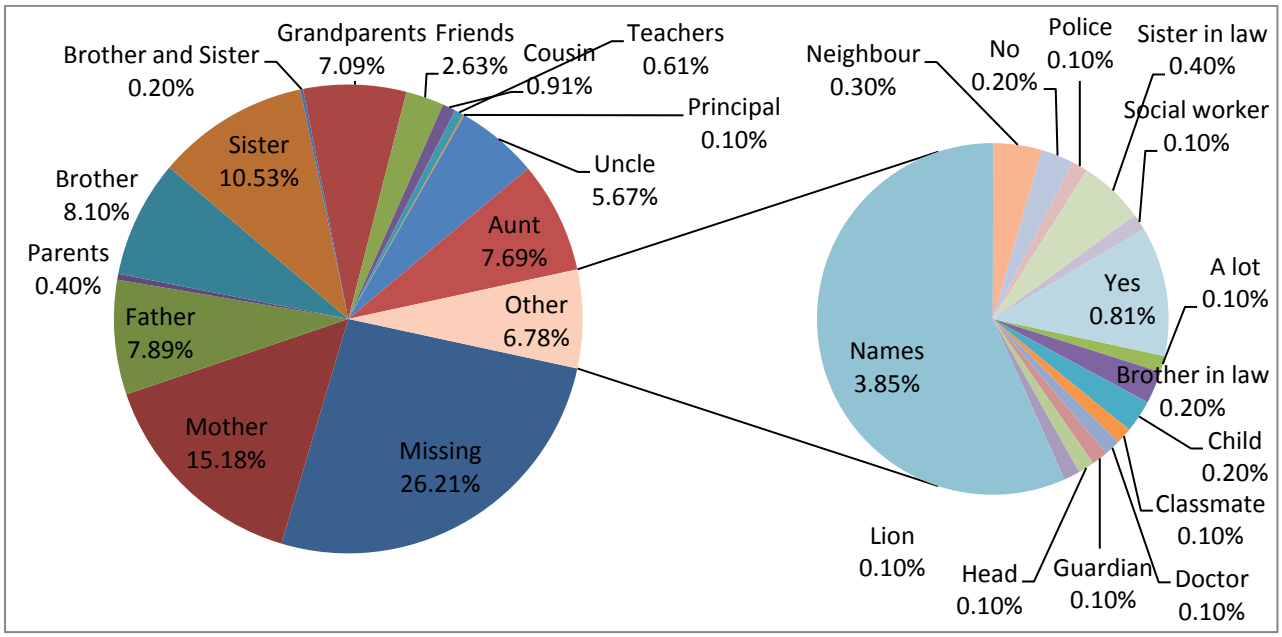


Figure 6.17: The other people with whom children reported to have fun –N=988

All in all, children received social support mainly from their parents, grandparents, siblings and guardians like Uncle and Aunt. Teachers and principal were not reported to provide the social support as much as was expected.

6.6. Use of Alcohol

As shown in figure 6.17 below, majority of children have never had an alcoholic drink (78%).

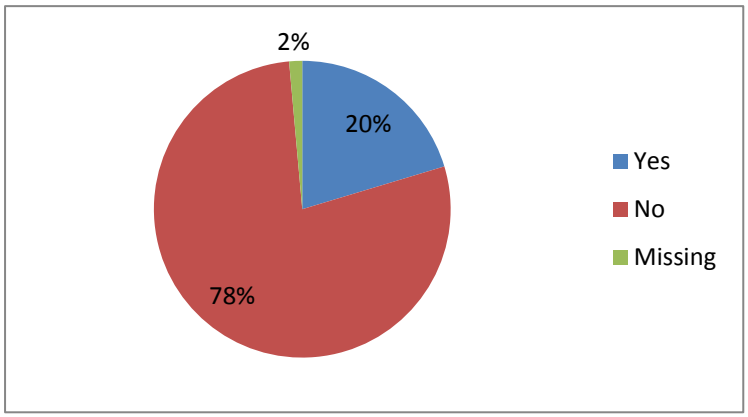


Figure 6.18: Percentage of children having drink ever in their life-N=988.

About 18% of children had drink in past month (See Figure 6.19). Nevertheless when asked to specify how often they drink in past month, around 25% of these 18% children

reported to drink alcohol in past month, with around 7% of those who reported to drink in past month had drink only once in the month, around 5% only once in a week, around 4% several times a week, and around 9% daily (See Figure 6.20).

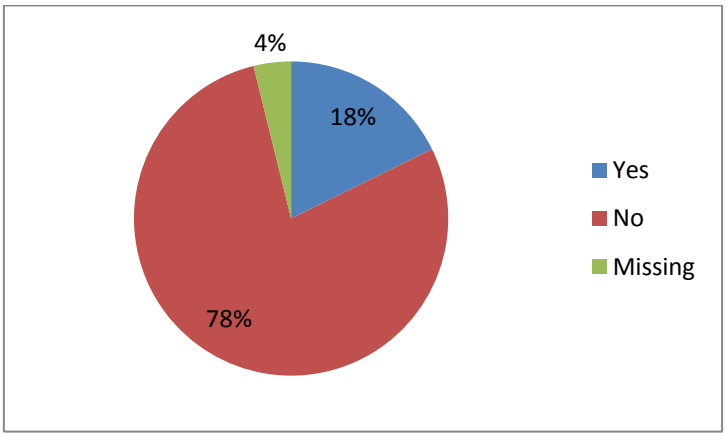


Figure 6.19: Percentage of children having drink in past month-N=988

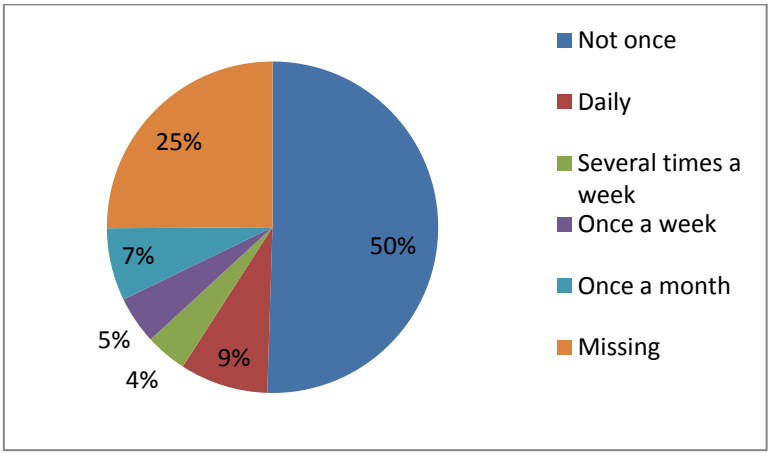


Figure 6.20: How often children had drink in past month-N=988

Though majority of children reported that it's not easy to get alcohol at school, around 15% of children held it to be easy (See Figure 6.21), which is not an ignorable figure at all.

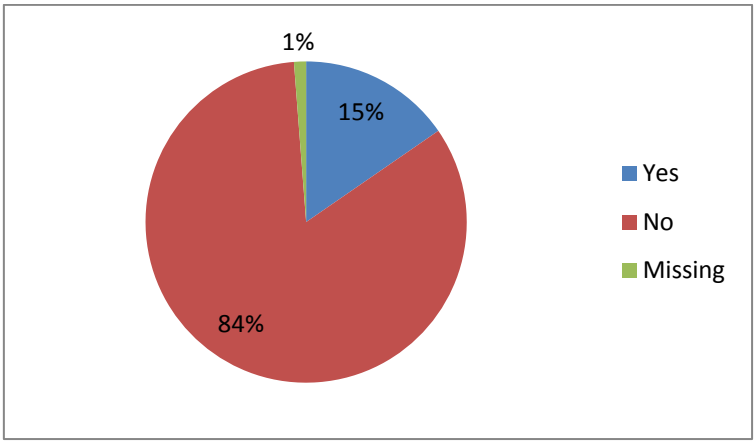


Figure 6.21: Percentage of children agreeing that "it's easy to get alcohol at school"-N=988

When children were asked what they would do if a "cool" kid offer them some alcohol, majority held that they would refuse but around 24% children reported that they would take the drink and pretend to drink and around 10% children reported to accept the offer (See Figure 6.22).

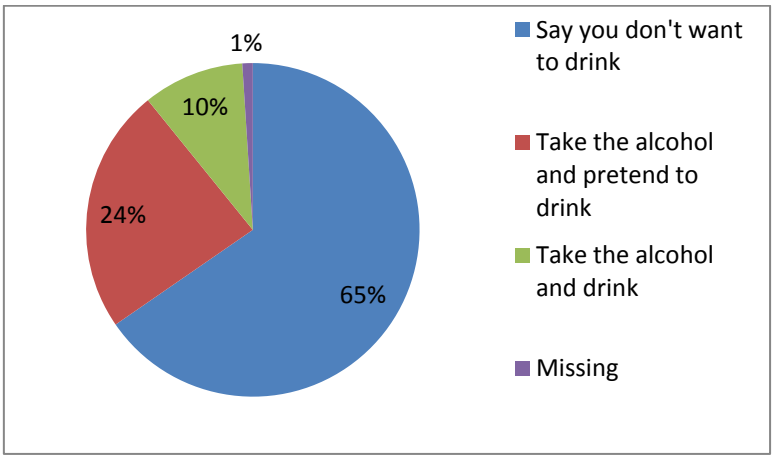


Figure 6.22: What do children do if a cool kid offers them some alcohol-N=988

Taken together, it can be said that majority of children had not been drunk even once in their life but the number of children having drink is upsetting and actions needs to be taken to protect such children from alcoholic drink. More fearful is the fact that for these children alcohol is easily available from their schools. Items for the domain of alcohol use can be seen on Appenix1(c), QQI01-QQI05

6.7. Attitude toward Violence and Alcohol Use

Most of children had negative attitude toward violence (See Figure 6.23). Majority of them agreed that "boys and men do not have to be violent" (48.5%) and "There are different ways we can control anger" (50.6%). Almost one third of children agreed that there are things they can do make themselves feel safer (67.4%) showing that they were well-prepared against violence. Children also showed negative attitude toward drink as majority of them disagreed with "I think it is OK for adults to get drunk" (48.7%) and "My friends think that it is OK for adults to get drunk" (56.2%). Most of children (64.8%) agreed that drinking is the cause of violence in adults. Items for the domain of attitude toward violence an alcohol use can be seen on Appenix1(c), QQK01-QQK07

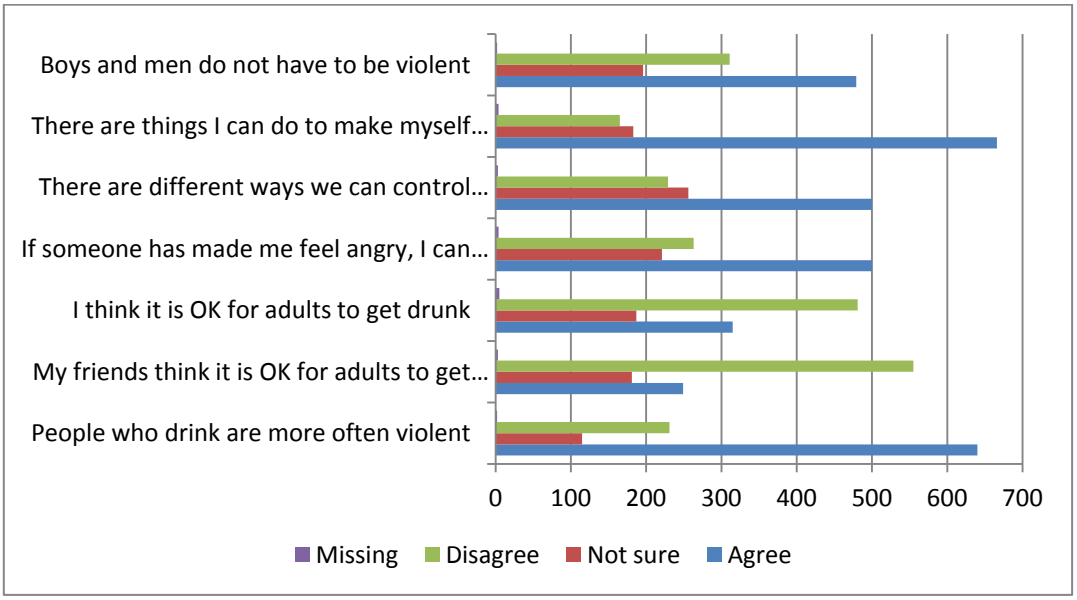


Figure 6.23: Children's attitude toward violence and alcohol use-N=988

6.8. Nutrition

Around 90% of children reported to have meals at schools (See Figure 6.24).

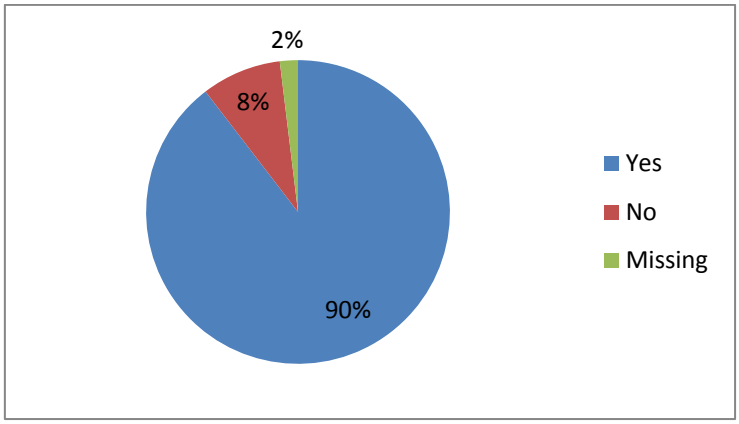


Figure 6.24: Percentage of children having meals at school-N=988

Despite having meals at school, more than one-third of children reported to have insufficient food at least once in a week, most probably on the weekend. Around 8% of children did not have enough meals for more than two days a week (See Figure 6.25). Items for the domain of nutrition can be seen on Appenix1(c), QQM01-QQI02.

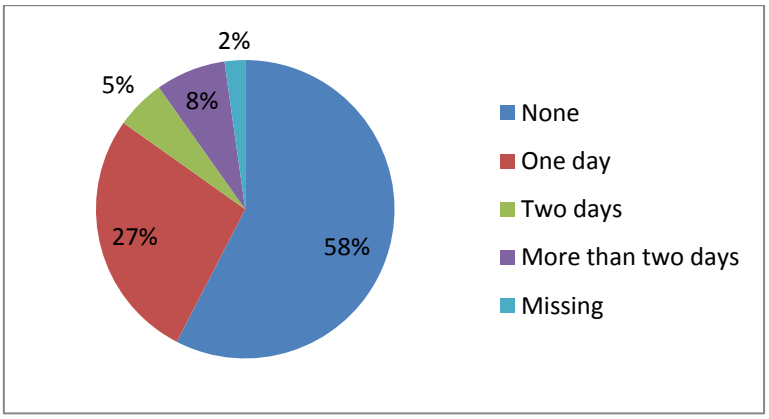


Figure 6.25: How many days a week children do not have enough food-N=988

6.9. Grants

Most of the families in the region appeared to receive grants. Only 25% of children reported that their families are not getting any of the grants. Most of the families were reported by children to receive child-support grants or pension while some of them were receiving foster grants, as shown in figure 6.26 below. Items for the domain of grants can be seen on Appenix1(c), QQM03

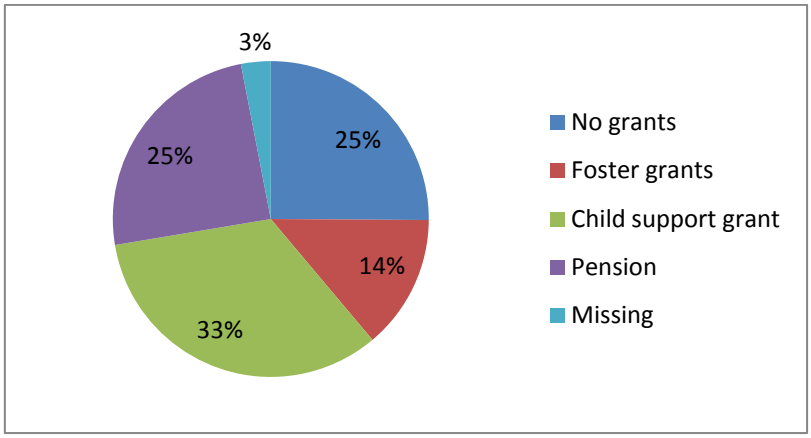


Figure 6.26: Grants received by children's families-N=988

6.10. Stigma

Majority of children did not experience stigma at all (See Figure 6.27). Only few of them reported to experience it often with around 9.1% teased, around 11.5% treated badly, and 16.7% gossiped. 23.2% of children reported that this experience of stigma made them upset. Items for the domain of stigma can be seen on Appenix1(c), QQO01-QQO07

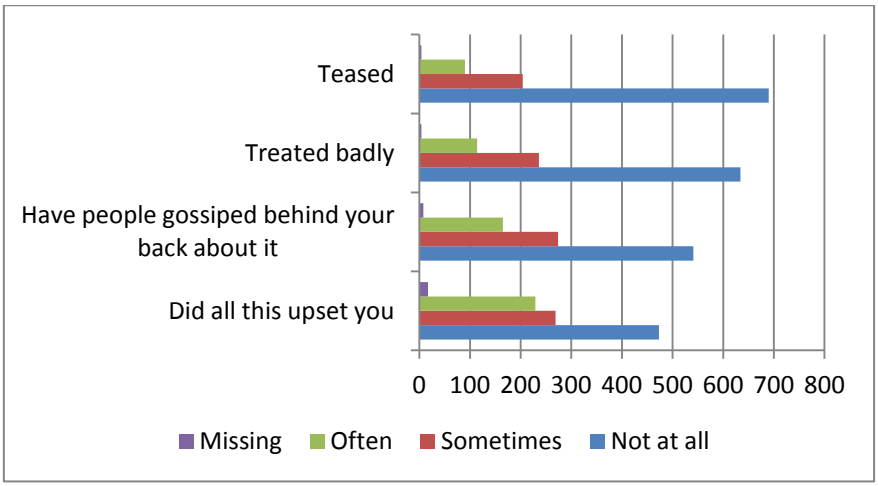


Figure 6.27: Experience of Stigma-N=988

In terms of feeling of social exclusion (a part of the measure of social stigma), children reported mixed results (See Figure 6.28). Majority of them were not worried about being rejected (67.4%) and did not feel different or alone (64.5%). However around half of them reported to avoid making new friends and more than one quarter of them were fearful

that if people know about a person being sick in their family, they would avoid touching them (35.9%), would be afraid of them (30.6%) and would think they were a bad person (30.3%). Around 30% of children reported that parents don't want them to be around their children.

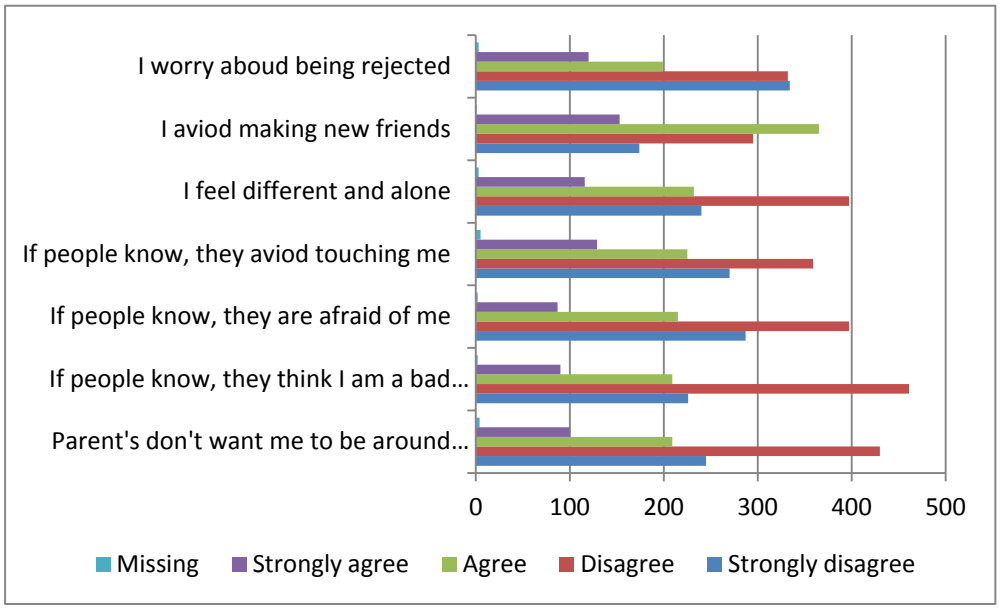


Figure 6.28: Feeling of Social Exclusion-n=988

6.11. Caregiver Illness

Although majority of children held that no one in their family is ill yet is concerning that around 29% children reported having someone ill in the family (See Figure 6.29). When children were asked who the person they usually look after, most of them is held that they usually look after their parents, siblings and grandparents. Some of them also selected Uncle and Aunt to be the person they mostly look after while some provided the names of the people and did not clarify their relation to them (See Figure 6.30). A very low percentage of children answered doctor or social worker (0.1%) who may have failed in understanding the meaning of question. Items for the domain of caregiver illness can be seen on Appenix1(c), QQP01-QQP04

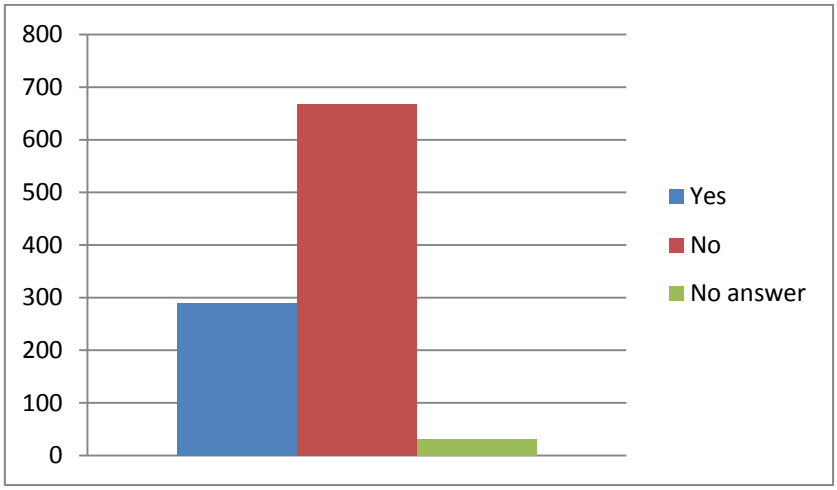


Figure 6.28: Is there anyone who is ill at home?-N=988

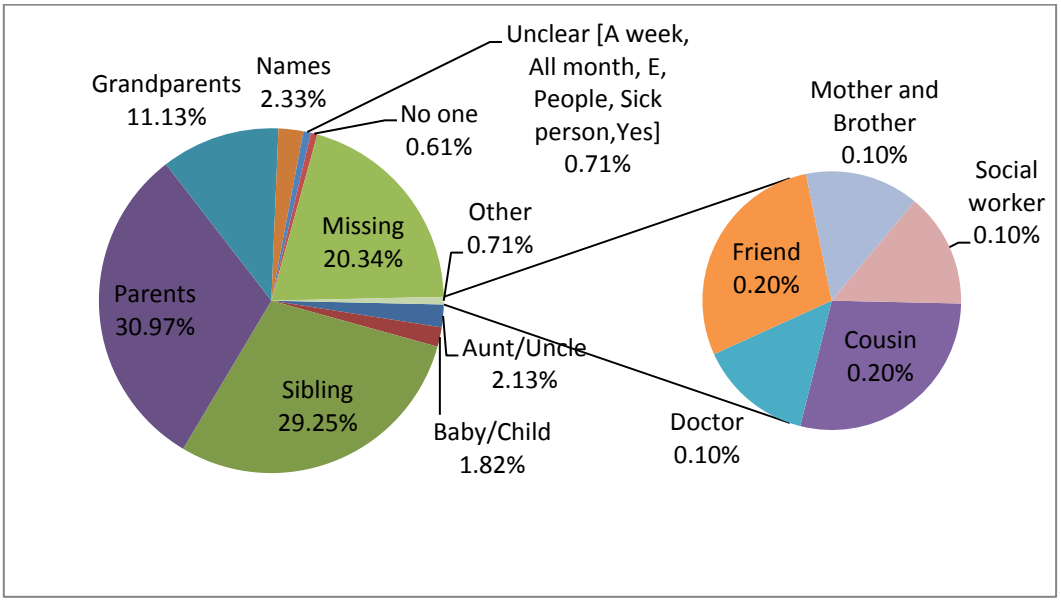


Figure 6.29: Who is the person you look after most?-N=988

The frequency with which the selected person was ill in a month earlier to the data collection raises concerns as well. Around 11% held that the person was ill for the entire month, as shown in figure 6.30 below:

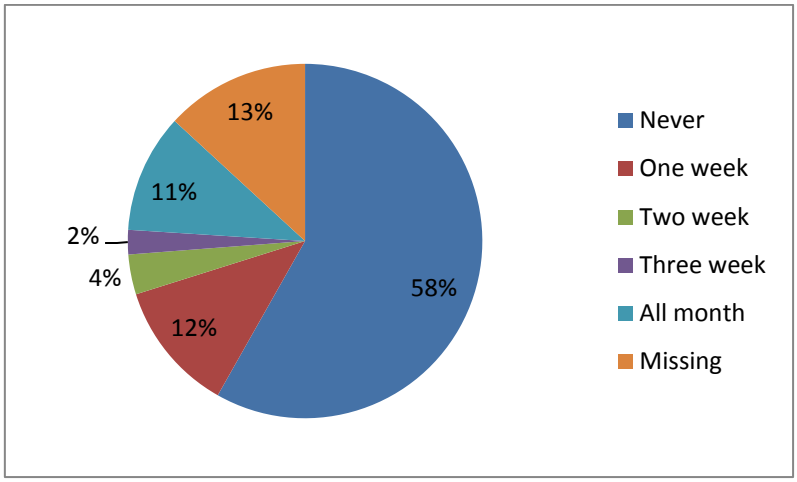


Figure 6.30: How often in the past month has this person been unwell?-N=988

Majority did not answer when asked if their caregiver has any illness or disability (See Figure 6.31), but many of them clarify the type of sickness or disability showing that the caregivers of many of children were either ill or disable.

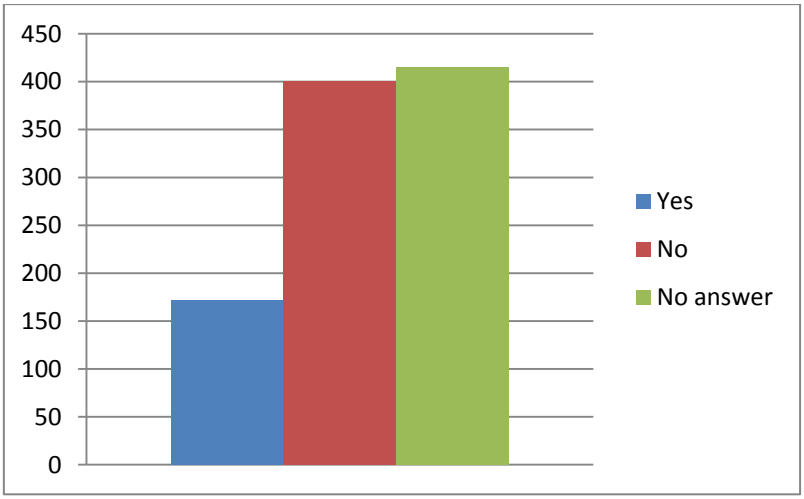


Figure 6.31: Does your caregiver have any kind of sickness or disability?-N=988

Sickness/ disability	Frequency	Percentage
Arms/Hands	6	3.50%
AIDS	1	0.60%
Asthma	6	3.50%
Bone problems	2	1.20%
Burns	1	0.60%
Deaf	2	1.20%

Eyes problem	4	0.60%
Cannot Talk	3	1.70%
Cannot Sleep	1	0.60%
Chest pains	7	4.10%
Coughing	10	5.80%
Injured	2	1.20%
Disability	8	4.70%
Diarrhoea	1	0.60%
Epilepsy	1	0.60%
Falling	3	1.70%
Flu/Fever	7	4.10%
Headache	3	1.70%
High Blood	3	1.70%
Finger	1	0.60%
Hip problem	1	0.60%
Mental illness	4	2.30%
HIV	3	1.70%
Legs problem	20	11.60%
P.E	1	0.60%
Rush/Chicken Pox	1	0.60%
Old age	1	0.60%
Paralyzed one side	1	0.60%
Pneumonia	1	0.60%
Shingles	1	0.60%
Sick	43	25.00%
The whole body	3	1.70%
T.B	17	9.90%
Trusting people/Relying on people	1	0.60%
Tumour	1	0.60%
Vomiting	1	0.60%
Total	172	100.00%

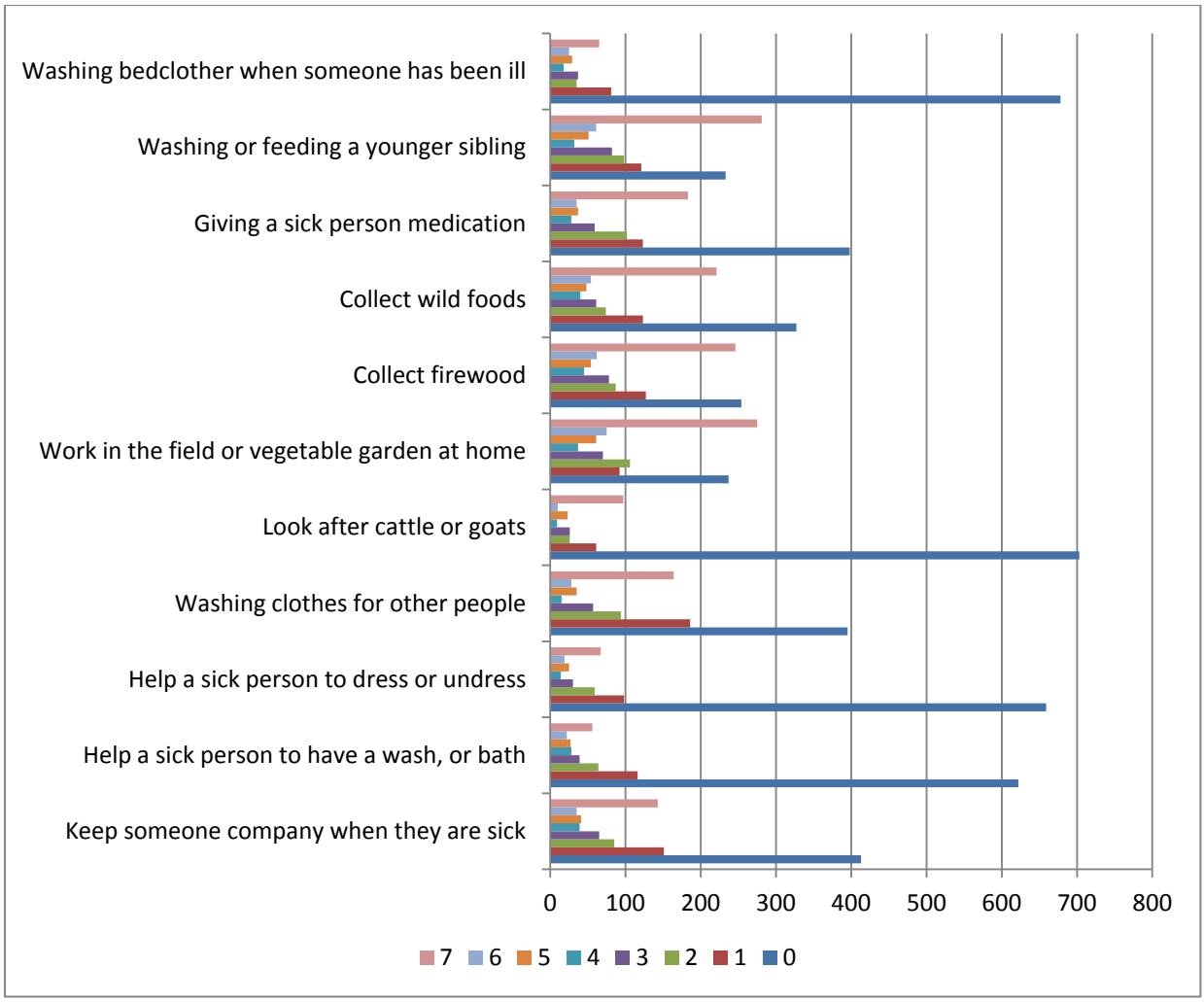
Table 6.1: Sickness/Disability in the caregiver of children-N=988

Table 6.1 lists the sickness or disabilities reported by children. As can be seen, coughing and TB are the most common diseases while disability in legs is the most common disability reported by children.

6.12. Caregiving responsibilities on child

Children were asked about the number of days in a week from 0-days, they performed certain household responsibilities. As shown in figure 6.32, on average, majority of children had no caregiving responsibility. However, a large number of children reported to clean home, f*etch* water, wash or feed young sibling, give medication to sick people, collect wild

food or firewood, and work in the field or vegetable garden at home on regular basis. Items for the domain of caregiving responsibilities can be seen on Appenix1(c), QQQ01-QQQ23



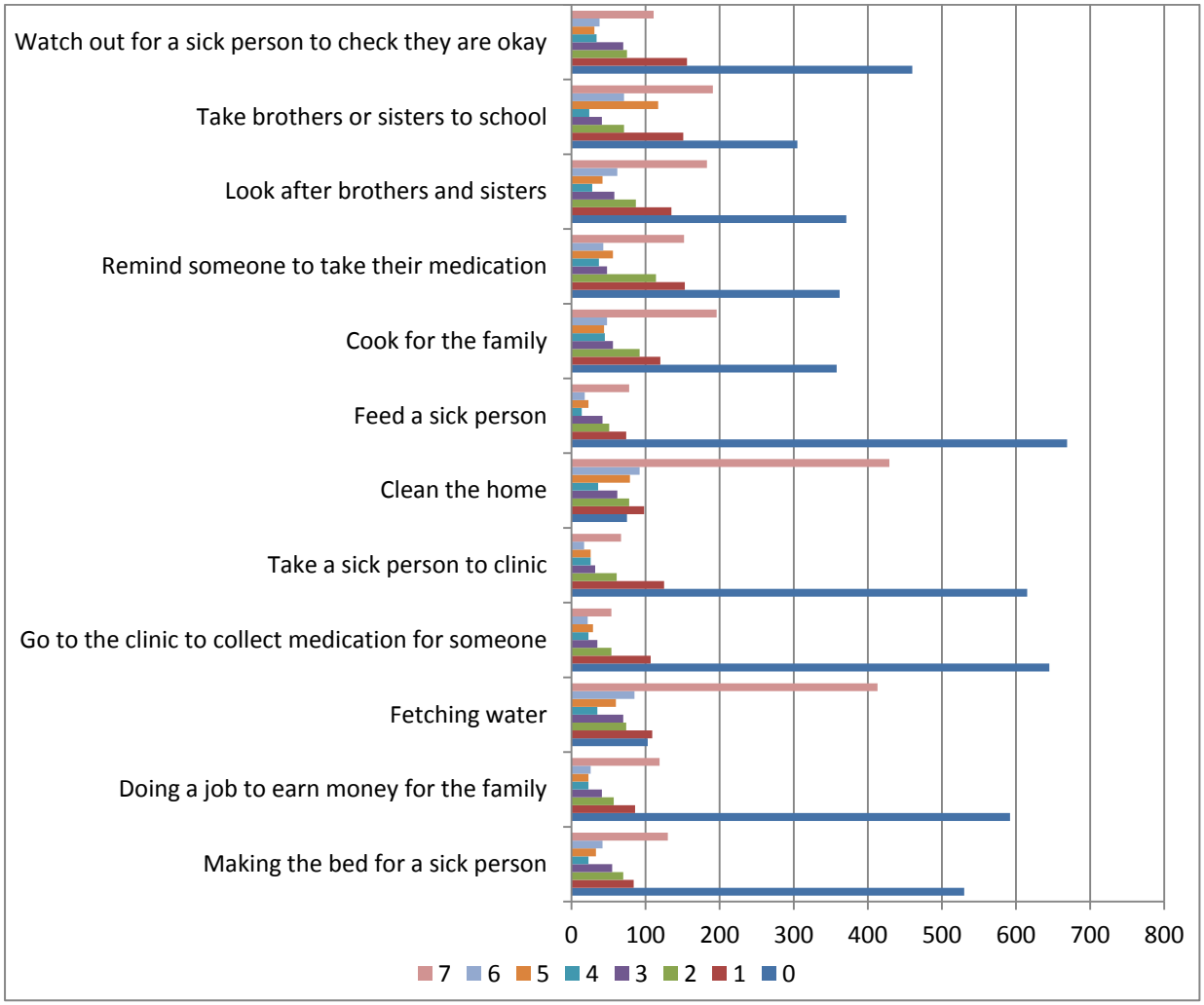


Figure 6.32: Frequency with which various task were carried out by children-N=988

6.13. Knowledge of and Attitude toward HIV/AIDS

Children attitude toward HIV/AIDS is not very welcoming. Majority of children were not willing to be friend with HIV positive person and not even to be friend with someone whose parents have HIV/AIDS. More than half of them considered HIV to be punishment for sinning (See Figure 6.33). Items for the domain of knowledge of and attitude toward HIV/AIDS can be seen on Appenix1(c), QQS01-QQT06

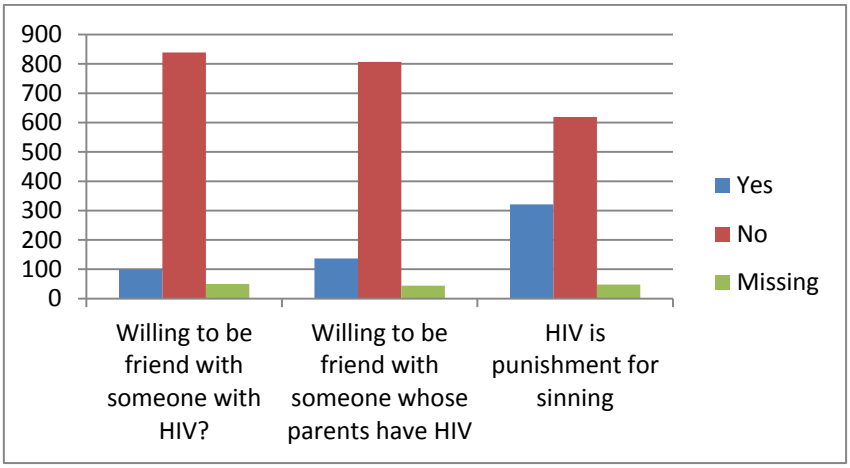


Figure 6.33: Children's attitude toward HIV-N=988

Most of children also had incorrect information about HIV/AIDS. It is important to note that a large number of children believe that people with HIV cannot look healthy and many of them consider AIDS to be curable. A large proportion of children selected "may be" in response to the questions showing the weakness in their awareness.

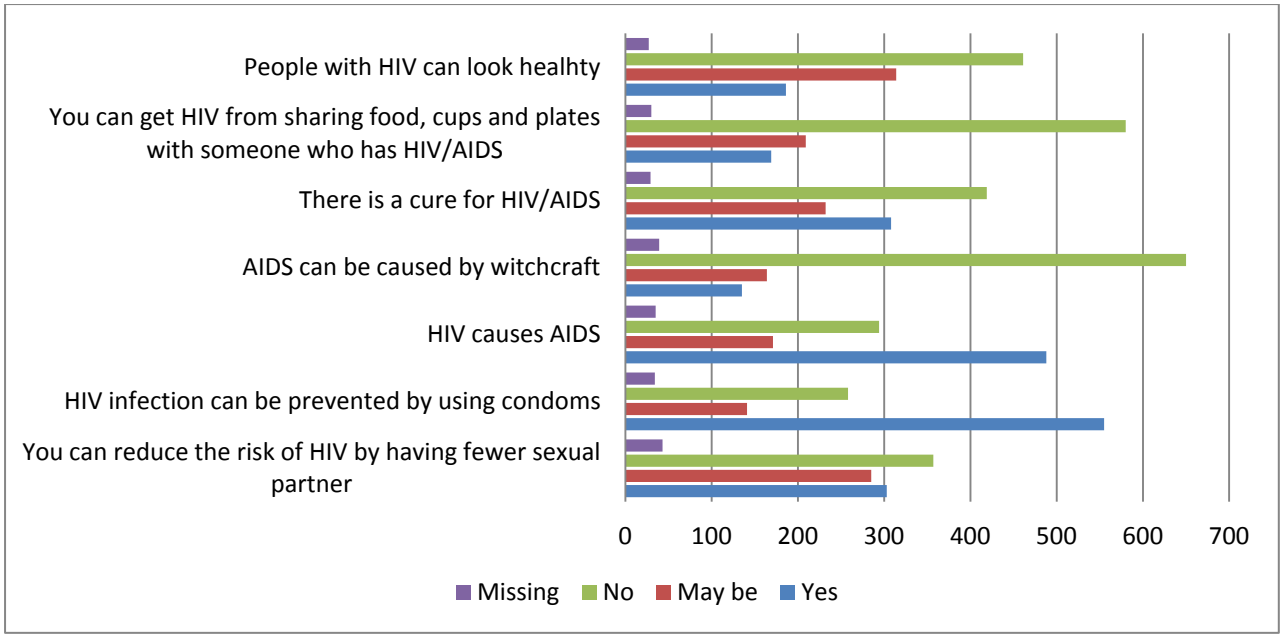


Figure 6.34: Children's knowledge of HIV/AIDS-N=988

Though majority of children were aware of the HIV prevention, a large number answered incorrectly, as shown in figure 6.35 below.

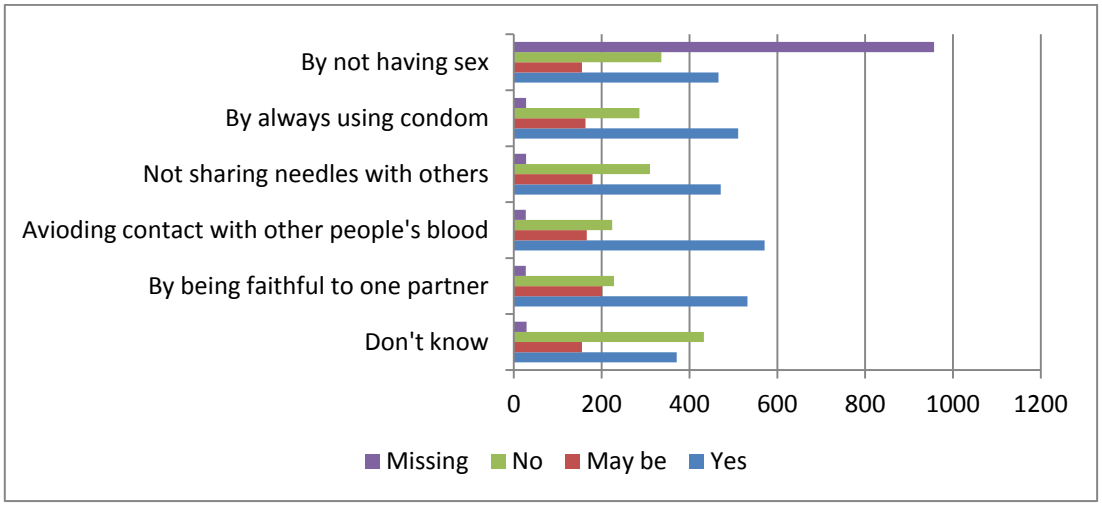


Figure 6.35: Children's knowledge of HIV prevention-N=988

6.14. Perception about Gender

It is pleasing to know that majority of children (62.2%) agreed that boys and girls should be treated equally (See Figure 6.36). However, quite contradictory to this a large proportion of children (68.8%) held that boys and girls are not equal. It is also important to note that around 43.5 % of children believed that a girl cannot refuse sex, if a boy gives her presents and 52.4% believed that a person must have sex with his/her girlfriend/boyfriend to show love. Items for the domain of perception about gender can be seen on Appenix1(c), QQU01-QQU04

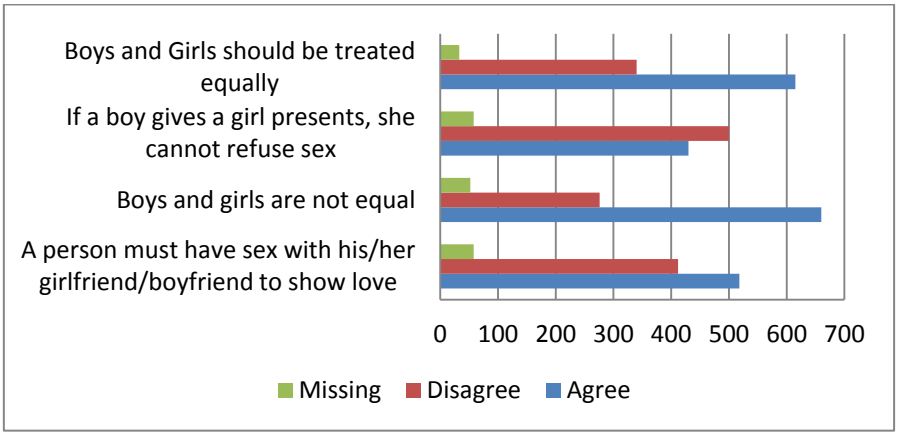


Figure 6.36: Children's perception about gender-N=988

6.15. Relationship between Factors and Psychosocial Problems in Children

The relationship between the above-described factor and children- and teacher-reported psychosocial problems in children were analysed using Spearmen Correlation. No factor was controlled for in the analysis. The results obtained from the analysis can be seen in Appendix 17. Here, the significance and the strength of the relationship have been described.

6.15.1. Relationship with Perception of School Environment

A number of important items measuring children's perception of school environment were found to be significantly correlated with different domains of psychosocial problems in children. Children's report of pushing and shoving in classroom was significantly correlated negatively with child-reported hyperactivity (r = - 0.11, $p < 0.01$), positively with child-reported pro-social behaviour (r = 0.10, p < 0.01), negatively with self-esteem (r = - 0.10, p < 0.01), negatively with cognitive interpretation (r = - 0.14, p < 0.01), negatively with anxiety (r = - 0.14, p < 0.01), and negatively with depression (r = - 0.16, p < 0.05). Children's report of yelling in classroom was found to be significantly associated with teacher-reported total SDQ difficulties (r = - 0.06, p < 0.05), child-reported hyperactivity (r = - 0.18, p < 0.01), child-reported pro-social behaviour (r = 0.18, p < 0.01), self-esteem (r = 0.11, p < 0.01), cognitive interpretation (r = - 0.21, p < 0.01), anxiety (r = - 0.17, p < 0.01), and depression (r = - 0.19, p < 0.01).

Children's report of looking out for each other by children in classroom was found to be significantly positively associated with only child-reported pro-social behaviour (r = 0.07, p < 0.05) and cognitive interpretation (r = 0.08, p < 0.05). Children's report of waiting for one's turn to talk by children of classroom was significantly correlated with teacher-reported pro-social behaviour (r = 0.06, p < 0.05) and anxiety (r = 0.09, p < 0.01). Children's report on their habit of waiting for their turn to talk had significant association with only anxiety (r = - 0.06, p < 0.05).

Children's report of fighting in the classroom was found to be an important factor as it was significantly correlated with teacher-reported SDQ total difficulties (r = 0.07, p < 0.05),

hyperactivity ($r = -0.11$, $p < 0.01$), teacher-reported pro-social behaviour ($r = 0.06$, $p < 0.05$), child-reported pro-social behaviour ($r = 0.09$, $p < 0.01$), self-esteem ($r = 0.08$, $p < 0.05$), cognitive interpretation ($r = -0.15$, $p < 0.01$), anxiety ($r = -0.14$, $p < 0.01$), and depression ($r = -0.13$, $p < 0.01$).

Anxiety was found to significantly and negatively associated with children's report on sharing their feeling with other kids at school ($r = -0.08$, $p < 0.01$) and with sharing their feeling with adults at school ($r = -0.11$, $p < 0.01$). Children's report on feeling safe at school was significantly and positively associated with child-reported hyperactivity ($r = 0.09$, $p < 0.01$), cognitive interpretation ($r = 0.29$, $p < 0.01$) and depression ($r = 0.18$, $p < 0.01$).

There was statistically significant correlation of children's report of feeling close to people at school with child-reported peer-relationship problems ($r = 0.09$, $p < 0.01$), child-reported hyperactivity ($r = 0.12$, $p < 0.01$), self-esteem ($r = -0.12$, $p < 0.01$), cognitive interpretation ($r = 0.20$, $p < 0.01$), and depression ($r = 0.13$, $p < 0.01$). Similarly, children's reported of learning a lot at school was significantly associated with child-reported peer-relationship problems ($r = 0.08$, $p < 0.05$), child-reported hyperactivity ($r = 0.14$, $p < 0.01$), self-esteem ($r = -0.90$, $p < 0.01$), cognitive interpretation ($r = 0.30$, $p < 0.01$), and depression ($r = 0.16$, $p < 0.01$).

Thus, taken together, children's perception of school environment was found to impact, sometimes positively and sometimes negatively, child-reported hyperactivity, child-reported pro-social behaviour related problem, self-esteem, cognitive interpretation, and emotional problem (anxiety and depression). Teacher-reported SDQ total and pro-social behaviour as well as child-reported peer-relationship problem are not found to have significant associated with most of the items measuring children's perception of school environment.

6.15.2. Relationship with Safety at Schools

Children's report on their awareness about the help available to them if they are victim of any crime of school was found to have significant positive association with child-reported hyperactivity ($r = 0.14$, $p < 0.05$), cognitive interpretation ($r = 0.17$, $p < 0.01$) and depression ($r = 0.14$, $p < 0.01$) and significant negative association with child-reported pro-social behaviour ($r = - 0.08$, $p < 0.05$), and self-esteem ($r = - 0.08$, $p < 0.05$). Similar to this, children's report on their awareness about the person to whom crime at school ought to be reported was significantly associated with child-reported hyperactivity ($r = 0.08$, $p < 0.05$), child-reported pro-social behaviour ($r = - 0.12$, $p < 0.01$), cognitive interpretation ($r = 0.13$, $p < 0.01$) and depression ($r = 0.11$, $p < 0.01$).

Children's report of scared of being hurt was significantly associated with hyperactivity ($r = 0.11$, $p < 0.01$), self-esteem ($r = 0.08$, $p < 0.01$), cognitive interpretation ($r = 0.20$, $p < 0.01$), anxiety ($r = - 0.07$, $p < 0.05$), and depression ($r = 0.21$, $p < 0.01$). Similarly children's report of scared of criminals was significantly associated with child-reported peer-relationship problem ($r = 0.10$, $p < 0.01$), child-reported hyperactivity ($r = 0.13$, $p < 0.01$), child-reported pro-social behaviour ($r = - 0.09$, $p < 0.01$), self-esteem ($r = - 0.12$, $p < 0.01$), cognitive interpretation ($r = 0.27$, $p < 0.01$), anxiety ($r = - 0.07$, $p < 0.05$), and depression ($r = 0.26$, $p < 0.01$). By contrast, children's report of scared of teacher/principal was significantly associated with only child-reported pro-social behaviour ($r = - 0.07$, $p < 0.05$) and anxiety ($r = - 0.07$, $p < 0.05$).

Children's report of being scared of classmate was found to be an important determiner of all domains of psychosocial problems in children. It was found to have significant association with teacher-reported SDQ total difficulties ($r = - 0.07$, $p < 0.05$), child-reported pro-social behaviour ($r = - 0.08$, $p < 0.05$) child-reported hyperactivity ($r = - 0.11$, $p < 0.01$), teacher-reported pro-social behaviour ($r = 0.07$, $p < 0.05$), child-reported pro-social behaviour ($r = 0.09$. $p < 0.01$), self-esteem ($r = 0.10$, $p < 0.01$), cognitive interpretation ($r = - 0.17$, $p < 0.01$), anxiety ($r = - 0.07$, $p < 0.05$), and depression ($r = - 0.12$, $p < 0.01$).

Children's report of scared of being disciplined was significantly associated with child-reported hyperactivity ($r = 0.07$, $p < 0.05$), self-esteem ($r = - 0.07$, $p < 0.05$), cognitive interpretation ($r = 0.13$, $p < 0.01$), and depression ($r = 0.14$, $p < 0.01$). Children's reported of scared of other things was correlated with child-reported hyperactivity ($r = 0.12$, $p < 0.01$) and child-reported pro-social behaviour ($r = - 0.14$, $p < 0.01$).

Children's report of being threatened at school was found to have significant correlation with child-reported hyperactivity ($r = - 0.09$, $p < 0.01$), and anxiety ($r = - 0.15$, $p < 0.01$). Children's report of being hit at school by teacher or principal was significantly associated with self-esteem ($r = - 0.09$, $p < 0.01$), cognitive interpretation ($r = 0.09$, $p < 0.01$), anxiety ($r = - 0.14$, $p < 0.05$), and depression ($r = - 0.08$, $p < 0.05$).

Children's report of being fearful of attending school was found to be significantly and negatively associated with child-reported peer-relation problems ($r = - 0.15$, $p < 0.01$), child-reported hyperactivity ($r = - 0.15$, $p < 0.01$), cognitive interpretation ($r = - 0.15$, $p < 0.01$), anxiety ($r = - 0.14$, $p < 0.05$), and depression ($r = - 0.13$, $p < 0.05$) and significantly and positively associated with child-reported pro-social behaviour ($r = 0.09$, $p < 0.05$), self-esteem ($r = 0.08$, $p < 0.01$). Likewise, children's report of being fearful of travelling to and from school was significantly but negatively correlated with teacher-reported SDQ total difficulties ($r = - 0.08$, $p < 0.05$), child-reported peer-relations problems ($r = - 0.08$, $p < 0.01$), child-reported hyperactivity ($r = - 0.14$, $p < 0.01$), cognitive interpretation ($r = - 0.18$, $p < 0.01$), anxiety ($r = - 0.14$, $p < 0.05$), and depression ($r = - 0.19$, $p < 0.05$) but positively associated with child-reported pro-social behaviour ($r = 0.16$, $p < 0.01$), self-esteem ($r = 0.13$, $p < 0.01$)

Children's report of being assaulted at school was significantly correlated with child-reported peer-relations problem ($- 0.10$, $p < 0.01$), self-esteem ($r = 0.09$, $p < 0.01$), cognitive interpretation ($r = - 0.15$, $p < 0.01$), anxiety ($r = - 0.11$, $p < 0.05$), and depression ($r = - 0.14$, $p < 0.05$). Children's report on their knowledge of the person who bring weapons at school was

significantly associated with child-reported hyperactivity (r = - 0.13, p < 0.01), child-reported pro-social behaviour (r = 0.07, p < 0.05), self-esteem (r = 0.14, p < 0.01), cognitive interpretation (r = - 0.22, p < 0.01), anxiety (r = - 0.09, p < 0.05), and depression (r = - 0.20, p < 0.05).

