Faculty of Community and Health Sciences
School of Nursing P/Bag X17, Bellville 7535, South Africa

Barriers to utilisation of out-patient mental health services at a children's hospital in Cape Town

By Stella Mokitimi

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Supervisor: Prof O. Adejumo

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Stella Mokitimi

KEYWORDS

Barriers

Utilisation

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Adolescent

Mental health

Services

Attendance

Non-attendance

Association

ABSTRACT

Barriers to utilisation of out-patient mental health services at a children's hospital in Cape Town

S Mokitimi

Magister Curationis minithesis, Faculty of Community and Health Science, University of the Western Cape

This mini-thesis is an investigation of the barriers (if any) to utilisation of child and adolescent out-patient mental health services in the Division of Child and Adolescent Psychiatry at a children's hospital in Cape Town, South Africa. It explores the reasons that make the patients not to honour their appointments. The study examines the relationship between the dependent variables (attendance (0), and non-attendance (1)), and independent variables which are demographic factors (age, sex, education, race, employment, marital status, area of residence, form of treatment, diagnosis and frequency of missed appointments) and continuous variables (finance/costs, language, knowledge, stigma, support system, culture/religion, confidentiality, work, school, service, and other miscellaneous **v**ariables (forgetting, inconvenience, refusing, frequency of appointments, and length of the session and emergency).

The literature reviewed in the study revealed that non-attendance in mental health is a universal phenomenon, which affects everyone regardless of race, ethnicity or economic class. Furthermore, child mental health differs from other health fields in that almost all the patients are brought for consultation, somehow, against their will (Eapen & Jairam, 2009).

In the study, the present researcher argues that even though non-attendance in child and adolescent psychiatry is a universal phenomenon, and literature is consistent in the findings on the barriers to utilisation of mental health services in other parts of the world, there is poor information on similar studies on South Africa, and particularly in Cape Town, where this study is based. This study will therefore contribute information to the existing body of knowledge in this area of child and adolescent mental health care services.

The present researcher used a quantitative approach and Non-experimental design. Notably, the researcher used random stratified sampling with a population of patients who consulted with the Division of Child and Adolescent Out-patient Psychiatry Unit and at Neuropsychiatry Out-patient Clinic from the 1st of January 2011 to the 31st of December 2011, who missed appointments, and those who never missed appointments. The researcher conducted a survey using self-administered structured questionnaires, with children from 9 years to 18 years, and all parents/caregivers. The data is analysed using the Statistical Package for the Social Sciences (SPSS) software, Version 19.0 and Descriptive and inferential statistics.

Findings from this study showed that all other independent variables investigated are statistically insignificant and are not associated with non-attendance in this out-patient unit, except for school related reasons which are found to be dominant possible barriers for attendance, and culture/religion is also statistically significant and has a weak association with non-attendance. These findings have implications on service delivery in this unit. Based on the findings, this mini-thesis concludes with a recommendation that services may possibly need to be reviewed to meet the needs of the patients in order to improve utilisation. I also recommend that this study be rolled out to other community clinics in the Western Cape, as it was done on a smaller scale, and only in one out-patient unit.

April, 2013

DECLARATION

I declare that the study entitled "*Barriers to utilisation of out-patient mental health services at a children's hospital in Cape Town"* is my own work, that it has not been submitted for any degree or examination in any other university, and that all the sources I have used or quoted have been indicated and acknowledged by complete references.

Stella Mokitimi

Signed: …….

April, 2013

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CONTENTS

DEFINITIONS

Non-attendees (DNAs): persons who were admitted from the 1st January 2011 until 31st December 2011, who missed one appointment within that period, and were still seen at DCAP when the study was conducted.

Regular Attendees (Non DNAs): Persons who were admitted from the 1st January 2011 until the 31st December 2011, who never missed any appointment within that period, and were still seen at DCAP when the study was conducted.

Barriers: Any reason(s) that make(s) it impossible for the patient to attend for a scheduled appointment.

Children: Persons from 4years old until 18years old.

Caregivers: Any person who is responsible for bringing the child for appointments under the following categories: Legal guardian (foster or adoptive parent), Legal guardian from the children's home (carer/social worker/driver/etc.), Grandparent, Sibling (brother or sister) over the age of 18 years, Relative (Uncle/aunt/cousin).

Utilization: attending or being present for a scheduled appointment.

LIST OF ABBREVIATIONS

DNA: Did not attend (Non-attendees)

NON-DNAS: Attendees

DCAP-OPU: Division of child and adolescent psychiatry out-patient unit

SPSS: Statistical Package for Social Sciences (software)

CHAPTER ONE
ORIENTATION TO THE STUDY

1.1. Introduction

This chapter provides an overview of the study. It is divided into nine sections: background of the study, problem statement, aim and objectives, research question, the definition of concepts, significance of the study, ethical aspects of the research, limitations of the study, and outline of the chapters.

1.2. Background of the study

The Division of Child and Adolescent Psychiatry (DCAP) is a psychiatric unit at a children's hospital, in Cape Town. This unit has an in-patient and out-patient section. It offers services that include Infant Mental Health, Community Outreach, Neuropsychiatry and Consultation Liaison. DCAP admits children with various psychiatric disorders from various communities around Cape Town, with different backgrounds. This unit offers funds to patients who are not able to consult due to financial constraints. Patients are contacted as there is a fund for patients from disadvantaged backgrounds, who are unable to attend due to lack of funds. Such patients are given half to a full amount for travelling costs for their appointments, to ensure that they are able to receive the services that they need. Despite this provision, patients still miss their appointments, and some cases are closed due to non-attendance.

At DCAP, about 25% of the overall population miss their appointments more than once. Even though 25% may appear to be a small percentage, it is significant because of the frequency of these missed appointments (DNAs).

Literature reveals that non-attendance in mental health is a universal phenomenon, and it affects everyone regardless of race, ethnicity or economic class. Furthermore, child mental health differs from other health fields in that almost all the patients are brought for consultation, somehow, against their will. Help seeking preferences with the general population also vary widely in different cultures, with only a minority preferring to consult mental health professionals (Eapen & Jairam, 2009).

Many studies have been conducted around the world on the utilisation of child and adolescent mental health services. Most of the studies were conducted in the US, a few in Africa, and the present researcher did not find any study conducted in South Africa, particularly Cape Town/Western Cape (Aida *et al*., 2010; Aisbet *et al.*, 2007; Eapen *et al*., 2009; Frisch & Frisch, 2006; Gerald *et al*., 2005; Goldstein *et al*., 2006; Gorman, 2007; He, 2007; Hunt *et al*., 2009; Kaplan & Sadocks, 1994; Lazaratus *et al*. & Lerner *et al*., 2004; Leslie *et al*., 2000; Lopez *et al*., 2008; Minty *et al*., 2004; Bauman, 2007; Scahil, 1997; Shi *et al*., 2009; Snowden *et al.*, 2008; Starr *et al*., 2002; Uys & Middleton, 2004; Ailson & Knesil, 1996; Wu *et al*., 2010 & Yan Fen *et al*., 2009).

The samples used in these studies were taken from schools, foster care children, different countries (rural and urban areas), private public mental health services, in and out patients and emergency psychiatry services and children from six years to adulthood (Aida *et al*., 2010; Aisbet *et al*., 2007; Eapen *et al*., 2009; Frisch & Frisch, 2006; Gerald *et al*., 2005; Goldstein *et al***.,** 2006; Gorman, 2007; He, 2007; Hunt *et al*., 2009; Kaplan & Sadocks, 1994; Lazaratus *et al*. & Lerner *et al.*, 2004; Leslie *et al*., 2000; Lopez *et al*., 2008; Minty *et al*., 2004; Bauman, 2007; Scahil, 1997; Shi *et al*., 2009; Snowden *et al*., 2008; Starr *et al*., 2002; Uys & Middleton, 2004; Ailson & Knesil, 1996; Wu *et al*., 2010 & Yan Fen *et al*., 2009) .

These studies were conducted using different research methods and designs, quantitative and qualitative design (Ford *et al.*, 1997; Donovan *et al*, 1997; Ginsburg *et al.*, 1995; WHO, 2002 cited in Tylee *et al.*, 2007).

Even though most studies that have been conducted on the barriers to utilisation of mental health services, on children and adults, and in various health settings globally, are consistent and concur on the barriers to utilisation of mental health services (Aida *et al*., 2010; Aisbet *et al*., 2007; Eapen *et al*., 2009; Frisch & Frisch, 2006; Gerald *et al*., 2005; Goldstein *et al*., 2006; Gorman, 2007; He, 2007; Hunt *et al*., 2009; Kaplan & Sadocks, 1994; Lazaratus *et al.*, Lerner *et al*., 2004; Leslie *et al*., 2000; Lopez *et al*., 2008; Minty *et al*., 2004; Bauman, 2007; Scahil, 1997; Shi *et al*., 2009; Snowden *et al*., 2008; Starr *et al*., 2002; Uys & Middleton, 2004; Ailson & Knesil, 1996; Wu *et al*., 2010 & Yan Fen *et al*., 2009), there is still poor information on similar studies for

South Africa, and particularly in Cape Town, where this study was conducted. This study will therefore contribute to the body of knowledge in South Africa, and can be rolled out to other communities as it was conducted at a small scale in one institution.

This literature review focuses on the findings of other studies on the predictors of utilisation of child and adolescent mental health services. In addition, it explores the barriers that have been investigated, their impact and recommendations on improving utilisation of mental health services using the Behavioural Model of health care utilisation as an organising framework for identifying these barriers.

1.3. Problem statement

Rajasuriya *et al*. (2010) argue that missed appointments and drop outs reduce the quality of patient care, interfere with patient management, and deprive other patients of earlier appointments and waste health care resources. This is experienced at DCAP. The problem of non-attendance causes a dilemma regarding whether these cases must be discharged, closed or transferred to other health care centres because the caregivers refuse to be discharged or be transferred elsewhere. Keeping these cases open blocks the waiting list and prolongs the waiting period for new referrals.

Similarly, other studies found that follow-up patients who missed appointments were more unwell and more functionally impaired than those who attended (Killaspy, Bernejee, King, Lloyd, 2000) and that those who did not keep appointments were more likely to be readmitted (Nelson, Maruish & Axler, 2000 cited in Rajasuriya, 2000). Also at DCAP, when these cases attend again after some time for a follow-up, or are readmitted, some have relapsed and others have deteriorated.

Furthermore, Sareen Jagdeo, Cox, Clare, Have Belik, De graaf & Stein (2007) state that untreated mental illness is believed to be a serious burden to the health and productivity of the community. Similarly, Mitchell and Selmes (2007) observe that many, who miss their appointment because of slips and lapses, later rearrange their appointments without adverse

consequences, but those that do not are at the risk of further deterioration, relapse and hospital readmission.

Missing appointments in the health service delivery system is a serious problem as it can reduce case management, clinical efficiency, staff morale and resource utilisation (Gorden, Ken, Lewabndaski & Seigers, 2010), and the extent of non-attendance in psychiatry may be significantly greater than in other medical specialties (Mitchell & Selmes, 2007). Furthermore, failure of parents to attend and engage in treatment has been identified as a significant barrier to implementing effective intervention in child and adolescent mental health (Watt & Dadds, 2007). Carpenter *et al.* (1981) cited in Mitchell & Selmes (2007) suggest that non-attendance should be understood in relation (the context of) to: (a) being a predictor of drop-out, relapse and readmission, (b) in relation to medication adherence, and (c) in relation to medical attitudes.

- As a predictor of dropout, relapse and readmission, early non-attendance increases the risk of further non-attendance. Missed appointments and unexpected disengagement in particular, can signal deteriorating mental health.
- Non-attendance is also particularly closely linked to medication non-adherence.
- Lastly, missed appointment may result in increased provider frustration, deceased levels of provider empathy and low quality patient provider communication **(**Husaine Gambles *et al*., 2004 & Pesata *et al*., 1999 cited in Mitchell & Selmes, 2007).
-

The actual reasons for non-attendance in this unit remain unknown. The characteristics and profile of the patients who do not attend, and those who attend are not known. What constitutes the barriers to utilisation is therefore not clear within this population. We do not know whether there are differences between these two groups of patients attending or not attending the clinics.

Lack of this knowledge makes it difficult for DCAP to implement interventions that may increase utilisation, and improve the mental health of the population. It also makes it difficult for the unit to evaluate the effectiveness of its services to mental health care users, and their need for the service.

1.4. Aim of the study

The aim of this study, therefore, is to investigate the barriers to utilisation of the child and Adolescent out-patient mental health services, and to determine whether there are any differences between those who attend and those who do not attend, at the Division of Child and Adolescent Psychiatry of a Hospital (which is a public establishment) in Cape Town**.**

1.5. The Research question

'What are the barriers to utilisation of child and adolescent out-patient mental health services in the Division of Child and Adolescent Psychiatry at a Hospital in Cape Town, South Africa?'

1.5.1 Sub questions

This aims to investigate the following:

- Do demographic factors such as age, sex, education level, race, and marital status affect attendance?
- Does the geographic residence affect attendance?
- Do financial costs of transport and services affect attendance?
- Does the child's illness or diagnosis affect attendance?
- Does the parental health status affect attendance?
- Does employment affect attendance?
- Does school (level of education?) affect attendance?
- Does the relationship between the patient and the therapist affect attendance?
- Do fears of stigmatisation affect attendance?
- Do cultural norms and beliefs influence attendance?
- Does the support system determine attendance?
- Do family problems affect attendance?
- Does language affect attendance?
- Does knowledge affect attendance?
- Does confidentiality affect attendance?
- Does service, affect attendance?
- Do other miscellaneous variables such as forgetting, inconvenience, refusing, frequency of appointments, and length of the session, emergency) affect attendance?

- Are there any differences between those who utilise the services and those who do not utilise them?

1.6. Definition of Terms

Non-attendees (DNAs): persons who were admitted from the 1st January 2011 until 31st December 2011, who missed one appointment within that period, and were still seen at DCAP when the study was conducted

Regular Attendees (Non DNAs): Persons who were admitted from the 1st January 2011 until the 31st December 2011, who never missed any appointment within that period, and were still seen at DCAP when the study was conducted .

1.7. Significance of the study

Even though non-attendance in child and adolescent psychiatry is a universal phenomenon, and literature is consistent in the findings on the barriers to utilisation of mental health services in other parts of the world, there is little information on similar studies in South Africa, and particularly Cape Town, where this study is based. This study will therefore contribute information to the existing body of knowledge in this area of child and adolescent mental health care services.

Gordon *et al*. (2010) support the investigation of non-attendance as it allows clinicians and the clinic managers to focus on that group of non-attenders, monitor their adherence and develop strategies for improving attendance. They further argue that data on missed appointments also allows a clinic to develop policies and strategies aimed at monitoring and reducing non-attendance. These strategies may include termination policies, transportation for patients, and childcare and extended hours for staff.

Findings from this study may benefit this unit and help the unit to plan intervention strategies to improve service delivery and lessen the negative impact on patients and staff and service delivery.

Knowledge of the characteristics of the attenders and non-attenders may assist DCAP to anticipate measures to improve utilisation and thereby improve the mental health of the patients. This knowledge may also help the unit to review its policies related to criteria for admissions, practise parameters, education, discharge and collaboration with other health care services.

1.8 Ethical Aspects of the Research

Approval of the proposal for the study was received from the UWC Faculty Board Research and Ethics Committees, and UWC Senate Higher Degrees Committee. Permission and consent to conduct the study was received from the Medical Superintendent of the relevant Hospital and the Head of the Division of Child and Adolescent Psychiatry.

All the participants in this study signed consent (adults) and assent (children) forms, after they understood everything explained to them about the study.

1.9 Limitations of the study

This study only focuses on one institution, and therefore, its findings may not be generalised to other communities. However, it can be rolled out to other communities. The researcher acknowledges also having difficulties with the patients' records that were inaccurate, which made it difficult to accurately separate the two groups (DNAs and NON-DNAs).

1.10 Conclusion

This chapter provided an introduction and overview of the study. Chapter two will provide the theoretical framework used in the analysis of the data for this research. Chapter three explains the methodology and the procedures followed to conduct the study. Chapter four will present the results of the research, and Chapter five discusses the main findings and gives recommendations.

CHAPTER TWO
LITERATURE REVIEW/ THEORETICAL FRAMEWORK

2.1 Introduction

This study investigates the barriers to utilisation of child and adolescent out-patient mental health services by examining the relationship between the identified dependent variables which are attendance (0), non-attendance (1), and the independent variables which are demographic factors of age, sex, education, race, employment, marital status, area of residence, form of treatment, diagnosis and frequency of missed appointments, and continuous variables such as finance/costs, language, knowledge, stigma, support system, culture/religion, confidentiality, work, school, service, and other miscellaneous variables such as forgetting, inconvenience, refusing, frequency of appointments, length of the session, and emergency**.** These variables are based on literature that has been consulted, and findings from the studies. The study investigates these variables and their association with non-attendance at the Division of Child and Adolescent Psychiatry Out-patient Unit and at Neuropsychiatry Clinic.

Literature was searched consulting the following: journals, Google scholar, Medline, Psychinfo and research books. Literature review was conducted to check the available information on the barriers to utilisation of child and adolescent out-patient mental health services, to review the methods used in other studies, to check what other studies found about this topic, and whether a similar study had already conducted on this topic in South Africa, and to look for any gaps that may be there from other studies. This chapter is divided into three sections, barriers to utilisation of mental health services based on the Behavioural Model, the recommendations from other studies, and conclusion.

2.2 The Conceptual framework

The Behavioural Model of health care utilisation is a framework used to organise and understand contextual and individual determinants affecting service utilisation (Anderson, 1968 cited in Mendenhall, 2010). The model identifies three clusters of variables that affect service utilisation:

2.2.1. Predisposing,

2.2.2. Enabling, and

2.2.3. Need variables (Anderson & Davidson, 2001 cited in Mendenhall, 2011; Goldstein *et al*., 2006; Wu *et al*., 2010; Yan Fen, Mark, Godley & Michael, 2009 and Boldero *et al*., 1995 cited in Tylee *et al.*, 2007). These factors are intertwined and influence each other.

The variables that are examined in this study are based on this model, and the content of the data collection instrument is based on the variables mentioned in this model

***2.2.1 Predisposing factors*:** include personal characteristics such as:

- Gender;
- Age;
- Marital status;
- Past history of illness;
- Care seeking;
- Race or ethnicity; and
- Education.

Gender

Gender has been associated consistently with patterns of seeking care, in part because patients confer differential risks of illness. Rajasuriya, De Silva and Hanwella (2010) in their study found out that being male, was a risk factor for non-attendance.

Age

Age has also been associated consistently with patterns of seeking care, in part because patients confer differential risks of illness. Various studies found different results on rates of utilisation of out-patient mental health services, across different ages. Studies of childhood mental health service use revealed consistently higher rates of use in adolescents than in childhood (Hurlburt, Leslie & Landsverk, 2004; Kataoka, Zhang & Wells, 2002 cited in Ringeisen, Casanuevam, Leyla & Stambaugh, 2009) whereas a study by (Ringeisen, Casanuevam, Urato, Leyla & Stambaugh, 2009; Sharp & Hamilton, 2001 cited in Mitchell & Selmes, 2007) found a gradual decline in such use throughout adolescence and a sharp decline by young adulthood.

Patients who miss appointments tend to be younger (Sharp & Hamilton, 2001 cited in Mitchell & Selmes, 2007). The national cross sectional data also suggest that young adults are especially unlikely to access mental health services. Findings on the National survey of Drug Use and Health (NSDUH) also confirms that regardless of need, the use of out-patient, mental health services declines from approximately 21% among 12-17 years old to about 11% among 18-25 years olds (Ringeisen, Casanuevam, Urato, Leyla & Stambaugh, 2009)

(iii) Marital status

Single parenting can also be a barrier to utilisation because of lack of social support and functional impairment (Gorden *et al*., 2010)

Care seeking

Rajasuriya, De Silva and Hanwella (2010) found out that not being prescribed medicines was a risk factor for non-attendance.

Acculturation is also found to be positively co-related with the use of out-patient services (Hunt, 2007). Culture-sanctioned conceptions of distress and appropriate coping, stigma, mistrust of the mental health system and limited proficiency in English, also have negative influence on utilisation of mental health services.

Culture varies in terms of idioms that are used to describe 'mental illness' and in the coping strategies endorsed, the adherence to alternative mental illness and treatment seeking explanatory models, and all these may lead to postponement of treatment. For example, the difficulty on the part of the family accepting the fact that their child has a mental health problem will hinder the utilisation of mental health services. Thoughts that nobody can help and that smoking, alcohol and recreational drugs can solve emotional problems decrease utilisation of mental health services (Aida *et al*., 2010).

Race or ethnicity

Race and culture are identified as predictors of utilisation, with lower rates of utilisation among blacks than whites (Goldstein *et al*., 2006; Wu *et al*., 2010; Yan Fen, 2009). There are racial and ethnic differences in family values, parenting practices, and family care giving experiences (McCabe *et al*., 2003; Chan *et al*., 2005: Algeria *et al*., 2004, cited in Hyucksun-Shin & Brown, 2009), and those may facilitate or decrease utilisation of mental health services. Many in these cultural contexts consult traditional healers and alternative medicine avenues before consulting mental health professionals (Eapen *et al*., 2009).

Studies by James, Landsverk, Slyman & Leslie (2004); Goldstein *et al*. (2006); WU *et al*. (2010); Yan Fen (2009); Scahill (1997); Snowden *et al*. (2008); Snowden *et al*. (2008); Eapen *et al*. (2009); Starr *et al*. (2002); Aida *et al*. (2010); Mcbee *et al*. (2003); Angold *et al*. (2004); Brannan (2006) cited in Hyucksun-Shin & Brown (2009); Aisbet *et al*. (2007) concur that race or ethnicity and culture are positively correlated with the use of mental health services as they determine social class, accessibility, affordability, conceptions to distress, cultural idioms used to describe mental illness, family values and practices, coping strategies and adherence to alternative treatment seeking explanatory models.

Education

Insufficient knowledge about services and negative perceptions about services are also barriers (Mendenhall, 2011). Other potential barriers are related to language barriers and lack of relevant mental health providers to serve such racial or ethnic groups (James, Landsverk, Slyman & Leslie, 2004; Owen, Hoagwood, HortWitz, Leaf, Poduska, Kellam & Ialongo, 2002).

Education may influence knowledge and attitudes toward care, but tends also to be associated with higher income, greater access to insurance coverage, and perhaps greater skill in negotiating health care systems, which all influence utilization of mental health services (Goldstein *et al*., 2006; Wu *et al*., 2010).

***2.2.2. Enabling factors*:** are related to:

- Availability;
- Accessibility;

- Equity of health services;
- Income, insurance; and
- Usual source of care and provider availability, which make utilization more affordable, and logistically easier (Daguar, Graham, Churchill & Sanci, 2007; Gordon *et al*, 2010; Eapen *et al*, 2009; WHO, 2001; WHO, 1999 & Dehne, 2005 cited in Tylee *et al*, 2007).

Availability

The study by Snowden identified that too suitable providers, lack of aggressive mental health screening and outreach, and lack of receptive treatment programs also play a role as barriers (Lamarine, 1988; Pumariega *et al*., 2005; Thompson *et al*., 2004; Fiscella *et al*., 2002; Lloyd *et al*.**,** 1998; Benkert *et al*., 2006; Nickerson *et al*., 1994; Snowden *et al*., 2007; Griner *et al*., 2006 & Cauce *et al*., 2002 cited in Snowden *et al*., 2008).

Other barriers include lack of qualified and experienced professionals who specialise in child and adolescent mental health, frustration at long waiting list and the lack of an afterhours service and use of deliberate self-harm to gain access (Aisbett *et al*., 2007).

Unawareness of the availability of the services for the community (Aida *et al*., 2010) and lack of knowledge of what the services offer (Elster *et al*., 1994; WHO, 2002; WHO, 2001; Kang *et al*., 2005; Deane *et al*., 2002 & Sanci *et al*., 2005 cited in Tylee *et al*., 2007; James, Landsverk, Slyman & Leslie, 2004) decrease utilisation of mental health services.

Accessibility

Problems of transportation such as lack of reliable transport to and from the mental health service (Aisbett *et al*., 2007) and distance travelled to access services, and inconvenient location, decrease utilisation of mental health services (Peasta *et al*., 1999; Jackson *et al*., 2006 cited in Mitchell & Selmes, 2007; Mendenhall, 2011; Gordon *et al*, 2010; Aisbett *et al*, 2007).

Income and insurance

According to Sharp and Hamilton (2001) cited in Mitchell & Selmes (2007), patients who miss appointments tend to be of lower socioeconomic status. Mendenhall (2011) identified expense of services as a huge barrier. Poverty and lack of financial coverage have also been found to be

significantly related to attendance rates, and a barrier for accessing mental health services (Minty & Anderson, 2004; Hunt, 2009).

On the contrary, Ringeisen, Urato & Stambaugh (2009) found that young adults with Medicaid insurance were more likely to use mental health services than those with no insurance or those with private insurance. On the other hand, young adults with private insurance were not significantly more likely than those with no insurance to access services. There were no differences in service utilisation between the young adults with private insurance and those with no insurance. This may suggest that financial coverage may or may not be a barrier to utilisation of services.

Usual source of care and provider availability

The parental mental illness especially maternal depression impacts on the accuracy of maternal responses on child behaviour rating scales, the potential benefit of parent training, cognitive behavioral approaches and preventative interventions and a child's increased risk of future psychopathology (Gordon *et al*., 2010).

Caregiver strain

Caregivers are the key identifiers of children's mental health problems and a critical influence on a child's entry into services (Hyucksun-Shin & Brown, 2009). Caregivers of children with emotional or behavioural problems experience a host of strains as a result of caring for a child with special needs. These strains may include interruptions of family life, financial strain and negative emotions such as sadness and frustration. The severity of the child's problem and history of caregiver psychopathology also contribute to increased levels of caregiver strain (Mcbee *et al.*, 2003; Angold *et al.*, 2004; Brannan, 2006 cited in: Hyucksun Shin & Brown, 2009; Costello *et al*., 1998; Folkman *et al*., 1987 and Stiffman *et al*., 2004 cited in Hyucksun Shin & Brown, 2009).

A caregiver's perceptions of the burden or impact of caring for a child with emotional or behavioral problems influence access to out-patient mental health services, in which parental

involvement is needed. Youths whose caregivers felt lower levels of caregiver strain were found to be less likely to use mental health services (Hyucksun Shin & Brown, 2009).

