LAY OPINIONS AND KNOWLEDGE OF DIKGOPHENG COMMUNITY ABOUT MENTAL ILLNESS IN POLOKWANE MUNICIPALITY

by

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DECLARATION

I, MA APHANE, declare that the mini-dissertation "*Lay opinions and knowledge of Dikgopheng community about mental illness in Polokwane Municipality*" hereby submitted to the University of Limpopo for the degree of Masters of Development has not previously been submitted by me for a degree at this or any other university; that it is my work in design and in execution, and that all material contained herein has been duly acknowledged.

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APHANE, M.A. (Mr) Date:

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DEDICATION

This work is dedicated to the silent and unsung heroes/heroines who manage to deal with the effects of mental illness issues on a daily basis.

LIST OF ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
B2M	Boys 2 Men
CBO	Community Based Organisations
CDM	Capricorn District Municipality
DevFTI	Development Facilitation and Training Institute
DSS	Dikgale Demographic Surveillance
HDSS	Health and Social Demographics Surveillance System
HIV	Human Immunodeficiency Virus
HIC	Higher Income Countries
HSRC	Human Science Research Council
IBM	International Business Machines
LMIC	Lower and Middle Income Countries
MDEV	Masters of Development
NGO	Non-Governmental Organisations
OMICC	Opinions about Mental Illness in Chinese Community
OMI	Opinions about Mental Illness in the Chinese Community
RF-SDQ	Risk Factors-Self Designed Questionnaire
SABC	The South African Broadcasting Corporation
SASH	South African Stress & Health Study
SPSS	Statistical Package for the Social Sciences
TGSL	Turfloop Graduate School of Leadership
UL	University of Limpopo (Turfloop campus)
VLIR-IUC	Flemish Interuniversity Council-Institutional Cooperation
WHO	World Health Organisation
ZCC	Zion Christian Church

ABSTRACT

In preparation for the launch of the Flemish Interuniversity Council-Institutional Cooperation (VLIR-IUC) in 2010, the Development Facilitation and Training Institute (DevFTI), University of Limpopo, conducted a scoping exercise with community members in villages within Dikgale in the Limpopo Province. The purpose of the exercise was to identify both the assets within the community — as well as the challenges being experienced in the area. During discussions with leaders of the Community Based Organisations (CBOs) it became apparent that mental health related issues were an emerging issue of concern — with special emphasis placed on the levels of stigma that existed towards mental illness in the area.

It is against this backdrop that the researcher was motivated to conduct a study with the aim of finding out the opinions and knowledge of the lay people about mental illness in Dikgopheng community, situated within the broader Dikgale area, in Polokwane Local Municipality in the Limpopo Province. The study used a quantitative descriptive survey research design in which participants answered questions administered through questionnaires. A random sampling strategy was used to secure a representative sample size of 249 respondents out of the total population of 700.

IBM's Statistical Package for Social Sciences for Windows (SPSS version 20) was used to analyse the descriptive statistics. Inconclusive results were found about formal knowledge of the psychosocial risk factors associated with the onset of mental illness. In contradistinction, patterns of cultural associations linked to the onset of mental illness were significant. Furthermore, an overwhelming majority of the community (75.1%) of the community members were found to have 'stigmatisation' opinions about people with mental illness.

Due to the lack of the psychosocial knowledge about risk factors and the onset of mental illness, it is recommended (i) that there is a need for education and training to raise awareness about risk factors associated with the onset of mental illness and (ii) that further qualitative research be undertaken to explore issues relating to mental illness and stigma in more depth in the area that specifically focuses on ameliorative measures that address stigma that could be implemented within the community.

Keywords: Lay opinions; Knowledge; Mental illness; Community; Risk factors.

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CHAPTER 1
INTRODUCTION

1.1 GENERAL INTRODUCTION

This study investigates opinions and knowledge of lay people about mental illness in Dikgopheng community in Polokwane Local Municipality in the Limpopo Province. The purpose of the study is to determine the general knowledge of the respondents about mental illness; the levels of stigma respondents hold about stigma towards mentally ill people and assess how the perceptions of mentally ill people impact on the degrees of integration that mentally ill people experience in the Dikgopheng community. This chapter will provide a general introduction to the study, problem statement, significance of this study, research aim and questions, definition of key terms and lastly an outline of research report.

1.2 BACKGROUND TO THE STUDY

Previous studies on mental illness (Hahn, 2003; Opare-Henaku, 2013) and people with mental illness have mostly been concentrated within the domain of mental health professionals — namely psychiatrists, psychologists, psychiatric social workers, academics in those related fields, as well as some psychiatric program directors and administrators. However, current mental health studies (Werner, 2005; Downey, 2008; Ventevogel, Jordans, Reis and de Jong, 2013) realised a need to document the lay opinions about mental illness to understand how community people view the diseases and how this influences the integration of mentally ill people in the community.

Pelzang (2010: 61) observed that the lay public seems to follow a narrow definition of the mental patient which is that people become categorised as mental patients only when they enter into a mental institution — even if they have a history of seeking treatment for mental health related complaints. This label generally remains with the patient for as long as they live; even if the individual has been discharged from institutional care. The ‘shame’ associated with the ’mental illness’ label has been widely documented since the early 1950's. For many years mental patients have been regarded with more dislike, less sympathy and stigma than other disabled group in

most societies (Gateshill, Kucharska-Pietura and Wattis, 2011). In their view this is the result of public attitudes of rejection and avoidance of the mentally ill people. It has also been noted that that it is often the case that when a person who has been institutionalised and returns home, their communities — and sometimes family members — view them less sympathetically than an ex-criminal when they pursue activities associated with re-integration, such as sourcing housing, jobs, and re-establishing links within community networks. This obviously makes the process of reintegration a problematic one that can contribute to feelings of marginalisation, or isolation (Makua, 2006) easily into their community.

Luty, Umoh, Sessay and Sarkhel (2007), cited in Pelzang (2010: 60) indicate that historically, and across most cultures, there has been a tendency for persistent negative attitudes towards — as well as social rejection of — people with mental illness. This cross-cultural pattern persists in many in different ways in diverse global locations. For example, within many psychiatric clinical contexts mentally ill patients rarely share the rights, liberties and respect that most people would expect as a norm (Weiss, Ramakrishna and Somma, 2006: 280). However, 'othering' of mentally ill people is a social construction that can be influenced and thus altered. For example, Dahlberg, Waern and Runeson (2008:2) argue that the knowledge that lay-persons acquire about mental illness can influence peoples' attitudes, resulting in positive behaviour changes towards mental illness and its treatment. This is reinforced by Hugo, Boshoff, Traut and Stein (2003:716) who concur that "knowledge of mental health and (good) or positive or non-discriminatory attitudes towards people with mental illness, facilitate individual and broader societal support towards people diagnosed or perceived to be afflicted by a mental illness".

1.3 STATEMENT OF THE PROBLEM

Informal discussions with some members of the Dikgale community in 2010 indicated that although the residents acknowledge the existence of stigma towards people with mental illness there was uncertainty about the specifics of these attitudes. It was equally unclear what levels of knowledge people had about mental illness.

Previous research suggests that the less knowledge that people have about mental illness, the more likely it is that they will demonstrate negative opinions towards people afflicted with mental health challenges (Deribew and Tamirat, 2005; Prior, 2009; Kakuma, Kleintjes, Lund, Drew, Green and Flisher, 2010; Aromaa, 2011; Prior, 2011) These opinions continue with the existing stigma labelled against people with mental illness (Gureje, Lasebikan, Ephraim-Oluwanuga, Olley and Kola, 2005; Corrigan, Edwards, Qreen, Thwart and Perm, 2001). Further to this, negative, community wide sentiments towards the mentally ill has been shown to frustrate efforts designed to aid recovery and subsequent re-integration into the community (Granerud, 2008).

It is against this background that the study seeks to investigate the opinion and knowledge of the lay people in Dikgopheng community towards mental illness in Polokwane Local Municipality in the Limpopo Province.

1.4 MOTIVATION OF THE STUDY

Krathwohl (2005) advises that the motivation for a research study should show the interest that the researcher has in undertaking the investigation. The researcher who undertook this study works as a research assistant with the Development Facilitation and Training Institute (DevFTI), University of Limpopo (UL). During community conversations with permanent residents in the Dikgale community a subtle, yet consistent concern was raised with regard to mental illness and stigma. The patterned references to mental health related issues included: suicide — or 'hanging-up' —, poverty, unemployment, alcohol abuse, sadness and a general feeling of hopelessness relating to the general situation within the community — with stigma featuring in different ways throughout. Based on this experience, the researcher decided to undertake a study about the lay opinions and knowledge of mental illness in Dikgopheng community, which is situated within the Dikgale area.

A further motivation for the study was that while it is clear that research into lay opinions and mental illness have received much attention in recent years (Pill, Prior and Wood 2001: 209) and that in South Africa mental health issues are increasingly being regarded as an important public health and development concern (Bradshaw, Norman and Schneider, 2007; Kleintjes, Flisher, Fick, Railoun, Lund and Molteno,

2006; Kakuma *et al.,* 2006) there is an absence of up to date information in the Dikgale area.

1.5 SIGNIFICANCE OF THE STUDY

Hertanto (2013) defines the significance of the study as a statement that provides reasons why it is important investigate the problem and how the outcome of the research will improve the situation. There are currently no studies that have investigated the opinions and knowledge of the Dikgale community towards mental illness. This study is therefore expected provide valuable insights into the situation in Dikgale and also to add value to the existing broader literature relating to mental health in the Limpopo Province. The results from the study can used by both formal and informal health systems in the Dikgale area to inform educational and health practices within the community about issues relating to mental illness.

1.6 AIM

The aim of this study is to find out about opinions and knowledge of lay people about mental illness in the Dikgopheng community in Polokwane Local Municipality in the Limpopo Province.

1.7 OBJECTIVES OF THE STUDY

The study has the following objectives:

- To determine whether community members have general knowledge about risk factors associated with the onset of mental illness;
- To assess how opinions of mental illness impact on mentally ill, or formerly mentally ill, people in the Dikgopheng community;
- To determine which segments of the community demonstrate stigmatising attitudes or actions towards people with mental illness.

1.8 RESEARCH QUESTIONS

This study seeks to answer the following research questions:

- Do members of the Dikgopheng community have knowledge about risk factors associated with the onset of mental illness?

- How opinions about mental illness impact on the integration of mentally ill, or formerly mentally ill, people within the Dikgopheng community?
- Which segments of the of the Dikgopheng community demonstrate stigmatising attitudes or actions towards people who are mentally ill?

1.9 DEFINITION OF KEY TERMS

According to Baron (2008) definition of important concepts is an important section of Chapter 1 as they provide readers with the exact meaning of terms as they are used in the study. This section defines the following terms: lay opinions, mental illness and knowledge of mental illness.

1.9.1 Lay opinions

Pill *et al.,* (2012: 209) assert that lay opinions are based on "personal knowledge" as opposed to scientifically validated "expert opinion based on scientific, technical or specialized knowledge". They further note that lay opinions do not belong to, or emanate from, a "particular profession". Cooper and Schindler (2011) add that lay opinions reflect a non-professional person's preference or feelings about a particular issue or phenomena. Lay opinions are closer to mental models that may be culturally, socially or individually embodied rather than 'knowledge' *per se* (Clark and McCann, 2004). Critical to this research is that lay opinions are not static constructions, but rather, malleable, dynamic constructions that have historical reference points and, therefore, open-ended — and somewhat unpredictable — futures.

1.9.2 Mental Illness

The phrase mental illness is synonymous with mental disorder (Kendell, 2002:111). The World Health Organization (2001:21) defines mental Illness as "clinically significant conditions, characterised by alterations in thinking, mood (emotions), or behaviour, associated with personal distress and / or impaired functioning". Bauman (2007: 720) defines mental illness as a "clinically significant behavioural or psychological syndrome, associated with distress or impairment in one or more important areas of functioning". Stein (2013) concurs by explaining that for a "mental state to classify as a disorder, it generally needs to cause dysfunction". Chapman, Perry and Strine (2006: 2) further clarify that mental illness "includes a collection of

disorders causing severe disturbances in thinking, feeling, and relating, and resulting in a substantially diminished capacity for coping with the ordinary demands of life".

Kappler (2003: 2), however, cautions that it is difficult to define mental illness when one takes into consideration the diverse cultural perspectives of the term 'illness', before one even begins to contemplate the heterogeneous interpretations of the expression 'mental'. Kappler accentuates this argument by arguing that the western professional definition of mental illness is individualistic — contrary to many Southern perspectives of "traditional [and] collective" conceptualisations of 'being' (2003:7). One specific example of the challenge of attempting to apply a universal definition to mental illness is provided by Sorsdahl, Stein, Grimsrud, Seedat, Flisher, Williams *et al.* (2009: 434) who suggest that that in traditional African belief systems mental illnesses are often associated with "ancestors or by bewitchment and traditional healers and religious."

Understanding lay and local concepts of mental illness is not only important in the assisting the health care-seeking behaviour of the patients but also in reducing the stigma that can be attached to the condition (Bagasra and Mackinem, 2014; Ventevogel, Jordans, Reis and de Jong, 2011; Parker, 2010). There are two main definitions of mental illness according to the local language of Dikgale (Sepedi), namely; "*bogafi*" and "*bolwetsi bja monagano*". "*Bogafi"* which is sometimes called *"go hlakana hlogo"* (literary meaning to be *"mixed up in the head"*) is roughly translated into English as *madness* which is considered as derogatory and offensive form while "*bolwetsi bja monagano*" roughly translated in to English as *mental illness* which is considered as a socially acceptable form. According to local people mental illness characterised by behaviours such as violence, picking up garbage, talking randomly, walking for long periods of time, doing things which are socially unacceptable (like undressing in public, talking alone), thinking differently from other people, and thinking too much.

1.9.3 Knowledge of mental illness

According to Lauber, Nordt, Falcato, and Rössler (2003: 249) knowledge of mental illness includes 'mental health literacy', also see Skre, Friborg, Breivik, Johnsen,

Arnesen and Wang 2013: 2 and Jorm 2012: 232; 'belief systems', also see Mamo, (2007:399); the 'ability of a person to identify specific illnesses and concepts about risk factors associated with the onset, development and management of mental illness', also see Francis, Pirkins and Dunt, (2002:8).

1.10 OUTLINE OF RESEARCH REPORT

According to Cone and Foster (2006) the research report outlines the way in which chapters are organised in the report. This study will be organized into five chapters as outlined below.

Chapter 1: Introduction

This chapter will provide a research plan in which the researcher indicates what he plans to do and how he plans to set about doing it (Mouton 2001). The chapter gives a general introduction to the study, problem statement, the significance of this study, research questions and the aim and objectives of the study.

Chapter 2: Literature review

This chapter will provide an account on the information that has been published on a topic by scholars and researchers (Taylor and Procter, 2008). In this chapter the researcher will define key concepts used in the study and reviews relevant existing literature regarding opinions about mental illness.

Chapter 3: Research Methodology

This chapter describes the procedures and steps that the researcher followed in conducting the study (Rajasekar, Philominathan and Chinnathambi, 2014). In this chapter the researcher will provide a description of the research area, population, sample, data collection, the procedure followed in collecting the data and the method used to analyse the data.

Chapter 4: Data analysis, presentation and interpretation of the findings

In this chapter the researcher will present the analysis of the data by categorization, tabulation of the results with reference made to the literature to address the initial research questions (Clamp, Gough and Land, 2004).

Chapter 5: Summary, recommendations and conclusion

This chapter will “round off what was started in the introductory chapter” (Hofstee, 2013: 155). In this chapter the researcher will present the summary of findings, the limitation of the study, conclusions and provide some tentative recommendations that the study findings point towards.

References and citations

Abbreviated Harvard referencing and citation style were used as recommended by the University of Limpopo Post Graduate Manual (2014: 59).

1.11 CONCLUSION

Chapter 1 introduced the problem under investigation including: the aim of the study; background information about lay sentiments towards mental illness; the motivation for the study; the significance of the study— including the objectives; the research questions followed by the outline of the research report. Chapter 2 will review relevant literature about lay opinions and knowledge towards mental illness — as well as the relationship between them.

CHAPTER 2
LITERATURE REVIEW

2.1 INTRODUCTION

Chapter 2 reviews the existing literature (Baron, 2008) regarding the opinions and knowledge of communities about mental illness. The literature review was conducted by searching computerised data-bases including Ebscohost, Google Scholar, PubMed and books in libraries augmented by grey literature searches including websites, television and radio news broadcasts, electronic and hard-copy journals, newspaper articles.

This chapter is organised into the following sections: rationale for the literature review; prevalence levels of mental illness globally; risk factors attributed to the onset of mental illness; opinions about mental illness; attitudinal factors about mental illness and integration of mentally ill people within communities.

2.2 RATIONALE FOR THE LITERATURE REVIEW

Baron (2008:11) states that a literature review is an extensive search that is inclusive of “research data published about the problem” with the aim to inform the reader of any prior research studies undertaken about the present study (Galvan, 2006). According to De Vos, Strydom, Fouche and Delport (2005:124) literature should “assist the researcher to refine the research topic and identify knowledge so that the research activity adds value to the existing body of scientific knowledge to the academic focus area”. Therefore, a literature review should be a thorough process that continues for the full duration of the research cycle. This ensures that the researcher is able to demonstrate a coherent, valid scientific process and be in a position to critically anchor the discussion of the findings to contemporary scientific knowledge and debates (Baron, 2008).

In this study, the literature review was carried out for the following reasons: to clarify the nature and significance of the study; to ensure that the study did not replicate existing studies and to seek inspiration as to how studies of this sort have added value

to both academic and more practical ‘real-life’ contexts. Particular attention was taken to identify deficiencies and inconsistencies in previous research and to identify the knowledge gaps, with special reference to rural sub-Saharan African contexts, such as the Limpopo Province.

The reason for taking this approach to the literature review is that the researcher is ambitious to contribute scientific knowledge that may be useful in the future, as well as to identify knowledge that can be used more immediately by community activists in the Dikgale community in the Limpopo Province, South Africa.

2.3 PREVALENCE OF MENTAL ILLNESS

The prevalence of mental illness is discussed, highlighted and explained in this section in order to surface the key issues and concepts that are typically associated with mental illness. The section will provide an overview of the prevalence of mental illness globally, in Higher Income Countries (HIC) and lastly in the Lower and Middle Income Courtiers (LMIC) — which is inclusive of the South African context.

2.3.1 Global prevalence of mental illness

According to Okasha (2002) the statistics of mental illness globally are probably only an indicator of mental health prevalence because many families and individuals affected by mental health issues are cautious, or reticent, of disclosure due to stigma and the perceived risk of subsequent “social ostracism”. Notwithstanding this, in 2010, the WHO reported that 80% of the global health burden of disease was caused by mental health related disorders (WHO, 2010). The World Health Organization estimated that approximately 450 million people are reported to experience mental health challenges annually (WHO, 2011). It is estimated 1 in 4 suffers from mental illness globally (Bradshaw, Steyn, Levitt and Nojilana [Sa]: unpaginated). In Africa, 5% of the African population suffers from mental disorder and this percentages will probably rise to about 15% by the year 2030 (WHO, 2008).

The global prevalence of common mental disorders: a systematic review and meta-analysis 1980–2013 confirms (Steel, Marnane, Iranpour, Chey, Jackson, Patel and Silove, 2014) that common mental illness are exceedingly prevalent globally where

about 1 in 5 respondents were recognized as having experienced a common mental disorder. According to this study worldwide, mental illness affects people across all regions of the world (Steel *et al.,* 2014). It is thus evident that mental illness is a global problem that is anticipated to "rise to 15% by the year 2020" (WHO, 2011: 6).