On the whole, children's perception of safety at school was found to have significantly impact the child-reported behavioural problems (peer-relation problems and hyperactivity), child-reported pro-social behaviour, self-esteem, cognitive interpretation, and emotional problems (anxiety and depression).

6.15.3. Relationship with Social Support

Children's report on different people being "the person in their life" was found to have insignificant association with most of the domains of psychosocial problems. Children's report on caregiver being "a person in their life" had significant positive correlation with child-reported hyperactivity ($r = 0.11$, $p < 0.01$), cognitive interpretation ($r = 0.08$, $p < 0.05$), and depression ($r = 0.17$, $p < 0.01$). Children's report on sister or brother being "the person in their life" had significant negative association with child-reported pro-social behaviour ($r = -0.12$, $p < 0.01$), but positive association with cognitive interpretation ($r = 0.10$, $p < 0.01$) and depression ($r = 0.09$, $p < 0.01$). Children's report on a teacher being "the person in their life" was also significantly negatively correlated with child-reported pro-social behaviour ($r = -0.08$, $p < 0.01$), but positively correlated with cognitive interpretation ($r = 0.08$, $p < 0.05$), and depression ($r = 0.07$, $p < 0.05$). By contrast, children's report on the principal or assistant principal being "the person in their life" was significantly and positively associated with teacher-reported SDQ total difficulties ($r = 0.06$, $p < 0.05$), child-reported peer-relations problems ($r = 0.08$, $p < 0.01$) and cognitive interpretation ($r = 0.08$, $p < 0.05$). Children's report on the best friend being "the person in my life" had significant negative correlation with child-reported pro-social behaviour ($r = -0.07$, $p < 0.05$) and positive correlation with depression ($r = 0.08$, $p < 0.05$). Children's report on group of close friends being "the person in my life" was significantly and negatively associated with teacher-reported SDQ total

difficulties (r = -0.09, p < 0.01), and child-reported pro-social behaviour (r = - 0.11, p < 0.01) but positively with depression (r = 0.06, p < 0.05).

Children' report on the people being helpful when they have personal problems was found to have significant correlation with child-reported hyperactivity and pro-social behaviour as well as self-esteem, cognitive interpretation and depression. Children's report on caregiver being helpful when they have personal problem was significantly and negatively associated with child-reported hyperactivity (r = -0.14, p < 0.01), cognitive interpretation (r = - 0.17, p < 0.01), anxiety (r = - 0.08, p < 0.01), and depression (r = -0.19, p < 0.01) but significantly and positively correlation with child-reported pro-social behaviour (r = 0.17, p < 0.01), and self-esteem (r = 0.14, p < 0.01). Children's report on siblings being helpful in times of personal problem was found to have significant negative association with child-reported hyperactivity (r = - 0.15, p < 0.01), cognitive interpretation (r = -0.15, p < 0.01), and depression (r = - 0.17, p < 0.01), and significant positive association with child-reported pro-social behaviour (r = 0.16, p < 0.01), and self-esteem (r = 0.19, p < 0.01).

Likewise, children's report on a teacher being helpful in times of personal problem had significant negative association with child-reported hyperactivity (r = - 0.11, p < 0.01), significant positive association with child-reported pro-social behaviour (r = 0.16, p < 0.01), significant positive association with self-esteem (r = 0.13, p < 0.01), significant negative association with cognitive interpretation (r = -0.15, p < 0.01), significant negative association with anxiety (r = -0.08, p < 0.01), and significant negative association with depression (r = - 0.15, p < 0.01). Children's report on the principal or assistance principal being helpful to children was also significantly and positively associated with child-reported hyperactivity (r = 0.08, p < 0.05), child-reported pro-social behaviour (r = 0.18, p < 0.01), and self-esteem (r = 0.09, p < 0.01), and negatively with cognitive interpretation (r = - 0.11, p < 0.01), anxiety (r = - 0.07, p < 0.05), and depression (r = -0.14, p < 0.01). Likewise, children's report on the best friend being helpful had significant association with child-reported hyperactivity (r = - 0.09, p < 0.01), cognitive interpretation (r = - 0.07, p < 0.05), and depression (r = - 0.11, p <

0.01), and positive association with child-reported pro-social behaviour ($r = 0.15$, $p < 0.01$), and self-esteem ($r = 0.09$, $p < 0.01$). Children's report on group of close friend being helpful in times of problems was found to have significant positive correlation with teacher-reported SDQ total difficulties ($r = 0.08$, $p < 0.05$), and significant negative correlation with cognitive interpretation ($r = - 0.07$, $p < 0.05$), and depression ($r = - 0.10$, $p < 0.01$).

Children's report on the people being helpful when they need money or any other thing was found to have not much relationship with psychosocial outcome in children, except for caregiver and siblings. For caregiver being helpful when they need money, there was significant correlation of children's report with child-reported hyperactivity in negative direction ($r = - 0.09$, $p < 0.01$), child-reported pro-social behaviour in positive direction ($r = 0.09$, $p < 0.01$), self-esteem in positive direction ($r = 0.11$, $p < 0.01$), cognitive interpretation in negative direction ($r = - 0.07$, $p < 0.05$), and depression in negative direction ($r = -0.10$, $p < 0.01$). Similarly, children's report on sister or brother being helpful in giving money and other things had significant negative correlation with child-reported hyperactivity ($r = - 0.10$, $p < 0.01$), teacher-reported pro-social behaviour ($r = -0.08$, $p < 0.05$), cognitive interpretation ($r = - 0.16$, $p < 0.01$), and depression ($r = -0.12$, $p < 0.01$) and significant positive correlation with child-reported pro-social behaviour ($r = 0.13$, $p < 0.01$), and self-esteem ($r = 0.14$, $p < 0.01$). By contrast, children's report on teacher being helpful when they need money or other things was significantly and positively correlated only with only child-reported peer-relationship problem ($r = 0.07$, $p < 0.05$) and child-reported hyperactivity ($r = 0.06$, $p < 0.05$). Likewise, children's report on the principal or assistant principal being helpful when they need money or other things was significantly but negatively correlated with only cognitive interpretation ($r = - 0.07$, $p < 0.05$) and children's report on best friend being helpful when they need money or other things was significantly and positively correlated with only child-reported pro-social behaviour ($r = 0.07$, $p < 0.05$). Children's report on the group of close friends being helpful was found to have no significant correlation with any domain of psychosocial problem in children.

Children's report on enjoying people's company was found to be an important determinant of psychosocial outcome in children. Children's report on having fun with caregiver was significantly associated with child-reported hyperactivity in negative direction (r = - 0.14, p < 0.01), child-reported pro-social behaviour in positive direction (r = 0.15, p < 0.01), self-esteem in positive direction (r = 0.14, p < 0.01), cognitive interpretation in negative direction (r = - 0.12, p < 0.01), and depression in negative direction (r = - 0.13, p < 0.01). Children's report on having fun with siblings was found to have significant negative association with child-reported hyperactivity (r = - 0.16, p < 0.01), cognitive interpretation (r = - 0.16, p < 0.01), anxiety (r = - 0.09, p < 0.01), and depression (r = - 0.14, p < 0.01) but positive association with child-reported pro-social behaviour (r = 0.20, p < 0.01), and self-esteem (r = 0.18, p < 0.01). Children report on having fun in teacher's company was also significantly and negatively correlated with cognitive interpretation (r = - 0.09, p < 0.01), and depression (r = - 0.07, p < 0.05) and positively correlation with child-reported pro-social behaviour (r = 0.13, p < 0.01), and self-esteem (r = 0.09, p < 0.01). By contrast, children's report on having fun in the company of the principal or assistant principal was found to have significant association with only few domains of psychosocial problems in children like negatively with child-reported hyperactivity (r = - 0.08, p < 0.05), positively with child-reported pro-social behaviour (r = 0.10, p < 0.01), and negatively with depression (r = - 0.11, p < 0.01). However, children's report on having fun with their best friend was significantly correlated with many domains like child-reported hyperactivity (r = - 0.12, p < 0.01), cognitive interpretation (r = -0.13, p < 0.01), anxiety (r = - 0.08, p < 0.05), and depression (r = - 0.15, p < 0.01) in negative direction, and child-reported pro-social behaviour (r = 0.19, p < 0.01), and self-esteem (r = 0.13, p < 0.01) in positive direction. Children's report on having fun with group of close friends had significant negative association with child-reported hyperactivity (r = - 0.09, p < 0.01), cognitive interpretation (r = - 0.14, p < 0.01) and depression (r = - 0.12, p < 0.01) and positive association with child-reported pro-social behaviour (r = 0.14, p < 0.01).

6.15.4. Relationship with Use of Alcohol

As expected, use of alcohol was found to have strong association with the psychosocial problems in children. Children's report of having drunk at least once in their life was found to significantly correlate with all domains of psychosocial problems. It showed negative association with psychosocial problems like teacher-reported total difficulties ($r = -0.10$, $p < 0.01$), child-reported peer-relationship problem ($r = -0.08$, $p < 0.01$), child-reported hyperactivity ($r = -0.15$, $p < 0.01$), cognitive interpretation ($r = -0.12$, $p < 0.01$), anxiety ($r = -0.14$, $p < 0.01$), and depression ($r = -0.13$, $p < 0.01$) and positive association with positive measures like teacher-reported pro-social behaviour ($r = 0.09$, $p < 0.01$), child-reported pro-social behaviour ($r = 0.09$, $p < 0.01$), and self-esteem ($r = 0.11$, $p < 0.01$).

Children's report of taking drink in past month was also significantly correlated with all domains of psychosocial problem except teacher-reported pro-social behaviour. It has significant negative correlation with teacher-reported total difficulties ($r = -0.07$, $p < 0.05$), child-reported peer-relationship problem ($r = -0.08$, $p < 0.05$), child-reported hyperactivity ($r = -0.13$, $p < 0.01$), cognitive interpretation ($r = -0.20$, $p < 0.01$), anxiety ($r = -0.08$, $p < 0.01$), and depression ($r = -0.15$, $p < 0.01$), and positive correlation with child-reported pro-social behaviour ($r = 0.08$, $p < 0.05$), and self-esteem ($r = 0.10$, $p < 0.01$).

Easy access of alcohol at school and positively associated with child-reported pro-social behaviour ($r = 0.08$, $p < 0.05$), and self-esteem ($r = 0.20$, $p < 0.01$)., as reported by children, was significantly and negatively associated with child-reported hyperactivity ($r = -0.13$, $p < 0.01$), cognitive interpretation ($r = -0.19$, $p < 0.01$), anxiety ($r = -0.07$, $p < 0.05$), and depression ($r = -0.13$, $p < 0.01$)

Children's acceptance to the offer of drink by a cool kid was found to have significant negative correlation with teacher-reported total difficulties ($r = -0.07$, $p < 0.05$), child-reported pro-social behaviour ($r = -0.15$, $p < 0.01$), and self-esteem ($r = -0.16$, $p < 0.01$), but significant positive correlation with child-reported peer-relationship problem ($r = 0.07$, $p <$

0.05), child-reported hyperactivity (r = 0.15, p < 0.01), cognitive interpretation (*r* = 0.26, *p* < 0.01), anxiety (*r* = 0.07, *p* < 0.05), and depression (*r* = 0.21, *p* < 0.01).

6.15.5. Relationship with Attitude toward Violence and Alcohol

Children's attitude toward violence was not found to have much significant association with psychosocial problems in children. Children's accord with non-violence of boys and men and their ability to express their anger had insignificant association with all domains of psychosocial problems. Children's report on their ability to make themselves feel safer has significant negative association with self-esteem (*r* = - 0.06, *p* < 0.05), but positive association with cognitive interpretation (*r* = 0.15, *p* < 0.01), and depression (*r* = 0.21, *p* < 0.01). Similarly, children's agreement with the statement that "there are different ways we can control anger" has significant positive association with child-reported hyperactivity (*r* = 0.10, *p* < 0.01), cognitive interpretation (*r* = 0.12, *p* < 0.01), and depression (*r* = 0.15, *p* < 0.01) but negative association with child-reported pro-social behaviour (*r* = - 0.09, *p* < 0.01).

By contrast, children attitude toward alcohol has significant association with many domains of psychosocial problems in children. Children's negative attitude toward drinking by adults have significant negative association with child-reported hyperactivity (*r* = -0.07, *p* < 0.05), cognitive interpretation (*r* = - 0.14, *p* < 0.01), anxiety (*r* = - 0.10, *p* < 0.01), and depression (*r* = - 0.10, *p* < 0.01) but positive association with self-esteem (*r* = 0.07, *p* < 0.05). Children's negative perceptions about their friend's attitude toward drinking by adults was significantly and negatively associated with teacher-reported SDQ total difficulties (*r* = - 0.11, *p* < 0.01), child-reported hyperactivity (*r* = -0.07, *p* < 0.05), cognitive interpretation (*r* = - 0.16, *p* < 0.01), anxiety (*r* = - 0.11, *p* < 0.01), and depression (*r* = - 0.10, *p* < 0.01), and positive association with teacher-reported pro-social behaviour (*r* = 0.08, *p* < 0.05), child-reported pro-social behaviour (*r* = 0.10, *p* < 0.01), and self-esteem (*r* = 0.13, *p* < 0.01).

Children negative attitude toward the role of drinking in violence was found to have significant negative association with teacher-reported pro-social behaviour (*r* = - 0.08, *p* <

0.01), child-reported pro-social behaviour (r = - 0.10, p < 0.01), and self-esteem (r = - 0.16, p < 0.01), but significant positive association with child-reported peer-relationship problem (r = 0.09, p < 0.01), child-reported hyperactivity (r = 0.16, p < 0.01), cognitive interpretation (r = 0.25, p < 0.01), and depression (r = 0.23, p < 0.01).

6.15.6. Relationship with Nutrition

Children's report on not having meals at school was significantly and positively correlated with cognitive interpretation (r = 0.15, p < 0.01) and depression (r = 0.15, p < 0.01), showing that meals at school can act as protective factor against negative cognitive interpretation and depression in children. Similarly, children's report on not having enough food was significantly and positively correlated with teacher-reported SDQ total difficulties (r = 0.13, p < 0.01), child-reported hyperactivity (r = 0.08, p < 0.05), and depression (r = 0.09, p < 0.01) but negative association with teacher-reported pro-social behaviour (r = - 0.21, p < 0.01), Thus, children's nutrition was found to be an important protective factor against a number of psychosocial problems particularly depression.

6.15.7. Relationship with Grants

Children's report on their parents taking grants was found to have significant negative correlation with only depression (r = - 0.06, p < 0.05). As the association was negative, it shows that taking grants reduce depression in children. However, grants produce no particular impact on any other domain of psychosocial problem.

6.15.8. Relationship with Stigma

Children's report on being teased by others have significant negative correlation with teacher-reported SDQ total difficulties (r = - 0.06, p < 0.05), and anxiety (r = - 0.06, p < 0.05) but positive correlation with child-reported peer-relationship problem (r = 0.06, p < 0.05), teacher-reported pro-social behaviour (r = 0.07, p < 0.05), cognitive interpretation (r = 0.07, p < 0.05), , and depression (r = 0.07, p < 0.05). Children's report on being treated badly was significantly and positively correlated with child-reported peer-relationship problem (r =

0.12, $p < 0.01$), child-reported hyperactivity ($r = 0.11$, $p < 0.01$), cognitive interpretation ($r = 0.21$, $p < 0.01$), anxiety ($r = 0.11$, $p < 0.01$), and depression ($r = 0.22$, $p < 0.01$) and significantly and negatively correlated with self-esteem ($r = -0.09$, $p < 0.01$). There was significant correlation of children's report of people gossiping behind their back with child-reported peer-relationship problem ($r = 0.08$, $p < 0.01$), child-reported hyperactivity ($r = 0.09$, $p < 0.01$), cognitive interpretation ($r = 0.10$, $p < 0.01$), and depression ($r = 0.11$, $p < 0.01$). However, children report on being upset about stigma did not have significant correlation with any domains of psychosocial problem except depression ($r = 0.08$, $p < 0.05$).

Children worries about being rejected was found to have significant positive correlation with teacher reported SDQ total difficulties ($r = 0.08$, $p < 0.05$), child-reported peer-relationship problem ($r = 0.08$, $p < 0.05$) and child-reported hyperactivity ($r = 0.08$, $p < 0.05$) as well as cognitive interpretation ($r = 0.09$, $p < 0.01$), anxiety ($r = 0.14$, $p < 0.01$), and depression ($r = 0.07$, $p < 0.01$). Children's reluctance in making new friends had significant positive association with only anxiety ($r = 0.09$, $p < 0.01$) but children's feeling of being alone had significant positive association with almost all domains of psychosocial problems including teacher-reported SDQ total difficulties ($r = 0.07$, $p < 0.05$), child-reported peer-relationship problem ($r = 0.07$, $p < 0.05$), child-reported hyperactivity ($r = 0.12$, $p < 0.01$), cognitive interpretation ($r = 0.08$, $p < 0.05$), anxiety ($r = 0.07$, $p < 0.05$), and depression ($r = 0.16$, $p < 0.01$). With child-reported pro-social behaviour ($r = - 0.07$, $p < 0.05$), and self-esteem ($r = -0.09$, $p < 0.01$), it correlated negatively.

Children's belief that people will avoid touching them after knowing about the family illness was found to have positive correlation with only teacher-reported SDQ total difficulties ($r = 0.07$, $p < 0.05$) and anxiety ($r = 0.12$, $p < 0.01$). Also, children's belief that people will afraid of them after knowing about their family illness was not significantly correlated with any of the psychosocial problems. However, children's belief that people will consider them bad person if they know had significant positive association with child-reported peer-relationship problem ($r = 0.11$, $p < 0.01$), child-reported hyperactivity ($r = 0.10$,

$p < 0.01$), cognitive interpretation ($r = 0.08$, $p < 0.01$), anxiety ($r = 0.10$, $p < 0.01$), and depression ($r = 0.14$, $p < 0.01$) and significant negative correlation with self-esteem ($r = -0.09$, $p < 0.01$). Children's belief that parents don't want them to be around their children was found to have significant positive correlation with teacher-reported SDQ total difficulties ($r = 0.09$, $p < 0.01$), child-reported peer-relationship problem ($r = 0.10$, $p < 0.01$), child-reported hyperactivity ($r = 0.12$, $p < 0.01$), anxiety ($r = 0.08$, $p < 0.05$), and depression ($r = 0.12$, $p < 0.01$) and negative correlation with self-esteem ($r = -0.10$, $p < 0.01$).

6.15.9. Relationship with Caregiver Illness

Illness of someone in the family of the child was found to be have statistically significant correlation in negative direction with child-reported peer relationship problem ($r = -0.07$, $p < 0.05$), child-reported hyperactivity ($r = -0.08$, $p < 0.05$), cognitive interpretation ($r = -0.10$, $p < 0.01$), and anxiety ($r = -0.12$, $p < 0.01$) but positive correlation with child-reported pro-social behaviour ($r = 0.07$, $p < 0.05$). Children's report on the number of days the person was ill in the past month had significant and positive correlation with teacher-reported SDQ total difficulties ($r = 0.08$, $p < 0.05$), child-reported peer relationship problem ($r = 0.07$, $p < 0.05$), child-reported hyperactivity ($r = 0.09$, $p < 0.05$), anxiety ($r = 0.07$, $p < 0.05$), and depression ($r = 0.09$, $p < 0.01$), showing that with the increment in the frequency of caregiver illness children are at higher risk of psychosocial problem.

6.15.10. Relationship with Caregiving Responsibilities on Children

Children's report on different caregiving responsibilities has correlation with different domains of psychosocial problems. Some responsibilities had significant correlation with most of the domains. Children's report on washing clothes for other people had significant positive correlation with teacher-reported total SDQ difficulties ($r = 0.07$, $p < 0.05$), child-reported hyperactivity ($r = 0.08$, $p < 0.01$), cognitive interpretation ($r = 0.09$, $p < 0.01$), and anxiety ($r = 0.13$, $p < 0.01$), and significant negative correlation with teacher-reported pro-social behaviour ($r = -0.12$, $p < 0.01$), and self-esteem ($r = -0.07$, $p < 0.05$). Children's report on helping a sick person to dress or undress had significant correlation with teacher-

reported SDQ total difficulties ($r = 0.10$, $p < 0.01$), child-reported peer-relationship problem ($r = 0.09$, $p < 0.01$), cognitive interpretation ($r = 0.14$, $p < 0.01$), anxiety ($r = 0.12$, $p < 0.01$), and depression ($r = 0.16$, $p < 0.01$) and negative correlation with self-esteem ($r = - 0.07$, $p < 0.05$).

Children's helping of a sick person to have a wash or bath was found to have significant positive association with teacher-reported SDQ total difficulties ($r = 0.07$, $p < 0.05$), child-reported hyperactivity ($r = 0.12$, $p < 0.01$), cognitive interpretation ($r = 0.17$, $p < 0.01$), anxiety ($r = 0.10$, $p < 0.01$), and depression ($r = 0.14$, $p < 0.01$), but negative correlation with child-reported pro-social behaviour ($r = - 0.11$, $p < 0.01$), and self-esteem ($r = - 0.09$, $p < 0.01$). Similarly, children's report on watching out a sick person had significant positive association with teacher-reported SDQ total difficulties ($r = 0.08$, $p < 0.05$), child-reported peer-relationship problem ($r = 0.08$, $p < 0.05$), child-reported hyperactivity ($r = 0.08$, $p < 0.05$), cognitive interpretation ($r = 0.12$, $p < 0.01$), anxiety ($r = 0.10$, $p < 0.01$), and depression ($r = 0.08$, $p < 0.01$), but negative correlation with teacher-reported pro-social behaviour ($r = - 0.07$, $p < 0.05$). Children's feeding of a sick person was significantly correlated with teacher-reported SDQ total difficulties ($r = 0.08$, $p < 0.05$), child-reported peer-relationship problem ($r = 0.07$, $p < 0.05$), child-reported hyperactivity ($r = 0.11$, $p < 0.01$), cognitive interpretation ($r = 0.19$, $p < 0.01$), anxiety ($r = 0.12$, $p < 0.01$), and depression ($r = 0.17$, $p < 0.01$), but negative correlation with child-reported pro-social behaviour ($r = - 0.07$, $p < 0.05$), self-esteem ($r = -0.09$, $p < 0.01$). Children's responsibility to clean the home was found to have significant positive association with child-reported pro-social behaviour ($r = 0.09$, $p < 0.01$), and self-esteem ($r = 0.15$, $p < 0.01$), and negative association with child-reported hyperactivity ($r = - 0.16$, $p < 0.01$), cognitive interpretation ($r = - 0.13$, $p < 0.01$), and depression ($r = - 0.16$, $p < 0.01$).

Taking the sick person to the clinic had significant positive association with child-reported hyperactivity ($r = 0.07$, $p < 0.05$), cognitive interpretation ($r = 0.13$, $p < 0.01$), anxiety ($r = 0.10$, $p < 0.01$), and depression ($r = 0.12$, $p < 0.01$). Children's going to the clinic

for collecting medication for someone was significantly and positively associated with child-reported peer-relationship problem ($r = 0.07$, $p < 0.05$), child-reported hyperactivity ($r = 0.15$, $p < 0.01$), cognitive interpretation ($r = 0.25$, $p < 0.01$), anxiety ($r = 0.14$, $p < 0.01$), and depression ($r = 0.24$, $p < 0.01$), but negatively associated with child-reported pro-social behaviour ($r = - 0.15$, $p < 0.01$), and self-esteem ($r = - 0.13$, $p < 0.01$).

Similarly children's report on doing a job to earn money for the family was significantly positively correlated with teacher-reported SDQ total difficulties ($r = 0.07$, $p < 0.05$), child-reported peer-relationship problem ($r = 0.07$, $p < 0.05$), child-reported hyperactivity ($r = 0.15$, $p < 0.01$), cognitive interpretation ($r = 0.22$, $p < 0.01$), anxiety ($r = 0.19$, $p < 0.01$) and depression ($r = 0.18$, $p < 0.01$), and significant negative correlation with child-reported pro-social behaviour ($r = - 0.08$, $p < 0.05$), and self-esteem ($r = - 0.14$, $p < 0.01$). Also, children's responsibility of making the bed for a sick person had significant positive correlation with teacher-reported SDQ total difficulties ($r = 0.08$, $p < 0.05$), child-reported hyperactivity ($r = 0.10$, $p < 0.01$), cognitive interpretation ($r = 0.12$, $p < 0.01$), anxiety ($r = 0.15$, $p < 0.01$), and depression ($r = 0.12$, $p < 0.01$) and negative association with child-reported pro-social behaviour ($r = - 0.10$, $p < 0.01$).

Children's report on washing bedclothes of someone was also significantly correlated with child-reported peer-relationship problems ($r = 0.07$, $p < 0.05$), child-reported hyperactivity ($r = 0.17$, $p < 0.01$), cognitive interpretation ($r = 0.24$, $p < 0.01$), anxiety ($r = 0.16$, $p < 0.01$), and depression ($r = 0.19$, $p < 0.01$), and negative association with child-reported pro-social behaviour ($r = - 0.10$, $p < 0.01$), and self-esteem ($r = - 0.14$, $p < 0.01$). Children's responsibility of looking after cattle was significantly correlated with child-reported peer-relationship problem ($r = 0.09$, $p < 0.01$), child-reported hyperactivity ($r = 0.13$, $p < 0.01$), cognitive interpretation ($r = 0.24$, $p < 0.01$), and depression ($r = 0.25$, $p < 0.01$), and negative association with child-reported pro-social behaviour ($r = - 0.12$, $p < 0.01$), and self-esteem ($r = -0.11$, $p < 0.01$).

By contrast, some other responsibilities did not produce much impact on the psychosocial outcome of children. For instance, children's report on keeping someone company when they are sick had significant positive association with only teacher-reported SDQ total difficulties ($r = 0.08$, $p < 0.01$), and anxiety ($r = 0.09$, $p < 0.01$). Likewise, children's report on taking sibling to school had significant positive correlation with only cognitive interpretation ($r = 0.07$, $p < 0.01$) and children's report on looking after their sibling had insignificant relationship with all domains of psychosocial problem. Reminding someone to take medication was also found to significantly and positively effect only two domains of psychosocial problem that were teacher-reported SDQ total difficulties ($r = 0.10$, $p < 0.01$) and child-reported anxiety ($r = 0.07$, $p < 0.05$). In the same way, giving medication to sick person was significantly and positively related to only child-reported peer-relationship problem ($r = 0.09$, $p < 0.01$), cognitive interpretation ($r = 0.07$, $p < 0.05$), and anxiety ($r = 0.09$, $p < 0.01$).

Children's report on fetching water was significantly correlated with only three domains of psychosocial problems namely child-reported hyperactivity in negative direction ($r = - 0.12$, $p < 0.01$), self-esteem in positive direction ($r = 0.14$, $p < 0.01$), and cognitive interpretation in negative direction ($r = - 0.09$, $p < 0.01$). Similarly cooking for the family had significant positive correlation with only self-esteem ($r = 0.09$, $p < 0.01$), and anxiety ($r = 0.10$, $p < 0.01$). Likewise, children's report on washing or feeding stick was significantly and positively correlated with only child-reported peer-relationship problem ($r = 0.07$, $p < 0.01$) and anxiety ($r = 0.08$, $p < 0.01$). Similarly, collecting wild food by children was significantly and positively correlated with only emotional problems in children including anxiety ($r = 0.10$, $p < 0.01$) and depression ($r = 0.09$, $p < 0.01$) and collecting firewood was positively correlated with cognitive interpretation ($r = 0.10$, $p < 0.01$) along with anxiety ($r = 0.14$, $p < 0.01$) and depression ($r = 0.07$, $p < 0.01$). Working in the field, by contrast, was significantly and negatively correlated with teacher-reported SDQ total difficulties ($r = - 0.08$, $p < 0.05$),

and positively correlated with just child-reported peer-relationship problem ($r = 0.07$, $p < 0.05$), and anxiety ($r = 0.07$, $p < 0.01$).

6.15.11. Relationship with Knowledge of and Attitude toward HIV/AIDS

Children attitude toward HIV/AIDS was found to have significant correlation with depression but not with other domains of psychosocial problems in children. Although children's unwillingness to have friendship with HIV positive person had significant negative correlation with child-reported hyperactivity ($r = - 0.07$, $p < 0.05$), self-esteem ($r = 0.12$, $p < 0.05$), cognitive interpretation ($r = - 0.12$, $p < 0.05$), and depression ($r = - 0.17$, $p < 0.01$), but children unwillingness to have friendship with someone whose parents are HIV positive was only significantly and positively correlated with depression ($r = 0.07$, $p < 0.05$). Similarly, children's belief of HIV to be a punishment for sinning was also correlated significantly and positively with only depression ($r = 0.07$, $p < 0.05$).

Children's knowledge about HIV/AIDS was not found to have much impact on children's psychosocial outcome except in some cases. Children belief that people with HIV can look healthy had insignificant correlation with all domains of psychosocial problems but children belief that one can get HIV from sharing food or other utensils with HIV positive person was found to have significant negative correlation with teacher-reported SDQ total difficulties ($r = - 0.09$, $p < 0.01$), cognitive interpretation ($r = - 0.07$, $p < 0.05$), and depression ($r = -0.07$, $p < 0.05$) but positive correlation with teacher-reported pro-social behaviour ($r = 0.07$, $p < 0.05$), self-esteem ($r = 0.07$, $p < 0.05$).

Children misperception that AIDS is curable was found to have significant positive correlation with only child-reported peer-relationship problem ($r = 0.07$, $p < 0.05$) and depression ($r = 0.09$, $p < 0.01$). By contrast, children's understanding that HIV causes AIDS had significant correlation with child-reported peer-relationship problem ($r = 0.08$, $p < 0.01$), child-reported hyperactivity ($r = 0.11$, $p < 0.01$), self-esteem ($r = - 0.07$, $p < 0.01$), cognitive interpretation ($r = 0.18$, $p < 0.01$), and depression ($r = 0.14$, $p < 0.01$). In the same way,

children's understanding that HIV can be caused by witchcraft was found to have significant negative correlation with child-reported hyperactivity (r = - 0.16, p < 0.01), cognitive interpretation (r = - 0.15, p < 0.01), anxiety (r = - 0.08, p < 0.01), and depression (r = - 0. 19, p < 0.01) and positive correlation with child-reported pro-social behaviour (r = 0.10, p < 0.01), and self-esteem (r = 0.15, p < 0.01).

Children knowledge about prevention of HIV through using condoms was found to have significant positive correlation with child-reported hyperactivity (r = 0.11, p < 0.01), cognitive interpretation (r = 0.14, p < 0.01), and depression (r = 0.13, p < 0.01) but significant negative correlation with teacher-reported pro-social behaviour (r = - 0.09, p < 0.01), child-reported pro-social behaviour (r = - 0.14, p < 0.01), and self-esteem (r = - 0.07, p < 0.05). By the same token, children disagreement with the fact that use of condom can reduce the risk of HIV was found to have significant positive correlation with child-reported hyperactivity (r = 0.13, p < 0.01), cognitive interpretation (r = 0.15, p < 0.01), anxiety (r = 0.08, p < 0.05), and depression (r = 0.14, p < 0.01) and negative correlation with child-reported pro-social behaviour (r = - 0.13, p < 0.01), and self-esteem (r = - 0.12, p < 0.01).

Children's knowledge that risk of HIV can be reduced by having fewer sexual partners was found to be an insignificant factor. Nevertheless, children's report that risk of HIV can be reduced by not having sex at all was found to have significant positive correlation with children-reported hyperactivity (r = 0.08, p < 0.05), cognitive interpretation (r = 0.10, p < 0.01), and depression (r = 0.11, p < 0.01) and negative association with child-reported pro-social behaviour (r = - 0.11, p < 0.01). Children's knowledge that not sharing needles can reduce risk of HIV was significantly and positively correlated with child-reported hyperactivity (r = 0.14, p < 0.01), cognitive interpretation (r = 0.14, p < 0.01), and depression (r = 0.10, p < 0.01) but not with child-reported pro-social behaviour (r = - 0.08, p < 0.01), self-esteem (r = - 0.10, p < 0.01) where the correlation is significantly negative. Children's understanding that avoiding contact with other's people blood can prevent HIV was found to have significant positive association with child-reported hyperactivity (r = 0.16, p < 0.01),

cognitive interpretation ($r = 0.21$, $p < 0.01$) and depression ($r = 0.18$, $p < 0.01$) and negative association with child-reported pro-social behaviour ($r = - 0.17$, $p < 0.01$), and self-esteem ($r = - 0.13$, $p < 0.01$). However, children's knowledge that HIV can be prevented by being faithful to one partner was found to be significantly and positively correlated with only depression ($r = 0.08$, $p < 0.01$).

6.15.12. Relationship with Perception about Gender

Child-reported disbelief on equal treatment of boys and girls had significant positive correlation with only cognitive interpretation ($r = 0.08$, $p < 0.05$). Children's belief that girls can refuse sex, even if a boy gives her present was found to have significant and negative correlation with teacher-reported pro-social behaviour ($r = - 0.08$, $p < 0.01$). Children's disagreement with the equality of boys and girls was found to have significant and positive correlation with child-reported hyperactivity ($r = 0.09$, $p < 0.01$), cognitive interpretation ($r = 0.08$, $p < 0.01$), and depression ($r = 0.14$, $p < 0.01$). Children rejection of the notion that a person must have sex with his/her boyfriend/girlfriend to show love was found to be an insignificant factor.

6.16. Conclusion

The chapter presented children's report on certain important factors that were expected to affect their psychosocial development. These include children's perception of school environment and safety at school, children beliefs about social support, children's use of alcohol, children's attitude toward use of alcohol and violence, nutrition of children, grants received by children's families, caregiver illness, caregiving responsibilities on children, children's knowledge of HIV/AIDS, and children's perception about gender equality. Children were found to have positive perception of school environment but majority of them reported school to be an unsafe setting for them. Children reported good support from their caregivers, sibling, parents, grandparents, friends and others. Though majority of children were not found to have drink ever in their life, a concerning percentage of them was taking drinks. Majority of children showed negative attitude toward use of alcohol and violence. A

large number of children reported to have insufficient food. Families of most of children were receiving grants. Furthermore, a large number of children reported caregiver illness and had caregiving responsibilities. Children's knowledge about HIV was not very good and they have much wrong perception about its causes and preventive measures. Many of children had negative perception about gender equality. Majority of these factors were found to have significant correlation with many domains of psychosocial problems though some factors were found to have significant correlation with only few domains.

CHAPTER 7: RESULTS – POTENTIAL PREDICTORS OF PSYCHOSOCIAL DIFFICULTIES

7.1. Analytical technique

The importance of regression analysis in examining the impact of demographic variables to predict children's psychosocial difficulties can be understood from existing literature which supports psychosocial difficulties as a measurable quantity (Gotts & Knudsen, 2003). These configurations used for analysis are designed to answer specific questions concerning the variables being studied. The multiple regression analysis provides a multiple correlation coefficient which represents the correlation between the composite of predictor variables and the criterion variable.

These procedures we have been talking about entail a number of strict assumptions. First, they are parametric methods. The use of the demographic variables always assumes that the variables in question have a relatively normal distribution and that the relationships between the variables are assumed to be linear (Fife-Schaw, Smith & Hammond, 2006, p.429). If the variables cannot be assumed to be normally distributed, it may be appropriate to use a non-parametric correlation (Fife-Schaw, Smith & Hammond, 2006, p.429).

At this point, it's important to introduce some problems with the regression method. While on one hand it gives a fool-proof way to analyse the correlation between various demographic variables and the emerging predictors of psychosocial outcomes, it suffers from a few unique disadvantages such as losing accuracy when the predictor variables are highly correlated with each other (Fife-Schaw, Smith & Hammond, 2006, p.429). The situation is called multicollinearity and causes difficulties when estimating the beta weights (Fife-Schaw, Smith & Hammond, 2006, p.429). In addition, it is important that a relatively large sample size is used so that the sampling error, which inflates the correlation coefficient, is minimised, thus, increasing the precision of the correlation estimate.

This would normally mean that a multiple regression should only be attempted when a sample size is in excess of 100 which is not necessarily in the case of our demographic variables. To get around this bottleneck, we will maintain a typical balance of independent and dependent variables which would allow us to carry a discriminating function analysis on categorical data measured at various intervals in question. Our ultimate objective is to detail the correlation between the demographic variables and outcome predictors to generate results.

7.2 Regression Analysis on Socio-demographic variables

From the huge amount of data collated in previous two chapters, regression analysis was performed. Only those dependent variables that had shown significant correlation with the psychological outcomes were selected for regression analysis. Since the study examines multiple dimensions of psychological outcomes in children, each psychological outcome was entered separately as the dependent variable and, therefore, separate regression analyses have been conducted for each psychological outcome.

The R square values were used to determine the proportion of variance in the selected psychological outcome that can be explained by the selected model. F-statistics were used to further confirm the quality of selected model and to compare the nested models. The effect of each factor on the selected psychological outcome and significance of their relationship will also be determined.

7.2.1. Predictors of Behavioural Problems

The selected model predicted only 12% of variance in teacher-reported behavioural problems, F (33, 597) = 2.557, $p < 0.0001$. Age of children, grade of children, gender of household head, and mothers' education were found to significantly and positively predict teacher-reported behavioural problems. In addition, child-reported of working in field or vegetable garden at home was found to produce significant negative impact on children behavioural problems.

Child-reported peer relationship problems were predicted only 2% by the selected model and the relationship was statistically insignificant, F (12, 812) = 1.602, p = 0.086. Only age of child significantly and positively predict the peer relationship problem in children (t = 3.361, p < 0.001). Models having significant correlation with child-reported hyperactivity made a good fit for the dependent variable, predicting 22% variance in child-reported hyperactivity, F (73, 485) = 1.916, p < 0.0001. Age and grade of child as well as mother's education were found to be statistically significant and positive predictor of hyperactivity.

7.2.2. Predictors of Pro-Social behaviour

The selected models were not really good in predicting pro-social behaviour reported by teacher and child. In case of teacher-reported pro-social behaviour, the model only predicted 5% of variance in the dependent variable F (18, 782) = 2.548, p < 0.0001. Similarly the selected model only predicted 10% of variance in the child-reported pro-social behaviour, F (53, 822) = 2.548, p < 0.0001. Socio-economic status, nutrition, watching out for a sick person, knowledge about HIV prevention through regular use of condom were found to be significant predictor of teacher reported pro-social behaviour and belief in having fun with close friends, making bed for sick person, and knowledge of HIV prevention though condom use significantly predicted child-reported pro-social behaviour.

7.2.3. Predictors of Self-Esteem

12% of variance in the self-esteem of children was reported by the selected independent variables [F (61, 680) = 1.628, p < 0.0001] of which washing clothes for other people was the only significant and positive predictor.

7.2.4. Predictors of Cognitive Problems

The selected model significantly predicted around 23% of variance in cognitive problems in children, F (81, 564) = 2.041, p < 0.0001. The significant predictors of cognitive problem among the selected independent variables include age of child, collection of

firewood by the child, and child's belief that HIV can spread through sharing utensils with HIV positive patients.

7.2.5. Predictors of Emotional Problems

Anxiety and depression were the two emotional problems in children on which the study was conducted with the aim to find its predictors. The selected variables were successful in predicting only 13% of variance in anxiety, F (59, 795) = 2.011, $p < 0.0001$. School grade, pushing and shoving by children at school, lot of fighting at school, having fun with best friends, exposure to teasing because of HIV patient in family, and fear of being rejected are significant positive predictor of anxiety in children of Agincourt.

In case of depression, our selected variables predicted 21% of variance in CDI scores, F (89, 484) = 2.048, $p < 0.0001$. Significant positive predictors of depression in children were found to be gender of child, having sibling as someone in life, perception of being treated badly, feeling of being different and alone, and belief that HIV can be prevented by not having sex.

7.3. Making inference of factors predicting psychosocial outcomes

The regression analysis showed that the number of significant predictor variables are only few for each psychosocial problem. Since only those variables has been used that had previously shown significant correlation with the psychosocial problem, the large number of insignificant coefficients in regression analysis signified the problem of multi-collinearity with our variables. Future studies should take this important issue in mind while conducting a long-scale research study on multiple predictors of psychosocial problem in children.

Age of the child is found to be of particular importance as elder children are more likely to get these problems than children of younger age. This is in line with the theory of cumulative advantage as children who have been in this situation for past many years score high in the scales measuring psychosocial problems. Gender of child, however, is not a significant predictor of these problems in multivariable analysis. Some items from the scale

measuring household and childcare responsibilities on children are also found to cause behavioural problem, low self-esteem and emotional problems. Only few items related to the child knowledge about HIV have shown significant relationship with child's psychosocial problem

7.4. Conclusion

The chapter present regression analysis on each domain of psychosocial problem to identify the extent to which these selected variables predict these psychosocial problems in children. The models were not found to be very good as there is issue of multicollinearity with the selected variables and variables cancelled each other impact on the psychosocial problems of children. However, age of child, gender of household head, knowledge about HIV and household tasks performed by children were found to be significant predictors of psychosocial problems in children.

CHAPTER 8: RESULTS – SCHOOL SUPPORT

8.1. Introduction

School can play an important role in protecting children from psychosocial difficulties. As shown in chapter 6, school environment can act as both a risk as well as a protective factor. Violence experienced in school can increase psychosocial difficulties in children while positive school environments can reduce those psychosocial difficulties in them. This chapter presents results regarding the support provided by the schools and school governing bodies in the study area.

The chapter begins with the description of analytical approach used for the study. It is then divided into two separate sections. The first section reports on the practices at the levels of school management; in order to provide a baseline to report against the goals of the envisaged Soul City intervention. The second section describes the results obtained from the social networking analysis of school governing bodies; in order to examine the extent to which these school governing bodies are linked with each other and are supporting each other for protecting children from psychosocial problems.

8.2. Analytical Approach

The data on school management assessment was derived from three methods - observation of conditions at the school, interview with principal, and a documentation analysis. Joint Education Trust School Management Instrument was used for the collection and analysis of data. Data obtained from the observation was in the form of filed notes of two field workers. The research reviewed the field notes to examine conditions of school management in the ten selected schools. The school management is concerned with creating the institutional conditions conducive to teaching and learning, such as good time management and school development planning. One proxy used as an indicator of this factor is the way in which the school responded to the research team’s visit and the degree of order and purposefulness exhibited by teachers and learners.

The transcriptions of the principals' interview were also reviewed to examine the coordination, direction, monitoring and support of the principals in school learning activities. The principals were asked about the school fees, staff development activities and resources available for the schools. Since, the interview was structured, the researcher examined the responses to the provided question and analysed them in light of the observation made in the school. The documents were analysed to examine the written record of the quality of school management. This included a review of school development plans, teacher sign-in records, learning materials, school timetable, learner attendance registers and a record of learner assessment results.

Version 2010 of *Microsoft Excel* was used to plot graphs and to find the descriptive statistics of the variables. Bar Diagrams were plotted to examine the number of respondents choosing a particular option while descriptive statistics were computed to examine the range, mean and standard deviation of some particular variables like frequency of contact between schools and organisation and the quality of their relationship. *UCINET* version 6.354 was used to examine the composition of social networks between organisations supporting the learning and development of children in the study area. The overall density of the social network was also computed using *UNICET*. The *Netdraw* service was used to draw the social networking diagram.

8.3. School Management Assessment

8.3.1. Results Obtained from Observation

The field notes revealed that the response of schools to the researchers was generally good, with all welcoming them. In six schools – four control and two experimental – there was clear focus on getting on with teaching and learning, although some lack of direction and time wasting was evident in the remaining four schools – one control and four experimental.

Regarding time management, although researchers were not present at the start of the day in two of the schools – both experimental – in the remainder the school day started on time in all cases. In all schools, learners returned to class promptly after break.

8.3.2. Results Obtained from Interviews

All principals reported that they coordinate, direct, monitor and support teaching and learning in classrooms. However, all principals could not produce school development plans, they all mentioned academic achievement as an explicit school goal. They were asked to fill a table on the number of learners, teachers and classes for each grade. Figure 8.1 to 8.3 below compares the average number of learners, teachers and classes per grade for each school.

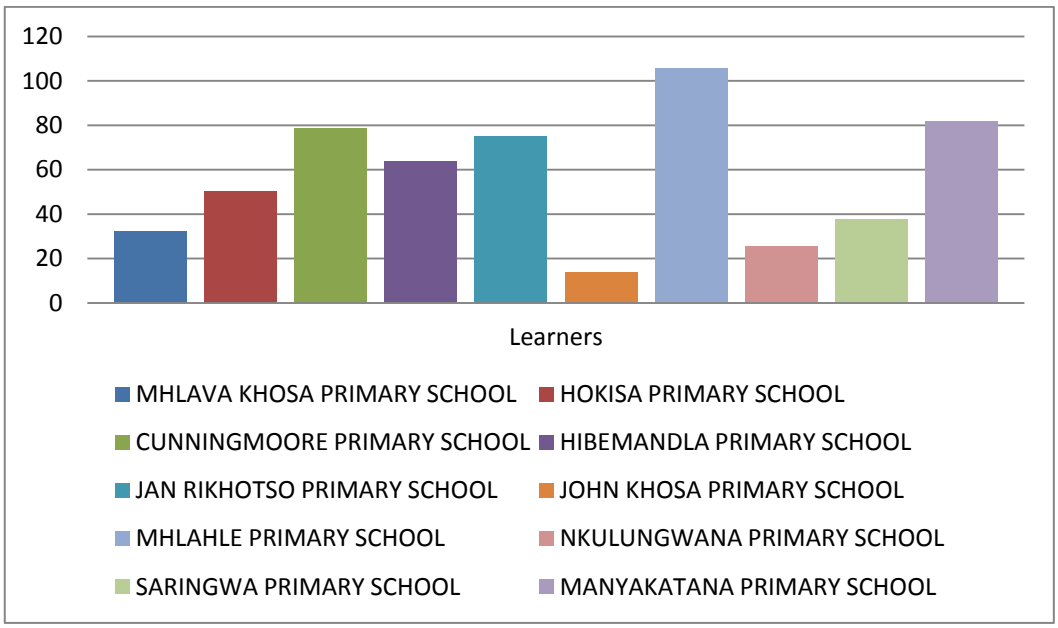


Figure 8.1: Number of Learners per Grade in Selected School

As can be seen, *Mhlahle Primary School* had highest number of learners per each grade and *John Khosa Primary School* had the least. Majority of the schools have 50-80 learners per each grade.

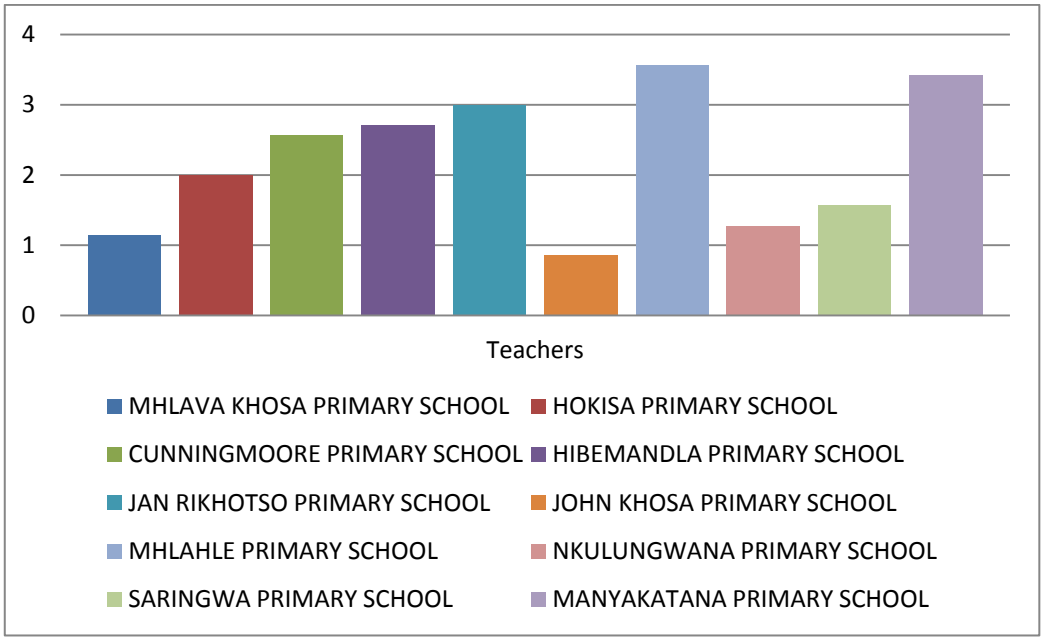


Figure 8.2: Number of Teachers per Grade in Selected School

Again, *Mhlahle Primary School* had the highest number of teachers per grade and *John Khosa Primary School* had the least. Similarly, the number of classes per each grade showed almost a similar pattern, as shown in figure 8.3 below. *Mhlahle Primary School* was found to divide the grades into a number of classes on average of 2.5 per each grade. However, *Khosa Primary School* is the only one with 1 class per each grade; *Mhlava Khosa Primary School,* having around 32 children and a single teacher for each grade, and *Nkulungwana Primary School,* having around 25 children and one teacher for each grade also placed all of children in a grade in just one class.

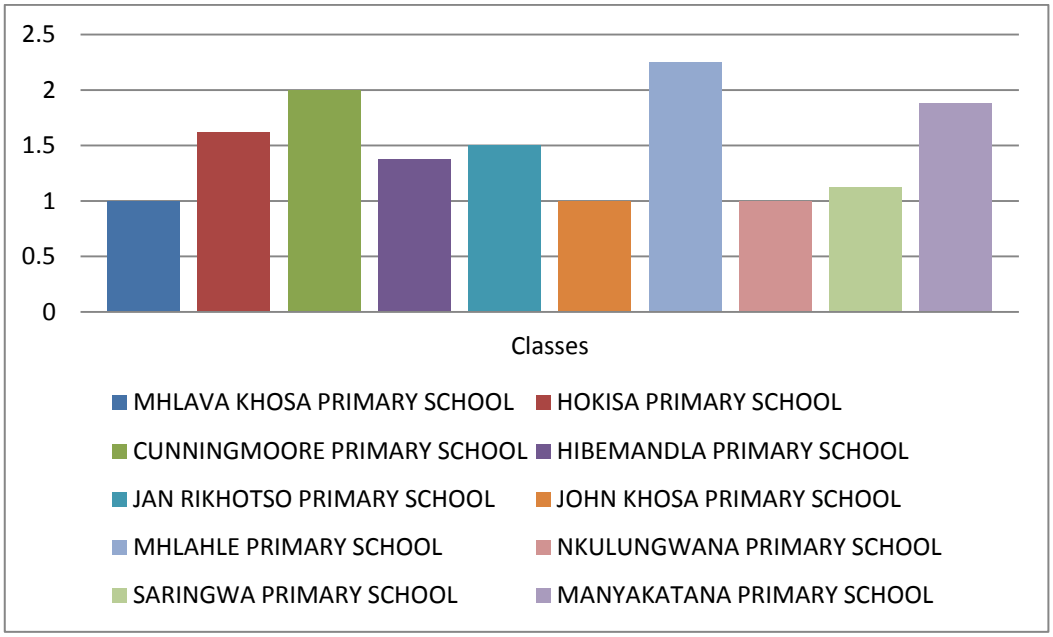


Figure 8.3: Number of Classes per Grade in Selected Schools

It was a requirement from the department of education that all teachers submit their year plans to their "subject head of department" for feedback. The responses from the interview concluded that such feedback must be mainly verbal, since only 30% of plans showed evidence of written feedback.

On the question of the heads of departments providing quality assurance for tests and exams set by teachers, all principals agreed that this does happen. In response to the question as to how often teachers conduct class tests, 100% of principals thought that these occurred at least once per term, however with observations of teacher assessment records only about four schools (one control, three experimental) could provide records of class tests.

Principals were also asked about the annual school fees per student, the number of school governing bodies' teachers and members in the school and the number of children receiving feeding. The results are shown in the table 8.1 below

School	Annual School Fees per Student	Number of SGB teachers	Number of SGB members	Children Receiving Feeding

Mhlava Khosa Primary School	R 50	02	09	225
Hokisa Primary School	R 20	02	08	403
Cunningmoore Primary School	--	03	10	607
Hibemandla Primary School	R 120*	02	09	510
Jan Rikhotso Primary School	--	02	09	600
John Khosa Primary School	--	01	07	108
Mhlahle Primary School	--	02	07	846
Nkulungwana Primary School	--	02	08	202
Saringwa Primary School	--	02	09	302
Manyakatana Primary School	--	02	09	652

* Only GR Scholars

Table 8.1: Data collected from Principal Interview

Regarding the distribution of textbooks, all principals said that children were given books to keep and take home, but we found evidence of this in only half of the schools (three controls and two experimental). Reasons for not giving children books to keep focused largely on issues such as learners damaging or losing the books, rather than unavailability. On the issue of textbook management, we found that inventories which provided adequate information on book numbers and whereabouts were present in the five schools that were distributing the textbooks.

8.3.3. Results Obtained from Document Review

Document reviews revealed that all schools were keeping learners' attendance registers up to date**.** Only two schools (both intervention schools) had a register of vulnerable children. No Incident reports were found in all schools, however all schools reported dealing with incidents of bullying regularly.

8.4. Social Network Analysis

Networks are the web of social relationship of an individual and it shows how an individual influences one's environment and how the environment influences the individual. Below are the results of the social network analysis on the school governing bodies.

8.4.1. Survey Respondents

The sample of 67 member of SGB was recruited for the present study from the 10 randomly selected schools; 8 members from *Mhlava Khosa Primary School*, 7 from *Hokisa Primary School*, 7 from *Cunningmoore Primary School*, 3 from *Hibemandla Primary School*, 5 from *Jan Rikhotso Primary School*, 8 from *John Khosa Primary School*, 7 from *Mhlahle Primary School*, 6 from *Nkulungwana Primary School*, 8 from *Saringwa Primary School*, and 8 from *Manyakatana Primary School*. As shown in figure 8.4 below majority of SGB members were working as an additional member in the schools. Other more common roles of these SGB members in the schools were Chairperson, Deputy Chairperson, Ex-officio/Principal, Secretory, and Treasure. Few of them were Deputy Secretory, Finance Officer, Member, Petty Cash Controller, Teacher Component, Vice Chairperson, and Vice Secretory.