Studies with children in foster placement found that children in the child welfare system with a history of out-of home placement have higher rates of service utilisation than those who live with their biological parents because the foster placement serves as a gateway to mental health services. Most of these children have dysfunctional backgrounds and present with emotional and behavioural problems, and are easily identified in foster care (Ringeisen, Urato, & Stambaugh, 2009 and Villagrana & Margarita, 2010). The rates of utilisation is said to be as high as 70 % for children over the age of seven (Bilaver, Jaudes, Koepke & George, 1999; Garland, Landsverk, Hough & Elis-Macloed, 1996; Halfon, Berkwiotz & Klee, 1992a, 1992b; Harmann, Childs & Keller, 2000; Landsverk, Litrownik, Newton, Ganger & Remer, 1996; Takayama, Berggman & Connel, 1994 cited in James, Landsverk, Slyman & Leslie, 2004).

Children experiencing caretaker absence received fewer visits compared to children who did not experience caretaker absence (Leslie, 2000). In their study, Reeb & Conger (2011) found that parental behavior influences service utilisation in adolescents. The absence of a warm supportive father hinders service utilisation by adolescents with depressive symptoms.

On the other hand, studies conducted on the relationship between kinship placement and utilisation of services found that there are lower rates of utilisation in kinship placement than children in foster /no-relative placement. This can be attributed to the fact that there is less support and monitoring by caseworkers for children in kinship care as caseworkers might perceive need for service differently when children remain with relatives. Attributes related to kinship caregivers are that they are older, have lower educational levels and fewer economic resources (James, Landsverk, Slyman & Leslie, 2004).

The shortage of trained child and adolescent practitioners, particularly those who are culturally and linguistically competent also decreases utilisation of mental health services (Snowden *et al*., 2008).

Lack of trust and faith in the usefulness of mental health professionals decreases utilisation of mental health services (Starr *et al*., 2002). In the study conducted by Eapen *et al*. (2009) parents reported that they found non-professional staff (extended relatives, friends community elders) a more likely support than primary care clinicians who were perceived as rushed and uninterested and attributing all child mental health problems to life in poor, violent communities.

Confidentiality also influences utilisation (Aida *et al*., 2010). Eapen *et al* (2009); Starr *et al*. (2002); Lamries (1988); Pumariega *et al*. (2005); Thompson *et al*. (2004); Fiscella *et al*. (2002); Lloyd *et al*. (1998); Benkert *et al*. (2006); Nickerson *et al*. (1994); Snowden *et al*. (2007); Griner *et al*. (2006) & Cauce *et al*. (2002) cited in Snowden *et al*. (2008) in their studies with children and adults found that in developed and developing countries young people and caregivers similarly do not utilise mental health services for reasons related to lack of confidence in health professionals, and therefore seek alternative help elsewhere.

Stigma

Heflinger & Hinshaw (2010) state that the recognition of professional and institutional stigma is important in order to understand the low utilisation rates of child and adolescent mental health services. Gofman (1963) and Phelan 2001 cited in Heflinger and Hinshaw (2011) define stigma as involving the deep discrediting of an individual as a function of his or her membership in a devalued group with low social power and further says that mental illness has been identified as one of the most stigmatised attributes a person can have in modern society. It adds considerably to the burden incurred by mental illness and enhances impairment (Hinshaw, 2007 cited in Heflinger & Hinshaw, 2010). It is also identified as a key barrier to mental health services access and utilisation (Corrigan, 2005 & Thornicroft, 2006, cited in Heflinger & Hinshaw 2010).

- Stigma may lead to lack of recognition of mental disturbance, leading to failure to pursue/or access psychological services as problematic behaviours are attributed to weak personal will or moral flaw or poor parenting.
- It also produces a strong sense of shame and/or personal failure leading to non-utilisation of mental health services.
- It also leads to lower rates of re-imbursement for mental health services that even if treatment is sought, it may not be funded or covered (Heflinger & Hinshaw 2010).

- Lastly, Barry *et al*. (2003) cited in Heflinger & Hinshaw (2010) adds that at a wider societal level, it leads to lower prioritisation of mental health research and services than for conditions believed to be "physical" in nature.

Mental illness is particularly stigmatising in some racial/ethnic minority communities and stigma might lead to children and caretakers to postpone treatment. Rural gossip networks and social visibility within rural communities compound the experience of stigma and social exclusion (Aisbett *et al*., 2007).

Negative perceptions of family and friends about mental health treatment, fears of youth about being recognized in the clinic waiting room with the possible stigma attached (Elster *et al*, 1994; WHO, 2002; WHO, 2001; Kang *et al.*, 2005; Deane *et al.*, 2002 & Sanci *et al*., 2005 cited in Tylee *et al*., 2007) and fears about lack of confidentiality and stigmatisation by the community among youth also add to the problem. For this, young people seek help from friends and family rather than health services in developed and developing countries (Boldero *et al*., 1995 cited in Tylee *et al*., 2007).

Other barriers include poor communication between the referring practitioner and the patient, patient's disagreement with the referral, referrer's skepticism about the value of psychiatry, poor quality referral letter, longer delay between the referral and the appointment (or between assessment and treatment), early stages of treatment, quality of therapeutic alliance and non-collaborative decision making (Boldero *et al.*, 1995 cited in Tylee *et al*., 2007).

Wilder *et al.* (1997) cited in Mitchell & Selmes (2007) say that compliance is as much a function of the patient's interaction with the psychiatric personnel and the suitability of the recommendations as it is of personal characteristics of the patients themselves, and that this effect begins with the original referrer to secondary care. Poor communication between the referring practitioner and the patient may increase non-attendance at an initial appointment (Mitchell *et al.*, 2007).

Patients who agree with their referral are more likely to attend than those who do not (Killaspy *et al*., 2000 cited in Mitchell *et al*., 2007). Other studies found out that the rates of missed

appointments with consultants (clinical psychologists and psychiatrists) appear to be lower than those of trainees (Mclvor *et al*., 2004 cited in Mitchell *et al*., 2007).

The rates of initial non-attendance also increase in time when there is a delay between the referral (and scheduling) and the actual appointment (Grunebaum *et al*., 1996 & Galluci *et al*., 2005 cited in Mitchell *et al*., 2007). Furthermore, rates of follow up non-attendance increase with the delay between assessment and treatment (Jackson *et al.*, 2006 cited in Mitchell *et al*., 2007).

Seasonal factors like the day week waiting times at the clinic visit, the severity of the child's psychiatric symptoms and functional impairment and the social support networks available to the family are also barriers (Gordon *et al.*, 2010; Costello *et al.*, 1998; Folkman *et al*., 1987 & Stiffman *et al*., 2004 cited in Hyucksun Shin & Brown, 2009).

2.2. 3 Need

It is defined by childhood diagnosis and the strongest predictor of both any utilisation of out-patient treatment and treatment duration (Cunningham *et al*., 1994; Wu *et al*., 2001; Zwaanswijk *et al*., 2003; Laitinen-Krispin *et al*., 1999; Kodjo *et al*., 2004; Mandell *et al*., 2003; Kumpulainen *et al*., 2002; Goodwin *et al*., 2002; Andersen *et al*, 1973; Gallo *et al*, 1995; Rogler *et al*., 1993; Wang *et al*., 2005 cited in Goldstein, Olfson, Wickramaratre & Wolk, 2006 & Wu, Katie, Liu, Fan & Fuller, 2010).

In their study, Rajasuriya, de Silva and Hanwella (2010) found out that not being prescribed medicines and having a diagnosis of psychoactive substance use or dementia were risk factors for non-attendance. In addition, they highlighted that risk of non-attendance was low for Bipolar disorder, schitz and depressive disorder.

Other barriers that determine the need are related to patients just forgetting appointments, practice errors and mix-up over dates (Selmes, 2007, & Hamilton, 2001 cited in Rajasuriya, De Silva & Hanwella, 2010).

Substance misuse has been found to complicate attendance. Patients with PTSD and substance misuse were found to be significantly more likely than others to miss appointments (Mitchell & Selmes, 2007).

The types of problems presented by the child, the type of recommended treatment, the number of sessions attended and the seasons of the admission are correlated with treatment compliance (Anthens *et al*., 2000).

A study by Goldstein (2006) identified high rates and persistence of utilisation among respondents ascertained for childhood depression and anxiety. Participation in extracurricular activities and the presence of symptoms of anxiety or disruptive disorders are associated with use of out-patient services (Wu *et al*., 2010)

2.3. Recommendations from the studies on improving utilisation of mental health services

There is a need for the development of strategies to maximize the uptake of effective, culturally relevant treatments, culturally sensitive public health initiatives that specifically target individuals from ethnic minority groups with childhood onset disorders in order to increase awareness of treatment availability (Rice *et al*., 2006).

Programs that assist clients in their homes might be especially beneficial for those who lack transportation (Aisbett *et al*., 2007).

Snowden *et al*. (2006) and Burns *et al*. (1995) cited in Snowden *et al*. (2008) and Aisbet *et al*. (2007) recommend community- and school-based interventions aimed at reducing the social stigma of young people with mental illness and collaboration with local school districts. The collocation of mental health services and general health services may be one way to reduce the fears associated with 'being seen' entering a stand-alone mental health service (Aisbet *et al*., 2007). Paula *et al*. (2009) cited in Eapen *et al*. (2009) suggests that child mental health services should be community-based in order to increase access to mental health services for children and primary care clinicians should be educated to identify mental health problems.

Minty (2004) & Rajasuriya, De Silva and Hanwella (2010) concur that making contact with the family prior to the date of the appointment can to be a very potent factor in avoiding non-attendance, particularly when the family is asked to confirm whether they will be attending (Minty, 2004). This can be done in the form of a low cost intervention such as a telephonic

reminder or a prompt letter sent out to the patients before their scheduled appointment (Jayaram, Rattenhalli, Kader, 2008 cited in Rajasuriya *et al.*, 2010). These studies found that these interventions significantly reduce non-attendance rates as non-attendance before intervention was 31.1% and after intervention this was reduced to 23.1 %, a relative risk reduction of 26.2 %.

Other studies recommend that an appointment reminder with another appointment date and possibly suggesting a home visit can be sent to the patient after missing one appointment (Cruz *et al.*, 2001 cited in Mitchell *et al.*, 2007) and after the second/third miss, a clinician can speak directly to the patient and clarify whether an appointment is needed or not and if needed, find a mutually agreed time. If the patient is uncontactable, then contact the referrer to clarify with the patient whether the appointment is still needed.

Integration of substance use and mental health services can also be effective in reducing non-utilisation (Yan Fen, 2009). Interpersonal communication issues can be resolved by providing patients with sufficient information about the practical aspects of their appointment (i.e., where to park, directions, etc.) and orientation statements explaining what to expect in the consultation can improve attendance (Kluger & Karras, 1983 cited in Mitchell *et al.*, 2007).

Discharge or exit interview explaining the need for follow-up and the rationale for medication can also be helpful. Clinicians can check whether there is anything further that can be done to help at the close of all appointments and prior to hospital discharge. (Mc Guire-Snieckus *et al.*, 2007 cited in Mitchell *et al.*, 2007).

Measures to improve initial attendance

Initial attendance can be improved by encouraging the referrer to explain the purpose of the referral, schedule the appointment as soon as possible, write to the patient with clear directions and explaining the mechanism of referral, offer the option of an afternoon appointment and offer the option of a community/home visit if the patient is too unwell to attend (Mitchell *et al.*, 2007).

Improving follow-up attendance

Attendance for follow-up can be improved by giving the patient a choice of appointment and /or locations, schedule the appointment as soon as possible, and where possible, agree about the duration of the treatment course at the start. It can also be improved by working toward

establishing and maintaining a good therapeutic relationship and involving the patient in treatment decisions (Mitchell *et al*., 2007).

Response to missed appointments

Missed appointments can be managed by contacting the patient by letter or telephone, identify any patient-cited barriers to attending, and confirming that the patient wishes to attend. It is also crucial to affirm that the patient can still be seen without prejudice; if possible convey hope that there is a definite prospect of improvement, and reschedule missed appointments as soon as possible (Pettinal *et al.*, 2004 cited in Mitchell *et al*., 2007).

Gordon, Antshell, Lewandowski & Seigers (2010) suggest use of family treated approach to pharmacological management whereby parents are treated for their own psychiatric problems alongside their children. They further suggest that identification of parental depression and referral for treatment should perhaps be among the responsibilities of the child mental health care provider (Gordon *et al*., 2010).

2.4. Conclusion

Literature states that these barriers are not associated exclusively with the decision to seek help, but also affect the ability to continue to utilise the service over a long period of time, subsequently limiting progress toward recovery and further compromising health (Aisbet *et al*., 2007).

Even though extensive research has been done, it is lacking in South Africa. More research needs to be done to identify barriers that are relevant to South African communities in order to plan relevant strategies for intervention. This literature review shows that there is a need for this study in South Africa. The next chapter will discuss the methodology used in conducting the study, based on this literature. It will be interesting to see the outcome to be able to compare existing information to the studies from other settings.

CHAPTER THREE
METHODOLOGY

3.1 Introduction

This study investigates the barriers to utilisation of child and adolescent out-patient mental health services by examining the relationship between the identified dependent variables which are attendance (0), non-attendance (1), and the independent variables which are, demographic factors such as age, sex, education level, race, and marital status, and continuous variables such as finance/costs, language, knowledge, stigma, support system, culture/religion, confidentiality, work, school, service, and other miscellaneous **v**ariables such as forgetting, inconvenience, refusing, frequency of appointments, and length of the session**,** emergency.

This chapter discusses the methodology that was used to conduct this study. The procedures that were followed in sampling, data collection, and data analysis are discussed, as well as the ethical aspects. The chapter is divided into eight sections: research design, sampling, data collection, reliability and validity, data analysis, ethical aspects, study limitations and conclusions.

3.2. Research Design

This is a quantitative non-experimental study. A survey design was used, and is appropriate for this study because the barriers were explored with a large sample at one time (Mouton, 2006). A survey also allows for the use of self-administered questionnaires and is appropriate to save time and costs.

3.3. Sampling

Sampling is the selection of a subset of individuals from within a statistical population to estimate characteristics of the whole population. The advantages of sampling are that it reduces costs, and that data collection is faster than measuring the entire population (Mouton, 2006).http://en.wikipedia.org/wiki/Sampling_ (statistics)). Probability sampling was used to ensure representativeness, and to save the costs and time. A probability sampling is one in which every unit in the population has a chance (greater than zero) of being selected in the sample, and this probability can be accurately determined.

3.3.1 The Population

A population is a group of people or items with the same characteristic one wish to understand, and about whom we want to draw conclusions. An exploratory research may be conducted with a survey of people who have a practical experience of the problem to be population (Mouton, 2006). The target population constituted of all the patients (parents/caregivers and children (from 4-19 years old) who attended at DCAP-OPU and Neuropsychiatry clinic from the 1st of January 2011 until the 31st of December 2011. Table 3.1 shows that between the 1st of January 2011 and 31st of December 2011, DCAP OPU had 275 patients, and neuropsychiatry had 36 patients. The total population from which the sample was drawn was 311 patients. This population is not racially balanced, and it constitutes approximately 85% coloureds, 10% whites and approximately 5 % blacks.

Table 3.1: Population at DCAP.from 1st January 2011 -31st December 2011

Department	**Total**
RMH Campus	275
Neuropsychiatry	36
Total	311

3.3.2 Sampling method

Stratified sampling was used, and it is whereby the frame is organized by categories into separate strata, and each stratum is then sampled as an independent sub-population, out of which individual elements can be randomly selected (Mouton, 2006). Stratified sampling method was appropriate because the frame was divided into different categories. Which were: DNAs (4-8years old), DNAs (9-18years old), NON-DNAs (4-8yeras) and NON-DNAs (9-18years). The units were randomly selected from these categories for the purpose of data collection. The

category of children (4-8years old) did not complete the questionnaires, but the parents/caregivers only.

3.3.2.1. Sampling techniques

Step 1

- From the overall population of 311 patients, 20 patients who were discharged were excluded from the study.
- The total target population was then 291 patients, was divided into two groups; DNAs and Non DNAs. There were 249 DNAs and 42 Non DNAs.
- Each group of DNAS and NON-DNAs was again divided into subgroups, according to age category. There were 19 DNAs (4-8yeras), 239 DNAs (9-18years), 4 NON-DNAs (4-8years) and 38 NON-DNAs (9-18years).

Step 2

- The population was supposed to be normally distributed. The confidence level was supposed to be 95% at (√ -α) α 100%, α = 5%, 2α⁄2 =1.96. The margin error was:ⅆ=5%. The probability of rejection and acceptance was p=0.5 acceptance, oɻ=1-p=0.5 not acceptance.

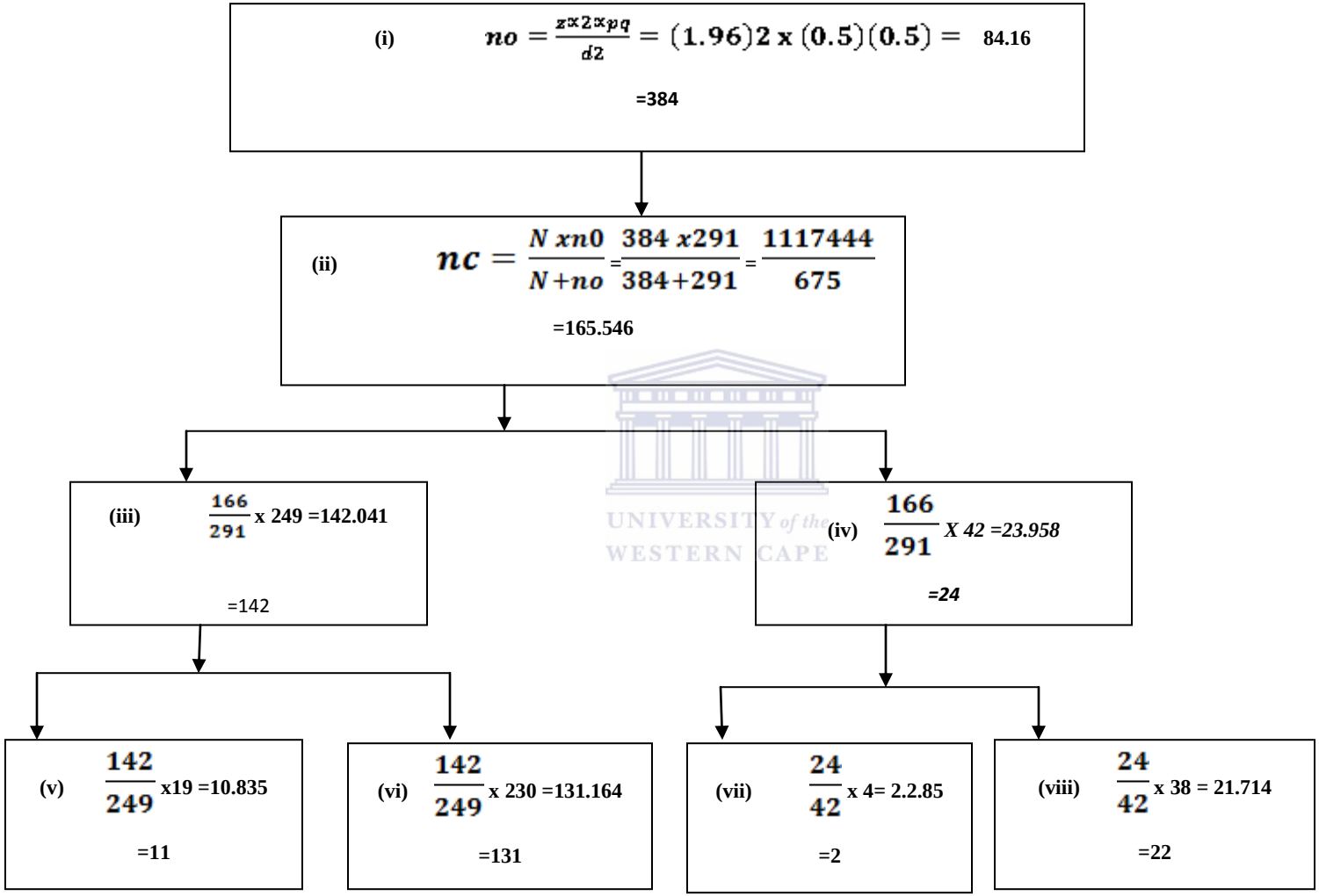
Step 3: Formula for calculating the sample frame

Figure 3.1 shows the formula used and how the totals were calculated for each category.

- (i) & (ii) calculation of the total population of 291 patients. The total sample frame was 166 patients.
- (iii) Shows the formula and calculation for 249 DNAs, and the total sample frame was 142.
- (iv) Illustrates the formula and calculation for 42 NON-DNAs, and the total sample frame was 24.
- (v) Shows the formula and calculation for 19 DNAs, age (4-8years), and the total sample frame was 11.
- (vi) Illustrates the formula and calculation for 230 DNAs, age (9-18years), and the total sample frame was 131.
- (vii) Shows the formula and calculation for 4 NON-DNAs, age (4-8years) and the total sample frame was 2.

- (viii) Illustrates the formula and calculation for 38 NON-DNAs, age (9-18years), and the total sample frame was 22.

Figure 3.1: Calculations for Systematic sampling



3.3.2.2 Sample frame

This refers to a list of elements that is selected from the population (Mouton, 2006). It comprised 166 patients. The sample frame constituted of 11 DNAs from 4-8years old, 131 DNAs from 9-18years old, 2 NON-DNAs from 4-8years old and 22 NON-DNAs from 9-18years old. Data was collected from 201 patients who were randomly selected from each category list.

3.4 Data Collection

3.5.1. Data collection process

Each day the researcher checked the records of the booked patients, in order to identify those who were admitted from the 1st January 2011 until 31st December 2011

The researcher then explained the study to the participants, and they were given a choice to participate. The participants were parents and caregivers of children from the age of 4years until 18years, and children from the age of 9 to 18 years, both attendees and non-attendees, who were admitted at DCAP from the 1st January 2011 until the 31st December 2011, and were still seen in this unit. When they agreed to participate, they signed the consent forms and completed the self-administered structured questionnaires. For the category (4-8years old), only parents completed the questionnaire, for the category (9-18years), both parents/caregivers and children completed the questionnaires.

3.5.2 Setting

Data was collected from parents and caregivers of children from the age of 4-18years, and children from the age of 9-18 years, both attendees and non-attendees, who were admitted at DCAP from the 1st January 2011 until the 31st December 2011, and were still seen in this unit. Data was collected at the Division of Child and Adolescent Psychiatry Out-patient Unit, and at Neuropsychiatry Clinic of a children's hospital which is a public establishment**.**

3.5.3 Time and challenges met

Data collection was done over a period of six months (from the 4th of May until mid-October). The process was prolonged, and took about five months instead of three months as planned. The delay was due to the challenges in getting participants. Patients were not attending for their appointments, and some were not even available in their homes.

3.5.4. Data collection instrument

A self-administered structured questionnaire was used because it allows for the use of closed and open-ended questions. The questionnaire provided the respondents with a number of defined responses that they could choose from, and an additional category of (other), and a few lines that they could write the responses that they wished if their desired response was not listed in the responses. It adequately covered all the categories, allowed for the numbering of the categories, and coding on SPSS software (Pallant, 2011). The data collection instrument was purposely designed for this study**,** and the variables are based on literature review. Two sets of questionnaires were used, an adult and child version. The first section (Section A) contained categorical variables, and asked about demographic information. This section contained closed and open-ended questions. It provided the respondents with a number of defined responses that they could choose from, and an additional category of (other), and a few lines that they could write the responses that they wished if that response was not listed in the responses. This was done in order to ensure that all the categories were adequately covered. Each category of responses was numbered, and these numbers were used as numeric codes to be entered on SPSS software. The second section (Section B) of the questionnaire contained continuous variables. Linkert scale was used, which ranged from strongly disagree to strongly agree.

Table 3.2: The Linkert scale for continuous variables

Code	**Category**	**Scale**
1	Strongly disagree	1.0-1.4
2	Disagree	1.5 – 2.4
3	Neutral	2.5 – 3.4
4	Agree	3.5 – 4.4
5	Strongly agree	4.5 -5.0

3.5.4.1 Confidentiality and anonymity

The data collection instrument was kept confidential and anonymous. It was coded, and the participants did not write their names on it. Table 3.5 below shows the codes used for the questionnaires.

Table 3.3: The codes for questionnaires and participants

Category	***Code***
DNAS (0-8years)	00NA*-001*-11
DNAS (9-18years)	00NA*-001*-131*
NON-DNAS (0-8years)	00A*-001*-2*

00NA* = non-attendees, 00A*= attendees, 001*=2. The number of the participant, 11*, 131*, 2*, 22* = total number of sample for that category

3.5.4.2 Translations

The research questionnaires were translated into isiXhosa, English and Afrikaans, and back to back in order to accommodate the three official languages in the Western Cape Province. The majority of participants preferred to complete the English version of the questionnaire.

3.6 Pilot study

A pilot study was conducted in order to pre- test the questionnaire. Convenience sampling was used. A total of 32 participants who were readily available and willing to participate were selected from the study population, but did not take part in the final study (Mouton, 2006).

3.7. Reliability and validity

Cronbach's alpha coefficient was used to test for reliability for pilot and final study. According to De Vellis, 2003 cited in Pallant, 2011, Cronbach's alpha coefficient of a scale should be above 7.

3.7.1 Pilot study reliability testing

The questionnaire was reviewed after reliability testing, and re-tested until it had good internal consistency, and the Cronbach's alpha coefficient was above 7. Table 3.4 below shows the reliability scores for both pilot and final study.

3.7.2. Final study Reliability testing

The instrument for final study was also tested for reliability and according to the Cronbach's alpha scale, there was internal consistency, and the Cronbach's alpha coefficient was above 7 and acceptable.

Table 3.4: For reliability

Question		**Pilot study**	**Final study**	**conclusion**
B	*20-25*	*0.7*	*0.71*	*A**
C	*26-29*	*0.76*	*0.73*	*A**
D	*30-35*	*0.73*	*0.92*	*A**
E	*3641*	*0.77*	*0.87*	*A**
F	*42-46*	*0.71*	*0.77*	*A**
G	*47-51*	*0.83*	*0.83*	*A**
H	*52-55*	*0.76*	*0.86*	*A**
I	*56-57*	*0.76*	*0.72*	*A**
J	*58-63*	*0.89*	*0.91*	*A**
K	64-65	0.86	0.96	A*
L	66-73	0.74	0.83	A*

*: A=Acceptable. , Overall reliability score was 0.93

3.8. Data Analysis

Data was analyzed using Descriptive and Inferential analysis by using Software Package for the Social Sciences (SPSS) Version 19.0 as a tool.