2.3.2 Prevalence of mental illness in the Higher Income Countries (HIC)

According to the WHO, (2011) in higher income countries like the United States of America (USA), Canada and Western Europe mental illness "ranks first among illnesses that result in disability". A study that was undertaken in the USA in 2000 and 2003 indicated that nearly half of all Americans (46.4%) reported meeting the criteria at some point in their life for anxiety disorder (28.8%), mood disorder (20.8%), impulse-control disorder (24.8%) or substance use disorders (14.6%) (Media Wiki, 2007:10). Another study, European study in 2004 found that approximately a quarter of adults reported meeting the criteria at some point in their life for one of the mood disorders (13.9%), anxiety disorders (13.6%), or alcohol disorder (5.2%) (Media Wiki, 2007:11).

2.3.4 Prevalence of mental illness the Lower and Middle Income Countries (LMIC)

According to Nugent (2008) and Kennellies (2014) the prevalence of chronic illnesses (including mental disorder) has become a leading health burden in many developing LMICs. According Bruckner, Scheffler, Shen, Yoon, Chisholm, Morris, Fulton, Dal Poz, and Saxena (2011: 184) the World Health Organization (WHO, 2011) "attributes 14% mental disorders of all of the world's premature deaths and in addition to imposing high costs on the health system, mental and neurological disorders and substance abuse also lead to lost worker productivity, impaired functioning, personal stigma, caregiver burden on family members, and, in some instances, to human rights violations".

This is associated with low incomes, high prevalence of communicable diseases, malnutrition and low life expectancy in such countries. According to Jack, Wagner, Petersen, Thom, Newton, Stein, Kahn, Tollman and Hofman (2014) about three quarters of mental health conditions are found in developing countries. According to Stein, Seedat, Herman, Moomal, Heeringa, Kessler *et al.* (2008) in South Africa there

is no coherent national data about the prevalence of psychiatric disorders. The South African Stress and Health Study (SASH) indicate that that approximately 30% of adult South Africans have reported experiencing some form of mental disorder in their lifetime (Bruwer, Sorsdahl, Harrison, Stein, Willaims and Seedat, 2011).

According to Inge, Arvin, Victoria, Sithembile, Crick and Sharon (2009) 16.5% of South Africans reported suffering from mental disorders. In a survey conducted by the SASH in South Africa it was discovered that about 16.5% of adults in South Africa have reported suffering from the symptoms of a common mental illness in the past year; yet only 25% received treatment during this time (Sorsdahl, Stein and Lund, 2012: 168). Therefore, researchers, policy-makers and international agencies have called for the low- and-middle- income countries to "scale up the mental health components of their health systems" (Bruckner *et al.,* 2011: 186).

Recent reports on the status of mental health of South Africans indicate that over 17 million people in South Africa are currently affected with symptoms that are associated with mental illness (Tromp, Dolley, Laganparsad, and Goveneder, 2014). According to the study conducted by the South African Stress and Health (SASH), over 17 million South Africans are living with a mental illness (Herman, Stein, Seedat, Heeringa, Moomal and Williams, 2009). Tromp, Dolley, Langanparsad and Govender, (2014: unpaginated) reports that The South African Anxiety and Depression Group (SADAG) estimated that 1 in 3 South African suffer from some form of mental disorder.

Okasha (2002) identifies diverse factors that seem to contribute to the high incidence levels of mental illness that are reported in South Africa. These factors include: other diseases — such as HIV/AIDS —, poverty, substance abuse, political violence and the changes in traditional value systems that are altering the face of many African communities. In another study by Rochat, Richter, Doll, Buthelezi, Tomkins and Stein (2006), across the nine provinces, 43% of people with HIV are presented with a mental disorder and a recent World Health Organisation emphasises the same (WHO 2014).

2.4 RISK FACTORS ATTRIBUTED TO THE ONSET OF MENTAL ILLNESS

Some literature attributes risk factors associated with the onset of mental illness into the following three general categories: moral, environmental and biological factors (Parker, 2010:5; Ahn, Proctora and Flanagan, 2009). Other bodies of literature are more specific and refine the categories into the supernatural and cultural risk factors — moral aetiologies — (Insel, and Wang, 2010; Pilgrim and Rogers, 2005) and psychosocial risk factors — that includes the environmental and biological aetiologies — (Mbanga, Niehaus and Mzamo 2002; Ventevogel *et al.,* 2013).

2.4.1 Psychosocial risk factors

Insel *et al.,* (2010) state that although the exact cause of most mental illnesses is not known; many health professionals associate the onset of mental illness as genetic factors, disease, abuse of alcohol and drugs, poverty and emotional stress, or a combination of elements of these factors which are explained in more detail below.

2.4.1.1 Genetic Factors

Many Western health care practitioners associate the onset of mental illnesses to diverse, interdependent nature-nurture combinations (Jorm *et al.,* 2006: 397). However the combination influence of the nature-nurture dialectic is not a precise and reliable one-size-fits all predictor of the likelihood of mental health disorders emerging from the dialectic in any situation. For example, “serious mental illnesses, such as schizophrenia, are more likely to be linked to genetic causal factors, compared to common mental disorders, such as depression.” This sentiment is also shared by some Traditional Healers of the Venda people that also link the onset of mental illness to genetic inheritance (Mufamadi and Sodi, 2010: 259). Nevertheless, the relationship between genetic inheritance and environmental factors plays a significant role in triggering mental health disorders.

2.4.1.2 Diseases

Diedrich (2007) diseases are generally physical and psychological abnormalities and pathological conditions that affect part of the body or an organism. The World Health Organisation (2011) notes the association between mental disorders and other

infectious and non-infectious diseases. It reports that globally, as many as 63% of people living with HIV are believed to have experienced some form of mental health complaint — especially depression — after being diagnosed positive (2011). In South Africa factors such as diseases (most particularly HIV/AIDS) are also attributed to the onset of mental illness (Myer, Stein, Jackson, Herman, Seedat, and Williams, 2009). Bodibe (2014) people living with HIV and AIDS have an increased risk of developing serious mental disorders such depression and anxiety disorder. Jonsson, Furin, Jeenah, Moosa, Sivepersad, Kalafatis and Schoeman (2011) estimate that about 26.5 people with mental illness are also living with HIV.

In the study conducted by Tuovinen, Räikkönen, Pesonen, Lahti, Heinonen, Wahlbeck, Kajantie, Osmond, Barker, and Eriksson (2012:308) also found a link between mental disorder and children born after their mothers had pregnancies complicated by hypertension. Parboosing, Bao, Shen, Schaefer and Brown (2013) state that over 30% of the risk of developing schizophrenia are results of exposure to flu virus such as while still in their mother's womb.

2.4.1.3 Alcohol and substance abuse

Lowinson, Ruiz, Millman and Langrod, (2005) define alcohol and drug abuse as the consumption of alcoholic and drugs in a large and harmful manner. According to Degenhardt, Whiteford, Ferrari, Baxter, Charlson, Hall *et al.* (2013) the use of drugs is a significant contributor to the global mental health burden. Recent research studies (Kuruvilla and Jacob, 2007; Saban, Flisher, Grimsrud, Morojele, London, Williams and Stein, 2014) indicate that there is a clear link between early and continued use of dagga the onset of mental illness. Girma and Tesfaye (2011) and Heffner, Strawn, DelBello, Strakowski and Anthenelli, (2013) describe substance abuse habits which are mostly often associated with the onset of mental illness.

2.4.1.4 Emotional stress

McCraty (2006: 5) describe emotional stress as an emotional discomfort resulting from an unexpected and intense upsetting experience. It is claimed that between 70-90% of mental disorders are associated with stress related to employment or unemployment (WHO, 2010). This is corroborated from multiple sources that associate poverty with emotional stress (Lund, De Silva, Plagerson, Cooper, Chisholm, Das, Knapp and

Patel, 2011; Murali and Oyebode, 2004; Zahir, 2011). In the study by Girma *et al.* (2011) anger and stress were found to be closely linked to the onset of mental illness.

2.4.1.5 Poverty

According to the former Sectary General of the United Nations (UN) Koffi Anan (2001) "the biggest enemy of health in the developing world is poverty." Dennis (2009) defines poverty as the lack of adequate income to provide for the basic necessities of life, in constant with the norms of the society a person lives in. According to Kuruvilla *et al.* (2007: 275) poverty is associated with “lack of opportunity, reduced availability and accessibility to resources and a greater likelihood of experiencing difficult events. The resultant distress may manifest in a variety of presentations including such as low mood and sadness, frustration or discontent”.

2.4.2 Cultural risk factors

Issa, Parakoyi, Yussuf and Musa, (2008:43) claim that sometimes non-western people attribute the onset of mental illness to supernatural phenomena including, curses, witchcraft, god, and various forms of ancestral influence. In the words of Idemudia (2004: Online) “to an African, biology alone does not explain disease causation, because it is seen as a social phenomenon, and as such has a significance for the whole ethnic group and immediate community members”. The following are some cultural and supernatural risk factors associated with the onset of mental illness in most African contexts.

2.4.2.1 Curses

Chauran (2013) defines a curse as wish or expression made with a belief that misfortune to befall or be attached to someone. Some African cultures attribute mental health disorders to a curse that is bestowed upon them be people using witchcraft and / or evil spirits (Hinshaw and Andreas, 2008: 367-393). Elise (2006:1-2) concurs that spirits and curses are relevant; but so too is the possibility that the onset of a mental health disorder can be attributed to the belief that it is a divine punishment for bad deeds. Most commentators on this agree that these types of beliefs contribute to differing levels of stigma and discrimination about mental health-related issues.

2.4.2.2 Witchcraft

According to Moore and Todd (2001) witchcraft is the use of supernatural powers or magic in a destructive and harmful manner. In some Asian and African countries, especially in areas with low levels of literacy (Girma *et al.,* 2001), supernatural phenomenon are cited as some of the risk factors associated with the onset of mental illness. According to Sorsdahl *et al.,* (2009) and Sodi, Mudhovozi, Mashamba, Radzilani-Makatu, Takalani and Mabunda, (2011) people in traditional African cultures account for the onset of mental illness to bewitchment or sorcery. In the study conducted by Ukpong and Abasiubong (2010: 56) in Nigeria "most respondents gave more than one possible cause of mental illness" mentioning witchcraft as one of the factors.

2.4.2.3 God and ancestors

Afeke and Vester (2004) explain that in a religious sense god is a supreme being and ancestors are the dead who have continued to exist and have the powers to influence the living. According to Lauber *et al.* (2004:5), religious people view the onset of mental illness as associated with sin, such as "the deliberate breaking of God's commandments that results in behaviours that are hurtful to self and to others." In other studies (Hartog and Gow, 2005; Sorsdahl *et al.*, 2009), the most common explanations given as risk factors associated with the onset of mental illness are religious belief system.

2.5 OPINIONS ABOUT MENTAL ILLNESS

Opinions about mental illness are typically either positive or negative (Stuber, Rocha, Christian and Link, 2014).

2.5.1 Positive opinions

The study conducted by Kabir, Iliyasu, Abubakar and Aliyu (2004:2) reveal that mental health literacy is found to be significantly increase positive opinions of, or associations towards, mental illness. This positive attitude has been associated with higher levels of tolerance and increased sympathy towards people suffering with mental health challenges. The same study also linked mental health literacy to community support, which in turn is associated with increased levels of accessing treatment. Hocking

(2003:47-48) suggests that “a better way of combating stigma in the community is by improving mental health knowledge…” by reducing public messages that reinforce-stigma and by encouraging the media to report on mental illness in a “more normalising and favourable light.”

2.5.2 Negative opinions

Weiss *et al.,* (2006: 278) claim that negative opinions about mental illness “often underlie stigma, which can cause affected persons to deny symptoms; delay treatment; be excluded from employment, housing, or relationships; and interfere with recovery”. Corrigan *et al.* (2001) concur that the negative opinions — mostly of the general public — may also impact badly on the social integration of people with mental illness within their respective communities. Research in the field of the impact of people's opinions towards mental illness reveals that people who are more informed about mental illness are less likely to support negative or stigmatizing opinions or behaviours. Further studies suggest that a lack of awareness or knowledge about mental health is mostly linked to biased and negative historical, institutional and individual attitudes towards people with mental illness (Corrigan *et al.,* 2001).

In another study Gureje, *et al.* (2005) argued that when people have limited knowledge about the risk factors associated with the onset of mental illnesses their opinions about mental illness tends to be wide-ranging and may impair the social integration of those with mental illness. They also noted that public enlightenment to foster community acceptance of people who are mentally ill is required for all sections of the community, especially for people in rural communities (Janardhana and Naidu, 2012).

2.6 ATTITUDINAL FACTORS ABOUT MENTAL ILLNESS

Attitudinal factors aspects about mental illness are described by different as aspect of the attitude of people about mental illness (Ng and Chan, 2000). Ng *et al.* (2000) and Chan, (2000) classifies attitudinal factors towards mental illness into” ‘benevolence’, ‘separatism’, ‘stereotyping’, ‘restrictiveness’, ‘pessimistic prediction’ and ‘stigmatization’.

2.6.1 'Benevolence'

'Benevolence' as a positive factor can be identified by actions or activities related to kindness, sympathy or normalisation towards, or of, people with a mental illness (Hahn, 2002: 3). Pelzang (2010: 61) refers to Hinkelman and Granello (2003: 263) who describes benevolence as a "paternalistic, sympathetic view, based on humanistic and religious principles". This attitude arises from a moral point of view generally underwritten by a humanitarian or religious kindliness view of patients (Avanci, Malaguti, and Pedrão, 2002).

2.6.2 'Separatism'

According to Pelzang (2010: 61) 'separatism' is a negative factor because it involves "treating people with mental illness away from their community" such as in institutions. El magd, and Al Zamil (2013) noted that 'separatism' can contribute to different forms of discrimination because the institutionalization of patients marks, or labels, them as being different. This form of mental health 'othering' has been shown to have a detrimental impact on lay-peoples' perceptions of the mentally ill.

2.6.3 'Stereotyping'

According to Hahn (2002: 3) 'stereotyping' is also a negative factor characterized by defining people with mental illness by specific behavioural patterns and mental abilities. Byrne (2000) further describes it as "selective perceptions" that situate people with particular differences within groups within the community. Todor (2013: 2010). People with mental illness are viewed as "irresponsible, unable to control themselves, incurable, irremediably lost for the society, dangerous".Lipczynska (2005) add that generally the community views people with mental illness as 'irresponsible' and therefore 'incapable of making their own decisions'.

Furthermore, Ganguli (2000) adds that research also shows that media depictions of mentally ill people as violent homicidal characters has a marked influence on public attitudes and contributes to stereotyping. This can be in the context of news reports of violent acts committed by mentally ill persons; as well as fictional accounts of psychotic criminals.

2.6.4 'Restrictiveness'

Restrictiveness' is another negative factor that reflects the way in which people that have "uncertain views on the rights of people with mental illness" restricts them from accessing a number of social practices or excludes them from some social relations Hahn (2002:3). According to Pelzang (2010: 61) it reflects the restriction of the mentally ill person's "freedom of social contact and activities during treatment and hospitalisation, as well as upon discharge, in order to protect their families and society at large from them".

In addition, Smith and Cashwell (2011) found that many authors have used the construct of social distance. According to them (Smith et al., 2011: 13) social distance the proximity one desires between oneself and another person in a social situation — to assess expected 'restrictiveness behaviour' towards adults with mental illness; also see Baumann (2007). Scholars have described low social distance as characterized by a feeling of commonality, or belonging to a group, based on the idea of shared experiences. In contrast, high social distance implies that the person is a stranger, or an outsider (Baumann, 2997).

2.6.5 'Pessimistic prediction'

According to Pelzang (2010:61) 'pessimistic prediction' is the negative evaluative component towards the mentally ill. Hahn (2002: 3), explains that pessimistic prediction can be identified as the view that people with mental illness are "unlikely to improve". 'Pessimistic prediction' is also linked to another common misconception about people with mental illness which is that they cannot live an independent life or make important contributions to their respective communities (Norman, Sorrentino, Windell and Manchanda, 2008:851) despite empirical evidence to the contrary (Read, Haslam, Sayce and Davies 2006:304). Restrictiveness is thus an important future-oriented factor for community re-integration; future employment opportunities and / or accessing housing.

2.6.6 'Stigmatisation'

Literature indicates that 'stigmatization' attitude is a worldwide phenomenon (Pettigrew and Tropp, 2006; West, Hewstone and Holmes, 2010) that affects people regardless of their background.

According to Rusch, Todd, Bodenhausen and Corrigan (2010) ‘stigmatization’ is also a negative factor that describes perceptions of “mental illness as shameful and that it should be hidden”. Furthermore, stigmatization as Pelzang asserts is a combinational phenomenon associated with emotional feelings of disgrace or discredit, which sets a person apart from others (2010:62). Mehta, Kassam, Leese, Butter and Thornicroft (2009:278) add prejudice and discrimination by the community against people with mental illness are common and are a part of more widespread stigmatisation. Mehta *et al.,* (2009:278) further state that stigmatisation against people with mental illness can contribute to negative outcomes such as social exclusion, integration barriers, discrimination as well as perpetuating self-stigmatisation and contributing to a low self-esteem. The stigmas thereby interfere with the rights of people to participate fully in the community (Gureje *et al.,* 2005:436-437).

2.7 COMMUNITY (RE)-INTEGRATION OF MENTALLY ILL PEOPLE

According to Draker and Latimer (2012) people with mental illnesses require participation in the community life such as employment, schooling, housing and other social services as much as any other community member. However, several studies (Granerud, 2008; Hanlon, Luitel, Kathree, Murhar, Shrivasta *et al.,* 2014) demonstrate that the degree of integration of mentally ill people within communities remains unequally distributed and for many mentally ill people it is a highly problematic situation. Angermeyer and Matschinger (2004) state that in many communities people with mental illness are the most marginalised groups in their respective societies. These people experience social exclusion including employment, marriage and education resulting in increased unemployment, lower educational achievement, poverty, the loss of friendships, denial of housing and rejection by their neighbours and community.

According to Nordt, Rossler and Lauber (2006:709) insufficient knowledge about mental illness and negative attitudes towards people with mental illness results in the difficulties of integrating the mentally people in their community. Other studies (Gureje, Olley, Ephraim-Oluwanuga and Kola, 2006; Stuart and Arboleda-Flórez, 2001) revealed inadequate knowledge about mental illness among the general lay population and stigmatising attitudes towards people with mental illness.

2.8 CONCLUSION

Chapter 2 reviewed literature regarding the opinions and knowledge of communities about mental illness, prevalence of mental illness globally, risk factors attributed to the onset of mental illness, opinions on mental illness, attitudinal factors about mental illness and integration of mentally ill people within communities. The reviewed literature indicates that the negative opinions of ordinary people towards mental illness can result in stigmatisation of the mentally ill, thereby making it difficult for them to be integrated within to their communities. In the following chapter the researcher presents and discusses the methodology used in this study.