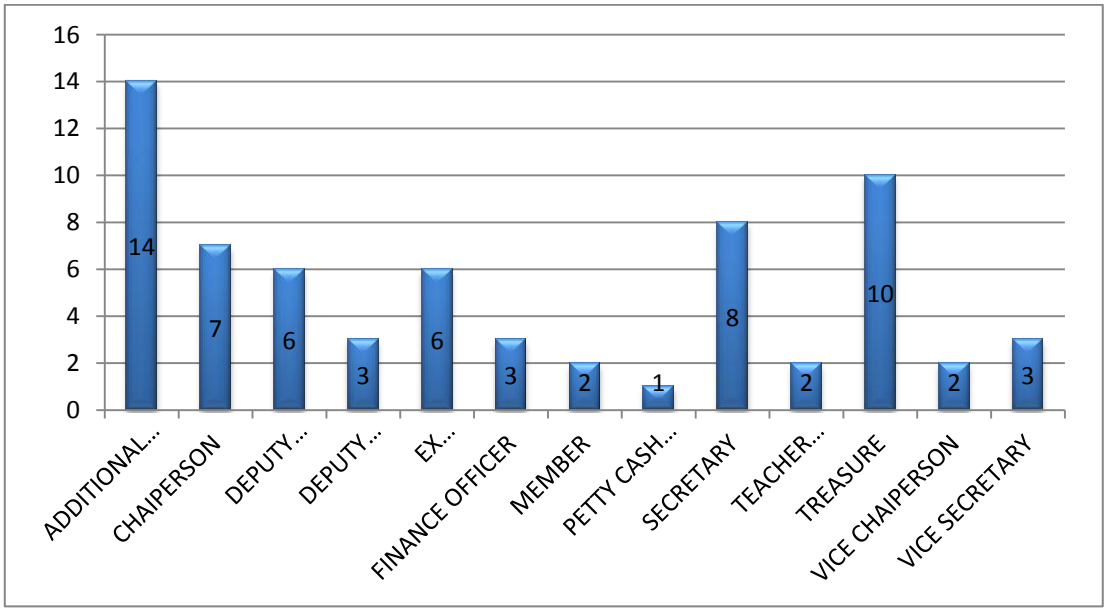


Figure 8.4: Role of Respondents in School

Majority of the respondents were the members of SGB for 2 to less than 5 years and were working in the current role for the same span of time, as shown in figure 9.5 and 9.6 below, respectively.

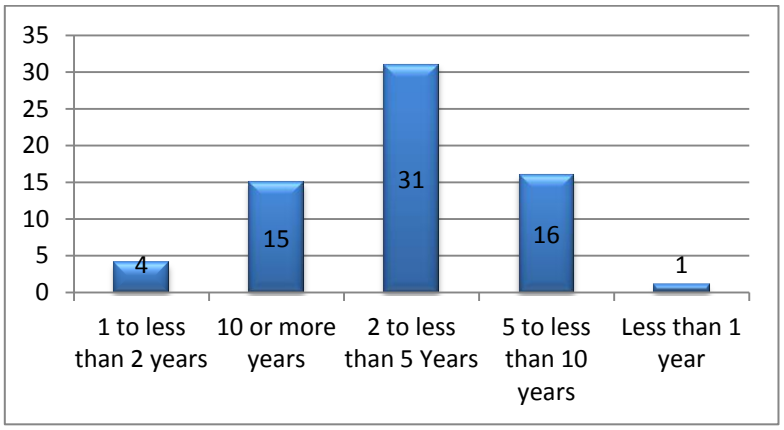


Figure 8.5: Years as a member of SGB

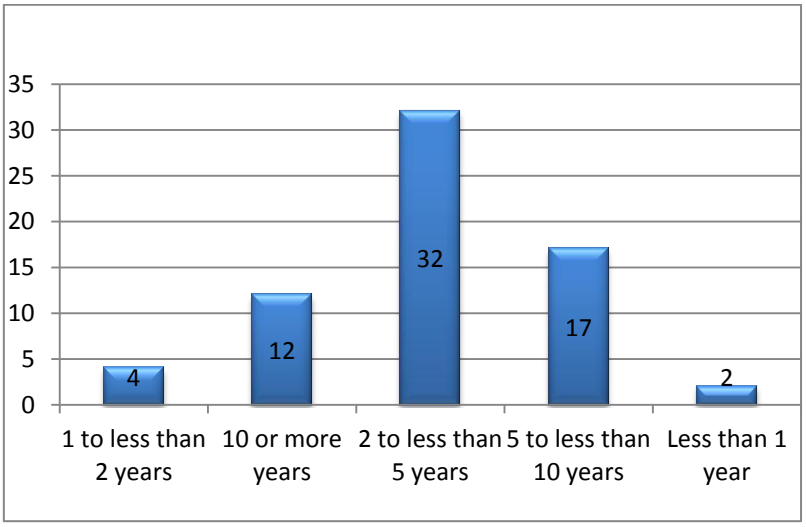


Figure 8.6: Years working in current role

8.4.2. Types of Interaction

A list of school governing bodies was provided to the respondents and they were asked to go through the list and indicate which organisation they have been involved with for the provision of children services. They were also asked to select any of the four types of involvement they might have had with these organisations; these included links through exchange of knowledge, through shared resources (joint funding, equipment, personnel, facilities, *etc*....), or through patient referrals (sent or received). The names of organisations as well as the type of interaction with these organisations are provided in the table 9.2 below.

As can be seen, the type of interaction of school with the organisation is not provided. However, for majority of cases all four types of interactions were present between the school and the organisations.

Name of Organisation	Type of Interaction
Cunningmoore Home Based Care	All four interactions
Bhubezi	Shared Information
Bushbuckridge Health And Social Service	All four interactions
CDF	--
Dept. of Social Services and Welfare Mkhuhlu	All four interactions
Dept. of Education	All four interactions
Dept. Of Health	All four interactions
Eco-Plan	Shared resources and Shared information
ESCOM	All four interactions
Evangelical Reformed Church	--
Haswikota	Shared resources
Ian Mackenzie Project	--
Inkululeko Xanthia Home Based Care	Shared resources and Shared information
Kruger National Park	All four interactions
Lillydale Home Based Care	All four interactions
Mapulaneng Hospital	Referral sent
Mkhuhlu Health And Social Service	All four interactions
Ntwanano - Inter-Denomination	--
Optometrist	All four interactions
Sabiesabie	--
Saps	Shared resources, Shared information and Referral sent
Singita	Shared resources and Shared information
Widower & Foster Care	--
Wits	All four interactions
Xanthia Clinic	Referral sent

Table 8.2: Type of Interaction between School and Organisation

8.4.3. Frequency of Contact

Respondents were also asked about the frequency with which they were in contact with the selected organisation. They were asked to rate the frequency using this scale:

1	2	3	4	5
Daily	Weekly	Monthly	Rarely	Never

The average frequency of contact for the main organisation was 3.35 (±1.029943284), while for other organisation 1 was 3.66 (±0.522393977), for other organisation 2 was 3.72 (±0.456803409), for other organisation 3 was 3.8 (±0.695852374), for other organisation 4 was 3.55 (±0.934198733), and for other organisation 5 was 4 (±0.00).

8.4.4. Relationship Quality

Another important attribute of the network is the quality of interaction between the members and organisations. The following scale was given to the respondents to rate their relationship quality with the selected organisation.

1	2	3	4
Poor relationship	Fair relationship	Good relationship	Excellent Relationship

The average quality of contact with the main organisation was 3.01 (±0.838382), with other organisation 1 was 3.37 (±0.489713), with other organisation 2 was 3.31 (±0.644455), with other organisation 3 was 2.90 (±0.552506), with other organisation 4 was 3.45 (±0.522233), and with other organisation 5 was 3 (±0.00).

8.4.5. Affiliation Network

67 respondents cited 26 organisations to which they were connected. The density score was computed to be 0.07 showing that 0.7% of the pairs of organisation were associated with at least one SGB member in common. Pairs of organisations to whom the respondents were connected are shown in figure 9.7. As can be seen, many of the

organisations were paired to particular sets of organisations resulting in the formation of two to three separate clusters. ECO-Plan is not paired with any of the organisations.

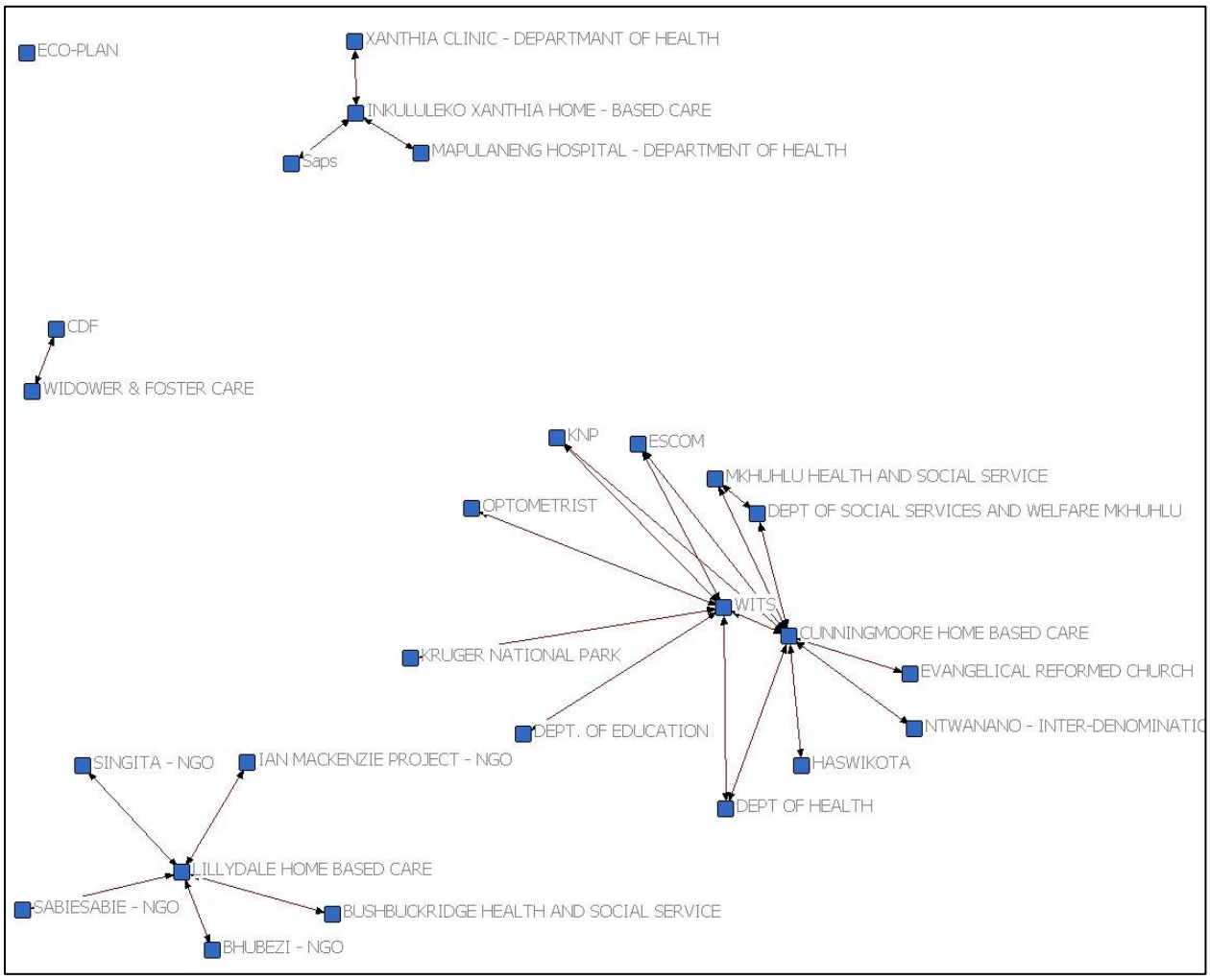


Figure 8.7: Affiliation Network of Cited Organisations

8.4.6. Benefits of Interacting with organisations

The SGB members' response on the 7 provided benefits of interacting with the organisations is shown in the figure 9.8 below. As can be seen, majority of the schools have already acquired the ability to serve clients better, to use their school services better and, to build new relationship through their interaction with other organisations. Majority of them expect to acquire additional funding, new knowledge, growth in the public profile, and increase in the ability to relocate resources. Only few of them were not expecting the stated benefit and in most cases, the benefits have already occurred or were expected to occur.

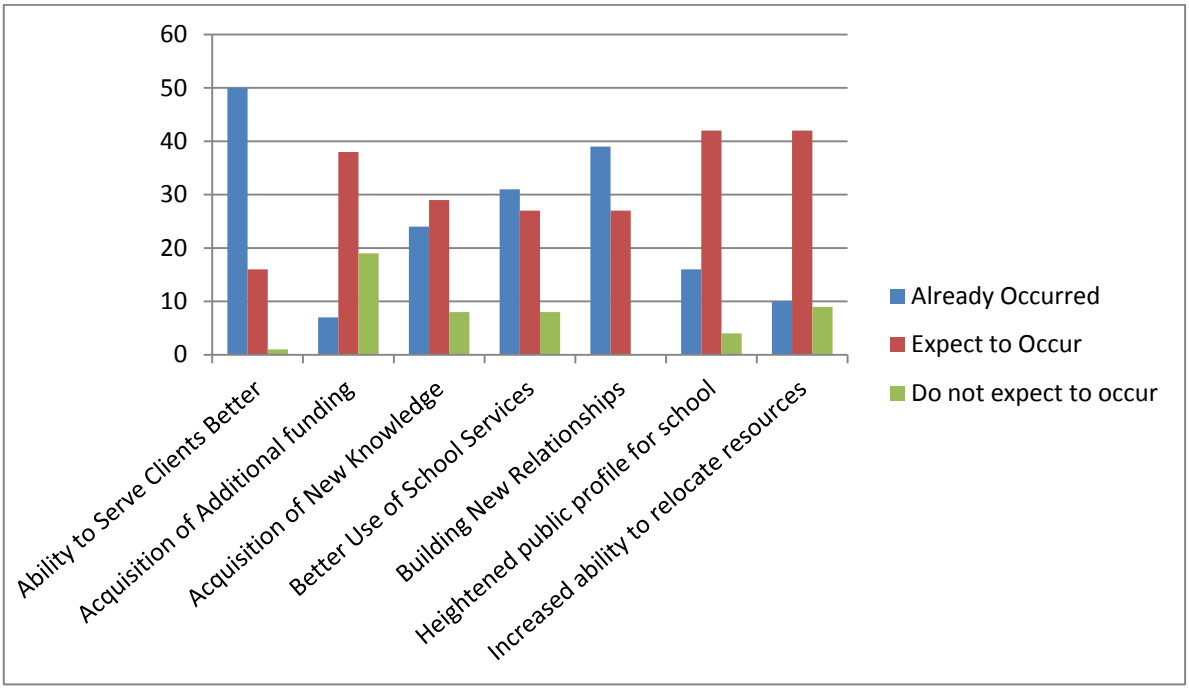


Figure 8.8: Benefits of Interacting with Organisations

The respondents were also asked to point out other benefits of interacting with various organisations. The two benefits pointed out by the respondents in response to this inquiry were the collective participation of schools with these organisations in social activities and acquisition of school uniforms and food parcels for vulnerable children. The former benefit was expected while the latter has already occurred.

8.4.7. Drawbacks of Interacting with organisations

When respondents were asked to comment on the drawbacks of interacting with organisations, a majority of them selected the option of, "Do not expect to occur" showing that the drawbacks were not expected. However, few of them did expect the drawbacks, some 18 respondents claimed to expect that the interaction would take too much time and resources, 9 held that they expected to lose control over decision, 7 expected that their relationship within the network would be strained, 7 expected the difficulty in dealing with network members, and 8 were expecting that not enough credit would be paid to their involvement. On the other hand, some of the participants also reported that the drawbacks have already occurred. The results are graphically illustrated in the figure 9.9 below.

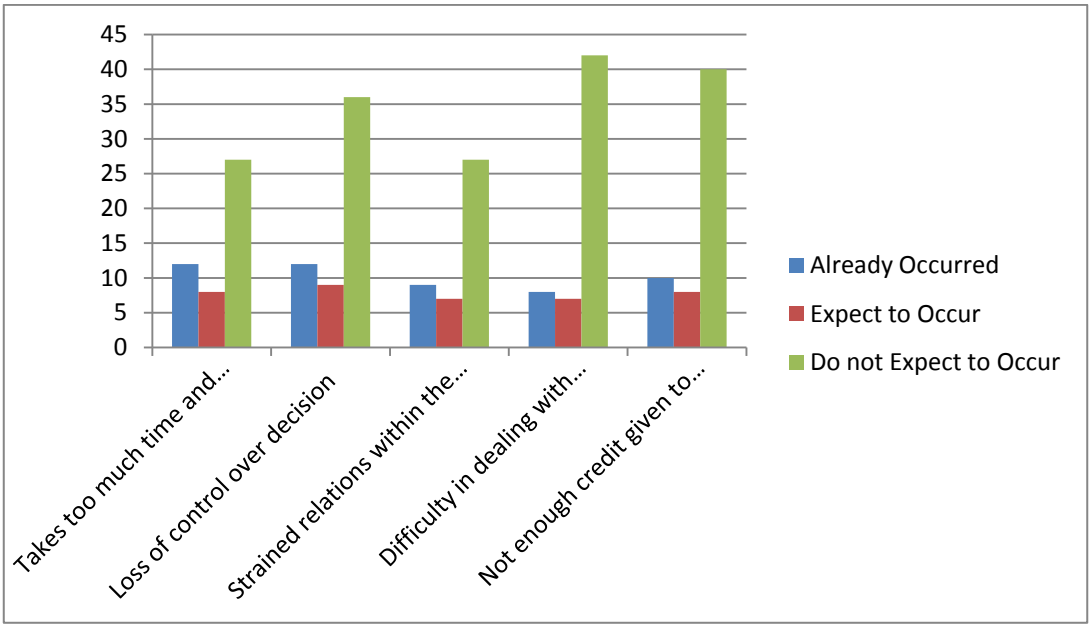


Figure 8.9: Drawbacks of Interacting with organisations

Some 6 respondents also pointed out a drawback other than the aforementioned which they were expecting. It was the inadequate visitation by the members of other organisations to their schools.

8.5. Conclusion

The chapter presents the findings related to the role of schools in the study area. School management assessment showed that the majority of the schools were focused on learning and were efficiently managing time. Principals of these schools claimed to provide good support to the learning activities. The number of learners per grade in the schools ranged between 10 and 105. There were around 1-4 teachers and 1-2 classes per each grade depending on the number of learners. The submission of project plan was mainly verbal. Most of the schools did not reveal their school fees. In majority of them, the number of SGB teachers was 2 and the number of SGB members was around 7-9. Many of children were claimed to receive feeding from the school. Books were also provided to children but were not given to keep with children. Important documents like incident reports were not kept by the schools.

Social networking analysis showed that SGB members are working at varied positions within the schools. Majority of them were working as a SGB member for more than 2 years. Majority of them have all four types of interaction with the other organisations and the average frequency of contact was monthly. The relationship quality of the schools with other organisation was good. Only 0.7% of the pairs of organisation were found to be associated with at least one SGB member in common. The pairing between the organisations was not very dense. Nevertheless, SGB members working in the schools accepted that there are many benefits they have obtained or were expecting to obtain from interacting with these organisations. In most cases, drawbacks of this interaction were not expected.

CHAPTER 9: RESULTS – INTERVIEWS WITH CHILDREN

9.1. Introduction

In the preceding chapter the researcher has examined a number of factors effecting psychosocial outcomes in children of Agincourt. Social support provided by family, school and community was the focal point of these factors. However, one's perception of these social support providing bodies influences whether one decided to seek social support when faced with context-specific problems. The present chapter examines children's perception about social support in Agincourt to analyse the extent to which mental health intervention in the rural South Africa can be successful. The chapter, as usual, begins with the description of analytical technique. It is followed by the explanation of themes emerged from the interview transcripts after thematic analysis and finally the thematic framework of these emerging theme has been presented and explained. The chapter ends at the conclusion drawn from the thematic analysis of the primary school learners' interview.

9.2. Analytical Technique

The five stages of data analysis in the framework approach were used in this study. According to Pope, Ziebland & Mays (2000), this involved: Familiarisation; Identifying a thematic framework; Indexing; Charting and finally, Mapping and Interpretation. Familiarisation involved listening to the recorder, reading transcripts and field notes in order to draw up themes and ideas. Each interview transcript was number coded line by line using the interview schedule as a guideline. It was followed by the process of identifying a thematic framework. Key issues, concepts and themes from the data were assessed and referenced in order to draw them up into thematic frameworks. This included aims, objectives of the study and other priority issues from the familiarisation stage. Scripts were checked, the coding and framework was verified by a second researcher. The first researcher then assessed

issues of conflict that may have arisen from the processes of analysis. The processes were followed in order to ensure validity and reliability (Ritchie & Spencer 2003, Casp 2002).

The end product was a "detailed index of the data" (Pope, Ziebland & Mays 2000). During Indexing data were placed into thematic frameworks using codes from the index and short descriptors to expand on an index heading. This aided in transcribing raw data to a paper trail and consequently led to the development of core themes. Each theme had its own code marked in the margin of the text. Data were then re-arranged according to appropriate parts of the thematic framework and then a chart was formed. The charts contained summaries of views and perceptions of the participants, rather than verbatim text.

The last step of thematic analysis was mapping and interpretation, which was influenced by the study objectives as well as emergent themes from the data. Using the charts, the range and nature of phenomena were interpreted. Typologies were also created and associations between themes were explored in order to interpret the findings.

9.3. Emerging Themes

The table 9.1 below presents the dominant themes that emerged from the thematic analysis of the interview transcripts.

As can be seen all these themes were closely linked with children perception about getting social support. Children talked about the problem they usually faced in the schools and families and explained how and when they decided to ask for help. They spoke about their concerns and expectations regarding the needed help and expressed their perception about the qualities of a helper. They also complained about the unhelpful behaviour they often experience. The researcher asked them about their preference with regard to the place of taking help. The last important theme that was present in the data was "help outside the school." It was closely linked with the second last theme of suitable place to talk but in this theme the focus was particular on the support needed by the learners outside the school, particularly during sports and games.

Emerging Themes
Type of problems encountered by the learners
Deciding to ask for help
Concerns about asking for help
Type of help expected
Qualities of helper
Unhelpful behaviours
Suitable place to talk
Help outside school

Table 9.1 Dominant Themes Emerged from the Transcripts

9.4. Thematic Framework

For each dominant theme, outlined in table 8.1, there were some associated key issues and concepts that served as the subsequent themes and resulted in the formation of thematic framework shown in the figure 9.1.

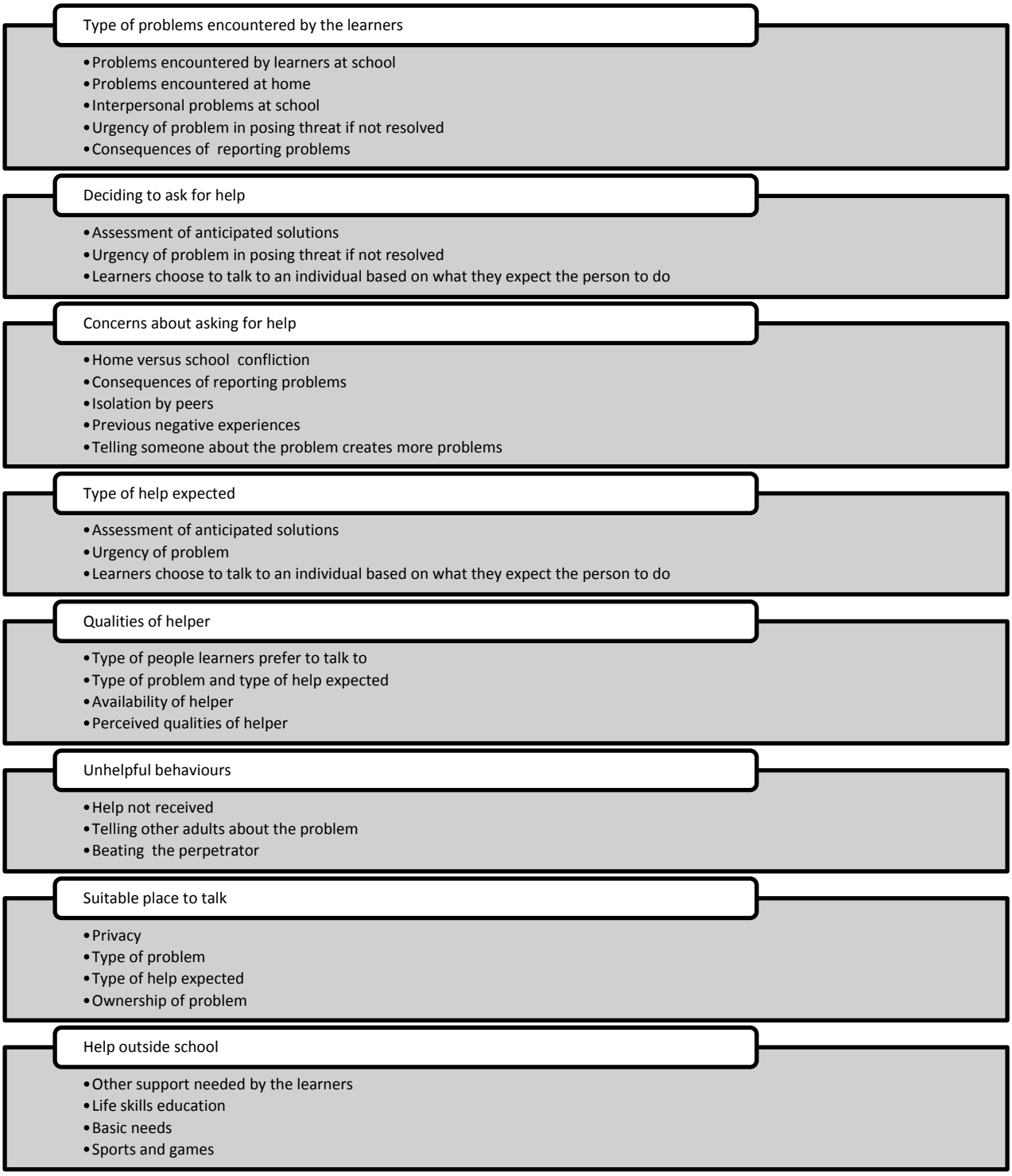


Figure 9.1 Thematic Framework

9.4.1. Types of Problem Encountered by Learner

Primary school learners talked at length about the problems they faced at school. Majority of them talked about the work pressure as an important problem they faced at

school. An eleven year old female learner spoke about the problem she faced in understanding the English language

"If something bad is (in) English then it is very big I don't understand"

Another female learner in grade 6 explained when she needed help from the teacher,

"When they teach us something and I don't understand"

Bullying was another important problem highlighted by the learners as a major problem they usually faced at school. A 13 years old boy complained,

"We have a lot of naughty boys here at school. They cause trouble every day. All the kids fear them. They always make fun of other kids, they steal their food and they fight with others a lot. They are not scared of punishment because they keep on causing trouble even if we report them to the principal. I do not like playing with them, I don't like them"

Primary school learner also identified a number of problems they face at home like family disintegration, parental fighting. They also talked about the interpersonal problem they face at school like loneliness and low self-esteem. While talking about the problem they usually faced, some of the learners spoke about the urgency of problem in posing threat if not resolved. Majority of the learners explained the outcome of reporting the problem to teacher or children. A 13 years old girl explained the consequence of reporting the bullying issue to her teachers

"They (teachers) talk to the boys who hate me, they said they are sorry but when we were out or after school they beat me"

9.4.2. Deciding to Ask for Help

All children talked about their decisions of asking help from others like teachers, parents, siblings *etc.* Almost all children talked about their assessment of anticipated solution while asking for help. Children claimed to ask for help if they believe that they will get the

expected help, but if they have negative experiences about asking help, they prefer to avoid it. A boy learner explicitly mentioned,

"If I think the teachers will help me then I will tell them sometimes"

The urgent need of help was associated with this theme as well and while making decisions about taking help, some children expressed that they ask for the help to solve a problem as soon as possible, because they believe that delay in help can cause serious problems. Children believed that they had to immediately report the boys that bully other children because the victims fear going to school. While making decisions regarding asking for help, majority of children would choose the person they believe is most suitable for providing the expected help.

A learner told the interviewer that he does not talk to his teachers about home matters except sometimes when he thinks they can be helpful.

"I won't tell the teacher about things at home (but) if I think the teachers will help me then I will tell them sometimes"

Another ten year old girl told the interviewer that she prefers to talk to her mother about her illness but avoids asking for help from her mother for problems faced at school because she believed that it would worsen the problem. She said,

"When something goes wrong with my body or I feel sick… or when things are not OK at home I will tell my mother, she will fix the problem"

And later provided that

"*When people beat me at school I don't tell my mother. If I tell my mother … she will come here, and when she is gone the people will ask me why I told my mother. So I would rather tell my teacher"*

9.4.3. Concerns about Asking for Help

Children mentioned the concerns they have about asking for help. Almost all children differentiated between problems encountered at home and at school. A female learner of age 12 held that she asks help from principal or teacher if the problem is related to her studies or assignments and asks help from her parents if "things are not good at home" or if someone bullies her. Children also mentioned the concerns they have regarding the consequences of reporting the problem. An eleven year old female learner expressed her concerns about asking for help from her father because he gets angry.

"When boys hit me here in the school, I would like to tell my class teacher but I won't tell my parents … because my daddy gets angry when I tell him that … (and) he says I am a girl I have to hit boys but I can't hit boys."

One important concern of children about asking for help was fear of being isolated. Some 6 learners talked about this concerns; some of them held that their peers would not isolate them if they report incidents of bullying to the authorities while other expressed fear of re-victimisation and isolation by peers if they report bullying incidents. A learner expressed this fear as,

"If I tell my mother … she will come here, and when she is gone the people will ask me why I told my mother."

Children also shared their previous experiences about reporting problems to the authorities or parents and expressed their concerns arising from these experiences. A female learner shared her past experience of getting unhelpful response from reporting to others.

"I had a period two months ago. When I told my best friends about it, they laughed and said that it was because I was sleeping with boys. I cried and reported them to my teacher. My teacher spoke to them and other girls in my class. My teacher advised me to ask my mother to buy me sanitary pads; My mother was shocked and said I was too young to start having

periods, she only bought me the pads after my teacher spoke to her, I still feel sad when I think about it.

Many learners were of the opinion that if they tell their problems to others, it will be worsened.

9.4.4. Type of Help Expected

Children have different expectations about the needed help. Some believe that the helper should punish the perpetrator. A 12 years old boy expected that,

"If I tell my teacher, she will report them to the principal and he will punish them."

Some believe that the perpetrator can be deterred only through talking to them. An 11 year old female learner said,

"My mother goes to them, they ones that bother me, then she talks to that person and sort things out"

Another female learner of age 12 said,

"If there is an adult or grown up who's not being so nice to me or upsets me, I will talk to my father. My father will go and address the person"

Other expected, from their previous experiences, that the helper would give them advice on how to handle the bullies, instead of interfering in the matter. An eleven year old female learner expressed her expectation from her parents when she talks to them about her friends. She said,

"They just tell me to keep going on with my friends and do something very good. They don't want me to grow up stupid, they say, they want me to be a very brave girl when I grow up."

Children also mentioned expectations to have someone listen to their problems. An 11 year old boy talked about his teacher and said,

"She (My teacher) will understand my problem, I don't know what she would do to help, but she would do something"

A girl talked about how sad she feels when her sister does not listen to her problems.

"At home, I would talk to my sister about somebody in grade eight, grade ten, but I know she won't listen to me."

9.4.5. Qualities of Helper

Children described their perceptions about the qualities of helper. The availability of helper was an important quality mentioned by the learners. Most of children preferred to talk to the person who is available. At school, this is usually teacher or principal and at home they prefer to talk to their mothers. An 11 years old girl held that she cannot talk to her parents because of their unavailability,

"My parents leave for work very early in the morning. When I have a problem I can only talk about it at school with my teacher. There is no other place to talk."

The qualities of the helper were based on children assessment of the expected help. They select the helper based on their learning from their observations and experiences. For instance, confidentiality was an important concern for the learners. They choose the helper who will not talk to other people about their problem. A male learner first decided to talk to his aunt about his problems but then rejected her because he thought she would report the matter to his father and decided to take help from the teacher who would not disclose it to anyone else.

"When I have a problem with my home situation I will tell my aunt. She goes to my mother or my father and talks to them…My aunt will tell them all my problems, then my father gets angry with me....No, I would rather go to the staffroom and talk to my teacher, she will understand my problem, I don't know what she would do to help, but she would do something"

While selecting the helpers, children also take into account the type of help expected from the helper and will relate the expected help with the qualities of helper. For instance a male learner expected his helper to listen to him without getting angry and said that he would not talk to his father because he lacks this quality.

9.4.6. Unhelpful Behaviours

Children also mentioned some behaviour of the helper which they considered as unhelpful. Some mentioned their previous experiences when they reported problems to the helper, but helper did not provide them expected help. According to an 11 year old girl, neither her mother nor her friends helped her when she reported her problem to them,

"I had a period two months ago. When I told my best friends about it, they laughed and said that it was because I was sleeping with boys. I cried and reported them to my teacher. My teacher spoke to them and other girls in my class. My teacher advised me to ask my mother to buy me sanitary pads; my mother was shocked and said I was too young to start having periods, she only bought me the pads after my teacher spoke to her, I still feel sad when I think about it"

An important concern for children was the confidentiality and they considered telling their problem to others as unhelpful. A learner decided not to tell the issue to her mother because she brought the matter to school.

"If I tell my mother ... she will come here, and when she is gone the people will ask me why I told my mother."

Some children also consider beating the perpetrator as unhelpful. They wanted some peaceful solution and did not want to beat the people bothering them. As mentioned by an 11 years old girl,

"When boys hit me here in the school, I would like to tell my class teacher but I won't tell my parents … because my daddy gets angry when I tell him that … (and) he says I am girl I have to hit boys but I can't hit boys."

9.4.7. Suitable Place to Talk

While talking about the suitable place to talk about their problems, the learners take into account a number of factors like privacy, link with the needed problem, type of problem, type of expected help and ownership of problem. Two learners mentioned that they would talk to a helper anywhere as long as it was a private space while majority of them preferred to talk to someone at the school environment. The selection of the place to talk to was based on the type of problem and the type of expected help. Majority of children choose the school as the suitable place as the usual problems they faced were linked with the school, and the perpetrators are usually their school fellows. One important concern of the learners was the ownership of problem. They believe that if the school owns the problem it would be bad to talk about it at home and vice versa. A male learner believed that if he would tell the school matters to his parents, the teacher would not like it.

"… Things happen here at school. If I tell people at home, the teacher will not like it."

9.4.8. Help Outside School

Children also talked at length about the help they expected to receive or were receiving outside the schools. The main source of help outside the schools, for majority of children were parents, but for some parents were not so helpful. Sometimes help is sought from friends who have experienced similar problems. A girl mentioned God as the helper and said that she was advised to pray about a problem and that helped. A child mentioned that he always discusses his problems with his brother before talking to anyone. Children also mentioned the role of clinicians and doctors as people from whom they can get help from about their physical health. An 11 year old learner talked about clinical help and HIV awareness he is getting from doctors. He mentioned,

"When I am sick I will go to the clinic and tell them what is wrong with me… If my friends are worried about something, I will tell them to come here and talk to people from LOVE LIFE"

When researcher asked who these people from love life are, he explained,

"One of my friend's mothers is very ill; they will teach them about HIV and AIDS"

9.5. Conclusion

The themes obtained from the thematic analysis indicate that the learners encounter different types of problems at home and at school interfering with learning. Bullying is very common among these learners. They report problems based on assessment of anticipated solutions. Teachers emerge as the most trusted, available significant individuals for learners to disclose problems, however, qualities of the teacher and type of problems will determine whether the learners choose to disclose problems or not.

The school premises were perceived as a suitable private space to talk to someone. Resources outside school were perceived to be useful for providing learners with additional information and material support.

Taken together the findings suggest the need for concerted efforts to develop mechanisms to equip teachers with skills to provide emotional support for learners, and to develop networks among government, school, parents, and community to implement a school-based approach to mental health promotion.

CHAPTER 10: DISCUSSION

10.1. Introduction

The present study provides understanding of psychosocial problems faced by socio-demographically deprived primary school children in grades 5 and 6 of schools situated in Agincourt. By examining the quantitative findings of the present study, the prevalence of the psychosocial problems can be determined. In addition, the findings presented in the previous chapters of this report also brings forth the nature and extent of the different domains of psychosocial problems in children as well as the socio-demographic factors that can predict psychosocial outcomes in children. In particular, the impacts of social support and school support on the psychosocial problems in children have been examined.

This chapter summarises the key findings of the present study and discusses them at length to answer the questions raised in the beginning of this report. While discussing the findings of the present study, the researcher has examined their consistency with findings presented in previous literature as well as the extent to which they support or reject the hypotheses of the present study. A summary of the chapter has been provided at the end.

10.2. Summary of Key Findings

The present study has four major components, each aimed at examining the psychosocial problems in the selected children of Agincourt. Each component produced important findings which can be combined together to provide comprehensible and reliable understanding of the prevalence and nature of psychosocial problems in children of Agincourt as well as the risk and protective factors affecting them.

The first component was quantitative and was aimed to determine the prevalence of different domains of psychosocial difficulties in children of grade 5 and 6. The prevalence of psychosocial difficulties was measured in two ways: first, by measuring the percentage of children at the clinical level of difficulties using cut-off scores for each scale and second, by

finding the mean score of children on each scale. It was found that children reported high prevalence of peer-relationship difficulty (36%), lack of pro-social behaviour (25%), low self-esteem (41%), and anxiety (35%). Teacher also reported high prevalence of conduct problem (23%), peer-relationship problem (22%), and lack of pro-social behaviour (30%).

On average, the sample has low prevalence of behaviour problems except that children reported average scores of peer-relationship problem were quite high (M = 5.04, SD = 1.51). Both children and teacher reported moderate mean score of pro-social behaviour showing that on average, children might face difficulties in behaving pro-socially. Average children's self-esteem was also quite moderate and their cognitive interpretation was found to be positive. Children did not report high prevalence of depression but very high prevalence of anxiety was reported. Thus, taken together, behavioural problems and anxiety are the most prevalent psychosocial problems among children of Agincourt. Since children also reported high prevalence of low self-esteem we can take low self-esteem to be the second most concerning problem for these children.

Second component of the study was also quantitative and was aimed to measure the socio-demographic factors that can influence the psychosocial outcome in children. Data on socio-demographic factors was collected through two means, first through surveying children and second from AHDSS data. The data on socio-demographic factors was linked with psychosocial problems to examine their relationship. It was found that age, gender, and grade of children produced significant impact on the prevalence of psychosocial problems. Self-esteem was found to be lowest in the eldest group of children but youngest group of children had most negative cognitive interpretation. Depression was also found to increase with increase in children's age. Boys had slightly higher – and significant – prevalence of depression when compared to girls. Boys were also found to be significantly more hyperactive than the girls. Children of grade 5 were found to be at higher risk of behavioural problems, negative cognitive interpretation, and emotional problems as compared to children of grade 6.

Education of mother was found to be an important determinant of prevalence of behavioural problems, negative cognitive interpretation, and emotional problems in children. Socio-economic status of children was also found to produce significant impact on the prevalence of behavioural problem, pro-social behaviour, self-esteem, and emotional problems but no particular pattern was found in the relationship to identify which socio-economic class is at higher risk of such difficulties.

A surprising finding is that death of the mother is not to cause psychosocial problems in children as was reported by Cluver *et al.* (2012) and Howard *et al.* (2006). This is mainly because these two studies and many others have focused on the HIV/AIDS orphanhood of children where in addition to the loss of parents, children also suffer from the stigmatisation. In this study, however, unlike Cluver *et al.* (2006), the researcher did not differentiate between HIV orphanhood and orphanhood caused by other reason, where it was found that although non-HIV orphanhood can also cause depression and anxiety, they are relatively lower as compared to what is caused by HIV orphanhood. Also, with age the non-HIV orphanhood do not predict the increase in depression and anxiety. Thus, the researcher believes that majority of children in our study sample might not have lost their mother due to HIV. This view is supported by the finding the majority of children in our sample that did not report stigmatisation. This combination of the findings provides some support to the view that HIV orphanhood can be an important risk factor for psychosocial problems in children of South Africa. However, to get confirmed result, future researcher should also determine the cause of mother's death. Also, the study has not taken data on the death of father which should also be avoided in the future studies in order to get clear picture on the impact of orphanhood on children.

Most of children had positive perception of school environment. Children's negative perception about school environment was significantly and positively correlated with hyperactivity, negative cognitive interpretation and emotional problems and negatively correlated with pro-social behaviour and self-esteem. Similarly, children's perception of

safety at school had significant positive association with almost all domains of psychosocial problems and it is concerning that most of children reported negative perception of school's safety showing that one of the main causes of the psychosocial problems in the sample was children's feeling of insecurity in the schools. Children reported to receive adequate social support from parents, grand-parents, siblings or other family members. Teachers and Principal/Assistant Principal were found to provide much lesser social support than was expected. This is an important finding as it shows a relationship with children's feeling of insecurity at school and it was later found that children's report of social support from teacher, principal or assistant principal had significant correlation with child-reported pro-social behaviour, cognitive interpretation, and emotional problems, indicating that if teachers and principal had provided more support to children they may have behaved pro-socially and would have been protected from negative cognitive interpretation and emotional problems. Thus, lack of social support from teacher and principal was an important risk factor for the study sample.

Almost one fifth of children (18%), reported to drink alcohol and the use of alcohol had significant correlation with almost all domains of psychosocial problems showing that children who drink alcohol are at higher risk of facing such problems. Majority of children agreed that violence should be avoided but this agreement was found to produce no particular impact on the psychosocial problems in children. By contrast, children's attitude toward drinking was negative and had significant positive association with many domains of psychosocial problem. Nutrition was found to have significant negative association with psychosocial problem and as a large number of children reported to have insufficient food to eat, lack of nutrition can be an important reason of psychosocial difficulties in children of Agincourt. A large proportion of children also reported that their families received grants and it was found that receiving of grants served as protective factors against depression but had not significant impact on any other domain of psychosocial problems.

With regard to stigma, most of children did not report of being teased or treated badly but many of them were fearful of revealing any particular thing to others. They held that if people will know about it they would avoid touching them, would be afraid of them and would think them to be bad person. However, these fears did not correlate significantly with many domains of psychosocial problem except the fear of being considered by others as bad person which was found to correlate significantly with child-reported behavioural problem, self-esteem, cognitive interpretation, and emotional problems. By contrast, the other measures of stigma, where most of children did not report of being stigmatised were found to correlate significantly with the psychosocial difficulties. It shows that although in the study sample the negative impact of stigma on the psychosocial outcome of children is not of much significance as most of children did not complain of being stigmatised, yet it is an important predictor of psychosocial difficulties and can be taken as a crucial risk factor for African children where stigmatisation against HIV/AIDS is quite high (Rankin, Brennan, Schell, Laviwa, & Rankin, 2005).

Caregiver illness was found to correlate significantly with behaviour problem, cognitive interpretation, and emotional problem which shows that the 29% children who reported the caregiver illness were at the high risk of these psychosocial problems. It is also concerning that in most cases, either parents or sibling were ill, with which children reported to receive important social support. The frequency of being ill was also quite high with around 11% of children reported that their caregiver remained ill for the entire last month. The results of correlation revealed that with the increase in the frequency of caregiver illness, the prevalence of psychosocial problem also increased. Children were found to perform some important caregiving responsibility like cleaning home, f*etch*ing water, washing or feeding young sibling, giving medication to sick people, collecting wild food, collecting wood for fire, and working in the field or vegetable garden. However, not all responsibilities were found to significantly affect the psychosocial difficulties in children – some of them were significantly correlated with almost all domains of psychosocial difficulties while other were

related to one or two particular difficulties only. Children had stigmatised attitude toward HIV/AIDS but it was correlated to only few domains of psychosocial problems. However, children's incorrect knowledge about HIV/AIDS and its prevention was found to correlate significantly with almost all domains of psychosocial problems.

When children were asked about gender equality they produced contradictory statements. Most of them held that boys and girls are not equal but agreed that they should be treated equally. It is further surprising that the two statements had similar positive relationship with cognitive interpretation ($r = 0.08$, $p < 0.05$). More than half of children were found to agree that girls cannot refuse sex after receiving gifts from a boy and this belief of children had negative relationship with pro-social behaviour ($r = - 0.08$, $p < 0.01$). However, children's belief that sex is necessary to show love did not cause any psychosocial problems in the study sample.

The third component of the research design of the present study was aimed to examine the support provided by the schools in the study area. The component includes both qualitative and quantitative methods to data collection and analysis. The assessment of school management did not reveal many issues in the support provided to children. Some schools were found to lack time management and most of them did not keep the important documented records. However, the focus on teaching and learning was evident from the assessment. The interaction between the school governing bodies, as evident from social network analysis, was not very dense but the relationship quality was good and the average frequency of contact between the school governing bodies was monthly. Members of these bodies also agreed with the benefits of such interaction and did not provide much drawbacks of interacting with other social governing bodies.

Interviews with the selected learners were the fourth component of the study's research design which was aimed to examine the social support perceived by children. The results of this component correlate with the results of children's survey as many children

complained about bullying at schools. However, opposed to what was found in the survey, teachers were named by many as the most trusted persons to whom they can discuss their problems. However, one important reason for selecting teacher as the suitable person to talk and school as the suitable place to talk about their problem was that most of the problems faced by children were associated with schools and they believed that their teacher would not like if they had disclosed these issues to their parents. One important finding of the present study is regarding children beliefs about asking for help. While discussing their problem children took into account a number of factors particularly their past experiences. Children who did not receive expected help in the past were reluctant in discussing their problems with adults. Children were also concerned about the confidentiality and were reluctant to discuss the problems if they fear that the person would not keep the issue to him/herself. Similarly, they did not like to discuss their issues in public places and preferred private spaces for this purpose.

10.3. Discussion

Three questions were raised at the beginning of the study and the research was designed in a way to get answers of all the questions sufficiently. Below is the discussion on the answer of these questions, as obtained after the analysis of data collected through research.

10.3.1. What is the prevalence of psychosocial difficulties amongst children in Grades 5 and 6 in the Agincourt area?

The study has comprehensively examined the prevalence of psychosocial difficulties along a number of domains. Teacher reported that 21% of children are suffering from behavioural problem and around 22% of children faced difficulties in peer-relationship. Children reported even higher prevalence of difficulties in peer-relationships (36%). Similarly, teacher also reported lower percentage of children at clinical level of hyperactivity (5%) as compared to the percentage reported by children (7%). However, in terms of pro-

social behaviour, teacher's reported that around 30% of children has lack of pro-social behaviour while the percentage of such children as reported by children was 25%.

Based on the prevalence rate reported by Abiodun (1992) and Liu and colleagues (1999) we were expecting prevalence to be around 8-15%. However, we found much higher prevalence showing that prevalence of psychosocial problems might have increased in the past many years as these two studies were conducted in 1990s. Also, these studies were not conducted in South Africa, so the prevalence might be higher in rural South Africa than these countries.

However, on comparing the prevalence of psychosocial problems reported by Kleintjes and colleagues (2006) which is a much recent study and is conducted in South Africa, it becomes clear that our study has reported a bit higher prevalence rates than what has previously been reported. The main difference between the study of Kleintjes and colleagues (2006) and our study was the methodology. Kleintjes and colleagues (2006) used estimated measures of psychosocial problems on the basis of consensus of clinicians and researchers. They did not use self-reported scale to measure psychosocial problems. Also, they used DSM-IV as a diagnostic criteria for diagnosing some psychosocial disorders. A direct comparison is therefore not possible as our study is methodologically weak in these terms.

The Brazilian study has reported prevalence rate of 24% for behavioural problems in children (Anselmi, *et al.*, 2004) but they used both borderline and clinical level of difficulties, while in our study we have only included children with clinical level of difficulties. In terms of clinical level, the prevalence of behavioural problem in this study was only 15% which is lower than what is reported by our study. On basis of this comparison, it is recommended that clinical intervention should be provided in the Agincourt for the proper diagnosis and treatment of effected children. The protective factors alone cannot be helpful.

The mean score of pro-social behaviour reported by the teacher (M = 5.90, SD = 2.50) was slightly lower than children-reported mean score (M = 6.01, SD = 2.49). This finding is consistent with what has been reported by Becker and his colleagues (2004) in a recent study, where teacher reported lower average score on pro-social behaviour of children as compared to what reported by children themselves Taken together, however, it is quite clear that children not only reported higher difficulties but also higher strengths, as compared to teachers.

Combining teacher's and children's report we found peer-relationship problem to be the most prevalent behavioural problem in children while hyperactivity to be the least prevalent. Lack of pro-social behaviour can be an important problem as well. This high prevalence of peer-relationship problems could be the result of presence of elder children in the class. Some 30% of children are older for their school grades and it is found that within a single class there are children from age 13 to 19. The younger children are, therefore, expected to suffer from peer-relationship problem. This is confirmed through the impact of age on prevalence of peer-relationship problem when younger children were found to be more likely to suffer from peer-relationship than elder children.

Although around 40% of children were found to have low self-esteem but this percentage was obtained using median split-off cut off and it shows that most of children scored higher than the median. The mean score of self-esteem was found to be closer to 21, which was set as the cut-off for the scale. Thus, in terms of self-esteem children were at moderate level and low self-esteem can be regarded as not much prevalent in children. Similarly, the mean score of cognitive interpretation were quite low showing that most of children had positive cognitive interpretation.

In case of emotional problems, 36% of children were found to be at clinical level of anxiety and 7% were found to be at clinical level of depression. The prevalence of anxiety is very alarming in children as previous studies have reported the prevalence to be 11% only

(Kleintjes *et al.*, 2006). However, the prevalence of depression correlates with previously reported prevalence (Kleintjes *et al.*, 2006), yet when compared with national data on prevalence of depressive disorder in adults (Williams *et al.* 2008), it appears that children have higher prevalence of this problem than what was reported for adults (4.9%). Anxiety in adults was also reported to be around 16% (Stein *et al.* 2008) in South Africa and our reported prevalence is almost double to that. Surprisingly, Kleintjes *et al.* (2006) have reported that the prevalence of psychosocial problems in children is lower than the prevalence in adults of South Africa. The comparison of our study's outcome with similar previous studies, however, disproves this. This shows that the prevalence we have reported for anxiety and depression in children is much higher and requires extraordinary measures for intervention.

The comparison of teacher- and children-reported behavioural problems in children raised an important question to be answered in future research. As reported above, children were found to score higher in all domains of SDQ whether they were strengths or difficulties. Further research is needed to validate this finding and to search the reasons that led children to score higher than the adults. One possible explanation is that the teachers, being more aware of the importance of research, were more cautious while reporting difficulties and strengths and, thus, scored moderately. If such is the case, future studies should not rely on teacher-reported behavioural problem and cross-examination of teacher-reported difficulties with self-reported difficulties should be conducted.

10.3.2. What are the risk factors that can increase the likelihood of psychosocial problems in these children?

The age, gender and grade of children were found to be important predictors of psychosocial difficulties in children of study area. The present study confirms that some psychosocial problems in children increases with age like behavioural problems and lack or pro-social behaviour and depression. This confirms that impact of increasing age on the psychosocial problems as reported in the previous studies (Ashenefi *et al.* 2000). This

relationship of age on prevalence of behavioural problems in our study, however, has another important explanation. As explained earlier, children of a much wider age group 12-19 is studying in the same grade, so the younger children are more likely to suffer from the bullying of elder children which can result in behavioural problems and lack of pro-social behaviour.

Significant differences were observed in the prevalence of behavioural problem, depression, anxiety and lack of pro-social behaviour between children of grade 5 and 6. Since lack of pro-social behaviour, depression and behavioural problems also increases with age, this finding can be taken as confirmation of cumulative effect of these problems. However, the cause of higher prevalence of anxiety in children of 6 grade, not through increase in age, is unclear.

On the subject of gender, the study shows that boys are more likely to suffer from depression than the girls. This is against what was reported by Daradkeh, Ghabash and Abou-Saleh (2002) who found that females are more likely to be depressive than males. However, their study was on adults. Other studies on adolescent have also showed higher prevalence of depression in female than male (Hesketh, Ding, & Jenkins, 2002; Yen *et al.* 2006). In our sample, however, boys seems to be subject to more sufferings than girls. This is explained by Daradkeh, Ghabash and Abou-Saleh (2002) who reported that this sex difference is basically caused by the higher exposure of female to chronic life difficulties in their sample. Therefore, the sex difference is basically subject to the treatment of different sex groups in the society of the studied area. More studies with understanding of cultural treatment of sex groups in South Africa are, therefore, needed to understand this higher prevalence of depression in boys.

Important risk factors associated with the psychosocial difficulties were found to be unsafe environment of school, lack of social support from teachers and principal, use of alcohol, caregiver illness, and incorrect knowledge of HIV/AIDS. Stigma was found to be

having strong correlation with psychosocial problems but in the study sample, children did not report much stigmatisation.

Previous studies have mostly focussed on the protective role of schools and have discussed how the schools can provide support to children for dealing with their psychosocial problems (Power & Blom-Hoffman, 2004; Hoadley, 2007). However, the present study has provided another dimension of the role of schools which is the negative dimension – the negative role of schools in making children more vulnerable. In our study, school environment act as a risk factor and it contradicts with the previous assumption about the role of schools.

Schools were not found to provide sufficient support to children. Children reported much lesser social support from teachers and principal as compared to their family members and friends. A number of children were found to be fearful of being punished or beaten by the teachers. Though children named teachers to be the person with whom they want to discuss their issues, the issues were found to be related to the school and children were fearful that teacher might object to the discussion of such issues with any adult outside the school. Although schools were found to be quite disciplined and were focussed on children's learning and development, good management of school was found to produce no particular influence on children's perception about them. It signifies that importance should be paid toward the provision of safe environment in schools.

The role of school can be made positive by educating teachers about the negative impacts of punishment on children's development and by providing them proper training of how to be supportive toward children. Since the social network of the school governing bodies in the study area was quite dense and schools governing bodies were closely knitted, it is easier to bring such change. Schools, because of closer interaction, can learn from each other's experience and can share their resources for educating and training the teachers.