3.8.1 The Aim of Data analysis

Data analysis was aimed at:

- Identifying what the barriers (if any) for non-attendance are; and

- Examining the relationship between the identified dependent variables which are, attendance (0), non-attendance (1), and the independent variables which are, demographic factors such as age, sex, education level, race, and marital status, and continuous variables such as finance/costs, language, knowledge, stigma, support system, culture/religion, confidentiality, work, school, service, and other miscellaneous **v**ariables such as forgetting, inconvenience, refusing, frequency of appointments, and length of the session**,** emergency.

3.8.2 Descriptive statistics and inferential statistics

3.8.2.1 Descriptive statistics

Descriptive statistics is used to describe the population being studied. It uses frequency distribution, which measures central tendency such as mean, median and mode. Descriptive statistics also makes use of the pie charts and bar graphs. The results of descriptive statistics cannot be generalised to any larger group (Pallant, 2011). Data was analysed using descriptive statistics, and are presented as frequency table, proportion and graphs.

3.8.2.2 Inferential statistics

Inferential statistics allows for making predictions or inferences about a population from observation and analyses of a sample. The results can be generalised to the larger population that the sample represents. For generalisation, inferential statistics uses tests of significance, such as chi-square or t-test in order, linear regression, logistic regression analyses, ANOVA, correlations, etc (Pallant, 2011). For inferential analysis, this study used tests such as correlation analyses, factor analyses, Chi-square and logistic regression.

3.8.2.2.1 Correlations

Spearman Rho correlations are used to explore the strength of the relationship between continuous variables. According to Pallant (2011), Spearman correlation gives an indication of the direction (positive or negative), as well as the strength of the relationship. The correlation coefficient (r) takes two values (-1 to +1), indicating that a positive correlation (as one variable increases, so does the other), or a negative correlation (as one variable increases, the other decreases). A correlation of 0 indicates no relationship between 2 variables. Given that the variables were not normally distributed, to determine the relationship between the variables in

this study, correlation Spearman's rho was used as a level of measurement, and is appropriate for analysis because it is used in health and medical literature preliminary analyses were performed to ensure no violation of the assumptions of normality, linearity and homoscedantity (Pallant, 2011:). Pallant (2011) further observes that for the correlation to be statistically significant, the p-value should be less than 0.5 levels. The correlation is declared weak if the value of the coefficient correlation r <0.5; moderate for 0.5<r<0.69; strong for 0.7< r<0.89; very strong correlation 0.8<r<0.9 and perfect for r=1. This consideration is also true if r is negative. A p-value was used to check the significance of the association; if p-value was less than 0.05 the association is declared significant otherwise it was not significant. Correlations between the variables were tested for statistical significance, considering the p-value.

3.8.2.2.1 Factor analysis

Factor analysis is a way of reducing data using smaller set of factors and also to reduce a large number of related variables. The sample size and the strength of the relationship among variables are to be considered in order to determine whether a particular data is suitable for factor analysis (Pallant, 2011). Pallant (2011) further suggests that a sample size should be more than 150 cases. The sample size for this study was suitable for factor analysis, 201 cases.

3.8.2.2.3 Factor extraction

Pallant (2011) states that factor extraction involves determining the smallest number of factors that can be used to best represent the interrelationships among the set of variables. In this study, we have a long list of factors and in order to reduce this number of factors to few factors, and to determine the factorability of the data, factor analysis (Bartlett's test of Sphericity and Kaiser Meyer-Olkins (KMO) was used (Pallant, 2011). Furthermore, Bartlett's test of Sphericity should be significant (p< .05) for the factor analysis to be considered appropriate. The KMO index should range from 0-1, with 0.6 suggested as the minimum value for a good factor analysis.

In addition, Kaiser's criterion/Eigenvalue is used inorder to determine which factors to retain for further investigation. According to Pallant (2011), only factors with eigenvalue of 1.0 or more are retained for further investigation. From the results, all the factors with eigenvalue from 1 and more, which were retained for further investigation.

3.8.2.2.4. Chi-Square (through cross tabulations)

Cross-tabulation is preformed to investigate the relationship between two variables and to check the association between categorical variables (nominal or ordinal) (Pallant, 2011). Chi-square test was performed. According to Burns & Groove (2001) the use of Chi square statistic, for cross tabulated data, helps identify relationships or differences between cell values. It is also mainly used by statisticians from a probability framework to detect possible relationships.

With a chi square analysis the degrees of freedom must be calculated which is used in the determination of the significance of the value. In this case, the Chi-square (X^2) value was 9.2840. The degrees of freedom, *df* =1 and *p* was 0.0023 (if $p<0.05$ results show significance).

3.8.2.2.5 Logistic regression

Finally, to predict and investigate the relationship among variables, logistic regression was used, given that the dependent variable "attendance" was dichotomized into 1= non-attendance and 0=attendance. Logistic regression allowed for the testing of the models to predict categorical outcomes with two or more categories (Pallant, 2011, p168). Given that the dependent variable has two outcomes which are nonattendance (1) and attendance (0), logistic regression was appropriated to predict that categorical outcomes with the following predictors: insight, occupation, culture/religion, school, service, confidentiality, finance/costs, and language (Pallant, 2011). Thus in this study, logistic regression was performed to assess the impact of a number of factors on the likelihood that respondents would report the barriers to attendance for child and adolescent out-patient mental health services. The model contained eight independent variables (insight, occupation, culture/religion, school, service, confidentiality, finance/costs, and language).

In the first model, step 1, the variables that were included were as follows: occupation, culture, school, service, confidentiality, finance/costs and language.

In the second model, step 2, the variables that were involved were occupation, culture/religion, school, service, finance/costs and language.

In the third model, step 3, the variables that were involved were as follows: occupation, culture/religion, school, service and language.

In the fourth model, step 4, the variables that were involved were culture/religion, school, service and language. In the fifth model, step 5, the variables that were involved were culture/religion, school and language.

In the sixth model, step 6, the variables that were involved were culture and school.

3.9 Ethical Aspects

3.9.1. Committees and Approval

The research proposal was submitted to the UWC Faculty Board research and Ethics Committees, and UWC Senate research Committee for approval. After approval, it was submitted to the Medical Superintendent of the relevant Hospital and then to the Head of the Division of Child and Adolescent Psychiatry for permission to conduct the study. Subsequently, the proposal was presented to the DCAP-OPU staff, and explained the study in details.

Patient's contact details were confirmed from their files. Parents/caregivers and patients were contacted telephonically, and the study was explained to them. Data collection commenced on the 4th of May 2012 after the approval.

3.9.2. Consent

The study was explained to the participants, and the participation information document (PID) was given to all the participants. They were given a chance to ask questions. When they agreed to participate, parents signed the informed consent, and parental consent form for the child, and the children (9-18years old) signed the informed assent forms.

3.9.3 Confidentiality

The questionnaires with responses are safely locked away for five years to ensure that no one has access to them except for the research team. All data will be held in confidence and will not be divulged to others not involved in the research.

3.9.5. Anonymity

Attaching codes on the questionnaires hid the participant's true identity.

The participant's names were not on the questionnaires; instead codes were used for DNAs and NON DNAs.

3.9.6. Participation

Participation was completely voluntary. No one was coerced. Participants were informed about their rights to consent to participate, or to refuse, and the right to withdraw from the study at any time they deemed it necessary. They were informed about the value and benefits of the study, and that the findings will be published.

3.9.7. Protection from harm

If any participants were emotionally affected by the study, he/she would have been referred to his/her own therapist in the unit. To the best knowledge of the present researcher, no participant was harmed by the study.

3.10 Conclusion:

The following chapter, chapter four will provide the results of this study.

CHAPTER 4:
FINDINGS

4.1 Introduction

This study investigates the barriers to utilisation of child and adolescent out-patient mental health services by examining the relationship between the identified dependent variables which are, attendance (0), non-attendance (1), and the independent variables which are, demographic factors such as age, sex, education level, race, and marital status, and continuous variables such as finance/costs, language, knowledge, stigma, support system, culture/religion, confidentiality, work, school, service, and other miscellaneous **v**ariables such as forgetting, inconvenience, refusing, frequency of appointments, length of the session, and emergency**.**

This chapter provides the findings of the study**.** According to the formula that was used, there is no fixed number. The formula used was ’n is greater than equal. The study sample can be the number or even above, but not less. The study sample was 201 participants, constituting of attenders and non-attendees, children from 9-8years old, and adults/ caregivers. Data was collected from all the 201 participants (children and adults), using self-administered structured questionnaires. All the participants who completed the questionnaires returned their questionnaires.

The analysis uses descriptive, bivariate and multivariate analysis. In descriptive analysis, the results are presented as frequency table, proportion and graphs. To test the correlation or association between variables, Pearson’s or Spearman’s correlations were used depending on the normality test and chi-square for categorical variables. Finally, to test if the test was statistically significant, multivariate analysis was applied. The results are presented in four sections under the following sub-headings: biographic information, descriptive, bivariate analysis and multivariate analysis.

4.2. Biographic information

4.2.1 Personal characteristics of parent or caregiver

4.2.1.1 Age of parent or caregiver

Table 4.1a below reveals that the parent or caregiver participants in the survey were from 15 to 65^{+} years old. 97(49%) were in age group of 35 to 44, and 6(3%) were in the age category 15-24 and 65^{+} respectively. In view of the results on age in Table 4.1, most of the parent/caregivers are in the economically active age, except for the 65+. This situation provides with the information that most of caregivers or parents are likely to be employed and therefore it could be posited that the work conditions are likely to lower attendance of patients.

4.2.1.2 Marital status

Table 4.1a below shows that 99(52.9%) parent/caregiver participants were married and 5(2.7%) were living together. These results suggest that most children are possibly coming from families with both parents.

4.2.1.3 Level of education

Table 4.1a below indicates that 114(59.1%) parent/caregiver participants had high school education, 45(23.3%) had diploma, and 3(1.6%) were uneducated.

4.2.1.4 Parent/caregiver relationship with child

Table 4.1b highlights that 128 (63.7%) parent/caregiver participants were biological parents, 23(11.4%) were legal guardians from the children's home (carer/social worker/driver/etc.), 13(6.5%) were grandparents, and 6(3.0%) are siblings (brother or sister).

4.2.1.5 Parental psychopathology

Table 4.1a given below, shows that the majority 98(52.4%) of the parent/caregiver participants did not have mental illness. Only 14(7.5%) had depression, and 4(2.1%) had depression and anxiety. These results suggest that parental mental illness possibly does not have a strong influence on attendance. However, studies show that even the minority that has psychopathology, may have increased levels of caregiver strain which may impact negatively on utilisation of mental health services (McCabe *et al*., 2003, Angold *et al*., 2004, Brannan, 2006

cited in Hyucksun Shin & Brown, 2009, Kaplan, Sadock & Grebb, 2004, Minty & Anderson, 2004). Studies show that maternal depression may impact on accuracy of maternal responses on child behaviour rating scales, and parent/caregiver may also contribute.

4.2.1.6 Person responsible for bringing the child for appointments

Table 4.1b below shows that 130(65.05%) participants are biological parents, 24(12.0%) are legal guardian from the children's homes, 19(9.5%) are foster /legal guardian, 18(9.0%) are grandparents, and 4(2.0%) are siblings.

4.2.1.7 Employment status

Table 4.1b below shows that 96(49.2%) of the parent/caregiver participants were employed, 72(36.9%) were unemployed and 3(1.5%) are not economically active. This situation suggests that work-related problems might possibly be lowering attendance. At the same time it may possible suggest that finance is not a barrier for attendance as the unit thought it may be, because most parents possibly can afford the service as they are employed.

Table 4.1a: Personal characteristics of parents/caregiver

Variables	Frequency	Percent
Age of parent/caregiver		
15-24	*6*	*3.0*
25-34	*31*	*15.7*
35-44	*97*	*49.0*
45-54	*49*	*24.7*
55-64	*9*	*4.5*
65+	*6*	*3.0*
Marital status of parent		
Never Married	*50*	*26.7*
Married	*99*	*52.9*
Widower	*6*	*3.2*
Divorced/separated	*27*	*14.4*
Living together	*5*	*2.7*
Highest level of education		
None	*3*	*1.6*
Primary school	*20*	*10.4*
High school	*114*	*59.1*
Diploma	*45*	*23.3*

Degree	*11*	*5.7*
Parental illness		
Mood disorder	*9*	*4.8*
Anxiety	*4*	*2.1*
Depression	*14*	*7.5*
Psychosis	*2*	*1.1*
Substance abuse		
Not sure	*56*	*29.9*
None	*98*	*52.4*
Other: (specify)	*2*	*1.1*

Table 4.1b: Personal characteristics of parents/caregiver

Variables	**Frequency**	**Percent**
Relationship with the child		
Biological parent (mother/father)	*128*	*63.7*
Legal guardian (foster or adoptive parent)	*21*	*10.4*
Legal guardian from the children's	*23*	*11.4*
Home (carer/social worker/driver/etc.)Grandparent	*13*	*6.5*
Sibling (brother or sister)	*6*	*3.0*
Relative (Uncle/aunt/cousin)	*9*	*4.5*
Other: specify	*1*	*0.5*
Person bringing child for appointments		
Biological parent (mother/father)	*130*	*65.0*
Legal guardian (foster or adoptive parent)	*19*	*9.5*
Legal guardian from the children's	*24*	*12.0*
Home (carer/social worker/driver/etc.)Grandparent	*18*	*9.0*
Sibling (brother or sister)	*4*	*2.0*
Relative (Uncle/aunt/cousin)	*5*	*2.5*
Job status		
Employed	*96*	*49.2*
Unemployed	*72*	*36.9*
Self-employed	*10*	*5.1*
Domestic worker	*12*	*6.2*
Not having a job	*3*	*1.5*
Strictly leaner	*2*	*1.0*

4.2.2 Personal characteristics of child

4.2.2.1 Gender of child

Table 4.2a shows that 103(51.2%) of participants were females, and 98(48.8%) were males. Attendance may be influenced by gender differences in attitude towards health care. These results show that there is a very small gap in terms of gender difference, and may possibly agree with other studies that found out that) being male, was a risk factor for non-attendance (Rajasuriya, de Silva and Hanwella, 2010).

4.2.2.2 Age of the child

Table 4.2 shows that 91(45.5%) of the participant were between age 13-18years, 85(42.5%) between age 9-12years and 24(12.0%) between age 0-8years old. We can posit that the pre-adolescent to adolescent age group (9-18years) can possibly refuse to attend, possibly have issues around confidentiality and stigmatization, which may also influence attendance. The 0-8years old are still dependent on parents/caregivers, and can possibly make limited choices with regard to attendance as the studies by Elster *et al*. (1994), WHO (2002), WHO (2001), Kang *et al*. (2005), Dean *et al*. (2002) & Sanci *et al*. (2005) cited in Tylee *et al.* (2007), Boldero *et al.* (1995) cited in Tylee *et al.* (2007) also state that for mental health problems, young people seek help from friends and family rather than health services in developed and developing countries. Also, we observe that all these age groups are in school, but the re-adolescent and adolescent age group may have more school related demands that may possibly influence attendance.

4.2.2.3 Child's Illness/Diagnosis

Table 4.2 below shows that 70(35. %) participants had ADHD, 26(13.3%) had disruptive behaviour, 24(12.2%) had mood disorder, 15(7.7%) had anxiety disorder, and 1 (.0%) had elimination disorder, whereas 48(24.4%) were not sure about their diagnosis. Studies show that these diagnoses have implications on the frequency and duration of treatment, which might impact on persistence for utilisation of services (Rajasuriya, de Silva and Hanwella, 2010).

4.2.2.4 Form of treatment received by child

Table 4.2 reveals that 85(42.9%) participants were on medication, 68(34.3%) were receiving individual psychotherapy, and 2(1.0%) were receiving group therapy.

Table 4.2 Personal characteristics of child

Variable	Frequency	Percent
Gender of child		
Males	*98*	*48.8*
Females	*103*	*51.2*
Age of child		
0-8years	*24*	*12.0*
9-12years	*85*	*42.5*
13-18years	*91*	*45.5*
Child's mental illness		
ADHD	*70*	*35.7*
Mood disorder	*24*	*12.2*
Anxiety	*15*	*7.7*
Disruptive behavior	*26*	*13.3*
Psychosis	*2*	*1.0*
Substance abuse	*2*	*1.0*
Deliberate self-harm	*4*	*2.0*
Elimination problems	*1*	*0.5*
Eating problem	*2*	*1.0*
Sleeping disorder		
Not sure	*48*	*24.5*
None	*2*	*1.0*
Form of treatment received from DCAP		
Medication	*85*	*42.9*
Individual Psychotherapy	*68*	*34.3*
Family Psychotherapy	*6*	*3.0*
Group Psychotherapy	*2*	*1.0*
Not sure	*35*	*17.7*

4.2.3. Personal characteristics of both child and parent

4.2.3.1. Ethnic group

Table 4.3a shows that 118(60.5%) participants were coloreds, 39(20.0%) were Africans, 30(15.4%) were whites and 7(3.6%) were Indian. These results may possibly indicate the non-users of the service are possibly from the lower economic racial groups, as the studies also confirm that race/ethnicity determines social class, which influences attendance (Goldstein *et al*, 2006, WU *et al.*, 2010, Yan Fen, 2009, Scahill, 1997, Snowden et al., 2008, Snowden *et al*., 2008, Eapen *et al*., 2009, Starr *et al*., 2002, Aida *et al*., 2010, McCabe *et al*., 2003, Angold *et al*., 2004, Brannan, 2006 cited in Hyucksun Shin & Brown, 2009, Aisbet *et al*., 2007).

4.2.3.2 Area of residence

Table 4.3a below shows 113 (56.5%) participants live in the suburbs, 66(33.0%) live in townships and 8(4.0%) live in the city.

4.2.3.3 Mode of transport

Table 4.3a shows that 86(43.0%) participants use taxis, 14(7.0%) use buses. 76(38.0%) use their own private transport, 18(9.0%) use transport from the children's homes, and only 6(3.0%) use trains. The possession of a car (poverty), is significantly related to attendance rates, either negatively or positively (Aisbett *et al*., 2007). This situation reflects that the majority of participants use public transport, and one can posit that attendance may be possibly affected by the costs of public transport, and lack of reliable transport to and from the mental health service (Aisbett *et al*., 2007).

4.2.3.4 Language

Table 4.3a below shows that 143(71.5%) participants speak English 32(16.0%) speak isiXhosa and 23(11.5%) speak Afrikaans. This situation suggests that the majority of patients are able to communicate in a universal language, and that then language is possibly not a barrier for attendance.

4.2.3.5 Religion

Table 4.3b below shows that 130(65.3%) participants are Christians, 56(28.1%) are Hindu and the 1(.5%) are of African traditional faith.

4.2.3.6 Alternative treatment

Table 4.3b given below shows that 131` (66.5%)participants are solely dependent on the intervention they get from DCAP, and they use no other forms of treatment except for the treatment that they receive from DCAP, 20(10.2%) use religion and 14(7.1%) see private psychologists /psychiatrist. These results suggest that the majority of patients are satisfied with the service they receive from this unit, hence they solely depend on it, and therefore service may possibly not be a barrier to attendance in this unit.

4.2.3.7 Frequency of missed appointments

Table 4.3b shows that 74(37.0%) participant are not sure how many times they missed appointments, 48(24.0%) never missed appointments, and 5(2.5%) missed appointments more than three times. The fact that the majority of participants are not sure how many times they missed appointment confirms that there is high rate of non-attendance in this unit.

Table 4.3a Personal characteristics of both child and parent

Variable	Frequency	Percent
Ethnic group		
African/Black	*39*	*20.0*
Colored	*118*	*60.5*
Indians/Asian	*8*	*4.1*
White	*30*	*15.4*
Area of residence		
Township	*66*	*33.0*
City	*8*	*4.0*
Town	*13*	*6.5*
Suburb	*113*	*56.5*
Mode of transport		
Own/family car	*76*	*38.0*
Taxi	*86*	*43.0*
Bus	*14*	*7.0*
Train	*6*	*3.0*

Car from the children's home	18	9.0
Language of communication		
IsiXhosa	*32*	*16.0*
English	*143*	*71.5*
Afrikaans	*23*	*11.5*
Other	*1*	*0.5*

Table 4.3b Personal characteristics of both child and parent

Variable	Frequency	Percent
Religion		
Africa traditional	*1*	*0.5*
Christian	*130*	*65.3*
Hindu	*56*	*28.1*
Jewish	*8*	*4.0*
Moslem	*4*	*2.0*
Alternative treatment		
Sangoma	*2*	*1.0*
Church	*20*	*10.2*
Private Psychiatrist/Psychologist	*14*	*7.1*
Non-governmental organization (NGO)	*3*	*1.5*
School counselor	*10*	*5.1*
Social worker	*16*	*8.1*
None	*131*	*66.5*
Other: specify	*1*	*0.5*
Frequency of missed appointments		
Never	*48*	*24.0*
Once	*39*	*19.5*
Twice	*23*	*11.5*
Three times	*5*	*2.5*
More than three times	*7*	*3.5*
Not sure	*74*	*37.0*

4.3 Analysis of the Continuous variables

4.3.1 Finance costs

Table 4.4 and Figure 4.1 show the results for finance/costs. These results indicate that from the items B1, B2, B3, B4, B5 and B6, 40(19.9%) participants chose strongly disagree scale, and this was the highest proportion corresponding to item B6, and the lowest proportion was 16(8.1%) corresponding to item B5. For disagree scale, the highest proportion of responses was 36(18.1%) corresponding to item B3, and the lowest proportion was 16(8.1%), which corresponds to item

B2. For neutral scale, the highest proportion of responses was 104(52.8%), which corresponds to item B2, and lowest proportion was 29(14.6%), which corresponds to item B1. For agree scale the highest proportion of responses was 34(17.2%), which corresponds to item B1, and the lowest proportion was 16(18.1%), which corresponds to items B2 and B4. Finally, for strongly agreed scale, the highest proportion of responses was 89(44.9%), which corresponds to item B1, while the lowest proportion was 30 (15.1%), which matches with item B4.

Furthermore, the responses for items: B1, B2, B3, B4, B5 and B6 are normally distributed. The mean and standard deviation for B1 are $\bar{x}$ =3.71 and STD =1.44, B2 are $\bar{x}$ = 3.1 and STD =1.18; B3 are $\bar{x}$ =3.38 and STD =1.3, B4 are $\bar{x}$ =3.01 and STD =1.15; B5 are $\bar{x}$ =3.46 and STD =1.3; and B6 are $\bar{x}$ =2.91 and STD =1.35. As the mean for item B1 fell in the range of 3.5-4.49, with regard to the scale interpretation, it is rating the participant's responses as agreed. The mean for items B2, B3, B4 and B5, fell in the range of 2.5-3.49, and with regard to the scale interpretation, it is rating the participant's responses as neutral. Finally, the mean for item B6 fell in the range of 1.5-2.49, and with regard to the scale interpretation, it is rating the participant's responses as disagreed.

The overall distribution of participant's rssponses is normal. The overall mean and standard deviation are $\bar{x}$ =3.25 and STD =0.82. As the overall mean fell in the range of 2.5-3.49, with regard to the scale interpretation, it is rating the participant's responses as likely being neutral to the fact that the finance /costs is probably the barrier to attendance.

	B1	B2	B3	B4	B5	B6
Strongly agree	44.9	17.8	30.2	15.1	30.8	17.9
Agree	17.2	8.1	14.1	8	11.9	12.4
Neutral	14.6	52.8	28.4	51.8	37.3	31.8
Disagree	10.6	8.1	18.1	12.6	11.9	17.9
Strongly Disagr	12.6	13.2	9	12.6	8	19.9

Figure 4.1 finance/costs

Table 4.4: Finance /costs

Items	SD*		D*		N*		A*		SA*		$\bar{x}$ *	STD*	SK	Dis	R*
	n	%	n	%	n	%	n	%	n	%					
No medical aid cover (B1)	25	12.6	21	10.6	29	14.6	34	17.2	89	44.9	3.71	1.44	0.72	normal	agree
Medical aid cover is limited (B2)	26	13.2	16	8.1	104	52.8	6	8.1	35	17.8	3.1	1.18	0.01	normal	neutral
Expensive costs for transport (B3)	18	9.0	36	18.1	57	28.4	28	14.1	60	30.2	3.38	1.3	-.178	normal	neutral
Not enough financial support from the hospital (B4)	25	12.6	25	12.6	103	51.8	16	8.0	30	15.1	3.01	1.15	0.1	normal	neutral
Not getting money from the hospital for transport even though needed (B5)	16	8.0	24	11.9	75	37.3	24	11.9	62	30.8	3.46	1.3	-0.22	normal	neutral
Expensive consultation fees (B6)	40	19.9	36	17.9	64	31.8	25	12.4	36	17.9	2.91	1.35	0.12	normal	disagree
Overall											3.25	0.82	0.32	normal	neutral

*:SD= strongly disagree; D=disagree, N=neutral; A=agree and SA=strongly agree; %: percentage. $\bar{x}$ =Mean, STD= Std. Deviation, SK= Skewness, Dis=Distribution,

4.3.2 Language

Table 4.5 and figure 4.2 show the results for language. These results from the items C1, C2, C3 and C4 indicate that 90(44.8%) participants choose strongly disagreed scale, and it was the highest proportion corresponding to item C3, and the lowest proportion was 82(40.8%) corresponding to item C1. For disagree scale, the highest proportion of responses was 84(42.0%) corresponding to item C2 while the lowest proportion was 72(36.0%), corresponding to item C4. For neutral scale, the highest proportion of responses was 17(8.5%), corresponding to item C4, and the lowest proportion was 13(6.5%), corresponding to item C2. For agree scale, the highest proportion of responses was 12(6.0%), corresponding to item C4, and the lowest proportion was 5(2.5%) corresponding to item C2. Finally, for strongly agreed scale, the highest proportion of responses was 15(7.5%), corresponding to item C1, while the lowest proportion was 8(4.0%), corresponding to item C3.