CHAPTER 3
RESEARCH METHODOLOGY

3.1 INTRODUCTION

This chapter presents the methodology that has been used in this study to investigate the lay opinions and knowledge of Dikgopheng community about mental illness in Polokwane Local Municipality in the Limpopo Province. The chapter addresses the "methods and procedures used to undertake this study" (Babbie and Mouton, 2003:64). The methodology includes research design, the description of the study area, the population, the sampling criteria used, the instruments used to collect data, the method of data collection and analysis and — lastly — the ethical procedures observed during the study. This study used a quantitative descriptive survey research design in which participants' answered questions administered through the questionnaire (Jackson, 2009).

3.2 RESEARCH DESIGN PROCESS

Research design is a technique to ensure that the proper systems are put in place — and adhered to — to ensure that there is maximum control over factors that will optimize the validity of the findings that emerge from the research process (Burns and Grove, 2007:237). Mouton (2001:56) emphasises that research design is an on-going process throughout the duration of the project so that the focus on the "end product, the point of departure and the logic of the research" is not lost.

3.2.1 Quantitative research

Matthews and Ross (2010) describe quantitative research methodology as being studies which involve the collection and analysis of numerical data. The objective of quantitative research is to collect and analyse structured data that can be presented in the form of numbers in ways that accurately represent 'real' world phenomena, or their interactions. Quantitative research adopts 'systematic' method and focuses on gathering measurable evidence and after appropriate analysis and coming to generalisable conclusions or providing new possible explanations of the phenomenon.

An example of a quantitative study involves specifying the number of participants from a defined population (the 'sample') and presenting data on the number of events occurring or some biographical variable (including gender, age, level of education, religious affiliation, and household income per month) within that sample. It will include a statistical section which may hypothesise a cause and effect relationship. Cresswell (2003) identifies several approaches to quantitative research which include experimental, descriptive, correlational and causal comparison. This study adopts a descriptive approach as the method of choice.

3.2.2 Descriptive Research

Shields and Rangarajan (2013) describe descriptive research as a study that describes the 'characteristics' of the population and phenomenon that are studied (opinions and knowledge about mental illness). Descriptive studies provide an accurate account of a particular issue under investigation and are normally carried out when there is little existing information on the researched phenomenon. In this study, the researcher decided use the descriptive research design for the following reasons:

- There was no existing literature about the lay opinions of people within the Dikgopheng community with regard to mental illness;
- To surface the opinions of people within a Pedi community about mentally ill people; and
- To describe the type of opinions that the Dikgopheng residents have about mentally ill people.

3.2.3 Survey research

Scheuren (2004:9) describes a survey as a method used to gather "information from a sample of individuals who are scientifically chosen so that each person in the population would have a measurable chance of selection".

In this study a survey was used mainly to systematically select a sample from the population. The survey was used to collect quantitative data that was designed to investigate the opinions of Dikgopheng community by examining the relationships among the variables listed above and biographical details of the respondents (Bennett, Khangura, Brehaut, Graham, Moher *et al.,* 2011).

3.3 GEOGRAPHICAL AREA OF THE STUDY

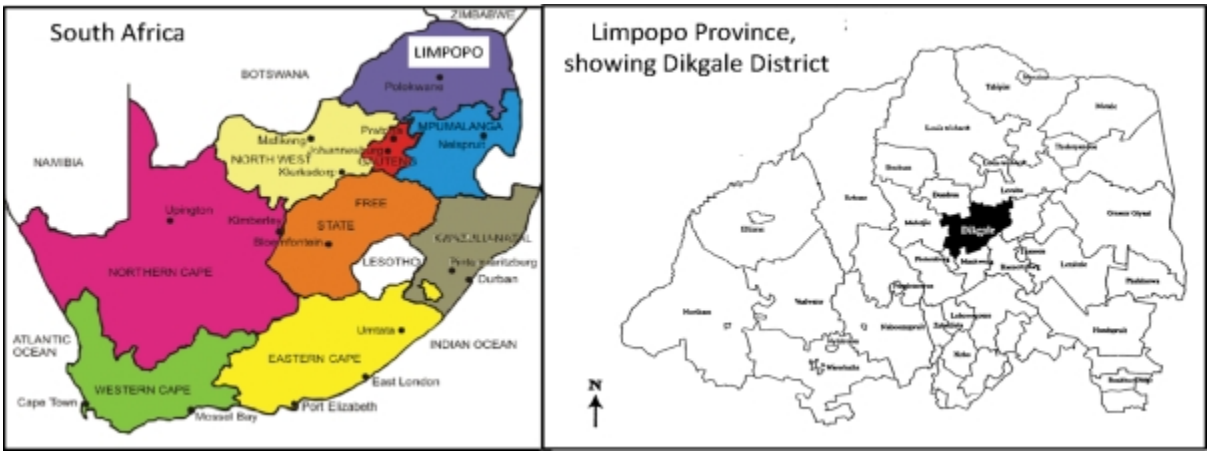
Dikgopheng — meaning place of the aloe in Sepedi — is a small village located in Dikgale about 45 km north-east of Polokwane — the provincial capital city of the Limpopo Province, South Africa. The South Africa Community Survey of 2007, report that that Limpopo Province accounted for approximately 5, 2 million of which 628,999 are in Polokwane city and 7,956 in Dikgale (Kanjala, Alberts, Byass and Burger, 2010).

Dikgopheng is as predominantly rural and characterised by subsistence farming and cultivation. According to Alberts and Burger (2002:207) just like its neighbouring villages “a large proportion of adults are migrant workers, while others work as farm labourers on neighbouring farms, or as domestic workers in nearby towns. Many are pensioners. The unemployment rate in the area is high.”

Alberts *et al.* (2002:208) further explain that the houses comprise of a combination of shacks made out of wood and corrugated irons), traditional round mud huts and conventional houses made out of bricks. According to them very few households have municipal water taps installed in their yards without any proper sanitation and use pit toilets. There are no hard infrastructures like tarred roads, sewage and drainage collection systems.

The total population of the village is an approximately 700 adult persons (Dikgopheng residence registry, 2012). According to Cook, Alberts, Burger and Byass (2008) most of the residents originate from the Pedi ethnic group. Health care is provided at two main primary health-care clinics and by an unknown number of indigenous and faith-based healing practitioners. Besides the clinics the people of Dikgale have a number Drop-in and Home-Based Care centres that also offer auxiliary health services (Cook *et al.,* 2008: 754).

Figure 3.1: Map of South Africa showing the location of Dikgale in Limpopo Provence.



Source: Kanjala, Alberts, Byass, and Burger (2010:60).

3.4 POPULATION

Brink (2000: 132) defines a population of a research study as the entire group of persons that is of interest to the researcher and which meets criteria for inclusion in the study. The target population in this study includes a total of 700 adults (over 18 years of age) who are permanent residents in Dikgopheng village.

3.5 SAMPLE SELECTION PROCESS

According to Burns *et al.* (2007:324) sampling involves selecting a group of people, events, behaviour or other variables with which to conduct a study. The purpose of a sample is to select a representative part of a population that will enable the researcher to draw conclusions about populations (Creswell, 2003). A sample size of 249 adults of Dikgopheng were selected using Krejcie and Morgan's (1970: 608) table for determining sample size from a given population. In order to identify the random sample from the population of 700, an online sample size calculator was used (Raosoft Sample Size Calculator). For the purpose of this research the sample was identified using lottery selection (Kothari, 2006: 60). Lottery selection involves:

- Identifying all of the names of adults from the residence registry;
- Writing all of the names on a piece of paper;
- Placing all of the names in a box;
- Shaking the box so that the names were distributed in a random fashion;
- The drawn outdrawing out the names one by one until the desired sample size is reached.

In this way each member of the population has an equal chance of being selected (Matthews *et al.,* 2010) and there is less opportunity for some members of the population to be included more than the others 'systematic bias' (McDougall and Holson, 2003).

3.5.1 Sampling criteria

Sampling criteria refers to "the characteristics essential for inclusion in the target population" (Burns *et al.,* 2007:227). The following sampling criteria were used in this study:

- They had to be permanent residents — both male and female — in Dikgopheng village;
- They had to be aged 18 years or older;
- They were required to voluntarily consent to participating in the study.

3.6 DATA COLLECTION METHODS

3.6.1 Primary data

Hox and Boije (2005: 593) define primary data as "original or raw data" collected for a specific research purpose. Primary data in this study included the information that was collected from the questionnaires.

3.6.2 Secondary data

Secondary data included the data already collected (Schutt, 2006) and "produced by some [other] researchers" (Matthews *et al.,* 2010: 284). In this research, secondary data included a review of related literature about lay peoples' opinions about mental illness. The data was collected through published books, journals and reports.

3.7 DATA COLLECTION INSTRUMENT

The study used a questionnaire to collect data. As Walonick (2010:5) notes the use of a questionnaire reduces bias and the researcher's own verbal opinions cannot unintentionally influence the respondent's answers. The questionnaire used to collect data has 3 sections: the respondents' biographical information; adapted version of 'Opinions about Mental Illness in a Chinese Community' and a self-designed question-called Knowledge of the risk factors associated with the onset of mental illness.

3.7.1 Respondents biographical information

Section A included the biographical information about the respondents. These included: the respondents' age, gender, highest level of formal education completed, employment status and household income per month. The researcher was guided by the findings of the reviewed literature in selecting the demographic information with the view that they may influence the opinions the community has about mental illness. These include:

Table 3.1: Biographical profiles of participants and their descriptions.

Profile	Description
Age	This referred to the time life of the respondents. Respondents were requested to fill in their age by number. The age numbers were later classified into age groups.
Gender	This refers to the sex of the respondents, which was measured by the respondent selecting either "male" or female".
Highest level of formal education completed	This referred to the level of formal education that a respondent has completed. This was captured by the respondent selecting the appropriate category of their level of education. The categories included: No formal schooling, Completed primary school, Completed secondary school and Tertiary (College/University) completed.
Employment status	This is the classification of the respondents in terms of official work position. Employment status was captured by the respondent's selection the appropriate category that included: Not-employed, Employed, Self-employed, Student.
House-hold income per month	This refers to the total earnings of a household per month. This was measured by respondents selecting the appropriate category that included: Less than R1 000, R1000 – R5000, R 5001 – R 10000 and Above R1000.

Source: *Dissertation* author's contribution.

3.7.2 Opinions about Mental Illness in Chinese Community Scale (OMICC scale)

Section B contains the adapted version of 'Opinions about Mental Illness in a Chinese Community' (OMICC) (Ng *et al.*, 2000) in Lingeswaran (2010:121) instrument

consisting of a series of questions designed for purpose of gathering information and directly measuring the respondents (Shields *et al.,* 2013) opinions about mental illness. The researcher opted to use OMICC as a reliable scale because it was reported to yield a high internal consistency (Cronbach's Alpha) of $\alpha < 0.866$ and has been used in multiple contexts — including rural and urban India (Kumar, 2013); and rural Africa (Chikomo, 2011). The OMICC used is the modified version of the Opinions about Mental Illness (OMI). This is a 34-item, 5 point Likert scale requires the respondents to [1] Strongly Agree, [2] Agree, [3] Neither Agree nor Disagree, [4] Disagree and [5] Strongly Disagree with the statements in the scale. The scale was further designed to examine opinion towards people with mental illness. The scale consists of six factors (Hahn, 2002; Lingeswaran, 2011) as described in Table 3.2 below:

Table 3.2: Descriptions of OMICC attitudinal factors.

Factor	**Description**	**Items numbers covered**
'Separatism'	Identified by items that emphasize the uniqueness of people with mental illness and keeping them away at a safe distance.	1, 2, 3, 4, 5, 6, 7, 8, 9 and 24
'Stereotyping'	Characterized by items that define people with mental illness in a certain behavioral pattern and mental ability.	10, 11, 12 and 13
'Restrictiveness'	Defined by items that hold an uncertain view on the rights of people with mental illness.	14, 15, 16 and 17
'Benevolence'	Identified by items related to kindness towards people with a mental illness.	18, 19, 20, 21, 22, 23, 25 and 26
'Pessimistic prediction'	Identified as the view that people with mental illness are unlikely to improve and how society treats them is not optimistic.	27, 28, 29 and 30
'Stigmatization'	Identified by items that perceive mental illness as shameful, and it should be hidden.	31, 32, 33 and 34

Source: *Dissertation* author's contribution.

3.7.3 Knowledge of the risk factors self-designed questionnaire (KRF-SDQ)

Section C is a self-designed questionnaire about the knowledge of community members with regard to the risk factors associated with the onset of mental illness. The questionnaire consisted of a list of questions that required the respondents to make decisions about which options best fit their understanding about the nature of the onset of a mental illness. The questionnaire was designed to collect information about the opinion of the community members about their knowledge of risk factors associated with the onset of mental illness. The questionnaire required the respondents to indicate if they [1] Agree, [2] Disagree or are [3] Not sure with the statements.

3.8 QUESTIONNAIRE TRANSLATION

To ensure the credibility of the data the researcher used the back translation method (Harkness, 2010). The questionnaire was translated from English ('source' language) to Sepedi ('target' — the language of the participants). With the help of a local contact person, the researcher requested the contact person in Dikgopheng to cross-check the translated version in order to capture contextually significant meanings and cultural content of words (Burns, *et al.,* 2001; Montoya, Llopis, and Gilaberte, 2011) of the Pedi speaking people of Dikgale. The questionnaire was then back-translating and the process was repeated using translators who were not involved in the study. Inconsistencies were detected through the repetition of the process and by way of administering the questionnaire to bilingual subjects. These inconsistencies were rectified prior to the pilot.

3.9 THE PILOT STUDY

Arain, Campbell, Cooper and Lancaster (2010) explain that pilot studies are undertaken so that adjustment to the data collection instrument/s and processes can be made prior to initiating the main study so that corrective, ameliorative actions can be taken to ensure maximum scientific knowledge insights can be accrued during the research process. In this study the pilot study followed the guidance of Morin (2013) in preparation for the main data collection, which included:

- Pre-testing the data collection instruments;
- Scrutinising the proposed recruitment approaches and techniques;
- Training of field workers who assisted in the data collection;
- Determining if the number of field workers were sufficient to successfully complete data collection and to ensure that the pre-data collection training was comprehensive enough.

The study was undertaken by 4 field workers (3 females and 1 male) and included 152 residents of Dikgopheng village at the research site. The residents who participated in the pilot study were not included in the main study. Informed by the preliminary study, the researcher under the under the guidance of your supervisor made the following adjustments:

3.9.1 Adaptation of the OMICC scale

The OMICC scale was adapted. The adaptation included the contextualisation of some words or phrases in the scale to suit the Dikgale context. The following statements were adapted exclusively for the purposes of ease of understanding by the respondents.

Table 3.3: Adapted OMICC items.

Items	Original statement	Adapted statement
12.	People with mental illness have a lower I.Q.	People with mental illness are generally less intelligent than most people.
13.	All people with mental illness have some strange behaviour.	All people with mental illness are unpredictable.
18.	People with mental illness can hold a job.	People with mental illness are reliable to continue working regardless of their condition.
19.	The care and support of family and friends can help people with mental illness to get rehabilitated.	The care and support of family and friends can help people with mental illness to get better.
20.	Corporations and the community (including the government) should offer jobs to people with mental illness.	Business and the community (including government) should offer jobs to people with mental illness.
23.	After people with mental illness are treated and rehabilitated, we still should not make friends with them	After people with mental illness have had treatment, we still should not make friends with them.

Source: *Dissertation* author's contribution.

3.9.2 Adaptation of the KRF-SDQ (self-designed questionnaire)

The initial self-designed questionnaire consisted of 5 statements under the cultural and supernatural risk factors. The statements included *God's punishment, Failure to appease the ancestors, Witchcraft, Magic and Curse.* During the pilot study it became apparent that the respondents could not distinguish between magic and witchcraft therefore, magic was eliminated from the list of statements.

3.9.3 Number of field-workers

The number of field workers was increased by 2 males and 1 female with the total of 6 (4 females and 2 males).

3.10 EVALUATION OF THE QUESTIONNAIRE

Cooper *et al.* (2011) identify three key criteria for evaluating a questionnaire which include internal consistency (Cronbach's Alpha), validity (content and construct), reliability and practicality. Each of these topics is described in more detail below.

3.10.1 Internal consistency

Dunn, Baguley and Brunsden (2013) define internal consistency as a measure of testing whether items in a questionnaire are that "proposes[ed] to measure the same general concept produce similar scores". According to Eisinga, Te Grotenhuis, and Pelzer (2013), Cronbach's alpha is a statistical measure for the internal consistency of a survey instrument. George and Mallery cited in Gliem and Gliem (2003:87) provide the following guidelines (Table 3.4 below):

Table 3.4: Description of Cronbach's Alpha.

Cronbach's Alpha	Internal consistency
0.9 and greater	Excellent reliability
Between 0.9 and 0.8	Good reliability
Between 0.8 and 0.7	Acceptable reliability
Between 0.7 and 0.6	Questionable reliability
Between 0.6 and 0.5	Poor reliability
Less than 0.5:	Unacceptable reliability

Source: adapted from George and Mallery cited in Gliem and Gliem (2003:87)

The OMICC scale — with 34 questions and six factors — has been reported to yield a high internal consistency (Cronbach's Alpha) of $\alpha < 0.866$ (Hahn, 2002; Salve, Goswami, Sagar, Nongkynrih, and Screenivas, 2013).

3.10.2 Content validity

Cooper *et al.* (2011) define 'validity' as the degree to which an instrument measures that which it is designed to measure. The researcher, with the assistance of more experienced researchers, assessed the questionnaire for the purpose of identification and elimination of questions with repetition and / or "dual-meaning". Furthermore, validation was undertaken during the pilot phase by asking the participants in the pilot

study to assess the questionnaire in terms of its clarity, comprehensibility, flow and construction. Based on this further nuanced revisions were made.

3.10.3 Construct validity

To achieve 'construct validity' numerous sources were used as guidelines in the construction of the questionnaire (Cooper *et al.,* 2001; Ghauri, and Gronhaug, 2002). Six factors of Community Opinions about Mental Illness as identified in the literature were adopted (Hahn, 2002 and Lingeswaran 2011). The identified factors include: 'Separatism', 'Stereotyping', 'Restrictiveness', 'Benevolence', 'Pessimistic Prediction' and 'Stigmatization'. The answers to these questions were combined to determine the respondents' opinions towards mental illness.

3.10.4 Reliability of the instrument

The 'reliability' of a research instrument concerns the extent to which the instrument yields the same results during repeated trials (Cooper *et al.,* 2001:216). To test the reliability of the questionnaire the researcher conducted two pilots with different participants in which the same questionnaire was administered to the same people. The reliability of the questionnaire in this regard was estimated by testing the consistency of the responses in pilot test.

3.10.5 Practicability of the instrument

According to Cooper *et al.* (2001:218) the operational requirements of a questionnaire require it to be practical thus administratively convenient to carry out; economic with regard to the time required for completion; to be internally consistent with regard to the issues it is designed to measure and interpretability to a broad academic audience.

3.10.6 'Convenience'

According to Peehbi (2006) an instrument is said to be 'convenient' if it is easy to administer and easy for the participants to complete with the assistance of a researcher, or research assistant. This means that it must have clear instructions and a simple design and layout (see Appendix D: Research Questionnaire). The researcher also followed the recommendations of Cooper *et al.* (2011) and designed the questionnaire in such a way that it is conveniently readable and has been scrutinised for minor mistakes such as spelling, syntax and punctuation errors.

3.10.7 Economy

This means that the questionnaire is designed in such a way that the respondents do not waste time in completing it. To accommodate this, the questionnaire was designed to be simple and to take no more than 20 minutes to complete which in the view of Cooper *et al.* (2002:314), “is an acceptable time”.