The study shows almost similar rate of the use of alcohol by children (20%) as compared to what was reported (22%) in the study of Onya *et al.* (2012), whose study was conducted in another rural setting of South Africa. What is shocking is that Onya *et al.* (2012) conducted study on children of grade 9 and 11 who were much older than children sampled in our study. The high percentage of children using alcohol at this young age can be alarming provided that the rates of alcohol use will increase even further when these children will get older. Also, this use of alcohol has been found to be one major cause of psychosocial problems in children. Therefore, our findings, together with previous findings on the use of alcohol stresses the need of intervention to stop this high use of alcohol among adolescents of South Africa.

Another risk factor reported through this study is caregiver illness which correlates with the previous findings on the subject. The negative impact of caregiver illness has been shown in studies of Caillods and Hallik (2004) and Richter *et al.*, (2006). The illness of caregiver put both the economic and social burden on children and this negative impact is, therefore, understandable.

Two important factors were found to have unclear association with psychosocial difficulties, namely socio-economic status and children's perception about gender equality. Socio-economic status was found to have significant association with behavioural problem, pro-social behaviour, self-esteem, and depression. However, it is difficult to decide the socio-economic class at higher risk of psychosocial problems. Behavioural problem was highest in children of families with SES quintiles 3 and the same children were reported by the teachers to have problems in behaving pro-socially and were self-reported to have lowest self-esteem. However, depression was found to be highest in children of families with SES quintiles 1 and it decreases with the increase in the socio-economic status. Except depression, no other psychosocial problem was found to have a patterned association with SES quintiles and it cannot be said that poverty can act as a risk factor for psychosocial problems in children. Following findings of Guo and Harris (2000) that shows that the impact of poverty on

children's psychosocial outcome is mediated by a number of other factors, a follow up study on the association of SES quintiles with other socio-demographic factors is highly recommended.

Children's response to gender equality were also contradictory showing that children were confused regarding the equality of gender and no conclusion can be made with regard to this factor. However, the study clearly showed that children's perception of gender equality influences their cognitive interpretation.

10.3.3. What are the protective factors that can help children of Agincourt with psychosocial problems despite the presence of risk factors?

Mother's education, social support from family members, and nutrition were found to be the important protective factor saving children from psychosocial problems. Receiving of grants by children's family was found to protect children from depression but not against other psychosocial problems.

This study shows that children of educated mothers are protected from developing behavioural and emotional problems. This effect of mother education was also reported by Anselmi *et al.* (2004). The problem, however, is that only 35% of mother have receive education beyond primary level in Agincourt. Some work is seriously needed to improve literacy rates of women in the area in order to create protective environment for children living here.

The present study also showed the positive role of social support in protecting children from psychosocial problems. Children reported positive relationship with their parents, siblings and grandparents as well as friends and peers and the study proved that this positive relationship protected these children from developing psychosocial problems and produced positive effect on the pro-social behaviour and self-esteem. The social support by caregiver is particularly important as it can reduce the likelihood of a child suffering from behavioural or emotional problems. The study also confirms what has been proposed by

Shaffer (2012) that the loss of familial support on which Americanised literature has so much emphasised is the outcome of the narrowed view of family. The multi-generational families and the blended families which exist in South Africa today are not less important today as they were years back.

Following our conceptual model, family forms the main microsystem and its influence on the psychosocial development of children are direct. Thus, the positive role of this microsystem for the South African children can be critical for the healthy development of the child, provided that these children are subject to many risk factors. The importance of social support from families has particularly focused on the role of parents which has previously been highlighted by Abiodum (1992), Caffo (2005) and Cluver (2007).

What has been missed in the literature is the role of other microsystems like siblings and peers. The study, however, shows some very encouraging findings regarding their role. For instance, the perception of sibling being helpful can serve as a protective factor against hyperactivity, negative cognitive interpretation, and depression and can improve pro-social behaviour and self-esteem of the child. Similarly, having fun with friend can lessen the likelihood of hyperactivity, anxiety and depression and can increase the likelihood of being pro-social. The present study, therefore, is among the few studies to highlight the importance of these ignored micro-systems and encourages future studies on these topics. The relationship between these microsystems and pro-social behaviour provides empirical evidence to the views of Shaffer (2010) about the role played by these institutions in "socialisation" of child which in his opinion is the process through which "children acquire the beliefs, motives, values and behaviours deemed significant and appropriate by older members of the their society" (p. 370). This explains one of the mechanisms through which social support helps a child get away from the behavioural and emotional problems he or she might suffer in the absence of socialisation through family and peer support.

Although the present study failed to find any significant influence of socio-economic status on prevalence of psychosocial problems in South African children, it has produced some good results regarding some the factors associated with socio-economic status like nutrition and grants. Nutrition was found to protect children from almost all domains of psychosocial problems. Not having enough food can cause behavioural problems, depression and lack of pro-social behaviour.

Grants are found to only influence the depression in children. Children whose family are taking grants are found to be less likely to be depressive than other children in this study.

Chapter 11: Conclusion and Recommendations

11.1. Introduction

This is the last chapter of the dissertation and contains the conclusion derived after analysis and discussion of the study findings. In addition, the chapter also includes separate sections on the recommendation for theory and practice.

11.2. Conclusion

The study provides a comprehensive and detailed understanding of the psychosocial problems in children of Agincourt aged 8-14 and studying in grades 5 and 6 as well as the factors affecting the psychosocial problems in these children. Prevalence of some psychosocial problem were found be very alarming particularly anxiety as 36% of children in sample were found to be at clinical level of anxiety. Other psychosocial problems that were found to be highly prevalent in children were peer-relationship problem and conduct problems. The study identified the socio-demographic factors that can affect the psychosocial outcome in children. More notably, the study has highlighted the importance of mother's education, social support from family, and availability of proper diet (nutrition) in protecting children from the psychosocial problems, in addition to the confirmation of the risk factors such as unsafe school environment, caregiver illness, and others. The study, thus, concludes that the environment in which a child develops play a vital role in the psychosocial development of children and changes are needed at social, familial, and school level to protect children from psychosocial problems.

11.3. Recommendations Policy and Practice

The findings of the present study suggest several courses of action for the South African society. First, the study has identified that the school environment in the region is perceived by children to be unsafe. School administrators are, therefore, recommended to take actions in this regard and to provide a safe and protected environment for learning. Important policy changes in improving the relationship between teachers and children are particularly recommended. Second, keeping in view the fear of children for being punished

by the teachers, it is recommended to the teachers to avoid punishing children through traditional methods like beating them with sticks and others. Third, the study recommends the government of South Africa to pay attention toward female education as mothers' education is found to protect children from psychosocially difficulties. Fourth recommendation is for the school management for improving their data records as a number of important were found to be missing there.

11.4. Recommendations for Future Research

The present was an effort to extensively study the psychosocial problems in Agincourt. Future researcher can use the same methodology for conducting comprehensive research on other areas of South Africa. The limitations of the present study, as highlighted below, needs to be taken into account while conducting any future study on the subject. The researcher in particular recommends the future researchers to control for variables while conducting multivariate analysis.

Two important questions were raised in the present study to be answered in future research. First, the study found that children scored higher than the teachers while reporting psychosocial difficulties as well as strengths in children. Future research for confirmation of this finding and examination of its possible causes is therefore recommended. Second, future research is suggested to clarify the relationship of socio-economic status and children's perception of gender equality with their psychosocial outcome. The sample size of children with age 17-19 was very small and, therefore, future studies should also look into the psychosocial problem of children of this age group.

11.5. Limitations of the Study

The study suffered from some important statistical and methodological limitations. Because of its extensive research design, it was difficult to minutely study every aspect of the study. It was also difficult to combine the results obtained from multiple analyses as the qualitative results looked at some other issue while quantitative to some other important issues. There was problem of missing data as well and despite all efforts by the researcher to

statistically deal with that, some findings of the study remained inconclusive due to high missing data. In particular the AHDSS data had a number of missing values. The survey results are therefore more reliable than the one based on AHDSS data.

Another issue was with regard to the controlling variables. No control variable was used throughout the study in any analysis and, therefore, there are chances that highly correlated variables might affect the findings. Control variables were not used because of the high number of independent variables and it was difficult to control for all of them.

It must also be taken into account that the present study is based on survey and interviews, not observation. Therefore, the findings are based on what teacher or students or other stakeholders reported. There might be human bias in these findings as some children give strange answers to the question, showing their lack of understanding. Also, the difference in the reporting of psychosocial problem by children and teachers is evident of the influence of role on the outcome.

References

Abiodun, O.A. (1992) Emotional illness in a paediatric population in Nigeria. *East African Medical Journal, 69*(10), 557-559.

Achenbach, T. M., Becker, A., Döpfner, M., Heiervang, E., Roessner, V., Steinhausen, H. C., & Rothenberger, A. (2008). Multicultural assessment of child and adolescent psychopathology with ASEBA and SDQ instruments: research findings, applications, and future directions. *Journal of Child Psychology and Psychiatry, 49*(3), 251-275.

Achenbach, T.M. (1991). *Manual for the Youth Self-Report and 1991 Profile*. Burlington: Department of Psychiatry, University of Vermont.

Adolescent Pathways Project. (1992). *Social support scale: Psychometric development summary*. New York: New York University.

Alaimo, K., Olson, C. M., & Frongillo, E. A. (2001). Food insufficiency and American school-aged children's cognitive, academic, and psychosocial development. *Pediatrics*, *108*(1), 44-53.

Allison, P.D., & Stewart, K.A. (1974) Productivity Differences among Scientists: Evidence for Accumulative Advantage, *American Sociological Review, 39,* 596-606.

Anderson, L.W. & Krathwohl, D.R. (eds.) (2001). *A Taxonomy for Learning, Teaching and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives*. New York: Longman.

Anonymous (2010). Questionnaire and Related Items in English and Translation. Retrieved 22 December 2011 from http://www.sdqinfo.com/b3.html

Argent, J., Finn, A., Leibbrandt, M., & Woolard, I. (2009). Poverty: Analysis of the NIDS Wave 1 dataset. *NIDS Discussion Document No, 13*. Available from: <http://www.psppd.org.za/MediaLib/Downloads/Home/AboutUs/Discussion%20Paper%2013_Poverty.pdf>.

Arguea, N.M., & Conroy, S.J. (2003) The effects of parental involvement in parent teacher groups on student achievement. *School Community Journal, 13*(2), 119+

Barbarin, O.A., Chinn, L., & Wright, Y.F. (2014). Creating developmentally auspicious school environment for African American boys. *Advances in Child Development and Behavior, 47*, 333-365.

Barbarin, O.A. & Richter, L.M. (2013). *Mandela's Children: Growing up in Post-Apartheid South Africa*. New York: Routledge.

Beck, A. T. (1976). *Cognitive therapy and the emotional disorders*. New York: International Universities Press.

Beck, A. T., Rush, A. J., Shaw, B. F., & Emery, G. (1979). *Cognitive therapy of depression*. New York Guilford Press.

Becker, A., Hagenberg, N., Roessner, V., Woerner, W., & Rothenberger, A. (2004). Evaluation of the self-reported SDQ in a clinical setting: Do self-reports tell us more than ratings by adult informants? *European Child & Adolescent Psychiatry*, 13(2), 17-24.

Becker, S. (2009). Young Carers Tasks and Outcomes Questionnaire. Retrieved May 7, 2012, from http://saulbecker.co.uk/v1/downloads/young_carers/Young%20Carers%20Outcomes%20Manual%20April%202009.pdf

Belfer, M.L. (2008) Child and adolescent mental disorders: the magnitude of the problem across the globe. *Journal of Child Psychiatry, 49*(3), 226-236.

Berk, L.E. (2000) *Child development* (5th ed.). Boston: Allyn and Bacon.

Bothma, H., Schrijvers, S., & Mackenbach, J. (1999) Socioeconomic Inequalities in Mortality and Importance of Perceived Control: Cohort Study. *BMJ, 319*, 1469-1470.

Bothma, H., Schrijvers, S., & Mackenbach, J. (1999). Socioeconomic inequalities in mortality and importance of perceived control: cohort study. *BMJ, 319,* 1469-1470.

Bronfenbrenner, U. (1979) *The Ecology of Human Development: Experiments by Nature and Human Design*. Cambridge: Harvard University Press.

Boyes, M.E., & Cluver, L.D. (2013). Relationship among HIV/AIDS orphanhood, stigma and symptoms of anxiety and depression in South African Youth: A longitudinal investigation using a path analysis framework. *Clinical Psychological Science, 1*(3), 323-330.

Bywaters, P. (1996). Government, social services departments and the health of children and young people: which way forward? *The British Journal of Social Work, 26*(6), 777-792.

Caan, W., & Jenkins, R. (2008). Integrating the promotion of child mental health into national policies for health sector reform. *Journal of Public Mental Health, 7*(1), 9-15.

Cluver L, Operario D & Gardner F (2009b) Parental illness, caregiving factors and psychological distress amongst children orphaned by AIDS in South Africa. *Vulnerable Children and Youth Studies: An International Interdisciplinary Journal for Research, Policy and Care, 4*(3), 185–198.

Cluver L, Bowes L, Gardner F. (2010). Risk and protective factors for bullying victimisation among AIDS-affected and vulnerable children in South Africa. *Child Abuse & Neglect*, *34*(10), 793-803.

Cluver, L. D., Gardner, F., & Operario, D. (2008). Effects of stigma on the mental health of adolescents orphaned by AIDS. *Journal of Adolescent Health*, *42*(4), 410-417.

Cluver, L., & Gardner, F. (2006) The Psychological Well-Being of Children Orphaned by AIDS in Cape Town, South Africa. *Annals of General Psychiatry, 5*, 8.

Cluver, L., & Gardner, F. (2007). Risk and Protective Factors for Psychological Well-Being of Children Orphaned by AIDS in Cape Town: A Qualitative Study of Children and Caregivers' Perspectives. *AIDS Care, 19*(3), 318-325.

Cluver, L., & Gardner, F. (2007). The mental health of children orphaned by AIDS: a review of international and southern African research. *Journal of Child and Adolescent Mental Health*, *19*(1), 1-17.

Cluver, L., Fincham, D., & Seedat, S (2009) Posttraumatic stress in AIDS-orphaned children exposed to high levels of trauma: The moderating role of perceived social support. *Journal of Traumatic Stress*, *22*(11), 1–7.

Cluver, L., Gardner, F., & Operario, D. (2007). Psychological distress amongst AIDS-orphaned children in urban South Africa. *Journal of Child Psychology and Psychiatry*, *48*(8), 755-763.

Cluver, L.C., Orkin, M., Gardner, F., & Boyes, M.E. (2012) Persisting mental health problems among AIDA-orphaned children in South Africa. *Journal of Child Psychology and Psychiatry, 53*(4), 363-370.

Collinson, M. (2008) *Children and Migration in South Africa: A Case Study from a Rural, Northeastern District.* Retrieved on 12 March 2011 from http://globalnetwork.princeton.edu/bellagio/Collinson_Children.pdf

Collinson.M.(2010) *Striving against adversity: The dynamics of migration, health and poverty in rural South Africa.* Global Health Action 3: 5080. DOI: 10.3402/gha.v3i.5080

Committee on Child Welfare (1987). Public policies and the health of children (Editorial). *CMAJ, 137*, 481-482

Connolly, P. & Eagle, G. (2009) The Effects of Trauma on Child Development: Children in South Africa. In J. Watts, K. Cockcroft, & N. Duncan (Eds.) *Developmental Psychology* (2nd ed.). South Africa: UCT Press.

Cortina, M.A., Sodha, A., Fazel, M., Ramchandani, P. (2012). The prevalence of child mental health problems in sub Saharan Africa: A Systematic Review. *Archives of Pediatrics & Adolescent Medicine, 166,* 276–281.

Creswell, J. W. (2002). Educational research: Planning, conducting, and evaluating quantitative and qualitative research (International Edition). Harlow: Pearson Education.

Cronin, A. & King, A. (2010) Power, Inequality and Identification: Exploring Diversity and Intersectionality amongst Older LGB Adults. *Sociology, 11*(5), 876-892.

Crystal, S. & Shea, D. (1990) Cumulative advantage, cumulative disadvantage and inequality among elderly people. *The Gerontologist, 30*, 437-443.

Dalgleish, T., Taghavi, R., Neshat-Doost, H., Moradi, A., Canterbury, R., & Yule, W. (2003). Patterns of processing bias for emotional information across clinical disorders: A comparison of attention, memory, and prospective cognition in children and

adolescents with depression, generalised anxiety, and posttraumatic stress disorder. *Journal of Clinical Child and Adolescent Psychology, 32*(1), 10-21.

Dalgleish, T., Taghavi, R., Neshat-Doost, H., Moradi, A., Yule, W., & Canterbury, R. (1997). Information processing in clinically depressed and anxious children and adolescents. *Journal of Child Psychology and Psychiatry*, *38*(5), 535-541.

Dannefer, D. (1984) Adult Development and Social Theory: A Paradigmatic Reappraisal. *American Sociological Review, 49*, 100-116

Dannefer, D. (1987) Aging as Intracohort Differentiation: Accentuation, the Matthew Effect, and the Life Course. *Sociological Forum, 2*, 211-236.

Dannefer, D. (1988) Differential Gerontology and the Stratified Life Course: Conceptual and Methodological Issues. In G.L. Maddox (Ed.). *Annual Review of Gerontology and Geriatrics* (Vol. 8). New York: Springer Publisher.

Dannefer, D. (2003) Cumulative Advantage/Disadvantage and the Life Course: Cross-Fertilizing Age and the Social Science Theory. *Journal of Gerontology: Social Sciences, 58B*(6), S327-S337.

Davisson, K.K., Werder, J.L., and Lawson, C.T. (2008). Children's Active Commuting to School: Current Knowledge and Future Directions. *Preventing Chronic Disease*, *5*, A100.

Department of Health and Medical Research Council. (2007). *Demographic and Health Survey 2003*. Pretoria: Department of Health.

Derluyn, I., & Broekaert, E. (2007). Different perspectives on emotional and behavioural problems in unaccompanied refugee children and adolescents. *Ethnicity and Health*, *12*(2), 141-162.

Dorling, D., Mitchell, R., & Pearce, J. (2007) The Global Impact of Income Inequality on Health by Age: An Observational Study. *BMJ, 335,* 873+

DuBois, D. L., Bull, C. A., Sherman, M. D., & Roberts, M. (1998). Self-esteem and adjustment in early adolescence: A social-contextual perspective. *Journal of Youth and Adolescence*, *27*(5), 557-583.

DuBois, D. L., Felner, R. D., Brand, S., & George, G. R. (1999). Profiles of self-esteem in early adolescence: Identification and investigation of adaptive correlates. *American Journal of Community Psychology*, *27*(6), 899-932.

DuBois, D. L., Felner, R. D., Brand, S., & Phillips, R. S. (1996). Early adolescent self-esteem: A developmental–ecological framework and assessment strategy. *Journal of Research on adolescence*, *6*(4), 543-579.

DuBois, D. L., Felner, R. D., Sherman, M. D., & Bull, C. A. (1994). Socioenvironmental experiences, self-esteem, and emotional/behavioral problems in early adolescence. *American Journal of Community Psychology*, *22*(3), 371-397.

Dubow, E. F., Huesmann, L. R., & Boxer, P. (2009). A social-cognitive-ecological framework for understanding the impact of exposure to persistent ethnic–political violence on children's psychosocial adjustment. *Clinical Child and Family Psychology Review*, *12*(2), 113-126.

Duncan, N. & Rock, B. (1997) Children and Violence: Quantifying the Damage. In: B. Rock, ed., *Spirals of Suffering: Public Violence and Children*. Pretoria: HSRC Publishers.

Durlak, J.A., & Status, J.A. (2001) School Problems of Children. In C.E. Walker, & M.C. Roberts (Eds.). *Handbook of Clinical Child Psychology.* New York: John Wiley & Sons.

Eaton, D.K., Brener, N., & Kann, L.K. (2008). Associations of health risk behaviors with school absenteeism. Does having permission for the absence make a difference? *Journal of School Health, 78*(4), 223-229.

Elder, J.P., Lytle, L., Sallis, J.F., Young, D.R., Steckler, A., Simons-Morton, D., Stone, E., Jobe, J.B., Stevens, J., Lohman, T., Webber, L., Pate, R., Saksvig, B.I., & Ribisl, K. (2007) A description of social-ecological framework used in the trial of activity for adolescent girls (TAAG). *Health Education Research, 22*(2), 155-165.

Elhamid, A. A., Howe, A., & Reading, R. (2009). Prevalence of emotional and behavioural problems among 6–12 year old children in Egypt. *Social Psychiatry and Psychiatric Epidemiology, 44*(1), 8-14.

Epstein, J.L. (1983) Longitudinal effects of family-school-person interaction on student outcome. *Research in Sociology of Education and Socialisation, 4*, 101-127.

Erikson, E. (1963) *Childhood and Society* (2nd ed). New York: WW Norton & Co.

Fein, R.A., Vosskuil, B., Pollack, W.S., Borum, R., Modzeleski, W., & Reddy, M. (2002). *Threat Assessment in Schools: A Guide to Managing Threatening Situations and to Creating Safe School Climates*. Washington, DC: U.S. Secret Service, National Threat Assessment Ctr.

Feitosa, C.A., Santos, D.N., Barreto do Carmo, M.B., Santos, L.M., Teles, C.A.S., Rodrigues, L.C., & Barreto, M.L. (In press) Behavior problems and prevalence of asthama symptoms among Brazilian children. *Journal of Psychosomatic Research.*

Ferraro, K.F., & Kelley-Moore, J.A. (2003) Cummulative Disadvantage and Health: Long-term Consequence of Obesity? *American Sociological Review, 68*(5), 707-729.

Ferraro, K.F., Irving, S.M., & Shippee, T.P. (2006) Utility of Cumulative Inequality Theory for Sociological Studies of the Life Course. Paper presented at the *2006 Annual Meeting of the American Sociological Association.* Montreal, CA: Prude University.

Garenne, M., Tollman, S.M., Kahn, K., & Gear, J.S.S. (2000). Causes of death in a rural area of South Africa: an international perspective. *Journal of Tropical Paediatrics, 46*(3), 183-190.

Garmezy, N. (1993). Children in poverty: resilience despite risk. *Psychiatry, 56*(1), 127-136.

Garmezy, N., & Masten, A. S. (1994) Chronic adversities. In M. Rutter, E. Taylor & L. Hersov (Eds.), *Child and Adolescent Psychiatry: Modern Approaches*. Oxford: Blackwell Scientific.

Garmezy, N., & Masten, A. S. (1994). Chronic adversities. In M. Rutter, E. Taylor & L. Hersov (Eds.), *Child and adolescent psychiatry: modern approaches* (pp. 191-208). Oxford: Blackwell Scientific.

Gartner, L.M., Morton, J., Lawrence, R.A., Naylor, A.J., O'Hare, D., Schanler, R.J., & Eidelman, A.I. (2005). Breastfeeding and the use of human milk. *Pediatrics,* 115(2), 496-506

Goodman, R. (1999). The extended version of the Strengths and Difficulties Questionnaire as a guide to child psychiatric caseness and consequent burden. *Journal of Child Psychology and Psychiatry, 40*(5), 791-799.

Goodman, R. (2001). Psychometric properties of the Strengths and Difficulties Questionnaire (SDQ). *Journal of the American Academy of Child and Adolescent Psychiatry, 40,* 1337-1345.

Goodman, R., Ford, T., Simmons, H., Gatward, R., & Meltzer, H. (2000). Using the Strengths and Difficulties Questionnaire (SDQ) to screen for child psychiatric disorders in a community sample. *The British Journal of Psychiatry*, *177*(6), 534-539.

Goodman, R., Ford, T., Simmons, H., Gatward, R., & Meltzer, H. (2000). Using the Strengths and Difficulties Questionnaire (SDQ) to screen for child psychiatric disorders in a community sample. *The British Journal of Psychiatry*, *177*(6), 534-539.

Goodman, R., Meltzer, H., & Bailey, V. (1998). The Strengths and Difficulties Questionnaire: a pilot study on the validity of the self-report version. *European Child & Adolescent Psychiatry*, *7*(3), 125-130.

Goodyer, I. M. (2002) Social adversity and mental functions in adolescents at high risk of psychopathology: Position paper and suggested framework for future research. *The British Journal of Psychiatry, 181*(5), 383-386.

Goudge, J., Gilson, L., Russell, S., Gumede, T., & Mills, A. (2009). The household costs of health care in rural South Africa with free public primary care and hospital exemptions for the poor. *Tropical Medicine & International Health, 14*(4), 458-467.

Greening, L., Stoppelbein, L., Dhossche, D., & Martin, W. (2005). Psychometric evaluation of a measure of Beck's negative cognitive triad for youth: applications for African–American and Caucasian adolescents.*Depression and anxiety*, *21*(4), 161-169.

Gundersen, C., & Kreider, B. (2009). Bounding the effects of food insecurity on children's health outcomes. *Journal of Health Economics*, *28*(5), 971-983.

Guo, G., & Harris, K.M. (2000) The Mechanism Mediating the Effects of Poverty on Children's Intellectual Development. *Population Association of America, 37*(4), 431-447.

Guthrie, T. (2002). Assessing the impact of the child support grant on the wellbeing of children in South Africa. A Summary of available evidence. *Children's Institute, University Of Cape Town*.

Hannon, K.L. (2008) *Poverty, Delinquency, and Educational Attainment: Cumulative Disadvantage or Disadvantage Saturation*. Unpublished Dissertation. Villanova University.

Hoadley, U. (2007). Boundaries of care: the role of the school in supporting vulnerable children in the context of HIV and AIDS. *African Journal of AIDS Research, 6*(3), 251-259.

Hosegood, V. & Ford, K. (2003) The impact of HIV/AIDS on Children's Living Arrangements and Migration in Rural South Africa. Paper Presented at *Conference on African Migration in Comparative Perspective, Johannesburg, South Africa, 4-7 June, 2003.*

Howe, D. (1998) *Patterns of Adoption.* Oxford: Blackwell Science Ltd.

Hunter, L. M., Twine, W., & Johnson, A. (2011). Adult mortality and natural resource use in rural South Africa: Evidence from the Agincourt Health and Demographic Surveillance Site. *Society and Natural Resources, 24*(3), 256-275.

Indepth-Network (2009) Agincourt Health and Socio-demographic surveillance system, South Africa. Retrieved 29 December 2011 from: http://www.indepth-network.org/site%20profiles/AGINCOURT%20PROFILE.pdf

Jason, L.A., Weine, A.M., Johnson, J.H., WarrenSohlberg, L., Filippelli, L.A., Turner, E.Y., & Lardon, C. (1992) *Helping transfer children: Strategies for educational and social readjustment.* San Francisco: JosseyBass.

Johnson, G.J. & Johnson, W.R. (2005) Cummulative Disadvantage Theory and Contingent Work: Race and Gender Comparisons. *African American Research Perspective* [online], *10*(1). Available from: <http://www.rcgd.isr.umich.edu> [Accessed 18 March 2011]

Kahn, K., Tollman, S.M., Collinson, M.A., Clark, S.J., Twine, R., Clark, B.D., Shabangu, M., Gomez-Olive, F.X., Mokoena, O., & Garenne, M.L. (2007). Research into Health, Population, and Social Transitions in Rural South Africa: Data and Methods of the Agincourt Health and Demographic Surveillance System 1. *Scandinavian Journal of Public Health, 35,* 8-20.

Kahn, K., Tollman, S.M., Garenne, M., & Gear, J.S.S. (1999). Who dies from what? Determining cause of death in South Africa's rural north-east. *Tropical Medicine and International Health 4*(6), 433-441.

Kahn, K. (2006). Dying to make a fresh start: Mortality and health transition in a new South Africa. *Unpublished Dissertation*. Umeå Medical University.

Kail, R.V., & Cavanaugh, J.C. (2010) *Human Development: A Life-Span View,* (5th ed.). Belmont: Wadsworth.

Kariya, T., & Rosenbaum, J.E. (2003) Stratified Incentives and Life Course Behaviors. In J.T. Mortimer & M.J. Shanahan (Eds.). *Handbook of the Life Course*. New York: Kluwer Academic.

Kashala, E., Elgen, I., Sommerfelt, K., & Tylleskar, T. (2005). Teacher ratings of mental health among school children in Kinshasa, Democratic Republic of Congo. *European child & adolescent psychiatry*, *14*(4), 208-215.

Kaslow, N. J., Stark, K. D., Printz, B., Livingston, R., & Ling Tsai, S. (1992). Cognitive Triad Inventory for Children: Development and relation to depression and anxiety. *Journal of Clinical Child Psychology*, *21*(4), 339-347.

Kerr, D. W., & Michalski, J. H. (2007). Family structure and children's hyperactivity problems: A longitudinal analysis. *The Canadian Journal of Sociology, 32*(1), 85-112.

Kgosiemang, D. T., & Oladele, O. I. (2012). Factors Affecting Farmers' Participation in Agricultural Projects in Mkhondo Municipality of Mpumalanga Province, South Africa. *Journal of Human Ecology-New Delhi*, *37*(1), 19+.

Kimani-Murage, E. W., Norris, S. A., Pettifor, J. M., Tollman, S. M., Klipstein-Grobusch, K., Gómez-Olivé, X. F., ... & Kahn, K. (2011). Nutritional status and HIV in rural South African children. *BMC Pediatrics, 11*(1), 23+.

Kleintjes, S., Flisher, A., Fick, M., Railoun, A., Lund, C., Molteno, C., & Robertson, B. (2006) The prevalence of mental disorders among children, adolescents and adults in the western Cape, South Africa. *South African Psychiatry Review, 9*(3), 157-160.

Kroger, J. (2003) Identity Development during Adolescence. In G.R. Adams & M.D. Berzonsky, (Eds.) *Blackwell Handbook of Adolescence.* Oxford: Blackwell Publishing.

Lachman, J.M., Cluver, L.D., Boyes, M.E., Kuo, C., & CAdale, M. (2014). Positive parenting for positive parents: HIV/AIDS, poverty, caregiver depression, child behavior, and parenting in South Africa. *AIDS Care: Psychological and Socio-medical Aspects of AIDS/HIV*, *26*(3), 304-313.

Leaf, P.J., Algeria, M., Cohen, P., Goodman, S.H., Horwitz, S.M., Hoven, C.W., Narrow, W.E., Vaden-Kiernan, M., & Regier, D.A. (1996). Mental health service use in the community and schools: results from the four-community MECA study. *Journal of American Academy of Child and Adolescent Psychiatry, 35*(7), 889-897.

Leydesdorff, L., & Scharnhorst, A. (2009) Measuring the Knowledge Base: A Program of Innovative Studies. *arXiv* [Online]. Available at: http://arxiv.org/abs/0912.1368 [Accessed 12 April 2011].

Liu, X., Kurita, H., Guo, C., Miyake, Y., Ze, J., & Cao, H. (1999) Prevalence and risk factors of behavioural problems among Chinese children aged 6 through 11 years. *Journal of the American Academy of Child & Adolescent Psychiatry, 38*(6), 708-715.

Lockhart, R., & van Niekerk, A. (2000). South African children: A history of adversity, violence and trauma. *Ethnicity and Health, 5*(3-4), 291-302.

Lund, C., Boyce, G., Flisher, A. J., Kafaar, Z., & Dawes, A. (2009). Scaling up child and adolescent mental health services in South Africa: human resource requirements and costs. *Journal of Child Psychology and Psychiatry*, *50*(9), 1121-1130.

Lyytikäinen, M., Jones, N., Huttly S., & Abramsky, T. (2006) *Childhood Poverty, Basic Services and Cumulative Disadvantage: An International Comparative Analysis* (Working Paper Number 33). London: Young Lives.

Mannarino, A. P., Cohen, J. A., & Berman, S. R. (1994). The children's attributions and perceptions scale: A new measure of sexual abuse-related factors. *Journal of Clinical Child Psychology*, *23*(2), 204-211.

Masten, A. S. (2007). Resilience in developing systems: Progress and promise as the fourth wave rises. *Development and Psychopathology, 19*(03), 921-930.

Masten, A., Best, K., & Garmezy, N. (1990) Resilience and development: Contributions from the study of children who overcome adversity. *Development and Psychopathology, 2*, 425-444.

Masten, A., Best, K., & Garmezy, N. (1990). Resilience and development: Contributions from the study of children who overcome adversity. *Development and Psychopathology, 2*, 425-444.

Masten, A.S. (2007) Resilience in developing systems: Progress and promise as the fourth wave rises. *Development and Psychopathology*, *19*(03), 921-930.

Mathews, A., & MacLeod, C. (2005). Cognitive vulnerability to emotional disorders. *Annual Review of Clinical Psychology, 1*, 167–195.

Mayer, J., & Filstead, W. J. (1979). The Adolescent Alcohol Involvement Scale; an Instrument for Measuring Adolescents' Use and Misuse of Alcohol. *Journal of Studies on Alcohol and Drugs*, *40*(03), 291+.

McMahon, T. J., & Luthar, S. S. (2007). Defining characteristics and potential consequences of caretaking burden among children living in urban poverty. *American Journal of Orthopsychiatry, 77*(2), 267-281.

Meiser-Stedman, R., Dalgleish, T., Glucksman, E., Yule, W., & Smith, P. (2009). Maladaptive cognitive appraisals mediate the evolution of posttraumatic stress reactions: A 6-month follow-up of child and adolescent assault and motor vehicle accident survivors. *Journal of abnormal psychology*, *118*(4), 778.

Mellor, D. (2004). Furthering the use of the strengths and difficulties questionnaire: reliability with younger child respondents. *Psychological assessment*, *16*(4), 396.

Meltzer, H., Gatward, R., Goodman, R., & Ford, T. (2000). *Mental health of children and adolescents in Great Britain*. London: The Stationery Office.

Merrell, K.W. (2008). *Helping Students Overcome Depression and Anxiety: A Practical Guide. 2nd ed.* New York: The Guilford Press.

Merton, R.K. (1968) The Matthew Effect in Science. *Science, 159*, 56-63

Merton, R.K. (1988) The Matthew Effect in Science II: Cummulative Advantage and the Symbolism of Intellectual Property. *ISIS, 79*, 606-623.

Mestrovic, S.G. (1985) A Sociological Conceptualisation of Trauma. *Social Science & Medicine, 21*(8), 835-848.

Meyer S. 2002. *The Influence of Parental Incomes on Children's Outcomes*. The Ministry of Social Development. New Zealand.

Millar J. (2001). Establishing Family Policy in Britain? *Family Matters*, *58*, 28-33.

Miller, A. (2003) *Teacher, parents and classroom behaviour: a psychosocial approach.* Maidenhead: Open University Press.

Miller, T., Smith, T., & Turner, C. (1996) A meta-analytic review of research on hostility and physical health. *Psychological Bulletin, 119*, 322-348.

Miller, T., Smith, T., & Turner, C. (1996). A meta-analytic review of research on hostility and physical health. *Psychol Bull, 119*, 322-348.

MRC/Wits Rural Public Health and Health Transitions Research Unit (n.d.) Publications. Retrieved 22 December 2014 from http://www.agincourt.co.za/index.php/about/working-papers-and-publications/

Muris, P., Meesters, C., Eijkelenboom, A., & Vincken, M. (2004). The self-report version of the Strengths and Difficulties Questionnaire: Its psychometric properties in 8-to 13-year-old non-clinical children. *British Journal of Clinical Psychology*, *43*(4), 437-448.

Myer, L., Stein D.J., Jackson P.B., Herman A.A., Seedat S., & Williams D.R. (2009) Impact of common mental disorders during childhood and adolescence on secondary school completion. *South African Medical Journal 99*(5), 354-356.

Nagler, S., Adnopoz, J., & Forsyth, W. (1995). Uncertainty, stigma, and secrecy: Psychological aspects of AIDS for children and adolescents. In: S. Geballe, J. Gruendel, & W. Andemann, (Eds.). *Forgotten children of the AIDS epidemic* (pp. 71-82). New Haven, CT: Yale University.

Natvig, G. K., Albrektsen, G., Anderssen, N., & Qvarnstrøm, U. (1999). School-related Stress and Psychosomatic Symptoms Among School Adolescents.*Journal of school health, 69*(9), 362-368.

Neale, J. M., & Liebert. R. M. (1986). Science and behavior: An introduction to methods of research (3rd ed.). Englewood Cliffs, NJ: Prentice-Hall.

Olson, S., Sameroff, A., Kerr, D., Lopez, N., & Wellman, H. (2005). Developmental Foundations of Externalizing Problems in Young Children: The Role of Effortful Control. *Development and Psychopathology, 17*, 25-45

Olson, S., Sameroff, A., Kerr, D., Lopez, N., & Wellman, H. (2005). Developmental foundations of externalizing problems in young children: The role of effortful control. *Development and Psychopathology, 17*, 25-45.

Onwuegbuzie, A. J., & Leech, N. L. (2007). Sampling designs in qualitative research: Making the sampling process more public. *The Qualitative Report, 12*(2), 238-254.

Orkin, F.M. (2000). *Child Labour in South Africa: Survey of Activities of young people 1999.* Department of Labour, South Africa. Retrieved 29 December 2011 from http://ilo-mirror.library.cornell.edu/public/english/standards/ipec/simpoc/southafrica/report/southafrica.pdf

Panter, J.R., Jones, A.P., van Sluijs, E.M.F. & Griffin, S.J. (2010). Attitudes, social support and environmental perceptions as predictors of active commuting behaviour in school children. *Journal of Epidemiology and Community Health, 64*, 41-48.

Pennington, N. & Hastie, R. (1986). Evidence Evaluation in Complex Decision Making. *Journal of Personality and Social Psychology, 51*(2), 242-258.

Pettifor, A.E., Rees, H.V., Steffenson, A., Hlongwa-Madikizela, L., MacPhail, C., Vermaak, K., & Kleinschmidt, I. (2004). *HIV and sexual behaviour among young South*

Africans: a national survey of 15-24 year olds. Johannesburg: Reproductive Health Research Unit, University of the Witwatersrand.

Pillay, A., & Lockhat, M. (1997). Developing mental health services for children in South Africa. *Social Science Medicine, 45*, 1493-1501.

Pollitt, E. (1990). *Malnutrition and Infection in the Classroom*. UNESCO, Division of Science, Technical and Environmental Education.

Power, T.J. & Blom-Hoffman, J. (2004). The School as a Venue for Managing and Preventing Health Problems: Opportunities and Challenges. In R.T. Brown (Ed.). *Handbook of Pediatric Psychology in School Settings.* Mahwah, NJ: Lawrence Erlbaum.

Power, T.J. & Blom-Hoffman, J. (2004). The school as a venue for managing and preventing health problems: Opportunities and challenges. In R.T. Brown (Ed.) *Handbook of Paediatric Psychology in Schools Settings*. Mahwah, NJ: Lawrence Elbraum.

Prothrow-Stith, D., Chery, J.M., & Oliver, J. (2005). Peacezone: A program for teaching social literacy. New York: Research Press.

Ramchandani, P., & Psychogiou, L. (2009). Paternal psychiatric disorders and children's psychosocial development. *The Lancet, 374*(9690), 646-653.

Rankin, W.W., Brennan, S., Schell, E., Laviwa, J., & Rankin, S.H, (2005). The Stigma of being HIV-positive in Africa. *PLoS Medicine, 2*(8), e247.

Reijneveld, S. A., Harland, P., Brugman, E., Verhulst, F. C., & Verloove-Vanhorick, S. P. (2005). Psychosocial problems among immigrant and non-immigrant children. *European Child & Adolescent Psychiatry, 14*(3), 145-152.

Reproductive Health Research Unit & Lovelife. (2005). The National Survey of HIV and sexual behaviour among young South Africans. Retrieved May 16, 2012, from http://www.healthlink.org.za/healthstats/203/data.

Resenbaum, J.E. (1984) *Career Mobility in Corporate Hierarchy.* New York: Academic Press.

Reynods, C. R., & Paget, K. D. (1981). Factor Analysis of the Revised Children's Manifest Anxiety Scale for Blacks, Whites, Males and Females with a National Normative Sample *Journal of Consulting and Clinical Psychology, 49*(3), 352-359.

Robertson, B. (2008) The Mental Health Needs of Vulnerable Children and Their Care-Givers in Low Income Areas: A Training Guide. Unpublished compilation by the Department of Psychiatry and Mental Health, University of Cape Town.

Robertson, B.A., Ensink, K., Parry, C.D. *et al.* (1999). Performance of the Diagnostics Interview Schedule for Children Version 2.3 (DISC-2.3) in an informal settlement area in South Africa. *Journal of the American Academy of Child & Adolescent Psychiatry, 38,* 1156-1164.

Rose-Jacobs, R., Black, M. M., Casey, P. H., Cook, J. T., Cutts, D. B., Chilton, M., & Frank, D. A. (2008). Household food insecurity: associations with at-risk infant and toddler development. *Pediatrics, 121*(1), 65-72.

Roy, R. (2008) *Psychosocial Intervention for Chronic Pain: In Search of Evidence.* New York: Springer.

Rutter, M. (1987) The role of Cognition in Child Development and Disorder. *British Journal of Medical Psychology, 60*(1), 1-16.

Rutter, M. (1987). The role of cognition in child development and disorder. *Br J Med Psychol, 60 (Pt 1),* 1-16.

Sallis, J.F., & Owen, N., (2002) Ecological models of health behavior. In K. Glanz, B.K., Rimer, & F.M. Lewis (Eds.) *Health Behavior and Health Education: Theory, Research, and Practice* (3rd ed.). San Francisco: JosseyBass.

Sampson, R.J. & Laub, J.H. (1997) A Life-Course Theory of Cummulative Disadvantage and the Stability of Delinquency. In: T.P. Thornberry, ed. *Advances of Criminological Theory,* vol. 7 (Developmental Theories of Crime and Delinquency). New Brunswick: Transactions Publishers.

Sampson, R.J. & Laub, J.H. (2005). A Life-Course View of the Development of Crime. *The Annals of the American Academy of Political and Social Science, 602*(1), 12-45.

Saunders, M., Lewis, P. and Thornhill, A. (2007). *Research Methods for Business Studies* (4th ed.) Harlow: Pearson Education

Schatz, E., Madhavan, S., & Williams, J. (2011). Female-headed households contending with AIDS-related hardship in rural South Africa. *Health & Place, 17*: 598-605.

Seedat, S., Nyamai, C., Nienga, F., Vythilingum, B., & Stein, D.J. (2004) Trauma exposure and post-traumatic stress symptoms in urban African schools: Survey in CapeTown and Nairobi. *The British Journal of Psychiatry 184*, 169-175.

Settersten, R.A. (2007) Passages to Adulthood: Linking Demographic Change and Human Development. *European Journal of Population, 23*(3-4), 251-272.

Shaffer, D.R. & Kipp, K. (2010). *Developmental Psychology: Childhood and Adolescence* (8th ed.). Belmont: Wadsworth.

Shaffer, D.R. (2010) *Social and personality development* (6th ed.). Belmont: Wadsworth.

Shapiro, J., Perez, M., & Warden, M.J. (1998) The importance of family functioning to caregiver adaptation in mothers of child cancer patients: testing a social ecological model. *Journal of Pediatric Oncology Nursing, 15*(1), 47-54

Shisana, O., Rehle, T., & Simbayi, L. (2005). *South African National HIV prevalence, behaviour and communication survey*. Cape Town: HSRC press.

Simeonsson, R.J., & Rosenthal, S.L. (2001) Developmental theories and clinical practice. In E. Walker, & M.C. Roberts (Eds.). *Handbook of Clinical Child Psychology.* New York: John Wiley & Sons.

Slopen, N., Fitzmaurice, G., Williams, D. R., & Gilman, S. E. (2010). Poverty, food insecurity, and the behavior for childhood internalizing and externalizing disorders. *Journal of the American Academy of Child & Adolescent Psychiatry, 49*(5), 444-452.

Smart, R. (2000). *Children living with HIV/AIDS in South Africa: a rapid appraisal*. Save the Children.

Snider, L. (2006). *Psychosocial vulnerability and resilience measures for national level monitoring of orphans and other vulnerable children*. UNICEF Publications.

Somersalo, H., Solantaus, T., & Almqvist, F. (2002). Classroom climate and the mental health of primary school children. *Nordic journal of psychiatry, 56*(4), 285-290.

Stouthamer-Loeber, M., Loeber, R., Farrington, D., & Zang, Q. (1993) The double edge of protective and risk factors for delinquency: Interrelations and developmental patterns. *Development and Psychopathology, 5*(4), 683-701.

Swenson, C. C., & Hanson, R. F. (1998). Sexual abuse of children. In: *Handbook of child abuse research and treatment* (pp. 475-499). New York: Springer.

Thabet, A.A., & Bostanis, P. (1998) Social adversities and anxiety disorders in the Gaza Strip. *Archive Diseases of Children, 78,* 439-442.

Tollman, S. M., & Kahn, K. (2007). Health, population and social transitions in rural South Africa. *Scand J Public Health Suppl, 69,* 4-7.

Tollman, S.M., Herbst, K., Garenne, M., Gear, J.S.S., & Kahn, K. (1999). The Agincourt Demographic and Health Study – site description, baseline findings and implications. *South African Journal of Medicine 89*(8), 858–864.

Twenge, J., & Nolen-Hoeksema, S. (2002). Age, Gender, Race, Socioeconomic Status, and Birth Cohort Difference on the Children's Depression Inventory. *Journal of Abnormal Psychology, 111*(4), 578-588.

Twine, R., Collinson, M. A., Polzer, T. J., & Kahn, K. (2007). Evaluating access to a child-oriented poverty alleviation intervention in rural South Africa. *Scand J Public Health Suppl, 69*, 118-127.

Van der Merwe, A., & Dawes, A. (2000). Prosocial and antisocial tendencies in children exposed to community violence. *Journal of Child and Adolescent Mental Health*, 12, 19–37.

Van Dyke, R.B. & Schroeder, J.L. (2006). Implementation of the Dallas Threat of Violence Risk Assessment. In S.R. Jimerson & M. Furlong (Eds.). *Handbook of school violence and school safety: From research to practice* (pp. 603-616). Mahwah, NJ: Lawrence Erlbaum Associates Publisher.

Van Roy, B., Groholt, B., Heyerdahl, S., & Clench-Aas, J. (2010). Understanding discrepancies in parent-child reporting of emotional and behavioural problems: Effects of relational and socio-demographic factors. *BMC Psychiatry, 10*(1), 56.

Vornovytskyy, M.S., & Boyce, J.K. (2010) *Economic Inequality and Environmental Quality: Evidence of Pollution Shifting in Russia* (Working Paper Series Number 217). Amherst, MA: Political Economy Research Institute.

Walker, S.J. & Melvin, J.K. (2010). Emotional Disorders (In Children and Adolescents). In J.H.Stone & M. Blouin (Eds.) *International Encyclopedia of Rehabilitation*. Retrieved 22 December 2014 from http://cirrie.buffalo.edu/encyclopedia/en/article/7/

Wang, M.Q., Matthew, R.F., Bellamy, N., & James, S. (2005). A structural model of the substance use pathways among minority youth. *American Journal of Health Behavior, 29*(6), 531-541.

Ward, C. (2005). Psychometric properties of the Social and Health Assessment Subscales in a sample of children in Cape Town.

Weaver, L. J., & Hadley, C. (2009). Moving beyond hunger and nutrition: a systematic review of the evidence linking food insecurity and mental health in developing countries. *Ecology of food and nutrition, 48*(4), 263-284.

Whitaker, R. C., Orzol, S. M., & Kahn, R. S. (2006). Maternal mental health, substance use, and domestic violence in the year after delivery and subsequent behavior problems in children at age 3 years. *Archives of General Psychiatry, 63*(5), 551-560.

Wild, L. (2003). *The Psychosocial Adjustment of Children Orphaned by AIDS*. Unpublished Thesis. Cape Town: Department of Psychiatry, University of Cape Town.

Wild, L. G., Flisher, A. J., Bhana, A., & Lombard, C. (2004). Associations among adolescent risk behaviours and self-esteem in six domains. *Journal of Child Psychology and Psychiatry, 45*(8), 1454-1467.

Wood, A.M., White, I.R., and Thompson, S.G. (2004). Are missing outcome data adequately handled? A review of published randomised controlled trials in major medical journals. *Clinical Trials, 1*(4), 368-376.

Zukerman, H. (1987) Accumulation of Advantage and Disadvantage: The theory and its Intellectual Biography. In: C. Mongardini & S. Tabboni, eds. *L'Opera di R.K. Merton e la sociologia contemporanea.* Genoa: ECIG.

Appendix 1 : Self report child questionnaire(English version)

Name: _____

School: _____ Study number: _____

Grade: _____ Boy: ☐ Girl: ☐

Village: _____

Date: _____ Date of birth:----------



All about me!



The questions you answer here are confidential.

This means that your school,class teachers or friends will not know your answers

This is not a test. There are no right or wrong answers! This research aims to help children and young people. Thank you for taking the time to help us

It would help us if you answered all questions as best you can even if you are not absolutely certain or the item seems silly

A Friends and other kids



How have things been in the past six months?

1.	I am usually on my own	*Not True = 1* *Somewhat Tue = 2* *Certainly True = 3*	QA01	
2.	I have one good friend or more	*Not True = 1* *Somewhat Tue = 2* *Certainly True = 3*	QA02	
3.	Other learners my age generally like me	*Not True = 1* *Somewhat Tue = 2* *Certainly True = 3*	QA03	
4.	Other learners or young people pick on me	*Not True = 1* *Somewhat Tue = 2* *Certainly True = 3*	QA04	
5.	I get on better with adults than people my age	*Not True = 1* *Somewhat Tue = 2* *Certainly True = 3*	QA05	
6.	I try to be nice to other people	*Not True = 1* *Somewhat Tue = 2* *Certainly True = 3*	QA06	
7.	I usually share with other	*Not True = 1* *Somewhat Tue = 2* *Certainly True = 3*	QA07	
8.	I am helpful if someone is hurt, upset of feeling ill	*Not True = 1* *Somewhat Tue = 2* *Certainly True = 3*	QA08	
9.	I am kind to younger children	*Not True = 1* *Somewhat Tue = 2* *Certainly True = 3*	QA09	
10.	I often volunteer to help others	*Not True = 1* *Somewhat Tue = 2* *Certainly True = 3*	QA10	



Feeling fidgety! B

How has life been for you in the past six months?

1.	I am restless. I can't stay still for long	*Not True = 1* *Somewhat Tue = 2* *Certainly True = 3*	**QB01**
2.	I am constantly fidgeting or squirming	*Not True = 1* *Somewhat Tue = 2* *Certainly True = 3*	**QB02**
3.	I am easily distracted	*Not True = 1* *Somewhat Tue = 2* *Certainly True = 3*	**QB03**
4.	I think before I do things	*Not True = 1* *Somewhat Tue = 2* *Certainly True = 3*	**QB04**
5.	I finish the work I am doing	*Not True = 1* *Somewhat Tue = 2* *Certainly True = 3*	**QB05**

C How I see myself!



How do you feel today? Tick one answer for each idea

1.	I am happy with the way I can do most things	*Strongly Disagree = 1* *Disagree = 2* *Agree = 3* *Strongly Agree = 4*	**QC01**
2.	I sometimes think I am a failure (a loser).	*Strongly Disagree = 1* *Disagree = 2*	**QC02**

		Agree = 3 *Strongly Agree = 4*		
3.	I am happy with myself as a person.	*Strongly Disagree = 1* *Disagree = 2* *Agree = 3* *Strongly Agree = 4*	QC03	☐
4.	I am the kind of person I want to be.	*Strongly Disagree = 1* *Disagree = 2* *Agree = 3* *Strongly Agree = 4*	QC04	☐
5.	I often feel ashamed of myself	*Strongly Disagree = 1* *Disagree = 2* *Agree = 3* *Strongly Agree = 4*	QC05	☐
6.	I like being just the way I am	*Strongly Disagree = 1* *Disagree = 2* *Agree = 3* *Strongly Agree = 4*	QC06	☐
7.	I am as good a person as I want to be	*Strongly Disagree = 1* *Disagree = 2* *Agree = 3* *Strongly Agree = 4*	QC07	☐
8.	I wish I had more to be proud of.	*Strongly Disagree = 1* *Disagree = 2* *Agree = 3* *Strongly Agree = 4*	QC08	☐



All about my life. D

How do you feel today? Tick one answer for each idea

1.	I do well at many different things	*Yes! = 1* *Maybe = 2* *No!! = 3*	QD01 ☐
2.	Schoolwork is no fun	*Yes! = 1* *Maybe = 2* *No!! = 3*	QD02 ☐
3.	Most people are friendly and helpful	*Yes! = 1* *Maybe = 2* *No!! = 3*	QD03 ☐
4.	Nothing is likely to work out for me	*Yes! = 1* *Maybe = 2* *No!! = 3*	QD04 ☐
5.	I am a failure	*Yes! = 1* *Maybe = 2* *No!! = 3*	QD05 ☐
6.	I like to think about the good things that will happen for me in the future	*Yes! = 1* *Maybe = 2* *No!! = 3*	QD06 ☐
7.	I do my schoolwork okay. I do my schoolwork okay.	*Yes! = 1* *Maybe = 2* *No!! = 3*	QDO7 ☐
8.	The people I know help me when I need it.	*Yes! = 1* *Maybe = 2* *No!! = 3*	QDO8 ☐
9.	I think that things will be going very well for me a few years from now.	*Yes! = 1* *Maybe = 2* *No!! = 3*	QD09 ☐
10.	I have messed up almost all the best friendships I have ever had.	*Yes! = 1* *Maybe = 2* *No!! = 3*	QD10 ☐

11.	Lots of fun things will happen for me in the future.	*Yes! = 1* *Maybe = 2* *No!! = 3*	QD11
12.	The things I do every day are fun.	*Yes! = 1* *Maybe = 2* *No!! = 3*	QD12
13.	I can't do anything right.	*Yes! = 1* *Maybe = 2* *No!! = 3*	QD13
14.	People like me.	*Yes! = 1* *Maybe = 2* *No!! = 3*	QD14
15.	There is nothing left in my life to look forward to.	*Yes! = 1* *Maybe = 2* *No!! = 3*	QD15
16.	My problems and worries will never go away.	*Yes! = 1* *Maybe = 2* *No!! = 3*	QD16
17.	I am as good as other people I know.	*Yes! = 1* *Maybe = 2* *No!! = 3*	QD17
18.	The world is a very mean place.	*Yes! = 1* *Maybe = 2* *No!! = 3*	QD18
19.	There is no reason for me to think that things will get better for me.	*Yes! = 1* *Maybe = 2* *No!! = 3*	QD19
20.	The important people in my life are helpful and nice to me.	*Yes! = 1* *Maybe = 2* *No!! = 3*	QD20
21.	I hate myself.	*Yes! = 1* *Maybe = 2* *No!! = 3*	QD21
22.	I will solve my problems	*Yes! = 1* *Maybe = 2* *No!! = 3*	QD22

23.	Bad things happen to me a lot.	*Yes! = 1* *Maybe = 2* *No!! = 3*	QD23	
24.	I have a friend who is nice and helpful to me.	*Yes! = 1* *Maybe = 2* *No!! = 3*	QD24	
25.	I can do a lot of things well.	*Yes! = 1* *Maybe = 2* *No!! = 3*	QD25	
26.	My future is too bad to think about.	*Yes! = 1* *Maybe = 2* *No!! = 3*	QD26	
27.	My family doesn't care about what happens to me.	*Yes! = 1* *Maybe = 2* *No!! = 3*	QD27	
28.	Things will work out okay for me in the future.	*Yes! = 1* *Maybe = 2* *No!! = 3*	QD28	
29.	I feel guilty for a lot of things.	*Yes! = 1* *Maybe = 2* *No!! = 3*	QD29	
30	No matter what I do, other people make it hard for me to get what I need	*Yes! = 1* *Maybe = 2* *No!! = 3*	DQ30	
31	I am a good person.	*Yes! = 1* *Maybe = 2* *No!! = 3*	QD31	
32	There is nothing to look forward to as I get older.	*Yes! = 1* *Maybe = 2* *No!! = 3*	QD32	
33	I like myself.	*Yes! = 1* *Maybe = 2* *No!! = 3*	QD33	
34	I am faced with many difficulties.	*Yes! = 1* *Maybe = 2* *No!! = 3*	QD34	

35	I have problems with my personality. I have problems with my personality.	*Yes! = 1* *Maybe = 2* *No!! = 3*	QD35	
36	I think that I will be happy as I get older.	*Yes! = 1* *Maybe = 2* *No!! = 3*	QD36	
37	I can contribute to my community	*Yes! = 1* *Maybe = 2* *No!! = 3*	QD37	
38	. I can contribute to my school	*Yes! = 1* *Maybe = 2* *No!! = 3*	QD38	

E Feeling worried...