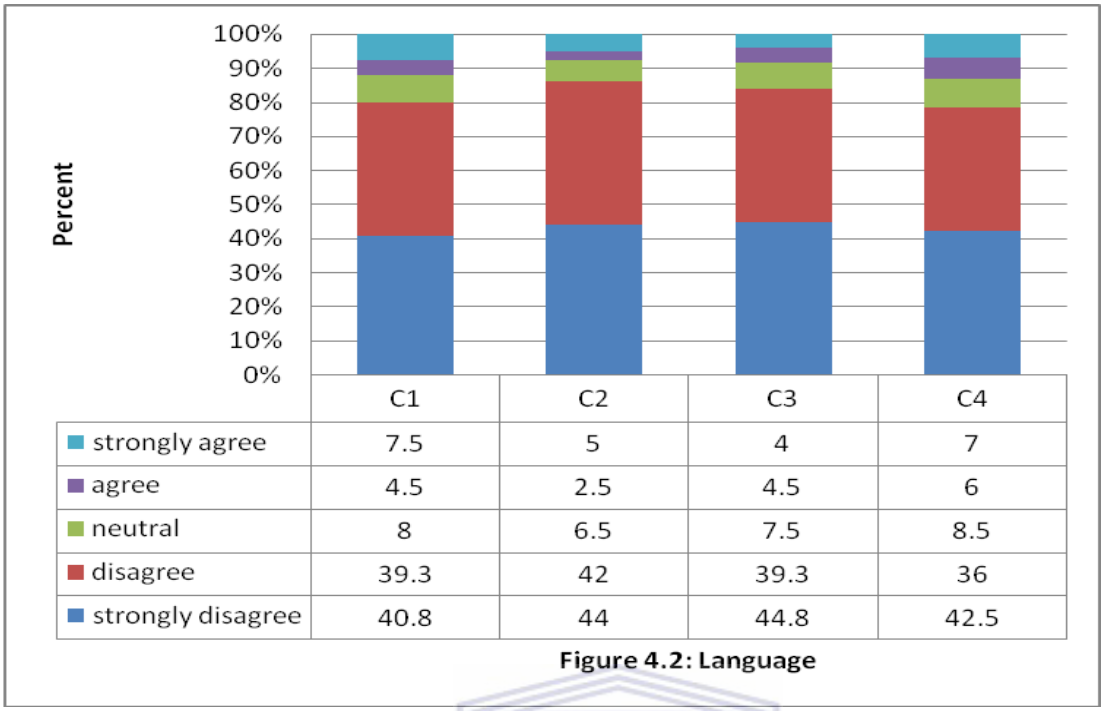
Furthermore, the responses for items C1, C2, C3 and C4 are normally distributed. The mean and standard deviation for C1 are $\bar{x}$ = 2 and STD = 1.2; C2 are $\bar{x}$ =1.8 and STD = 1.02; C3 are $\bar{x}$ =1.84 and STD =1.02 and C4 are $\bar{x}$ =2 and STD =1.2.As the mean for items C1, C2, C3 and C4 fell in the range of 1.5-2.49, with regard to the scale interpretation, it is rating the participant's responses as disagreed.

The overall distribution of responses is normal. The overall mean and standard deviation are $\bar{x}$ =1.91 and STD = 0.81. As the overall mean is 1.91, it fell in the range of 1.5-2.49, and with regard to the scale interpretation, it is rating the participant's responses as likely being disagreed to the fact that the language is probably the barrier to attendance.

Table 4.5: Language

Items	SD*		D*		N*		A*		SA*		$\bar{x}$ *	STD*	SK*	Dis*	R*
	n	%	n	%	n	%	n	%	n	%					
Parent understands Language (C1)	82	40.8	79	39.3	16	8.0	9	4.5	15	7.5	2	1.2	1.4	normal	disagree
Parent needs an interpreter (C2)	88	44.0	84	42.0	13	6.5	5	2.5	10	5.0	1.8	1.02	1.7	normal	disagree
Child needs an interpreter (C3)	90	44.8	79	39.3	15	7.5	9	4.5	8	4.0	1.84	1.02	1.51	normal	disagree
Child needs a therapist who speaks her language(C4)	85	42.5	72	36.0	17	8.5	12	6.0	14	7.0	2	1.2	1.3	normal	disagree
Overall											1.91	0.81	0.95	normal	disagree

*: SD= strongly disagree; D=disagree, N=neutral; A=agree and SA=strongly agree; %: percentage. $\bar{x}$ =Mean, STD= Std. Deviation, SK= Skewness, Dis=Distribution, R=Rating



	C1	C2	C3	C4
strongly agree	7.5	5	4	7
agree	4.5	2.5	4.5	6
neutral	8	6.5	7.5	8.5
disagree	39.3	42	39.3	36
strongly disagree	40.8	44	44.8	42.5

Figure 4.2: Language

4.3.3 Culture/religion

Table 4.6 and figure 4.3 show the results for culture and religion. These results indicate that from the items C1, C2, C3 and C4, 120(59.7%) participants chose strongly disagreed scale, and this was the highest proportion corresponding to item D3, and the lowest proportion was 103(51.5%), corresponding to item D1. For disagree scale, the highest proportion of responses was 72(36.0%), corresponding to item D1 and the lowest proportion was 60(30.0%), corresponding to item D6. For neutral scale, the highest proportion of responses was 15(7.5%) corresponding to item D1, while the lowest proportion was 11(5.5%), corresponding to item D4 For agree scale, the highest proportion of responses was 4(2.0%), corresponding to item D4 and the lowest proportion was 2(1.0%), corresponding to items and D1, D2, D3 and D5. Finally, for strongly agree scale, the same highest proportion of responses was 8(4.0%), corresponding to items D1, D2 and D6, and the lowest proportion was 3(1.5%) participants, corresponding to item D5.

Furthermore, the responses for items D1, D4 and D6 are normally distributed while the responses for items D2, D3 and D5 are positively distributed The mean and standard deviation for D1 are $\bar{x}$ =1.70, and STD =0.95; D2 are $\bar{x}$ =1.7 and STD =0.95; D3 are $\bar{x}$ =1.56 and STD =0.85;D4 are $\bar{x}$ =1.60 and STD =0.88; D5 are $\bar{x}$ =1.55 and STD =0.79 and D6 are $\bar{x}$ =1.65 and STD =0.97. As

the mean for items D1, D2, D3, D4, D5 and D6, fell in the range of 1.5-2.49, with regard to the scale interpretation, it was rating the participant's responses as disagreed.

The overall distribution of responses is positive. the overall mean and standard deviation are $\bar{x}$ =1.62 and STD =0.75. As the overall mean is 1.62, it fell in the range of 1.5-2.49, and with regard to the scale interpretation it was rating the participant's responses as likely being disagreed to the fact that the culture and religion are probably the barriers to attendance.

Table 4.6: Culture/Religion

Items	SD*		D*		N*		A*		SA *		$\bar{x}$ *	STD*	SK*	Dis*	R*
	n	%	n	%	n	%	n	%	n	%					
Therapist's advice is against religion/ culture (D1)	103	51.5	72	36.0	15	7.5	2	1.0	8	4.0	1.70	0.95	1.84	normal	disagree
Appointments clash with prayer time (D2)	109	54.5	68	34.0	13	6.5	2	1.0	8	4.0	1.7	0.95	1.94	positive	disagree
Therapists does not respect religion (D3)	120	59.7	62	30.8	12	6.0	2	1.0	5	2.5	1.56	0.85	2.1	positive	disagree
Child's therapist doesn't understand culture (D4)	115	57.2	66	32.8	11	5.5	4	2.0	5	2.5	1.60	0.88	1.96	normal	disagree
Child's therapist doesn't respect culture/religion (D5)	117	58.2	66	32.8	13	6.5	2	1.0	3	1.5	1.55	0.79	1.87	positive	disagree
The treatment that child receives is against culture (D6)	115	57.5	60	30.0	14	7.0	3	1.5	8	4.0	1.65	0.97	1.93	normal	disagree
Overall											1.62	0.75	1.97	positive	disagree

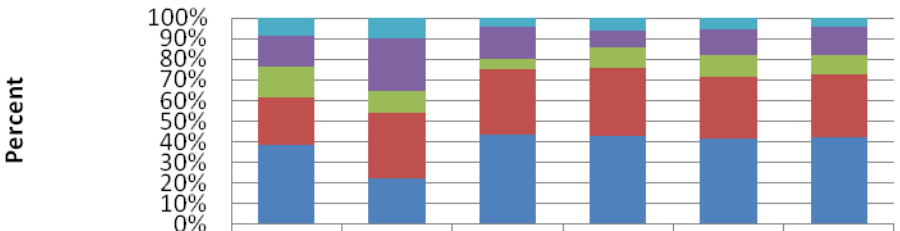
*: SD= strongly disagree; D=disagree, N=neutral; A=agree and SA=strongly agree; %: percentage. $\bar{x}$ =Mean, STD= Std. Deviation, SK= Skewness, Dis=Distribution, R=Rating

4.3.4 Knowledge

Table 4.7 and figure 4.4 show the results for knowledge. These results indicate that from the items E1, E2, E3, E4, E5 and E6, 87(43.7%) participants chose strongly disagreed scale, and this was the highest proportion corresponding to item E3, and the lowest proportion was 45(22.6%) corresponding to item E2. For disagree scale, the highest proportion of responses was 63(31.7%) corresponding to item E3, and the lowest proportion was 46(23.1%), corresponding to item E1. For neutral scale, the highest proportion of responses was 30(15%), corresponding to item E1 and the lowest proportion was 10(5.0%), corresponding to item E3. For agree scale, the highest proportion of responses was 50(25.1%), corresponding to item E2, and the lowest proportion was 16(8.2%), corresponding to item E4. Finally, for strongly agree scale the highest proportion of responses was 20(10.1%), again corresponding to item E2 and the lowest proportion was 9(4.5%), corresponding to item E3 and E6.

Furthermore, the responses for item E1, E2, E3, E4, E5 and E6 are normally distributed. The mean and standard deviation for E1are $\bar{x}$ =2.33 and STD = 1.35; E2 are $\bar{x}$ =2.69 and STD =1.33; E3 are $\bar{x}$ =2.05 and STD =1.23, E4 are $\bar{x}$ =2.02 and STD =1.19, E5 are $\bar{x}$ =2.11 and STD = 1.23 and E6 are $\bar{x}$ =2.08 and STD =1.21. As the mean for items E1, E3, E4, E5 and E6 fell in the range of 1.5-2.49, with regard to the scale interpretation, it was rating the participant's responses as disagreed. As the mean for item E2 fell in the range of 2.5-3.45, with regard to the scale interpretation, it is rating the participant's responses as neutral.

The overall distribution of responses is normal.The overall mean and standard deviation are $\bar{x}$ =2.21 and STD = 0.98. As the overall mean fell in the range of 1.5-2.49 is 2.21, with regard to the scale interpretation it is rating the participant's responses as likely being disagreed to the fact that knowledge is probably the barrier for attendance.



	E1	E2	E3	E4	E5	E6
strongly agree	9	10.1	4.5	6.1	5.5	4.5
agree	14.6	25.1	15.1	8.2	12.5	13.6
neutral	15.1	11.1	5	10.2	10.5	9.5
disagree	23.1	31.2	31.7	32.7	30	30.2
strongly disagree	38.2	22.6	43.7	42.9	41.5	42.2

Figure 4.4: knowledge

Table 4.7: Knowledge

Items	SD*		D*		N*		A*		SA*		$\bar{x}$ *	STD*	SK*	Dis*	R*
	n	%	n	%	n	%	n	%	n	%					
Disbelieving that child has mental illness (E1)	76	38.2	46	23.1	30	15.1	29	14.6	18	9.0	2.33	1.35	0.63	normal	disagree
Not fully understand about child's illness (E2)	45	22.6	62	31.2	22	11.1	50	25.1	20	10.1	2.69	1.33	0.27	normal	neutral
Child's therapist has never explained about my child's illness (E3)	87	43.7	63	31.7	10	5.0	30	15.1	9	4.5	2.05	1.23	1.00	normal	disagree
Child is not on medication, no need come all the time (E4)	84	42.9	64	32.7	20	10.2	16	8.2	12	6.1	2.02	1.19	1.14	normal	disagree
Child is not seriously ill, no need to come all the time (E5)	83	41.5	60	30.0	21	10.5	25	12.5	11	5.5	2.11	1.23	0.93	normal	disagree
Child can cope with his illness, no need to attend (E6)	84	42.2	60	30.2	19	9.5	27	13.6	9	4.5	2.08	1.21	0.93	normal	disagree
Overall											2.21	0.98	0.81	normal	disagree

*: SD= strongly disagree; D=disagree, N=neutral; A=agree and SA=strongly agree; %: percentage. $\bar{x}$ =Mean, STD= Std. Deviation, SK= Skewness, Dis=Distribution, R=Rating

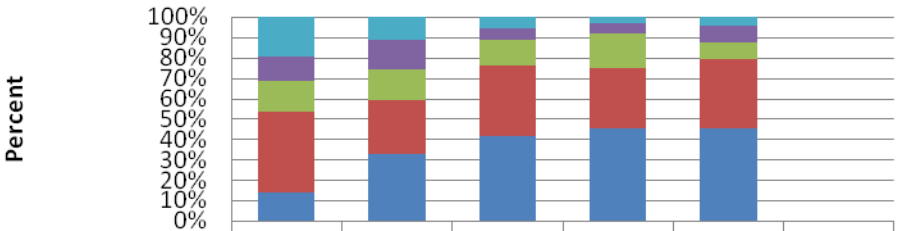
4.3.5 Stigma

Table 4.8 and Figure 4.5 show the results for stigma. These results indicate that from the items F1, F2, F3, F4 and F5, 90(45.0%) participants chose strongly disagreed scale, and this was the highest proportion corresponding to item F4, and the lowest proportion was 18(9.0%) corresponding to item F1. For disagree scale, the highest proportion of responses was 68(34.4%) corresponding to item F3, and the lowest proportion was 51(25.4%), corresponding to F1. For neutral scale, the highest proportion of responses was 34(17%) corresponding to item F4, and the lowest proportion was 16(8.2%), which corresponds to item F5. For agree scale, the highest proportion of responses was 29(14.4%), corresponding to item F2, and the lowest proportion was 10(5.0%), corresponding to item F4. Finally, for strongly agree scale, the highest proportion of responses was 25(12.4%), corresponding to item F1, and the lowest proportion was 6(3.0%), which correspond to item F4.

Furthermore, the responses for items F1, F2, F3, F4 and F5 are normally distributed. The mean and standard deviation for F1 are $\bar{x}$ =2.18 and STD =1.4; F2 are $\bar{x}$ =2.46 and STD =1.38; F3 are $\bar{x}$ =1.99 and STD =1.13, F4 are $\bar{x}$ =1.91 and STD = 1.04 and F5 are $\bar{x}$ =1.92 and STD = 1.12. As the Mean for items F1, F2, F3, F4, and F5, fell in the range of 1.5-2.49, with regard to the scale interpretation it was rating the participant's responses as disagreed?

The overall distribution of responses is normal. The overall mean and standard deviation are $\bar{x}$ =2.18 and STD = 0.88. As the overall mean is 2.18, it fell in the range of 1.5-2.49, and with regard to the scale interpretation it is rating the participant's responses as disagreed to the fact that the stigma is probably the barrier to attendance.

However, stigma has been identified as a key barrier to mental health services access and utilisation. It may be due to lack of recognition of mental disturbance, leading to failure to pursue/or access psychological services as problematic behaviours are attributed to weak personal will or moral flaw or poor parenting. It also produces a strong sense of shame and/or personal failure leading to non-utilisation of mental health services (Corrigan, 2005 & Thornicroft, 2006, cited in Heflinger and Hinshaw, 2010).



	F1	F2	F3	F4	F5	
strongly agree	12.4	11.6	5.6	3	4.6	
agree	8	14.4	5.6	5	7.7	
neutral	9.5	14.6	12.9	17	8.2	
disagree	25.4	26.6	34.4	30	34.2	
strongly disagree	9	32.7	41.4	45	45.4	

Figure 4.5: Stigma

Table 4.8: Stigma

Items	SD*		D*		N*		A*		SA*		$\bar{x}$ *	STD*	SK*	Dis*	R*
	n	%	n	%	n	%	n	%	n	%					
Ashamed being seen with child at the clinic (F1)	18	9.0	51	25.4	19	9.5	16	8.0	25	12.4	2.18	1.4		normal	disagree
Symptoms don't mean that child has mental illness (F2)	65	32.7	53	26.6	29	14.6	29	14.4	23	11.6	2.46	1.38	0.55	normal	disagree
Child doesn't need to see psychiatrist (F3)	82	41.4	68	34.4	26	12.9	11	5.6	11	5.6	1.99	1.13	1.19	normal	disagree
Child doesn't need to take medication (F4)	90	45.0	60	30.0	34	17	10	5.0	6	3.0	1.91	1.04	1.10	normal	disagree
Family doesn't support child for attendance (F5)	89	45.4	67	34.2	16	8.2	15	7.7	9	4.6	1.92	1.12	1.29	normal	disagree
Overall											2.18	0.88	0.68	normal	disagree

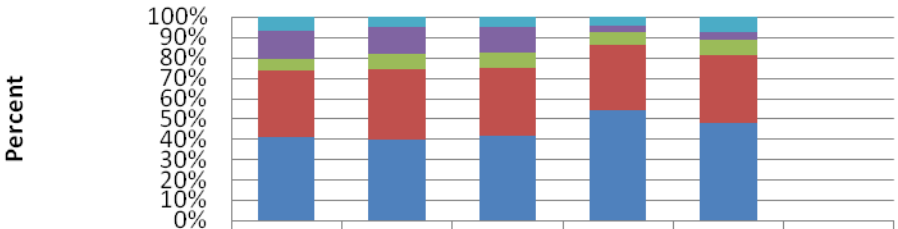
*: SD= strongly disagree; D=disagree, N=neutral; A=agree and SA=strongly agree; %: percentage. $\bar{x}$ =Mean, STD= Std. Deviation, SK= Skewness, Dis=Distribution, R=Rating

4.3.6 Confidentiality

Table 4.9 and figure 4.6 show the results for confidentiality. These results indicate that from the items G1, G2, G3, G4, and G5, 109(54.2%) participants chose strongly disagreed scale, and this was the highest proportion corresponding to item G4, and the lowest proportion was 79(39.7%), which correspond to item G2. For disagree scale, the highest proportion of responses was 69(34.7%), corresponding to item G2 and the lowest proportion was 63(31.5%), corresponding to item G4. For neutral scale the highest proportion of responses was 15(7.5%), corresponding to item G2 and G3 and the lowest proportion was 11(5.5%), which corresponds to item G1. For agree scale, the highest proportion of responses was 28(14.0%) corresponding to item G1, and the lowest proportion was 6(3.0%), corresponding to item G4. Finally, for strongly agree scale, the highest proportion of responses was 15(7.6%), corresponding to item G5, and the lowest proportion was 9(4.5%) corresponding to item G4.

Furthermore, the responses for items G1, G2, G3 and G4 are normally distributed. The responses for G5 are positively distributed the mean and standard deviation for G1are $\bar{x}$ =2.14 and STD =1.28; G2are $\bar{x}$ =2.09 and STD = 1.20, G3 are $\bar{x}$ =2.06 and STD =1.21and G4 are $\bar{x}$ =1.72 and STD = 1.03 and G5 are $\bar{x}$ =1.90 and STD =1.18. As the mean for items, G1, G2, G3, G4, and G5, fell in the range of 1.5-2.49, with regard to the scale interpretation, it was rating the participant's responses as disagreed.

The overall distribution of items G1, G2, G3, G4 and G5 was normal. The overall mean and standard deviation are $\bar{x}$ =1.96 and STD = 0.9. As the overall mean is 1.96, it fell in the range of 1.5-2.49, and with regard to the scale interpretation, it was rating the participants responses as likely being disagreed to the fact that confidentiality is probably the barrier to attendance.



	G1	G2	G3	G4	G5	
strongly agree	7	5	5	4.5	7.6	
agree	14	13.1	12.6	3	4	
neutral	5.5	7.5	7.5	6.5	7	
disagree	32.5	34.7	33.2	31.5	33.3	
strongly disagree	41	39.7	41.7	54.2	48	

Figure 4.6: Confidentiality

Table 4.9: Confidentiality

Items	SD*		D*		N*		A*		SA*		$\bar{x}$ *	STD*	SK*	Dis*	R*
	n	%	n	%	n	%	n	%	n	%					
Worried that therapist will share information (G1)	82	41.0	65	32.5	11	5.5	28	14.0	14	7.0	2.14	1.28	0.96	normal	disagree
Worried that info about child could be used against child (G2)	79	39.7	69	34.7	15	7.5	26	13.1	10	5.0	2.09	1.20	0 .99	normal	disagree
Keeping some secretes from the therapist (G3)	83	41.7	66	33.2	15	7.5	25	12.6	10	5.0	2.06	1.21	1.02	normal	disagree
Therapist and parent do not agree about child's treatment (G4)	109	54.2	63	31.5	13	6.5	6	3.0	9	4.5	1.72	1.03	1.77	normal	disagree
Child does not have a good relationship with the therapist (G5)	95	48	66	33.3	14	7.0	8	4.0	15	7.6	1.90	1.18	1.47	positive	disagree
Overall											1.96	0.90	0.87	normal	disagree

*: SD= strongly disagree; D=disagree, N=neutral; A=agree and SA=strongly agree; %: percentage. $\bar{x}$ =Mean, STD= Std. Deviation, SK= Skewness, Dis=Distribution, R=Rating

4.3.7 Service

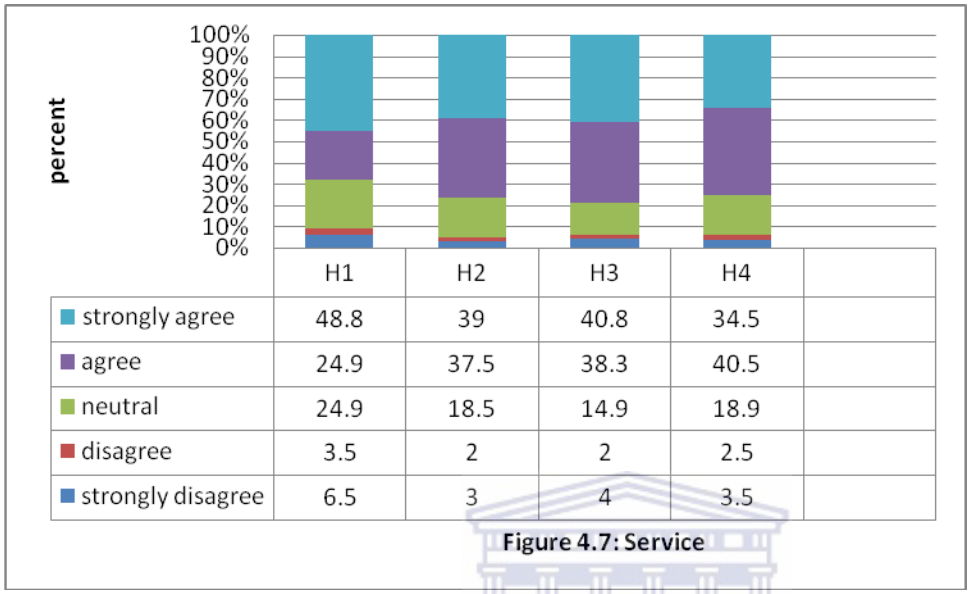
Table 4.10 and Figure 4.7 show the results for service. These results indicate that from the item H1, H2, H3 and H4, 13(6.5%) participants chose strongly disagreed scale, and this was the highest proportion corresponding to item H1, and the lowest proportion was 6(3.0%), corresponding to item H2. With disagree scale, the highest proportion of responses was 7(3.5%), corresponding to the item H1 again, and the lowest proportion was 4(2.0%), which corresponds to item H2 and H3. For neutral scale, the highest proportion of responses was 38(18.9%), corresponding to item H4, and the lowest proportion was 30(14.9%), corresponding to item H3 again. For agree scale the highest proportion of responses was 81(40.5%), corresponding to item H4 again and the lowest proportion was 50(24.9%), which corresponds to item H1. Finally, for strongly agree scale, the highest proportion of responses was 98(48.8%), corresponding to item H1, while the lowest proportion was 69(34.5%), corresponding to item H4.

Furthermore, the responses for items H1, H3 and H4 are normally distributed, while the responses for item H2 are negatively distributed. The mean and standard deviation for H1 are $\bar{x}$ =4.06 and STD =1.17; H2 are $\bar{x}$ =4.08 and STD = 0.96, H3 are $\bar{x}$ =4.10 and STD = 0.10; and H4 are $\bar{x}$ =4.00 and STD = 0.98. As, the mean for items H1, H2, H3, and H4, fell in the range of 3.5-4.45, with regard to the scale interpretation, it was rating the participant's responses as agreed.

The overall distribution of responses for items H1, H2, H3, and H4 is normal. The overall mean and standard deviation are $\bar{x}$ =4.1 and STD =0.86. As the overall mean is $\bar{x}$ =4.1, it fell in the range of 3.5 -4.49, and with regard to the scale interpretation, it was rating the participants responses as likely being agreed to the fact that the service is probably the barrier to attendance for child and adolescent out-patient mental health services at DCAP.

However, lack of confidence in Health professionals among young people and caregivers in developed and developing countries, leads to non-utilisation of mental health services (Eapen *et al*. (2009), Starr *et al*. (2002) & Lamries (1988), Pumariega *et al*. (2005), Thompson *et al*. (2004), Fiscella *et al.* (2002), Lloyd *et al*. (1998), Benkert *et al*. (2006), Nickerson *et al*. (1994), Snowden *et al*. (2007), Griner *et al*. (2006) & Cauce *et al*. (2002) cited in Snowden *et al*. (2008).

Also, therapeutic alliance and the degree of "helpfulness" of the clinician also impact on attendance (Mitchell & Selmes, 2007).