3.10.8 Internal consistency

Dunn *et al.* (2013) define internal consistency as a measure of testing whether items in a questionnaire are appropriate for measuring a particular or general concept. The OMICC scale — with 34 questions and six factors — has been reported to yield a high internal consistency (Cronbach's Alpha) of $\alpha < 0.866$; (Salve *et al.,* 2013).

3.10.9 ‘Interpretability’

According to Terwee, Bot, de Boer, van der Windt, Knol, Dekker, Bouter and de Vet, (2007: 37) ‘interpretability’ means “the degree to which one can assign qualitative meaning to quantitative scores”. The ‘Interpretability’ of the questionnaire was taken into consideration and the final measurement scale was decided upon after a review of other alternative, valid options.

3.11 PROCESS OF DATA COLLECTION

Grimm (2010) defines the process of data collection as the steps followed in systematically gathering information to enable a researcher to answer research questions. The data collection process included the steps described below.

3.11.1 Request for permission to conduct research

Permission to conduct the study was obtained from the Headman of Dikgopheng village through the Dikgale Tribal Council.

3.11.2 Recruitment of respondents and field-workers

As Madsen, Mirza, Holm, Hilsted, Kampmann and Riss (2002: 158) point out “effective recruitment of subjects is crucial to the success of the study”. To recruit respondents in this study (including pilot), contact with community people was conducted through the

Dikgale Tribal Council and headman of Dikgopheng village. The Tribal Council also assisted in the identification and recruitment of local field workers.

3.11.3 Training of the field-workers

Six field workers are recruited (4 females and 2 males) on the basis that they were unemployed residents of Dikgale area who have completed Grade 12 and had prior knowledge of part-time data collection with the Health and Demographic Surveillance Systems (HDSS) (Kanjala *et al.,* 2010) project since 2009. The field workers were trained in the process of collecting this data using the instrument described above. The training included the following:

- Introduction to the study;
- The purpose of the study;
- Methodology of data collection; and
- Administration of the questionnaire.

3.11.4 Appointment with the respondents

To ensure a participant-friendly environment that ensured that the respondents were available and comfortable, appointments with the respondents were arranged a week before the interview date. Respondents were allowed to choose the venue and time. A day before the interview, the respondents were telephoned and reminded about the appointment.

3.11.5 Administration of questionnaires

Administration of data collection was done following Bowling's (2005) guidelines:

- The respondents were informed of the purpose of the study, the reason for they were selected to participate and ethical procedures that were in place during the study;
- The respondents were also given an opportunity to ask questions or comment before signing the consent letter;
- The field workers read statements as they appear in the questionnaire and requested respondents to tick the answers that best describe their opinion for

that particular question. In this way the data collection process tended to match natural conversation that intended to make the respondents to feel at ease;

- Respondents were thanked for taking part in the study.

3.12 DATA ANALYSIS

3.12.1 Data preparation and capturing

The researcher made preparations for the data analysis in the following way:

- Checked all were correctly completed;
- Numbered each question;
- Coded the response for each question;
- Created a data file on the SPSS software; and
- Captured and the cleaned the data.

3.12.2 Method of data cleaning

According to Beaver (2012) the process of leaning the quantitative data is important and also need data cleaning process careful consideration as it will significantly affect the final results. After capturing the data was cleaned using Bian (2011: 21) advises as sated below:

- Key in values and labels for each variable;
- Run frequency for each variable;
- Check outputs to see if you have variables with wrong values;
- Check missing values and physical surveys if you use paper surveys, and make sure they are real missing;
- Sometimes, you need to recode string variables into numeric variables.

3.12.3 Statistical analysis

With the guidance of the UL Statistician, IBM's Statistical Package for Social Sciences for Windows (SPSS version 20) was used to analyse the general descriptive statistics for both sections.

3.12.3.1 For the KRF-SDQ (self-designed questionnaire)

For Section B (the self-designed questionnaire) the responses were coded as 1= agree, 2=disagree and 3=not sure. SPSS was used to generate frequencies and percentages. Microsoft Excel 2010 was fused to produce the graphic display of data by means of bar and pie charts.

3.12.3.2 For the OMICC scale

The responses of OMICC was measured at the ordinal scale (have a rating scale e.g. 1 to 5, representing 1 = Strongly Agree, 2 = Agree, 3 = Neither Agree nor Disagree, 4 = Disagree and 5 = Strongly Disagree). SPSS was used to generate frequencies, percentages, cross tabulation using the Pearson Chi-squire to test the significance of the relationship (*p-value*) between the relationship between 'stigmatisation' and the biographical information of the respondents (Nuzzo, 2014). Furthermore, the researcher used Microsoft Excel 2010 to further calculate the totals for scores for each of the 6 factors and the scores were divided in 3 categories that were coded as 1=low, 2=medium and 3=high opinion factor. Microsoft Excel 2010 was further used to produce the graphic display of data by means of bar and pie charts.

3.13 ETHICAL CONSIDERATIONS

According to Lo (2009) it is important to observe ethics in conducting a research study in order to ensure the aims of the research are accountable to the public; gain public support for research as well as to ensure that moral and social values representing the specific ethical guidelines of the country are adhered to. The principles of research ethics as explained by Burns *et al.* (2007:212-219) were observed in order to ensure that the researcher was operating within the expected research ethics limits. The following steps were undertaken to satisfy these ethical requirements:

3.13.1 Permission

According to Driscoll and Brizee (2012) one specific issue to consider before conducting any research study involving human subjects is to request permission from the relevant authorities. Permission to conduct the study was obtained from the Headman of Dikgopheng village through the Dikgale Tribal Council (see Appendix B:

'Letter requesting permission to conduct a study in Dikgale') and the School Research Ethics of Turfloop Graduate School of Leadership (TGSL).

3.13.2 Confidentiality

Metthews *et al.* (2010) describe confidentiality as the way in which data is used and made available to others as part of the agreement researchers make with study participants and must be described during the informed consent process. To ensure confidentiality, participants were not required to write their names and contact details on the questionnaire. Data obtained was kept closed and was only accessible to the people involved in research. The exception to the latter is if the participants are asked if the raw data can be used for other purposes. This was not the case in this study so the data remains confidential.

3.13.3 Privacy

Privacy can be defined in terms of having control over the extent, timing, and circumstances of sharing oneself (physically, behaviorally, or intellectually) with others (McCabe, 2004). To ensure privacy in this study, the researcher allowed the participants to take part voluntarily, choose the venue, deny answering questions they deemed too personal and cease participating at any moment, for whatever reason.

3.13.4 Informed Consent

Section 12, subsection 2 (c) of the Constitution of the Republic of South Africa states that everyone has the right "…not to be subjected to medical or scientific experiments without their informed consent". Therefore, in this research study informed consent was ensured by following the three elements as outlined in the Belmont Report (1979: 7);, namely: information, comprehension and voluntariness. The researcher employed Groenewalt's (2004) guidelines of informing the respondents that:

- They are participating in research;
- The purpose of the research;
- The procedures of the research;
- The risk and benefits of the research;
- The voluntary nature of research participation;

- The respondents' right to participation in the study at any time without fear;
- The procedures that were being used to protect confidentiality.

For full details see Appendix A: 'Letter requesting consent of participation'.

3.14 CONCLUSION

Chapter 3 presented the methodology that has been used in this study to investigate the lay opinions and knowledge Dikgopheng community about mental illness in in Polokwane Local Municipality in the Limpopo Province. The chapter addressed the research design, the description of the study area, the population, the sampling criteria used, the instruments used to collect data, the method of data collection and analysis and lastly the ethical procedures observed during the study. The results of the data collected in this chapter are presented and discussed in the following chapter.

CHAPTER 4
DATA ANALYSIS, PRESENTATION AND INTERPRETATION OF FINDINGS

4.1 INTRODUCTION

This chapter presents the analysis and interpretation of the data collected during the research study. The chapter presents results of the analysis about lay opinions and knowledge of members of Dikgopheng community about mental illness. The data analysis will address the principle objectives of the study:

- To determine whether community members have general knowledge about risk factors associated with the onset of mental illness;
- To assess how opinions on mental illness impact on mentally ill or formerly mentally ill people into Dikgopheng community;
- To determine which community members show stigma towards the people with mental illness.

In the analysis and interpretation special attention is drawn to the following issues:

- The biographical information of the respondents;
- Knowledge of the risk factors associated with the onset of mental illness;
- Opinions about mental illness;
- How opinions about mental illness impact on integration of mentally ill, or formerly mentally ill, people within Dikgopheng community; and
- The way in which the biographical information of the participants intersects with the ‘stigmatisation’ factor of the OMICC scale.

The content was analysed using the IBM Statistical Package for Social Sciences for Windows, version 20 (2011). Frequency distributions (*n*), cross-tabulation were analysed. Descriptive statistics such as frequencies and percentages were used to prepare the data in a summarised version.

4.2 RESULT RELIABILITY TEST

The Cronbach Alpha test was computed to measure the internal consistency of the adapted OMMIC scale. Table 4.1 (below) illustrates the adapted OMICC test in this study yielded a Cronbach's Alpha of 0.717 which is acceptable (George *et al.,* 2003: 231; Krippendorff, 2004:241).

Table 4.1: Results of the reliability test.

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.717	0.721	34

Source: *Dissertation* author's contribution.

4.3 RESULTS OF BIOGRAPHICAL INFORMATION

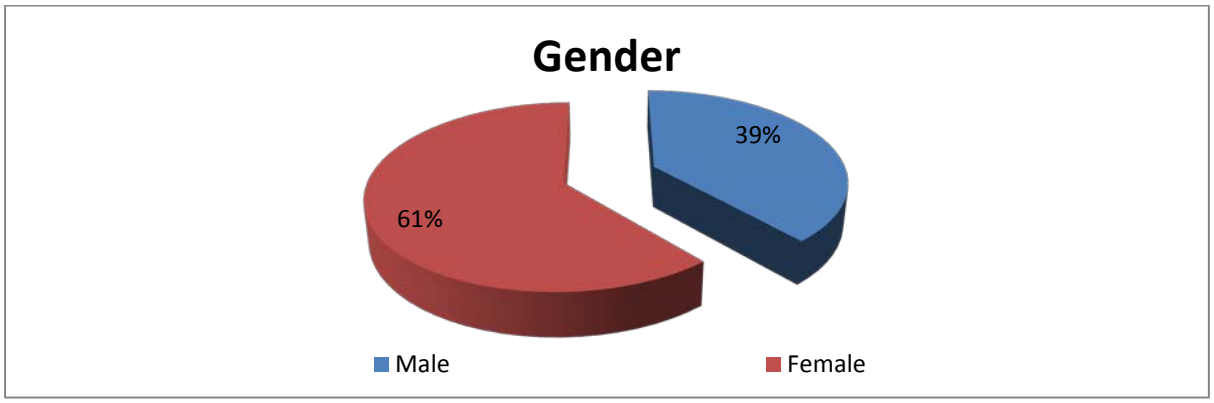
Section A of the questionnaire was formulated to gather biographical information about the respondents. This section included the respondents' age, gender, highest level of formal education completed, religion, employment status and household-income per month. IBM SPSS was used to analyse the descriptive statistics of the biographical information. All the questions were answered so frequencies and percentages were used to represent the results (Heller and Greene 2012: 5). The results are presented in Table 4.1 below:

4.3.1 Gender

Respondents were requested to state their gender. Pie-Chart 4.1 indicates the percentage response rate by gender. It is apparent from this table that 61.0% of the sampled respondents were females and 40.9% were males.

There is a considerable gap in a number of respondents between the male and females who participated in this study. The gap may be attributed to time of the data collection — which was done on weekdays and like many rural areas, a significant amount of the males are working away from the house (Collinson, 2010; Mokgokong, 2010). Another factor could be attributed to the general gender statistics of the Capricorn District Municipality (CDM) which confirms that there are more females (53.21%) than males (46.79%) resident in the area (StatsSA, 2012).

Pie-chart 4.1: Percentage response rate indicating gender in the sampled population.



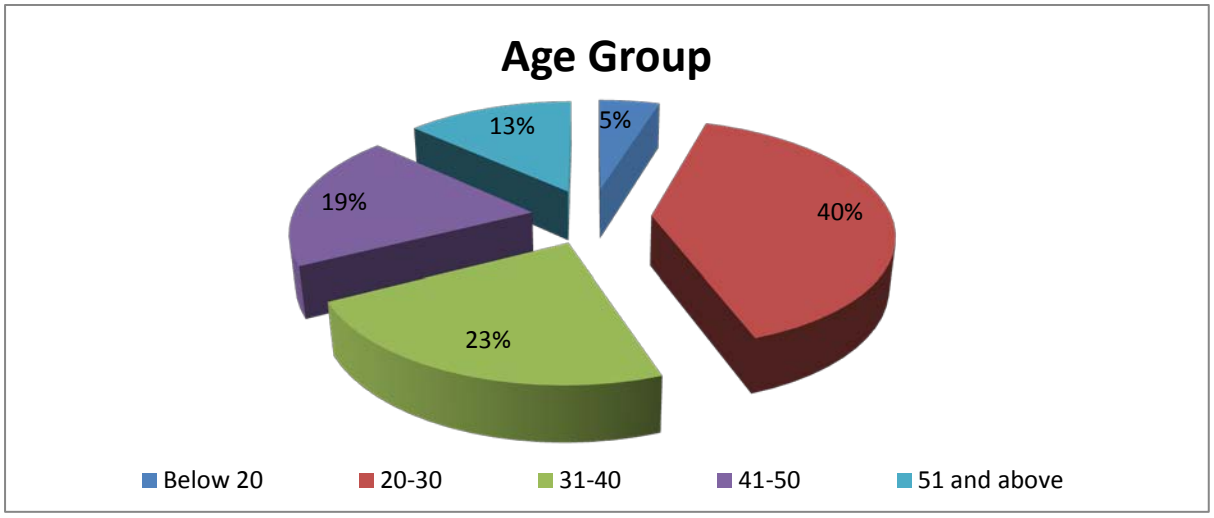
Source: *Dissertation author's contribution*.

4.3.2 Age group

Pie-Chart 2 shows the age categories of the respondents who participated in this study. Respondents were requested to give in their ages in numbers and during the analysis the ages were grouped into the following; Below 20, 20-30, 31-40, 41-50 and 50 and above. The majority of the respondents (40.0%) were between age group 20-30, followed by 31-40 (23.0%), then 40-49 (19.0%) and 51 and above (13.0%) with only (5%) between 18-20 years of age (5%).

Similarly, StatsSA (2012) Municipal report, Limpopo, Report 03-01-57, reports that the population of Limpopo and its Districts is young as the majority of the people are aged below 35 years.

Pie-chart 4.2: Percentage response rate indicating the age group.



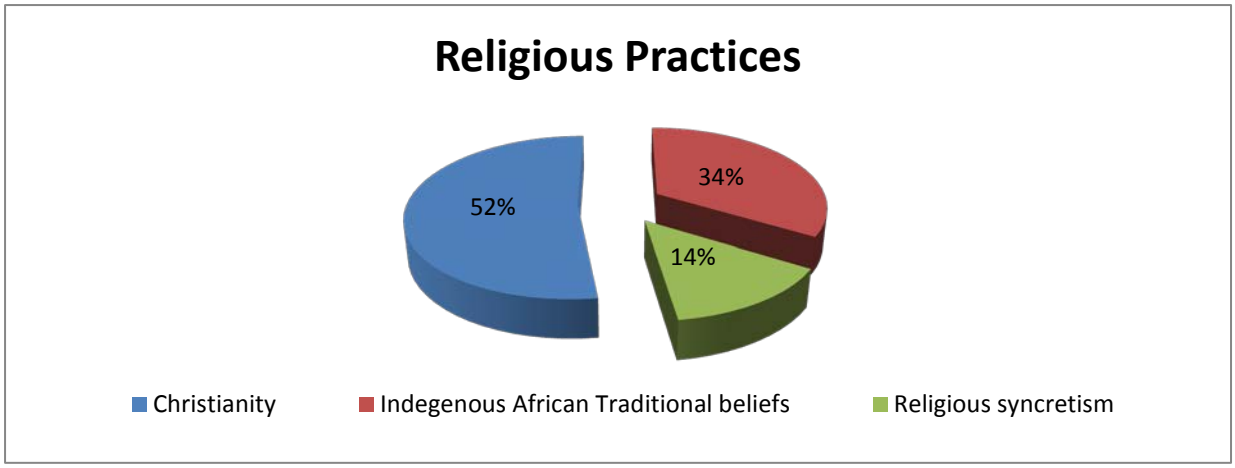
Source: Dissertation author's contribution.

4.3.3 Religious practices

Respondents were requested to state or choose the religion they practice. Pie-Chart 4.3 illustrates that majority of the respondents reported affiliations to Christianity (52.0%), followed by add stats affiliated to Indigenous African Traditional Beliefs and only 14.0% of those were practiced to both religions.

This evidence suggests that Christianity and the Indigenous African Traditional Beliefs are the two dominating religions of the Dikgopheng community. The findings are similar to those of Malema (2000: 18) who found out that most of the respondents from her study in Dikgale belonged to the Zion Christian Church (ZCC) denomination. Alberts *et al.,* 2002:2) concur that most of the Dikgale inhabitants belong to the ZCC, which they describe as a Christian church which allow some traditional practices.

Pie-chart 4.3: Percentage response rate indicating religious attachment in the sampled population.



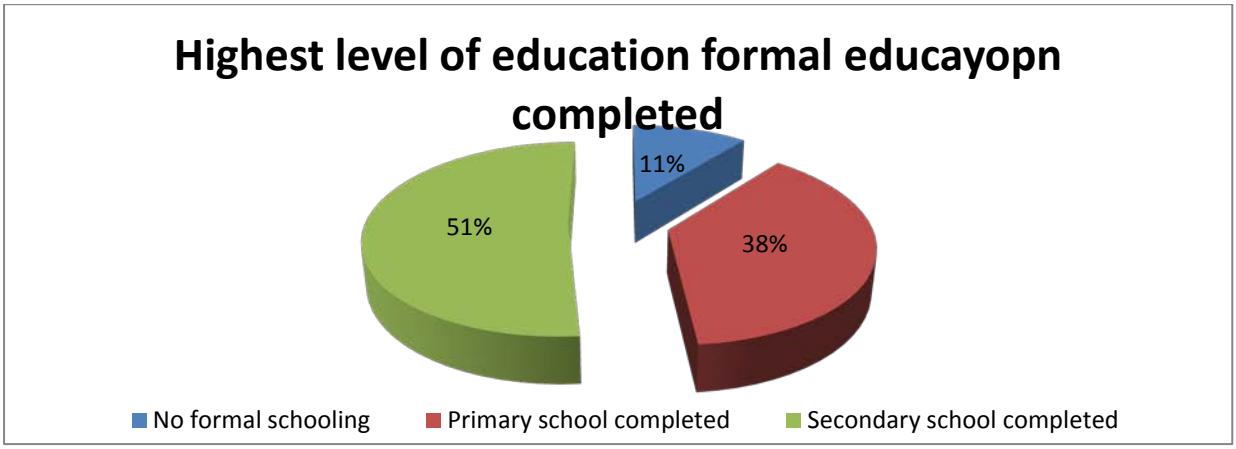
Source: Dissertation author's contribution.

4.3.4 Highest level of formal education completed

Pie-Chart 4.4 demonstrates that most of the respondents in the study (51%) completed their secondary education; followed by those who completed their primary education (38%) and that. 11% of the respondents had no formal education.