Many kids and teenagers feel nervous or anxious at times. Please say which of these is true for you

1.	I worry a lot of the time	*Yes=1* *No=2*	QE01	
2.	I worry about what my carers will say to me	*Yes=1* *No=2*	QE02	
3.	I feel that others do not like the way I do things	*Yes=1* *No=2*	QE03	
4.	It is hard for me to get to sleep at night	*Yes=1* *No=2*	QE04	
5.	I worry about what other people think about me	*Yes=1* *No=2*	QE05	
6.	I feel alone even when there are people with me	*Yes=1* *No=2*	QE06	
7.	I worry about what is going to happen	*Yes=1* *No=2*	QE07	

8. Other children are happier than I	*Yes = 1* *No = 2*	**QE08**	
9. I have bad dreams	*Yes = 1* *No = 2*	**QE09**	
10. I wake up scared some of the time	*Yes = 1* *No = 2*	**QE10**	
11. I worry when I go to bed at night	*Yes = 1* *No = 2*	**QE11**	
12. I am nervous	*Yes = 1* *No = 2*	**QE12**	
13. A lot of people are against me	*Yes = 1* *No = 2*	**QE13**	
14. I often worry about something bad happening to me	*Yes = 1* *No = 2*	**QE14**	



What I think and feel.. F

This part of the questionnaire looks at sadness and other difficulties which many people experience at some point in their lives. This questionnaire is arranged in groups of 3 statements. Please listen to each group carefully. Then pick out ONLY ONE statement from each group which best describes the way you have been feeling during the past two weeks

I am sad once in a while=1
I am sad many times=2
I am sad all the time=3
QF01 ☐

Nothing will ever work out for me=1
I am not sure if things will work out for me=2
Things will work out for me OK=3
QF02 ☐

I do most things OK=1
I do many things wrong=2
I do everything wrong=3
QF03 ☐

I hate myself=1
I do not like myself=2
I like myself=3
QF04 ☐

I feel like crying every day=1
I feel like crying many days=2
I feel like crying once in a while=3
QF05 ☐

Things bother me all the time=1
Things bother me many times=2
Things bother me once in a while=3
QF06 ☐

I look OK=1
There are some bad things about my looks=2
I look ugly=3
QFO7 ☐

I do not feel alone=1
I feel alone many times=2
I feel alone all the time=3
QF08 ☐

I have plenty of friends=1
I have some friends but wish I had more=2
I don't have any friends=3
QF09 ☐

Nobody really loves me=1
I am not sure if anybody loves me=2
I am sure that somebody loves me=3
QF10 ☐



What I think about my school G

Tell us about how your school was in the past few days. Write the number for your answer in the box. Choose one answer for each question

1. Kids in my class push and shove each other a lot.	*All of the time =1* *Most of the time = 2* *Sometimes = 3* *Never=4*	**QG01**	
2. Kids in my classroom yell at each other a lot.	*All of the time =1* *Most of the time = 2* *Sometimes = 3* *Never=4*	**QG02**	
3. Kids in my class look out for each other.	*All of the time =1* *Most of the time = 2* *Sometimes = 3* *Never=4*	**QG03**	
4. Kids in my class room wait for their turn to talk.	*All of the time =1* *Most of the time = 2* *Sometimes = 3* *Never=4*	**QG04**	
5. I always wait for my turn to talk.	*All of the time =1* *Most of the time = 2* *Sometimes = 3* *Never=4*	**QG05**	

6. **There are a lot of fights at my school.**

All of the time =1
Most of the time = 2
Sometimes = 3
Never=4

QG06 ☐

7. **When I am angry or sad, I talk about my feelings to other kids at school.**

All of the time =1
Most of the time = 2
Sometimes = 3
Never=4

QG07 ☐

8. **When I am angry or sad, I talk about my feelings to adults at school.**

All of the time =1
Most of the time = 2
Sometimes = 3
Never=4

QG08 ☐

9. **I feel safe at my school.**

All of the time =1
Most of the time = 2
Sometimes = 3
Never=4

QG09 ☐

10. **I feel close to people at this school.**

All of the time =1
Most of the time = 2
Sometimes = 3
Never=4

QG10 ☐

11. **I learn a lot at my school.**

All of the time =1
Most of the time = 2
Sometimes = 3
Never=4

QG11 ☐

Being safe at school

H

1.Do you know what help or assistance is available to you if you are a victim of any crime at school?	*yes = 1* *No = 2*	QH01	
2.IF YES, could you tell me what support is available?	Counselling=1 Other (specify)=2 Medical support=3 Anonymous =4 Reporting=5	QH02	
3.Are you scared of being hurt?	*Yes=1* *No=2*	QH03	
4.Are you scared of criminals?	*Yes=1* *No=2*	QH04	
5.Are you scared of teachers/principal?	*Yes=1* *No=2*	QH05	
6.Are you scared of classmates/friends?	*Yes=1* *No=2*	QH06	
7.Are you scared of being disciplined?	*Yes=1* *No=2*	QH07	
8.Are you scared of other things at school?(specify)	*Yes=1* *No=2*	QH08	
9.Do you know where to go to report if you are a victim of crime at school, or if something bad happens to you at school? (If someone intentionally hurts you, or bullies you, or steals something from you, or in any other way victimises you?)	*Yes=1* *No=2*	QH06	
10.. IF YES, where?	*Principal = 1* *Teacher = 2* *Guidance counsellor = 3* *Private doctor = 4* *NGO/home based care = 5* *Police = 6*	QH10	

	Traditional leader/authority = 7 *Parents = 8* *Childlike = 9* *Social worker = 10* *Other (Specify)*		
11.Has anybody ever threatened to harm you at school?	*Yes = 1* *No = 2*	**QH11**	
12.. If YES, who was that person? (If occurred more than once then refer to the last incident)	*Classmate = 1* *Other learner = 2* *Another learner from outside the school = 3* *Teacher/ Principal = 4* *Other adult = 5*	**QH12**	
13.Have you ever been caned or hit at school for what you have done wrong by the principal or teacher?	*Yes = 1* *No = 2*	**QH13**	
14.Has anything ever happened to make you fear going to school?	*Yes = 1* *No = 2*	**QH14**	
15.. Do you ever fear travelling to and from school?	*Yes = 1* *No = 2*	**QH15**	
16.Have you been assaulted at school in the past 12 months?	*Yes = 1* *No = 2*	**QH16**	
17.Do you personally know people who bought weapons such as knives or guns with them to school?	*Yes = 1* *No = 2*	**QH17**	

I What I think



1. **Have you ever had an alcoholic drink?**	*Yes = 1* *= 2*	**QI01**	
2. **During the past month, how often did you drink alcohol?**	*Not once = 1* *Daily = 2* *Several times per week = 3* *Once a week = 4* *Once a month = 5*	**QI02**	
3. **Have you ever been drunk in the past month?**	*Yes = 1* *No = 2*	**QI03**	
4. **It's easy to get alcohol at school**	*Yes = 1* *No = 2*	**QI04**	
5. **What do you do if a cool kid offers you some alcohol?**	*Say you don't want to drink = 1* *Take the alcohol and pretend to drink = 2* *Take the alcohol and drink = 3*	**QI05**	



What do you think about these? There's no right or wrong answers..

1. Boys and men do not have to be violent	*Agree = 1* *Not Sure = 2* *Disagree = 3*	**QK01**
2. There are things I can do to make myself feel safer.	*Agree = 1* *Not Sure = 2* *Disagree = 3*	**QK02**
3. There are different ways we can control anger.	*Agree = 1* *Not Sure = 2* *Disagree = 3*	**QK03**
4. If someone has made me feel angry, I can tell them how I feel	*Agree = 1* *Not Sure = 2* *Disagree = 3*	**QK04**
5. I think it is OK for adults to get drunk	*Agree = 1* *Not Sure = 2* *Disagree = 3*	**QK05**
6. My friends think it is OK for adults to get drunk	*Agree = 1* *Not Sure = 2* *Disagree = 3*	**QK06**
7. People who drink are more often violent	*Agree = 1* *Not Sure = 2* *Disagree = 3*	**QK07**

L People looking after people.....



(QL01) Who is the person who looks after you most? _____

(QL02 Is there someone in your life you can depend on? _____ **(QL03** Who is that person?_____

Below is a list of people. We'd like to know what kinds of help and support they give you.

This person is a person in my life			
	Yes =1		
Your caregiver	No = 2	QL04	☐
Your sisters or brother	Ina = 1 Ee = 2	QL05	☐
A teacher	Ina = 1 Ee = 2	QL06	☐
The principal or assistant principal	Ina = 1 Ee = 2	QL07	☐
Your best friend	Ina = 1 Ee = 2	QL08	☐
Your group of close friends	Ina = 1 Ee = 2	QL09	☐
(QL10) Other people(Tell us who)_____			

This person is helpful when I have a personal problem			
Your caregiver	Not at all = 1 Sort of= 2 Very = 3	QL11	☐
Your sisters or brother	Not at all = 1 Sort of= 2 Very = = 3	QL12	☐
A teacher	Not at all = 1 Sort of= 2 Very =3	QL13	☐
The principal or assistant principal	Not at all = 1 Sort of= 2 Very =3	QL14	☐
Your best friend	Not at all = 1 Sort of= 2 Very = 3	QL15	☐
Your group of close friends	Not at all = 1 Sort of= 2 Very = 3	QL16	☐

This person is helpful when I need money and other things			
Your caregiver	Not at all = 1 Sort of= 2 Very = 3	QL18	☐
Your sisters or brother	Not at all = 1 Sort of= 2 Very = 3	QL19	☐
A teacher	Not at all = 1 Sort of= 2 Very = 3	QL20	☐
The principal or assistant principal	Not at all = 1 Sort of= 2 Very = 3	QL21	☐
Your best friend	Not at all = 1 Sort of= 2 Very = 3	QL22	☐
Your group of close friends	Not at all = 1 Sort of= 2 Very = 3	QL23	☐

I have fun with this person			
Your caregiver	Not at all = 1 Sort of= 2 Very = 3	QL25	☐
Your sisters or brother	Not at all = 1 Sort of= 2 Very = 3	QL26	☐
A teacher	Not at all = 1 Sort of= 2 Very = 3	QL27	☐
The principal or assistant principal	Not at all = 1 Sort of= 2 Very = 3	QL28	☐

QL 17. Other people(Tell us who)_____

QL 24 Other people(Tell us who)_____

Your best friend Not at all = 1 **QL29** ☐
Sort of = 2
Very = 3

Your group of close friends Not at all = 1 **QL30** ☐
Sort of = 2
Very = 3

QL31 Other people(Tell us who)_____

M Stuff that's been difficult for me



""Do you have meals at school?"	*Ina = 1* *Ee = 2*	**QM01**

Here is Lindiwe and Buntu telling us about things that happen to many kids in Mpumalanga.

Can you tell us if these things are happening to you?

Lindiwe and Buntu often don't have enough food in their home. How many days this week did you not have enough food?	*None=0* *One day=1* *Two days=2* *More than two days=3*	**QM02**
Is anyone in your home getting one of these grants? **Please tick them**	*No grants = 1* *Foster care grant = 2* *Child support grant = 3* *Pension = 4*	**QM03**

N

Buntu and Lindiwe's mother was ill for some time before she died. Their father is unwell at the moment. Some people have been unkind to them because of this.

Have you ever been teased or treated badly because of people in your family being unwell?

1. Teased	*Not at all = 1* *Sometimes = 2* *Often = 3*	**QN01**
2. Treated badly	*Not at all = 1* *Sometimes = 2* *Often = 3*	**QN02**
3. Have people gossiped behind your back about it	*Not at all = 1* *Sometimes = 2* *Often = 3*	**QN03**
4. Did all this upset you?	*Not at all = 1* *Sometimes = 2* *Often = 3*	**QN04**

O **Because someone in my family is sick or has died...**

1. I worry about being rejected	*Strongly Disagree = 1* *Disagree = 2* *Agree = 3* *Strongly Agree = 4*	QO01	
2. I avoid making new friends	*Strongly Disagree = 1* *Disagree = 2* *Agree = 3* *Strongly Agree = 4*	QO02	
3. I feel different and alone	*Strongly Disagree = 1* *Disagree = 2* *Agree = 3* *Strongly Agree = 4*	QO03	
4. If people know, they avoid touching me	*Strongly Disagree = 1* *Disagree = 2* *Agree = 3* *Strongly Agree = 4*	QO04	
5. If people know, they are afraid of me	*Strongly Disagree = 1* *Disagree = 2* *Agree = 3* *Strongly Agree = 4*	QO05	
6. If people know, they think I am a bad person	*Strongly Disagree = 1* *Disagree = 2* *Agree = 3* *Strongly Agree = 4*	QO06	
7. Parents don't want me to be around their kids	*Strongly Disagree = 1* *Disagree = 2* *Agree = 3* *Strongly Agree = 4*	QO07	



Is there anyone who is ill at home? *Yes = 1*

1 **QP01** ☐

No = 2

(QP02 Who is the person who you help look after most?

_____

3 How often in the past month has this person been unwell?

Never = 1
One week = 2
Two weeks = 3 QP03 ☐
Three weeks = 4
All month = 5

4 (QP04) X6 Does your caregiver have any kind of sickness or disability?

If yes, please say what

Q Helping at home



Below are some tasks which children do to help at home. Think about the help you have given over the past month.

Please say how many days you have done this in the last week.

1. Washing clothes for other people	*How many days in the past week? 0;1; 2; 3; 4; 5; 6 or 7*	QQ01	
2. Help a sick person to dress or undress	*How many days in the past week? 0;1; 2; 3; 4; 5; 6 or 7*	QQ02	
3. Help a sick person to have a wash, or bath	*How many days in the past week? 0;1; 2; 3; 4; 5; 6 or 7*	QQO3	
4. Keep someone company when they are sick	*How many days in the past week? 0;1; 2; 3; 4; 5; 6 or 7*	QQ04	
5. Watch out for a sick person to check they are OK	*How many days in the past week? 0;1; 2; 3; 4; 5; 6 or 7*	QQ05	
6. Take brothers or sisters to school	*How many days in the past week? 0;1; 2; 3; 4; 5; 6 or 7*	QQ06	
7. Look after brothers or sisters	*How many days in the past week? 0;1; 2; 3; 4; 5; 6 or 7*	QQ07	
8 Remind someone to take their medication	*How many days in the past week? 0;1; 2; 3; 4; 5; 6 or 7*	QQO8	
9 Cook for the family	*How many days in the past week? 0;1; 2; 3; 4; 5; 6 or 7*	QQ09	
10 Feed a sick person	*How many days in the past week? 0;1; 2; 3; 4; 5; 6 or 7*	QQ10	
11 Clean the home	*How many days in the past week? 0;1; 2; 3; 4; 5; 6 or 7*	QQ11	
12 Take a sick person to the clinic	*How many days in the past week? 0;1; 2; 3; 4; 5; 6 or 7*	QQ12	
13 Go to the clinic to collect medication for someone	*How many days in the past week? 0;1; 2; 3; 4; 5; 6 or 7*	QQ13	
14 Fetching water	*How many days in the past week? 0;1; 2; 3; 4; 5; 6 or 7*	QQ14	
15 Doing a job to earn money for the family	*How many days in the past week?*	QQ15	

	0;1; 2; 3; 4; 5; 6 or 7		
16. **Making the bed for a sick person**	*How many days in the past week?* *0;1; 2; 3; 4; 5; 6 or 7*	**QQ16**	
17. **Washing bedclothes when a someone has been ill**	*How many days in the past week?* *0;1; 2; 3; 4; 5; 6 or 7*	**QQ17**	
18. **Washing or feeding a younger sibling**	*How many days in the past week?* *0;1; 2; 3; 4; 5; 6 or 7*	**QQ18**	
19. **Giving a sick person medication**	*How many days in the past week?* *0;1; 2; 3; 4; 5; 6 or 7*	**QQ19**	
20. **Collect wild foods**	*How many days in the past week?* *0;1; 2; 3; 4; 5; 6 or 7*	**QQ20**	
21. **Collect firewood**	*How many days in the past week?* *0;1; 2; 3; 4; 5; 6 or 7*	**QQ21**	
22. **Work in the field or vegetable garden at home**	*How many days in the past week?* *0;1; 2; 3; 4; 5; 6 or 7*	**QQ22**	
23. **Look after cattle or goats**	*How many days in the past week?* *0;1; 2; 3; 4; 5; 6 or 7*	**QQ23**	

Thinking about HIV R

How does this community feel about children whose parents have HIV?AIDS? with 6 choices ranging to be answered "yes" or "no"

1. **Are you willing to be friends with someone with HIV**	*Yes! = 1* *No! = 2*	**QR01**	
2. **Willing to be friends with someone whose parents have HIV/AIDS**	*Yes! = 1* *No! = 2*	**QR02**	
3. **HIV is a punishment for sinning**	*Yes = 1* *No = 2*	**QR03**	

How does this community feel about children whose parents have HIV?AIDS? with “yes” ,”Maybe”, or “no”

1. People with HIV can look healthy	*Yes = 1* *Maybe = 2* *No = 3*	QS01	
2. You can get HIV from sharing food or cups and plates with someone who has HIV/AIDS	*Yes = 1* *Maybe = 2* *No = 3*	QS02	
3. There is a cure for HIV/AIDS	*Yes = 1* *Maybe = 2* *No = 3*	QS03	
4 AIDS can be caused by witchcraft	*Yes = 1* *Maybe = 2* *No = 3*	QS04	
5 . HIV causes AIDS	*Yes = 1* *Maybe = 2* *No = 3*	QS05	
6 HIV infection can be prevented by using condoms	*Yes = 1* *Maybe = 2* *No = 3*	QS06	
7 You can reduce the risk of HIV by having fewer sexual partners	*Yes = 1* *Maybe = 2* *No = 3*	QSO7	

T

How can you prevent getting HIV/AIDS? (do not read out answers)

1.	**By not having sex**	*Yes = 1* *Maybe = 2* *No = 3*	QT01
2.	**By always using a condom**	*Yes = 1* *Maybe = 2* *No = 3*	QT02
3.	**Not sharing needles with others**	*Yes = 1* *Maybe = 2* *No = 3*	QT03
4	**Avoiding contact with other peoples blood**	*Yes = 1* *Maybe = 2* *No = 3*	QT04
5	**By being faithful to one partner**	*Yes = 1* *Maybe = 2* *No = 3*	QT05
6	**Don't Know**	*Yes = 1* *Maybe = 2* *No = 3*	QT05

U

Do you agree/disagree with the following:

1.	**Boys and girls should be treated equally**	*Agree = 1* *Disagree = 2*	QU01
2.	**If a boy gives a girl presents, she cannot refuse sex**	*Agree = 1* *Disagree = 2*	QU02
3.	**. Boys and girls are not equal**	*Agree = 1* *Disagree = 2*	QU03
4	**A person must have sex with his/her boyfriend/girlfriend to show love**	*Agree = 1* *Disagree = 2*	QU04

What do you want to be when you grow up? ----------

Thank you for your help

Appendix 1B : Self report child questionnaire(Shangaan version)

Vito ra xikolo: _____ Numboro ya mudyondzi: _____

Ntanga: _____ Mufana: ☐ Nhwanyana: ☐

Tiko: _____

Siku: _____ Siku ro velekiwa:----------



Hinkwato ta mina!



Swivutiso leswi u swi hlamulaka laha i swa xihundla.
Leswi swi vula leswaku xikolo xa wena,
mudyondzisi ni vanghana va wena va nge ti tivi tinhlamulo ta wena

Lexi a hi xikambelwana. A ku na nhlamulo leyi nga yona kumbe leyi nga hoxeka. Tinhlamulo ta wena ti nga endla xikolo xa wena ndhawu leyi antswaka. Ha khensa nkharhi ni ku pfuniwa hi wena.

A swi ta hi pfuna loko a wo ringeta ku hlamula swivutiso hinkwaswo hi ku hetiseka na loko kuri leswaku u ni ku kanakana kumbe u kuma leswaku swivutiso swin'wana a swi pfuni nchumu.

A Vanghana ni vana vanw'ana



Vutomi a byi ri njhani eka tinhweti ta ntsevu leti hundzeke?

1.	**Ndzi kumeka ndzi ri ndzexe mikarhi yo tala**	*A hi ntiyiso = 1* *Swi lave kuva ntiyiso = 2* **QA011** *Minkarhi leyo tala = 3*	
2.	**Ndzi ni munghana un'we wa ntiyiso Kumbe vo tala**	*A hi ntiyiso = 1* *Swi lave kuva ntiyiso = 2* **QA012** *Minkarhi leyo tala = 3*	
3.	**Van'wana va tintangha ta mina va ndzi tsakela**	*A hi ntiyiso = 1* *Swi lave kuva ntiyiso = 2* **QA013** *Minkarhi leyo tala = 3*	
4.	**Van'wana vadyondzi ni lavantsongo va ndzi pfuka**	*A hi ntiyiso = 1* *Swi lave kuva ntiyiso = 2* **QA014** *Minkarhi leyo tala = 3*	
5.	**Ndzi kota ku hanya kahle ni vanhu lava kulu ka mina ku tlula lavatsongo**	*A hi ntiyiso = 1* *Swi lave kuva ntiyiso = 2* **QA015** *Minkarhi leyo tala = 3*	
6.	**Ndza ringeta ku hanya kahle ni vanhu van'wana**	*A hi ntiyiso = 1* *Swi lave kuva ntiyiso = 2* **QA016** *Minkarhi leyo tala = 3*	
7.	**Ndzi tala ku avelana ni van'wana**	*A hi ntiyiso = 1* *Swi lave kuva ntiyiso = 2* **QA017** *Minkarhi leyo tala = 3*	
8.	**Ndza swikota ku pfuna loko un'wana a a vavisekile ,a twa ku vava kumbe a vabya**	*A hi ntiyiso = 1* *Swi lave kuva ntiyiso = 2* **QA018** *Minkarhi leyo tala = 3*	

9.	**Ndzi ni ntwela vusiwana eka lavatsongo**	*A hi ntiyiso = 1* *Swi lave kuva ntiyiso = 2* *Minkarhi leyo tala = 3*	**QA019**
10.	**Ndza ti nyiketela ku pfuna van'wana**	*A hi ntiyiso = 1* *Swi lave kuva ntiyiso = 2* *Minkarhi leyo tala = 3*	**QA20**



Ku titwa u nga tshamisekanga!

B

Vutomi a byi ri njhani eka tinhweti ta ntsevu leti hundzeke

1.	**A ndzi tshamiseki. A ndzi swi koti ku tshamiseka nkarhi wo leha**	*A hi ntiyiso = 1* *Swi lave kuva ntiyiso = 2* *Minkarhi leyo tala = 3*	**QB01**
2.	**Ndzi tshama ndzi ri karhi ndzi hundzuluka kumbe ku halahala**	*A hi ntiyiso = 1* *Swi lave kuva ntiyiso = 2* *Minkarhi leyo tala = 3*	**QB02**
3.	**Ndzi lahlekela hi miehleketo hi ku olova**	*A hi ntiyiso = 1* *Swi lave kuva ntiyiso = 2* *Minkarhi leyo tala = 3*	**QB03**
4.	**Ndza tiehleketa ndzi nga si endla nchumu**	*A hi ntiyiso = 1* *Swi lave kuva ntiyiso = 2* *Minkarhi leyo tala = 3*	**QB04**

5. Ndza heta ntirho lowu ndzi wu endlaka	*A hi ntiyiso = 1* *Swi lave kuva ntiyiso = 2* *Minkarhi leyo tala = 3*	**QB05**	

C leswi ndzi tivonisaka swona!



U titwa njhani namuntlha? Funga nhlamulo yin'we eka nhloko mhaka yin'wana ni yin'wana

1. Ndza tsaka hi leswi ndzi endlisaka swona swilo swo tala	*Ndza kaneta swinene = 1* *A hi swona = 2* *Hi swona = 3* *Ndza pfumela swinene = 4*	**QC01**	
2. Ndzi pfa ndzi ehleketa leswaku ndza tsandzeka (ndzi xitsandzeki)	*Ndza kaneta swinene = 1* *A hi swona = 2* *Hi swona = 3* *Ndza pfumela swinene = 4*	**QC02**	
3. Ndza tsaka hi leswi ni nga xiswona tani hi munhu.	*Ndza kaneta swinene = 1* *A hi swona = 2* *Hi swona = 3* *Ndza pfumela swinene = 4*	**QC03**	
4. Ndzi munhu tani hi leswi ndzi swi lavisaka xiswona.	*Ndza kaneta swinene = 1* *A hi swona = 2* *Hi swona = 3* *Ndza pfumela swinene = 4*	**QC04**	
5. Ndzi pfa ndzi va ni tingana hi mina n'wini	*Ndza kaneta swinene = 1* *A hi swona = 2* *Hi swona = 3* *Ndza pfumela swinene = 4*	**QC05**	
6. Ndzi tirhandza ndzi ri leswi ndzi nga xiswona	*Ndza kaneta swinene = 1* *A hi swona = 2* *Hi swona = 3* *Ndza pfumela swinene = 4*	**QC06**	
7. Ndzi munhu wa kahle naswona ndzi tirhandza ndzi ri tano	*Ndza kaneta swinene = 1* *A hi swona = 2* *Hi swona = 3*	**QC07**	

	Ndza pfumela swinene = 4		
8. **Ndzi navela onge loko a ndzi ri ni swin'wana leswi ndzi tinyungubyisaka hi swona.**	*Ndza kaneta swinene = 1* *A hi swona = 2* *Hi swona = 3* *Ndza pfumela swinene = 4*	**QC08**	



Hinkwato ta vutomi bya mina

D

Ndzi ti twa njhani namuntlha? Funga nhlamulo yin'we eka nhloko mhaka yin'wana ni yin'wana

1. **Ndzi kota swilo swotala.**	*Ina! = 1* *Kumbe xana = 2* *Ee! = 3*	**QD01**	
2. **Ntirho wa xikolo a wu tsakisi.**	*Ina! = 1* *Kumbe xana = 2* *Ee! = 3*	**QD02**	
3. **Vanhu vo tala va ni vunghana naswona va ndzi pfuna.**	*Ina! = 1* *Kumbe xana = 2* *Ee! = 3*	**QD03**	
4. **Ku hava lexi ndzi tirhelaka.**	*Ina! = 1* *Kumbe xana = 2* *Ee! = 3*	**QD04**	
5. **Ndzi xi tsandzeki.**	*Ina! = 1* *Kumbe xana = 2* *Ee! = 3*	**QD05**	
6. **Ndza navela ku ehleketa hi leswa kahle leswi nga ta ndzi humelela nkarhi lowu taka.**	*Ina! = 1* *Kumbe xana = 2* *Ee! = 3*	**QD06**	
7. **Ntirho wa mina wa xikolo wu famba kahle.**	*Ina! = 1* *Kumbe xana = 2* *Ee! = 3*	**QDO7**	
8. **Vanhu lava ndzi va tivaka va ndzi pfuna loko ndzi va kombela.**	*Ina! = 1* *Kumbe xana = 2*	**QDO8**	

		Ee! = 3	
9.	**Ndza tshemba leswaku swilo swi ta ndzi fambela kahle eka malembe lawa ya taka.**	*Ina! = 1* *Kumbe xana = 2* *Ee! = 3*	**QD09**
10.	**Ndzi onhile vunghana lebyi ndzi nga va na byona.**	*Ina! = 1* *Kumbe xana = 2* *Ee! = 3*	**QD10**
11.	**Swotala leswo tsakisa swita ndzi humelela nkarhi lowu taka.**	*Ina! = 1* *Kumbe xana = 2* *Ee! = 3*	**QD11**
12.	**Swilo leswi ndzi swi endlaka masiku hinkwawo swa tsakisa.**	*Ina! = 1* *Kumbe xana = 2* *Ee! = 3*	**QD12**
13.	**A ndzi swikoti ku endla nchumu xa kahle.**	*Ina! = 1* *Kumbe xana = 2* *Ee! = 3*	**QD13**
14.	**Vanhu va ndzi rhandza.**	*Ina! = 1* *Kumbe xana = 2* *Ee! = 3*	**QD14**
15.	**A kuna xa kahle evuton'wini bya mina lexi ndzi nga xi langutelaka.**	*Ina! = 1* *Kumbe xana = 2* *Ee! = 3*	**QD15**
16.	**Ku khunguvanyeka ni ku vilela ka mina ku nge heli.**	*Ina! = 1* *Kumbe xana = 2* *Ee! = 3*	**QD16**
17.	**Ndzi kahle ndzi fana na vanhu van'wana.**	*Ina! = 1* *Kumbe xana = 2* *Ee! = 3*	**QD17**
18.	**Misava leyi yi tele swo biha.**	*Ina! = 1* *Kumbe xana = 2* *Ee! = 3*	**QD18**
19.	**Ku hava xivangelo lexi ndzi endlaka ndzi ehleketa leswaku swilo swi ta ndzi fambela kahle.**	*Ina! = 1* *Kumbe xana = 2* *Ee! = 3*	**QD19**
20.	**Vanhu va nkoka evuton'wini bya mina va pfuna naswona va kahle eka mina.**	*Ina! = 1* *Kumbe xana = 2* *Ee! = 3*	**QD20**

21.	**Ndza tivenga.**	*Ina! = 1* *Kumbe xana = 2* *Ee! = 3*	**QD21**
22.	**Ndzi ta kuma xintshunxo eka swiphiqo swa mina.**	*Ina! = 1* *Kumbe xana = 2* *Ee! = 3*	**QD22**
23.	**Swilo swo ka swinga ri kahle swa ndzi humelela.**	*Ina! = 1* *Kumbe xana = 2* *Ee! = 3*	**QD23**
24.	**Ndzi ni munghana loyi a nga kahle no ndzi pfuna.**	*Ina! = 1* *Kumbe xana = 2* *Ee! = 3*	**QD24**
25.	**Ndzi kota ku endla leswo tala kahle.**	*Ina! = 1* *Kumbe xana = 2* *Ee! = 3*	**QD25**
26.	**Vumundzuku bya mina byi bihe ngopfu andzi naveli no ehleketa hi byona.**	*Ina! = 1* *Kumbe xana = 2* *Ee! = 3*	**QD26**
27.	**Vandyangu wa mina a va na mhaka ni leswaku ku humelela yini hi mina.**	*Ina! = 1* *Kumbe xana = 2* *Ee! = 3*	**QD27**
28.	**Swilo swa mina swi ta va kahle hi masiku lawa ya taka.**	*Ina! = 1* *Kumbe xana = 2* *Ee! = 3*	**QD28**
29.	**Ndzi titwa nandzu eka leswo tala.**	*Ina! = 1* *Kumbe xana = 2* *Ee! = 3*	**QD29**
30	**Hambi loko ndzi endla swa kahle, vanhu van'wana va endla leswaku swi ndzi tikela ku kuma leswi ndzi swi lavaka.**	*Ina! = 1* *Kumbe xana = 2* *Ee! = 3*	**DQ30**
31	**Ndzi munhu loyi a lulameke.**	*Ina! = 1* *Kumbe xana = 2* *Ee! = 3*	**QD31**
32	**A kuna nchumu lexi ndzi nga xi langutelaka eku kuleni ka mina.**	*Ina! = 1* *Kumbe xana = 2* *Ee! = 3*	**QD32**

33	**Ndza tirhandza.**	*Ina! = 1* *Kumbe xana = 2* *Ee! = 3*	**QD33**
34	**Ndzi langutane ni swiphiqo swo tala.**	*Ina! = 1* *Kumbe xana = 2* *Ee! = 3*	**QD34**
35	**Ndzi ni xiphiqo hi leswi vumunhu bya mina byi nga xiswona.**	*Ina! = 1* *Kumbe xana = 2* *Ee! = 3*	**QD35**
36	**Ndzi tshemba leswaku ndzi ta tsaka loko ndzi kurile.**	*Ina! = 1* *Kumbe xana = 2* *Ee! = 3*	**QD36**
37	**Ndzi nga pfuna eka muganga lowu ndzi tshamaka eka wona.**	*Ina! = 1* *Kumbe xana = 2* *Ee! = 3*	**QD37**
38	**Ndzi nga pfuna exikolweni xa mina**	*Ina! = 1* *Kumbe xana = 2* *Ee! = 3*	**QD38**

E Ku vilela...



Nkarhi wun'wana vana lavantsongo ni lavakulu va titwa va ri ni ku chuha kumbe ku kanakana. U komberiwa ku vula leswi nga ntiyiso eka wena.

1.	**Ndza vilela minkarhi leyo tala**	*Ina=1* *Ee=2*	**QE01**
2.	**Ndza vilela hi leswi lava ndzi hlayisaka va nga ta swi vula eka mina**	*Ina=1* *Ee=2*	**QE02**
3.	**Ndzi vilerisiwa hikuva van'wana a va nga tsakeli leswi ndzi endlisaka swona swilo**	*Ina=1* *Ee=2*	**QE03**

4. Swa ndzi tikela ku etlela ni vusiku	*Ina = 1* *Ee = 2*	QE04	
5. Ndza vilela hi leswi vanhu va ehleketaka swona hi mina	*Ina = 1* *Ee = 2*	QE05	
6. Ndzi titwa ndzi ri ndexe ni loko ndzi ri ni vanhu	*Ina = 1* *Ee = 2*	QE06	
7. Ndzi vilela hi leswi nga ta ndzi humelela	*Ina = 1* *Ee = 2*	QE07	
8. Vana van'wana va tsakile ku tlula mina	*Ina = 1* *Ee = 2*	QE08	
9. Ndzi ni milorho yo ka yi nga ri kahle	*Ina = 1* *Ee = 2*	QE09	
10. Ndzi pfa ndzi ri ni ku chava nkarhi wun'wana	*Ina = 1* *Ee = 2*	QE10	
11. Ndza vilela loko ndzi ya eku etleleni ni vusiku	*Ina = 1* *Ee = 2*	QE11	
12. Ndza chava	*Ina = 1* *Ee = 2*	QE12	
13. Vanhu vo tala a va yimi na mina	*Ina = 1* *Ee = 2*	QE13	
14. Ndzi tshama ndzi ri karhi ndzi vilela hi leswo biha swi nga ta ndzi humelela	*Ina = 1* *Ee = 2*	QE14	



leswi ndzi ehleketaka ni leswi ndzi titwisaka swona

F

Xiyenge lexi xa swivutiso xi languta ku tsana ni swiphiqo leswi vanhu vo tala va nga na swona enkarhini wo karhi wa vutomi bya vona. Swivutiso leswi swi avanyisiwe hi swiyenge swinharhu. Wa komberiwa leswaku u yingisela eka xiyenge xin'wana na xin'wana hi vukheta. Kutani u hlawula nhlokomhaka yin'we eka xiyenge xin'wana ni xin'wana lexi hlamuselaka kahle leswi u nga titwisa swona eka mavhiki mambirhi lawa ya hundzeke , tsala nomboro ya nhlamulo ya wena eka xibokisana xa le tlhelo. Hlawula nhlamulo yin'we ntsena..

Ndzi twa ndzi tsanile kan'we hi nkarhi un'wana=1
Ndzi twa ndzi tsanile nkarhi wo tala=2 QF01
Ndzi twa ndzi tsanile minkarhi hinkwayo=3

A kuna nchumu xi nga ta ndzi lunghela = 1
A ndzi na ku tshemba leswaku swilo swi ta ndzi lunghela = 2 QF02
Swilo swi ta ndzi lunghela = 3

Ndzi endla swilo swo tala kahle = 1
Ndzi endla swilo swo tala hi ndlela yo hoxeka=2 QF03
Ndzi endla swilo hinkwaswo hi ndlela yo hoxeka = 3

Ndza tivenga = 1
A ndzi tirhandzi = 2 QF04
Ndza tirhandza = 3

Ndzi twa ndzi lava ku rila masiku hinkwawo = 1
Ndzi twa ndzi lava ku rila masiku lawo tala = 2 QF05
Ndzi twa ndzi lava ku rila kanwe hi minkarhi in'wana = 3

Swilo swa ndzi karhata nkarhi hinkwawo = 1
Swilo swa ndzi karhata minkarhi yo tala = 2 QF06
Swilo swa ndzi karhata kanwe hi minkarhi yin'wana = 3

Ndzi langhuteka kahle = 1
Kuni leswi nga ri ku kahle hi leswi ndzi langhutekisaka xiswona = 2 QFO7
Ndzi bihile = 3

A ndzi titwi ndzi ri ndzexe = 1
Ndzi titwa ndzi ri ndzexe minkarhi yo tala = 2 QF08
Ndzi titwa ndzi ri ndzexe minkarhi hinkwayo = 3

Ndzi ni vanghana vo tala = 1
Ndzi na vanghana kambe ndzi navela ku va ni lavo tala = 2 QF09
A ndzi na vanghana = 3

A ndzi rhandziwi hi munhu = 1
A ndzi tshembhi leswaku ku ni munhu loyi a ndzi rhandzaka = 2 QF10
Ndza tshembha leswaku ku ni munhu loyi a ndzir handzaka = 3



Leswi ndzi swi ehleketaka hi xikolo xa mina G

Hi byeli hi laha xikolo xa wena a xi ri xiswona eka masiku lawa ya nga hundza.Tsala nomboro ya nhlamulo leyi yi nga mavonele ya wena eka xibokisana xa le thlelo. Hlawula nhlamulo yin'we ntsena.

12. `Vana va letlilasini ya mina va susumetana ni ku kokakokana swinene.	*Minkarhi hinkwayo =1* *Minkarhi leyo tala = 2* *Nkarhi wun'wana = 3* *A swi humeleli =4*	**QG01**	
13. Vana va tlilasi ya mina va karihelana swinene	*Minkarhi hinkwayo =1* *Minkarhi leyo tala =2* *Nkarhi wun'wana = 3* *A swi humeleli = 4*	**QG02**	
14. Vana va tlilasi ya mina va hlayisana swinene.	*Minkarhi hinkwayo =1* *Minkarhi leyo tala = 2* *Nkarhi wun'wana = 3* *A swi humeleli = 4*	**QG03**	
15. Vana va tlilasi ya mina va nyikana nkarhi wo vulavula	*Minkarhi hinkwayo =1* *Minkarhi leyo tala = 2* *Nkarhi wun'wana = 3* *A swi humeleli = 4*	**QG04**	
16. Ndzi yimela nkarhi wa mina wo vulavula wu fika eka minkarhi hinkwayo.	*Minkarhi hinkwayo =1* *Minkarhi leyo tala = 2* *Nkarhi wun'wana = 3* *A swi humeleli = 4*	**QG05**	

17. Ku ni tinyimpi to tala exikolweni xa mina.	*Minkarhi hinkwayo =1* *Minkarhi leyo tala = 2* *Nkarhi wun'wana = 3* *A swi humeleli = 4*	**QG06**	
18. Loko ndzi hlundzukile kumbe ndzi khunguvanyekile, ndza vulavula hi leswi ndzi titwisaka xiswona na vana van'wana exikolweni.	*Minkarhi hinkwayo =1* *Minkarhi leyo tala = 2* *Nkarhi wun'wana = 3* *A swi humeleli = 4*	**QG07**	
19. Loko ndzi hlundzukile kumbe ndzi khunguvanyekile, ndza vulavula hi leswi ndzi titwisaka xiswona na lavakulu exikolweni.	*Minkarhi hinkwayo =1* *Minkarhi leyo tala = 2* *Nkarhi wun'wana = 3* *A swi humeleli = 4*	**QG08**	
20. Ndzi titwa ndzi hlayisekile exikolweni xa mina.	*Minkarhi hinkwayo =1* *Minkarhi leyo tala = 2* *Nkarhi wun'wana = 3* *A swi humeleli = 4*	**QG09**	
21. Ndzi titwa ndzi ri ekusuhi swinene ni vanhu exikolweni.	*Minkarhi hinkwayo =1* *Minkarhi leyo tala = 2* *Nkarhi wun'wana = 3* *A swi humeleli = 4*	**QG10**	
22. Ndzi dyondza swilo swotala exikolweni xa mina	*Minkarhi hinkwayo =1* *Minkarhi leyo tala = 2* *Nkarhi wun'wana = 3* *A swi humeleli = 4*	**QG11**	

Ku hlayiseka exikolweni H

1. Wa ku tiva laha u nga kumaka ku pfuniwa loko u endliwe swin'wana swa vugevenga exikolweni xana?	*Ina! = 1* *Ee! = 2*	QH01	
2. Loko nhlamulo yi ri INA, U nga ndzi byela hi ku pfuniwa loku nga kona xana?	*Ku vulavurisana ni lava nga swi dyondzela = 1* *Swin'wana (vula u boxa leswi nga kona) = 2* *Ku pfuniwa hi swa rihanyo = 3* *Ndzi vulavula ni munhu loyi a ndzi tivaka = 4* *Ku pota kava nawu = 5*	QH02	
3. Wa chava ku twisiwa ku vava	*Ina = 1* *Ee = 2*	QH03	
4. Wa chava swigevenga?	*Ina = 1* *Ee = 2*	QH04	
5. Wa chava nhloko ya xikolo/vadyondzisi?	*Ina = 1* *Ee = 2*	QH05	
6. Wa chava lava u nghenaka na vona etlelasini/vanghana?	*Ina = 1* *Ee = 2*	QH06	
7. Wa chava ku panichiwa xana?	*Ina = 1* *Ee = 2*	QH07	
8. Wa chava swin'wana exikolweni xana? (boxa leswi u swi chavaka)	*Ina = 1* *Ee = 2*	QH08	
9. Wa ku tiva laha u nga potaka loko u endliwe swin'wana swa vugevenga exikolweni, kumbe swin'wana swo biha swi nga ku humelela exikolweni xana? (loko un'wana a ku twisa ku vava hi vomu, a ku karhata, kumbe ku ku yivela kumbe ku ku hlupha hi ndlela yin'wana?	*Ina = 1* *Ee = 2*	QH06	
10. Loko nhlamulo yi ri INA, leswi swi humelele kwihi?	*Nhloko ya xikolo = 1* *Mudyondzisi = 2* *Mudyondzisi wa Guidance = 3* *Dokodela = 4*	QH10	

NGO/home based care = 5

Phorisa = 6

Ehosini = 7

Vatswari = 8

Riqingo ra Lavantsongo = 9

Social worker = 10

Swin'wana (Boxa)

11.U tshama u xungetiwa hi un'wana a lava ku ku vavisa exikolweni xana?	*Ina=1* *Ee=2*	**QH11**	
12.Loko nhlamulo kuri INA, (Loko swi humelele ko tlula kan'we, tsundzuka loko swi humelela ro hetelela	*Mudyondzi kuloni = 1* *Mudyondzi un'wana = 2* *Mudyondzi un'wana Wa xikolo xin'wana = 3* *Modyondzisi/Nhloko ya xikolo = 4* *Munhu un'wana lonkulu = 5*	**QH12**	
13.U tshama u biwa hi mudyondzisi kumbe nhloko ya xikolo exikolweni hikuva u hoxile	*Ina=1* *Ee=2*	**QH13**	
14.U tshama u humelela hi swin'wan swi ku chavisa ku ya exikolweni xana?	*Ina=1* *Ee=2*	**QH14**	
15.Wa chava ku ya, ni ku vuya hi le xikolweni xana?	*Ina=1* *Ee=2*	**QH15**	
16.U tshama u vavisiwa exikolweni eka tinhweti ta khume mbirhi leti nga hundza xana?	*Ina=1* *Ee=2*	**QH16**	
17.Wa va tiva hi wexe vanhu lava taka ni mikwana kumbe swibamu exikolweni xana?	*Ina=1* *Ee=2*	**QH17**	

I Leswi ndzi swi ehleketaka



1. U tshama u nwa byalwa xana?	*Ina=1* *Ee=2*	**QI01**	
2. Eka n'hweti leyi nga hundza, u nwe kangani byalwa xana?	*Ku nga ri kan'we = 1* *Masiku hinkwawo = 2* *Masiku yo hlaya evhikini = 3* *Kan'we hi vhiki ni = 4* *Kan'we hi n'hweti = 5*	**QI02**	
3. U tshama u dakwa eka n'hweti leyi hundzeke xana?	*Ina! = 1* *Ee! = 2*	**QI03**	
4. Swa olova ku kuma byalwa exikolweni	*Ina=1* *Ee=2*	**QI04**	
5. U endla yini loko n'wana wa kahle a ku nyika byalwa exikolweni xana?	*Vula leswaku a wu lavi ku nwa = 1* *U teka byalwa u endla ingaku wa nwa=2* *U teka byalwa u nwa = 3*	**QI05**	



U ehleketa yini hi leswi landzelaka? Ku hava nhlamulo leyi ka yona kumbe leyi nga hoxeka

1. Vafana ni vavanuna a va boheki ku va ni tinyimpi	*Hi swona = 1* *A ndzi na ntiyiso = 2* *A hi swona = 3*	**QK01**	
2. Kuni leswi ndzi nga swi endlaka leswi ndzi nga endlaka ndzi titwa ndzi hlayisekile	*Hi swona = 1* *A ndzi na ntiyiso = 2* *A hi swona = 3*	**QK02**	
3. Ku ni tindlela to tala to tikhoma loko hi hlundzukile.	*Hi swona = 1* *A ndzi na ntiyiso = 2* *A hi swona = 3*	**QK03**	
4. Loko munhu a ndzi hlundzukisile, ndzi nga n'wi byela hi laha ndzi titwaka ha kona.	*Hi swona = 1* *A ndzi na ntiyiso = 2* *A hi swona = 3*	**QK04**	
5. Ndzi vona swi nga hoxekangi loko lavakulu va dakwa.	*Hi swona = 1* *A ndzi na ntiyiso = 2* *A hi swona = 3*	**QK05**	
6. Vanghana va mina vari swi kahle loko lavakulu va dakwa.	*Hi swona = 1* *A ndzi na ntiyiso = 2* *A hi swona = 3*	**QK06**	
7. Vanhu lavo dakwa va tala ku va ni tinyimpi.	*Hi swona = 1* *A ndzi na ntiyiso = 2* *A hi swona = 3*	**QK07**	

L Vanhu va hlayisa van'wana.....



(QL01) I mani loyi a ku hlayisaka ku tlula van'wana? _____

(QL02) Xana ku na un'wana loyi u n'wi tshembaka eviton'wini? _____ **(QL03)** I mani munhu loyi? _____

Laha hansi kuni nxaxameto wa mavito. Hi lava ku tiva leswaku i mani a ku pfunaka naswona u ku pfunisa ku yini.

Loyi i munhu evuton'wini bya mina

Mulanguteri	Ina = 1 Ee = 2	**QL04** ☐
Buti kumbe Sesi	Ina = 1 Ee = 2	**QL05** ☐
Mudyondzisi	Ina = 1 Ee = 2	**QL06** ☐
Nhloko ya xikolo kumbe mukhomeri wa yena	Ina = 1 Ee = 2	**QL07** ☐
Munghana lonkulu	Ina = 1 Ee = 2	**QL08** ☐
Ntlawa wa vanghana lava va nga kusuhi na mina	Ina = 1 Ee = 2	**QL09** ☐

(QL10) Van'wana vanhu (Boxa vanhu lava)_____

Loyi i munhu loyi a ndzi pfunaka loko ndzi ri na swiphiqo

Mulanguteri	Na nchumu = 1 kumbe xana = 2 swinene = 3	**QL11** ☐
Buti kumbe Sesi	Na nchumu = 1 kumbe xana = 2 swinene = 3	**QL12** ☐
Mudyondzisi	Na nchumu = 1 kumbe xana = 2 swinene = 3	**QL13** ☐
Nhloko ya xikolo kumbe mukhomeri wa yena	Na nchumu = 1 kumbe xana = 2 swinene = 3	**QL14** ☐
Munghana lonkulu	Na nchumu = 1 kumbe xana = 2 swinene = 3	**QL15** ☐
Ntlawa wa vanghana lava va nga kusuhi na	Na nchumu = 1 kumbe xana = 2 swinene = 3	**QL16** ☐

Loyi i munhu loyi a ndzi pfunaka loko ndzi lava mali na swilo swin'wana

Mulanguteri	Na nchumu = 1 kumbe xana = 2 swinene = 3	**QL18** ☐
Buti kumbe Sesi	Na nchumu = 1 kumbe xana = 2 swinene = 3	**QL19** ☐
Mudyondzisi	Na nchumu = 1 kumbe xana = 2 swinene = 3	**QL20** ☐
Nhloko ya xikolo kumbe mukhomeri wa yena	Na nchumu = 1 kumbe xana = 2 swinene = 3	**QL21** ☐
Munghana lonkulu	Na nchumu = 1 kumbe xana =	**QL22** ☐

Ndza tiphina loko ndzi ri ni munhu loyi

Mulanguteri	Na nchumu = 1 kumbe xana = 2 swinene = 3	**QL25** ☐
Buti kumbe Sesi	Na nchumu = 1 kumbe xana = 2 swinene = 3	**QL26** ☐
Mudyondzisi	Na nchumu = 1 kumbe xana = 2 swinene = 3	**QL27** ☐
Nhloko ya xikolo kumbe mukhomeri wa yena	Na nchumu = 1 kumbe xana = 2 swinene = 3	**QL28** ☐
Munghana	Na nchumu = 1	**QL29** ☐

mina

QL 17. Van'wana vanhu (Boxa vanhu lava)

_____

2

swinene = 3

Ntlawa wa Na nchumu = 1

vanghana lava va kumbe xana =

nga kusuhi na mina 2 QL23 ☐

swinene = 3

QL 24 Van'wana vanhu (Boxa vanhu lava)_____

lonkulu kumbe

xana = 2

swinene = 3

Ntlawa wa Na nchumu = 1 **QL30** ☐

vanghana lava va kumbe

nga kusuhi na xana = 2

mina swinene = 3

QL31Van'wana vanhu (Boxa vanhu lava)_____

Mswilo leswi ndzi tik



"Wa dya swakudya exikolweni xana?"	*Ina = 1* *Ee = 2* **QM01**	

Hi lava Lindiwe na Buntu va hi byela swilo leswi swi humelelaka vana votala laha a Mpumalanga.

U nga hi byela loko swilo leswi swi ku humelela xana?

Lindiwe na Buntu va tala ku va va nga ri ni swakudya ekaya, I masiku mangani eka vhiki leri laha u nga kumangiki swakudya u xurha?	*A swi humelelanga=0* *siku rin'we=1* *masiku mambirhi=2* *masiku yo tlula mambirhi=3* **QM02**	

Xana kuni loyi eka nwina a kumaka mali leyi? **U komberiwa ku funga**	*Ku hava mali = 1* **QM03** *Mali ya vana lavo hlayisiwa hi maxaka ni van'wana = 2* *Mali ya mudende wa vana = 3* *mudende = 4*	

Mhani wa Buntu na Lindiwe a va vabya nkarhi wo leha va nga se lova. Tatana wa vona na yena wa vabya sweswi. Vanhu a va nga va khomi kahle hi mhaka ya xiyimo lexi. U tshama u kholeriwa hikuva kuri ni van'wana va vabyaka ekaya?