	H1	H2	H3	H4
strongly agree	48.8	39	40.8	34.5
agree	24.9	37.5	38.3	40.5
neutral	24.9	18.5	14.9	18.9
disagree	3.5	2	2	2.5
strongly disagree	6.5	3	4	3.5

Figure 4.7: Service

Table 4.10: Service

Items	SD*		D*		N*		A*		SA*		$\bar{x}$ *	STD*	SK*	Dis*	R*
	n	%	n	%	n	%	n	%	n	%					
Confident that child is getting the best help from therapist (H1)	13	6.5	7	3.5	33	24.9	50	24.9	98	48.8	4.06	1.17	1.22	normal	agree
Hospital offers excellent therapists for children (H2)	6	3.0	4	2.0	37	18.5	75	37.5	78	39.0	4.08	0.96	1.11	negative	agree
The staff in unit /hospital is good (H3)	8	4.0	4	2.0	30	14.9	77	38.3	82	40.8	4.10	0.10	-1.31	normal	agree
I get the best service in this hospital (H4)	7	3.5	5	2.5	38	18.9	81	40.5	69	34.5	4.00	0.98	1.08	normal	agree
Overall											4.1	0.86	0.97	normal	agree

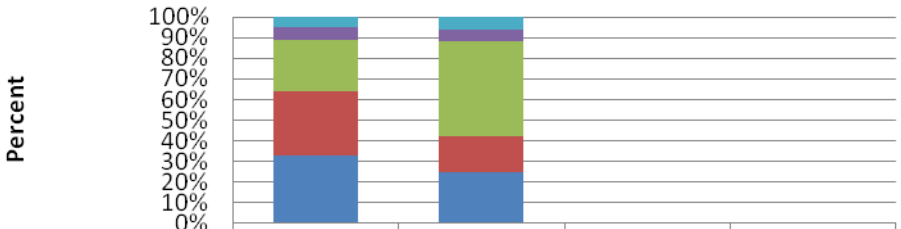
*: SD= strongly disagree; D=disagree, N=neutral; A=agree and SA=strongly agree; %: percentage. $\bar{x}$ =Mean, STD= Std. Deviation, SK= Skewness, Dis=Distribution, R=Rating

4.3.8 Support system

Table 4.11 and Figure 4.8 show the results for support system. These results indicate that from items I1 and I2, 66(32.8%) participants chose strongly disagreed scale, and this is the highest proportion corresponding to item I1 and the lowest proportion was 48(25.1%) corresponding to item I2. For disagree scale, the highest proportion of responses was 63(31.2%), corresponding to item I1 again, and the lowest proportion was 33(17.3%) corresponding to item I2. For neutral scale, the highest proportion of responses was 87(45.5%) corresponding to item I2 and the lowest proportion was 50(24.9%), corresponding to item I1. With agree scale, the highest proportion of responses was 12(6.0%), corresponding to item I1 and the lowest proportion was 11(5.8%), which correspond to item I2. Finally, for strongly agree scale, the highest proportion of responses was 12(6.3%), corresponding to item I2 and the lowest proportion was 10(5.0%), which corresponds to item I1.

Furthermore the responses for item I1 are negatively distributed, while the responses for item I 2 are normally distributed. The mean and standard deviation for I1 are $\bar{x}$ =2.19 and STD =1.11 and I 2 are $\bar{x}$ =2.51 and STD = 1.12. As the mean for item I1 fell in the range of 1.5-2.49, with regard to the scale interpretation, it is rating the participant's responses as disagreed. On the other hand, the mean for item I2 fell in the range of 2.5-3.45, and with regard to the scale interpretation it is rating the participant's responses as neutral.

The overall distribution for item I1 and I2 is normal. The overall mean and standard deviation are $\bar{x}$ =2.33, STD =0.98. As the overall mean is $\bar{x}$ =2.33, it fell in the range of 1.5-2.49, and with regard to the scale interpretation it is rating the participants responses as likely being disagreed to the fact that support system is probably the barrier to attendance.



	I1	I2		
strongly agree	5	6.3		
agree	6	5.8		
neutral	24.9	45.5		
disagree	31.2	17.3		
strongly disagree	32.8	25.1		

Figure 4.8: Support System

Table 4.11: Family support system

Items	SD*		D*		N*		A*		SA*		$\bar{x}$ *	STD*	SK*	Dis*	R*
	n	%	n	%	n	%	n	%	n	%					
Not getting support for family (I1)	66	32.8	63	31.2	50	24.9	12	6.0	10	5.0	2.19	1.11	0.77	negative	disagree
Shortage of staff in children's homes (I2)	48	25.1	33	17.3	87	45.5	11	5.8	12	6.3	2.51	1.12	0.24	normal	neutral
Overall											2.33	0.98	0.51	normal	disagree

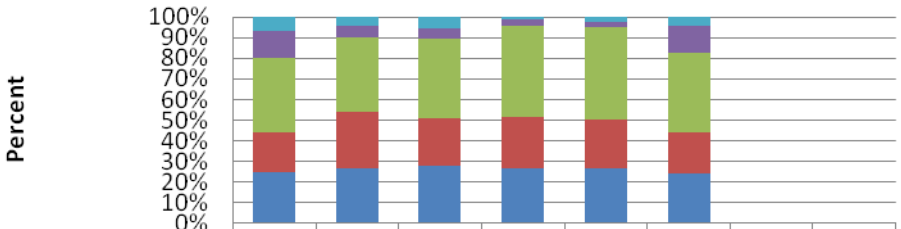
*: SD= strongly disagree; D=disagree, N=neutral; A=agree and SA=strongly agree; %: percentage. $\bar{x}$ =Mean, STD= Std. Deviation, SK= Skewness, Dis=Distribution, R=Rating

4.3.9. Work

Table 4.12 and figure 4.9 show the results for work. These results indicate that from items J1, J2, J3, J4, J5 and J6, 55(28.2%) participants chose strongly disagreed scale, and this was the highest proportion corresponding to item J3, and the lowest proportion was 47(24.5%) corresponding to item J6. For disagree scale, the highest proportion of responses was 54(27.4%), corresponding to item J2 and the lowest proportion was 38(19.3%), which corresponds to item J1. For neutral scale, the highest proportion of responses with 86(44.6%), corresponding to item J5 and the lowest proportion was 71(36.0%), corresponding to items J1 and J2. For agree scale, the highest proportion of responses was 26(13.5%), corresponding to item J6 and the lowest proportion was 5(2.6%), corresponding to item J5. Finally, for strongly agree scale, the highest proportion of responses was 14(7.1%), corresponding to item J1 and the lowest proportion was 3(1.5%), which corresponds to item J4.

Furthermore, the responses for items J1, J3, J4, J5 and J6 are normally distributed while the responses for item J2 are positively distributed. The mean and standard deviation for J1 are $\bar{x}$ =2.58 and STD = 1.20; J2 are $\bar{x}$ =2.32 and STD =1.06, J3 are $\bar{x}$ =2.37 and STD = 1.12; J4 are $\bar{x}$ =2.28 and STD = 0.95, J5 are $\bar{x}$ =2.31 and STD = 0.98 and J6 are $\bar{x}$ =2.53 and STD =1.13. As the mean for item J1 and J6 fell in the range of 2.5-3.49, with regard to the scale interpretation it is rating the participant's responses as neutral. The mean for item, J2, J3, J4 and J5, fell in the range of 1.5-2.49 and with regard to the scale interpretation it is rating the participant's responses as disagreed.

The overall distribution of items J1, J2, J3, J4, J5 and J6 items is normal. The overall mean and standard deviation are $\bar{x}$ =2.40 and STD = 0.88. as the overall mean is $\bar{x}$ =2.40 it fell in the range of 1.5-2.49, and with regard to the scale interpretation it is rating the participants responses as likely being disagreed to the fact that the work is probably the barrier to attendance.



	J1	J2	J3	J4	J5	J6		
strongly agree	7.1	4.1	5.6	1.5	2.6	4.2		
agree	12.7	5.6	5.1	3.1	2.6	13.5		
neutral	36	36	38.5	44.1	44.6	38		
disagree	19.3	27.4	22.6	24.6	23.3	19.8		
strongly disagree	24.9	26.4	28.2	26.7	26.9	24.5		

Figure 4.9: Work

Table 4.12: Work

Items	SD*		D*		N*		A*		SA*		$\bar{x}$ *	STD*	SK*	Dis	R
	n	%	n	%	n	%	n	%	n	%					
Not getting time off & losing a day's salary (J1)	49	24.9	38	19.3	71	36.0	25	12.7	14	7.1	2.58	1.20	0.23	normal	neutral
Working seven days a week & asking someone else to bring child (J2)	53	26.4	54	27.4	71	36.0	11	5.6	8	4.1	2.32	1.06	0.44	positive	disagree
Working shifts & appointment clash with shift work (J3)	55	28.2	44	22.6	75	38.5	10	5.1	11	5.6	2.37	1.12	0.43	normal	disagree
Exhausted leave days & cant' bring child (J4)	52	26.7	48	24.6	86	44.1	6	3.1	3	1.5	2.28	0.95	0.73	normal	disagree
Self-employed & no time to bring the child (J5)	52	26.9	45	23.3	86	44.6	5	2.6	5	2.6	2.31	0.98	0.19	normal	disagree
Working long hours & only available week-ends but unit is closed (J6)	47	24.5	38	19.8	73	38.0	26	13.5	8	4.2	2.53	1.13	0.13	normal	neutral
Overall											2.40	0.88	0.15	normal	disagree

SD= strongly disagree; D=disagree, N=neutral; A=agree and SA=strongly agree; %: percentage. $\bar{x}$ *= Mean, STD= Std. Deviation, SK= Skewness, Dis=Distribution, R=Rating

4.3.10. School

Table 4.13 and Figure 4.10 show the results for culture and religion. These results indicate that from the items K1 and K2, 31(15.4%) participants chose strongly disagreed scale, and this is the highest proportion corresponding to item K1; and the lowest was 24(11.9%), corresponding to item K2. For disagree scale, the highest proportion of responses was 42(20.9%), corresponding to the item K2, and the lowest was 36(17.9), corresponding to item K1. For neutral scale, the highest proportion of responses was 23(11.4%), corresponding to item K1 again and the lowest proportion was 21(10.4%), corresponding to item K2. For agree scale, the highest proportion of responses was 62(30.8%), corresponding to item K2, and the lowest proportion was 60(29.9%), corresponding to item K1. Finally, for strongly agree scale, the highest proportion of responses was 52(25.9%), corresponding to item K2 again and the lowest proportion was 51(25.4%), corresponding to item K1.

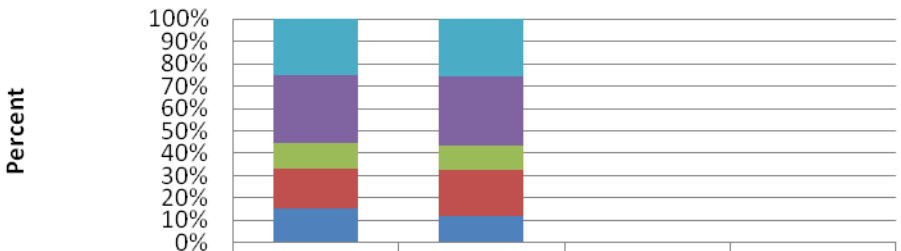
Furthermore, the responses for items K1 and K2 are normally distributed. the mean and standard deviation for K1 are $\bar{x}$ =3.32 and STD =1.42 and for K2 are $\bar{x}$ =3.38 and STD =1.38 respectively. The mean for items, K1 and K2 fell in the range of 2.5-3.49 and with regard to the scale interpretation it was rating the participant's responses as neutral.

The overall distribution of responses is normal. The overall mean and standard deviation are $\bar{x}$ =3.35 and STD = 1.37. As the overall mean is $\bar{x}$ =3.35 it fell in the range of 2.5-3.49, and with regard to the scale interpretation it was rating the participants responses as likely being neutral to fact that the school is probably the barrier to attendance.

Table 4.13: School

Items	SD*		D*		N*		A*		SA*		$\bar{x}$ *	STD *	SK*	Dis*	R*
	n	%	n	%	n	%	n	%	n	%					
Child's appointment interferes with school (K1)	31	15.4	36	17.9	23	11.4	60	29.9	51	25.4	3.32	1.42	-0.37	normal	neutral
Child loses out on school work (K2)	24	11.9	42	20.9	21	10.4	62	30.8	52	25.9	3.38	1.38	0.38	normal	neutral
Overall											3.35	1.37	0.34	normal	neutral

*: SD= strongly disagree; D=disagree, N=neutral; A=agree and SA=strongly agree; %: percentage. $\bar{x}$ =Mean, STD= Std. Deviation, SK= Skewness, Dis=Distribution, R=Rating



	K1	K2		
strongly agree	25.4	25.9		
agree	29.9	30.8		
neutral	11.4	10.4		
disagree	17.9	20.9		
strongly disagree	15.4	11.9		

Figure 4.10 school

4.3.11 Other miscellaneous barriers

Table 4.14 and figure 4.11 show the results for other barriers. These results indicate that from items L1, L2, L3, L4, L5, L6, L7 to L8, 84(42.0%), participants chose strongly disagree scale, and this was the highest proportion corresponding to item L8 (Duration of sessions/prolonged sessions), and the lowest proportion was 33(16.5%) corresponding to item L6 (Emergency). For disagree scale, the highest proportion of responses was 79(39.5%) corresponding to the item L7 (too frequent appointments) and the lowest was 17(8.5%) participants corresponding to item L3 (refusing). For neutral scale, the highest proportion of responses was 82(43.4%), corresponding to item L5 (Staff in the children's home forgets about appointment), and the lowest proportion was 22(11.0%), corresponding to item L2 (Inconvenient Time for appointment) and L7 (too Frequent Appointments). For agree scale, the highest proportion of responses with 54(27.3%), corresponding to item L2 (Inconvenient times for appointment) and the lowest proportion was 12(6.3%), corresponding to item L5. Finally, for strongly agree scale, the highest proportion of responses was 42(21.2%), corresponding to item L2 (Inconvenient times for appointment) and the lowest proportion was 7(3.5%), corresponding to item L1 (Too busy schedule & no time to bring child) had.

Furthermore, the responses for items L1, L2, L3, L4, L5, L6, L7 and L8 are normally distributed. The mean and standard deviation for L1 are $\bar{x}$ =2.22 and STD =1.07; L2 are $\bar{x}$ =3.10 and STD =1.46, L3 are $\bar{x}$ =2.20 and STD =1.29, L4 are $\bar{x}$ =2.41 and STD = 1.27; L5

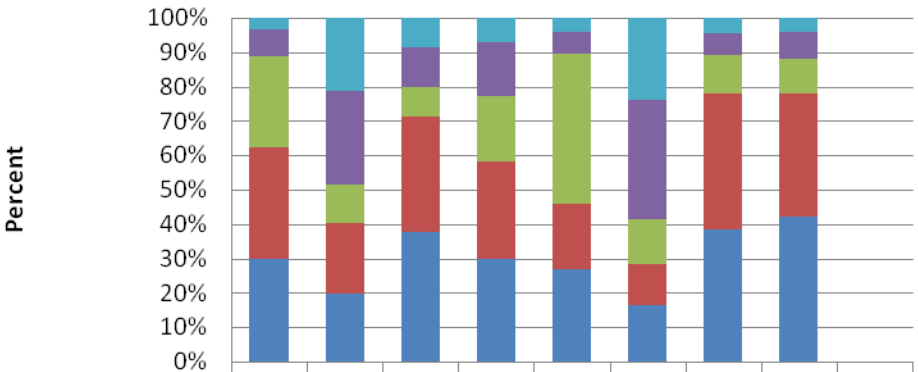
are $\bar{x}$ =2.42 and STD = 1.08; L6 are $\bar{x}$ =3.38 and STD = 1.40; L7 are $\bar{x}$ =1.99 and STD =1.08 and L8 are $\bar{x}$ =1.96 and STD =1.10. The mean for items, L1, L3, L4, L5, L7 and L8, fell in the range of 1.5-2.49, and with regard to the scale interpretation it was rating the participant's responses as disagreed. The mean for items L2 and L6 fell in the range of 2.5-3.49 and with regard to the scale interpretation it was rating the participant's responses as neutral.

Hyucksun –Shin (2009), Kaplan, Sadock & Grebb (2004), Minty & Anderson (2004), Lazaratous & Anthens (2000), Goldstein (2006), Wu *et al*. (2010) & Aisbet *et al*. (2007) state that child symptomatology and impairment, the treatment and its season are correlated with treatment compliance and may limit progress towards recovery and further compromise health.

Table 4. 14: Other barriers

Items	SD*		D*		N*		A*		SA*		$\bar{x}$ *	STD*	SK*	Dis*	R*
	n	%	n	%	n	%	n	%	n	%					
Too busy schedule & no time to bring child (L1)	60	29.9	64	32.3	52	26.3	15	7.6	7	3.5	2.22	1.07	0.64	normal	disagree
Time for appointment is inconvenient (L2)	39	19.7	41	20.7	22	11.1	54	27.3	42	21.2	3.1	1.46	0.14	normal	neutral
Child refuses to attend for appointment (L3)	75	37.7	67	33	17	8.5	23	11.6	17	8.5	2.20	1.29	0.93	normal	disagree
Parent forgets about children appointment (L4)	60	29.9	38	19.1	56	28.1	31	15.6	14	7.0	2.41	1.27	0.52	normal	disagreed
Staff in the children's home forgets about appointment (L5)	51	27.0	36	19.0	82	43.4	12	6.3	8	4.2	2.42	1.08	0.23	normal	disagree
Emergency (L6)	33	16.5	24	12.0	26	13.0	69	34.5	48	24.0	3.38	1.40	0.53	normal	neutral
Appointments are too frequent (L7)	77	38.5	79	39.5	22	11.0	13	6.5	9	4.5	1.99	1.08	1.21	normal	disagree
Sessions are too long & take too much time (L8)	84	42.0	72	36.0	20	10.0	16	8.0	8	4.0	1.96	1.10	1.19	normal	disagree
Overall											2.5	0.82	0.04	normal	disagree

*: SD= strongly disagree; D=disagree, N=neutral; A=agree and SA=strongly agree; %: percentage. $\bar{x}$ =Mean, STD= Std. Deviation, SK= Skewness, Dis=Distribution, R=Rating



	L1	L2	L3	L4	L5	L6	L7	L8
strongly agree	3.5	21.2	8.5	7	4.2	24	4.5	4
agree	7.6	27.3	11.6	15.6	6.3	34.5	6.5	8
neutral	26.3	11.1	8.5	19.1	43.4	13	11	10
disagree	32.3	20.7	33.7	28.1	19	12	39.5	36
strongly disagree	29.9	19.7	37.7	29.9	27	16.5	38.5	42

Figure 4.11: Other

4.4. Factor analysis

Factor analysis is a way of reducing data using smaller set of factors and also to reduce a large number of related variables. The sample size and the strength of the relationship among variables are to be considered in order to determine whether particular data are suitable for factor analysis (Pallant, 2011). Pallant (2011) further suggests that a sample size should be more than 150 cases. The sample size for this study was suitable for factor analysis, 201 cases.

4.4.1 Factor extraction

Pallant (2011) states that factor extraction involves determining the smallest number of factors that can be used to best represent the interrelationships among the set of variables. In this study, we have a long list of factors and in order to reduce this number of factors to few factors, and to determine the factorability of the data, factor analysis (Bartlett's test of sphericity and Kaiser Meyer-Olkins (KMO) was used (Pallant, 2011). Furthermore, Bartlett's test of sphericity should be significant ($p < .05$) for the factor analysis to be considered appropriate. The KMO index should range from 0-1, with 0.6 suggested as the minimum value for a good factor analysis.

The results from factors analysis for principal components as shown below in table 4.15 show that Kaiser-Mayer-test is 0.824, which is quite beyond the limit of acceptance which is 0.6 according Pallant (2011). Furthermore, Bartlett's test of Sphericity, as indicated in Table 5,.chi-square is 65519.757 with degree of freedom (df) =1431 and p-value is 0.0005 <0.05. Based on the above information, and given that p-value is less than 5%, the model was adequate and it fit the data.

Table 4.15. KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.824
Bartlett's Test of Sphericity	Approx. Chi-Square	6519.757
	df	1431
	Sig.	0.000

Furthermore, Kaiser's criterion/eigenvalue was used inorder to determine which factors to retain for further investigation. According to pallant(2011), only factors with eigenvalue of 1.0 or more are retained for further investigation. From the results, Table 4.16 and Table 4.17

below show the factors with eigenvale from 1 and more, which were retained for further investigation.

Table 4.16 factors with eigenvale from 1 and more

Variable	Question
	Group 1
Insight	***(Knowledge/, Stigma, Frequency of appointments, Forgetting, Refusing***
	Knowledge
	E1-I do not fully believe that my child has mental illness.
	E2-I do not fully understand about my child's illness.
	E3-My child's therapist has never explained to me about my child's illness, so I do not fully understand why we should come all the time.
	E4-My child is not on medication, so I do not see why we should come all the time.
	E5-My child is not seriously ill, he can function well, he does not need to come all the time.
	E6-My child can cope with his illness and does not need to attend for all his appointments.
	Stigma
	F1-I feel ashamed of being seen with my child at this clinic by those who know me.
	F2-My child's symptoms/problem does not mean that my child has a mental health problem/mental illness.
	F3-My child does not really have to see psychiatrist for her problems.
	F4-My child does not need to take medication for her problems.
	(Other) Refusing
	L4-I simply forget about my child's appointments sometimes.
	(Other) Forgetting
	L5-The staff simply in the children's home simply forgets about the child's appointment.
	(Other)Frequency of appointments
	L7-My child's appointments are too frequent for me to attend all the time.
	Group 2
Occupation	***(work, support system, busy schedule, forgetting***
	Work
	J1-I do not get time off work to attend for my child's appointments, and I lose a day's salary whenever I bring my child for appointments.
	J2-I work seven days a week, and do not have time to bring my child for appointments; I have to ask someone to bring my child.
	J3-I work shifts, and sometimes the appointments clash with my shifts and I get paid per shift per day.
	J4-I have exhausted my leave days, I have no more days to take off work to bring my child for appointments.
	J5-I am self-employed; it is difficult to find suitable time to attend for the appointment.
	J6-I work long hours, and only available in the evenings and weekends, but the

	unit is closed during those times.
	Support system
	I1-I do not get any support from my family to bring the child for her appointments they think that there is nothing wrong with my child.
	I2-Sometimes there is no staff to bring the child for appointments due to shortage of staff in our children's home.
	(Other) Busy schedule
	L1-I am too busy with my own schedule; I do not always have time to attend for my child's appointments.
	(Other) Forgetting
	L5-The staff simply in the children's home simply forgets about the child's appointment.
Group 3	
Culture /religion	
	D1-My child's therapist's recommendations/advice is against my religion and culture.
	D2-My child's appointments clash with the time for my prayers at the mosque.
	D3-My therapists does not respect my religion.
	D4-My child's therapist does not understand my culture.
	D5-My child's therapist does not respect my culture/religion.
	D6-The treatment that my child receives is against my culture.
Group 4	
School	***(school, inconvenient times for appointment, emergency, duration of the sessions)***
	School
	K1-dance
	K2-My child loses out on school work every time we attend for her appointments.
	Inconvenient times for appointment
	L2-The times for my child's appointments are inconvenient for me sometimes.
	Emergency
	L6-I cannot bring my child for an appointment when I have an emergency.
	Duration of the sessions
	L8-My child's sessions are too long, they take too much of my time.
Group 5	
Service	
	H1-I am confident that my child is getting the best help that he/she needs from his/her therapist.
	H2-This unit /hospital offer excellent therapists for the children.
	H3-The staff in this unit/hospital is very good at what they do.
	H4-I get the best service in this hospital.
Group 6	
Confidentiality	
	G1-I am worried that my child's therapists may share personal information about my child's mental health, to other people that have no business knowing it.

	G2-I worry that sensitive information about me and my child could be used against me.
	G3-I feel that there are some things I will not share with my child's therapist. because I cannot trust him/her with the information.
Group 7	
Finance/costs	
	B3-The money I spend on transport is more than I expect.
	B4-The money that I get from the hospital for transport does not cover the full costs for my transport.
	B5-I do not get money from the hospital to help me for transport fees even though I need it.
	B6-I pay more than I expect for my child's consultation with the therapist.
Group 8	
Language	***finance/costs, language, language)***
	Finance/costs
	B1-I do not have medical aid cover.
	Language
	C1-I can understand the language that the therapist speaks but my child does not understand it.
	C2-I need an interpreter to help me to communicate with my child's therapist.
	C3-My child needs an interpreter in order to communicate with her therapist.
Group 9	
Therapist	
	G5-My child does not have a good relationship with her therapist.
Group 10	
Finance/costs	
	B2-The medical aid cover for my child's illness is limited.
	Language
	C4-My child needs a therapist who speaks her language so that she can express herself well.
Group 11	
Support system (omit)	
	F5-My family does not support my child attending here, they think that there is nothing wrong with him.
	Therapists (omit)
	G4-My child's therapist and I do not agree on the treatment for my child.
	Refusing (OMIT)
	L3-My child refuses to attend for her appointments sometimes.

Table 4.17 **Final variables after reduction**

Variable	***Question***
Group 1	
Insight	
	E1-I do not fully believe that my child has mental illness.
	E2-I do not fully understand about my child's illness.

	E3-My child's therapist has never explained to me about my child's illness, so I do not fully understand why we should come all the time.
	E4-My child is not on medication, so I do not see why we should come all the time.
	E5-My child is not seriously ill, he can function well; he does not need to come all the time.
	E6-My child can cope with his illness and does not need to attend for all his appointments.
	F1-I feel ashamed of being seen with my child at this clinic by those who know me.
	F2-My child's symptoms/problem does not mean that my child has a mental health problem/mental illness.
	F3-My child does not really have to see psychiatrist for her problems.
	F4-My child does not need to take medication for her problems.
	L4-I simply forget about my child's appointments sometimes.
	L5-The staff simply in the children's home simply forgets about the child's appointment.
	L7-My child's appointments are too frequent for me to attend all the time.
Group 2	
Occupation	
	J1-I do not get time off work to attend for my child's appointments, and I lose a day's salary whenever I bring my child for appointments.
	J2-I work seven days a week, and do not have time to bring my child for appointments; I have to ask someone to bring my child.
	J3-I work shifts, and sometimes the appointments clash with my shifts and I get paid per shift per day.
	J4-I have exhausted my leave days; I have no more days to take off work to bring my child for appointments.
	J5-I am self-employed; it is difficult to find suitable time to attend for the appointment.
	J6-I work long hours, and only available in the evenings and weekends, but the unit is closed during those times.
	I1 I do not get any support from my family to bring the child for her appointments they think that there's nothing wrong with my child.
	I2 Sometimes there is no staff to bring the child for appointments due to shortage of staff in our children's home.
	L1 I am too busy with my own schedule; I do not always have time to attend for my child's appointments.
	L5 The staff simply in the children's home simply forgets about the child's appointment.
Group 3	
Culture /religion	
	D1-My child's therapist's recommendations/advice is against my religion and culture.
	D2-My child's appointments clash with the time for my prayers at the Mosque.
	D3-My therapists does not respect my religion.
	D4-My child's therapist doesn't understand my culture.