These findings resonate with Kanjala *et al.* (2010: 60) and StatsSA, (2012) that indicates an increase in the proportion of Grade 12/matric (from 13.6% to 22.4% in 2011).

Pie-chart 4.4: Percentage response rate indicating highest level of formal education completed in the sampled population.



Source: Dissertation author's contribution.

4.3.5 Employment status

Pie-Chart 4.5 illustrates that half of the sampled respondents (50.0%) reported to be unemployed; 29.0% were employed and 21.0% were reported to be self-employed.

These findings correspond with a recent Needs Assessment undertaken in the area (Mamabolo and Aphane, 2011) and with who reported high levels of employment (42.4%) in the Dikgale area. Although they do not specify the statistics, Kanjala *at al.* (2010: 60) agree that "unemployment within the HDSS population is high". However, these findings contradict the StatsSA (2012) that suggests that unemployment has fallen from 46.1% in 1996 to 37.4% in 2011.

Pie-chart 4.5; Percentage response rate indicating employment status in the sampled population.

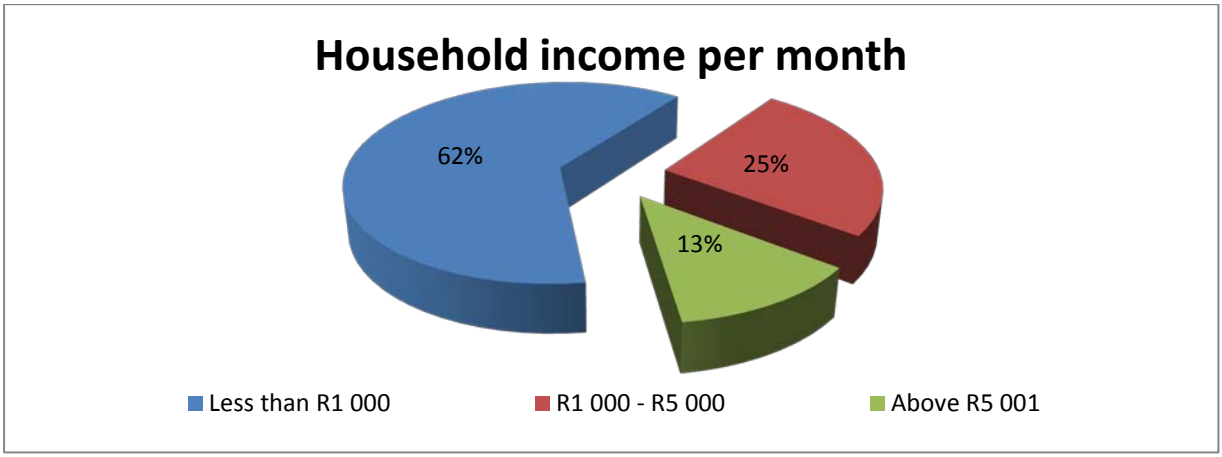
Source: Dissertation author's contribution.

4.3.6 Household income per month

Pie Chart 4.6 shows that a large proportion of the respondents (62.0%) were residents in households with a monthly income of less than R1 000. Twenty-five percent (25%) reported they were residents in a household with a monthly income of between R1 000 - R5 000 and 13% were from the households with a monthly income of over R5 000.

The household income per month can be attributed to the findings by Alberts *et al.* (2002:2) who reported that most of the Dikgale residents are farmers and domestic workers. Similarly, the Polokwane Municipality Integrated Development Plan IDP2012-2013) (2014) report that the households income of Polokwane Municipality per annum is in the lower income category (category 1: R0-R2400) which “reflection of poor households represent” (p: 49).

Pie-chart 4.6: Percentage response rate indicating household income per month in the sampled population.



Source: Dissertation author's contribution.

4.4 RESULTS: KNOWLEDGE OF RISK FACTORS ASSOCIATED WITH THE DEVELOPMENT OF MENTAL ILLNESS

Section B of the questionnaire consisted of a self-designed questionnaire (KRF-SDQ) that asked the respondents about their opinions of the risk factors associated with the onset of mental illness. The questionnaire included statements about the biological, psychosocial, supernatural and cultural risk factors associated with the development of mental illness (see Appendix D, below). IBM SPSS was used to analyse the descriptive statistics of the biographical information of the respondents. Because all the questions were answered, frequencies and percentages were used in the results (Heller *et al.,* 2012: 5). The total responses for all variables is *n=249*. The results are presented below

4.4.1 Psychosocial risk factors

With regard to biological and psychosocial risk factors, the respondents were provided statements about factors associated with the onset of mental illness and asked to provide an indication of their position on the topic by answering '*agree', 'disagree' or 'don't know'* which statement fits best. The factors that were included in this section of the research included: emotional stress, genetic inheritance, poverty, disease and alcohol and substance abuse. Table 4.2 below provides an overview of their responses.

4.4.1.1 Emotional stress

Most respondents (69.1%) were not sure if emotional stress in a person's life is a risk factor associated with the onset of mental illness while 24.5% agree that emotional stress is a contributing factor. These results differ from the studies (Heinrich and Gullone, 2006; Pirkola, Isometsä, Suvisaari, Aro, Joukamaa, and Poikolainen, 2005; Spataro, Mullen, Burgess, Wells and Moss, 2004; Teicher, Samson, Polcari and McGreenery, 2006) that show there is correlation between mental illness and stress. Emotional stressful life experiences such as sexual abuse, physical abuses, verbal abuse, bullying has been linked to the onset of mental disorders (Maldonado, 2014: online).

4.4.1.2 Genetic inheritance

Over half of the respondents (51.8%) agreed that inheritance is a risk factor associated with the onset of mental illness. 46% indicated that they don't know and 7.6 % disagreed with the suggestion.

The present results seem to be consistent with other research findings (Bearden, Reus and Freimer, 2004; Insel *et al.,* 2003) which found that genetics has been found to account for more than 40% of susceptibility of an individual to mental illness.

4.4.1.3 Poverty

An overwhelming majority (71.9%) of the respondents did not agree that poverty is a risk factor associated with the onset of mental illness, while 17.3% agreed that it does and only 10.8% didn't know.

In contrast, according to De Silva, McKenzie, Harpham and Huttly, (2005) and Patel and Kleinman (2003) there is evidence that associates poverty and the onset of mental illness.

4.4.1.4 Diseases

More than half of the respondents (59.4%) agreed that diseases are also factors associated with onset of mental illness, 30.1% were not sure and 10.4% disagreed with the statement.

These results match those observed in others studies (Kapungwe, Cooper, Mwanza, Mwape, Sikwese, Kakuma *et al.,* 2010; Murali *et al.,* 2004; Inge *et al.,* 2009; Myer *et al.,* 2009; Zahir *et al.,* 2011) that attributes some diseases — most particularly HIV/AIDS — to the onset of mental illness. Brown, Kim, Mitchell and Inskip (2010) states that over 30% of the risk of developing schizophrenia are results of exposure to flu virus such as while still in their mother's womb.

4.4.1.5 Alcohol and substance abuse

Nearly 60% of the members of Dikgopheng community (59.8%) attributed the misuse of alcohol and drugs as a risk factor in the onset of a mental illness, followed by 24.9% who stated that they don't know and 15.3% who disagreed.

These findings concur with those of Girma *et al,* (2011), Inge, *et al.* (2009), Kuruvilla *et al.* (2007), and who found a strong relationship between substance abuse and alcohol.

Table 4.2: Psychosocial risk factors.

Variables	Agree		Disagree		Not sure	
	n	%	n	%	n	%
1. Emotional stress	61	24.5	16	6.4	172	69.1
2. Inheritance/genetics	129	51.8	19	7.6	101	40.6
3. Poverty	43	17.3	179	71.9	27	10.8
4. Diseases	148	59.4	26	10.4	75	30.1
5. Alcohol & drug misuse	149	59.8	38	15.3	62	24.9

Source: Dissertation author's contribution.

4.4.2 Cultural risk factors

In this section, the respondents were also given statements attributing the onset of a mental illness to cultural factors. The factors that were considered in this section include: punishment from God, failure to appease the ancestors, witchcraft and curses. . The respondents were asked to indicate if they *agree, disagree* or *don't know* with each statement and an overview of the results is provided in Table 4.3.

4.4.2.1 Punishment from God

Over half of the respondents (53.0%) disagreed with the statement that a punishment from God is a risk factor associated with the onset of mental illness, while 41.0% agreed with the statement and only 6.0% reported that they didn't know.

According to Nkosi (2012: 88) in South Africa illnesses — including mental illness — are sometimes associated with a "punishment resulting from being disobedient to spiritual forces including the spirit of light (God)". Similarly in studies conducted by Silton, Flannelly, Galek, and Ellison (2013) among the American adults and Phillips, Pargament, Lynn, and Crossley (2004) among American college students it has been found that a belief in a punitive God is associated with some forms of mental illness including anxiety, paranoia, obsession, and compulsion.

4.4.2.2 Failure to appease the ancestors

Over half of the respondents (57.8%) agreed that a failure to appease the ancestors is a risk factor associated with the onset of a mental illness, followed by 29.7% who disagreed and 12.4% who didn't know.

Likewise, Prasadarao (2014) and Bogopa (2010) agree that in some African cultures, (Like Kenya and South Africa) failure to appease the ancestors may results in various forms of illnesses. Similarly in some Asian cultures (like as in China) the neglect of worshiping ancestors is considered as a risk factor to the development of mental illness (Ran, Xiang, Simpson and Chan, 2005).

4.4.2.3 Witchcraft

62.7% of the respondents attributed witchcraft as being a risk factor for the onset of mental illness while 24.5% disagreed and 12.9% reported that they didn't know.

The results concur with the findings from studies done in other African and Middle-Eastern countries. For example in a study conducted by Alqahtani and Salmon (2008) and Teferra and Shibre (2012) community members in Ethiopia link the onset of mental illness to the phenomenon of bewitchment. Similarly in South Sudan bewitched is cited as the main factor for a person to have mental illness (Ventevogel *et al.,* 2013).

4.4.2.4 Curses

Over half of the respondents (51.4%) regard curses as a risk factor in the onset of mental illness by, with 22.5% who disagreed and 26.1% who were didn't know.

These results are consistent with those of other studies in African countries (Bogopa, 2010; Okello and Ekblad, 2006; Teferra *et al.,* 2012) includes being cursed as a factor associated with the development of a mental illness.

Table 4.3: Cultural risk factors.

Variables	Agree		Disagree		Not sure	
	n	%	n	%	n	%
6. God's punishment	102	41.0	132	53.0	15	6.0
7. Failure to appease the ancestors	144	57.8	74	29.7	31	12.4
8. Witchcraft	156	62.7	61	24.5	32	12.9
9. Curse	128	51.4	56	22.5	65	26.1

Source: Dissertation author's contribution.

4.5 OPINIONS ABOUT MENTAL ILLNESS

Section C of the questionnaire required the opinions of the Dikgopheng community about mental illness using the OMICC scale (see Appendix D: Research questionnaire below). The scale consisted of 34 items with 6 factors. These 6 factors included 'separatism', 'stereotyping', 'restrictiveness', 'benevolence', 'pessimistic prediction' and 'stigmatisation'. IBM SPSS was used to compute the factors. To arrive at each factor, all items in a specific category were identified, given a new label and computed into groups. Ms Excel was used to calculate the sum and the average in each category. With assistance from the University of Limpopo Statistician the results were categorised as 'high', 'normal' and 'low' factors. The total response for all variables is n=249. Column Chart 4.1 (below) provides an overview of the results.

4.5.1 'Separatism'

'Separatism' relates to items 1-9 and 24 of the OMICC scale that "that emphasize the uniqueness of people with mental illness and keeping them away at safe distance" (El magd and Zamil, 2014: 883). Nearly half of the respondents (49.0%) were not of the

opinion that people with mental illness are unique and they should not be isolated from the rest of the community. 38.6% were of the view that they should be isolated from the community.

The results concurs with other findings (Adhikari, 2007; Zartaloudi and Madianos, 2010) that people with mental illness are generally considered to be dangerous and aggressive which in turn increases the 'social distance' that should be put between mental health sufferers and non-sufferers.

4.5.2 'Stereotyping'

'Stereotyping' relates to items 10-13 of the OMICC scale that relates to the "narrow assumption (of people with mental illness) based on diagnoses" (Smith, 2008:25). Nearly 60% of the respondents (59.0%) were of the opinion that people with mental illness have a peculiar behavioural pattern and mental difference that is different from the rest of the community. 34.9% were of the view that that mentally ill people are just like anyone else.

These findings further support the studies of Corrigan *et al.* (2003) and Bec (2007) that generally the community people view those with mental illness are unpredictable, dangerous and unable to control the way they behave.

4.5.3 'Restrictiveness'

'Restrictiveness' relates to items 14-17 of the OMICC scale that relates to the "uncertain views on the rights of people with mental illness" (Hahn, 2002:3). Over half of the respondents (58.6%) reported to hold uncertain opinions on the rights of people with mental illness and 32.9% indicated that people with mental illnesses do have rights.

Similarly, other researchers (Baumann, 2007; Link, Yang, Phelan and Collins, 2004; Smith *et al.,* 2011) also reported restrictiveness behaviour of community people towards those with mental illness.

4.5.4 'Benevolence'

'Benevolence' relates to items 18-23 of the OMICC scale that is "related to kindness towards people with a mental illness" (El magd *et al.,* 2014: 883). 67.5% of the respondents scored low on 'benevolence' and 23.7 scored high. This means that members of the Dikgopheng community are not kind towards people with a mental illness and 23.7% are kind.

Although the results are aligned to Grahams (2013) findings that unkindness towards people with mental illness by the people occurs regardless of their knowledge about the illness and relationship with those who have mental illness. Hickling, Robertson- and Paisley, (2011); Girma *et al.* (2013) and Thornicroft, (2006) add that awareness education on mental illness and relatives of people who mentally ill seem to have kindness towards the mentally ill.

4.5.5 'Pessimistic prediction'

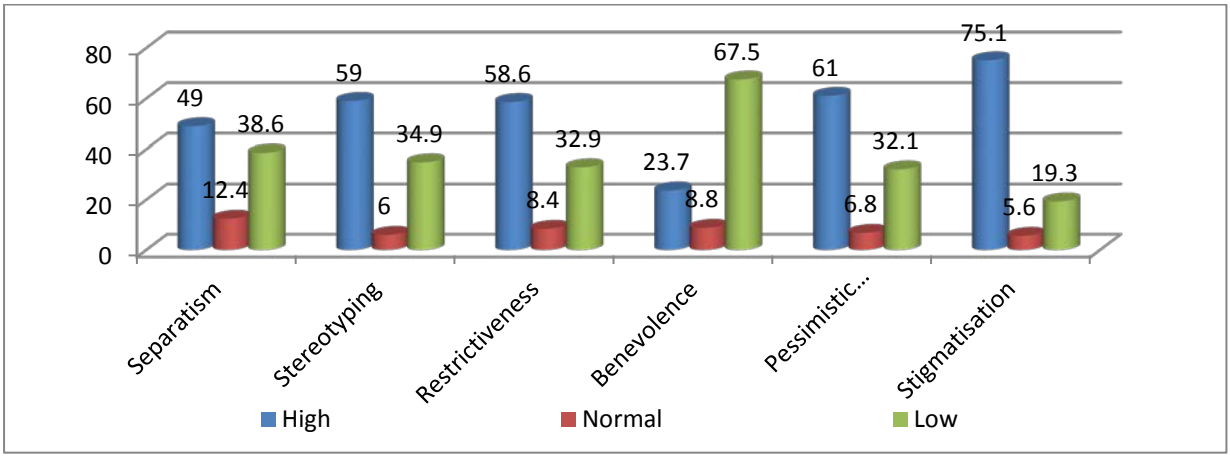
'Pessimistic prediction' relates to items 27-30 of the OMICC scale that relates to the "attitude that people diagnosed with mental illness are unlikely to improve" (Smith, 2008:25). Most respondents (61.0%) were of the opinion that there is no hope of improvement of people with mental illness and the way their community treated them and 32.1% were optimistic about the change in the way they are treated. This finding corroborates the ideas of Norman *et al.* (2008), Pelzang, (2010), Read, Haslam *et al.* (2004) who describes that most of community members have a negative attitudes towards people with mental illness.

4.5.6 'Stigmatisation'

'Stigmatisation' relates to items 31-34 of the OMICC scale that "that people perceive mental illness as shameful, and it should be hidden" (El magd *et al.,* 2014: 883). An overwhelming majority of the respondents (75.1%) viewed mental illness as shameful thing and believed that it should be hidden away from the general public while only 19.3% were of the opinion that the illness should not be hidden.

Others research studies (Adhikari, 2007; Corrigan, Mörris, Michaels, Rafacz and Rusch 2003; Zartaloudi *et al.,* 2010) also found that the opinions of the general public on people with mental illness is negative.

Column chart 4.1: Results of OMICC scale



Source: *Dissertation* author's contribution.

4.6 STIGMATIZATION ATTITUDES AND BIOGRAPHICAL INFORMATION

Cross tabulation was used to compare the way in which gender, age, employment status, highest formal education completed, religious practices and household income of the participants intersects with the 'stigmatisation' factor of the OMICC scale. Pearson Chi-Squire was used to find out if there is a significant association between the 'stigmatisation' attitude and the biographical information (Kruss, Visser, Aphane, and Haup, 2012: 23). The test for statistical significance (*P-value*) is equal to 0.05 ($p > 0.05$). According to Nuzzo, (2014) if the p value is less than $p < 0.05$ it means the relationship is significant and if it is greater than $p => 0.05$, the relationship is insignificant. The following tables present the results.

4.6.1 Gender and stigmatisation

Cross tabulation 4.1 shows out of 96 male respondents, 68 (70.8%) show high levels of stigmatisation towards mentally ill people, and out of 153 female respondents, 119 (77.8%) show high levels of stigmatisation towards mentally ill people. Overall out of 249 respondents, 77.8% respondents show high levels of stigmatisation towards mentally ill people. The results were statistically insignificant at the Pearson Chi-squire test of $p>0.527$. Therefore, as compared to their male counterpart, female members of Dikgopheng community perceive mental illness as a disgraceful thing that should be concealed.

These findings are aligned to other studies that have shown an association between gender and high levels of stigmatisation towards mentally ill people. In the study by Wirth and Bodenhausen, Todd and Richeson (2009: 172) the association between gender and stigma has been observed where females shown to have stigma towards people with mental who are not related to them. In others studies (Reichert, 2012; Savrun, Arikan, Uysal, Cetin, Poyraz, Aksoy *et al.,* 2007) female respondents were reported to display less 'stigmatizing' opinions towards people with mental illness than their male counterparts.

Cross tabulation 4.1: Gender and stigmatisation.

Gender	'Stigmatisation'						N=Total
	High		Normal		Low		
Male	n=68	70.8%	n=7	7.3%	n=21	21.9%	96
Female	n=119	77.8%	n=7	4.6%	n=27	17.6%	153
Total	n=187	75.1%	n=14	5.6%	n=48	19.3%	249

Source: *Dissertation* author's contribution.

4.6.2 Age group and stigmatisation

Cross tabulation 4.2 illustrates, out of 33 respondents, 29 (87.9%) of respondents who are 51 years and above had higher 'stigmatisation' scores followed by the respondents below the age group of 20 who scored 83.3% (n=69) out of 99. Out of 57 respondents between 31-40 years of age, 46 (80.7%) had higher 'stigmatisation' scores. Overall, out of 249 respondents 187 (75.1%) scored high in stigmatisation.