1. U kholeriwile	*A swi humeleli = 1* *Nkarhi wun'wana = 2* *Minkarhi yo tala = 3*	**QN0 1**	
2. U khomiwa ku biha	*A swi humeleli = 1* *Nkarhi wun'wana = 2* *Minkarhi yo tala = 3*	**QN0 2**	
3. Xana vanhu va vulavula, va hleva hi swona	*A swi humeleli = 1* *Nkarhi wun'wana = 2*	**QN0**	

	Minkarhi yo tala=3	**3**	
4. Leswi swi ku twise ku vava	*A swi humeleli = 1* *Nkarhi wun'wana = 2* *Minkarhi yo tala swinene=3*	**QN04**	

O ***Hikuva un'wana edyangwini wa mina wa vabya kumbe u lovile....***

1. Ndzi vilerisiwa hi ku ka ndzi nga laviwi	*Ndza kaneta swinene = 1* *A hi swona = 2* *Hi swona = 3* *Ndza pfumela swinene = 4*	**QO01**	
2. Ndza kanakana ku va ndzi lava vanghana lavantshwa	*Ndza kaneta swinene = 1* *A hi swona = 2* *Hi swona = 3* *Ndza pfumela swinene = 4*	**QO02**	
3. Ndzi titwa ndzi hambanile ni van'wana naswona ndzi ri ndzexe	*Ndza kaneta swinene = 1* *A hi swona = 2* *Hi swona = 3* *Ndza pfumela swinene = 4*	**QO03**	
4. Loko vanhu va switiva, a va lavi ku ndzi khumba	*Ndza kaneta swinene = 1* *A hi swona = 2* *Hi swona = 3* *Ndza pfumela swinene = 4*	**QO04**	
5. Loko vanhu va switiva va ndzi chava	*Ndza kaneta swinene = 1* *A hi swona = 2* *Hi swona = 3* *Ndza pfumela swinene = 4*	**QO05**	

6. **Loko vanhu va switiva, va ehleketa leswaku ndzi munhu wo biha**

Ndza kaneta swinene = 1
A hi swona = 2
Hi swona = 3
Ndza pfumela swinene = 4

QO06

7. **Vatswari a va swi lavi loko ndzi va ekusuhi na vana va vona**

Ndza kaneta swinene = 1
A hi swona = 2
Hi swona = 3
Ndza pfumela swinene = 4

QO07



1 **Ku ni munhu loy a vabyaka ekaya xana?**

Ina=1
Ee=2

QP01

(QP02) I mani munhu loyi u pfunaka ku n'wi hlayisa ku tlula van'wana? _____

3 **Munhu loyi u vabye ka ngani eka n'hweti leyi nga hundza xana?**

Na nchumu = 1
Vhiki rin'we = 2
Mavhiki mambirhi = 3
Mavhiki manharhu = 4
N'hweti hinkwayo = 5

QP03

4 **(QP04) X6. Muhlayisi wa wena u ni vuvabyi kumbe i mutsoniwa xana? Loko nhlamulo yi ri INA, (Boxa muxaka wa vuvabyi ni vutsoniwa)**

Ku pfuna ekaya



Laha hansi ku ni swinthirhwana leswi vana va swi endlaka ku pfuna emakaya. Ehleketa leswi u nga swi endla ku pfuna ekaya n'hweti leyi nga hundza. Wa komberiwa ku vula masiku lawa u nga pfuna ni leswi unga swi endla eka vhiki leri nga hela.

1. **Ndzi hlantswa swiambalo swa van'wana**	*I masiku yangani eka vhiki leri nga hundza?* **QQ01** *0;1; 2; 3; 4; 5; 6 kumbe 7*		
2. **Ku pfuna munhu loyi a vabyaka, ku n'wi ambarisa ni ku n'wi hluvula**	*I masiku yangani eka vhiki leri nga hundza?* **QQ02** *0;1; 2; 3; 4; 5; 6 kumbe 7*		
3. **Ku pfuna munhu wo vabya ku hlamba**	*I masiku yangani eka vhiki leri nga hundza?* **QQO3** *0;1; 2; 3; 4; 5; 6 kumbe 7*		
4. **Ku hungasa na munhu wo vabya**	*I masiku yangani eka vhiki leri nga hundza?* **QQ04** *0;1; 2; 3; 4; 5; 6 kumbe 7*		
5. **Ku hlayisa muvabyi, ni ku languata loko a ri kahle**	*I masiku yangani eka vhiki leri nga hundza?* **QQ05** *0;1; 2; 3; 4; 5; 6 kumbe 7*		
6. **Ku heleketa vamakwerhu exikolweni**	*I masiku yangani eka vhiki leri nga hundza?* **QQ06** *0;1; 2; 3; 4; 5; 6 kumbe 7*		
7. **Ku hlayisa buti kumbe sesi**	*I masiku yangani eka vhiki leri nga hundza?* **QQ07** *0;1; 2; 3; 4; 5; 6 kumbe 7*		
8 **Ku tsundzuxa un'wana ku teka mirhi**	*I masiku yangani eka vhiki leri nga hundza?* **QQO8** *0;1; 2; 3; 4; 5; 6 kumbe 7*		
9 **Ku swekela vandyangu**	*I masiku yangani eka vhiki leri nga hundza?* **QQ09** *0;1; 2; 3; 4; 5; 6 kumbe 7*		

10	**Ku dyisa muvabyi**	*I masiku yangani eka vhiki leri nga hundza?* *0;1; 2; 3; 4; 5; 6 kumbe 7*	**QQ10**
11	**Ku basisa ekaya**	*I masiku yangani eka vhiki leri nga hundza?* *0;1; 2; 3; 4; 5; 6 kumbe 7*	**QQ11**
12	**Ku heleketa muvabyi etliliniki**	*I masiku yangani eka vhiki leri nga hundza?* *0;1; 2; 3; 4; 5; 6 kumbe 7*	**QQ12**
13	**Ku ya etliliniki ku ya tekela un'wana mirhi**	*I masiku yangani eka vhiki leri nga hundza?* *0;1; 2; 3; 4; 5; 6 kumbe 7*	**QQ13**
14	**Ku ya ka mati**	*I masiku yangani eka vhiki leri nga hundza?* *0;1; 2; 3; 4; 5; 6 kumbe 7*	**QQ14**
15	**Ku tirhela ku kuma mali yo hanyisa vandyangu**	*I masiku yangani eka vhiki leri nga hundza?* *0;1; 2; 3; 4; 5; 6 kumbe 7*	**QQ15**
16.	**Ku andlala masangu ya muvabyi**	*I masiku yangani eka vhiki leri nga hundza?* *0;1; 2; 3; 4; 5; 6 kumbe 7*	**QQ16**
17.	**Ku hlantswela muvabyi minkumba loko a vabya**	*I masiku yangani eka vhiki leri nga hundza?* *0;1; 2; 3; 4; 5; 6 kumbe 7*	**QQ17**
18.	**Ku hlantswela kumbe ku dyisa vana lavantsongo ekaya**	*I masiku yangani eka vhiki leri nga hundza?* *0;1; 2; 3; 4; 5; 6 kumbe 7*	**QQ18**
19.	**Ku nyika muvabyi mirhi**	*I masiku yangani eka vhiki leri nga hundza?* *0;1; 2; 3; 4; 5; 6 kumbe 7*	**QQ19**
20.	**Ku ya kha mihandzu ya nhova**	*I masiku yangani eka vhiki leri nga hundza?* *0;1; 2; 3; 4; 5; 6 kumbe 7*	**QQ20**
21.	**Ku ya tshova tihunyi**	*I masiku yangani eka vhiki leri nga hundza?* *0;1; 2; 3; 4; 5; 6 kumbe 7*	**QQ21**

22.	**Ku tirha emasin'wini kumbe exirhapeni xa le kaya**	*I masiku yangani eka vhiki leri nga hundza?* **QQ22** *0;1; 2; 3; 4; 5; 6 kumbe 7*	
23.	**Ku risa tihomu na timbuti**	*I masiku yangani eka vhiki leri nga hundza?* **QQ23** *0;1; 2; 3; 4; 5; 6 kumbe 7*	

Ku ehleketa hi HIV

Vanhu va muganga wa ka n'wina va tekisa ku yini vanhu lava nga ni xitsongwatsongwana xa HIV/AIDS? U hlawula eka nharhu wa swivutiso kutani u hlamula "Ina!" kumbe "Ee!"

1. Wa swi navela ku va na munghana loyi a nga ni xitsongwatsongwana xa HIV xana?	*Ina! = 1* *Ee! = 2*	QR0 1	
2. Wa swi navela ku va na munghana loyi vatswari va yena va nga ni xitsongwatsongwana xa HIV xana?	*Ina! = 1* *Ee! = 2*	QR0 2	
3. Xitsongwatsongwana xa HIV i nkhavi wa lava nga dyoha	*Hi swona = 1* *A hi swona = 2*	QR0 3	

Vanhu va muganga wa ka n'wina va tekisa ku yini vanhu lava nga ni xitsongwatsongwana xa HIV/AIDS? U hlawula eka nkombo wa swivutiso kutani u hlamula "Ina!" kumbe "Ee!"

1. Vanhu lava nga ni xitsongwatsongwana xa HIV va nga languteka va hanyile.	*Ina = 1* *Kumbe xana = 2* *Ee = 3*	QS01	
2. U nga khomiwa hi xitsongwatsongwana xa HIV hi ku dya swakudya kumbe ku tirhisa bikirhi na puleti leyi nga tirhisa hi munhu loyi a nga na xitsongwatsongwana xa HIV/AIDS	*Ina = 1* *Kumbe xana = 2* *Ee = 3*	QS02	
3. Ku ni ndlela yo tshungula xitsongwatsongwana xa HIV/AIDS	*Ina = 1* *Kumbe xana = 2* *Ee = 3*	QS03	
4 Xitsongwatsongwana xa HIV/AIDS xi nga vangiwa hi ku loyiwa	*Ina = 1* *Kumbe xana = 2*	QS04	

		Ee = 3	
5	**Xitsongwatsongwana xa HIV xi vanga AIDS?**	*Ina = 1* *Kumbe xana = 2* *Ee = 3*	**QS05**
6	**Xitsongwatsongwana xa HIV xi nga siveriwa hi ku tirhisa khondomu**	*Ina = 1* *Kumbe xana = 2* *Ee = 3*	**QS06**
7	**U nga hunguta ku tluleriwa hi xitsongwatsongwana xa HIV hi ku va ni varhandzani vo ka va nga talangi**	*Ina = 1* *Kumbe xana = 2* *Ee = 3*	**QSO 7**

U nga siverisa ku yini ku tluleriwa hi* xitsongwatsongwana xa HIV *? (u nga hlayeli henhla tinhlamulo)

1.	**Hi ku ka u nga endli swa le masangwini**	*Ina = 1* *Kumbe xana = 2* *Ee = 3*	QTO 1
2.	**Hi ku tirhisa khondomu nkarhi hinkwawo**	*Ina = 1* *Kumbe xana = 2* *Ee = 3*	QTO 2
3.	**Hi ku ka u nga tirhisi nareta leti nga tirhisiwa hi un'wana/van'wana**	*Ina = 1* *Kumbe xana = 2* *Ee = 3*	QTO 3
4	**Hi ku ka u nga hlangani ni nghati ya van'wana vanhu**	*Ina = 1* *Kumbe xana = 2* *Ee = 3*	QTO 4
5	**Hi ku va u tshembeka ka murhandziwa wa wena**	*Ina = 1* *Kumbe xana = 2* *Ee = 3*	QTO 5
6	**A ndzi swi tivi**	*Ina = 1* *Kumbe xana = 2* *Ee = 3*	QTO 5



Wa pfumelelana kumbe ku kaneta leswi landzelaka:

1. Vafana ni vanhwanyana va fanele ku khomiwa ku fana	*Hi swona = 1*	QU0	
	A hi swona = 2	1	
2. Loko mufana a nyika nhwanyana tinyiko, nhwanyana a nge swikoti ku ala ku endla swa le masangwini na yena	*Hi swona = 1*	QU0	
	A hi swona = 2	2	
3. Vafana ni vanhwanyana a va ringani	*Hi swona = 1*	QU0	
	A hi swona = 2	3	
4 Munhu u fanele ku ya emasangwini ni murhandzani wa xinuna/ wa xisati ku n'wi komba rirhandzu	*Hi swona = 1*	QU0	
	A hi swona = 2	4	

Xana u lava ku va yini loko u kula? ----------

Hi Nkhensa ku pfuniwa hi n'wina

Appendix:1 (c) Summary of Components, Data sources and Domains of the Study

Self-Report Child Questionnaire

Variable	Questionnaire Items	Scale (Domain name)	Questionnaire (Domain Description) or Data Source	Domain value and text	Domain Type
QQA01	I am usually on my own	Peer problems	Peer problems subscale of SDQ	*Not True = 1* *Somewhat True = 2* *Certainly True = 3*	Nominal
QQA02	I have one good friend or more	Peer problems			
QQA03	Other learners my age generally like me	Peer problems			
QQA04	Other learners or young people pick on me	Peer problems			
QQA05	I get on better with adults than people my age	Peer problems			
QQA06	I try to be nice to other people	Prosocial behaviour problems	Prosocial subscale of SDQ	*Not True = 1* *Somewhat True = 2* *Certainly True = 3*	Nominal
QQA07	I usually share with other	Prosocial behaviour problems			
QQA08	I am helpful if someone is hurt, upset of feeling ill	Prosocial behaviour problems			
QQA09	I am kind to younger children	Prosocial behaviour problems			
QQA10	I often volunteer to help others	Prosocial behaviour problems			
QQB01	I am restless. I can't stay still for long	Hyperactivity	Hyperactivity subscale of SDQ	*Not True = 1* *Somewhat Tue = 2* *Certainly True = 3*	Nominal
QQB02	I am constantly fidgeting or squirming	Hyperactivity			
QQB03	I am easily distracted	Hyperactivity			
QQB04	I think before I do things	Hyperactivity			
QQB05	I finish the work I am doing	Hyperactivity			
QQC01	I am happy with the way I can do most things	Self-esteem		*Strongly Disagree = 1* *Disagree = 2*	Nominal
QQC02	I sometimes think I am a failure (a loser).	Self-esteem?			
QQC03	I am happy with myself as a person.	Self-esteem	DuBois Self Esteem Questionnaire	*Agree = 3* *Strongly Agree = 4*	
QQC04	I am the kind of person I want to be.	Self-esteem			
QQC05	I often feel ashamed of myself	Self-esteem			
QQC06	I like being just the way I am	Self-esteem			
QQC07	I am as good a person as I want to be	Self-esteem			
QQC08	I wish I had more to be proud of.	Self-esteem			
	I do well at many different things	Cognitive	Cognitive Triad inventory for children (CTI-C)	Yes! = 1 Maybe = 2 No!! = 3	Nominal
QQD02	Schoolwork is no fun	Cognitive			
QQD03	Most people are friendly and helpful	Cognitive			
QQD04	Nothing is likely to work out for me	Cognitive			
QQD05	I am a failure	Cognitive			
QQD06	I like to think about the good things that will happen for me in the future	Cognitive			
QQD07	I do my schoolwork okay. I do my schoolwork okay.	Cognitive			
QQD08	The people I know help me when I need it.	Cognitive			
QQD09	I think that things will be going very well for me a few years from now.	Cognitive			
QQD10	I have messed up almost all the best friendships I have ever had.	Cognitive			

QQD11	Lots of fun things will happen for me in the future.	Cognitive			
QQD12	The things I do every day are fun.	Cognitive			
QQD13	I can't do anything right.	Cognitive			
QQD14	People like me.	Cognitive			
QQD15	There is nothing left in my life to look forward to.	Cognitive			
QQD16	My problems and worries will never go away.	Cognitive			
QQD17	I am as good as other people I know.	Cognitive			
QQD18	The world is a very mean place.	Cognitive			
QQD19	There is no reason for me to think that things will get better for me.	Cognitive			
QQD20	The important people in my life are helpful and nice to me.	Cognitive			
QQD21	I hate myself.	Cognitive			
QQD22	I will solve my problems	Cognitive			
QQD23	Bad things happen to me a lot.	Cognitive			
QQD24	I have a friend who is nice and helpful to me.	Cognitive			
QQD25	I can do a lot of things well.	Cognitive			
QQD26	My future is too bad to think about.	Cognitive			
QQD27	My family doesn't care about what happens to me.	Cognitive			
QQD28	Things will work out okay for me in the future.	Cognitive			
QQD29	I feel guilty for a lot of things.	Cognitive			
QQD30	No matter what I do, other people make it hard for me to get what I need	Cognitive			
QQD31	I am a good person.	Cognitive			
QQD32	There is nothing to look forward to as I get older.	Cognitive			
QQD33	I like myself.	Cognitive			
QQD34	I am faced with many difficulties.	Cognitive			
QQD35	I have problems with my personality. I have problems with my personality.	Cognitive			
QQD36	I think that I will be happy as I get older.	Cognitive			
QQD37	I can contribute to my community	Cognitive			
QQD38	. I can contribute to my school	cognitive			
QQE01	I worry a lot of the time	Depression	Children's Depression Inventory(CDI)	Yes=1 No=2	Nominal
QQE02	I worry about what my carers will say to me	Depression			
QQE03	I feel that others do not like the way I do things	Depression			
QQE04	It is hard for me to get to sleep at night	Depression			
QQE05	I worry about what other people think about me	Depression			
QQE06	I feel alone even when there are people with me	Depression			
QQE07	I worry about what is going to happen	Depression			
QQE08	Other children are happier than I	Depression			
QQE09	I have bad dreams	Depression			
QQE10	I wake up scared some of the time	Depression			
QQE11	I worry when I go to bed at night	Depression			
QQE12	I am nervous	Depression			

QQE13	A lot of people are against me	Depression			
QQE14	I often worry about something bad	Depression			
QQF01	happening to me I am sad once in a while=1 I am sad many times=2 I am sad all the time=3			I am sad once in a while=1 I am sad many times=2 I am sad all the time=3	Nominal
QQF02	Nothing will ever work out for me=1 I am not sure if things will work out for me=2 Things will work out for me OK=3	Depression		Nothing will ever work out for me=1 I am not sure if things will work out for me=2 Things will work out for me OK=3	Nominal
QQF03	I do most things OK=1 I do many things wrong=2 I do everything wrong=3	Depression		I do most things OK=1 I do many things wrong=2 I do everything wrong=3	Nominal
QQF04	I hate myself=1 I do not like myself=2 I like myself=3	Depression		I hate myself=1 I do not like myself=2 I like myself=3	Nominal
QQF05	I feel like crying every day=1 I feel like crying many days=2 I feel like crying once in a while=3	Depression		I feel like crying every day=1 I feel like crying many days=2 I feel like crying once in a while=3	Nominal
QQF06	Things bother me all the time=1 Things bother me many times=2 Things bother me once in a while=3	Depression		Things bother me all the time=1 Things bother me many times=2 Things bother me once in a while=3	Nominal Nominal
QQF07	I look OK=1 There are some bad things about my looks=2 I look ugly=3			I look OK=1 There are some bad things about my looks=2 I look ugly=3	Nominal
QQF08	I do not feel alone=1 I feel alone many times=2 I feel alone all the time=3			I do not feel alone=1 I feel alone many times=2 I feel alone all the time=3	
QQF09	I have plenty of friends=1			I have plenty of friends=1	Nominal
	I have some friends but wish I had more=2 I don't have any friends=3			I have some friends but wish I had more=2 I don't have any friends=3	
QQF10	Nobody really loves me=1 I am not sure if anybody loves me=2 I am sure that somebody loves me=3			Nobody really loves me=1 I am not sure if anybody loves me=2 I am sure that somebody loves me=3	Nominal
QQG01	Kids in my class push and shove each other a lot.	Perception of School Environment	Selected Questions from Peace Zone	*All of the time =1* *Most of the time = 2* *Sometimes = 3* *Never=4*	Nominal
QQG02	Kids in my classroom yell at each other a lot.	Perception of School			

QQG03	Kids in my class look out for each other.	Environment Perception of School Environment			
QQG04	Kids in my class room wait for their turn to talk.	Perception of School Environment			
QQG05	I always wait for my turn to talk.	Perception of School Environment			
QQG06	There are a lot of fights at my school.	Perception of School Environment			
QQG07	When I am angry or sad, I talk about my feelings to other kids at school.	Perception of School Environment			
QQG08	When I am angry or sad, I talk about my feelings to adults at school.	Perception of School Environment			
QQG09	I feel safe at my school.	Perception of School Environment			
QQG10	I feel close to people at this school.	Perception of School Environment			
QQG11	I learn a lot at my school.	Perception of School Environment			
QQH01	Do you know what help or assistance is available to you if you are a victim of any crime at school?	Safety at school		*yes = 1* *No = 2*	Nominal
QQH02	IF YES, could you tell me what support is available?	Safety at school		Counselling=1 Other (specify)=2 Medical support=3 Anonymous =4 Reporting=5	Nominal
QQH03	Are you scared of being hurt?	Safety at school		*Yes=1* *No=*	Nominal Nominal
QQH04	Are you scared of criminals?	Safety at school			
QQH05	Are you scared of teachers/principal?	Safety at school			
QQH06	Are you scared of classmates/friends?	Safety at school			
QQH07	Are you scared of being disciplined?	Safety at school			
QQH08	Are you scared of other things at school?(specify)	Safety at school			
QQH08b	Specify	Safety at school			
QQH09	Do you know where to go to report if you are a victim of crime at school, or if something bad happens to you at school? (If someone intentionally hurts you, or bullies you, or steals something from you, or in any other way victimises you?)	Safety at school	Safety at School questionnaire Fein,Vsskuil,Pollack, Borum		

QQH10	IF YES, where?	Safety at school	Modzeleski&Reddy(2002)	*Principal = 1* *Teacher = 2* *Guidance counsellor = 3* *Private doctor = 4* *NGO/home based care = 5* *Police = 6* *Traditional leader/authority= 7* *Parents = 8* *Childlike = 9* *Social worker = 10*	Nominal
QQH11	Has anybody ever threatened to harm you at school?	Safety at school		*Yes=1* *No=2*	Nominal
QQH12	If YES, who was that person? (If occurred more than once then refer to the last incident)	Safety at school		*Classmate = 1* *Other learner = 2* *Another learner from outside the school = 3* *Teacher/ Principal = 4* *Other adult = 5*	Nominal
QQH13	Have you ever been caned or hit at school for what you have done wrong by the principal or teacher?	Safety at school		*Yes=1* *No=2*	Nominal
QQH14	Has anything ever happened to make you fear going to school?				
QQH15	Do you ever fear travelling to and from school?	Safety at school			
QQH16	Have you been assaulted at school in the past 12 months?	Safety at school			
QQH17	Do you personally know people who bought weapons such as knives or guns with them to school?	Safety at school			
QQI01	Have you ever had an alcoholic drink?	Alcohol experience		*Yes=1* *No=2*	Nominal
QQI02	During the past month, how often did you drink alcohol?	Alcohol experience	Mayer&Filstead(1979)	*Not once = 1* *Daily= 2* *Several times per week = 3* *Once a week= 4* *Once a month = 5*	Nominal
QQI03	Have you ever been drunk in the past month?	Alcohol experience		*Yes = 1* *No = 2*	Nominal
QQI04	It's easy to get alcohol at school	Alcohol experience		*Yes = 1* *No = 2*	Nominal
QQI05	What do you do if a cool kid offers you some alcohol?	Alcohol experience		*Say you don't want to drink= 1* *Take the alcohol*	Nominal

				and pretend to drink=2 *Take the alcohol and drink = 3*	
QQK01	Boys and men do not have to be violent	Attitudes and beliefs related to Alcohol		*Agree = 1* *Not Sure = 2* *Disagree= 3*	Nominal
QQK02	There are things I can do to make myself feel safer.	Attitudes and beliefs related to Alcohol			
QQK03	There are different ways we can control anger.				
QQK04	If someone has made me feel angry, I can tell them how I feel	Attitudes and beliefs related to Alcohol			
QQK05	I think it is OK for adults to get drunk	Attitudes and beliefs related to Alcohol			
QQK06	My friends think it is OK for adults to get drunk	Attitudes and beliefs related to Alcohol			
QQK07	People who drink are more often violent	Attitudes and beliefs related to Alcohol			
QQL01	Who is the person who looks after you most?	Person in life			
QQL02	Is there someone in your life you can depend on?	Person in life			
QQL03	Who is that person?_____	Person in life			
QQL04	Your caregiver	This person is a person in my life	Social Support scale Adolescent Pathways Project (1992)	Yes =1 No = 2	Nominal
QQL05 QQL06	Your sisters or brother A teacher				
QQL07	The principal or assistant principal			Yes =1 No = 2	Nominal
QQL08	Your best friend				
QQL09	Your group of close friends				
QQL10	Other people(Tell us who)_____				
QQL11	Your caregiver	This person is helpful when I have a personal problem		Not at all = 1 Sort of= 2 Very = 3	Nominal
QQL12	Your sisters or brother				
QQL13	A teacher				
QQL14	The principal or assistant principal				
QQL15	Your best friend				
QQL16	Your group of close friends				
QQL17	Other people(Tell us who)_____				
QQL18	Your caregiver	This person is helpful when I need money and other things		Not at all = 1 Sort of= 2 Very = 3	Nominal
QQL19	Your sisters or brother				
QQL20	A teacher				
QQL21	The principal or assistant principal				

QQL22	Your best friend				
QQL23	Your group of close friends				
QQL24	Other people(Tell us who)_____				
QQL25	Your caregiver	I have fun with this person		Not at all = 1 Sort of= 2 Very = 3	Nominal
QQL26	Your sisters or brother				
QQL27	A teacher				
QQL28	The principal or assistant principal				
QQL29	Your best friend				
QQL30	Your group of close friends				
QQL31	Other people(Tell us who)_____				
QQM01	""Do you have meals at school?"	Food security	Cluver et al 2008	*Yes =1* *No=2* *None=0*	Nominal
QQM02	Lindiwe and Buntu often don't have enough food in their home.	Food security			
	How many days this week did you not have enough food?			*One day=1* *Two days=2* *More than two days=3*	Nominal
QQM03	Is anyone in your home getting one of these grants?	Child care grants		*No grants = 1* *Foster care grant= 2* *Child support grant = 3* *Pension = 4*	Nominal
QQN01	Teased	Stigma	. Cluver, Gardner and Operio 2007 .	*Not at all = 1* *Sometimes= 2* *Often=3*	
QQN02	Treated badly	Stigma			
QQN03	Have people gossiped behind your back about it	Stigma			
QQN04	Did all this upset you?	Stigma			
QQO01	I worry about being rejected	Stigma		*Strongly Disagree = 1* *Disagree = 2* *Agree= 3* *Strongly Agree =*	
QQO02	I avoid making new friends	Stigma			
QQO03	I feel different and alone	Stigma			
QQO04	If people know, they avoid touching me	Stigma	Mason &Berger 2008		
QQO05	If people know, they are afraid of me	Stigma			
QQO06	If people know, they think I am a bad person	Stigma			
QQO07	Parents don't want me to be around their kids	Stigma			
QQP01	Is there anyone who is ill at home?	Illness in household	Global Questions from WHO 2003 CLASSIFICATION OF FUNCTIONING, DISABILITY AND HEALTH ICF	*Yes=1* *No=2* *Never = 1*	Nominal
QQP02	Who is the person who you help look after most?	Illness in household			
QQP03	How often in the past month has this person been unwell?	Illness in household		*One week = 2* *Two weeks = 3* *Three weeks= 4*	Nominal
QQP04	Does your caregiver have any kind of	llness in			

	sickness or disability?	household		*All month = 5*	
QQQ01	If yes, please say what Washing clothes for other people	Child's caregiving & labour tasks		*How many days in the past week? 0;1; 2; 3; 4; 5; 6 or 7*	Nominal
QQQ02	Help a sick person to dress or undress	Child's caregiving & labour tasks			
QQQ03	Help a sick person to have a wash, or bath	Child's caregiving & labour tasks			
QQQ04	Keep someone company when they are sick	Child's caregiving & labour tasks			
QQQ05	Watch out for a sick person to check they are OK	Child's caregiving & labour tasks			
QQQ06	Take brothers or sisters to school	Child's caregiving & labour tasks			
QQQ07	Look after brothers or sisters	Child's caregiving & labour tasks	ORPHAN CHILDREN STUDY Cluver&Gardner 2007		Nominal Nominal Nominal
QQQ08	Remind someone to take their medication	Child's caregiving & labour tasks			
QQQ09	Cook for the family	Child's caregiving & labour tasks			
QQQ10	Feed a sick person	Child's caregiving & labour tasks			
QQQ11	Clean the home	Child's caregiving & labour tasks			
QQQ12	Take a sick person to the clinic	Child's caregiving & labour tasks			
QQQ13	Go to the clinic to collect medication for someone	Child's caregiving & labour tasks			
QQQ14	Fetching water	Child's caregiving & labour tasks			
QQQ15	Doing a job to earn money for the family	Child's caregiving & labour tasks			
QQQ16	Making the bed for a sick person	Child's caregiving & labour tasks			
QQQ17	Washing bedclothes when a someone has been ill	Child's caregiving & labour tasks			
QQQ18	Washing or feeding a younger sibling	Child's caregiving & labour tasks			
QQQ19	Giving a sick person medication	Child's caregiving & labour tasks			
QQQ20	Collect wild foods	Child's caregiving & labour tasks			
QQQ21	Collect firewood	Child's caregiving & labour tasks			
QQQ22	Work in the field or vegetable garden at home	Child's caregiving &			

		labour tasks			
QQQ23	Look after cattle or goats	Child's caregiving & labour tasks			
QQR01	Are you willing to be friends with someone with HIV?	Attitudes about HIV		*Yes! = 1* *No! = 2*	Nominal
QQR02	Willing to be friends with someone whose parents have HIV/AIDS?	Attitudes about HIV			
QQR03	HIV is a punishment for sinning	Attitudes about HIV			
QQS01	People with HIV can look healthy	Knowledge about HIV			
QQS02	You can get HIV from sharing food or cups and plates with someone who has HIV/AIDS	Knowledge about HIV	National Survey of HIV and risk behaviour RHRU & LOVELIFE 2005	*Yes=1* *Maybe=2* *No=3*	Nominal
QQS03	There is a cure for HIV/AIDS	Knowledge about HIV			
QQS04	AIDS can be caused by witchcraft	Knowledge about HIV			
QQS05	. HIV causes AIDS	Knowledge about HIV			
QQS06	HIV infection can be prevented by using condoms	Knowledge about HIV			
QQS07	You can reduce the risk of HIV by having fewer sexual partners	Knowledge about HIV			
QQT01	By not having sex	Knowledge about HIV Prevention	Demographic and Health Survey DoH &MRC 2007	*Yes=1* *Maybe=2* *No=3*	Nominal
QQT02	By always using a condom	Knowledge about HIV Prevention			
QQT03	Not sharing needles with others	Knowledge about HIV Prevention			
QQT04	Avoiding contact with other peoples blood	Knowledge about HIV Prevention			
QQT05	By being faithful to one partner	Knowledge about HIV Prevention			
QQT06	Don't Know	Knowledge about HIV Prevention			
QQU01	Boys and girls should be treated equally	Gender opinions		*Agree= 1* *Disagree = 2*	Nominal
QQU02	If a boy gives a girl presents, she cannot refuse sex	Gender opinions			Nominal
QQU03	. Boys and girls are not equal	Gender opinions			Nominal
QQU04	A person must have sex with his/her boyfriend/girlfriend to show love	Gender opinions			Nominal
QQU05	What do you want to be when you grow up?	Future hopes		String variables	Nominal

Appendix 1(d)

Information obtained from the data base of the Agincourt Demographic Surveillance

Site matched to study participants variables:

Unit of Analysis	Table_name	Column_name	Primary caregiver	Mother	Father	Child	Sibling	Household	HMembers
Household	Census Form	Household number				x		x	
Individual		Mother Status		x		x			
Individual		H/H Relation				x			
Individual		Refugee		x	x	x			
Individual		Resident Status		x	x	x			
Individual		Last Event				x			
Individual	Death Form	ID (for relation to child)		x	x				
Individual/HOUSEHOLD		DOD							
Individual/HOUSEHOLD		Cause of death (VA)		x	x				
Household	Migration Form	Household		x	x	x		x	
Individual		Individual migration	x	x	x	x			
Household		Household migration							
Household/Individual		IN/OUT							
Household/Individual		Move date							
Household/Individualual		Reason							
Household	Maternity History	Numer of children living							
Household		Death of children (ie, siblings of study child) (Y/N)							
Individual		Child status				x			
Individual	Pregnancy outcome form	Mother ID							
Individual		Baby Name (should be child in study)				x			
Individual		Gender				x			
Individual		Birthweight (kg)				x			
		E5 Ever breastfed		x		x			
		E6 How long?							
Household/Individual	Union Form	Are parents of child married/in a union	x	x	x	x			
Household	Child care grants	Dwell number (for linking)				x			
Individual		Do they receive a grant for study child?				x			
Individual		Type of grant				x			
Household/Individual		Grant for non-study children?				x			
		If no grants, why?						x	
Individual	Education	Did the child attend crèche?				x			
Individual		Highest level of education completed by parents & primary caregiver	x	x	x				
Individual		For non-baseline children aged 10-12 – grade level in school				x			
		Name of school							
Household	Food security	11. Has your household not had enough to eat in the last month?						x	

Household		12. How often in the last month did your household not have enough to eat?						x	
		15. Reasons?						x	
		19. How do you expect the amount of food available to your household to change in the coming year?						x	
	Health Care Utilization	Immunisation Record (complete or not?)				x			
		Illness in the last 14 days		x	x	x			
		Hospitalization in last 12 months?	x			x			
	Morbidity	Are parents/caregiver alive?	x	x	x				
		Who is primary caregiver? Relation to child?	x			x			
	Household Asset	Composite score indicating SES						x	
	Temporary Migration	How many places did he/she live in last 12 months?				x			
		2. How many years has the person been a temp mig?	x	x	x				
		6. Reasons ?	x	x	x	x		x	
		7. Times returned home	x	x	x	x			
		18. Linked moves				x			
		19. Children?				x			
		20. Where do they stay?				x			
		21. If ill, who cares for child?				x			
		22. Daily caregiver?				x			

Appendix 2: Strength and Difficulties questionnaire

Strengths and Difficulties Questionnaire $T_{4\text{-}16}$

For each item, please mark the box for Not True, Somewhat True or Certainly True. It would help us if you answered all items as best you can even if you are not absolutely certain or the item seems daft! Please give your answers on the basis of the child's behaviour over the last six months or this school year.

Child's Name _____ Male = 1

Surname_____ ☐

Date of Birth Female

_____ = 2

1	Considerate of other people's feelings	Not True =1 Somewhat True = 2 Certainly True = 3	Q1 ☐
2	Restless, overactive, cannot stay still for long	Not True =1 Somewhat True = 2 Certainly True = 3	Q2 ☐
3	Often complains of headaches, stomach-aches or sickness	Not True =1 Somewhat True = 2 Certainly True = 3	Q3 ☐
4	Shares readily with other children (treats, toys, pencils etc.)	Not True =1 Somewhat True = 2 Certainly True = 3	Q4 ☐
5	Often has temper tantrums or hot tempers	Not True =1 Somewhat True = 2 Certainly True = 3	Q5 ☐
6	Rather solitary, tends to play alone	Not True =1 Somewhat True = 2 Certainly True = 3	Q6 ☐

7	Generally obedient, usually does what adults request	Not True =1 Somewhat True = 2 Certainly True = 3	Q7	☐
8	Many worries, often seems worried	Not True =1 Somewhat True = 2 Certainly True = 3	Q8	☐
9	Helpful if someone is hurt, upset or feeling ill	Not True =1 Somewhat True = 2 Certainly True = 3	Q9	☐
10	Constantly fidgeting or squirming	Not True =1 Somewhat True = 2 Certainly True = 3	Q10	☐
11	Has at least one good friend	Not True =1 Somewhat True = 2 Certainly True = 3	Q11	☐
12	Often fights with other children or bullies them	Not True =1 Somewhat True = 2 Certainly True = 3	Q12	☐
13	Often unhappy, down-hearted or tearful	Not True =1 Somewhat True = 2 Certainly True = 3	Q13	☐
14	Generally liked by other children	Not True =1 Somewhat True = 2 Certainly True = 3	Q14	☐
15	Easily distracted, concentration wanders	Not True =1 Somewhat True = 2 Certainly True = 3	Q15	☐
16	Nervous or clingy in new situations, easily loses confidence	Not True =1 Somewhat True = 2 Certainly True = 3	Q16	☐
17	Kind to younger children	Not True =1 Somewhat True = 2 Certainly True = 3	Q17	☐

18	Often lies or cheats	Not True =1 Somewhat True = 2 Certainly True = 3	Q18	☐
19	Picked on or bullied by other children	Not True =1 Somewhat True = 2 Certainly True = 3	Q19	☐
20	Often volunteers to help others (parents, teachers, other children)	Not True =1 Somewhat True = 2 Certainly True = 3	Q20	☐
21	Thinks things out before acting	Not True =1 Somewhat True = 2 Certainly True = 3	Q21	☐
22	Steals from home, school or elsewhere	Not True =1 Somewhat True = 2 Certainly True = 3	Q22	☐
23	Gets on better with adults than with other children	Not True =1 Somewhat True = 2 Certainly True = 3	Q23	☐
24	Many fears, easily scared	Not True =1 Somewhat True = 2 Certainly True = 3	Q24	☐
25	Sees tasks through to the end, good attention span	Not True =1 Somewhat True = 2 Certainly True = 3	Q25	☐

26	Overall, do you think that this child has difficulties in one or more of the following areas:emotions, concentration, behaviour or being able to get on with other people?	No = 1 Yes- Minor Difficulties = 2 Yes- Definite Difficulties = 3 Yes- Severe Difficulties =4	Q26	☐

If you have answered "Yes", please answer the following questions about these difficulties:

27	How long have these difficulties been present?	Less than a month =1 1-5month s=2 6-12 months =3 Over a year =4	Q27 ☐
28	Do the difficulties upset or distress the child?	Not at all =1 Only a little = 2 Quite a lot = 3 A great deal = 4	Q28 ☐

Do the difficulties interfere with the child's everyday life in the following areas?

29	PEER RELATIONSHIPS	Not at all =1 Only a little = 2 Quite a lot = 3 A great deal = 4	Q30 ☐
30	CLASSROOM LEARNING	Not at all =1 Only a little = 2 Quite a lot = 3 A great deal = 4	Q31 ☐
31	Do the difficulties put a burden on you or the class as a whole?	Not at all =1 Only a little = 2 Quite a lot = 3 A great deal = 4	Q32 ☐

Signature----------Date----------

Class teacher/ Grade Tutor/Head of Grade/Other(please specify)

Thank you very much for your help

© Robert Goodman, 2005

Appendix 2 (b)

Summary of Components, data sources and domains of the study Teacher Strengths and Difficulties Questionnaire (SDQ)

Variable	Questionnaire Items	Scale (Domain name)	Questionnaire (Domain Description)	Domain Responses	Domain Type
QQ001	*Considerate of other people's feelings*	*Prosocial behaviour*	*SDQ*	*0 = Not true* *1 = Somewhat true* *2 = Certainly true*	*Nominal*
QQ002	*Restless, overactive, cannot stay still for long*	*Hyperactivity*	*SDQ*		
QQ003	*Often complains of headaches, stomach-aches or sickness*	*Emotional symptoms*	*SDQ*		
QQ004	*Shares readily with other children (treats, toys, pencils etc.)*	*Prosocial behaviour*	*SDQ*		
QQ005	*Often has temper tantrums or hot tempers*	*Conduct problems*	*SDQ*		
QQ006	*Rather solitary, tends to play alone*	*Peer problems*	*SDQ*		
QQ007	*Generally obedient, usually does what adults request*	*Conduct problems*	*SDQ*		
QQ008	*Many worries, often seems worried*	*Emotional symptoms*	*SDQ*		
QQ009	*Helpful if someone is hurt, upset or feeling ill*	*Prosocial behaviour*	*SDQ*		
QQ010	*Constantly fidgeting or squirming*	*Hyperactivity*	*SDQ*		
QQ011	*Has at least one good friend*	*Peer problems*	*SDQ*		
QQ012	*Often fights with other children or bullies them*	*Conduct problems*	*SDQ*		
QQ013	*Often unhappy, down-hearted or tearful*	*Emotional symptoms*	*SDQ*		
QQ014	*Generally liked by other children*	*Peer problems*	*SDQ*		
QQ015	*Easily distracted, concentration wanders*	*Hyperactivity*	*SDQ*		
QQ016	*Nervous or clingy in new situations, easily loses confidence*	*Emotional symptoms*	*SDQ*		
QQ017	*Kind to younger children*	*Prosocial behaviour*	*SDQ*		
QQ018	*Often lies or cheats*	*Conduct problems*	*SDQ*		
QQ019	*Picked on or bullied by other children*	*Peer problems*	*SDQ*		
QQ020	*Often volunteers to help others (parents, teachers, other children)*	*Prosocial behaviour*	*SDQ*		
QQ021	*Thinks things out before acting*	*Hyperactivity*	*SDQ*		
QQ022	*Steals from home, school or elsewhere*	*Conduct problems*	*SDQ*		
QQ023	*Gets on better with adults than with other children*	*Peer problems*	*SDQ*		
QQ024	*Many fears, easily scared*	*Emotional symptoms*	*SDQ*		
QQ025	*Sees tasks through to the end, good attention span*	*Emotional symptoms*	*SDQ*		
QQ026	*Do you have any other comments or concerns?*		*SDQ*		
QQ027	*Overall, do you think that this child has difficulties in one or more of the following areas: emotions, concentration, behaviour or being able to get on with other people?*	*Impact supplement*	*SDQ Impact Supplement*		
QQ028	*How long have these difficulties been present?*	*Impact supplement*	*SDQ Impact Supplement*		
QQ029	*Do the difficulties upset or distress the child?*	*Impact supplement*	*SDQ Impact Supplement*		
QQ030	*PEER RELATIONSHIPS*	*Impact supplement*	*SDQ Impact Supplement*		
QQ031	*CLASSROOM LEARNING CLASSROOM LEARNING*	*Impact supplement*	*SDQ Impact Supplement*		
QQ032	*Do the difficulties put a burden on you or the class as a whole?*	*Impact supplement*	*SDQ Impact Supplement*		
QQ033	*Signature*				

Appendix 3: Interview guide

Topic Guide

1. Opening question about how things are going at school currently
2. Hypothetical questions:
    a. If someone is bothering you at school and you want to talk to someone about it because it is upsetting you, who would you usually go and talk to?
    b. If somebody came into the school to talk to students about things they find difficult, would you find it easier to talk to someone like a teacher or a health care worker?
        i. What types of things would you like to talk to them about?
        ii. Where would you like to talk to them?
        iii. How often would you like to talk to them?
3. Are there people at school you can talk to when you are upset or have a problem?
    a. Who do you most like to talk to?
    b. Why do you talk to this person?
    c. How often do you talk to them?
    d. Where do you meet with them?
4. View on the usefulness of the person
    a. How does this person help you?
    b. Areas helped
        i. Own feelings
        ii. Peer relationships
        iii. Home circumstances
        iv. School studies
        v. Relationships with other adults
    c. What do you like about talking to this person(s)?
    d. What do you dislike?
5. Other support
    a. School?
6. Any worries about talking to someone?
7. How do you feel you could be helped more?
8. Where would you prefer to talk to someone
    a. School
    b. Home
    c. Elsewhere?
9. Do people ever come into your school other than parents and teachers
    a. What do they do?
    b. How do you feel about it?
        i. Likes
        ii. Dislikes
10. Have you been to the health clinic?
    a. If you have something that is worrying you, would you rather go to the clinic to talk to someone or talk to someone in school?

11. Is there anything else you would like to suggest about how children could be helped if they have something that is worrying them?

Appendix 4: School Governing Body Social Network questionnaire

GUIDE FOR COMPLETION

We are interested in your networks and interaction patterns you observe or in which you participate. There are three sections below, please answer all the questions.

Please note, the confidentiality of every participant in this study is of the utmost importance, therefore all replies will be kept confidential and responses will be reported only in the aggregate.

Section A. Your network

Listed below are organisations we believe are involved in some way in the school governing body. We would like to know the extent to which you are involved with, or linked to, the other organisations on the list for providing a full range of services to children.

We have listed four types of involvement you might have with these organisations. These include links through exchange of knowledge, through shared resources (joint funding, equipment, personnel, facilities, etc...), or through patient referrals (sent or received) between you and the other organisations listed.

Please go through the list and indicate which organisation **you** have been involved with for the provision of children services. Simply place a tick (√) in the box that applies to the right of the names given, but only for those types of links that occur with *some regularity* (not just occasional referral, for instance). Please indicate your involvement for each of the four types of relationships listed. If you had no regular involvement with any of the organisations on the list regarding shared information, shared resources, or referrals, simply leave the box or row blank for that organisation.

We are also interested in the frequency of interaction* between your school and the organisations listed below. Please go through the list and indicate the frequency of contact your school has with each organisation on the list. To do this, please circle the number that best reflects the frequency of contact using the scale where: 1 = daily, 2 = weekly, 3 = monthly, 4 = rarely, 5 = never.

In the last column, we would like you to rate the *overall quality* of the working relationships your school has with each organisation you have ticked. For instance, can you rely on the organisation to keep their word, to do a good job, and to respond to your needs and those of its patients/clients? To do this, please circle the number that best reflects relationship quality using a scale where: 1 = poor relationship, 2 = fair relationship, 3 = good relationship, 4 =excellent relationship. Again, if you have no relationship with a listed organisation, simply leave blank.

At the end, please add any other organisations your school is involved with that are not listed but that you believe are valuable to the network in helping it address Safeguarding Children issues.

* Interaction can include: regular contacts in person or by other means (e.g. mail, e-mail, telephone, fax etc).

	Types of links (Tick√ the box if you have this link)				**Frequency of contact** (please circle)	**Relationship quality** (please circle)
Name of organisation	Shared information	Shared resources	Referrals sent	Referrals received	1= daily, 2= weekly, 3= monthly, 4= rarely, 5= never	1 = poor relationship, 2 = fair relationship, 3 = good relationship, 4 =excellent relationship.
					1 2 3 4 5	1 2 3 4
					1 2 3 4 5	1 2 3 4
					1 2 3 4 5	1 2 3 4
					1 2 3 4 5	1 2 3 4
					1 2 3 4 5	1 2 3 4
					1 2 3 4 5	1 2 3 4
					1 2 3 4 5	1 2 3 4
					1 2 3 4 5	1 2 3 4
					1 2 3 4 5	1 2 3 4
					1 2 3 4 5	1 2 3 4
					1 2 3 4 5	1 2 3 4
					1 2 3 4 5	1 2 3 4

Other organisations your school is involved with in the network that are not listed but that you believe are valuable to the school governing body

	Types of links (Tick√ the box if you have this link)						**Frequency of contact** (please circle)	**Relationship quality** (please circle)
Name	Job Description	Organisation	Shared information	Shared resources	Referrals sent	Referrals received	1= daily, 2= weekly, 3= monthly, 4= rarely, 5= never	1 = poor relationship, 2 = fair relationship, 3 = good relationship, 4 =excellent relationship.
							1 2 3 4 5	1 2 3 4
							1 2 3 4 5	1 2 3 4
							1 2 3 4 5	1 2 3 4
							1 2 3 4 5	1 2 3 4
							1 2 3 4 5	1 2 3 4
							1 2 3 4 5	1 2 3 4
							1 2 3 4 5	1 2 3 4
							1 2 3 4 5	1 2 3 4
							1 2 3 4 5	1 2 3 4

Section B

We would now like to know what the benefits and drawbacks have been from cooperating and collaborating with other organisations in the network in the provision of children services. For each possible benefit or drawback listed please indicate, by placing a tick in the appropriate box, whether **your school**, through involvement with other organisations in the network, have already experienced the benefit/drawback, expect to experience it, or do not expect to experience it. Tick √ only one box for each benefit/drawback.

	Already occurred	**Expect to occur**	**Do not expect to occur**
Benefits:			
a. Ability to serve my clients better	□	□	□
b. Acquisition of additional funding or other resources	□	□	□
c. Acquisition of new knowledge or skills	□	□	□
d. Better use of my school's services	□	□	□
e. Building new relationships helpful to me	□	□	□
f. Heightened public profile for my school	□	□	□
g. Increased ability to relocate resources	□	□	□
h. Other benefits (please list major benefits)	□	□	□
Drawbacks:			
i. Takes too much time and resources	□	□	□
j. Loss of control/autonomy over decisions	□	□	□
k. Strained relations within the network	□	□	□
l. Difficulty in dealing with network members	□	□	□
m. Not enough credit given to our involvement	□	□	□
n. Other drawbacks (please list major drawbacks)	□	□	□

Section C. Personal Details

Please give your full name

Name : _____

Role in School Governing Body _____

School: _____

C1. How many years have you been a member of the school governing body?

Tick one box only

- Less than 1 year ☐
- 1 to less than 2 years ☐
- 2 to less than 5 years ☐
- 5 to less than 10 years ☐
- 10 or more years ☐

C2. How many years have you been working in the role (eg treasurer) you currently hold?

Tick one box only

- Less than 1 year ☐
- 1 to less than 2 years ☐
- 2 to less than 5 years ☐
- 5 to less than 10 years ☐
- 10 or more years ☐

Thank you for completing this questionnaire.

NGO'S for social Network analysis

Home Based Care Organisations

Organisation	Name	Phone
1. Cunningmore Home Based Care	Isaac Nxumalo	071 109 1632
2. Ecoplan	Aaron Ubisi	072 895 7556
3. Swa vana	Happy Mokoena	072 736 4301
4. Inkululeko Xanthia Home Based Care	Onnica Venolia	076 141 8279 072 454 3437
5. Lillydale Home Based Care	Mainah Ndlovu	082 360 8796
6. Widower and Foster Care	Gladys Mathebula	072 241 0768

NGO's

Organisation	Name	Phone	Fax
7. Bushbuckridge Health and Social Services Consortium	Charles Monareng	013 795 5412	013 795 5412 (ask) or 013 795 5055
8. Cunningmore Home Based Care	Isaac Nxumalo	071 109 1632	013 708 1249
9. Ebenezer Home Based Care	A.Z. Themba	013 777 5029	013 777 5029 (ask)
10. Ecoplan	Aaron Ubisi	072 895 7556	
11. Enable Home Based Care	Johannes	082 580 4555	015 383 0012
12. Huntington Drop in centre	Happy Mokoena		
13. Hlokomela Home Based Care	Christine du Preez Antoinette Ngwenya	083 300 2933 072 224 9056	015 795 5381
14. Hluvukani Home Based Care	Glanny Mabaso	073 411 6107	Drop at Glanny's house in Acornhoek
15. Impilo			
16. Inkululeko Xanthia Home Based Care	Onnica Venolia	076 141 8279 072 454 3437	
17. Kudomele Home Based Care	Mr Matlala	015 383 0118 084 696 7705	015 383 0018 or 2
18. Lehlabile Multi Project	Sr Elizabeth Ngobeni	072 247 0015 013 795 0647	Take by hand to Cottondale clinic
19. Lepelle Consortium	David	082 952 3413	015 795 5096
20. Maruleng Home Based Care	Rahab Lekuba	084 733 7549	015 383 0012
21. Lillydale Home Based Care	Mainah Ndlovu	082 360 8796	
22. Maviljan Home Based Care	Irene	013 799 1934	013 799 1957
23. Mkhuhlu Home Based care	Susan Thulani Matsona Andries	083 331 8883 013 708 6259 076 152 7050 084 820 6891	013 708 6117
24. NAPWA	Gay Mufumadi	072 602 0577 013 797 1199	c/o 013 797 1046
25. Nhlengelo Home Based Care	Martha	013 797 1199 083 266 4031	013 797 1046 (h) 013 797 1199 (o)
26. Obrigado Home Based Care	Maggy	013 777 7500 073 282 8869	013 777 7500 (ask)
27. Rixile Home Based Care	Lindi	073 276 1878	013 795 5785
28. Widower and Foster Care	Gladys Mathebula	072 241 0768	
29. Wisani	Thembi	013 774 0460	013 774 0460 (ask)
30. Word of Life	Pastor I.C. Malele	082 932 6600	013 795 0954
31. Working for Children	James Ndlovu	073 224 4622	
32. ZIGNA	Diana Ndlovu	013 773 0458 082 672 3654	013 773 0458 (ask) or 013 773 0381 (ask)
Organisations not involved in Home Based Care but delivering services to OVCs			
1. Acornhoek Advise Centre	Busi Matukane	073 226 2785	013 795 5024
2. Teddy Bear School project	Lindiwe Spooko	084 985 1470 072 419 8131	
3. The Place of Safety in Thulamahashe	Josephine c/o Social Workers	013 773 0350	013 773 0691

Appendix 5: School Management Instrument

School Name: ……

Principal Name: …….

This audit will be based on the researcher's observation concerning how the school is managed and the extend to which the school governing body members are involved in the whole school management. This will include interviews with the school principals regarding school fees, staff development activities and resources available for the schools and school document reviews of school development plans, teacher sign-in records, learning materials, school timetable, learner attendance registers and a record of learner assessment results.

Adapted from JET School Management instrument.

SECTION A: CONDITIONS CONDUCIVE TO WORK

1. On arrival at the school, please rate the school's response to your visit:

1	2	3	4	5
Openly hostile	Indifferent, but participated in research	Were expecting fieldworker, but had not prepared for visit	Welcoming. Researcher needed to take charge of planning day's format	Welcoming. Had planned for day's visit. Took charge of the day

2. Did the school exhibit a sense of purpose during the day?

1	No. Chaotic and disorderly.
2	Partial. Some order. Some sense of aimlessness and lack of direction Some time wasted. Visit used as a reason to disrupt normal functioning.
3	Yes. Clear focus on getting down to the business of teaching and learning.

3. During the course of your visit, did you see learners out of class during lesson time?

Yes	
No	

4. Please describe what you saw.

SECTION B: INTERVIEW

1. School Name _____
2. FIeldworker Name _____
3. Fieldwork Date _____
4. Principal Name and Surname _____
5. Gender: Male _____ Female _____
6. Pupil and Teacher numbers

Numbers	**GR**	**G1**	**G2**	**G3**	**G4**	**G5**	**G6**	**G7**
Pupils								
Teachers								
Classes								

7. What are the school fees? ……. per annum per child
8. Number of SGB teachers ……
9. Proportion of children who receive school feeding ……..
10. Participation in Departmental training over the last year.

	1	**2**	**3**	**4**	**5**
Date of course					
Length					
Topics					

11. Are teachers required to submit their teaching plans to the principal/HOD

Yes	1
No	2

12. Do teachers get feedback on their planning from management?

Yes	1
No	2

13. Does the principal/HOD/ monitor whether teachers follow the plan during the year?

Yes	1
No	2

14. **IF YES**: what form does the monitoring take?

Only discussion	Check learner's books	Check daily lesson plans

15. Does school management monitor results of tests or exams

Yes	1
No	2

16. How often do teachers give learners homework?

Every day	1
2- 3 times a week	2
Once a week	3
2- 3 times a term	4

17. What form does the homework take?

Complete exercises started in class	Consolidation exercises not started in class	New work not covered yet in class

18. Are learners given the opportunity to take textbooks and/ readers home with them?

Yes	1
No	2

19. IF **NO**: Could you please explain why not.

Not enough books	
Children lose them	
We don't believe in children being dependent on textbooks	
Other (specify)	

SECTION C: DOCUMENT REVIEW

The following documents are to be collected during interviews with the Principal or Deputy or HoD.

Document	Copy examined or not	If not available, give reason
1. School Development Plan		
2. Sign-in record for teachers		
3. Inventory – learning support materials		
4. School timetable		
5.Attendance registers for learners		
6. Records of learners academic progress		
7. Register of vulnerable children		
8. Incident reports		

DOCUMENT 1: School Development Plan

1.1 Does the school have a written SDP?

Yes	
No	

1.2 Does the SDP mention academic achievement as a goal of the school?

Yes	
No	

1.3 Has the SDP been translated into an operational plan?

Yes	
No	

1.4 If **YES**, has the operational plan been budgeted?

Yes	
No	

1.5 If **YES**, does the operational plan set clear measures for success (especially with respect to academic achievement)?