	D5-My child's therapist doesn't respect my culture/religion.
	D6-The treatment that my child receives is against my culture.
Group 4	
School	
	K1-My child's appointments interfere with school attendance.
	K2-My child loses out on schoolwork every time we attend for her appointments.
	L2-The times for my child's appointments are inconvenient for me sometimes.
	L6-I cannot bring my child for an appointment when I have an emergency.
	L8-My child's sessions are too long, they take too much of my time.
Group 5	
Service	
	H1-I am confident that my child is getting the best help that he/she needs from his/her therapist.
	H2-This unit /hospital offer excellent therapists for the children.
	H3-The staff in this unit/hospital is very good at what they do.
	H4-I get the best service in this hospital.
Group 6	
Confidentiality	
	G1-I am worried that my child's therapists may share personal information about my child's mental health, to other people that have no business knowing it.
	G2-I worry that sensitive information about me and my child could be used against me
	G3-I feel that there are some things I will not share with my child's therapist because I cannot trust him/her with the information.
Group 7	
finance/costs	
	B3-The money I spend on transport is more than I expect.
	B4-The money that I get from the hospital for transport does not cover the full costs for my transport.
	B5-I do not get money from the hospital to help me for transport fees even though I need it.
	B6-I pay more than I expect for my child's consultation with the therapist.
Group 8	
Language	
	B1-I do not have medical aid cover.
	C1-I can understand the language that the therapist speaks but my child does not understand it.
	C2-I need an interpreter to help me to communicate with my child's therapist.
	C3-My child needs an interpreter in order to communicate with her therapist.

Group 9 –omitted ***Group 10-omitted*** ***Group 11-omitted***

Eight variables were left, in their rank order, which were:

Table 4.18: Final remaining variables

Group 1	Insight
Group 2	Occupation
Group 3	Culture/religion
Group 4	School
Group 5	Service
Group 6	Confidentiality
Group 7	Finance/Costs
Group 8	Language

4.5 Correlation analysis

Correlation is often used to explore the relationship, to describe the strength and direction of the linear relationship between two variables (Pallant, 2011). Given that the variables were not normally distributed, to determine the relationship between the variables in this study, correlation Spearman's rho was used as a level of measurement, and is appropriate for analysis because it is used in health and medical literature. Preliminary analyses were performed to ensure no violation of the assumptions of normality, linearity and homoscedantity (Pallant, 2011).

4.5.1 Finance

The results in table 4.19 below show that there a weak correlation between finance and all other variables: language, religion, knowledge, stigma, confidentiality, service, support system, work and other. The correlation coefficient and p-values are respectively, $r = -0.062$, $n = 189$, $r = 0.043$, $n = 188$, $r = 0.048$, $n = 183$, $r = 0.090$, $r= -0.007$, $n = 182$, $r = 0.075$, $n = 188$, $r = 0.113$, $n = 181$, $r = 0.293$, $n = 180$, $p < 0.01$, $r =0.280$, $n =190$, $p < 0.01$ and, $r = 0.165$, $n = 175$, $p < 0.05$. The correlation between finance and the following variables: work,

school and other, was statistically significant, and the correlation significance was 0.01 and 0.05 level.

4.5.2 Language

The results in table 4.19 below reveal that there was a weak correlation between language and the following variables: service, support system, work, school, other, stigma, confidentiality and knowledge. The correlation coefficient and p-values respectively are, r = -0.092, n = 198,r = 0.068, n = 190, r = 0.017, n = 189, r = 0.060, n = 200,r = 0.051, n = 185, r = 0.173, p < 0.05, r = 0.177, n = 193, p < 0.05 an r = 0.311, n = 191, p < 0.01. There was a moderate positive correlation between language and religion, and correlation coefficient and p-values are r = 0.560, n = 197, p <0.01.the correlation between language and the following variables: knowledge, stigma and confidentiality, was statistically significant, as the correlation significance was at 0.01 and 0.05 level.

4.5.3 Religion

The results in table 4.16 indicate that there was a weak correlation between religion and the following variables: support system, work, school, stigma, confidentiality, other and service. The correlation coefficient and p-values respectively are, r = 0.183, n = 188, p < 0.05, r = 0.195, n = 189, p < 0.01, and r = 0.123, n = 198, r = 0.342, p < 0.01, r = 0.368, n = 191, p< 0.01, r = 0.272, n = 183, p < 0.01 and r = -0.240, n = 196, p < 0.01 .There was a moderate positive correlation between religion and knowledge and correlation coefficient and p-value are , r = 0.433, n = 190, p < 0.01. The correlation between religion and the following variables: confidentiality, service, support system, work, and other, were statistically significant, as the correlation coefficient was at 0.01 and 0.05 level.

4.5.4 Knowledge

The results in table 4.16 reveal that there was a weak correlation between knowledge and the following variables: supports system, service, work and school. The correlation coefficient and p-value respectively are, r = 0.189, n = 182, p < 0.05, r = -0. 309, n = 189, p < 0.01, r = 0.302, n = 183, and r = 0.220, n = 191, p < 0.01. There was a moderate positive correlation between knowledge and the variables, confidentiality and other. The correlation coefficient and p-value are, r = 0.553, n=185, p <0.01 and r = 0.541, n = 179, p < 0.01. Lastly, knowledge and stigma had a strong, high or marked positive correlation, and correlation coefficient and p-value are, r = 0.796, p < 0.01. The correlation between knowledge and the

following variables; service, support system, work, school and other, was statistically significant, as the correlation coefficience was at 0.01 and 0.05 level.

4.5.5 Stigma

Table 4.16 given above shows that there was a weak correlation between stigma and the following variables: school, service, support system and work. The correlation coefficient and p-value respectively are, r = 0.095, n = 192, r = -0.326, n = 191, p < 0.01, r = 0.204, n = 185, p < 0.01, and r = 0. 248, n = 183, p < 0.01. There was a moderate positive correlation between stigma and confidentiality and other. The correlation coefficient and p-value are r = 0.628, n = 18, and r = 0.465, n = 181. The correlation between stigma and the following variables: language, religion, knowledge, confidentiality, service, support, work and other, was statistically significant, as the correlation significance was at 0.01 and 0.05 level.

4.5.6 Confidentiality

Table 4.16 reveals that there was a very weak correlation between confidentiality and the following variables: school, service, support system and work, and the correlation coefficient and p-value respectively are, r = 0.104, n = 193, r = -0.395, n = 191, p < 0.01, r = 0.343, n = 183, p < 0.01, r = 0.367, n = 183, p < 0.01. The correlation between confidentiality and the following variables: service, support system, work and other, was statistically significant, as the correlation significance was at 0.01 level.

4.5.7 Service

Table 4.16 illustrates that there was a weak correlation between service the following variables: support system, work, school, and other. The correlation coefficient and p-value respectively are r = -0.088, n = 190, r = -0. 169, n = 189, p < 0.05, and r = -0.01, n = 199, r = -0.204, n = 184, p < 0.01. The correlation between service and the following variables: work and other, was statistically significant, as the correlation significance was at 0.01 and 0.05 level.

4.5.8 Support system

Table 4.16 highlights that there was a weak or low positive correlation between support system and school, and between support system and other, and the correlation coefficient and p-value are, r = 0.245, n = 191, p < 0.01 and r =0.390, n = 183, p < 0.01. There was a moderate positive correlation between support system and work, and the correlation

coefficient and p-value are, r = 0.580, n = 186, p < 0.01. The correlation between support system and these variables was statistically significant, and the correlation significance was at 0.01 level.

4.5.9 Work

Table 4.16 shows that there was a moderate positive correlation between work and the following variables: school, other, and the correlation coefficient and p-value are, r = 0.514, n = 190, p < 0.01 and r =0.636, n = 182, p < 0.01. The correlation between work and these two variables was statistically significant, and the correlation coefficience was at 0.01 level.

4.5.10 School

Table 4.16 indicates that there was a moderate positive correlation between school and other, and the correlation coefficient and p-value are, r = 0.568, n = 185, p < 0.01. This correlation was statistically significant, and the correlation significance was at 0.01 level.

Table 4.19: Spearman correlation

			Spearman's rho								
	Finance1	Language	Religion	Knowledge	Stigma	Confident	Services	Support	Work	School	Other
Finance1	1.000	-.062	.043	.048	.090	-.007	.075	.113	.293**	.280**	.165*
	190	189	188	183	181	182	188	181	180	190	175
Language	-.062	1.000	.560**	.311**	.173*	.177*	-.092	.068	.017	.060	.051
	189	200	197	191	192	193	198	190	189	200	185
Religion	.043	.560**	1.000	.433**	.342**	.368**	-.240**	.183*	.195**	.123	.272**
	188	197	198	190	190	191	196	188	189	198	183
Knowledge	.048	.311**	.433**	1.000	.796**	.553**	-.309**	.189*	.302**	.220**	.541**
	183	191	190	191	184	185	189	182	183	191	179
Stigma	.090	.173*	.342**	.796**	1.000	.628**	-.326**	.204**	.248**	.095	.465**
Confident	-.007	.177*	.368**	.553**	.628**	1.000	-.395**	.343**	.367**	.104	.434**
	182	193	191	185	186	193	191	183	183	193	180
Services	.075	-.092	-.240**	-.309**	-.326**	-.395**	1.000	-.088	-.169*	-.011	-.204**
	188	198	196	189	191	191	199	190	189	199	184
Support	.113	.068	.183*	.189*	.204**	.343**	-.088	1.000	.580**	.245**	.390**
	181	190	188	182	185	183	190	191	186	191	183
Work	.293**	.017	.195**	.302**	.248**	.367**	-.169*	.580**	1.000	.514**	.636**
	180	189	189	183	183	183	189	186	190	190	182
School	.280**	.060	.123	.220**	.095	.104	-.011	.245**	.514**	1.000	.568**
	190	200	198	191	192	193	199	191	190	201	185
Other	.165*	.051	.272**	.541**	.465**	.434**	-.204**	.390**	.636**	.568**	1.000
Miscellaneous variables	175	185	183	179	181	180	184	183	182	185	185

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

4.6 Chi-Square though cross-tabulations

According to Burns & Groove (2001), the use of Chi square statistic, for cross tabulated data, helps identify relationships or differences between cell values. It is also mainly used by statisticians from a probability framework to detect possible relationships.

With a Chi square analysis the degrees of freedom must be calculated which is used in the determination of the significance of the value. In this case, the Chi-square (X^2) value was 9.2840. The degrees of freedom, *df* =1 and *p* was 0.0023 (if p<0.05 results show significance). These findings report only on the variables that were statistically correlated and significant.

4.6.1 Language

Table 4.20 indicates that the Exp-percent =65.5%, p-value = 0.01, and df=15, the association is statistically weak. There was a weak statistically significant association between language and non-attendance.

4.6.2 Culture/religion

Table 4.20 shows that the exp percent was 72.2%, df=17 and p<0.01. There was a weak statistically significant association between culture/religion and non-attendance.

4.6.3 Service

Table 4.20 reveals that the exp % was 65.6%, df=15 and p<0.04. There was a weak statistically significant association between service and non-attendance.

4.6.4 Work

Table 4.20 shows that the exp % was 79.5%, df=21 and p=value =0.004. There was a weak statistically significant association between work and attendance.

4.6.5 School

Table 4.20 illustrates that the exp % was 44.4%, df was 8 and p-value was 0.008. There was a weak statistically significant association between school and non-attendance.

4.7 Logistic regression

Logistic regression allows for the testing of the models to predict categorical outcomes with two or more categories (Pallant, 2011, p168). Given that the dependent variable has two outcomes which are non-attendance (1) and attendance (0), logistic regression was appropriated to predict that categorical outcomes with the following predictors: insight, occupation, culture/religion, school, service, confidentiality, finance/costs, and language (Pallant, 2011). Thus in this study, logistic regression was performed to assess the impact of a number of factors on the likelihood that respondents would report the barriers to attendance for child and adolescent out-patient mental health services. The model contained eight independent variables (insight, occupation, culture/religion, school, service, confidentiality, finance/costs, and language). The findings in this chapter only reports on the variables that were statistically significant.

Table 4.21 shows that in the first model, step 1, the variables that were included were occupation, culture, school, service, confidentiality, finance/costs and language. The school had an odds ratio of 5.23, and was the strongest predictor of reporting reasons for non-attendance. This indicates that respondents who attend school were over five times more likely to report non-attendance than those who did not attend school. Controlling for all other factors in the model, culture/religion had an odds ratio of 0.147, and was less than 1, indicating that reasons related to culture/religion, were 0.147 times less likely to report non-attendance, controlling for other factors in the model.

In the second model, step 2, the variables that were involved were occupation, culture/religion, school, service, finance/costs and language. The school had an odds ratio of 5.23, and was again the strongest predictor of reporting reasons for non-attendance, indicating that respondents who attend school were over 5 times more likely to report non-attendance than those who did not attend school, controlling for all other factors in the model. Culture/religion again had an odds ratio of 0.14, less than 1, indicating that reasons related to culture/religion were 0.14 times less likely to report non-attendance, controlling for other factors in the model.

In the third model, step 3, the variables that were involved were occupation, culture/religion, school, service and language. The school again had an odds ratio of 5.46 , and was the strongest

predictor of reporting reasons for non-attendance. This indicates that respondents who attend school were over 5 times more likely to report non-attendance than those who did not attend school, controlling for all other factors in the model. Culture/religion again had an odds ratio of 0.14, less than 1, indicating that reasons related to culture/religion were 0.14 times less likely to report non-attendance, controlling for other factors in the model.

In the fourth model, step 4, the variables that were involved were culture/religion, school, service and language. School had an odds ratio of 4.10, and was again the strongest predictor of reporting reasons for non-attendance. This shows that respondents who attend school were over four times more likely to report non-attendance than those who did not attend school, controlling for all other factors in the model. Culture/religion had an odds ratio of 0.134, less than 1, again indicating that reasons related to culture/religion were 0.134 times less likely to report non-attendance, controlling for other factors in the model.

In the fifth model, step 5, the variables that were involved were culture/religion, school and language. The school had an odds ratio of 3.99 (4), and again was the strongest predictor of reporting reasons for non-attendance was school, and this indicates that respondents who attend school were over five times more likely to report non-attendance than those who did not attend school, controlling for all other factors in the model. Culture/religion had the odds ratio of 0.164 for, less than 1, indicating that reasons related to culture/religion were 0.164 times less likely to report non-attendance, controlling for other factors in the model.

In the sixth model, step 6, the variables that were involved were culture and school. The school had an odds ratio of 4.01, and was again the strongest predictor of reporting reasons for non-attendance, and this reflects that respondents who attend school were over 4 times more likely to report non-attendance than those who did not attend school, controlling for all other factors in the model. Culture/religion had an odds ratio of 0.21, less than 1, indicating that reasons related to culture/religion were 0.21 times less likely to report non-attendance, controlling for other factors in the model.

The full model containing all predictors was statistically significant, χ^2(8, N=172) =43.80, p< 0.001, indicating that the model was able to distinguish between respondents who reported and did not report reasons for non-attendance. The model as a whole explained between 22.1% (cox and Snell R-square) and 40.6% (Nageleke R-squared) of the variance in attendance status and correctly classified 86% of cases. As shown in table 4.20 above, only two of the independent variables made a unique statistically significant contribution to the model (school and cultural/religion).

Table 4.21: Logistic regression predicting barriers to attendance for child and adolescent out-patient mental health services

Variables in the Equation

	Variables	B	S.E.	Wald	Df	Sig.	Exp(B)
Step 1[a]	Occupation	-.333	.597	.310	1	.578	.717
	Cult_rel	-1.916	.494	15.033	1	.000	.147
	School_1	1.655	.506	10.705	1	.001	5.232
	Service	-.467	.326	2.055	1	.152	.627
	Confid	-.143	.315	.205	1	.651	.867
	Finan_cost	.188	.291	.416	1	.519	1.207
	languag	.542	.477	1.293	1	.256	1.719
	Constant	1.925	1.573	1.498	1	.221	6.856
Step 2[a]	Occupation	-.436	.557	.613	1	.434	.647
	Cult_rel	-1.943	.493	15.548	1	.000	.143
	School_1	1.655	.508	10.624	1	.001	5.234
	Service	-.460	.328	1.964	1	.161	.631
	Finan_cost	.183	.291	.395	1	.530	1.201
	languag	.558	.476	1.376	1	.241	1.748
	Constant	1.856	1.563	1.410	1	.235	6.396
Step 3[a]	Occupation	-.450	.557	.651	1	.420	.638
	Cult_rel	-1.952	.490	15.843	1	.000	.142
	School_1	1.697	.508	11.140	1	.001	5.455
	Service	-.410	.317	1.679	1	.195	.663
	languag	.623	.465	1.791	1	.181	1.864
	Constant	2.000	1.557	1.650	1	.199	7.393
Step 4[a]	Cult_rel	-2.007	.494	16.515	1	.000	.134
	School_1	1.412	.332	18.061	1	.000	4.103
	Service	-.373	.310	1.447	1	.229	.688
	languag	.599	.469	1.634	1	.201	1.820
	Constant	1.719	1.496	1.320	1	.251	5.580
Step 5[a]	Cult_rel	-1.811	.450	16.229	1	.000	.164
	School_1	1.383	.328	17.751	1	.000	3.987
	languag	.429	.440	.954	1	.329	1.536
	Constant	.315	.900	.122	1	.727	1.370
Step 6[a]	Cult_rel	-1.576	.369	18.270	1	.000	.207
	School_1	1.388	.326	18.099	1	.000	4.007
	Constant	.900	.682	1.745	1	.187	2.460

a. Variable(s) entered on step 1: Occupation, Cult_rel, School_1, Service, Confid, Finan_cost, language.

4.8. Conclusion

The findings from this study suggest that all the variables explored have no statistically significant association with non-attendance in this unit, except school and culture/religion. The findings from this analysis will be discussed further in chapter five where the discussion and recommendations are presented.

CHAPTER FIVE
DISCUSSION AND RECOMMENDATIONS

5.1 Introduction

In this concluding chapter the main findings of this study, which are in chapter four are discussed, and the recommendations for further studies are also made. This study aimed at investigating the barriers to attendance for child and adolescent out-patient mental health services at the Division of Child and Adolescent Psychiatry Unit at a hospital in Cape Town, with a view to developing strategies to improve the utilisation of the services, and to improve the mental health of the patients. This chapter is divided into five sections: overview of the study, discussion of the findings, recommendations, limitations and conclusion.

5.2 The major procedure followed in conduct the research

A quantitative approach and non-experimental, and a survey design were used. This study was conducted with children (4-9years old) and adults/caregivers who attended at DCAP (Division of child and adolescent psychiatry) from the 1st of January 2011 until 31st of December 2011. Random stratified sampling was used, to ensure representativeness (Mounton, 2006). The inclusion criteria were cases that were still active (still being seen/attending during the time of the study). All the cases that were discharged) were excluded from participation. Convenience sampling was done for pilot study, with 32 patients who were readily available and were not going to take part in the main study. The study sample was 166 participants. Data was collected from cchildren form 0 9-18years old and parents/caregiver, using self-administered structured questionnaires. Cronbach's alpha coeffient was used to test for reliability and validity of the pilot and final study, and for both the Cronbach's alpha coefficient value was met and was above 7.

The study investigated the barriers to utilisation of child and adolescent out-patient mental health services by examining the relationship between the identified dependent variables which are, attendance (0), and non-attendance (1), and the independent variables which are, demographic factors such as age, sex, education level, race, and marital status, and continuous variables such as finance/costs, language, knowledge, stigma, support system, culture/religion, confidentiality, work, school, service, and other miscellaneous **v**ariables such as forgetting, inconvenience, refusing, frequency of appointments, and length of the session**,** emergency.

The analysis used descriptive, bivariate and multivariate analysis. In descriptive analysis, the results were presented as frequency tables, proportions and graphs. To test the correlation or association between variables, Pearson's or Spearman's correlations were used depending on the normality test and chi-square for categorical variables. Finally, to test if the test was statistically significant, multivariate analysis was applied. The results are presented in four sections such as biographic information, descriptive, bivariate analysis and multivariate analysis.

5.3 Section A: Categorical variables (Biographic information)

5.3.1 Age of parent/ caregiver, employment status and finance/costs

The findings revealed that even though the majority of the children's parents/caregivers are in economically active age, and employed, work and finance were not statistically significant as a barrier for attendance in this unit. This probably means that patients do not miss appointments because of financial problems. This may be the fact, as earlier stated in chapter one, that this unit already has a financial provision for patients who are unable to attend due to financial constraints. However, as the majority of participants are employed, one would expect work-related reasons to affect attendance; but it was not the case, and this could possibly mean that parents are able to make means to attend with their children for appointments.

5.3.2 Age of the child, education, insight and school

The results revealed that the majority had high school education. The majority was between age 13-18years. Notably, the unit investigated in this study sees children and adolescents who are in school going age. Both the results of Chi-Square and Logistic regression also showed school as a dominant barrier for attendance and statistically significant than all other variables. This situation can also be accounted for the reasons stated by participants for non-attendance, such as that the appointments interfere with their school hours, that they miss schoolwork and some are not able to catch up with schoolwork that they have missed when they come for their appointments. This is an expected situation with scholars. We can also posit based on the literature that the pre-adolescent to late adolescent age group (9-18years) can possibly refuse to attend, possibly have issues around confidentiality and stigmatization, which may also influence attendance. The 0-8years old are still dependent on parents/caregivers, and can possibly make limited choices with regard to attendance. (Elster

et al., 1994, WHO, 2002, WHO, 2001, Kang *et al.*, 2005, Dean *et al.*, 2002 & Sanci *et al*., 2005 cited in Tylee *et al*., 2007).

5.3.3 Marital status and support system

Findings from this study showed that the majority of the patients in this unit come from families with both parents (married). The majority parent/caregiver participants who are biological parents are responsible for bringing the children for appointments. The majority of the parent/caregiver participants did not have mental illness. Only a few had depression, and anxiety. This suggests that patients seen in this unit possibly have a good system. Participants also indicated that their relatives support them to fulfill attendance. However, challenges are experienced with the minority that is in the children's home as they indicated that the caregivers sometimes forget about their appointments. We could posit then that family status possibly is not a major barrier in this unit. Literature also states that stable family conditions and good support system are positively correlated to attendance. However, concerns about the children who are in the children's home need to be taken into consideration. Literature also confirms that parent/caregiver psychopathology may also contribute to increased levels of caregiver strain which impact negatively on utilisation of mental health services (McCabe *et al.*, 2003, Angold *et al*., 2004, Brannan, 2006 cited in Hyucksun Shin & Brown, 2009, Kaplan, Sadock & Grebb, 2004, Minty & Anderson, 2004), and this could account for the minority that has parents with mental illness.

5.3.4. Gender of child

Findings showed that the majority of participants were females, followed by males. Rajasuriya, de Silva and Hanwella (2010) in their study found out that being male, was a risk factor for non-attendance. It is however difficult to say whether gender is a risk factor in this unit, and to compare the findings with other studies because the statistics about the frequency of missed appointment between the two genders was not analysed.

5.3.5 Child's Illness/Diagnosis, Form of treatment received by child

The results in Table 4.2 in chapter four showed that majority of participants had ADHD and the minority had disruptive behaviour, mood disorder, had anxiety disorder, and elimination disorder. The majority was on medication, others were receiving individual psychotherapy and 2(1.0%) were receiving group therapy. This larger group with ADHD is the one that is seen in both at DCAP out-patient unit and at neuropsychiatry clinic; hence both out-patient

clinics were included in the study. Being diagnosed with ADHD requires medication and regular consistent attendance for appointments, as the results proved that the majority is on medication. Other disorders may require other forms of treatment as mentioned above. These results contradict with literature in that these illnesses may have implications on the frequency and duration of treatment, which might impact on persistence for utilisation of services and also not being prescribed medicines, can be a risk factor for non-attendance (Rajasuriya, de Silva and Hanwella, 2010).

5.3.6 Ethnic group, language, culture/religion

The findings indicated that there are racial imbalances with the population at DCAP. The majority of the participants were coloreds, followed by Africans and the least were whites. The majority of participants spoke English. This situation is a true reflection as the majority; about 99.9% of participants preferred the English version of the questionnaire, indicating that possible language is not an issue in this unit. Also the results of Chi-square test showed a weak statistically significant association between language and non-attendance, whereas logistic regression test showed no statistic significance in association between language and non-attendance. This possibly means that even though English is not a first language for the majority of the participants, but it is a commonly spoken language, and that participants are able to communicate in English with their therapists. It could also possibly mean that language is not a problem because therapists are possibly able to communicate in the patients' mother tongues, as the unit has therapists who represent all the three different languages. Also, the Chi-square showed culture/religion to have a weak statistically significant association with non-attendance, as logistic regression test showed that the same. This is true because the participants indicted that they feel that their religion and culture is respected, and that the treatment that they receive is not against their culture/religion.

5.3.7 Area of residence, mode of transport

The results in the frequency table 4.3a in chapter 4 showed that the majority of DCAP population participants live in the suburbs, followed by townships and the minority lives in the city. The majority of participants use public transport, for example, taxis and buses, and the minority uses their own private transport. Literature confirms the area of residence has implications on accessibility and costs for traveling, lack of reliable transport to and from the mental health service, and that the possession of a car (poverty), is significantly related to attendance rates, either negatively or positively (Aisbett *et al*., 2007). However, as

finance/costs was not statistically significant as barrier for attendance, perhaps also because the patients are charged very minimal and affordable rates for service, and the unit gives money for transport to those who do not afford, dynamics and challenges with public transport and distance might play a role in attendance. Some suburbs are not proximal to the unit.

5.3.8 Frequency of missed appointments

The majority of participants are not sure how many times they missed appointments. According to the definition of terms, the first category (not sure) is the category of the ones who have missed several appointments such that they cannot even keep track of how many times they missed it. The second (never) category and third (once) is also difficult to determine the accuracy as we know that participants can give the responses that they think the researcher needs. However, these results confirm that the majority of patients miss their appointments several times in this unit, and that non-attendance is possibly a real problem.

5.4. Section B (Continuous Variables)

This study started off with 11 continuous variables for this section (finance/costs, language, knowledge, culture/religion, stigma, work, service, support system, school, confidentiality and other miscellaneous variables such as (emergency, bus schedule, forgetting, refusing, frequency of appointments, and length of the sessions). The sample size and the strength of the relationship among variables were considered in order to determine whether particular data are suitable for factor analysis (Pallant, 2011). The sample size for this study was suitable for factor analysis, 201 cases. Furthermore, factor analysis (Bartlett's test of sphericity and Kaiser Meyer-Olkins (KMO) was used to reduce the large number of related variables. Bartlett's test of sphericity was significant ($p < .05$) for the factor analysis and the KMO index was 0.824 and beyond the limit of acceptance which is 0.6 (Pallant, 2011) and was a good value for factor analysis. The Bartlett's test of Sphericity was 65519.757 with degree of freedom (df) =1431 and p-value =0.0005 <0.05, and less than 5%, confirming that the model was adequate and it fit the data. Furthermore, according to Kaiser's criterion, Eigenvalue was tested and factors with Eigenvalue from 1 and more, were retained for further investigation. Factors that were retained were as follows: insight, occupation, culture/religion, school, service, confidentiality, finance/costs and language.