The results were statistically significant at the Pearson Chi-squire test of p value of *p<0.041* level. Therefore, older members of Dikgopheng community (51 and above) have a feeling of embarrassment and disgrace about people with mental illness.

The findings of this study do not support the previous research by Crisp, Gelder, Goddard and Meltzer (2005) who found out that generally young people have 'stigmatising' attitudes toward people with mental illnesses.

Cross tabulation 4.2: Age group and 'stigmatisation'.

Age Group	'Stigmatisation'						N=Total
	High		Normal		Low		
Below 20	n=10	83.3%	n=1	8.3%	n=1	8.3%	12
20-30	n=69	69.7%	n=4	4.0%	n=26	26.3%	99
31-40	n=46	80.7%	n=2	3.5%	n=9	15.8%	57
41-50	n=33	68.8%	n=7	14.6%	n=8	16.7%	48
51 and above	n=29	87.9%	n=0	0.0%	n=4	12.1%	33
Total	n=187	75.1%	n=14	5.6%	n=48	19.3%	249

Source: Dissertation author's contribution.

4.6.3 Employment status and stigmatisation

Table 4.6 indicates that out of 53 employed respondents, 38 (71.1%) reported a high level of stigmatisation. Out of 123 unemployed respondents, 93 (75.6%) reported high stigmatisation level. Out of 73 self-employed respondents, 56 (76.7%) reported to have high 'stigmatisation' attitude. Overall, out of 249 respondents 187 (75.1%) reported to have stigmatisation attitudes.

Results were statistically insignificant at the Pearson Chi-squire test of *p>0.933*. Therefore, the status of employment of the people of Dikgopheng community does not influence the stigmatisation attitude they have on mental illness.

Cross tabulation 4.3: Employment status and stigmatisation.

Employment	'Stigmatisation'						N=Total
	High		Normal		Low		
Employed	n=38	71.7%	n=4	7.5%	n=11	20.8%	53
Not employed	n=93	75.6%	n=7	5.7%	n=23	18.7%	123
Self employed	n=56	76.7%	n=3	4.1%	n=14	19.2%	73
Total	n=187	75.1%	n=14	5.6%	n=48	19.3%	249

Source: Dissertation author's contribution.

4.6.4 Highest formal education completed and stigmatisation

Table 4.8 show that out of 27 participants with no formal schooling, 21 (77.8%) reported high stigma. Out of 94 participants who completed primary school education,

74 (78.7%) reported high 'stigmatisation' attitude. Out of 128 participants who have completed secondary education, 92 (71.9%) reported high stigma. Overall, out of 249 participants, 187 (75.1%) reported high stigma attitude towards the mental illness.

Results were statistically insignificant at the Pearson Chi-squire test of *p>0.755*. Therefore, level of education does not play a significant role in the way the people of Dikgopheng community view mental illness.

The present findings seem to be consistent with other research (Corrigan *et al.,* 2012; Girma, Tesfaye, Froeschl and Möller-Leimkühler (2013) which found people with higher level of formal education reported less stigma compared with people with lower formal qualifications or without education.

Cross tabulation 4.4: Highest formal education completed and stigmatisation.

Level of education	'Stigmatisation'						N=Total
	High		Normal		Low		
No schooling	n=21	77.8%	n=2	7.4%	n=4	14.8%	27
Completed primary education	n=74	78.7%	n=4	4.3%	n=16	17.0%	94
Completed secondary education	n=92	71.9%	n=8	6.3%	n=28	21.9%	128
Total	n=187	75.1%	n=14	5.6%	n=48	19.3%	249

Source: Dissertation author's contribution.

4.6.5 Religious practice and stigmatisation

Table 4.9 report that out of 130 respondents, 98 (75.4%) of those who subscribed to Christianity have high 'stigmatising' attitudes. Out of 84 participants subscribing to the Indigenous African Religion, 64 (76.2) who belongs to both Christianity and Indigenous African Religion reported a high stigma and out of 35, 25 (71.4%) report high levels of stigma towards the mentally ill. Overall, out of 249 respondents 187 (75.1%) reported a high stigma towards the mentally ill.

Results were statistically insignificant at the Pearson Chi-squire test of *p>0.740*. Therefore, religion does not alter the way in which the Dikgopheng community view mental illness.

According to Igbinomwanhia, James, and Omoaregba, (2013) evidence suggests that people with mental illnesses are less accepted in some sections of religious community. In the study by Stanford, (2007: 447) amongst the Christian community stigma towards people mental illness results in abandonment of the mentally ill because they associating mental illness with the work of demons, and suggestions that mental disorder results from the sins people commit against God.

Cross tabulation 4.5: Religious practice and 'stigmatisation'.

Religion	'Stigmatisation'						N=Total
	High		Normal		Low		
Christianity	n=98	75.4%	n=9	6.9%	n=23	17.7%	130
Indigenous religion	n=64	76.2%	n=4	4.8%	n=16	19.0%	84
Combination of both	n=25	71.4%	n=1	2.9%	n=9	25.7%	35
Total	187	75.1%	14	5.6%	48	19.3%	249

Source: Dissertation author's contribution.

4.6.6 Household income and stigmatisation

Table 4.10 shows out of 155 respondents whose household earns less than R1 000 per month, 111 (71.6%) have high 'stigmatisation' attitude. Out of 63, 51 (81.0%) of participants with a household income of between R1 000 – R5 000, reported high in stigmatisation and out of 31 participants, 25 (80.6%) with a household income of over R5 001 reported high 'stigmatisation' attitude.

Overall out of 259 participants, 187 (75.1%) have a high 'stigmatisation' attitude towards mental illness. The results were statistically insignificant at the Pearson Chi-squire test of *p>0.219*.

The study by Lim, Zelaya, Latkin, Quan, Frangakis, Ha *et al.* (2013) indicate that income affects the way in which people perceive those with mental illness. These

results match those observed in the study by (Girma *et al.,* 2013) in which respondents with high levels of income showed higher levels of stigma.

Cross tabulation 4.6: Household income and stigmatisation.

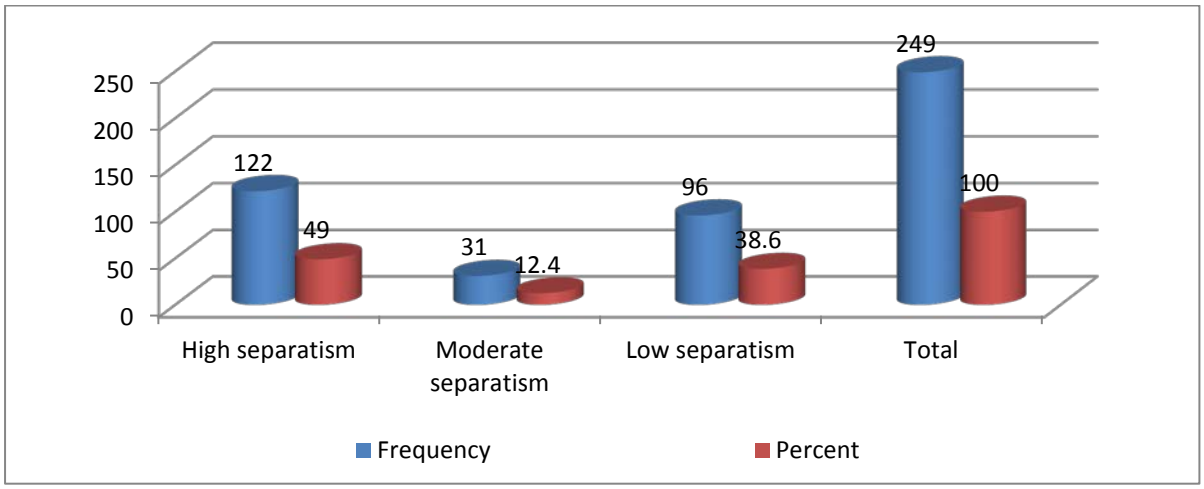
Income	Stigmatisation						N=Total
	High		Normal		Low		
Less than R1 000	n=111	71.6%	n=10	6.5%	n=34	21.9%	155
R1 000 – R5 000	n=51	81.0%	n=1	1.6%	n=11	17.5%	63
Over R5 001	n=25	80.6%	n=3	9.7%	n=3	9.7%	31
Total	187	75.1%	14	5.6%	48	19.3%	249

Source: *Dissertation author's contribution.*

4.7 INTEGRATION OF MENTALLY, OR FORMERLY, MENTALLY ILL PEOPLE WITHIN THE COMMUNITY

The results to the question are illustrated by the 'separatism' and 'restrictiveness' factors of the scale as shown by both Charts 4.5.1 and 4.5.2 below:

Column chart 4.2: Results of 'separatism' attitude of respondents.

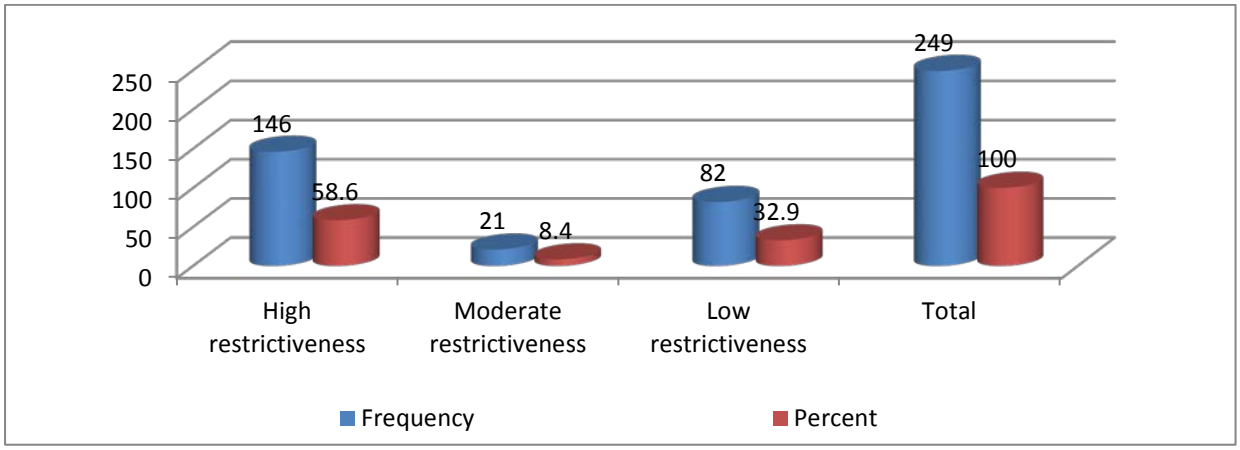


Source: *Dissertation author's contribution.*

Column Chart 4.2 shows that nearly half of the sampled population (49.0%) of the reported a high 'separatism' attitude towards people with mental illness. This shows that nearly half of the members of Dikgopheng community were of the opinion that

people with mental illness are different from the rest of the community and therefore they should be hidden from the public view (Pelzang, 2010).

Column chart 4.3: Results of 'restrictiveness' attitude of respondents.



Source: *Dissertation author's contribution.*

Column Chart 4.3 shows that over half of the participants (58.6%) reported a high 'restrictiveness' attitude towards people with mental illness. This means that most people in Dikgopheng community restrain people with mental illness by limiting their "freedom of social contact and activities during treatment and hospitalisation, as well as upon discharge, in order to protect their families and society at large from them." (Pelzang, 2010: 61).

The 'separatism' and 'restrictiveness' attitudes are further compounded by the findings that over 70% of the Dikgopheng community are of the opinion that mental illness is shameful thing and that it should be concealed from the community.

There are similarities between findings in this study and other studies — for example see Granerud, (2008) and Hanlon *et al.*, (2014) — that the integration of mental ill people within communities is still a problematic phenomenon. As a result of this many mentally ill people find themselves being excluded and isolated from many aspects of community life, such as employment, schooling, making friends and having families of their own. These factors subsequently limit opportunities of the ex-and-currently mentally ill people to be fully integrated with their community.

4.8 DISCUSSION

The purpose of this section is to discuss the interpretations of the results (Linda, 2009). Interaction with members of the Dikgopheng community demonstrated that they are uncertain about general knowledge and opinions of their community members on mental illness and are not certain which members of the community have stigma about people with mental illness. The discussion will be based on the objectives of the study as set out in Chapter 1.

In terms of psychosocial risk factors the results are inconclusive as the Dikgopheng community displayed conflicting knowledge of psychosocial risk factors associated with the development of mental illness. Despite evidence from the literature the most of Dikgopheng community reported not to be sure about emotional stress (69.1%) as a risk factor, did not agree with poverty as a risk factor (70.0%).With regard the issue of inheritance just half of the Dikgopheng community agreed (51.8) agreed and nearly 60% agreed with both diseases (59.4%) and alcohol and substance misuse (59.8) as risk factors respectively.

With regard to the cultural risk factors associated with the development of mental illness, the results shows that generally the that the Dikgopheng community are on par with the findings of the research studies from the non-western countries (mostly Africa, Asia and the Middle-East). Over half agreed that the punishment from god and curse as a risk factor, nearly 60% agreed with failure to appease the ancestors, over 60% agreed witchcraft as a risk factor and just over half.

In terms of stigma, even though the results did not any significant correlation between the biographical information of the respondents and ‘stigmatisation’ attitude, the results confirm that an overwhelming majority (75.1%) of Dikgopheng community members have stigma towards the people with mental illness.

Corresponding with findings in other studies throughout the world (Pettigrew *et al.,* 2006; West *et al.,* 2010), in this study stigma is a problem that creates a barriers of the integration (Mehta *et al.,* 2009) of mentally ill or previously mental ill people into their

community. As such this limits the capacity for the mentally ill people to participate meaningfully (Saunders, Naidoo and Griffiths, 2008) in Dikgopheng community life.

4.9. CONCLUSION

This chapter presented the results of the analysis and interpretation of the data collected during the research study pertaining to three principle objectives. Special attention in this chapter was drawn to the (i) the biographical information of the respondents; (ii) knowledge of the risk factors associated with the onset of mental illness; (iii) opinions about mental illness; (iv) the way in which the biographical information of the participants intersects with the 'stigmatisation' factor of the OMICC scale and (v), the opinions of Dikgopheng community with regard to the integration of the mentally or previously mentally ill people within their community. Chapter 5 will present the summary of the results, conclusions and proposed recommendations.

CHAPTER 5
SUMMARY OF RESULTS, RECOMMENDATIONS AND CONCLUSION

5.1 INTRODUCTION

The aim of the study was to investigate the lay opinion and knowledge of Dikgopheng community about mental illness in Polokwane Local Municipality in the Limpopo Province. Chapter 1 provided an overview of the introduction to the study, statement of the problem, motivation, research aim, objectives, questions and definition of key concepts. Chapter 2 presented a review of relevant literature pertaining to the study. Chapter 3 introduced the research area and also outlined the methodology followed in conducting study. A quantitative descriptive research design was applied in conducting this study. This approaches assisted the researcher to surface opinions of Dikgopheng community about mental illness. This chapter presents a summary of the findings; to provide recommendations based on the findings; highlight the limitations of the study and lastly to present a conclusion.

5.1.1 Contextual summary

The study was conducted in Dikgopheng village amongst members of the community. The total population of the study was 700 community members and 249 members were randomly selected to participate in the study.

The findings in the study answered the following research questions outlined in Chapter 1:

- Do members of the Dikgopheng community have knowledge about risk factors associated with the onset of mental illness?
- How are the opinions on mental illness impact on the integration of mentally ill or formerly mentally ill people into Dikgopheng community?
- Which members of Dikgopheng community have stigma towards people who are mentally ill?

5.2 SUMMARY OF THE KEY RESULTS

The study was conducted in Dikgopheng village amongst members of the community. The total population of the study was 700 community members and 249 members were selected to participate in the study on the basis that they were adults (18 and above), residing in Dikgopheng at the time of the study.

5.2.1 Summary of the biographical information of the respondents

The majority of the sampled respondents were female (61.0%) and only 39.0% were males. Most of the participants belong to Christianity (52.0%), followed by those who belonged to the Indigenous African Traditional Beliefs 14.0%. Most of the participants in the study completed their secondary education (51%), followed by those with who completed their primary education (38%). A large proportion of the participants (62.0%) reported to be from households with less than R1 000 per month, followed by those from households income of between R1 000 - R5 000 (25%).

5.3.1 Summary of the risk factors

5.3.1.1 Psychosocial risk factors

Most of the participants (69.1%) were not sure if emotional stress is a risk factor in the development of mental illness. Over half (51.8%) believe inheritance to be risk factor. An overwhelming 71.9% of the participants do not link mental illness and poverty. Nearly 60 % (59.4%) believe that diseases are factors and 59.8% attribute the misuse of alcohol and drugs as risk factors associated with the onset of mental illness.

5.3.1.2 Supernatural/superstitious causes

Most of the participants (53.0%) did not associate the punishment from God as a risk factor associated with the onset of mental illness. Fifty-seven percent believed that failure to appease the ancestors as a risk factor. Sixty-two percent attributes witchcraft as a risk factor and 51.4%) regarded curse as a risk factor in the onset of mental illness.

5.3.2 Opinion on mental illness

Less than half of the participants (49.0%) are not of the opinion that people with mental illness are unique and as such they should be kept away at a safe distance

from to those without it. Over half (59.0%) define people with mental illness in a certain behavioural pattern and take for granted their mental ability. Most of the participants 67.5% of the respondents reported not to be kind towards people with a mental illness and 75.1%) are of the view mental illness as shameful thing and believes that it should be hidden away from the general public.

5.3.3 'Stigmatisation' attitudes towards mental illness

The results presented in this section indicate that the Dikgopheng community have 'stigmatisation' attitude towards mental illness (75.1%). Furthermore, the results prove that gender, age, religion, education, household income and employment status variable does influence on the stigmatisation attitude.

5.3.4 Summary of the impact of the opinions on integration in the community

Nearly half of the participants (49%) do not think that people with mental illness should be kept away at a safe distance from other community members, most of them 58.6%) believes that they should be restrained them from freely interacting other the general community.

5.4 LIMITATIONS OF THE STUDY

Ioannidis (2007) describes limitation of a research study as "potential weaknesses in your study and are out of your control". The study had a methodological limitation. The research design used in the study was quantitative and structured questionnaires were used to collect data on about the lay opinions of Dikgopheng community about mental illness, therefore, the data collected in using this method does not yield more detailed in-depth insights and elaborative accounts of human perception (McNabb, 2013:147). It is also provides limited insights into opinions that serve as a situational scoping exercise based on the premise that mental health challenges are known to be increasing in South Africa (Mayosi, Lawn, van Niekerk, Bradshaw, Abdool Karim and Coovadia, 2012). As a situational analysis of opinions, the data is relevant but the limitation is that it does not provide specific direction about how to improve the situation in the area.

5.5 RECOMMENDATIONS

Based on the findings of the study, the following recommendations are suggested (sections 5.4.1 and 5.4.2, below).

5.5.1 Community education

There is a need for education that creates awareness (Barrenger and Draine, 2013; Campbell, 2014; Petersen and Lund, 2011) about risk factors that are associated with the development of mental illness amongst community members in ways that parallel Petersen and Lund's (2011) call to educate primary healthcare workers as a first step towards community mobilisation to improve the situation as imagined by Campbell and Cornish (2014). As the process of mobilisation does not require specialised health care workers, the local CBOs may be well positioned to co-facilitate the process (Jack, Wagner, Petersen, Thom, Newton, Stein *et al.,* 2014). Another target group that could be considered for facilitating this process are traditional healers (Sorsdahl, 2009).