Yes	
No	

DOCUMENT 2: Attendance register for teachers

2.1 Did you see the attendance register / time book for teachers?

Yes	
No	

2.2 Was it filled in on the day of the visit?

Yes	
No	

DOCUMENT 3: LSM Inventory

3.1 Does the school have an inventory of learning support materials (textbooks)?

Yes	
No	

3.2 Is it easy to find information on, for example, how many Grade 6 maths books or English readers there are in the school?

Yes	
No	

3.3 Where are the books (textbooks and readers) for the Grade 6 learners stored? (Check, by asking to see where the books are stored.)

Storeroom	
Staff room in a cupboard set aside for the Grade 6 teacher's use	
Grade 6 classroom	

3.4 Is there any evidence that books are used regularly?

Yes	1
No	2

If **YES**, please describe this evidence

_____

_____

_____

DOCUMENT 4: School time table

4.1 Does the school have a written timetable, which indicates the start and end time of lessons? (You must see the timetable and examine it yourself)

Yes	1
No	2

4.2 Did the first lesson of the day actually begin at the time stipulated?

Yes	
No	

4.3 Does the break time (for the longest break) take place at the time specified on the timetable?

Yes	
No	

4.4 At the end of the break, do learners return promptly to their classes?

Yes	

No	

4.5 Does the principal have a master file of all timetables so that it is possible to identify where a teacher should be at any given time of the day?

Yes	
No	

DOCUMENT 5: Attendance registers for learners

5.1 Do teachers record attendance of learners daily?

Yes	
No	

5.2 Do the teachers keep a record of reasons for absence of each learner?

Yes	
No	

DOCUMENT 6: Records of learners academic progress

6.1 Do teachers keep quarterly reports of learners' academic progress?

Yes	
No	

6.2 Are the reports discussed with parents and caregivers of learners?

Yes	
No	

DOCUMENT 7: Register of vulnerable children

7.1 Does the school keep a record of identified vulnerable children?

Yes	
No	

7.2 Does the school keep a report of the assistance given to the identified children?

Yes	
No	

DOCUMENT 8: Incident reports

8.1 Does the school keep a record of **learner** injuries/accidents during school hours or while a learner is participating in a school supervised activity?

Yes	
No	

Appendix 6: Letter of permission from Department of Education

0137085158

DEPARTMENT OF EDUCATION
BOHLABELA
PRIVATE BAG X1024
HAZYVIEW
1242

VERY URGENT

FAX COVER

TO:	TINTSWALO MERCY HLUNGWANA
FAX NUMBER:	011 7172084
TELEPHONE NUMBER:	0828050981
FOR ATTENTION:	
FROM:	SIHLANGU C
FAX NUMBER:	013-7085158
TELEPHONE NUMBER:	013-7085028
TOTAL OF PAGES:	1 PAGE
URGENCY:	
SUBJECT:	RESEARCH TO AGINCOURT SCHOOLS.
MESSAGE:	

COMPILED BY

DATE

MPUMALANGA PROVINCIAL GOVERNMENT

DEPARTMENT OF EDUCATION - BOHLABELA

Private Bag x 1034
Hazyview 1242
(013) 7085000
Fax: (013) 708 5158

ENQ : SIHLANGU C

TO : FACULTY OF HEALTH SCIENCE
WITWATERSRAND UNIVERSITTY
PRIVATE BAG
JOHANNESBURG

SUBJECT: PERMISSION TO CONDUCT RESEARCH ON EMOTIONAL BEHAVIOURAL PROBLEMS.

1. The above matter refers.
2. The Bohlabela District in Mpumalanga is granting you the permission to start conducting the Research at Agincourt Circuit as soon as possible.
3. Your co-operation is always appreciated.

DISTRICT SENIOR MANAGER
/mem

2007/01/16
DATE

Appendix 7: Ethical Clearance from the University of the Witwatersrand

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

Division of the Deputy Registrar (Research)

HUMAN RESEARCH ETHICS COMMITTEE (MEDICAL)
R14/49 Hlungwani

CLEARANCE CERTIFICATE	**PROTOCOL NUMBER M081146**
PROJECT	Prevalence and Predicators of Psychosocial Outcomes amongst Socioeconomically Deprived Primary School Children in A rural Setting in South Africa: The Role of Ecological ....
INVESTIGATORS	Ms TM Hlungwani
DEPARTMENT	School of Public Health
DATE CONSIDERED	08.11.28
DECISION OF THE COMMITTEE*	Approved unconditionally

Unless otherwise specified this ethical clearance is valid for 5 years and may be renewed upon application.

DATE 09.01.21 **CHAIRPERSON** .....
(Professor P E Cleaton Jones)

*Guidelines for written 'informed consent' attached where applicable

cc: Supervisor : Prof K Kahn

DECLARATION OF INVESTIGATOR(S)

To be completed in duplicate and **ONE COPY** returned to the Secretary at Room 10004, 10th Floor, Senate House, University.
I/We fully understand the conditions under which I am/we are authorized to carry out the abovementioned research and I/we guarantee to ensure compliance with these conditions. Should any departure to be contemplated from the research procedure as approved I/we undertake to resubmit the protocol to the Committee. **I agree to a completion of a yearly progress report.**

PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES...

.....

Appendix 8: Permission to conduct research at MRC/Wits Rural Public Health and Health Transitions Research Unit

School of Public Health
University of the Witwatersrand

7 York Road
Parktown 2193
Tel: +27-11-717 2606
Fax: +27-11-717 2084

Professor Peter Cleaton-Jones
Chair, Committee on Human Subject (Medical)
Faculty of Health Sciences
University of the Witwatersrand

4 November 2008

Dear Professor Cleaton-Jones

Permission to undertake PhD research in the MRC/Wits Rural Public Health and Health Transitions Research Unit (Agincourt)

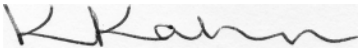
Tintswalo Mercy Hlungwani is a staff member and PhD student in the School of Public Health who is planning research that falls under the MRC/Wits-Agincourt child health and development research area that I lead. Her work is titled 'A randomised controlled trial of a non-governmental organisation's school-based intervention for vulnerable children in a high HIV prevalence and socio-economically deprived rural setting in South Africa'.
.
The purpose of Tintswalo's proposed research is to assess the nature and extent to which vulnerable children have been the beneficiaries of Soul City's school-based intervention programme following its introduction in the Agincourt sub-district, Mpumalanga Province; and to evaluate the extent to which the School Governing Bodies and teachers have been able to utilise the knowledge and skills attained through the intervention.

The objectives are:

- To examine psychological and educational outcomes following a school-based intervention delivered to vulnerable primary school children.
- To assess school management systems geared towards creating a supportive environment for vulnerable children before and after the intervention.
- To analyse social networks utilised by schools for care of vulnerable children before and after the intervention.

Tintswalo Hlungwani has permission to undertake this research in the MRC/Wits-Agincourt Unit.

Please contact me should you require any further information.
Kind regards



Kathleen Kahn
Senior Researcher
MRC/Wits Unit in Rural Public Health and Health Transitions Research (Agincourt)

Appendix 9: Information letter to parents and caregivers (English version)

Enquiries: Tintswalo Mercy Hlungwani,
School of Public Health,
Faculty of Health Sciences,, 7 York Rd, Parktown,
☏ 011 71727234, Fax : 011 7172084, Cell: 082 8050981;
✉ tintswalo.hlungwani@wits.ac.za

Re : Kulani/ Soul City Child Health and Resilience Project.

Information for Parents/Caregivers

Dear Sir/Madam,

Your child is being invited to take part in a research study. Before you decide, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask us or your child's teacher if there is anything that is not clear or if you would like more information. Thank you for reading this.

What is the purpose of the study?

The purpose of the study is to understand more about children's emotions, thoughts and behaviours. What we learn from this research will be used to better help children in schools.

In this specific study we will examine:

- Thoughts or feelings that children have about themselves, their schools, their future and the world.
- Strengths and difficulties of each child as indicated by the children and their class teachers and yourself.
- How your child is progressing in his/her academic achievements.
- How well the school is managed in order to assist children with difficulties.

Who is eligible to take part?

Children in years in grade 6 at school, their parents or caregivers and their class teachers.

Does my child have to take part?

It is up to you to decide if you do not want your child to take part. If you decide you want your child to take part, you will need to fill in the enclosed form and your child may participate. If you agree to your child taking part, then on the day we visit the school, your child will be given an information sheet and asked to sign an assent form and they can still withdraw at any time from the study without giving a reason. We would like send home a short questionnaire for you to complete. By completing the questionnaire you will help us better understand your child. If you are happy to complete it, we would be grateful if you would indicate on the consent form on the next page. If you do not want your child to participate or do not wish to complete the questionnaire this will not be affect him or her in any way at school.

What would happen if my child takes part?

Please note that:

- the study will take place during school time and in your child's classroom
- your child will be asked to answer some questions and this should take approximately one and a half hours
- Your child can decide to stop the study at any time.
- Your child need not answer questions that they do not wish to answer.
- Your child's name will be removed from the information gathered in the study and it will not be possible to identify anyone from our reports on the study.

What will happen to the results of the research?

Any research publication would not identify your child individually. If you wish to obtain a copy of the published results, please inform the school principal. We would be delighted to send them to you when they are available.

Who has reviewed the study?

This study has received ethical approval from human Research Ethics Committee of the University of the Witwatersrand (approval number: M081146)

Contact for further information.

If you have any further questions about this research, please contact Mercy Tel: +27 11 717 2734 Cell +27 82 805 0981 or RhianTel: 083 279 7573 or 013 708 0003, or at the Wits Agincourt office near Agincourt Health Centre.

Your child will be given a copy of this Information Sheet and a signed consent form to keep if he/she takes part.

Thank you again for your help.

Parents/Caregiver information letter (Shangaan version)

Swivutiso: Tintswalo Mercy Hlungwani,
School of Public Health,
Faculty of Health Sciences,, 7 York Rd, Parktown,
☏ 011 71727234, Fax : 011 7172084, Cell: 082 8050981;
✉ tintswalo.hlungwani@wits.ac.za

Eka tatana kumbe manana

N'wana wa n'wina wa rhambiwa ku va xiphemu xa vulavisisi. Mi nga si nyika mpfumelelo wa n'wina, i swa nkoka leswaku mi twisisa xivanghelo xa ndzavisiso lowu na swilaveko swa wona. Ma komberiwa ku teka nkarhi mi hlaya hi vuxokoxoko leswi landzelaka kutani mi vulavula ni van'wana hi leswi mi swi hlayeke, loko mi swi lava. Vutisani hina kumbe mudyondzisi wa n'wana wa n'wina loko ku ri na swin'wana swi nga twisisekiki kumbe mi lava vuxokoxoko hi swin'wana. Ha mi khensa ku va mi hlayile leswi.

Hikokwalaho ka yini ku endliwa vulavisisi lebyi?

Xivanghelo xa vulavisisi lebyi i ku twisisisa hi xiyimo xa miehleketo ya vana, leswi vana va swi ehleketaka, ni matikhomelo ya vona. Leswi hi nga ta swi dyondza eka vulavisisi lebyi swi ta hi pfuna ku antswisa xiyimo xa madyonzele ya vana eswikolweni.

Eka vulavisisi lebyi hi ta kambisisa leswi landzelaka:

- Leswi vana va titwisaka swona ni mavonelo ya vona ya vutomi, hi vona vinyi, swikolo swa vona, vumundzuku ni hi misava hi ku angarhela.
- Vuswikoti bya voan ni leswi va karhatanga tani hi leswi swi kombisiweke hi vana hi voxe ni vadyondzisi va vona.
- Vuxokoxoko bya ndyangu lebyi nga hlengeletiwa hi ti Census

A mani a nga vaka xiphemu xa vulavisisi lebyi?

Vana va malembe ya mune ni ya ntsevu lava nga exikolweni ni vadyondzisi va vona.

Xana n'wana wa mina a nga va xiphemu xa ndzavisiso lowu?

Swi le ka mutswari un'wana na un'wana ku vula loko a nga swi lavi leswaku n'wana wa yena a va xiphemu xa ndzavisiso lowu. Loko mutswari a swi lava leswaku n'wana wa yena a va xiphemu xa ndzavisiso lowu, u ta fanela ku tata fomo leyi fambaka na papila leri kutani n'wana wa yena a nga va xiphemu xa ndzavisiso lowu. Loko mutswari a pfumela leswaku n'wana a va xiphemu xa ndzavisiso lowu, hi siku leri hi vhakelaka xikolo, n'wana wa n'wina u ta nyikiwa papila leri nga ni vuxokoxoko a thlela a komberiwa ku sayina fomo naswona n'wana a nga tshika a nga ha yi emahlweni na ku va xiphemu xa ndzavisiso lowu handle ka ku vula xivanghelo. Loko mi nga swi lavi leswaku n'wana a va xiphemu xa ndzavisiso lowu, a swi nga nwi onhiseli eka tidyondzo ta yena exikolweni. Hi lava ku mi rhumela xipapilana xa swivitiso ekaya leswaku mi hlamula. Loko mi hlamula swivutiso leswi, mi ta va mi hi pfuna ku twisisa n'wana wa n'wina. Loko mi tsakela ku hlamula swivutiso, hi ta tsaka loko mo hi funghela eka fomo leyi nga ka papilla leri landzelaka.Loko mi nga swi lavi leswaku n'wana a va xiphemu xa ndzavisiso lowu, swi nge n'wi kanganyisi eka tidyondzo ta yena.

Ku ta humelela yini loko n'wana wa mina a va xiphemu xa ndzavisiso lowu?
Tiva leswi:

- Ndzavisiso lowu wu ta endliwa hi nkarhi wa xikolo, etlilasini ya n'wana
- N'wana wa n'wina u ta komberiwa ku hlamula swivutiso, leswi nga ta teka nkarhi wo ringana awara na hafu
- N'wana wa n'wina a nga tshika ku hlamula swivutiso leswi nkarhi un'wana na un'wana
- N'wana wa n'wina a nga tshika ku hlamula swivutiso swin'wana leswi a nga laviki ku swi hlamula
- Vito ra n'wana wa n'wina ri ta suriwa ri suka eka vuxokoxoko lebyi nga ta va byi kumiwile eka ndzavisiso lowu nakambe a ku na vito ra n'wana kumbe mutswari ri nga ta tsariwa eka matsalwa ya ndzavisiso lowu.
- Vuto ra n'wana ri ta susuwa eka vuxokoxoko lebyi hi nga ta byi hlengeleta, a swi nga endleki leswaku n'wana a tiveka eka matsalwa ya vulavisisi lebyi.

Ku ta humelela yini hi mbuyelo wa ndzavisiso lowu?
Matsalwa ya ndzavisiso lowu ya nge ve na vito kumbe ku vula swin'wana hi n'wana wa n'wina. Loko mi lava tsalwa ra mbuyelo wa ndzavisiso lowu, kombelani eka nhloko ya xikolo. Hi ta tsakela ku mi rhumela loko hi ri na wona.

I mani a nga kambela ndzavisiso lowu?
Ndzavisiso lowu wu kumile mpfumelelo eka Human Research Ethics Committee of the University of the Witwatersrand (nomboro ya mpumelelo: (M081146)

Loko mi lava voxokoxoko
Loko mi lava ku pfuniwa mayelana ni swivutiso leswi mi nga vaka na swona mi nga ba riqingo eka Mercy Tel: +27 11 717 2734 Cell +27 82 805 0981 kumbe Rhian Tel: 083 279 7573 or 013 708 0003, kumbe Wits Agincourt office ekusuhi na Agincourt Health Centre.

Ha khensa ku tikarhata ka n'wina, nkarhi wa n'wina na ku va mi hlayile papilla leri hambi leswi mi nga ta pfumela kumbe mi nga pfumeli leswaku n'wana wa n'wina a va xiphemu xa ndzavisiso lowu.

N'wana wa n'wina u ta nyikiwa papilla leri nga ni vuxokoxoko na fomo leyi nga sayiniwa leswaku a tshama na yona loko kuri ku u ta va xiphemu xa ndzavisiso lowu.

Hi Nkhensa ku pfuniwa hi n'wina

Appendix 10: Consent form completed by parents and caregivers

CONSENT FORM (English version)

Please complete the form and send it back to school with your child

Child's name _____

I have read and I understand the information sheet for this study
□ Yes □ No

My child may participate in the study

□ Yes □ No

_____ _____
Signature of Caregiver Date

CONSENT FORM (SHANGAAN VERSION)

Ma komberiwa ku rhumela fomo leyi exikolweni na n'wana wa n'wina
Mi komberiwa ku hlamula swivutiso

Vito ra n'wana_____

Ndzi kumile vuxokoxoko na swona ndzi kume nkarhi wo vutisa swivutiso
□ Ina □ Ee

N'wana wa mina a nga va xiphemu
□ Ina □ Ee

_____ _____
Ku sayina muhlayisi wa n'wana Siku

Appendix 11: Information letter for learners (English version)

Enquiries: Tintswalo Mercy Hlungwani,
School of Public Health,
Faculty of Health Sciences,, 7 York Rd, Parktown,
☏ 011 71727234, Fax : 011 7172084, Cell: 082 8050981;
✉ tintswalo.hlungwani@wits.ac.za

Dear Learner

We would like to invite you to take part in a study and we would like to explain what we are doing before you decide whether or not to take part. Please take some time to read the following information carefully and discuss it with others if you wish. Ask us if there is anything that is not clear or if you would like more information. Thank you for reading this.

What is the purpose of the study?

We are interested in understanding more about your emotions, thoughts and behaviours and whether there's anything we can do in your schools to support you and other children like you. In this study we will ask you about your thoughts and feelings about yourself, your friendships, your school, the future.

Do I have to take part?

You do not have to take part if you do not want to. If you decide not to take part, you this will not affect you in any way with your teachers or school. If you agree to take part, then you will need to sign a form and can still stop answering our questions at any time and without giving a reason.

What would happen to me if I take part?

You will be asked to answer some questions about your thoughts, feelings and behaviour. You may also be asked to answer some questions about things that have happened in your life.

Please note that:

- You can decide to stop the study at any time.
- You need not answer questions that you do not wish to.
- Your name will be removed from the information gathered in the study and it will not be possible to identify you from our reports on the study.

Contact for further information.

If you have any further questions about this research, please ask us or your class teacher.

Thank you for taking the time to read this information sheet and considering whether you'd to take part in this research.

Your will be given a copy of this Information Sheet and a signed assent form to keep if you take part.

Thank you again for your help.

Learner information letter (Shangaan version)

Swivutiso: Tintswalo Mercy Hlungwani,
School of Public Health,
Faculty of Health Sciences,, 7 York Rd, Parktown,
☏ 011 71727234, Fax : 011 7172084, Cell: 082 8050981;
✉ tintswalo.hlungwani@wits.ac.za

Eka N'wana

Wa rhambiwa ku va xiphemu xa vulavisisi. U nga si nyika mpfumelelo wa leswaku wa swi tsakela kumbe a wu swi tsakeli ku va xiphemu xa ndzavisiso lowu, i swa nkoka leswaku u twisisa xivanghelo xa ndzavisiso lowu na swilaveko swa wona. Wa komberiwa ku teka nkarhi u hlaya hi vuxokoxoko leswi landzelaka kutani u nga vulavula ni van'wana hi leswi u swi hlayeke, loko u swi lava. Vutisa hina kumbe mudyondzisi wa wena loko ku ri na swin'wana u nga swi twisiseki kumbe u lava vuxokoxoko hi swin'wana. Ha ku khensa ku va u hlayile leswi.

Hikokwalaho ka yini ku endliwa vulavisisi lebyi?
Xivanghelo xa vulavisisi lebyi I ku twisisisa hi xiyimo xa miehleketo, leswi u swi ehleketaka, na matikhomelo ya wena. Leswi hi nga ta swi dyondza eka vulavisisi lebyi swi ta hi pfuna ku antswisa xiyimo xa madyonzele ya wena ni vana van'wana lava fanaka na wena. Eka vulavisisi lebyi hi ta ku vutisa hi leswi u swi ehleketaka, leswi u titwisaka xiswona hi vanghana va wena, hi xikolo ni hi vumundzuku bya wena.

Swa ni boha ku va xiphemu xa vulavisisi lebyi xana?
A swi bohi ku va xiphemu xa vulavisisi lebyi loko u nga swi lavi. Loko u nga swi lavi ku va xiphemu xa ndzavisiso lowu a swi nga ku onhiseli eka tidyondzo ta wena exikolweni. Loko u swi lava ku va xiphemu xa ndzavisiso lowu, hi siku leri hi vhakelaka xikolo xa wena, u ta nyikiwa papila leri nga ni vuxokoxoko u thlela a komberiwa ku sayina fomo naswona u nga tshika u nga ha yi emahlweni na ku va xiphemu xa ndzavisiso lowu handle ka ku vula xivanghelo

Loko mi lava vuxokoxoko
Loko u ri na swivutiso hi ndzavisiso lowu u nga hi vutisa kumbe u vutisa mudyondzisi wa wena.

Ha khensa ku tikarhata ka wena, nkarhi wa wena na ku va u hlayile papilla leri hambi leswi u nga ta pfumela kumbe u nga pfumeli ku va xiphemu xa ndzavisiso lowu.

U ta nyikiwa papila leri nga ni vuxokoxoko na fomo leyi nga sayiniwa leswaku u tshama na yona loko kuri ku u ta va xiphemu xa ndzavisiso lowu.

Assent form (English Version)

Name of Researchers:…… please tick box: YES NO

1. I have read and understand the information sheet for this study and have had the chance to ask questions. ☐ ☐
2. I understand that I have chosen to take part and that I am free to stop ☐ ☐
   - at any time
   - without giving any reason
3. I agree to take part in the study and I understand that my answers may be used, without giving my name in the presentation of the research. ☐ ☐

_____ _____ _____

Name of Participant (child) Signature Date

Assent form (Shangaan version)

Vito ra mulavisisi:…… Funga bokisi: **Hi swona** **A hi swona**

Ndzi hlayile naswona ndza switwisisa leswi nga eka tsalwa leri ra ndzavisiso lowu ndzi thlele ndzi va ni nkarhi wo vutisa swivutiso. ☐ ☐

Ndza switwisisa leswaku i ku tsakela ka mina ku va xiphemu naswona ndzi nga tshika nkarhi un'wana ni un'wana handle ka ku vula xivangelo. ☐ ☐

Ndza pfumela ku va xiphemu xa vulavisisi lebyi ni leswaku tinhlamulo ta mina ti nga tirhisiwa handle ka ku va vito ra mina ri vuriwa eka mbuyelo wa ndzavisiso lowu ☐ ☐

_____ _____ _____

Vito ra n'wana Nsayino Siku

Appendix 12: Information sheet Parents and Caregivers about Learners interviews
(English version)

Enquiries: Tintswalo Mercy Hlungwani,
School of Public Health,
Faculty of Health Sciences,, 7 York Rd, Parktown,
☏ 011 71727234, Fax : 011 7172084, Cell: 082 8050981;
✉ tintswalo.hlungwani@wits.ac.za

Your child is being invited to take part in a research study. Before you decide, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask us or your child's teacher if there is anything that is not clear or if you would like more information. Thank you for reading this.

What is the purpose of the study?
The purpose of the study is to understand more about children's emotions, thoughts and behaviours. What we learn from this research will be used to better help children in schools.

In this specific study we will ask in detail about:

- Children's thoughts about school, their friends, teachers and families.
- Who children like to talk to or would like to talk to if they have a problem.

Who is eligible to take part?
Children in grade 5 and 6 at school

Does my child have to take part?
It is up to you to decide if you do not want your child to take part. If you decide you want your child to take part, you will need to fill in the enclosed form and your child may participate. If you agree to your child taking part, then on the day we visit the school, your child will be given an information sheet and asked to sign an assent form and they can still withdraw at any time from the study without giving a reason. We will ask them a few questions and record our conversations so we can take notes from them later. If you do not want your child to participate he or she will not be affected in any way at school.

What would happen if my child takes part?
Please note that:

- the study will take place during school time and in your child's classroom
- your child will be asked to answer some questions and this should take approximately one and a half hours
- Your child can decide to stop the study at any time.
- Your child need not answer questions that they do not wish to answer.
- Your child's name will be removed from the information gathered in the study and it will not be possible to identify anyone from our reports on the study.
- All recordings of conversations will be kept confidential and will be destroyed at the end of the study.

What will happen to the results of the research?

Any research publication would not identify your child individually. If you wish to obtain a copy of the published results, please inform the school principal. We would be delighted to send them to you when they are available.

Contact for further information.

If you have any further questions about this research, please contact Mercy Tel: +27 11 717 2734 Cell +27 82 805 0981 or Rhian Tel: 013 708 0003, or at the Wits Agincourt office near Agincourt Health Centre.

Thank you for taking the time to read this information sheet and considering whether you'd like your child to take part in this research.

Your child will be given a copy of this Information Sheet and a signed consent form to keep if he/she takes part.

Information sheet Parents and Caregivers about Learners interviews (Shangaan version)

Enquiries: Tintswalo Mercy Hlungwani,
School of Public Health,
Faculty of Health Sciences,, 7 York Rd, Parktown,
011 71727234, Fax : 011 7172084, Cell: 082 8050981;
tintswalo.hlungwani@wits.ac.za

N'wana wa n'wina wa rhambiwa ku va xiphemu xa vulavisisi. Mi nga si nyika mpfumelelo wa n'wina, i swa nkoka leswaku mi twisisa xivanghelo xa ndzavisiso lowu na swilaveko swa wona. Ma komberiwa ku teka nkarhi mi hlaya hi vuxokoxoko leswi landzelaka kutani mi vulavula ni van'wana hi leswi mi swi hlayeke, loko mi swi lava. Vutisani hina kumbe mudyondzisi wa n'wana wa n'wina loko ku ri na swin'wana swi nga twisisekiki kumbe mi lava vuxokoxoko hi swin'wana. Ha mi khensa ku va mi hlayile leswi.

Hikokwalaho ka yini ku endliwa vulavisisi lebyi?

Xivanghelo xa vulavisisi lebyi i ku twisisisa hi xiyimo xa miehleketo ya vana, leswi vana va swi ehleketaka, ni matikhomelo ya vona. Leswi hi nga ta swi dyondza eka vulavisisi lebyi swi ta hi pfuna ku antswisa xiyimo xa madyonzele ya vana eswikolweni.

Eka vulavisisi lebyi hi ta kambisisa leswi landzelaka:

- Leswi vana va titwisaka swona ni mavonelo ya vona hi xikolo xa v.ona, vanghana, vadyondzisi ni maxaka.
- Hi lava ku twisisa leswaku vana va kota ku byela mani hi swiphiqo swa vona swa vutomi.

A mani a nga vaka xiphemu xa vulavisisi lebyi?

Vana va ntangha nthlanu na ntsevu lava nga exikolweni.

Xana n'wana wa mina a nga va xiphemu xa ndzavisiso lowu?

Swi le ka mutswari un'wana na un'wana ku vula loko a nga swi lavi leswaku n'wana wa yena a va xiphemu xa ndzavisiso lowu. Loko mutswari a swi lava leswaku n'wana wa yena a va xiphemu xa ndzavisiso lowu, u ta fanela ku tata fomo leyi fambaka na papila leri kutani n'wana wa yena a nga va xiphemu xa ndzavisiso lowu. Loko mutswari a pfumela leswaku n'wana a va xiphemu xa ndzavisiso lowu, hi siku leri hi vhakelaka xikolo, n'wana wa n'wina u ta nyikiwa papila leri nga ni vuxokoxoko a thlela a komberiwa ku sayina fomo naswona n'wana a nga tshika a nga ha yi emahlweni na ku va xiphemu xa ndzavisiso lowu handle ka ku vula xivanghelo. Hi ta vutisa vana swutiso, na swona hi ta kandziyisa mabulo ya hina eka tape hi thlena hi tsala tin'wana ta tinhlamulo. Loko mi nga swi lavi leswaku n'wana a va xiphemu xa ndzavisiso lowu, a swi nga nwi onhiseli eka tidyondzo ta yena exikolweni.

Ku ta humelela yini loko n'wana wa mina a va xiphemu xa ndzavisiso lowu?

Tiva leswi:

- Ndzavisiso lowu wu ta endliwa hi nkarhi wa xikolo, etlilasini ya n'wana

- N’wana wa n’wina u ta komberiwa ku hlamula swivutiso, leswi nga ta teka nkarhi wo ringana awara na hafu
- N’wana wa n’wina a nga tshika ku hlamula swivutiso leswi nkarhi un’wana na un’wana
- N’wana wa n’wina a nga tshika ku hlamula swivutiso swin’wana leswi a nga laviki ku swi hlamula
- Vito ra n’wana wa n’wina ri ta suriwa ri suka eka vuxokoxoko lebyi nga ta va byi kumiwile eka ndzavisiso lowu nakambe a ku na vito ra n’wana kumbe mutswari ri nga ta tsariwa eka matsalwa ya ndzavisiso lowu.
- Vuto ra n’wana ri ta susuwa eka vuxokoxoko lebyi hi nga ta byi hlengeleta, a swi nga endleki leswaku n’wana a tiveka eka matsalwa ya vulavisisi lebyi.

Ku ta humelela yini hi mbuyelo wa ndzavisiso lowu?

Matsalwa ya ndzavisiso lowu ya nge ve na vito kumbe ku vula swin’wana hi n’wana wa n’wina. Loko mi lava tsalwa ra mbuyelo wa ndzavisiso lowu, kombelani eka nhloko ya xikolo. Hi ta tsakela ku mi rhumela loko hi ri na wona.

Loko mi lava voxokoxoko

Loko mi lava ku pfuniwa mayelana ni swivutiso leswi mi nga vaka na swona mi nga ba riqingo eka Mercy Tel: +27 11 717 2734 Cell +27 82 805 0981 kumbe Rhian 013 708 0003, kumbe Wits Agincourt office ekusuhi na Agincourt Health Centre.

Ha khensa ku tikarhata ka n’wina, nkarhi wa n’wina na ku va mi hlayile papilla leri hambi leswi mi nga ta pfumela kumbe mi nga pfumeli leswaku n’wana wa n’wina a va xiphemu xa ndzavisiso lowu.

N’wana wa n’wina u ta nyikiwa papilla leri nga ni vuxokoxoko na fomo leyi nga sayiniwa leswaku a tshama na yona loko kuri ku u ta va xiphemu xa ndzavisiso lowu.

Consent forms for child interviews

CONSENT FORM (English version)

Please send this form back to school with your child

Please answer all questions.

Child's name _____

1. I have received enough information and have had a chance to ask questions

□ Yes **□ No**

2. My child may participate in the interviews and can be recorded on tape.

□ Yes **□ No**

_____ _____

Signature of Caregiver **Date**

CONSENT FORM (Shangaan version)

Ma komberiwa ku rhumela fomo leyi exikolweni na n'wana wa n'wina

Mi komberiwa ku hlamula hinkwaswo swivutiso

Vito ra n'wana_____

1. Ndzi kumile vuxokoxoko na swona ndzi kume nkarhi wo vutisa swivutiso

□ Ina **□ Ee**

2. N'wana wa mina a nga va xiphemu na swona a nga kandziyisiwa ka tape

□ Ina **□ Ee**

_____ _____

Ku sayina muhlayisi wa n'wana **Siku**

Information sheet for Learners interviews (English version)

Enquiries: Tintswalo Mercy Hlungwani,
School of Public Health,
Faculty of Health Sciences,, 7 York Rd, Parktown,
☏ 011 71727234, Fax : 011 7172084, Cell: 082 8050981;
✉ tintswalo.hlungwani@wits.ac.za

We would like to invite you to take part in a study and we would like to explain what we are doing before you decide whether or not to take part. Please take some time to read the following information carefully and discuss it with others if you wish. Ask us if there is anything that is not clear or if you would like more information. Thank you for reading this.

What is the purpose of the study?

We are interested in understanding more about your emotions, thoughts and behaviours and whether there's anything we can do in your schools to support you and other children like you. In this study we will ask you about your thoughts and feelings about yourself, your friendships, your school, the future.

Do I have to take part?

You do not have to take part if you do not want to. If you decide not to take part, you this will not affect you in any way with your teachers or school. If you agree to take part, then you will need to sign a form and can still stop answering our questions at any time and without giving a reason.

What would happen to me if I take part?

You will be asked to answer some questions about your thoughts, feelings and behaviour. You may also be asked to answer some questions about things that have happened in your life.

Please note that:

- You can decide to stop the study at any time.
- You need not answer questions that you do not wish to.
- Your name will be removed from the information gathered in the study and it will not be possible to identify you from our reports on the study.

Contact for further information.

If you have any further questions about this research, please ask us or your class teacher.

Thank you for taking the time to read this information sheet and considering whether you'd to take part in this research.

Your will be given a copy of this Information Sheet and a signed assent form to keep if you take part.

Information sheet for Learners interviews (Shangaan version)

Swivutiso: Tintswalo Mercy Hlungwani,
School of Public Health,
Faculty of Health Sciences,, 7 York Rd, Parktown,
☏ 011 71727234, Fax : 011 7172084, Cell: 082 8050981;
✉ tintswalo.hlungwani@wits.ac.za

Wa rhambiwa ku va xiphemu xa vulavisisi. U nga si nyika mpfumelelo wa leswaku wa swi tsakela kumbe a wu swi tsakeli ku va xiphemu xa ndzavisiso lowu, i swa nkoka leswaku u twisisa xivanghelo xa ndzavisiso lowu na swilaveko swa wona. Wa komberiwa ku teka nkarhi u hlaya hi vuxokoxoko leswi landzelaka kutani u nga vulavula ni van'wana hi leswi u swi hlayeke, loko u swi lava. Vutisa hina kumbe mudyondzisi wa wena loko ku ri na swin'wana u nga swi twisiseki kumbe u lava vuxokoxoko hi swin'wana. Ha ku khensa ku va u hlayile leswi.

Hikokwalaho ka yini ku endliwa vulavisisi lebyi?

Xivanghelo xa vulavisisi lebyi I ku twisisisa hi xiyimo xa miehleketo, leswi u swi ehleketaka, na matikhomelo ya wena. Leswi hi nga ta swi dyondza eka vulavisisi lebyi swi ta hi pfuna ku antswisa xiyimo xa madyonzele ya wena ni vana van'wana lava fanaka na wena. Eka vulavisisi lebyi hi ta ku vutisa hi leswi u swi ehleketaka, leswi u titwisaka xiswona hi vanghana va wena, hi xikolo ni hi vumundzuku bya wena.

Swa ni boha ku va xiphemu xa vulavisisi lebyi xana?

A swi bohi ku va xiphemu xa vulavisisi lebyi loko u nga swi lavi. Loko u nga swi lavi ku va xiphemu xa ndzavisiso lowu a swi nga ku onhiseli eka tidyondzo ta wena exikolweni. Loko u swi lava ku va xiphemu xa ndzavisiso lowu, hi siku leri hi vhakelaka xikolo xa wena, u ta nyikiwa papila leri nga ni vuxokoxoko u thlela a komberiwa ku sayina fomo naswona u nga tshika u nga ha yi emahlweni na ku va xiphemu xa ndzavisiso lowu handle ka ku vula xivanghelo

Loko mi lava vuxokoxoko

Loko u ri na swivutiso hi ndzavisiso lowu u nga hi vutisa kumbe u vutisa mudyondzisi wa wena.

Ha khensa ku tikarhata ka wena, nkarhi wa wena na ku va u hlayile papilla leri hambi leswi u nga ta pfumela kumbe u nga pfumeli ku va xiphemu xa ndzavisiso lowu.

U ta nyikiwa papila leri nga ni vuxokoxoko na fomo leyi nga sayiniwa leswaku u tshama na yona loko kuri ku u ta va xiphemu xa ndzavisiso lowu.

Assent forms for interviews

Assent form FOR INTERVIEWS(English version)

Name of Researchers:…… please tick box: YES NO

1. I have read and understand the information sheet for this study and have had the chance to ask questions. ☐ ☐

2.I understand that I have chosen to take part and that I am free to stop ☐ ☐
- at any time
- without giving any reason

3 .I agree to take part in the study and to be recorded on tape ☐ ☐
- I understand that my answers may be used, without giving my name in the presentation of the research.
- I understand that the tapes used in the study will be destroyed after two years of completing the study

_____ _____

Name of Participant (child) **Signature and date**

Assent form FOR INTERVIEWS(Shangaan version)

Vito ra mulavisisi: Funga bokisi: **Hi swona** **A hi swona**

1. Ndzi hlayile naswona ndza switwisisa leswi nga eka tsalwa leri ra ndzavisiso lowu ndzi thlele ndzi va ni nkarhi wo vutisa swivutiso. ☐ ☐

2. Ndza switwisisa leswaku i ku tsakela ka mina ku va xiphemu naswona ndzi nga tshika ☐ ☐
- nkarhi un'wana ni un'wana
- handle ka ku vula xivangelo.

3.Ndza pfumela ku va xiphemu xa vulavisisi lebyi ni leswaku ndzi nga kandziyisiwa ka tape. ☐ ☐
- Ni leswaku tinhlamulo ta mina ti nga tirhisiwa handle ka ku va vito ra mina ri vuriwa eka mbuyelo wa ndzavisiso lowu.
- Ndzi twisisa leswaku ti tape tit a thunyiwa endzaku ka malembe mambirhi

_____ _____

Vito ra n'wana **Nsayino na siku**

Appendix 13: Letter to the School Principals

Enquiries: Tintswalo Mercy Hlungwani,
School of Public Health,
Faculty of Health Sciences,, 7 York Rd, Parktown,
☏ 011 71727234, Fax : 011 7172084, Cell: 082 8050981;
✉ tintswalo.hlungwani@wits.ac.za

Re : Kulani/ Soul City Child Health and Resilience Project.

Information for School Principal

Dear Sir/Madam,

Many thanks for allowing us to do research in your school with regard to resources available to support vulnerable children. As we explained at the staff meeting in October 2008, we are trying to understand more about children's emotions, thoughts, behaviours and their academic achievements through questionnaires that will be completed by the grade 6 learners, their class teachers and parents or caregivers..

In addition to questionnaires given to learners, teachers and caregivers, we would be grateful if you could allow us to do an audit related to how your school manages to create an environment to promote learning especially in the resource poor environment. This audit will be in the form of an interview with the principal and review of relevant documents in the school.

Members of the school governing body will also be requested to complete questionnaires which will help us to analyse networks of organisations that are available for your school to help vulnerable children.

The audit is not in anyway an inspection of your school, but rather aims to gather information that will be used to evaluate a Soul City school based intervention that will be implemented in some of the schools in Agincourt. The results will be confidential and will be used only for Soul City. The intervention will be rolled out to all schools based on the final report of the evaluation.

Thank you again for your help.

Appendix 14: Information letter to class teachers

Enquiries: Tintswalo Mercy Hlungwani,
School of Public Health,
Faculty of Health Sciences,, 7 York Rd, Parktown,
☏ 011 71727234, Fax : 011 7172084, Cell: 082 8050981;
✉ tintswalo.hlungwani@wits.ac.za

Re : Kulani/ Soul City Child Health and Resilience Project.

Information to Class teacher

Dear class teacher

Thank you for your help in agreeing to answer questions on children in your class. By answering these questions, you will be helping us learn more about how we might be able to help the emotional development of children in your schools. What we learn from this research will be used to better help children in schools.

In this specific study we will examine:

- Thoughts or feelings that children have about themselves, their schools, their future and the world.
- Strengths and difficulties of children as indicated by the children themselves and their class teachers.
- How children are progressing in their academic achievements.
- How the school is managed in order to assist children with difficulties.

Who is eligible to take part?
All the children in years grade 5 and 6 and their class teachers are eligible to take part as long as their carers have given consent.

What about my class?
Whilst you are completing the questionnaires on each child in your class, the children will also be answering questions with us.

What will happen to the results of the research?
Any research publication would not identify the child or you individually. If you wish to obtain a copy of the published results, please inform the school principal. We would be delighted to send them to you when they are available.

Contact for further information.
If you have any further questions about this research, please contact Mercy Tel: +27 11 717 2734 Cell +27 82 805 0981 or Rhian Tel: 083 279 7573 or 013 708 0003, or at the Wits Agincourt office near Agincourt Health Centre.

Thank you for taking the time to read this information
Thank you again for your help.

Appendix 15: Information for Class teacher completeting Strengths and Difficulties Questionnaire

answer every

Enquiries: Tintswalo Mercy Hlungwani,
School of Public Health,
Faculty of Health Sciences,, 7 York Rd, Parktown,
☏ 011 71727234, Fax : 011 7172084, Cell: 082 8050981;
✉ tintswalo.hlungwani@wits.ac.za

Re : Kulani/ Soul City Child Health and Resilience Project.

Information for Class teacher completeting Strengths and Difficulties Questionnaire

Dear Class teacher,

Many thanks for completing these questionnaires on the children in your class. As we explained at the staff meeting in October 2008, we are trying to understand more about children's emotions, thoughts and behaviours. When you complete the questionnaire we would be grateful if you could answer every question for each child, otherwise we cannot use any of the responses. If you would like to make any other comments you feel are important the please write these on the back of the form in the space provided.

We will collect the forms from you at the end of the day.

Thank you again for your help.

Appendix 16: Erikson's Stages of Psychosocial Development in Children

Source: Kail, & Cavanaugh, 2010, p. 11

Psychosocial Stage	Age	Challenge
Basic trust vs. Mistrust	Birth to 1 year	To develop a sense that world is safe, a "good place"
Autonomy vs. shame	1 to 3 years	To realize that one is an independent person who can make decisions
Initiative vs. guilt	3 to 6 years	To develop the ability to try new things and to hurdle failure
Industry vs. Inferiority	6 years to adolescence	To learn basic skills and to work with others
Identity vs. identity confusion	Adolescence	To develop a lasting integrated sense of self

Appendix 17: Descriptive Statistics

Variable		Frequency	Percentage
Age	9-12 years	689	69.7
	13-16 years	294	29.8
	17-19 years	5	.5
Gender	Male	487	49.3
	Female	501	50.7
Grade	Five	557	56.4
	Six	431	43.6
Age of Household head	Less than 18 years	1	.1
	18-25 years	10	1.1
	26-35 years	81	8.2
	Greater than 35 years	756	76.4
	Missing	140	14.2
Gender of Household head	Male	519	52.5
	Female	329	33.3
	Missing	140	14.2
SES quintiles for 2007	1	114	11.5
	2	182	18.4
	3	188	19.0
	4	179	18.1
	5	158	16.0
	Missing	167	17.0
Mother status	Deceased	93	9.4
	Alive	794	80.3
	Missing	101	10.3
Mother's location	Bushbuckridge	15	1.5
	Agincourt	30	3.0
	Same household	696	70.4
	Same Village	25	2.5
	Elsewhere	28	2.8
	Missing	194	19.8
Mother's education	0 years	197	19.9
	1-7 years	184	18.6
	8-15 years	352	35.6
	Missing	255	25.9
Mother's Union Status	Not in union	503	50.9
	In union	388	39.2
	Missing	97	9.9

Mother's Union Type (only for 388 women in union)	Informal	73	7.4
	Married	298	30.1
	Remarried	7	0.7
	Separated	10	1.0
Child's Birth Weight	Low (≤ 2.5)	265	26.8
	High (> 2.5)	23	2.3
Child's breastfeeding	Yes	443	44.8
	No	23	2.3
	Missing	522	52.9
Child's duration of breastfeed (only for 443 child who were breastfeed)	0-6 months	292	29.5
	7-13 months	14	1.4
	< 13 months	95	9.6
	Missing	42	4.3
Child's residence status	Permanent	759	76.7
	Migrant	10	1.0
	Missing	219	22.3
Child labor	Never worked	621	62.8
	Even worked	4	0.4
	Missing	363	36.8
Perception of School Environment			
Kid in my class push and shove each other a lot	All of the time	257	26.0
	Most of the time	142	14.4
	Sometimes	207	21.0
	Never	380	38.5
	Missing	2	.2
Kids in my classroom yell at each other a lot.	All of the time	227	23.0
	Most of the time	214	21.7
	Sometimes	252	25.5
	Never	293	29.7
	Missing	2	.2
Kids in my class look out for each other.	All of the time	342	34.6
	Most of the time	211	21.4
	Sometimes	204	20.6
	Never	228	23.1
	Missing	3	.3
Kids in my class room wait for their turn to talk.	All of the time	321	32.5

	Most of the time	226	22.9
	Sometimes	198	20.0
	Never	241	24.4
	Missing	2	.2
I always wait for my turn to talk.	All of the time	296	30.0
	Most of the time	241	24.4
	Sometimes	226	22.9
	Never	220	22.3
	Missing	5	.5
There are a lot of fights at my school.	All of the time	272	27.5
	Most of the time	172	17.4
	Sometimes	228	23.1
	Never	312	31.6
	Missing	4	.4
When I am angry or sad, I talk about my feelings to other kids at school.	All of the time	274	27.7
	Most of the time	201	20.3
	Sometimes	265	26.8
	Never	246	24.9
	Missing	2	.2
When I am angry or sad, I talk about my feelings to adults at school.	All of the time	262	26.5
	Most of the time	236	23.9
	Sometimes	248	25.1
	Never	240	24.3
	Missing	2	.2
I feel safe at my school.	All of the time	464	47.0
	Most of the time	210	21.3
	Sometimes	147	14.9
	Never	163	16.5
	Missing	4	.4
I feel close to people at this school.	All of the time	417	42.2
	Most of the time	222	22.5
	Sometimes	176	17.8
	Never	169	17.1
	Missing	4	.4
I learn a lot at my school.	All of the time	431	43.6

	Most of the time	240	24.3
	Sometimes	151	15.3
	Never	161	16.3
	Missing	5	.5
Safety at School			
Do you know what help or assistance is available to you if you are a victim of any crime at school?	Yes	616	62.3
	No	357	36.1
	Missing	15	1.5
If YES, what support is available?	Counseling	214	21.7
	Medical support	98	9.9
	Anonymous	78	7.9
	Reporting	246	24.9
	Other (specify)	105	10.6
	Missing	247	25.0
Are you scared of being hurt?	Yes	677	68.5
	No	271	27.4
	Missing	40	4.0
Are you scared of criminals?	Yes	737	74.6
	No	214	21.7
	Missing	37	3.7
Are you scared of teachers/principal?	Yes	466	47.2
	No	489	49.5
	Missing	33	3.3
Are you scared of classmates/friends?	Yes	306	31.0
	No	641	64.9
	Missing	41	4.1
Are you scared of being disciplined?	Yes	649	65.7
	No	309	31.3
	Missing	30	3.0
Are you scared of other things at school?	Yes	542	54.9
	No	402	40.7
	Missing	44	4.5
Do you where to … victimize you?	Yes	646	65.4
	No	321	32.5
	Missing	21	2.1

Has anybody ever threatened to harm you at school?	Yes	421	42.6
	No	537	54.4
	Missing	30	3.0
If YES, who was that person?	Classmate	237	24.0
	Other learner	154	15.6
	Another learner from outside the school	78	7.9
	Teacher/Principal	83	8.4
	Other adult	126	12.8
	Missing	290	31.3
Have you ever been caned or hit at school for what you have done wrong by the principal or teacher?	Yes	619	62.7
	No	345	34.9
	Missing	24	2.4
Has anything ever happened to make you fear going to school?	Yes	548	55.5
	No	407	41.2
	Missing	33	3.3
Do you ever fear travelling to and from school?	Yes	239	24.2
	No	733	74.2
	Missing	16	1.6
Have you been assaulted at school in the past 12 months?	Yes	303	30.7
	No	667	67.5
	Missing	18	1.8
Do you personally know people who bought weapons such as knives or guns with them to school?	Yes	230	23.3
	No	728	73.7
	Missing	30	3.0
Use of Alcohol			
Have you ever had an alcoholic drink?	Yes		
	No		
	Missing		
During the past month, how often did you drink alcohol?	Not once	499	50.5
	Daily	85	8.6
	Several times a week	40	4.0
	Once a week	46	4.7
	Once a month	70	7.1
	Missing	248	25.1
Have you ever been drunk in the past month?	Yes	175	17.7

	No	775	78.4
	Missing	38	3.8
It's easy to get alcohol at school	Yes	152	15.4
	No	824	83.4
	Missing	12	1.2
What do you do if a cool kid offers you some alcohol?	Say you don't want to drink	646	65.4
	Take the alcohol and pretend to drink	235	23.8
	Take the alcohol and drink	97	9.8
	Missing	10	1.0
Attitude toward Violence and Alcohol Use			
Boys and men do not have to be violent	Agree	479	48.5
	Not sure	196	19.8
	Disagree	311	31.5
	Missing	2	.2
There are things I can do to make myself feel safer.	Agree	666	67.4
	Not sure	183	18.5
	Disagree	135	13.7
	Missing	4	.4
There are different ways we can control anger.	Agree	500	50.6
	Not sure	256	25.9
	Disagree	229	23.2
	Missing	3	.3
If someone has made me feel angry, I can tell them how I feel	Agree	500	50.6
	Not sure	221	22.4
	Disagree	263	26.6
	Missing	4	.4
I think it is OK for adults to get drunk	Agree	315	31.9
	Not sure	187	18.9
	Disagree	481	48.7
	Missing	5	.5
My friends think it is OK for adults to get drunk	Agree	249	25.2
	Not sure	181	18.3
	Disagree	555	56.2
	Missing	3	.3
People who drink are more often violent	Agree	640	64.8

	Not sure	115	11.6
	Disagree	231	23.4
	Missing	2	.2
	Nutrition		
Do you have meals at school?	Yes	885	89.6
	No	84	8.5
	Missing	19	1.9
Lindiwe and Buntu … have enough food?	None	569	57.6
	One day	269	27.2
	Two days	53	5.4
	More than 2 days	75	7.6
	Missing	22	2.2
	Grants		
Is anyone in your home getting one of these grants?	No grants	248	25.1
	Foster grant	136	13.8
	Child support grant	331	33.5
	Pension	243	24.6
	Missing	30	3.0
	Stigma		
Teased	Not at all	690	69.8
	Sometimes	204	20.6
	Often	90	9.1
	Missing	4	.4
Treated badly	Not at all	634	64.2
	Sometimes	236	23.9
	Often	114	11.5
	Missing	4	.4
Have people gossiped behind your back about it	Not at all	541	54.8
	Sometimes	274	27.7
	Often	165	16.7
	Missing	8	.8
Did all this upset you	Not at all	473	47.9
	Sometimes	269	27.2
	Often	229	23.2
	Missing	17	1.7

I worry about being rejected	Strong disagree	334	33.8
	Disagree	332	33.6
	Agree	199	20.1
	Strongly agree	120	12.1
	Missing	3	.3
I avoid making new friends	Strong disagree	174	17.6
	Disagree	295	29.9
	Agree	365	36.9
	Strongly agree	153	15.5
	Missing	1	.1
I feel different and alone	Strong disagree	240	24.3
	Disagree	397	40.2
	Agree	232	23.5
	Strongly agree	116	11.7
	Missing	3	.3
If people know, they avoid touching me	Strong disagree	270	27.3
	Disagree	359	36.3
	Agree	225	22.8
	Strongly agree	129	13.1
	Missing	9	.9
If people know, they are afraid of me	Strong disagree	287	29.0
	Disagree	397	40.2
	Agree	215	21.8
	Strongly agree	87	8.8
	Missing	2	.2
If people know, they think I am a bad person	Strong disagree	226	22.9
	Disagree	461	46.7
	Agree	209	21.2
	Strongly agree	90	9.1
	Missing	2	.2
Parents don’t want me to be around their kids	Strong disagree	245	24.8
	Disagree	430	43.5
	Agree	209	21.2
	Strongly agree	100	10.1
	Missing	4	.4
Caregiver Illness			

Is there anyone who is ill at home?	Yes	289	29.3
	No	667	67.5
	Missing	32	3.2
How often in the past month has this person been unwell?	Never	575	58.2
	One week	118	11.9
	Two weeks	36	3.6
	Three weeks	22	2.2
	All month	107	10.8
	Missing	130	13.2
Caregiving responsibilities on child			
Washing clothes for other people	0 days	395	40.0
	1 day	186	18.8
	2 days	94	9.5
	3 days	57	5.8
	4 days	15	1.5
	5 days	35	3.5
	6 days	28	2.8
	7 days	164	16.6
	Missing	14	1.4
Help a sick person to dress or undress	0 days	659	66.7
	1 day	98	9.9
	2 days	59	6.0
	3 days	30	3.0
	4 days	14	1.4
	5 days	25	2.5
	6 days	19	1.9
	7 days	67	6.8
	Missing	17	1.7
Help a sick person to have a wash, or bath	0 days	622	63.0
	1 day	116	11.7
	2 days	64	6.5
	3 days	39	3.9
	4 days	28	2.8
	5 days	27	2.7
	6 days	22	2.2
	7 days	56	5.7

	Missing	14	1.4
Keep someone company when they are sick	0 days	413	41.8
	1 day	151	15.3
	2 days	85	8.6
	3 days	65	6.6
	4 days	39	3.9
	5 days	41	4.1
	6 days	35	3.5
	7 days	143	14.5
	Missing	16	1.6
Watch out for a sick person to check they are OK	0 days	460	46.6
	1 day	156	15.8
	2 days	75	7.6
	3 days	70	7.1
	4 days	34	3.4
	5 days	31	3.1
	6 days	38	3.8
	7 days	111	11.2
	Missing	13	1.3
Take brothers or sisters to school	0 days	305	30.9
	1 day	151	15.3
	2 days	71	7.2
	3 days	41	4.1
	4 days	24	2.4
	5 days	117	11.8
	6 days	71	7.2
	7 days	191	19.3
	Missing	17	1.7
Look after brothers or sisters	0 days	371	37.6
	1 day	135	13.7
	2 days	87	8.8
	3 days	58	5.9
	4 days	28	2.8
	5 days	42	4.3
	6 days	62	6.3
	7 days	183	18.5
	Missing	22	2.2

Remind someone to take their medication	0 days	362	36.6
	1 day	153	15.5
	2 days	114	11.5
	3 days	48	4.9
	4 days	37	3.7
	5 days	56	5.7
	6 days	43	4.4
	7 days	152	15.4
	Missing	23	2.3
Cook for the family	0 days	358	36.2
	1 day	120	12.1
	2 days	92	9.3
	3 days	56	5.7
	4 days	45	4.6
	5 days	44	4.5
	6 days	48	4.9
	7 days	196	19.8
	Missing	29	2.9
Feed a sick person	0 days	669	67.7
	1 day	74	7.5
	2 days	51	5.2
	3 days	42	4.3
	4 days	14	1.4
	5 days	23	2.3
	6 days	18	1.8
	7 days	78	7.9
	Missing	19	1.9
Clean the home	0 days	75	7.6
	1 day	98	9.9
	2 days	78	7.9
	3 days	62	6.3
	4 days	36	3.6
	5 days	79	8.0
	6 days	92	9.3
	7 days	429	43.4