Chi-square was perfomed to determine the association between the continous variables (occupation, insight, language, finane/costs, culture/religion, service, school and

confidentiality) and the dependent variables (non-attendance). Also, Logistic regression was used to assess the impact of a number of factors on the likelihood that respondents would report the barriers to attendance for child and adolescent out-patient mental health services. This study then only reports on the variables that were statistically significant from the results.

5.5. Results for Chi-square and Logistic regression

The results of logistic regression and chi-square showed that school as the dominant variable that is likely to affect attendance and statistically significant compared to other variables. This is true and has been confirmed before, given that this is a child and adolescent unit, and that the cases seen in this unit are attending school. Notably, the majority of participants confirmed that appointment interferes with school, and that the child loses out on schoolwork. School was statistically significant, and from the findings it came out as the major barrier for attendance at DCAP.

Culture/religion was also statistically significant and showed to be less likely to affect attendance. As stated before in this chapter, participants confirmed that their treatment does not interfere with their culture or religion, suggesting that culture /religion is probably not a barrier for attendance.

5.6 Differences between attendees and non-attendees

The results showed that there were no differences between the two groups in terms of their profile. These results are also congruent with other studies conducted on barriers to utilisation of child and adolescent mental health services in that the findings showed that non-attendance affects everyone regardless of race, ethnicity or economic class (Aida *et al*., 2010; Aisbet *et al*., 2007; Eapen *et al*., 2009; Frisch & Frisch, 2006; Gerald *et al*., 2005; Goldstein *et al*., 2006; Gorman, 2007; He, 2007; Hunt *et al*., 2009 Kaplan & Sadocks, 1994; Lazaratus *et al*., Lerner *et al*., 2004; Leslie *et al*., 2000; Lopez *et al*., 2008; Minty *et al*., 2004;bauman, 2007; Scahil, 1997; Shi *et al*., 2009; Snowden *et al*., 2008; Starr *et al*., 2002; Uys & Middleton, 2004; Ailson & Knesil, 1996; Wu *et al*., 2010 & Yan Fen *et al*., 2009). The results of this study show that there are no differences in terms of the profile between the attendees and non-attendees.

5.8 Surprises in findings

In this study, it was surprising to note that school came out as the variable that is associated with non-attendance and was statistically significant. As stated in chapter one, the common reasons thought of by the unit is always finance, forgetting and accessibility. I expected this study would confirm that too. However, these findings mean that the variables that were examined are possibly not barriers to attendance in this unit perhaps because this unit is already making provision for them, such as (providing finance, contacting patients to remind them about their appointments, and offering a professional service. The results about the school now have implication to service delivery.

5.9 Recommendations

However, the statistically significant variables associated with non-attendance may possibly have implication on the service delivery in this unit. Given that the population the patients seen in this unit are attending school, and school came out as the major barrier for attendance, it may be useful for this unit to review their service delivery.

- Appointments can be scheduled after school, instead of during school hours.
- The staff can make provision to see patients and have sessions at school instead of taking children out of school for their appointments.
- The out-patient unit can open during weekends as well, as children do not attend school during weekends.
-

The above recommendation has implications on staff working hours and schedule. These may require the staff to review their shifts, and work flexible hours, that will accommodate the needs identified above and suggested recommendations. The staff may have to work during weekends, public holidays, school holidays, and be available after school hours as well in order to accommodate these learners. Literature also shows that lack of an after hours' service, is a barrier to utilisation of services (Aisbett *et al*., 2007).

5.10 Limitations

This study was conducted with a small population sample in one out-patient unit, and therefore cannot be generalised to other communities. Similar studies can be expanded/rolled out to other out-patient clinics or out-patient units to identify the barriers to utilisation of services.

5.8. Conclusion

These findings suggest that this unit can now strengthen the strategies already in place, and review them, and design new ones to accommodate the scholars that they serve. This unit needs to provide the service that is flexible and will meet the needs of the learners in order to improve attendance.

This was my first experience to conduct a study of my own. I am grateful for the opportunity of being the one to investigate the topic that was a need for the unit that will benefit our unit and our patients, and have huge implications on service delivery at DCAP. The experience was difficult yet a challenging one. I have found research very interesting, and I would like to continue to do it in future, and to investigate more topics that will benefit our community.

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APPENDIX I

UNIVERSITY OF THE WESTERN CAPE

Faculty of Community and Health Sciences

Private Bag X 17, Bellville 7535, South Africa

Tel: +27 79 390 7475, Fax: 27 21-685 4107

E-mail:smokitim@pgwc.ac.za or 3002286@uwc.ac.za

Project Title: Barriers to utilisation of out-patient mental health services at a children's Hospital in Cape Town

PARENT/CAREGIVER QUESTIONNAIRE

Your answers are CONFIDENTIAL – nobody other than the research team will know what your answers are.

Your views are important to us!!! **Enjoy!!!**

Code----------

IMPORTANT!!!!!!!!!!!!!!!!!!!!!!!!!!!!

- There is no right or wrong answer, we need you honest answer.
- You will not be judge for your answer or even be penalized for what you say
- Please write as much as you can in the section that require you views and other information that is not mentioned in this questionnaire.
- Please circle the answer of your choice from the multiple choice questions

PILOT STUDY QUESTIONNAIRES SECTION 1-PERSONAL INFORMATION

A1	What is your age group?	1. 15-24 2. 25-34 3. 35-44 4. 45-54 5. 55-64 6. 65 and above	1
A 2	Is your child male or female?	1.Male 2.Female	2
A3	What is the age group of your child?	1. 0-8 years 2. 9-12years 3. 13-18years	3
A4	What is your current marital status?	1. Never married 2. Married 3. Widower 4.Divorced/Separate d 5. Living together	4
A5	What is your highest level of education?	1. None 2. Primary school 3. High school 4. Diploma 5. Degree	5
A6	What is your ethnic group?	1. African/Black 2. Colored 3. Indian/Asian 4. White 5. Other (specify)----------	6
A7	What type of a relationship do you have with the child?	1. Biological parent (mother/father) 2. Legal guardian (foster or adoptive parent) 3. Legal guardian from the children's home (carer/social worker/driver/etc.) 4. Grandparent 5. Sibling (brother or sister) 6. Relative (Uncle/aunt/cousin) 7. Other: specify----------	7
A8	Who brings your child to the clinic for appointments?	1. Biological parent (mother/father) 2. Legal guardian (foster or adoptive parent) 3. Legal guardian from the children's home (carer/social worker/driver/etc.) 4. Grandparent 5. Sibling (brother or sister) 6. Relative (Uncle/aunt/cousin) 7. Other: specify----------	8
A9	What is your job status?	1. Employed 2. Unemployed 3. Self-employed 4. Domestic worker 6. Not having a job 7. Strictly leaner	9
A10	What is the area of your residence?	1. Township 2. City 3. Town 4. Suburb	10
A11	Please give the name of the area where you live		11

A12	What mode of transport do you use when you come for your appointments?	1. Own/family car 2. Taxi 3. Bus 4. Train 5. Car from the children's home 6. Other: specify----------	12
A13	What language(s) do you speak?	1 = IsiXhosa 2 = English 3 = Afrikaans 4 = Other:(specify)----------	13
A14	What religious group or church do you belong to?	1. African traditional 2. Christian 3. Hindu 4. Jewish 5. Moslem 6. None 7. Other: specify----------.-----	14
A15	What are other forms of treatment that you use except for the help that you receive from your therapist?	1. Sangoma 2. Church 3. Private Psychiatrist/Psychologist 4. Non-governmental organization (NGO) 5. School counselor 6. Social worker 7. None 8. Other: specify----------	15
A16	How often have you missed an appointment?	1 = Never 2 = Once 3 = Twice 4 = Three times 5 = More than three times 6. Not sure	16
A17	What is your illness?	1. Mood disorder 2. Anxiety 3. Depression 4. Psychosis 5. Substance abuse 6. Not sure 7. None 8. Other: (specify)----------	17
A18	What is your child's mental health problem/illness/diagnosis?	1. ADHD 2. Mood disorder 3. Anxiety 4. Disruptive behavior 5. Psychosis 6. Substance abuse 7. Deliberate self-harm 8. Feeding problems 9. Eating problem 10. Sleeping disorder 11.not sure 12. None.	18
A19	What form of treatment does your child receive from this unit for his/her illness?	1. Medication 2. Individual Psychotherapy 3. Family Psychotherapy 4. Group Psychotherapy 5. Not sure	19

SECTION B

Please read carefully the following statements and **circle only one number in column 3** and the mean for each number is given below. **1= strongly disagree 2 = disagree 3 = neutral 4 = agree 5 = strongly**

B1	My medical aid does not covers for my child's mental illness.	1	2	3	4	5	20
B2	The amount that my medical aid pays for my child's mental illness is limited, and therefore not enough for all the sessions.	1	2	3	4	5	21
B3	The money I spend on transport is more than I expect.	1	2	3	4	5	22
B4	The money that I get from the hospital for transport doesn't cover the full costs for my transport.	1	2	3	4	5	23
B5	I do not get money from the hospital to help me for transport fees even though I need it.	1	2	3	4	5	24
B6	I pay more than I expect for my child's consultation with the therapist.	1	2	3	4	5	25
C1	I can understand the language that the therapist speaks but my child does not understand it.	1	2	3	4	5	26
C2	I need an interpreter to help me to communicate with my child's therapist.	1	2	3	4	5	27
C3	My child needs an interpreter in order to communicate with her therapist.	1	2	3	4	5	28
C4	My child needs a therapist who speaks her language so that she can express herself well.	1	2	3	4	5	29
C5	My child understands the language that therapist speaks, but I do not.	1	2	3	4	5	30
C6	My child, the therapist and I are able to communicate in the language that we all understand.	1	2	3	4	5	31
D1	My child's therapist's recommendations/advice are/is against my religion and culture.	1	2	3	4	5	32
D2	My child's appointments clash with the time for my prayers at the mosque.	1	2	3	4	5	33
D3	My therapist does not respect my religion.	1	2	3	4	5	34
D4	My child's therapist does not understand my culture.	1	2	3	4	5	35
D5	My child's therapist does not respect my culture/religion.	1	2	3	4	5	36
D6	The treatment that my child receives is against my culture.	1	2	3	4	5	37
E1	I do not fully believe that my child has mental illness.	1	2	3	4	5	38
E2	I do not fully understand about my child's illness.	1	2	3	4	5	39
E3	My child's therapist has never explained to me about my child's illness, so I do not fully understand why we should come all the time.	1	2	3	4	5	40
E4	My child is not on medication, so I do not see why we should come all the time.	1	2	3	4	5	41
E5	My child is not seriously ill, he can function well, and he does not need to come all the time.	1	2	3	4	5	42
E6	My child can cope with his illness and does not need to attend for all his appointments.	1	2	3	4	5	43
F1	I feel ashamed of being seen with my child at this clinic by those who know me.	1	2	3	4	5	44
F2	My child is teased for attending in a mental health institution and for taking medication.	1	2	3	4	5	45
F3	My child's symptoms/problem does not mean that my child has a mental health problem/mental illness.	1	2	3	4	5	46

F4	My child does not really have to see psychiatrist for her problems.	1	2	3	4	5	47
F5	My child does not need to take medication for her problems.	1	2	3	4	5	48
F6	My family does not support my child attending here, they think that there's nothing wrong with him.	1	2	3	4	5	49
G1	I am worried that my child's therapists may share personal information about my child's mental health, to other people that have no business knowing it?	1	2	3	4	5	50
G2	I worry that sensitive information about me and my child could be used against me.	1	2	3	4	5	51
G3	I feel that there are some things I will not share with my child's therapist because I cannot trust him/her with the information.	1	2	3	4	5	52
G4	All in all, I have complete trust in my child's therapist.	1	2	3	4	5	53
G5	My child's therapist and I do not agree on the treatment for my child.	1	2	3	4	5	54
G6	My child does not have a good relationship with her therapist	1	2	3	4	5	55
H1	I am confident that my child is getting the best help that he/she needs from his/her therapist.	1	2	3	4	5	56
H2	My child's therapist is not good enough to deal with my child's problem.	1	2	3	4	5	57
H3	The help that my child is receiving from his therapist is not effective/doesn't help my child.	1	2	3	4	5	58
H4	This unit /hospital offer excellent therapists for the children.	1	2	3	4	5	59
H5	The staff in this unit/hospital is very good at what they do.	1	2	3	4	5	60
H6	I get the best service in this hospital.	1	2	3	4	5	61
H7	It takes too long to attend for my child, I always have to wait for too long to be see the therapist or to get medication.	1	2	3	4	5	62
I1	I am not able to attend for my child's appointments because of my own physical illness and I also have to attend for my own doctor's appointments.	1	2	3	4	5	63
I2	I have other children who need my attention, it's difficult to pay attention on this child all the time	1	2	3	4	5	64
I3	I have too many other problems at home that make it difficult for me to attend for my child's appointments.	1	2	3	4	5	65
I4	I am a single parent and I do not have anyone to help me to bring my child for appointments.	1	2	3	4	5	66
I5	I do not get any support from my family to bring the child for her appointments they think that there's nothing wrong with my child.	1	2	3	4	5	67
I6	Sometimes there is no staff to bring the child for appointments due to shortage of staff in our children's home.	1	2	3	4	5	68
J1	I do not get time off work to attend for my child's appointments, and I lose a day's salary whenever I bring my child for appointments.	1	2	3	4	5	69
J2	I work seven days a week, and do not have time to bring my child for appointments, I have to ask someone to bring my child.	1	2	3	4	5	70
J3	I work shifts, and sometimes the appointments clash with my shifts and I get paid per shift per day.	1	2	3	4	5	71
J4	I have exhausted my leave days; I have no more days to take off work to bring my child for appointments.	1	2	3	4	5	72
L5	I am self-employed; it is difficult to find suitable time to attend for the appointment.	1	2	3	4	5	73
J6	I work long hours, and only available in the evenings and weekends, but the unit is closed during those times.	1	2	3	4	5	74

K1	My child's school does not allow my child time off to attend for his appointments.	1	2	3	4	5	75
K2	My child's appointments interfere with school attendance.	1	2	3	4	5	76
K3	My child loses out on school work every time we attend for her appointments.	1	2	3	4	5	77
L1	I am too busy with my own schedule; I do not always have time to attend for my child's appointments.	1	2	3	4	5	78
L2	The times for my child's appointments are inconvenient for me sometimes.	1	2	3	4	5	79
L3	My child refuses to attend for her appointments sometimes.	1	2	3	4	5	80
L4	I simply forget about my child's appointments sometimes.	1	2	3	4	5	81
L5	The staff simply in the children's home simply forgets about the child's appointment.	1	2	3	4	5	82
L6	I cannot bring my child for an appointment when I have an emergency.	1	2	3	4	5	83
L7	My child's appointments are too frequent for me to attend all the time.	1	2	3	4	5	84
L8	My child's sessions are too long, they take too much of my time.	1	2	3	4	5	85

86. What are other reasons that make it impossible for you to attend for your child's appointments except for those asked in this questionnaire? Please explain----------
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----------87. Please tell us what you would like our hospital to do to make it more possible for you to attend for your child's appointments----------
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WELL DONE!!! THANKS FOR TAKING PART!!!

NOW, PLEASE GO BACK AND CHECK THAT YOU HAVE NOT MISSED ANY QUESTION

APPENDIX II

UNIVERSITY OF THE WESTERN CAPE

Faculty of Community and Health Sciences

Private Bag X 17, Bellville 7535, South Africa

Tel: +27 79 390 7475, Fax: 27 21-685 4107

E-mail:smokitim@pgwc.ac.za or 3002286@uwc.ac.za

Project Title: Barriers to utilisation of out-patient mental health services at a children's Hospital in Cape Town

QUESTIONNAIRE FOR A CHILD (9-18YEARS OLD)

Your answers are CONFIDENTIAL – nobody other than the research team will know what your answers are.

Your views are important to us!!! **Enjoy!!!**

Code----------

IMPORTANT!!!

- There is no right or wrong answer, we need you honest answer.
- You will not be judge for your answer or even be penalized for what you say
- Please write as much as you can in the section that require you views and other information that is not mentioned in this questionnaire.
- Please circle the answer of your choice from the multiple choice questions

PILOT STUDY CHILD QUESTIONNAIRE SECTION 1-PERSONAL INFORMATION

A1	What is the age group of your parents?	1.15-24 2.25-34 3.35-44 4.45 54 5.55-64 6.65 and above	1
A2	Are you male or female?	1. Male 2.Female	2
A3	What is your age group?	1. 0-8 years 2. 9-12years 3. 13-18years	3
A4	What is your parent's current marital status?	1.Never married 2.married 3.widower 4.divorced /separated 5 living together	4
A5	What is your parent's highest level of education?	1. None 2. Primary school 3. High school4. Diploma 5. Degree	5
A6	What is your ethnic group?	1. African/Black 2. Colored 3. Indian/Asian 4. White 5. Other (specify)----------	6
A7	Who do you stay with?	1. Biological parent (mother/father) 2. Legal guardian (foster or adoptive parent) 3. Legal guardian from the children's home (carer/social worker/driver/etc.) 4. Grandparent 5. Sibling (brother or sister) 6. Relative (Uncle/aunt/cousin) 7. Other: specify----------	7
A8	Who brings you to the clinic for appointments?	1. Biological parent (mother/father) 2. Legal guardian (foster or adoptive parent) 3. Legal guardian from the children's home (carer/social worker/driver/etc.) 4. Grandparent 5. Sibling (brother or sister) 6. Relative (Uncle/aunt/cousin) 7. Other: specify----------	8
A9	What is your parent's job status?	1. employed 2. Unemployed 3. Self-employed 4. Domestic worker 6.not having a job 7. Strictly leaner	9
A10	What is the area of your residence?	1. Township 2. City 3. Town 4. Suburb	10
A11	Please give the name of the area where you live		11

A12	What mode of transport do you use when you come for your appointments?	1. Own/family car 2. Taxi 3. Bus 4. Train 5. Car from the children's home 6. Other: specify----------	12
A13	What language(s) do you speak?	1. IsiXhosa 2 .English 3 .Afrikaans 4 .Other:(specify)----------	13
A14	What religious group or church do you belong to?	1. African traditional 2. Christian 3. Hindu 4. Jewish 5. Moslem 6. None 7. Other: specify----------	14
A15	What are other forms of treatment that you use except for the help that you receive from your therapist?	1. Sangoma 2. Church 3. Private Psychiatrist/Psychologist 4. Non-governmental organization (NGO) 5. School counselor 6. Social worker 7. None 8. Other: specify----------	15
A16	How many times have you missed an appointment?	1. Never 2 .Once 3. Twice 4 .Three times 5 .More than three times 6. Not sure	16
A17.	What is your illness?	1. Mood disorder 2. Anxiety 3. Depression 4. Psychosis 5. Substance abuse 6. Not sure 7. None 8. Other: (specify)----------	17
A18	What is your mental health problem/illness/diagnosis?	1. ADHD 2. Mood disorder 3. Anxiety 4. Disruptive behavior 5. Psychosis 6. Substance abuse 7. Deliberate self-harm 8. Feeding problems 9. Eating problem 10. Sleeping disorder 11.not sure 12. None.	18
A19	What form of treatment do you receive from this unit for your illness?	1. Medication 2. Individual Psychotherapy 3. Family Psychotherapy 4. Group Psychotherapy 5. Not sure	19

SECTION B

Please read carefully the following statements and **circle only one number in column 3** and the mean for each number is given below. **1= strongly disagree 2 = disagree 3 = neutral 4 = agree 5 = strongly agree.**

B1	My parent's medical aid does not cover for my mental illness.	1	2	3	4	5	20
B2	The amount that my parent's medical aid pays for my mental illness is limited, and therefore not enough for all the sessions.	1	2	3	4	5	21
B3	The money that my parents spend on transport is more than I expect.	1	2	3	4	5	22
B4	The money that I get from the hospital for transport doesn't cover the full costs for my transport.	1	2	3	4	5	23
B5	I do not get money from the hospital to help me for transport fees even though I need it.	1	2	3	4	5	24
B6	My parents pay more than they expect for my consultation fee/my therapist.	1	2	3	4	5	25
C1	My parent/caregiver understands the language my therapist speaks, but I do not.	1	2	3	4	5	26
C2	My parents need an interpreter to help them communicate with my therapist.	1	2	3	4	5	27
C3	I need an interpreter to help me to communicate with my therapist.	1	2	3	4	5	28
C4	I need a therapist who speaks my language so that I can express myself well.	1	2	3	4	5	29
C5	I can understand the language that the therapist speaks but my parent/caregiver does not understand it.	1	2	3	4	5	30
C6	My parents, the therapist and I are able to communicate in the language that we all understand.	1	2	3	4	5	31
D1	My therapist's advice is against my culture/religion.	1	2	3	4	5	32
D2	My appointments clash with the time for my prayers in the Mosque.	1	2	3	4	5	33
D3	My therapist does not respect my religion.	1	2	3	4	5	34
D4	My therapist does not understand my culture/religion.	1	2	3	4	5	35
D5	My therapist does not respect my culture.	1	2	3	4	5	36
D6	The treatment that I receive is against my culture/religion.	1	2	3	4	5	37
E1	I do not fully believe that I have mental illness.	1	2	3	4	5	38
E2	I do not fully understand about my illness.	1	2	3	4	5	39
E3	My therapist has never explained to me about my illness, so I do not fully understand why I should come all the time.	1	2	3	4	5	40
E4	I am not on medication, so I do not see why I should come all the time.	1	2	3	4	5	41
E5	I am not seriously ill, I can function well, I do not need to attend all the time.	1	2	3	4	5	42
E6	I can cope with my illness and I do not need to attend for all my appointments.	1	2	3	4	5	43
F1	I feel ashamed of being seen at this clinic by those who know me.	1	2	3	4	5	44
F2	I am teased for attending in a mental health institution and for taking medication.	1	2	3	4	5	45

F3	My problems do not mean that I have a mental health problem/mental illness.	1	2	3	4	5	46
F4	I do not really have to see a psychiatrist for my problems.	1	2	3	4	5	47
F5	I do nott need to take medication for my problems, yet my therapist wants me to take it.	1	2	3	4	5	48
F6	My family does not support me in attending here, they think that there's nothing wrong with me.	1	2	3	4	5	49
G1	I am worried that my therapists may share personal information about my condition to other people that have no business knowing it.	1	2	3	4	5	50
G2	I worry that sensitive information about me could be used against me.	1	2	3	4	5	51
G3	I feel that there are some things I will not share with my therapist because I cannot trust my therapist with the information.	1	2	3	4	5	52
G4	All in all I have complete trust in my therapist.	1	2	3	4	5	53
G5	My parents and my therapist do not agree about my treatment.	1	2	3	4	5	54
G6	I do not have a good relationship my therapist.	1	2	3	4	5	55
H1	I am confident that I am getting the best help that I need from my therapist.	1	2	3	4	5	56
H2	My therapist is not good enough to deal with my problems.	1	2	3	4	5	57
H3	The help that I am receiving from my therapist is not effective/does not help me.	1	2	3	4	5	58
H4	This unit /hospital offer excellent therapists for the children.	1	2	3	4	5	59
H5	The staff in this unit/hospital is very good at what they do.	1	2	3	4	5	60
H6	I get the best service in this hospital.	1	2	3	4	5	61
H7	It takes too long to attend for my appointments, I always have to wait for too long to see the therapist or to get medication.	1	2	3	4	5	62
I1	I am not able to attend for my appointments because of my parent's physical illness and my parent also has to attend for his/her other doctor's appointments.	1	2	3	4	5	63
I2	My parents have other children who need their attention; it's difficult to pay attention only to me all the time.	1	2	3	4	5	64
I3	My parents have too many other problems at home that make it difficult for them to attend for appointments.	1	2	3	4	5	65
I4	My parent is a single parent and she does not have anyone to help her to bring me for my appointments.	1	2	3	4	5	66
I5	My parents do not get any support from my family to bring me for my appointments they think that there's nothing wrong with me.	1	2	3	4	5	67
I6	Sometimes there is no staff to bring me for appointments due to shortage of staff in our children's home.	1	2	3	4	5	68
J1	My parents do not get time off work to attend for my appointments, and they lose a day's salary whenever they bring me for my appointments.	1	2	3	4	5	69
J2	My parents work seven days a week, and do not have time to bring me for my appointments, they have to ask someone to bring my child.	1	2	3	4	5	70
J3	My parents work shifts, and sometimes the appointments clash with their shifts and they get paid per shift per day.	1	2	3	4	5	71
J4	My parent has exhausted her leaves days, she has no more days to take off work to bring me for my appointments.	1	2	3	4	5	72
J5	My parent is self-employed; it is difficult to find suitable time to attend the appointment.	1	2	3	4	5	73

J6	My parent works long hours, and only available in the evenings and weekends, but the unit is closed during those times.	1	2	3	4	5	74
K1	My school does not allow me time off to attend for my appointments.	1	2	3	4	5	75
K2	My appointments interfere with school attendance.	1	2	3	4	5	76
K3	I lose out on school work every time I attend for my appointments.	1	2	3	4	5	77
L1	My parents are too busy to bring me to the hospital.	1	2	3	4	5	78
L2	The times for my appointments are inconvenient for me sometimes.	1	2	3	4	5	79
L3	I refuse to attend for my appointments sometimes.	1	2	3	4	5	80
L4	My parents simply forget about my appointments sometimes.	1	2	3	4	5	81
L5	The staff at the children's home simply forgets about my appointment.	1	2	3	4	5	82
L6	My parents/caregivers cannot bring me for my appointment when there is an emergency.	1	2	3	4	5	83
L7	My appointments are too frequent for me to attend all the time.	1	2	3	4	5	84
L8	My sessions are too long, they take too much of my time.	1	2	3	4	5	85

86. What are other reasons that make it impossible for you to attend for your child's appointments except for those asked in this questionnaire? Please explain

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87. Please tell us what you would like our hospital to do to make it more possible for you to attend for your child's appointments----------

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WELL DONE!!! THANKS FOR TAKING PART!!!