The specific design would require further research into the existing knowledge base — and roles of — the drivers of the campaign but this type of approach would be more likely to foster a culturally relevant (Fleck, 2011) step towards enabling community based actions to ameliorate the current levels of stigma. Such an approach would also begin a process of facilitating the mainstreaming of mental health literacy within this rural community; built upon — and consolidated by — transversal collaborations that could serve as a future model of rural mental health literacy. The ambition of such a model could be to enable rural people to better navigate the mental health landscape in the future as imagined by Campbell *et al.* (2014).

Similar educational activities (Collins, Wong, Cerully, Schultz and Eberhart, 2012; Corrigan and Gelb, 2006; Corrigan *et al.,* 2012) have been shown to produce results in other geographical locations; but — to date — it has not been possible to identify attempts to tailor make a comprehensive intervention in the Limpopo Province that could be taken to scale.

5.5.2 Further research

Further qualitative research should be undertaken to explore complex issues related to mental illness. Cornah (2006: 25) cautions that most quantitative research isolates "the impact of one activity upon another, which may not always capture the rich and complex interactions of other factors on any association found". Therefore, qualitative research design about the opinions of mental illness in Dikgale area will assist in exploring the complex interdependencies between stigma and mental illness.

CONCLUSION

This chapter has outlined the aim and contextual summary of the study; summary of the results; the limitations of the study and recommendations for future research. Overall, the findings of the study shows generalised negative opinions — particularly stigma towards people with mental illness — in the area; limited knowledge within the community about the risks factors associated with the development of mental illness and the difficulties in successfully integrating the mentally ill or formerly mentally ill people within Dikgopheng community.

The result of this research study provided satisfactory baseline insights for further research into mental illness in the area and clearly indicates that stigma is a challenge that influences the lived experience of people with a mental illness. Almost five years after Kakuma, Kleintjes, Lund, Drew, Green and Flisher (2010) highlighted the challenge of stigma in South Africa towards mental illnesses, it appears that there is much work to be done and it is therefore suggested that education, raising awareness and community mobilisation be critically interrogated and applied to this rural challenge.

LIST OF REFERENCES

Adhikari, SR. 2007. Mental Illness and Stigma. *Kathmandu University Medical Journal* 5(3): 293-294.

Afeke, B & Vester, P. 2004. Christianisation of ancestor veneration within African traditional religions: An evaluation. *In die Skriflig* 38(1): 47-61.

Ahn, W, Proctor, CC & Flanagan, EH. 2009. Mental health clinicians' beliefs about the biological, psychological, and environmental bases of mental disorders. *Cognitive Science* 33(2)**:** 147-182.

Alberts, M & Burger, S. 2002. *Dikgale DSS, South Africa*. In Population and Health in Developing Countries, Population, Health, and Survival in INDEPTH Sites, 1: 207–211. Canada: International Development Research Centre. From: http://www.indepth-network.org/dss_site_profiles/dikgale.pdf (accessed 20 August 2013).

Alqahtani, M & Salmon, P. 2008. Cultural influences in the aetiological beliefs of Saudi Arabian primary care patients about their symptoms: the association of religious and psychological beliefs. *Journal of Religious Health* (2008) 47:302–313.

Anan, K. 2001. *Poverty biggest enemy of health in developing world* (World Health Assembly held in Geneva). From: http://www.un.org/News/Press/docs/2001/sgsm7808.doc.htm (accessed 10 October 2013).

Angermeyer, MC & Matschinger, H. 2004. The stigma of mental illness: effects of labelling on public attitudes towards people with mental disorder. *Acta Psychiatrica Scandinavica* 108(4): 304–309.

Arain, M, Campbell, MJ, Cooper, CL & Lancaster, GA. 2010. What is a pilot or feasibility study? A review of current practice and editorial policy. *BMC Medical Research Methodology* 10 (Article 67): 1-7.

Aromaa, E. 2011. Attitudes towards people with mental disorders in a general population in General Population in Finland. MA (Social Sciences) dissertation. University of Jyväskylä, Jyväskylä.

Avanci, RC, Malaguti, SE & Pedrão, LJ. 2002. Authoritarianism and benevolence towards mental illness: study with beginning a nursing program. *Journal of São Paolo University of Nursing* 10(4):509-15.

Babbie, E & Mouton, J. 2003.*The practice of social research*. Cape Town: Oxford University.

Bagasra, A & Mackinem, M. 2014. An Exploratory Study of American MuslimConceptions of Mental Illness. Journal of Muslim Mental Health, 8(1): 57-76.

Baron, MA. 2008. Guidelines for Writing Research Proposals and Dissertations. Dakota: University of Dakota (Division of Educational Administration). From http://www.regent.edu/acad/schedu/pdfs/residency/su09/dissertation_guidelines.pdf (accessed 01 February 2013).

Bradshaw, D, Steyn, K, Levitt, N & Nojilana, B. [Sa]. *Non-Communicable Diseases-A race against time.* Medical Research Council (MRC) Policy Brief. MRC. *www.mrc.ac.za/policybriefs/raceagainst.pdf* (accessed 25 August 2014).

Barrenger, SL & Draine, J. 2013. “You Don't Get No Help”: The Role of Community Context in Effectiveness of Evidence-Based Treatments for People with Mental Illness Leaving Prison for High Risk Environments. *American Journal of Psychiatric Rehabilitation* 16(2): 154-178.

Baumann, SE 2007. *Primary health care psychiatry: a practical guide for Southern Africa;* 1st edition. Cape Town: Juta & Co Ltd.

Bearden, CE, Reus, VI & Freimer, NB. 2004. "Why genetic investigation of psychiatric disorders is so difficult". *Current Opinion in Genetics & Development* 14(3): 280–6.

Beaver, M. 2012. *Survey Data Cleaning Guidelines: (SPSS and Stata);* 1st edition. Michigan: Michigan State University.

Bec's Blog. 2007. Blog 1, *Mental Illness Stereotypes*. [online version] http://beccakara.blogspot.com (accessed 20 September 2012).

Bennett, C, Khangura, S, Brehaut, JC, Graham, ID, Moher, D, Potter, BK & Grimshaw, JM. 2011. Reporting Guidelines for Survey Research: An Analysis of Published Guidance and Reporting Practices. *PLoS Medicine* 8(8): 1-11.

Bian, H. 2011. *SPSS for Beginners*. Office for Faculty Excellence. From https://www.ecu.edu/cs-acad/ofe/upload/**SPSS** Beginners (accessed 20 May 2012).

Bodenhausen, GV, Todd, AR & Richeson, J. 2009. Controlling prejudice and stereotyping: Antecedents, mechanisms, and contexts. In T. Nelson (Ed.), *Handbook of prejudice, stereotyping, and discrimination* (pp. 111-135). New York: Psychology Press.

Bodibe, K. 2010. South Africa: The Link Between Mental Health and HIV. From http://allafrica.com/stories/201009090505.html (accessed 30 July 2014).

Bogopa, D. 2010. Health and Ancestors: The Case of South Africa and Beyond. *Indo-Pacific Journal of Phenomenologym* 10(1):1-7.

Bowling, A. 2005. Mode of questionnaire administration can have serious effects on data quality. *Journal of Public Health* 27(3): 281-291.

Bradshaw, D, Norman, R & Schneider, MA. 2007. Clarion call for action based on refined DALY estimates for South Africa (Editorial). *South African Medical Journal* 97:438-40.

Bravo, P, Edwards, A, Rollnick, S & Elwyn, G. 2010. Tough Decisions Faced by People Living with HIV: A Literature Review of Psychosocial Problems. *AIDS Reviews* 12(2), 76-88.

Brink, HI. 2000. *Fundamentals of research methodology for health professionals*, Juta, Cape Town.

Brown, S, Kim, M, Mitchell, C & Inskip, H. 2010. Twenty-five year mortality of a community cohort with schizophrenia. *British Journal of Psychiatry* 196(2):116-21.

Bruckner, TA, Scheffler, RM, Shen, G, Yoon, J, Chisholm, D, Morris, M, Fulton, BD, Dal Poz, RM & Saxena, S. 2011.The mental health workforce gap in low- and middle-income countries: a needs-based approach. *Bulletin of the World Health Organization* 89:184-194.

Bruwer, B, Sorsdahl, K, Harrison, D, Stein, D, Willaims, D & Seedat, S. 2011. Barriers to Mental Health Care and Predictors of Treatment Dropout in the South African Stress and Health Study. *Psychiatry Services* 62(7): 774-778.

Burns, H & Grove, SK. 2007. *Understanding nursing research: building an evidence-based practice;* 4th edition. Texas: Arlington.

Campbell, C. 2014. Community mobilisation in the 21st century: updating our theory of social change? *Journal of Health Psychology* 19(1): 46-59.

Campbell, C & Cornish, F. 2014. Reimagining community health psychology: maps, journeys and new terrains. *Journal of Health Psychology* 19(1): 3-15.

Chapman, DP, Perry, GS & Strine, TW. 2006. The vital link between chronic disease and depressive disorders. *Preventing Chronic Diseases* 3(2):33.

Chauran, A. 2013. *Have You Been Hexed? Recognizing and Breaking Curses*. Llewellyn Worldwide.

Chikomo, JG. 2011. *Knowledge and attitudes of the Kinondoni community towards mental illness.* MA (Nursing Studies) dissertation. Stellenbosch University: Stellenbosch

Clamp, GL, Gough, S & Land, L. 2004. *Resources for Nursing Research;* 4th edition. London, England: SAGE Publications, Ltd.

Clark, E & McCann, TV. 2004. Embodiment of severe and enduring mental illness: finding meaning in schizophrenia. *Issues in Mental Health Nursing* 25(8): 783-98.

Collins, RL, Wong, EC, Cerully, JL, Schultz, D & Eberhart, NK. 2012. A Literature Review to Guide Evaluation of California's Mental Health Prevention and Early Intervention Initiative. California: California Mental Health Services Authority.

Collinson, MA. 2010. Striving against adversity: the dynamics of migration, health and poverty in rural South Africa. *Global Health Action* 3, 5080.

Cone, JD & Foster, SL. 2006. *Dissertations and theses from start to finish: Psychology and related fields;* 2nd edition. Washington, DC: American Psychological Association.

Cook, I, Albert, M, Burger, S & Byass, P. 2008. All-cause mortality trends in Dikgale, rural South Africa, 1996-2003. *Public Health* 36(7): 753-760.

Cooper, DR & Schindler, PS. 2011. *Business research methods;* 11th edition. Columbus, OH: McGraw-Hill Irwin.

Cornah, D. 2006. *The impact of spirituality on mental health: a review of the literature* (A report written on behalf of the Mental Health Foundation). London: Mental Health Foundation.

Corrigan, PW, Edwards, AB, Qreen, A, Thwart, SL & Perm, DL. 2001. Prejudice, Social Distance, and Familiarity with Mental Illness. *Schizophrenia Bulletin* 27(2), 219-225.

Corrigan, P & Gelb, B. 2006. Three programs that use mass approaches to challenge the stigma of mental illness. *Psychiatric Services* 57:393-8.

Corrigan, PW, Mörris, SB, Michaels, PJ, Rafacz, JD & Rüsch, N. 2012. Challenging the Public Stigma of Mental Illness: AMeta-Analysis of Outcome Studies**.** *Psychiatric Services* 63(10): 963- 973.

Creswell, JW. (2003). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches;* 2nd edition. Thousand Oaks: Sage Publications.

Crisp, A, Gelder, M, Goddard, E & Meltzer, H. 2005 Stigmatization of people with mental illnesses: a follow-up study within the Changing Minds campaign of the Royal College of Psychiatrists. *World Psychiatry* 4(2): 106- 113.

Dahlberg, M, Waern, M & Runeson, B. 2008. Mental health literacy and attitudes in a Swedish community sample: investigating the role of personal experience of mental health care. *BMC Public Health* 8(8). dol:10.1 186/1471-2458-8-8.

Degenhardt, L, Whiteford, HA, Ferrari, AJ, Baxter, AJ, Charlson, FJ, Hall, WD, Freedman, G, Burstein, R, Johns, N, Engell, RE, Flaxman, A, Murray, CJL & Vos, T. 2013. Global burden of disease attributable to illicit drug use and dependence: findings from the Global Burden of Disease Study 2010. *The Lancet* 382(9):1564–74.

Dennis, R. 2009. Poverty, Human Development, and Health in Canada: Research, Practice, and Advocacy Dilemmas). *Canadian Journal of Nursing Research (CJNR)* 41(2): 7–18.

Department of Health, Education, and Welfare. 1979. *The Belmont Report: Ethical Principles and Guidelines for the Protection of Human Subjects of Research*. (4 day during the Smithsonian Institution's Belmont Conference Center.

Deribew, A & Tamirat, SY. 2005. How are mental health problems perceived by a community in Agaro town? *Ethiopian Journal of Health Development* 19(2): 153-159.

De Silva, MJ, McKenzie, K, Harpham, T & Huttly, SRA. 2005. Social capital and mental illness: a systematic review. *Journal of Epidemiological Community Health* 59: 619–627. doi: 10.1136/jech.2004.029678.

De Vos, AS, Strydom, H, Fouche, GB & Delport, CSL. 2005. *Research at grass roots for the social sciences and human service professions;* 4th edition. Hatfield: Van Schaik Publishers.

Diedrich, L. 2007. *Treatments: language, politics, and the culture of illness*. Minneapolis: University of Minnesota Press.

Dikgale Tribal Office. 2012. *2012 Residence Registry Note Book*. Dikgale area.

Downey, CA. 2008. *Lay theories of health: multidimensional conceptualizations of what comprises health in young and middle-aged adults.* PhD (Philosophy) dissertation. Michigan: University of Michigan.

Draker, RR & Latimer, E. 2012. Lessons learned in developing community mental health care in North America: Mental Health Policy Paper. *World Psychiatry* 11: 47-51.

Driscoll, DL & Brizee, A. 2012. *Ethical Considerations in Primary Research*. *Online Writing Lab.* From: https://owl.english.purdue.edu/owl/resource/559/02/ (accessed 09 October 2013).

Dunn, TJ, Baguley, T & Brunsden, V. 2013. From alpha to omega: A practical solution to the pervasive problem of internal consistency estimation. *British Journal of Psychology* (Aug 6). doi: 10.1111/bjop.12046

Eisinga, R, Te Grotenhuis, M & Pelzer, B. 2013. The reliability of a two-item scale: Pearson, Cronbach or Spearman-Brown? *International Journal of Public Health* 58(4): 637–642.

Elise, S. 2006. Resistance of seeking Treatment for mental illness- How others can help, *Global neuroscience initiative foundation.* From: http://brainblogger.com/2006/05/27/anti-stigmatization-resistance-to-seeking-treatment-for-mental-illness-how-others-can-help/ (accessed 23 October 2012).

El magd, MHA & Luma Al Zamil, A. 2013. Medical and Non-Medical Female Students' Attitudes toward Mental Illness and Psychiatric Patientsat Umm Al Qura University. *Life Science Journal* 10(2): 882-888.

Fleck, F. 2011. Mental health beyond the crises: Dr Mustafa Elmasri. *Bulletin of the World Health Organization* 89(5), 326–327.

Francis, C, Pirkis, J & Dunt, D. 2002. *Improving mental health literacy: a review of the literature*. Centre for Health Program Evaluation.

Galvan, J. 2006. *Writing literature reviews: a guide for students of the behavioural sciences;* 3rd edition. Glendale, CA: Pyrczak Publishing.

Ganguli, R. 2000. Mental illness and misconceptions: Understand the weak link between mental illness and violent behaviour. *PG News*, Saturday, March 18, 2000. From: http://old.postgazette.com/forum/20000318gang1.asppp (accessed 23 October 2012).

Gateshill, G, Kucharska-Pietura, K & Wattis, J. 2011. Attitudes towards mental disorders and emotional empathy in mental health and other healthcare professionals. *The Psychiatrist Online* 35:101-105. doi: 10.1192/pb.bp.110.029900.

George, D & Mallery, P. 2003. *SPSS for Windows step by step: A simple guide and reference. 11.0 update;* 4th edition. Boston: Allyn & Bacon.

Ghauri, PN & Grønhaug, K. 2010. *Research Methods in Business Studies;* 4th edition. London: FT Pearson.

Girma, E, Tesfaye, M, Froeschl, G, Möller-Leimkühler, AM, Müller, N & Dehning, S. 2013. Public Stigma against People with Mental Illness in the Gilgel

Girma, E & Tesfaye, M. 2011. Patterns of treatment seeking behaviour for mental illnesses in Southwest Ethiopia: a hospital based study. *BMC Psychiatry* 11(138): 1-7.

Gliem, JA & Gliem, RR. (2003). *Calculating, interpreting, and reporting Cronbach's Alpha Reliability Coefficient for Likert-Type Scales* (Presented at the Midwest Research-to-Practice Conference in Adult, Continuing, and Community Education, The Ohio State University, Columbus, OH, October 8-10, 2003.

Graham, CL. 2013. Mental Health & Stigma. *British Journal of Psychiatry*, 202 (55). From: http://www.psychologytoday.com/blog/why-we-worry/201308/mental-health-stigma (accessed 15 March 2014).

Granerud, A. 2008. *Social Integration for people with mental health problems* (Doctoral thesis at the Nordic School of Public Health). Göteborg, Sweden: Nordic School of Public Health.

Grimm, P. 2010. Field Work/Data Collection Process. *Wiley Online Library* (15 December 2010). doi: 10.1002/9781444316568.wiem02047.

Groenewald, T. 2004. A phenomenological research design illustrated. *International Journal of Qualitative Methods,* *3*(1): 1-26. From: http://www.ualberta.ca/~iiqm/backissues/3_1/pdf/groenewald.pdf (accessed 16 July 2012).

Gureje, O, Lasebikan, VO, Ephraim-Oluwanuga, O, Olley, BO & Kola, L. 2005. Community study of knowledge of and attitude to mental illness in Nigeria. *British Journal of Psychiatry* 186 (May), 436-441.

Gureje, O, Olley, BO, Ephraim-Oluwanuga, O & Kola, L. 2006. Do beliefs about causation influence attitudes to mental illness? *World Psychiatry* 5(2):104-107.

Hahn, A. 2002. The Effects of Information and Prior Contact on Attitudes Towards Mental Illness. *Undergraduate Research Journal*, *(Indiana University South Bend, Advanced Lab in Social Psychology)* 26(5): 28-35.

Hanlon, C, Luitel, NP, Kathree, T, Murhar, V, Shrivasta, S, Medhin, G, Ssebunnya, J, Fekadu, A, Shidhaye, R, Petersen, I, Jordans, A, Kigozi, F, Thornicroft, G, Patel, V, Tomlinson, M, Lund, C, Breuer, E, De Silva, M & Prince, M. (2014) Challenges and Opportunities for Implementing Integrated Mental Health Care: A District Level Situation Analysis from Five Low- and Middle-Income Countries. *PLoS ONE* 9(2). e88437. doi:10.1371/journal.pone.0088437.

Harkness, JA. 2010. *Survey translation and the question of quality*. Paper presented at the International Workshop on Comparative Survey Design and Implementation, Lausanne, Switzerland.

Hartog, K & Gow, KM. 2005. Religious attributions pertaining to the causes and cures of mental illness. *Mental Health, Religion & Culture* 8(4), 263-276.