	Missing	39	3.9
Take a sick person to clinic	0 days	615	62.2
	1 day	125	12.7
	2 days	61	6.2
	3 days	32	3.2
	4 days	26	2.6
	5 days	26	2.6
	6 days	17	1.7
	7 days	67	6.8
	Missing	19	1.9
Go to the clinic to collect medication for someone	0 days	645	65.3
	1 day	107	10.8
	2 days	54	5.5
	3 days	35	3.5
	4 days	23	2.3
	5 days	29	2.9
	6 days	22	2.2
	7 days	54	5.5
	Missing	19	1.9
Fetching water	0 days	103	10.4
	1 day	109	11.0
	2 days	74	7.5
	3 days	70	7.1
	4 days	35	3.5
	5 days	60	6.1
	6 days	85	8.6
	7 days	413	41.8
	Missing	39	3.9
Doing a job to earn money for the family	0 days	592	59.9
	1 day	86	8.7
	2 days	57	5.8
	3 days	41	4.1
	4 days	23	2.3
	5 days	23	2.3
	6 days	26	2.6

	7 days	119	12.0
	Missing	21	2.1
Making the bed for a sick person	0 days	530	53.6
	1 day	84	8.5
	2 days	70	7.1
	3 days	55	5.6
	4 days	23	2.3
	5 days	33	3.3
	6 days	42	4.3
	7 days	130	13.2
	Missing	21	2.1
Washing bedclothes when a someone has been ill	0 days	678	68.6
	1 day	81	8.2
	2 days	35	3.5
	3 days	37	3.7
	4 days	18	1.8
	5 days	29	2.9
	6 days	25	2.5
	7 days	65	6.6
	Missing	20	2.0
Washing or feeding a younger sibling	0 days	233	23.6
	1 day	121	12.2
	2 days	98	9.9
	3 days	82	8.3
	4 days	32	3.2
	5 days	51	5.2
	6 days	61	6.2
	7 days	281	28.4
	Missing	29	2.9
Giving a sick person medication	0 days	398	40.3
	1 day	123	12.4
	2 days	102	10.3
	3 days	59	6.0
	4 days	28	2.8
	5 days	37	3.7

	6 days	35	3.5
	7 days	183	18.5
	Missing	23	2.3
Collect wild foods	0 days	327	33.1
	1 day	123	12.4
	2 days	74	7.5
	3 days	61	6.2
	4 days	40	4.0
	5 days	48	4.9
	6 days	54	5.5
	7 days	221	22.4
	Missing	40	4.0
Collect firewood	0 days	254	25.7
	1 day	127	12.9
	2 days	87	8.8
	3 days	78	7.9
	4 days	45	4.6
	5 days	54	5.5
	6 days	62	6.3
	7 days	246	24.9
	Missing	35	3.5
Work in the field or vegetable garden at home	0 days	237	24.0
	1 day	92	9.3
	2 days	106	10.7
	3 days	70	7.1
	4 days	37	3.7
	5 days	61	6.2
	6 days	75	7.6
	7 days	275	27.8
	Missing	35	3.5
Look after cattle or goats	0 days	703	71.2
	1 day	61	6.2
	2 days	26	2.6
	3 days	26	2.6
	4 days	9	.9

	5 days	23	2.3
	6 days	10	1.0
	7 days	97	9.8
	Missing	33	3.3
Knowledge of and Attitude toward HIV/AIDS			
Are you willing to be friends with someone with HIV?	Yes	99	10.0
	No	839	84.9
	Missing	50	5.1
Are you willing to be friends with someone whose parents have HIV/AIDS?	Yes	137	13.9
	No	807	81.7
	Missing	44	4.5
HIV is a punishment for sinning	Yes	321	32.5
	No	619	62.7
	Missing	48	4.9
People with HIV can look healthy	Yes	186	18.8
	Maybe	314	31.8
	No	461	46.7
	Missing	27	2.7
You can get HIV from sharing food or cups and plates with someone who has HIV/AIDS	Yes	169	17.1
	Maybe	209	21.2
	No	580	58.7
	Missing	30	3.0
There is a cure for HIV/AIDS	Yes	308	31.2
	Maybe	232	23.5
	No	419	42.4
	Missing	29	2.9
AIDS can be caused by witchcraft	Yes	135	13.7
	Maybe	164	16.6
	No	650	65.8
	Missing	39	3.9
HIV causes AIDS	Yes	488	49.4
	Maybe	171	17.3
	No	294	29.8
	Missing	35	3.5
HIV infection can be prevented by using condoms	Yes	555	56.2
	Maybe	141	14.3

	No	258	26.1
	Missing	34	3.4
You can reduce the risk of HIV by having fewer sexual partners	Yes	303	30.7
	Maybe	285	28.8
	No	357	36.1
	Missing	43	4.4
By not having sex	Yes	466	47.2
	Maybe	155	15.7
	No	336	34.0
	Missing	31	3.1
By always using a condom	Yes	511	51.7
	Maybe	163	16.5
	No	286	28.9
	Missing	28	2.8
Not sharing needles with others	Yes	471	47.7
	Maybe	179	18.1
	No	310	31.4
	Missing	28	2.8
Avoiding contact with other peoples blood	Yes	571	57.8
	Maybe	166	16.8
	No	224	22.7
	Missing	27	2.7
By being faithful to one partner	Yes	532	53.8
	Maybe	201	20.3
	No	228	23.1
	Missing	27	2.7
Don't Know	Yes	371	37.6
	Maybe	155	15.7
	No	433	43.8
	Missing	29	2.9
Perception about Gender			
Boys and girls should be treated equally	Agree	615	62.2
	Disagree	340	34.4
	Missing	33	3.3
If a boy gives a girl presents, she cannot refuse	Agree	430	43.5

sex	Disagree	500	50.6
	Missing	58	5.9
Boys and girls are not equal	Agree	660	66.8
	Disagree	276	27.9
	Missing	52	5.3
A person must have sex with his/her boyfriend/girlfriend to show love	Agree	518	52.4
	Disagree	412	41.7
	Missing	58	5.9

Chi Square Test (Cross Tabs)

Relationship of psychosocial problem with age

			Age			Total
			13-16 years	17-19 years	9-12 years	
SDQ Total Difficulties Score (Teacher-reported)	Abnormal	Count	82	1	126	209
		Expected Count	62.2	1.1	145.8	209.0
	Borderline	Count	70	1	183	254
		Expected Count	75.6	1.3	177.1	254.0
	Normal	Count	142	3	380	525
		Expected Count	156.2	2.7	366.1	525.0
Total		Count	294	5	689	988
		Expected Count	294.0	5.0	689.0	988.0

			Age			Total
			13-16 years	17-19 years	9-12 years	
Hyperactivity (Child-reported)	Abnormal	Count	26	0	42	68
		Expected Count	20.2	.3	47.4	68.0
	Borderline	Count	41	0	85	126
		Expected Count	37.5	.6	87.9	126.0
	Normal	Count	227	5	562	794
		Expected Count	236.3	4.0	553.7	794.0
Total		Count	294	5	689	988
		Expected Count	294.0	5.0	689.0	988.0

			Age			Total
			13-16 years	17-19 years	9-12 years	
Peer Relationship Problem (Child-reported)	Abnormal	Count	116	3	239	358
		Expected Count	106.5	1.8	249.7	358.0
	Borderline	Count	138	1	339	478
		Expected Count	142.2	2.4	333.3	478.0
	Normal	Count	40	1	111	152
		Expected Count	45.2	.8	106.0	152.0
Total		Count	294	5	689	988
		Expected Count	294.0	5.0	689.0	988.0

			Age			Total
			13-16 years	17-19 years	9-12 years	
Pro-social Behavior (Teacher-reported)	Abnormal	Count	106	1	185	292
		Expected Count	86.9	1.5	203.6	292.0
	Borderline	Count	52	0	157	209
		Expected Count	62.2	1.1	145.8	209.0
	Normal	Count	136	4	347	487
		Expected Count	144.9	2.5	339.6	487.0
Total		Count	294	5	689	988
		Expected Count	294.0	5.0	689.0	988.0

			Age			Total
			13-16 years	17-19 years	9-12 years	
Pro-social behavior (Child-reported)	Abnormal	Count	76	0	171	247
		Expected Count	73.5	1.3	172.3	247.0
	Borderline	Count	57	1	168	226
		Expected Count	67.3	1.1	157.6	226.0
	Normal	Count	161	4	350	515
		Expected Count	153.2	2.6	359.1	515.0
Total		Count	294	5	689	988
		Expected Count	294.0	5.0	689.0	988.0

			Age			Total
			13-16 years	17-19 years	9-12 years	
Self Esteem	High	Count	158	2	420	580
		Expected Count	172.6	2.9	404.5	580.0
	Low	Count	136	3	269	408
		Expected Count	121.4	2.1	284.5	408.0
Total		Count	294	5	689	988
		Expected Count	294.0	5.0	689.0	988.0

			Age			Total
			13-16 years	17-19 years	9-12 years	
Depression	Clinical	Count	20	1	50	71
		Expected Count	21.1	.4	49.5	71.0
	Normal	Count	274	4	639	917
		Expected Count	272.9	4.6	639.5	917.0
Total		Count	294	5	689	988
		Expected Count	294.0	5.0	689.0	988.0

			Age			Total
			13-16 years	17-19 years	9-12 years	
Anxiety	Clinical	Count	96	2	255	353
		Expected Count	105.0	1.8	246.2	353.0
	Normal	Count	198	3	434	635
		Expected Count	189.0	3.2	442.8	635.0
Total		Count	294	5	689	988
		Expected Count	294.0	5.0	689.0	988.0

Relationship of psychosocial problem with gender

			Gender		
			Female	Male	Total
SDQ Total Difficulties Score (Teacher-reported)	Abnormal	Count	103	106	209
		Expected Count	106.0	103.0	209.0
	Borderline	Count	125	129	254
		Expected Count	128.8	125.2	254.0
	Normal	Count	273	252	525
		Expected Count	266.2	258.8	525.0
Total		Count	501	487	988
		Expected Count	501.0	487.0	988.0

			Gender		
			F	M	Total
Peer Relationship Problems (Child-reported)	Abnormal	Count	169	189	358
		Expected Count	181.5	176.5	358.0
	Borderline	Count	249	229	478
		Expected Count	242.4	235.6	478.0
	Normal	Count	83	69	152
		Expected Count	77.1	74.9	152.0
Total		Count	501	487	988
		Expected Count	501.0	487.0	988.0

			Gender		
			Female	Male	Total
Hyperactivity (Child-reported)	Abnormal	Count	28	40	68
		Expected Count	34.5	33.5	68.0
	Borderline	Count	56	70	126
		Expected Count	63.9	62.1	126.0
	Normal	Count	417	377	794
		Expected Count	402.6	391.4	794.0
Total		Count	501	487	988
		Expected Count	501.0	487.0	988.0

			Gender		
			Female	Male	Total
Pro-social Behavior (Teacher-reported)	Abnormal	Count	146	146	292
		Expected Count	148.1	143.9	292.0
	Borderline	Count	106	103	209
		Expected Count	106.0	103.0	209.0
	Normal	Count	249	238	487
		Expected Count	247.0	240.0	487.0
Total		Count	501	487	988
		Expected Count	501.0	487.0	988.0

			Gender		
			Female	Male	Total
Pro-social behavior (Child-	Abnormal	Count	116	131	247

reported)		Expected Count	125.3	121.8	247.0
	Borderline	Count	118	108	226
		Expected Count	114.6	111.4	226.0
	Normal	Count	267	248	515
		Expected Count	261.1	253.9	515.0
Total		Count	501	487	988
		Expected Count	501.0	487.0	988.0

			Gender		
			Female	Male	Total
Self Esteem	High	Count	303	277	580
		Expected Count	294.1	285.9	580.0
	Low	Count	198	210	408
		Expected Count	206.9	201.1	408.0
Total		Count	501	487	988
		Expected Count	501.0	487.0	988.0

			Gender		
			Female	Male	Total
Depression	Clinical	Count	28	43	71
		Expected Count	36.0	35.0	71.0
	Normal	Count	473	444	917
		Expected Count	465.0	452.0	917.0
Total		Count	501	487	988
		Expected Count	501.0	487.0	988.0

			Sex		
			F	M	Total
Anxiety	Clinical	Count	191	162	353
		Expected Count	179.0	174.0	353.0
	Normal	Count	310	325	635
		Expected Count	322.0	313.0	635.0
Total		Count	501	487	988
		Expected Count	501.0	487.0	988.0

Relationship of psychosocial problem with grade

			Grade		
			5	6	Total
SDQ Total Difficulties Score (Teacher-reported)	Abnormal	Count	97	112	209
		Expected Count	117.8	91.2	209.0
	Borderline	Count	185	69	254
		Expected Count	143.2	110.8	254.0
	Normal	Count	275	250	525
		Expected Count	296.0	229.0	525.0
Total		Count	557	431	988
		Expected Count	557.0	431.0	988.0

			Grade		
			5	6	Total
Peer Relationship Problem (Child-reported)	Abnormal	Count	203	155	358
		Expected Count	201.8	156.2	358.0
	Borderline	Count	278	200	478

		Expected Count	269.5	208.5	478.0
	Normal	Count	76	76	152
		Expected Count	85.7	66.3	152.0
Total		Count	557	431	988
		Expected Count	557.0	431.0	988.0

			Grade		
			5	6	Total
Hyperactivity (Child-reported)	Abnormal	Count	39	29	68
		Expected Count	38.3	29.7	68.0
	Borderline	Count	90	36	126
		Expected Count	71.0	55.0	126.0
	Normal	Count	428	366	794
		Expected Count	447.6	346.4	794.0
Total		Count	557	431	988
		Expected Count	557.0	431.0	988.0

			Grade		
			5	6	Total
Pro-social behavior (Teacher-reported)	Abnormal	Count	181	111	292
		Expected Count	164.6	127.4	292.0
	Borderline	Count	160	49	209
		Expected Count	117.8	91.2	209.0
	Normal	Count	216	271	487
		Expected Count	274.6	212.4	487.0
Total		Count	557	431	988
		Expected Count	557.0	431.0	988.0

			Grade		
			5	6	Total
Pro-social behavior (Child-reported)	Abnormal	Count	166	81	247
		Expected Count	139.3	107.8	247.0
	Borderline	Count	168	58	226
		Expected Count	127.4	98.6	226.0
	Normal	Count	223	292	515
		Expected Count	290.3	224.7	515.0
Total		Count	557	431	988
		Expected Count	557.0	431.0	988.0

			Grade		
			5	6	Total
Self Esteem	High	Count	280	300	580
		Expected Count	327.0	253.0	580.0
	Low	Count	277	131	408
		Expected Count	230.0	178.0	408.0
Total		Count	557	431	988
		Expected Count	557.0	431.0	988.0

			Grade		
			5	6	Total
Depression	Clinical	Count	44	27	71
		Expected Count	40.0	31.0	71.0
	Normal	Count	513	404	917

	Expected Count	517.0	400.0	917.0
Total	Count	557	431	988
	Expected Count	557.0	431.0	988.0

			Grade		
			5	6	Total
Anxiety	Clinical	Count	225	128	353
		Expected Count	199.0	154.0	353.0
	Normal	Count	332	303	635
		Expected Count	358.0	277.0	635.0
Total		Count	557	431	988
		Expected Count	557.0	431.0	988.0

Spearman Correlations

Social support

	SDQ Total Difficulties (Teacher-reported)	Peer Relationship (Child-reported)	Hyper-activity (Child-reprted)	Pro-social Behavior (Teacher-reported)	Pro-social Behavior (Child-reported)	Self-esteem	Anxiety	Depression
The person in your life: Your caregiver	.020	.037	.112**	.014	-.024	-.023	-.037	.169**
The person in your life: Your sister or brother	-.028	.034	.019	.022	-.121**	-.021	.017	.093**
The person in your life: A teacher	.056	.025	.015	.007	-.087**	-.007	.010	.071*
The person in your life: The principal or asst. principal	.064*	.084**	.014	-.017	-.012	-.032	.049	.021
The person in your life: Your best friend	-.054	-.023	.031	.036	-.073*	-.008	.054	.077*
The person in life: The group of close friends	-.093**	-.037	.038	.039	-.114**	.000	-.056	.065*
Helpful in personal problems: Your caregiver	-.007	.016	-.143**	-.035	.172**	.141**	-.076*	-.194**
Helpful in personal problems: Your sister or brother	.038	-.059	-.145**	-.041	.162**	.191**	-.045	-.172**
Helpful in personal problems: A teacher	.049	-.001	-.112**	-.046	.161**	.133**	-.083**	-.152**
Helpful in personal problems: The Principal or Asst. Principal	.027	-.032	-.076*	-.021	.179**	.090**	-.071*	-.140**
Helpful in personal problems: Your best friend	.031	-.042	-.085**	-.022	.146**	.092**	-.004	-.108**

Helpful in personal problems: The group of close friends	.078*	-.053	-.015	-.047	.063	.044	-.021	-.098**
Helpful when need money: Your caregiver	-.024	-.045	-.090**	.019	.090**	.111**	-.039	-.095**
Helpful when need money: Your sister or brother	.047	-.023	-.104**	-.078*	.126**	.139**	-.061	-.115**
Helpful when need money: A teacher	.040	.071*	.064*	-.030	.000	-.001	.047	.025
Helpful when need money: The principal or asst. principal	.022	.006	.061	.012	-.019	-.003	.059	-.008
Helpful when need money: your best friend	.061	.054	-.014	-.035	.065*	.016	-.043	-.023
Helpful when need money: The group of close friends	.058	-.022	.040	-.038	-.040	-.028	.025	.004
Enjoying company: Your caregiver	-.001	-.053	-.140**	-.007	.151**	.141**	-.056	-.129**
Enjoying company: Your sister and brother	.001	-.021	-.158**	.021	.201**	.176**	-.089**	-.142**
Enjoying company: A teacher	-.023	-.015	-.056	-.014	.133**	.087**	-.055	-.073*
Enjoying company: The principal or asst. principal	-.026	-.017	-.078*	.010	.101**	.055	-.035	-.112**
Enjoying company: Your best friend	.019	.031	-.118**	.013	.193**	.127**	-.080*	-.154**
Enjoying company: The group of close friends	.027	-.014	-.091**	-.006	.143**	.051	-.042	-.118**

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Attitude toward Violence and Alcohol Use

	SDQ Total Difficulties (Teacher-reported)	Peer Relationship (Child-reported)	Hyper-activity (Child-reprted)	Pro-social Behavior (Teacher-reported)	Pro-social Behavior (Child-reported)	Self-esteem	Depression	Anxiety
Boys and men do not have to be violent	-.014	-.030	.003	.024	.025	-.011	.060	.002
There are things I can do to make myself feel safer.	-.027	.032	.060	-.007	-.013	-.064*	.153**	-.009

There are different ways we can control anger.	-.017	.028	.096**	-.029	-.090**	-.041	.118**	-.047
If someone has made me feel angry, I can tell them how I feel	-.022	.006	.040	.019	-.030	.004	.045	.008
I think it is OK for adults to get drunk	-.052	-.031	-.072*	.028	.027	.073*	-.139**	-.101**
My friends think it is OK for adults to get drunk	-.113**	-.011	-.068*	.078*	.104**	.130**	-.160**	-.107**
People who drink are more often violent	.062	.088**	.159**	-.083**	-.102**	-.158**	.251**	.032

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Nutrition

	SDQ Total Difficulties (Teacher-reported)	Peer Relationship (Child-reported)	Hyper-activity (Child-reprted)	Pro-social Behavior (Teacher-reported)	Pro-social Behavior (Child-reported)	Self-esteem	Depression	Anxiety
"Do you have meals at school?"	-.003	.056	.049	-.005	-.027	-.038	.146**	.008
Lindiwe and Buntu … enough food?	.131**	-.004	.082*	-.208**	-.019	-.059	.085**	.061

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Grants

	SDQ Total Difficulties (Teacher-reported)	Peer Relationship (Child-reported)	Hyper-activity (Child-reprted)	Pro-social Behavior (Teacher-reported)	Pro-social Behavior (Child-reported)	Self-esteem	Anxiety	Depression
Is anyone in your home getting one of these grants?	-.017	-.026	.018	.054	.022	.018	-.024	-.064*

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Stigma

	SDQ Total Difficulties (Teacher-reported)	Peer Relationship (Child-reported)	Hyper-activity (Child-reprted)	Pro-social Behavior (Teacher-reported)	Pro-social Behavior (Child-reported)	Self-esteem	Anxiety	Depression
Teased	-.064*	.063*	.020	.066*	.043	-.030	-.064*	.074*
Treated badly	.013	.122**	.114**	-.007	-.036	-.087**	.106**	.216**
People gossiped behind your back about it	.032	.082**	.089**	.027	.014	-.037	.036	.107**
Did all this upset you	.015	.034	.008	-.003	.058	-.011	.056	.081*

I worry about being rejected	.077*	.077*	.076*	-.061	-.017	-.046	.135**	.074*
I avoid making new friends	.030	.043	.043	-.032	.002	.023	.092**	-.031
I feel different and alone	.065*	.065*	.116**	-.053	-.068*	-.085**	.074*	.164**
If people know, they avoid touching me	.071*	.060	.051	-.048	-.017	-.039	.121**	.046
If people know, they are afraid of me	.062	.026	.062	-.010	.005	-.044	.048	.054
If people know they think I am a bad person	.044	.110**	.100**	-.048	-.034	-.085**	.100**	.143**
Parents don't want me to be around their kids	.092**	.097**	.119**	-.053	-.037	-.098**	.077*	.116**

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Caregiver Illness

	SDQ Total Difficulties (Teacher-reported)	Peer Relationship (Child-reported)	Hyper-activity (Child-reprted)	Pro-social Behavior (Teacher-reported)	Pro-social Behavior (Child-reported)	Self-esteem	Anxiety	Depression
Is there anyone who is ill at home?	-.042	-.067*	-.082*	.046	.069*	.059	-.123**	-.060
How often in the past month has this person been unwell?	.082*	.069*	.087*	-.066	-.039	-.007	.070*	.091**

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Caregiving responsibility on Child

	SDQ Total Difficulties (Teacher-reported)	Peer Relationship (Child-reported)	Hyper-activity (Child-reprted)	Pro-social Behavior (Teacher-reported)	Pro-social Behavior (Child-reported)	Self-esteem	Anxiety	Depression
Washing clothes for other people	.074*	.060	.085**	-.119**	-.057	-.071*	.128**	.057
Help a sick person to dress or undress	.100**	.092**	.053	-.050	-.037	-.065*	.123**	.160**
Help a sick person to have a wash, or bath	.068*	.023	.116**	-.033	-.110**	-.086**	.096**	.140**
Keep someone company when they are sick	.083**	.023	.016	-.051	-.020	-.023	.085**	.024
Watch out for a sick person to check they are OK	.077*	.077*	.076*	-.069*	-.027	-.030	.105**	.080*
Take brothers or sisters to school	.042	.059	-.014	-.008	-.011	.019	.056	.002
Look after brothers or sisters	.041	.003	-.014	-.027	.032	-.001	.020	.036
Remind someone to take their medication	.098**	.011	-.011	-.043	-.022	.022	.066*	.008
Cook for the family	.055	.051	-.027	-.025	.057	.087**	.096**	-.025
Feed a sick person	.075*	.066*	.111**	-.039	-.071*	-.091**	.117**	.168**
Clean the home	-.027	-.021	-.164**	-.017	.088**	.152**	-.040	-.162**
Take a sick person to the clinic	.007	.049	.072*	.007	-.051	-.029	.096**	.121**
Go to the clinic to collect medication for someone	.031	.069*	.152**	-.026	-.149**	-.125**	.136**	.239**

Fetching water	-.020	-.006	-.121**	.019	.008	.143**	.059	-.055
Doing a job to earn money for the family	.068*	.069*	.152**	-.027	-.077*	-.136**	.188**	.177**
Making the bed for a sick person	.079*	.033	.100**	-.043	-.097**	-.025	.146**	.121**
Washing bedclothes when a someone has been ill	.052	.073*	.173**	.024	-.096**	-.139**	.161**	.194**
Washing or feeding a younger sibling	.009	.072*	-.028	.000	.031	.048	.077*	.010
Giving a sick person medication	.008	.091**	.029	.013	-.035	-.016	.090**	.059
Collect wild foods	.029	-.013	-.038	-.023	-.003	.025	.100**	.092**
Collect firewood	.002	.013	.048	-.006	-.055	-.001	.140**	.067*
Work in the field or vegetable garden at home	-.078*	.072*	.052	.051	-.043	.056	.065*	.051
Look after cattle or goats	-.009	.085**	.134**	-.022	-.121**	-.117**	.046	.254**

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Knowledge of and Attitude toward HIV/AIDS

	SDQ Total Difficulties (Teacher-reported)	Peer Relationship (Child-reported)	Hyper-activity (Child-reprted)	Pro-social Behavior (Teacher-reported)	Pro-social Behavior (Child-reported)	Self-esteem	Anxiety	Depression
Are you willing to be friends with someone with HIV?	-.022	-.031	-.073*	.053	-.008	.120**	-.037	-.172**
Are you willing to be friends with someone whose parents have HIV/AIDS?	-.060	.002	-.022	.022	-.038	.030	-.006	-.075*
HIV is a punishment for sinning	.060	.028	-.011	-.057	-.049	-.014	-.003	.073*
People with HIV can look healthy	-.017	.000	-.047	.023	-.034	.027	.022	.003
You can get HIV from sharing food or cups and plates with someone who has HIV/AIDS	-.085**	-.025	.007	.069*	-.024	.072*	.022	-.069*
There is a cure for HIV/AIDS	-.039	.074*	.035	.001	-.016	-.019	.005	.093**
AIDS can be caused by witchcraft	.019	-.030	-.156**	-.004	.104**	.147**	-.077*	-.192**
HIV causes AIDS	.004	.079*	.106**	-.031	-.058	-.067*	-.015	.144**
HIV infection can be prevented by using condoms	.058	.056	.109**	-.092**	-.139**	-.072*	-.018	.131**
You can reduce the risk of HIV by having fewer sexual partners	.063	.031	.009	-.039	-.007	.020	-.057	.031
By not having sex	-.013	.050	.082*	-.054	-.111**	-.025	.049	.111**
By always using a condom	.011	.057	.125**	-.048	-.126**	-.119**	.081*	.140**
Not sharing needles with others	.015	.024	.140**	-.028	-.078*	-.099**	.009	.101**
Avoiding contact with other peoples blood	.022	.028	.155**	-.045	-.165**	-.130**	.055	.178**

By being faithful to one partner	.004	.013	.012	-.024	-.038	.019	-.008	.081*

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Perception about Gender

	SDQ Total Difficulties (Teacher-reported)	Peer Relationship (Child-reported)	Hyper-activity (Child-reprted)	Pro-social Behavior (Teacher-reported)	Pro-social Behavior (Child-reported)	Self-esteem	Anxiety	Depression
Boys and girls should be treated equally	-.020	-.022	.033	-.016	-.038	.038	-.005	.062
If a boy gives a girl presents, she cannot refuse sex	.024	-.031	-.013	-.076*	.037	.001	-.022	-.024
Boys and girls are not equal	-.009	.039	.086**	-.017	-.025	-.012	-.045	.143**
A person must have sex with his/her boyfriend/girlfriend to show love	-.010	-.039	.009	-.016	.050	.026	-.033	-.039

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Regression

Impact of Factors on Teacher-reported SDI Total Difficulties Score

	B	t	Sig.
age	.478	2.305	.021
Grade	-2.064	-3.692	.000
Gender of household head	-.976	-2.253	.025
Mothers education	-.136	-2.580	.010
Kids in my classroom yell at each other a lot.	.178	.834	.404
There are a lot of fights at my school.	.248	1.203	.229
Are you scared of classmates/friends?	-.117	-.615	.539
Do you ever fear travelling to and from school?	.132	.538	.591
Have you ever had an alcoholic drink?	.310	1.154	.249
Have you ever been drunk in the past month?	.131	.650	.516
What do you do if a cool kid offers you some alcohol?	-.149	-.604	.546
My friends think it is OK for adults to get drunk	-.203	-.752	.452

principal person in life	-.292	-1.077	.282
group of close friend person in life	-.012	-.046	.963
Group of close friends helpful	.288	1.301	.194
How many days this week did you not have enough food	.297	1.673	.095
Teased	-.562	-1.705	.089
I worry about being rejected	.574	2.282	.023
I feel different and alone	.080	.300	.765
If people know, they avoid touching me	.291	1.157	.248
Parents don't want me to be around their kids	-.038	-.134	.893
How often in the past month has this person been unwell?	.076	.720	.472
Washing clothes for other people	-.121	-1.163	.245
Help a sick person to dress or undress	.206	1.271	.204
Keep someone company when they are sick	.210	1.823	.069
Help a sick person to have a wash, or bath	-.067	-.401	.688
Watch out for a sick person to check they are OK	-.134	-1.083	.279
Remind someone to take their medication	.126	1.258	.209
Feed a sick person	.084	.627	.531
Doing a job to earn money for the family	.100	.920	.358
Making the bed for a sick person	-.099	-.882	.378
Work in the field or vegetable garden at home	-.330	-3.665	.000
You can get HIV from sharing … HIV/AIDS	-.030	-.135	.893

Impact of Factors on Child-reported Peer Relationship Problem Score

	B	t	Sig.
age	.131	3.361	.001

Age of household	-.002	-.426	.670
I feel close to people at this school.	-.061	-1.257	.209
I learn a lot at my school.	.024	.457	.648
Are you scared of criminals?	.011	.266	.791
Are you scared of classmates/friends?	-.024	-.578	.563
Has anything ever happened to make you fear going to school?	-.019	-.361	.718
Do you ever fear travelling to and from school?	.060	1.047	.296
Have you been assaulted at school in the past 12 months?	-.021	-.365	.716
Have you ever had an alcoholic drink?	.128	2.220	.027
Have you ever been drunk in the past month?	-.004	-.086	.931
What do you do if a cool kid offers you some alcohol?	.052	.903	.367

Impact of Factors on Child-reported Hyperactivity Score

	B	t	Sig.
age	.190	2.609	.009
Gender	.133	.681	.496
Grade	-.701	-3.570	.000
SES quintiles	-.109	-1.617	.107
Mothers education	-.058	-3.157	.002
Kids in my class push and shove each other a lot.	-.045	-.632	.528
Kids in my classroom yell at each other a lot.	.009	.114	.909
There are a lot of fights at my school.	-.045	-.612	.541
I feel safe at my school.	.026	.307	.759
I feel close to people at this school.	.065	.790	.430

I learn a lot at my school.	.005	.061	.951
Do you know what help or assistance is available to you if you are a victim of any crime at school?	-.114	-1.035	.301
Are you scared of being hurt?	-.040	-.608	.543
Are you scared of criminals?	-.115	-1.486	.138
Are you scared of being disciplined?	-.093	-1.322	.187
Are you scared of classmates/friends?	-.035	-.447	.655
Are you scared of other things at school?	-.062	-.779	.436
Do you know where to go to report if you are a victim of crime at school, or if something bad happens to you at school?	-.030	-.355	.723
Has anybody ever threatened to harm you at school?	-.047	-.661	.509
Has anything ever happened to make you fear going to school?	.065	.834	.405
Do you ever fear travelling to and from school?	-.005	-.050	.960
Do you personally know people who bought weapons such	.043	.544	.586
Have you ever had an alcoholic drink?	.038	.382	.703
Have you ever been drunk in the past month?	.109	1.472	.142
It’s easy to get alcohol at school	-.023	-.229	.819
What do you do if a cool kid offers you some alcohol?	.150	1.835	.067
There are different ways we can control anger.	.086	.888	.375
I think it is OK for adults to get drunk	.114	1.187	.236
My friends think it is OK for adults to get drunk	-.059	-.585	.559
People who drink are more often violent	.061	.635	.526
Caregiver person in life	.162	1.478	.140
Caregiver helpful	-.103	-.861	.390
Sibling helpful	.062	.558	.577
Teacher helpful	-.067	-.566	.571
Principal helpful	.066	.588	.557

Best friend helpful	.064	.549	.583
Caregiver money	.129	1.127	.260
Sibling money	-.067	-.510	.610
Teacher money	-.053	-.516	.606
Caregiver fun	-.087	-.767	.443
Sibling fun	-.120	-.896	.371
Principal fun	.024	.290	.772
Best friend fun	-.016	-.158	.874
Group of close friends fun	-1.735E-5	-.091	.927
How many days this week did you not have enough food	.020	.330	.741
Treated badly	.121	.957	.339
Have people gossiped behind your back about it	-.081	-.883	.378
I worry about being rejected	.096	1.101	.271
I feel different and alone	.125	1.368	.172
If people know, they think I am a bad person	.067	.664	.507
Is there anyone who is ill at home?	.051	.665	.506
How often in the past month has this person been unwell?	.010	.291	.771
Washing clothes for other people	.024	.676	.499
Help a sick person to dress or undress	-.039	-.769	.442
Watch out for a sick person to check they are OK	.036	.871	.384
Feed a sick person	.059	1.213	.226
Clean the home	-.048	-1.283	.200
Take a sick person to the clinic	-.072	-1.530	.127
Go to the clinic to collect medication for someone	.044	.890	.374
Fetching water	-.047	-1.342	.180

Doing a job to earn money for the family	.014	.365	.716
Making the bed for a sick person	-.070	-1.864	.063
Washing bedclothes when a someone has been ill	.039	.751	.453
Look after cattle or goats	.025	.669	.504
Are you willing to be friends with someone with HIV	.030	.396	.692
AIDS can be caused by witchcraft	-.020	-.244	.808
HIV infection can be prevented by using condoms	.011	.139	.890
HIV causes AIDS	.074	.963	.336
By not having sex	-.023	-.273	.785
By always using a condom	.029	.285	.776
Not sharing needles with others	.097	1.190	.235
Avoiding contact with other peoples blood	.043	.491	.624
Boys and girls are not equal	-.080	-1.254	.211

Impact of Factors on Teacher-reported Pro-social Behaviour Score

	B	t	Sig.
age	-.016	-.241	.809
SES quintiles	.124	1.905	.057
Mother union status	-.334	-1.945	.052
Kids in my classroom yell at each other a lot.	-.075	-.997	.319
Kids in my class room wait for their turn to talk.	-.008	-.115	.908
There are a lot of fights at my school.	-.135	-1.906	.057
Are you scared of classmates/friends?	-.028	-.482	.630
Have you ever had an alcoholic drink?	-.015	-.180	.857
My friends think it is OK for adults to get drunk	-.058	-.611	.541

People who drink are more often violent	-.039	-.417	.677
Sibling money	.114	1.168	.243
How many days this week did you not have enough food	-.146	-2.354	.019
Teased	.276	2.550	.011
Washing clothes for other people	-.060	-1.773	.077
Watch out for a sick person to check they are OK	-.070	-1.960	.050
You can get HIV from sharing food or cups and plates with someone who has HIV/AIDS	.085	1.072	.284
HIV infection can be prevented by using condoms	-.158	-2.268	.024
If a boy gives a girl presents, she cannot refuse sex	.007	.123	.902

Impact of Factors on Child-reported Pro-social Behaviour Score

	B	t	Sig.
Kids in my class push and shove each other a lot.	.076	1.045	.296
Kids in my classroom yell at each other a lot.	-.036	-.461	.645
There are a lot of fights at my school.	.051	.694	.488
Do you know what help or assistance is available to you if you are a victim of any crime at school?	.095	.967	.334
Are you scared of criminals?	.042	.563	.573
Are you scared of teachers/principal?	-.031	-.441	.659
Are you scared of classmates/friends?	.022	.306	.759
Are you scared of other things at school?	.024	.297	.766
Do you know where to go to report if you are a victim of crime at school, or if something bad happens to you at school?	.118	1.274	.203
Has anything ever happened to make you fear going to school?	.040	.499	.618
Do you ever fear travelling to and from school?	-.049	-.465	.642
Do you personally know people who bought weapons such	-.141	-1.652	.099
Have you ever had an alcoholic drink?	.036	.358	.721

Have you ever been drunk in the past month?	.040	.529	.597
It’s easy to get alcohol at school	.085	.769	.442
What do you do if a cool kid offers you some alcohol?	-.094	-1.024	.306
There are different ways we can control anger.	.124	1.269	.205
My friends think it is OK for adults to get drunk	.007	.073	.942
People who drink are more often violent	-.018	-.185	.853
Sibling person in life	-.137	-1.103	.270
teacher person in life	.014	.111	.912
best friend person in life	.061	.638	.524
group of close friend person in life	.109	1.078	.281
Caregiver helpful	.002	.019	.985
Sibling helpful	-.101	-.821	.412
Teacher helpful	.005	.040	.968
Principal helpful	.027	.242	.809
Best friend helpful	.129	1.046	.296
Caregiver money	-.027	-.238	.812
Sibling money	-.094	-.684	.494
Best friend money	-.037	-.339	.735
Caregiver fun	.009	.080	.937
Sibling fun	.234	1.659	.097
Teacher fun	.118	1.150	.251
Principal fun	-.154	-1.607	.108
Best friend fun	-.077	-.662	.508
Group of close friends fun	-.001	-3.329	.001
I feel different and alone	-.112	-1.317	.188

Is there anyone who is ill at home?	.028	.336	.737
Help a sick person to have a wash, or bath	-.060	-1.214	.225
Feed a sick person	.095	2.035	.042
Clean the home	.074	2.201	.028
Go to the clinic to collect medication for someone	-.095	-1.906	.057
Doing a job to earn money for the family	.011	.273	.785
Making the bed for a sick person	-.093	-2.340	.020
Washing bedclothes when a someone has been ill	.025	.513	.608
Look after cattle or goats	-.052	-1.419	.156
AIDS can be caused by witchcraft	.053	.660	.510
HIV infection can be prevented by using condoms	-.196	-2.467	.014
By not having sex	-.084	-.971	.332
By always using a condom	-.048	-.495	.621
Not sharing needles with others	.044	.522	.602
Avoiding contact with other peoples blood	-.137	-1.578	.115

Impact of Factors on Self-Esteem

	B	t	Sig.
Gender of household	-.025	-.100	.921
Age	-.144	-1.365	.173
SES quintiles	.152	1.420	.156
Kids in my class push and shove each other a lot.	-.087	-.745	.457
Kids in my classroom yell at each other a lot.	-.023	-.185	.853
There are a lot of fights at my school.	.010	.087	.930
I feel safe at my school.	-.151	-1.117	.264

I feel close to people at this school.	.141	1.071	.284
I learn a lot at my school.	.140	.971	.332
Do you know what help or assistance is available to you if you are a victim of any crime at school?	-.091	-.616	.538
Are you scared of being hurt?	.012	.116	.908
Are you scared of criminals?	-.143	-1.206	.228
Are you scared of classmates/friends?	-.006	-.055	.956
Are you scared of being disciplined?	.223	1.844	.066
Have you ever been caned or hit at school for what you have done wrong by the principal or teacher?	.060	.544	.587
Has anything ever happened to make you fear going to school?	-.115	-.834	.405
Do you ever fear travelling to and from school?	-.075	-.479	.632
Have you been assaulted at school in the past 12 months?	.223	1.478	.140
Do you personally know people who bought weapons such	.029	.204	.838
Have you ever had an alcoholic drink?	.146	.934	.351
Have you ever been drunk in the past month?	-.178	-1.397	.163
It’s easy to get alcohol at school	.215	1.293	.196
What do you do if a cool kid offers you some alcohol?	-.002	-.015	.988
There are things I can do to make myself feel safer.	-.097	-.561	.575
I think it is OK for adults to get drunk	-.150	-.935	.350
My friends think it is OK for adults to get drunk	.138	.824	.410
People who drink are more often violent	-.289	-1.846	.065
Caregiver helpful	.067	.341	.733
Sibling helpful	-.238	-1.255	.210
Teacher helpful	.209	1.176	.240
Principal helpful	-.293	-1.576	.115
Best friend helpful	.072	.370	.712

Caregiver money	-.299	-1.614	.107
Sibling money	.269	1.271	.204
Caregiver fun	.246	1.305	.192
Sibling fun	.192	.831	.406
Teacher fun	.103	.689	.491
Best friend fun	-.064	-.359	.719
Treated badly	-.136	-.655	.512
I feel different and alone	-.218	-1.431	.153
If people know, they think I am a bad person	-.022	-.132	.895
Parents don't want me to be around their kids	-.167	-1.057	.291
Washing clothes for other people	-.137	-2.328	.020
Help a sick person to dress or undress	-.060	-.644	.520
Help a sick person to have a wash, or bath	.039	.422	.673
Cook for the family	.102	1.856	.064
Feed a sick person	.065	.857	.392
Clean the home	.113	1.857	.064
Go to the clinic to collect medication for someone	.010	.130	.896
Fetching water	.104	1.809	.071
Doing a job to earn money for the family	-.053	-.808	.419
Washing bedclothes when a someone has been ill	-.141	-1.722	.086
Look after cattle or goats	-.003	-.048	.962
Are you willing to be friends with someone with HIV	-.201	-1.662	.097
You can get HIV from sharing food or cups and plates with someone who has HIV/AIDS	-.004	-.027	.978
AIDS can be caused by witchcraft	.235	1.646	.100
HIV causes AIDS	-.024	-.181	.856

HIV infection can be prevented by using condoms	-.090	-.677	.498
By always using a condom	-.148	-1.033	.302
Not sharing needles with others	-.053	-.390	.696
Avoiding contact with other peoples blood	-.085	-.626	.532

Impact of Factors on CTIC-Total Score

	B	t	Sig.
age	1.096	2.697	.007
Grade	-.924	-.849	.396
Mothers_education	-.110	-1.122	.262
Kids in my class push and shove each other a lot.	.184	.463	.643
Kids in my classroom yell at each other a lot.	-.161	-.389	.698
Kids in my class look out for each other.	-.167	-.419	.675
There are a lot of fights at my school.	-.420	-1.044	.297
I feel safe at my school.	.365	.797	.426
I feel close to people at this school.	-.726	-1.600	.110
I learn a lot at my school.	.160	.335	.738
Do you know where to go to report if you are a victim of crime at school, or if something bad happens to you at school?	-.347	-.796	.427
Are you scared of being hurt?	-.378	-1.107	.269
Are you scared of criminals?	-.082	-.196	.845
Are you scared of classmates/friends?	-.196	-.465	.642
Are you scared of being disciplined?	.098	.251	.802
Do you know what help or assistance is available to you if you are a victim of any crime at school?	-.246	-.493	.622
Have you ever been caned or hit at school for what you have done wrong by the principal or teacher?	-.429	-1.040	.299
Has anything ever happened to make you fear going to school?	.281	.635	.525

Do you ever fear travelling to and from school?	-.085	-.162	.872
Have you been assaulted at school in the past 12 months?	-.090	-.173	.863
Do you personally know people who bought weapons such	-.531	-1.142	.254
Have you ever had an alcoholic drink?	-.535	-1.020	.308
Have you ever been drunk in the past month?	.448	1.069	.286
It's easy to get alcohol at school	1.090	1.808	.071
What do you do if a cool kid offers you some alcohol?	-.164	-.347	.729
There are things I can do to make myself feel safer.	1.318	2.245	.025
There are different ways we can control anger.	-.767	-1.418	.157
I think it is OK for adults to get drunk	-.188	-.353	.724
My friends think it is OK for adults to get drunk	.562	.987	.324
People who drink are more often violent	-.370	-.692	.489
Caregiver person in life	-.412	-.531	.595
Sibling person in life	1.136	1.730	.084
teacher person in life	.390	.494	.621
principal person in life	.025	.037	.971
Caregiver helpful	.665	.992	.321
Sibling helpful	-.836	-1.307	.192
Teacher helpful	-.583	-.880	.379
Principal helpful	.371	.589	.556
Best friend helpful	.412	.608	.543
Group of close friends helpful	.265	.506	.613
Caregiver money	.279	.445	.656

Sibling money	.146	.199	.843
Principal money	-.745	-1.287	.199
Caregiver fun	-.933	-1.442	.150
Sibling fun	-.349	-.466	.641
Teacher fun	.005	.010	.992
Best friend fun	-.161	-.280	.779
Group of close friends fun	-.001	-.692	.489
Do you have meals at school	1.239	2.662	.008
Teased	-.444	-.756	.450
Treated badly	2.350	3.660	.000
Have people gossiped behind your back about it	-.133	-.273	.785
I worry about being rejected	-.235	-.489	.625
I feel different and alone	.100	.201	.840
If people know, they think I am a bad person	.124	.221	.825
Is there anyone who is ill at home?	-.158	-.345	.730
Washing clothes for other people	-.097	-.489	.625
Help a sick person to dress or undress	-.366	-1.160	.246
Help a sick person to have a wash, or bath	.229	.709	.478
Watch out for a sick person to check they are OK	.015	.062	.951
Take brothers or sisters to school	-.104	-.571	.568
Feed a sick person	-.139	-.509	.611
Clean the home	-.192	-.929	.353
Take a sick person to the clinic	.067	.249	.804

Go to the clinic to collect medication for someone	.496	1.770	.077
Fetching water	-.152	-.770	.442
Doing a job to earn money for the family	.205	.933	.351
Making the bed for a sick person	-.021	-.097	.923
Washing bedclothes when a someone has been ill	.164	.565	.572
Giving a sick person medication	-.149	-.756	.450
Collect firewood	.478	2.552	.011
Look after cattle or goats	.245	1.170	.242
Are you willing to be friends with someone with HIV	.026	.059	.953
You can get HIV from sharing food or cups and plates with someone who has HIV/AIDS	-1.093	-2.359	.019
AIDS can be caused by witchcraft	-.499	-1.091	.276
HIV causes AIDS	.492	1.140	.255
HIV infection can be prevented by using condoms	.838	1.913	.056
By not having sex	-.135	-.285	.776
By always using a condom	.285	.505	.614
Not sharing needles with others	.572	1.267	.206
Avoiding contact with other peoples blood	.143	.290	.772

Impact of Factors on Anxiety

	B	t	Sig.
Grade	-.520	-2.389	.017
Kids in my class push and shove each other a lot.	-.214	-2.502	.013
Kids in my classroom yell at each other a lot.	.086	.931	.352
Kids in my class room wait for their turn to talk.	.121	1.359	.174

I always wait for my turn to talk.	-.157	-1.735	.083
There are a lot of fights at my school.	.172	2.024	.043
When I am angry or sad, I talk about my feelings to other kids at school.	-.091	-.981	.327
When I am angry or sad, I talk about my feelings to adults at school	.067	.729	.466
Are you scared of being hurt?	-.097	-1.232	.218
Are you scared of criminals?	.071	.796	.426
Are you scared of teachers/principal?	-.065	-.791	.429
Are you scared of classmates/friends?	.006	.063	.949
Has anybody ever threatened to harm you at school?	-.081	-.888	.375
Have you ever been caned or hit at school for what you have done wrong by the principal or teacher?	.008	.093	.926
Has anything ever happened to make you fear going to school?	-.114	-1.117	.265
Do you ever fear travelling to and from school?	.158	1.349	.178
Have you been assaulted at school in the past 12 months?	-.074	-.660	.509
Do you personally know people who bought weapons such	-.048	-.460	.646
Have you ever had an alcoholic drink?	.061	.524	.601
Have you ever been drunk in the past month?	.055	.575	.566
It’s easy to get alcohol at school	-.074	-.567	.571
What do you do if a cool kid offers you some alcohol?	.067	.634	.526
I think it is OK for adults to get drunk	.169	1.529	.127
My friends think it is OK for adults to get drunk	-.041	-.338	.735
Caregiver helpful	.153	1.131	.258
Teacher helpful	-.218	-1.727	.085
Principal helpful	.119	.923	.356
Sibling fun	-.068	-.462	.644
Best friend fun	.240	1.977	.048

Teased			
	-.320	-2.264	.024
Treated badly			
	.247	1.796	.073
I worry about being rejected			
	.297	2.762	.006
I avoid making new friends			
	.043	.372	.710
I feel different and alone			
	.107	.961	.337
If people know, they avoid touching me			
	.127	1.285	.199
If people know, they think I am a bad person			
	-.057	-.464	.643
Parents don’t want me to be around their kids			
	.075	.634	.526
Is there anyone who is ill at home?			
	-.074	-.754	.451
How often in the past month has this person been unwell?			
	.035	.846	.398
Washing clothes for other people			
	.003	.067	.946
Help a sick person to dress or undress			
	.013	.200	.842
Help a sick person to have a wash, or bath			
	.054	.819	.413
Keep someone company when they are sick			
	.025	.523	.601
Watch out for a sick person to check they are OK			
	-.033	-.650	.516
Remind someone to take their medication			
	-.007	-.162	.871
Cook for the family			
	.048	1.224	.221
Feed a sick person			
	-.037	-.649	.516
Take a sick person to the clinic			
	-.067	-1.151	.250
Go to the clinic to collect medication for someone			
	.070	1.205	.229
Doing a job to earn money for the family			
	.062	1.308	.191
Making the bed for a sick person			
	-.009	-.177	.860
Washing bedclothes when a someone has been ill			
	.110	1.851	.065
Washing or feeding a younger sibling			
	.024	.576	.565
Giving a sick person medication			
	-.041	-.945	.345

Collect wild foods	.062	1.554	.121
Collect firewood	.038	.902	.367
Work in the field or vegetable garden at home	-.055	-1.338	.181
AIDS can be caused by witchcraft	-.117	-1.348	.178
By always using a condom	.118	1.365	.173

Impact of Factors on Depression

	B	t	Sig.
Grade	-.334	-1.156	.248
Gender	.652	2.282	.023
age	.134	1.214	.225
SES quintiles	-.119	-1.219	.223
Mothers education	-.021	-.781	.435
Kids in my class push and shove each other a lot.	.117	1.131	.258
Kids in my classroom yell at each other a lot.	-.192	-1.776	.076
There are a lot of fights at my school.	-.082	-.759	.448
I feel safe at my school.	-.001	-.004	.997
I feel close to people at this school.	.014	.115	.908
I learn a lot at my school.	-.151	-1.185	.237
Do you know what help or assistance is available to you if you are a victim of any crime at school?	.042	.282	.778
Are you scared of being hurt?	.132	1.440	.151
Are you scared of criminals?	-.056	-.474	.635
Are you scared of classmates/friends?	.067	.583	.560
Are you scared of being disciplined?	.043	.407	.684
Do you know where to go to report if you are a victim of crime at school, or if something bad happens to you at school?	-.015	-.118	.906

Have you ever been caned or hit at school for what you have done wrong by the principal or teacher?	-.162	-1.427	.154
Has anything ever happened to make you fear going to school?	.034	.264	.792
Do you ever fear travelling to and from school?	.081	.576	.565
Have you been assaulted at school in the past 12 months?	-.030	-.188	.851
Do you personally know people who bought weapons such	-.114	-.956	.340
Have you ever had an alcoholic drink?	-.116	-.811	.418
Have you ever been drunk in the past month?	.023	.208	.835
It's easy to get alcohol at school	.240	1.497	.135
What do you do if a cool kid offers you some alcohol?	.073	.588	.557
There are things I can do to make myself feel safer.	-.100	-.660	.509
There are different ways we can control anger.	-.144	-1.005	.315
I think it is OK for adults to get drunk	-.038	-.269	.788
My friends think it is OK for adults to get drunk	-.086	-.583	.560
People who drink are more often violent	-.017	-.124	.902
Caregiver person in life	-.277	-1.384	.167
Sibling person in life	.327	1.993	.047
teacher person in life	.005	.026	.979
best friend person in life	.011	.076	.939
group of close friend person in life	.064	.394	.693
Caregiver helpful	.015	.088	.930
Sibling helpful	.197	1.215	.225
Teacher helpful	-.048	-.284	.776
Principal helpful	-.056	-.337	.736
Best friend helpful	.064	.363	.717
Group of close friends helpful	-.063	-.466	.641

Caregiver money	.130	.800	.424
Sibling money	.078	.405	.686
Caregiver fun	-.271	-1.557	.120
Sibling fun	.008	.040	.968
Teacher fun	-.060	-.455	.649
Principal fun	-.096	-.753	.452
Best friend fun	-.128	-.837	.403
Group of close friends fun	6.956E-5	.257	.797
Do you have meals at school	.146	1.275	.203
How many days this week did you not have enough food	.004	.043	.966
Is anyone in your home getting one of these grants?	-.047	-.566	.572
Teased	.063	.387	.699
Treated badly	.426	2.262	.024
Have people gossiped behind your back about it	-.073	-.497	.620
Did all this upset you?	-.054	-.436	.663
I worry about being rejected	-.118	-.939	.348
I feel different and alone	.386	2.778	.006
If people know, they think I am a bad person	.191	1.282	.201
Parents don’t want me to be around their kids	.218	1.515	.130
How often in the past month has this person been unwell?	.080	1.538	.125
Help a sick person to dress or undress	.044	.504	.614
Help a sick person to have a wash, or bath	-.016	-.189	.850
Watch out for a sick person to check they are OK	-.105	-1.713	.087
Feed a sick person	-.084	-1.135	.257
Clean the home	-.081	-1.555	.121

Take a sick person to the clinic	-.014	-.208	.836
Go to the clinic to collect medication for someone	.123	1.675	.095
Doing a job to earn money for the family	-.065	-1.127	.260
Making the bed for a sick person	.087	1.569	.117
Washing bedclothes when a someone has been ill	.132	1.738	.083
Collect wild foods	-.009	-.197	.844
Collect firewood	.050	1.050	.294
Look after cattle or goats	.030	.541	.589
Are you willing to be friends with someone with HIV	.033	.238	.812
Willing to be friends with someone whose parents have HIV/AIDS	.123	.815	.416
HIV is a punishment for sinning	.045	.402	.688
You can get HIV from sharing food or cups and plates with someone who has HIV/AIDS	-.107	-.871	.384
There is a cure for HIV/AIDS	-.073	-.635	.526
AIDS can be caused by witchcraft	-.138	-1.099	.272
HIV causes AIDS	.194	1.641	.101
HIV infection can be prevented by using condoms	.053	.446	.655
By not having sex	.271	2.188	.029
By always using a condom	-.036	-.239	.811
Not sharing needles with others	-.096	-.779	.436
Avoiding contact with other peoples blood	.008	.059	.953
By being faithful to one partner	.046	.355	.723
Boys and girls are not equal	-.092	-.929	.353