NOW, PLEASE GO BACK AND CHECK THAT YOU HAVE NOT MISSED ANY QUESTION

A1	What is your age group?	1. 15-24 2. 25-34 3. 35-444. 45-54. 5. 55-64 6. 65 and above	1
A 2	Is the child male or female?	1.Male 2.Female	2
A3	What is the age group of your child?	1. 0-8 years 2. 9-12years 3. 13-18years	3
A4	What is your current marital status?	1. Never married 2. Married 3. Widower 4.Divorced/Separate d 5. Living together	4
A5	What is your highest level of education?	1. None 2. Primary school 3. High school 4. Diploma 5. Degree	5
A6	What is your ethnic group?	1. African/Black 2. Colored 3. Indian/Asian 4. White 5. Other (specify)----------	6
A7	What type of a relationship do you have with the child?	1. Biological parent (mother/father) 2. Legal guardian (foster or adoptive parent) 3. Legal guardian from the children's home (carer/social worker/driver/etc.) 4. Grandparent 5. Sibling (brother or sister) 6. Relative (Uncle/aunt/cousin) 7. Other: specify----------	7
A8	Who brings your child to the clinic for appointments?	1. Biological parent (mother/father) 2. Legal guardian (foster or adoptive parent) 3. Legal guardian from the children's home (carer/social worker/driver/etc.) 4. Grandparent 5. Sibling (brother or sister) 6. Relative (Uncle/aunt/cousin) 7. Other: specify----------	8
A9	What is your job status?	1.Eemployed 2. Unemployed 3. Self-employed 4. Domestic worker 6. Not having a job 7. Strictly leaner	9
A10	What is the area of your residence?	1. Township 2. City 3. Town 4. Suburb	10
A11	Please give the name of the area where you live		11

A12	What mode of transport do you use when you come for your appointments?	1. Own/family car 2. Taxi 3. Bus 4. Train 5. Car from the children's home 6. Other: specify--------	12
A13	What language do you speak?	1. IsiXhosa 2. English 3. Afrikaans 4 Other:(specify)----------	13
A14	What religious group or church do you belong to?	1. African traditional 2. Christian 3. Hindu 4. Jewish 5. Moslem 6. None 7. Other: specify----------	14
A15	What are other forms of treatment that you use except for the help that you receive from your therapist?	1. Sangoma 2. Church 3. Private Psychiatrist/Psychologist 4. Non-governmental organization (NGO) 5. School counselor 6. Social worker 7. None 8. Other: specify----------	15
A16	How often have you missed an appointment?	1 Never 2 Once 3 Twice 4 Three times 5 More than three times 6. Not sure	16
A17	What is your illness?	1. Mood disorder 2. Anxiety 3. Depression 4. Psychosis 5. Substance abuse 6. Not sure 7. None 8. Other: (specify)----------	17
A18	What is your child's mental health problem/illness/diagnosis?	1. ADHD 2. Mood disorder 3. Anxiety 4. Disruptive behaviour 5. Psychosis 6. Substance abuse 7. Deliberate self-harm 8.Elimination problems 9. Eating problem 10. Sleeping disorder 11.not sure 12. None.	18
A19	What form of treatment does your child receive from this unit for his/her illness?	1. Medication 2. Individual Psychotherapy 3. Family Psychotherapy 4. Group Psychotherapy 5. Not sure	19

SECTION B

Please read carefully the following statements and **circle only one number in column 3** and the mean for each number is given below. **1= strongly disagree 2 = disagree 3 = neutral 4 = agree 5 = strongly agree**

B1	I do not have medical aid cover.	1	2	3	4	5	20
B2	The medical aid cover for my child's illness is limited.	1	2	3	4	5	21
B3	The money I spend on transport is more than I expect.	1	2	3	4	5	22
B4	The money that I get from the hospital for transport doesn't cover the full costs for my transport.	1	2	3	4	5	23
B5	I do not get money from the hospital to help me for transport fees even though I need it.	1	2	3	4	5	24
B6	I pay more than I expect for my child's consultation with the therapist.	1	2	3	4	5	25
C1	I can understand the language that the therapist speaks but my child does not understand it.	1	2	3	4	5	26
C2	I need an interpreter to help me to communicate with my child's therapist.	1	2	3	4	5	27
C3	My child needs an interpreter in order to communicate with her therapist.	1	2	3	4	5	28
C4	My child needs a therapist who speaks her language so that she can express herself well.	1	2	3	4	5	29
D1	My child's therapist's recommendations/advice are/is against my religion and culture.	1	2	3	4	5	30
D2	My child's appointments clash with the time for my prayers in the Mosque.	1	2	3	4	5	31
D3	My therapist does not respect my religion.	1	2	3	4	5	32
D4	My child's therapist doesn't understand my culture.	1	2	3	4	5	33
D5	My child's therapist doesn't respect my culture/religion.	1	2	3	4	5	34
D6	The treatment that my child receives is against my culture.	1	2	3	4	5	35
E1	I do not fully believe that my child has mental illness.	1	2	3	4	5	36
E2	I do not fully understand about my child's illness.	1	2	3	4	5	37
E3	My child's therapist has never explained to me about my child's illness, so I do not fully understand why we should come all the time.	1	2	3	4	5	38
E4	My child is not on medication, so I do not see why we should come all the time.	1	2	3	4	5	39
E5	My child is not seriously ill, he can function well, he does not need to come all the time.	1	2	3	4	5	40
E6	My child can cope with his illness and does not need to attend for all his appointments.	1	2	3	4	5	41
F1	I feel ashamed of being seen with my child at this clinic by those who know me.	1	2	3	4	5	42
F2	My child's symptoms/problem does not mean that my child has a mental health problem/mental illness.	1	2	3	4	5	43
F3	My child does not really have to see psychiatrist for her problems.	1	2	3	4	5	44
F4	My child does not need to take medication for her problems.	1	2	3	4	5	45
F5	My family does not support my child attending here, they think that there is nothing wrong with him.	1	2	3	4	5	46

G1	I am worried that my child's therapists may share personal information about my child's mental health, to other people that have no business knowing it.	1	2	3	4	5	47
G2	I worry that sensitive information about me and my child could be used against me.	1	2	3	4	5	48
G3	I feel that there are some things I will not share with my child's therapist because I cannot trust him/her with the information.	1	2	3	4	5	49
G4	My child's therapist and I do not agree on the treatment for my child.	1	2	3	4	5	50
G5	My child doesn't have a good relationship with her therapist.	1	2	3	4	5	51
H1	I am confident that my child is getting the best help that he/she needs from his/her therapist.	1	2	3	4	5	52
H2	This unit /hospital offer excellent therapists for the children.	1	2	3	4	5	53
H3	The staff in this unit/hospital is very good at what they do.	1	2	3	4	5	54
H4	I get the best service in this hospital.	1	2	3	4	5	55
I1	I do not get any support from my family to bring the child for her appointments they think that there is nothing wrong with my child.	1	2	3	4	5	56
I2	Sometimes there is no staff to bring the child for appointments due to shortage of staff in our children's home.	1	2	3	4	5	57
J1	I do not get time off work to attend for my child's appointments, and I lose a day's salary whenever I bring my child for appointments.	1	2	3	4	5	58
J2	I work seven days a week, and do not have time to bring my child for appointments, I have to ask someone to bring my child.	1	2	3	4	5	59
J3	I work shifts, and sometimes the appointments clash with my shifts and I get paid per shift per day.	1	2	3	4	5	60
J4	I have exhausted my leave days; I have no more days to take off work to bring my child for appointments.	1	2	3	4	5	61
J5	I am self-employed; it is difficult to find suitable time to attend for the appointment.	1	2	3	4	5	62
J6	I work long hours, and only available in the evenings and weekends, but the unit is closed during those times.	1	2	3	4	5	63
K1	My child's appointments interfere with school attendance.	1	2	3	4	5	64
K2	My child loses out on school work every time we attend for her appointments.	1	2	3	4	5	65
L1	I am too busy with my own schedule; I do not always have time to attend for my child's appointments.	1	2	3	4	5	66
L2	The times for my child's appointments are inconvenient for me sometimes.	1	2	3	4	5	67
L3	My child refuses to attend for her appointments sometimes.	1	2	3	4	5	68
L4	I simply forget about my child's appointments sometimes.	1	2	3	4	5	69
L5	The staff simply in the children's home simply forgets about the child's appointment.	1	2	3	4	5	70
L6	I cannot bring my child for an appointment when I have an emergency.	1	2	3	4	5	71
L7	My child's appointments are too frequent for me to attend all the time.	1	2	3	4	5	72
L8	My child's sessions are too long, they take too much of my time.	1	2	3	4	5	73

74. What are other reasons that make it impossible for you to attend for your child's appointments except for those asked in this questionnaire? Please explain----------
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75. Please tell us what you would like our hospital to do to make it more possible for you to attend for your child's appointments----------
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WELL DONE!!! THANKS FOR TAKING PART!!!

NOW, PLEASE GO BACK AND CHECK THAT YOU HAVE NOT MISSED ANY QUESTION

APPENDIX IV. FINAL QUESTIONNAIRE FOR THE CHILD. -PERSONAL INFORMATION

A1	What is the age group of your parents?	1.15-24 2.25-34 3.35-44 4.45 54 5.55-64 6.65 and above	1
A2	Are you male or female?	1. Male 2.Female	2
A3	What is your age group?	1. 0-8 years 2. 9-12years 3. 13-18years	3
A4	What is your parent's current marital status?	1.Never married 2.married 3.widower 4.divorced /separated 5 living together	4
A5	What is your parent's highest level of education	1. None 2. Primary school 3. High school 4. Diploma 5. Degree	5
A6	What is your ethnic group?	1. African/Black 2. Colored 3. Indian/Asian 4. White 5. Other (specify)----------	6
A7	Who do you stay with?	1. Biological parent (mother/father) 2. Legal guardian (foster or adoptive parent) 3. Legal guardian from the children's home (carer/social worker/driver/etc.) 4. Grandparent 5. Sibling (brother or sister) 6. Relative (Uncle/aunt/cousin) 7. Other: specify----------	7
A8	Who brings you to the clinic for appointments?	1. Biological parent (mother/father) 2. Legal guardian (foster or adoptive parent) 3. Legal guardian from the children's home (carer/social worker/driver/etc.) 4. Grandparent 5. Sibling (brother or sister) 6. Relative (Uncle/aunt/cousin) 7. Other: specify----------	8
A9	What is your parent's job status?	1. Employed 2. Unemployed 3. Self-employed 4. Domestic worker 6. Not having a job 7. Strictly leaner	9
A10	What is the area of your residence?	1. Township 2. City 3. Town 4. Suburb	10
A11	Please give the name of the area where you live		11

A12	What mode of transport do you use when you come for your appointments?	1. Own/family car 2. Taxi 3. Bus 4. Train 5. Car from the children's home 6. Other: specify----------	12
A13	What language(s) do you speak?	1.IsiXhosa 2 .English 3 .Afrikaans 4 .Other:(specify)----------	13
A14	What religious group or church do you belong to?	1. African traditional 2. Christian 3. Hindu 4. Jewish 5. Moslem 6. None 7. Other: specify----------	14
A15	What are other forms of treatment that you use except for the help that you receive from your therapist?	1. Sangoma 2. Church 3. Private Psychiatrist/Psychologist 4. Non-governmental organization (NGO) 5. School counselor 6. Social worker 7. None 8. Other: specify----------	15
A16	How many times have you missed an appointment?	1. Never 2 .Once 3. Twice 4 .Three times 5 .More than three times 6. Not sure	16
A17.	What is your parent's illness?	1. Mood disorder 2. Anxiety 3. Depression 4. Psychosis 5. Substance abuse 6. Not sure 7. None 8. Other: (specify)----------	17
A18	What is your mental health problem/illness/diagnosis?	1. ADHD 2. Mood disorder 3. Anxiety 4. Disruptive behavior 5. Psychosis 6. Substance abuse 7. Deliberate self-harm 8. Elimination problems 9. Eating problem 10. Sleeping disorder 11.not sure 12. None.	18
A19	What form of treatment do you receive from this unit for your illness?	1. Medication 2. Individual Psychotherapy 3. Family Psychotherapy 4. Group Psychotherapy 5. Not sure	19

SECTION B

Please read carefully the following statements and **circle only one number in column 3** and the mean for each number is given below. **1= strongly disagree 2 = disagree 3 = neutral 4 = agree 5 = strongly agree.**

B1	I do not have medical aid cover.	1 2 3 4 5	20
B2	The medical aid cover for me illness is limited.	1 2 3 4 5	21
B3	The money that my parents spend on transport is more than I expect.	1 2 3 4 5	22
B4	The money that I get from the hospital for transport doesn't cover the full costs for my transport.	1 2 3 4 5	23
B5	I do not get money from the hospital to help me for transport fees even though I need it.	1 2 3 4 5	24
B6	My parents pay more than they expect for my consultation fee/my therapist.	1 2 3 4 5	25
C1	My parent/caregiver understands the language my therapist speaks, but I do not.	1 2 3 4 5	26
C2	My parents need an interpreter to help them communicate with my therapist.	1 2 3 4 5	27
C3	I need an interpreter to help me to communicate with my therapist.	1 2 3 4 5	28
C4	I need a therapist who speaks my language so that I can express myself well.	1 2 3 4 5	29
D1	My therapist's advice is against my culture/religion.	1 2 3 4 5	30
D2	My appointments clash with the time for my prayers in the Mosque.	1 2 3 4 5	31
D3	My therapist does not respect my religion.	1 2 3 4 5	32
D4	My therapist does not understand my culture/religion.	1 2 3 4 5	33
D5	My therapist does not respect my culture.	1 2 3 4 5	34
D6	The treatment that I receive is against my culture/religion.	1 2 3 4 5	35
E1	I do not fully believe that I have mental illness.	1 2 3 4 5	36
E2	I do not fully understand about my illness.	1 2 3 4 5	37
E3	My therapist has never explained to me about my illness, so I do not fully understand why I should come all the time.	1 2 3 4 5	38
E4	I am not on medication, so I do not see why I should come all the time.	1 2 3 4 5	39
E5	I am not seriously ill, I can function well, and I do not need to attend all the time.	1 2 3 4 5	40
E6	I can cope with my illness and I do not need to attend for all my appointments.	1 2 3 4 5	41
F1	I feel ashamed of being seen at this clinic by those who know me.	1 2 3 4 5	42
F2	My problems do not mean that I have a mental health problem/mental illness.	1 2 3 4 5	43
F3	I do not really have to see a psychiatrist for my problems.	1 2 3 4 5	44

F4	I do not need to take medication for my problems, yet my therapist wants me to take it.	1	2	3	4	5	45
F5	My family does not support me in attending here, they think that there's nothing wrong with me.	1	2	3	4	5	46
G1	I am worried that my therapists may share personal information about my condition to other people that have no business knowing it.	1	2	3	4	5	47
G2	I worry that sensitive information about me could be used against me.	1	2	3	4	5	48
G3	I feel that there are some things I will not share with my therapist because I cannot trust my therapist with the information.	1	2	3	4	5	49
G4	My parents and my therapist do not agree about my treatment.	1	2	3	4	5	50
G5	I do not have a good relationship my therapist.	1	2	3	4	5	51
H1	I am confident that I am getting the best help that I need from my therapist.	1	2	3	4	5	52
H2	This unit /hospital offer excellent therapists for the children.	1	2	3	4	5	53
H3	The staff in this unit/hospital is very good at what they do.	1	2	3	4	5	54
H4	I get the best service in this hospital.	1	2	3	4	5	55
I1	My parents do not get any support from my family to bring me for my appointments they think that there's nothing wrong with me.	1	2	3	4	5	56
I2	Sometimes there is no staff to bring me for appointments due to shortage of staff in our children's home.	1	2	3	4	5	57
J1	My parents do not get time off work to attend for my appointments, and they lose a day's salary whenever they bring me for my appointments.	1	2	3	4	5	58
J2	My parents work seven days a week, and do not have time to bring me for my appointments, they have to ask someone to bring my child.	1	2	3	4	5	59
J3	My parents work shifts, and sometimes the appointments clash with their shifts and they get paid per shift per day.	1	2	3	4	5	60
J4	My parent has exhausted her leaves days, she has no more days to take off work to bring me for my appointments.	1	2	3	4	5	61
J5	My parent is self-employed; it is difficult to find suitable time to attend the appointment.	1	2	3	4	5	62
J6	My parent works long hours, and only available in the evenings and weekends, but the unit is closed during those times.	1	2	3	4	5	63
K1	My appointments interfere with school attendance.	1	2	3	4	5	64
K2	I lose out on school work every time I attend for my appointments.	1	2	3	4	5	65
L1	My parents are too busy to bring me to the hospital.	1	2	3	4	5	66
L2	The times for my appointments are inconvenient for me sometimes.	1	2	3	4	5	67
L3	I refuse to attend for my appointments sometimes.	1	2	3	4	5	68
L4	My parents simply forget about my appointments sometimes.	1	2	3	4	5	69
L5	The staff in the children's home simply forgets about my appointment.	1	2	3	4	5	70

L6	My parents/caregivers cannot bring me for my appointment when there is an emergency.	1	2	3	4	5	71
L7	My appointments are too frequent for me to attend all the time.	1	2	3	4	5	72
L8	My sessions are too long, they take too much of my time.	1	2	3	4	5	73

74. What are other reasons that make it impossible for you to attend for your child's appointments except for those asked in this questionnaire? Please explain

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75. Please tell us what you would like our hospital to do to make it more possible for you to attend for your child's appointments---

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WELL DONE!!! THANKS FOR TAKING PART!!!

NOW, PLEASE GO BACK AND CHECK THAT YOU HAVE NOT MISSED ANY QUESTION

APPENDIX V

UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa
Tel: +27 79 390 7475, Fax: 27 21-685 4107
E-mail: smokitim@pgwc.gov.za or 3002286@uwc.ac.za

INFORMATION SHEET (for parent/caregiver)

Project Title: Barriers to utilisation of out-patient mental health services at a Children's Hospital in Cape Town

What is this study about?

This is a research project being conducted by Stella Mokitimi at the University of the Western Cape. We are inviting you to participate in this research project because you are a mental health care user in this unit. The purpose of this research project is to identify the reasons that make it impossible for you to attend for your appointments or your child's appointments, so that we can be able to design strategies that can help you to attend and therefore improve the mental health of our patients.

What will I be asked to do if I agree to participate?

You will be asked to complete a questionnaire that contains questions about your attendance and reasons for not attending. Some questions will be about yourself, your child, your child's school, your job, your family and your opinions. This will take place at Red Cross War Memorial Children's hospital at the Division of Child and Adolescent Psychiatry unit. An appointment will be scheduled on the same day of your appointment with your therapist, and hour earlier that your scheduled time with your therapist. You will be put in a private room to complete the questionnaire. You will be re-reimbursed for your bus/taxi fare/petrol.

Would my participation in this study be kept confidential?

We will do our best to keep your personal information confidential. To help protect your confidentiality, your questionnaire with your responses will be safely locked away to ensure

that no one has access to it except for the research team. If we write a report or article about this research project, your identity will be protected to the maximum extent possible. In accordance with legal requirements and/or professional standards, we will disclose to the appropriate individuals and/or authorities information that comes to our attention concerning child abuse or neglect or potential harm to you or others.

What are the risks of this research?

There are no known risks associated with participating in this research project

What are the benefits of this research?

This research is not designed to help you personally, but the results may help the investigator learn more about the difficulties that make it impossible for our patients to attend. We hope that, in the future, other people might benefit from this study through improved understanding of these challenges. Understanding these challenges will also help us to design strategies that will make it possible for our patients to attend, and therefor will improve the mental health of our communities. This knowledge will also help the higher authorities to understand these challenges and may be try to assist the communities.

Do I have to be in this research and may I stop participating at any time?

Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time you want. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify. However, your withdrawal from the study will not help us understand your challenges.

Is any assistance available if I am negatively affected by participating in this study?

If it occurs that you feel emotionally affected by the questions, you will be allowed to see your therapist.

What if I have questions?

This research is being conducted by Stella Mokitimi, of the school of Nursing, at the University of the Western Cape. If you have any questions about the research study itself, please contact:

Stella Mokitimi at

University of the Western Cape

Private bag X 17

Bellville

7535

(021) 6854103

smokitim@pgwc.gov.za OR 3002286@uwc.ac.za

Should you have any questions regarding this study and your rights as a research participant or if you wish to report any problems you have experienced related to the study, please contact:

Dean of the Faculty of Community and Health Sciences

Professor Jose Frantz (Acting)

University of the Western Cape

Private bag X 17, Bellville 7535

(021) 959 2631, jfrantz@uwc.ac.za

Acting Director

Professor K Jooste

University of the Western Cape

Private bag X 17, Bellville 7535

(021) 959 2271, kjooste@uwc.ac.za

Supervisor:

Professor O. Adejumo

University of the Western Cape

Private Bag X17

Bellville 7535

oadejumo@uwc.ac.za

The University of the Western Cape's Senate Research Committee and Ethics Committee has approved this research.

APPENDIX VI

UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa
Tel: +27 79 390 7475, Fax: 27 21-685 4107
E-mail: smokitim@pgwc.gov.za or 3002286@uwc.ac.za

INFORMATION SHEET (CHILD) (9-18years old)

Project Title: Barriers to utilisation of out-patient mental health services at a Children's hospital in Cape Town.

What is this study about?

This is a research project being conducted by Stella Mokitimi at the University of the Western Cape. We are inviting you to participate in this research project because you are attending in this unit. The purpose of this research project is to identify the reasons that make it difficult for you to attend for your appointments, so that we can be able to set up programs that can help you to attend and therefore improve the mental health of our patients.

What will I be asked to do if I agree to participate?

You will be asked to complete a questionnaire that contains questions about your attendance and reasons for not attending. Some questions will be about yourself, your school, your family and your views. This will take place at Red Cross War Memorial Children's hospital at the Division of Child and Adolescent Psychiatry unit. An appointment will be set up on the same day of your appointment with your therapist, and hour earlier that your scheduled time with your therapist. You will be put in a private room to complete the questionnaire. You will be given money for your traveling.

Would my participation in this study be kept confidential?

We will do our best to keep your personal information confidential. To do this, your questionnaire with your responses will be safely locked away to ensure that no one has access to it except for the research team. If we write a report or article about this research project, your identity will be protected to the maximum extent possible. In accordance with legal requirements and/or professional standards, we will disclose to the appropriate individuals and/or authorities information that comes to our attention concerning child abuse or neglect or potential harm to you or others.

What are the risks of this research?

There are no known risks associated with participating in this research project

What are the benefits of this research?

This research is not meant to help you personally, but the results may help the investigator learn more about the difficulties that make it impossible for our patients to attend. We hope that, in the future, other people might benefit from this study through improved understanding of these challenges. Understanding these challenges will also help us to set up programs that will make it possible for our patients to attend, and therefor will improve the mental health of our communities. This knowledge will also help the higher authorities to understand these challenges and may be try to assist the communities.

Do I have to be in this research and may I stop participating at any time?

Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time you want. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify. However, your withdrawal from the study will not help us understand your challenges.

Is any assistance available if I am negatively affected by participating in this study?

If it occurs that you feel emotionally affected by the questions, you will be allowed to see your therapist.

What if I have questions?

This research is being conducted by Stella Mokitimi, of the school of Nursing, at the University of the Western Cape. If you have any questions about the research study itself, please contact:

Stella Mokitimi at

University of the Western Cape

Private bag X 17

Bellville

7535

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Should you have any questions regarding this study and your rights as a research participant or if you wish to report any problems you have experienced related to the study, please contact:

Dean of the Faculty of Community and Health Sciences

Professor Jose Frantz (Acting)

University of the Western Cape

Private bag X 17, Bellville 7535

(021) 959 2631, jfrantz@uwc.ac.za

Acting Director

Professor K Jooste

University of the Western Cape

Private bag X 17, Bellville 7535

(021) 959 2271, kjooste@uwc.ac.za

Supervisor:

Professor O. Adejumo

University of the Western Cape

Private Bag X17, Bellville 7535

oadejumo@uwc.ac.za

The University of the Western Cape's Senate Research Committee and Ethics Committee has approved this research.

APPENDIX VII

UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa
Tel: +27 79 390 7475 Fax: 27 21-685 4107
E-mail: smokitim@pgwc.gov.za or 3002286@uwc.ac.za

INFORMED CONSENT FORM (Parent/ caregiver)

Project Title: Barriers to utilisation of out-patient mental health services at a children's Hospital in Cape Town

Thank you for considering participating in this study

In order to participate in the study we described, please complete the form below and return it to the researcher who gave you the form.

I…….*(Print own name)*, AGREE **to take part in the study about** "Barriers to utilisation of child and adolescent out-patient mental health services" **which is being conducted at The Division of Child and Adolescent Psychiatry unit at Red Cross Hospital.**

I know why they are asking me to participate in this project and all of my questions have been answered.

Signature……..Date……

Thank you for participating

APPENDIX-VIII

UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa
Tel: +27 79 390 7475, Fax: 27 21-685 4107
E-mail: smokitim@pgwc.gov.za or 3002286@pgwc.ac.za

INFORMED CONSENT FORM (completed by parent for the child)

Project Title: Barriers to utilisation of out-patient mental health services at a Children's Hospital in Cape Town.

Thank you for considering your child's participating in this study

In order for your child to participate in the study we described, please complete the form below and return it to the researcher who gave you the form.

I…… *(Print own name),* AGREE for my child **to take part in the study about "** Barriers to utilisation of child and adolescent out-patient mental health services" **which is being conducted at The Division of Child and Adolescent Psychiatry unit at Red Cross Hospital.**

I know why they are asking my child to participate in this project and all of my questions have been answered.

Signature…….Date……

Thank you for your permission.

APPENDIX-IX

UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa
Tel: +27 79 390 7475, Fax: 27 21-685 4107
E-mail:smokitim@pgwc.goc.za or 3002286@uwc.ac.za

INFORMED ASSENT FORM (child 9-18 years old)

Project Title: Barriers to utilisation of out-patient mental health services at a children's Hospital in Cape Town.

Thank you for considering participating in this study

In order to participate in the study we described, please complete the form below and return it to the researcher who gave you the form.

I……*(Print own name),* AGREE **to take part in the study about** "Barriers to utilisation of child and adolescent out-patient mental health services" **which is being conducted at The Division of Child and Adolescent Psychiatry unit at Red Cross hospital.**

I know why they are asking me to participate in this project and all of my questions have been answered.

Signature…….Date……

Thank you for participating