Heffner, JL, Strawn, JR, DelBello, MP, Strakowski, SM & Anthenelli, RM. 2013. The Co-occurrence of Cigarette Smoking and Bipolar Disorder: Phenomenology and Treatment Considerations. *National Institute of Health,* 13(0): 439-453.

Heinrich, LM & Gullone, E. 2006. The clinical significance of loneliness: a literature review. *Clinical Psychology Review* 26(6): 695–718.

Heller, T & Greene, S. 2012. *Using SPSS for Data Analysis: Support Document for SPSS Output Tables.* UW-Stout Office of Planning, Assessment, Research & Quality (PARQ). From: http://www.uwstout.edu/parq/upload/spssinfo.pdf (accessed 21 May 2014).

Herman, AA, Stein, DJ, Seedat, S, Heeringa, SG, Moomal, H & Williams, DR. 2009. The South African Stress and Health (SASH) study: 12-month and lifetime prevalence of common mental disorders. *South African Medical Journal* 99 (5pt 2): 339-44.

Hertanto, A. 2013. *How to Write significance of the study* (The Second Day of the Workshop Series on 'Thesis and Dissertation Proposal Writing, March 23rd, 2013). From: http://arifhert.blogspot.com/2013/04/how-to-write-significance-of-study.html (accessed 10 October 2013).

Hickling, FW, Robertson HH & Paisley, V. 2011. Deinstitutionalization and attitudes toward mental illness in Jamaica: A qualitative study. *Public Health* 29(3).doi.org/10.1590/S1020-49892011000300004.

Hinkelman, L & Granello, DH. 2003. Biological sex, adherence to traditional gender roles, and attitudes toward persons with mental illness: An exploratory investigation. *Mental Health Counselling* 25(4): 259-270.

Hinshaw, SP & Andrea, S. 2008. Stigma as related to mental disorders *Annual Review of Clinical Psychology* 4(1): 367-393.

Hocking, B. 2003. Reducing mental illness stigma and discrimination: everybody's business. *Medical Journal of Australia* 9(Suppl. 178):47-48.

Hofstee, E. 2013. *Constructing a good dissertation: A practical guide to finishing a masters, MBA or PhD on schedule*. Sandton: EPE publishers.

Hox, JJ & Boije, HR. 2005. *Data Collection: Primary vs. Secondary*: *Encyclopaedia of Social Measurement (1)* Amsterdam: Elsevier.

Hugo, CJ, Boshoff, DEL, Traut, NZ & Stein, DJ. 2003. *Community attitudes towards and knowledge of mental illness in South Africa.* MRC Unit on Anxiety Disorders. University of Stellenbosch: South Africa.

Idemudia, S. 2004. *Mental Health and Psychotherapy 'through' the Eyes of Culture: Lessons for African Psychotherapy*. From: http://www.inst.at/trans/15Nr/02_7/idemudia15.htm (accessed 20 May 2014).

Igbinomwanhia, NG, James, BO & Omoaregba, JO. 2013. The attitudes of clergy in Benin City, Nigeria towards persons with mental illness. *African Journal of Psychiatry* (16):196-200 From: http://dx.doi.org/10.4314/ajpsy.v16i3.26 (accessed 12 May 2014).

Inge, P, Arvin, B, Victoria, C, Sithembile, M, Crick, L & Sharon, K. 2009. The Mental Health and Poverty Research Programme and Planning for district mental health services in South Africa: A situational analysis of a rural district site. *Health Policy & Planning* 24(2):140.

Insel, TR & Collins, FS. 2003. Psychiatry in the genomics. *American Journal of Psychiatry* 160(4): 616–20.

Insel, TR & Wang, PS. 2010. Rethinking mental illness. *Journal of the American Medical Association* 303(19): 1970–1971.

Ioannidis, JPA. 2007. Limitations are not Properly Acknowledged in the Scientific Literature. *Journal of Clinical Epidemiology* (60): 324-329.

Issa, BA, Parakoyi, DB, Yussuf, AD & Mussa, IO. 2008. Caregivers' knowledge of etiology of mental illness in a tertiary health institution in Nigeria. *Iranian Journal of Psychiatry and Behavioural Science* 1(2):43-49.

Jack, H, Wagner, RG., Petersen, I, Thom, R, Newton, CR, Stein, A, Kahn, K, Tollman, S & Hofman, KJ. 2014. Closing the mental health treatment gap in South Africa: a review of costs and cost-effectiveness. *Glob Health Action* 15(7): 23431 - http://dx.doi.org/10.3402/gha.v7.23431.

Jack, H, Wagner, RG, Petersen, I, Thom, R, Newton, CR & Stein, A. 2014. Closing the mental health treatment gap in South Africa: A review of costs and cost-effectiveness. *Glob Health Action* 7:23431.doi: 10.3402/gha.v7**.**23431.

Jackson, SL. 2009. *Research Methods and Statistics: A Critical Thinking Approach;* 3rd edition. Belmont CA: Wadsworth.

Janardhana, N & Naidu, DM. 2012. Inclusion of people with mental illness in Community Based Rehabilitation: need of the day. *International Journal of Psychosocial Rehabilitation* 16(1): 117-124.

Jonsson, G, Furin, J, Jeenah, F, Moosa, MY, Sivepersad, R, Kalafatis, F & Schoeman, J. 2011. Human Rights, Mental Illness, and HIV: The Luthando Neropsychiatric HIV Clinic in Soweto, South Africa. *Health & Human Rights* 13, E64-72.

Jorm, AF. 2012. Mental health literacy. Empowering the community to take action for better mental health. *American Psychology* (67):231–243.

Jorm, AF, Barney, LJ, Christensen, H, Highet, NJ, Kelly, CM & Kitchener, BA. 2006. Research on mental health literacy: what we know and what we still need to know. *Australian and New Zealand Journal of Psychiatry* (1) 4:3-5.

Kabir, M, Iliyasu, Z, Abubakar, IS & Aliyu, MH. 2004. Perception and beliefs about mental illness among adults in Karfi village, Northern Nigeria. *BMC International Health and Human Rights* (1) 4: 3.

Kakuma, R, Kleintjes, S, Lund, C, Drew, N, Green, A & Flisher, AJ. 2006. Mental Health Stigma: What is being done to raise awareness and reduce stigma in South Africa? *African Journal of Psychiatry* 13:116-124.

Kanjala, C, Alberts, M, Byass, P & Burger, S. 2010. Spatial and temporal clustering of mortality in Digkale HDSS in rural northern South Africa. *Global Health Action Supplement* 3: 59-63.doi: 10.3402/gha.v3i0.5236.

Kappeler, F. 2003. *Defining mental illness: Collectivist versus individualistic approaches*. From: http://www.sonoma.edu/programs/healthcrisis/pdf/defining_mental_illness_1.pdf (accessed 20 June 2012).

Kapungwe, A, Cooper, S, Mwanza, J, Mwape, L, Sikwese, A, Kakuma, R, Lund, C & Flisher, AJ. 2010. Mental illness--stigma and discrimination in Zambia. *African Journal of Psychiatry* 13:193-202.

Kendell, RE. 2002. The distinction between personality disorder and mental illness *The British Journal of Psychiatry* 180: 110-115.

Kennellies, P. 2014. *Three-quarters of those afflicted with mental disorder live in developing countries.* From: http://theagenda.tvo.org/story/mental-health-challenges-developing-countries (accessed 20 May 2014).

Kleintjes, S, Flisher, AJ, Fick, M, Railoun, A, Lund, C & Molteno, C. 2006. The prevalence of mental disorders among children, adolescents and adults in the Western Cape, South Africa. *South African Psychiatric Review (*9):157-60.

Kothari, CI. 2006. *Research Methodology: Methods and techniques;* 2nd edition. New Delhi: New Age International Publishers.

Krathwohl, DR. 2005. *How to Prepare a Dissertation Proposal: Suggestions for Students in Education and the Social and Behavioural Sciences*. Syracuse, New York: Syracuse University Press.

Krejcie, R & Morgan, DW. 1970. Determining sample size for research activities. *Educational and Psychological Measurement* 30: 607-610.

Krippendorff, K. 2004. *Content Analysis: An Introduction to Its Methodology;* 2nd edition. Thousand Oaks CA: Sage.

Kruss, G, Visser, M, Aphane, M & Haup, G. 2012. *Academic interaction with social partners: investigating the contribution of universities to economic and social development*. Cape Town: HSRC Press.

Kumar, R. 2013. Attitude to People with Mental Illness: A Mental Health Literacy Survey from Punjab State. *International Journal of Health Sciences & Research*, 3 (12): 135-145.

Kuruvilla, A & Jacob, KS. 2007. Poverty, social stress and mental health. *India Journal of Medicine Research* 126: 273-278.

Lauber, C, Nordt, C, Falcato, L & Rossler, W. 2004. Factors influencing social distance towards people with mental illness. *Community Mental Health Journal* 40(3):265-274.

Lauber, C, Nordt, C, Falcato, L & Rössler, W. 2003. Do people recognise mental illness? Factors influencing mental health literacy. *European Archives of Psychiatry and Clinical Neuroscience,* 253:248-251.

Lim, T, Zelaya, C, Latkin, C, Quan, V.M, Frangakis, C, Ha, TV, Le Minh, N & Go, V. 2013. Individual-level socioeconomic status and community-level inequality as determinants of stigma towards persons living with HIV who inject drugs in Thai

Linda, LA . 2009. *Sociology Writer's Guide.* Boston Montreal: Allyn and Bacon.

Lingeswaran, A. 2010. Psychiatric Curriculum and its Impact on the Attitude of Indian Undergraduate Medical Students and Interns. *Indian Journal of Psychological Medicine* 32(2): 119–127.

Lingeswaren, A. 2011. Repetitive Transcranial Magnetic Stimulation in the Treatment of depression: A Randomized, Double-blind, Placebo-controlled Trial. *Indian Journal of Psychological Medicine* 33(1):35–44.

Link, B, Yang, L, Phelan, J & Collins, P. 2004. Measuring mental illness stigma. *Schizophrenia Bulletin* 30(3): 511-541.

Lipczynska, S. 2005. Mental health: mental health research. *Journal of Mental Health*, 14(6):649–651.

Lo, B. 2009. *Ethical Issues in Clinical Research: A Practical Guide*. Lippincott: Williams & Wilkins.

Lowinson, JH, Ruiz, P, Millman, R & Langrod, J. 2005. Substance Abuse: A Comprehensive Textbook. Mishawaka: Lippincott Williams & Wilkins.

Lund, C, De Silva, M, Plagerson, S, Cooper, S, Chisholm, D & Das, J. 2011. Poverty and mental disorders: breaking the cycle in low-income and middle-income countries. *Lancet* 9801(378):1502-1514.

Luty, J, Umoh, O, Sessay, M & Sarkhel, A. 2007. Effectiveness of changing minds campaign factsheets in reducing stigmatised attitudes towards mental illness. *Psychiatric Bulletin* 31(10): 377-381.

Lowinson, JH, Ruiz, P, Millman, RB & Langrod, JG. (ed). 2005. Sunstance Abuse: A Comprehensive Textbook 4th edition. Philadelphia: Lippincott Williams & Wilkins.

Madsen, SM, Mirza, MR, Holm, KL, Kampmann, K & Riss, P. 2002. Attitude towards Clinical Research amongst participants and non-participants. *Journal of Internal Medicine* 25(2): 156-168.

Makua, ML. 2006. *The Role Played by families in support of their mentally ill relatives in a rural community in Limpopo Province***.** MA (Social Science studies) dissertation. University of South Africa, Pretoria.

Maldonado, M. 2014. How Stress Affects Mental Health. *Psych Central*. From: http://psychcentral.com/blog/archives/2014/02/25/how-stress-affects-mental-health/ (accessed 8 August 2014).

Malema, RN. 2000. *Risk factors associated with teenage pregnancy at Ga-Dikgale Village in the Northern Province of South Africa***.** MA (Health studies) dissertation. University of Pretoria, Pretoria.

Mamabolo, R & Aphane, M. 2011. *Report of Ga-Dikgale Need Assessment (VLIR Project 2*- Development Facilitation and Training Institute (DevFTI). University of Limpopo.

Mamo, DC. 2007. *Addressing patient needs: the role of mental health literacy*. doi:10.1176/appi.ajp.2007.07091513r.

Mayosi, B.M, Lawn, JE, van Niekerk, A, Bradshaw, D, Abdool Karim, SS & Coovadia, H. M. 2012. Health in South Africa: changes and challenges since 2009. *The Lancet,* 380: 2029-2043. 10.1016/s0140-6736(12)61814-5.

Mbanga, I, Niehaus, DJH & Mzamo, NC. 2002. Attitudes towards and beliefs about schizophrenia in Xhosa families with affected pro-bands. *Curationis* (25):69–74.

McCabe, M. 2004. *Conflicts of Interest, Privacy/Confidentiality, and Tissue Repositories, Protections, Policies, and Practical Strategies*. *Boston.* From http://ccnmtl.columbia.edu/projects/cire/pac/foundation/#sup1ref(accessed 16 July 2012).

McCraty, RM. 2006. *Emotional Stress, Positive Emotions, and Psychophysiological Coherence. In Stress in Health and Disease*. California. From: http://www.alternativeworldwidehealth.com/files/Heartmath_Stress_chapter.pdf (accessed 01 August 2014).

McDougall, G.J & Holston, EC. 2003. Black and White men at risk for memory impairment. *Nursing Research* 52(1):42-46.

McNabb, DE. 2013. Research Methods in Public Administration and Non-profits Management: Quantitative and Qualitative Approaches; 3rd edition. New York: M.E Sharpe Inc.

MediaWiki. 2007. *Prevalence of mental illness*. From: www.mediawiki.org. (accessed 23 August 2012).

Mehta, N, Kassam, A, Leese, M, Butler, G & Thornicroft, G. 2009. Public attitudes towards people with mental illness in England and Scotland. *British Journal of Psychiatry* 194(1): 278-284.

Metthews, B & Ross, L. 2010. Research Methods: A practical guide for the social science. Harlow: Longman.

Mokgokong, MJ. 2010. *The effects of Gender Inequality on Rural Household Livelihoods Diversification: A Case Study of Sebayeng Village, Polokwane, Limpopo Province*. MA (Administration studies) dissertation. University of Limpopo, Turfloop.

Montoya, A, Llopis, N & Gilaberte, I. 2011. Validation of the Translation of an Instrument to Measure Reliability of Written Information on Treatment Choices: A Study on Attention Deficit/Hyperactivity Disorder (ADHD). *Education for Health* 24(3):1-9.

Moore, HL & Todd, S. 2001. *Magical Interpretations, Material Realities: Modernity, Witchcraft and the Occult in Postcolonial Africa.* London: Routledge.

Morin, KH. 2013. Value of a Pilot Study. *Journal of Nursing Education* 53(10): 547-548.

Mouton, J. 2001. *How to succeed in your master's and doctoral studies:* A South African guide and resource book. Pretoria: Van Schaik Publishers.

Mufamadi, J & Sodi, T. 2010. Notions of Mental Illness by Vhavenda Traditional Healers in Limpopo Province, South Africa. *INDILINGA – African Journal of Indigenous Knowledge Systems* 9(2): 253-264.

Murali, V & Oyebode, F. 2004. Poverty, social inequality and mental health. *Advances in Psychiatric Treatment* (10): 216-224.

Myer, L, Stein, DJ, Jackson, PB, Herman, AA, Seedat, S & Williams, DR. 2009. Impact of common mental disorder during childhood and adolescence secondary school completion. *South African Medical Journal* (5) 99. From: http://scholar.sun.ac.za/handle/10019.1/7042 (accessed 15 March 2012).

Ng, P & Chan, K. 2000. Sex Differences in Opinion Towards Mental Illness Secondary School Students in Hong Kong. *International Journal of Social Psychiatry* 46(2):79.

Nkosi, BM. 2012. Understanding and Exploring Illness and Disease in South Africa: A Medical Anthropology Context. *International Journal of Humanities and Social Science* 24(2): 84-93.

Nordt, C, Rossler, W & Lauber, C. 2006. Attitudes of mental health professionals toward people with schizophrenia and major depression. *Schizophrenia Bulletin* 32(4):709-714.

Norman, RMG, Sorrentino, RM, Windell, D & Manchanda, R. 2008. The role of perceived norms in the stigmatization of mental illness. *Social Psychiatry Epidemiology* (43):851-859.

Nugent, R. 2008. Chronic Diseases in Developing Countries. *New York Academy of Sciences* (1136):70–79.

Nuzzo, R. 2014. Scientific method: Statistical errors. *Nature* (7487)506:150.

Okasha, A. 2002. Mental health in Africa: the role of the WPA. *World Psychiatry* 1(1):32–35.

Okello, E & Ekblad, S. 2006. Lay Concepts of depression among the Baganda of Uganda: a pilot study. *Transcult* 43(2):287–313.

Opare-Henaku, A. 2013. *Notions of spirits as agents of mental illness among the Akan of Ghana: A cultural-psychological exploration*. MA (Psychology studies) dissertation. Commonwealth University: Virginia.

Parboosing, R, Bao, Y, Shen, L, Schaefer, CA & Brown, AS. 2013. Gestational Influenza and Bipolar Disorder in Adult Offspring. *JAMA Psychiatry* 70(1): 677-685. doi:10.1001/jamapsychiatry.2013.896.

Parker, M. 2010.*The layperson's understands of mental illness: The folk psychiatry model* Honours (Psychology studies) dissertation. University of Cape Town: Cape Town.

Patel, V & Kleinman, A. 2003. Poverty and common mental disorders in developing countries. *Bulletin of the World Health Organisation* 81(8): 609-615.

Peerbhai, R. 2006. *Job Satisfaction at IT SMES in Durban.* MA (Business administration studies) dissertation. Durban Institute of Technology: Durban.

Pelzang, R. 2010. Attitude of Nurses towards Mental Illness in Bhutan. *Journal of Bhutan Studies* 22(11):11-118.

Petersen, I & Lund, C. 2011. Mental health service delivery in South Africa from 2000 to 2010: One step forward, one step back. *South African Medical Journal: South African Medical Journal* 101: 751-757.

Pettigrew, TF & Tropp, LR. 2006. A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology* (90):751-83.

Phillips, R.E, Pargament, KI, Lynn, QK & Crossley, CD. 2004. Self-directing religious coping: A deistic God, abandoning God, or no God at all? *Journal for the Scientific Study of Religion* 43(3):409–418.

Pilgrim, D & Rogers, A. 2005. *A sociology of mental health and illness*. Milton Keynes: Open University Press.

Pill, R, Prior, L & Wood, F. 2001. Lay attitudes to professional consultations for common mental disorder: a sociological perspective. *British Medical Bulletin* 27(1): 207-219.

Pirkola S, Isometsä E, Suvisaari, J, Aro, H, Joukamaa, M & Poikolainen, K. 2005. Childhood adversities as risk factors for adult mental disorders: results from the Health 2000 study. *Social Psychiatry and Psychiatric Epidemiology* 40(10): 769–77.

Polokwane Municipality. 2014. *Integrated Development Plan.* From: http://www.polokwane.gov.za/nico/FINAL%20IDP29May2012vic.pdf (accessed 08 August 2014).

Prasadarao, PSDV. 2014. *Understanding International Perspectives: Implications for U.S. Health and Wellness.*

Prior, G. 2011. *Attitudes to Mental Illness 2010*. From: http://www.geog.qmul.ac.uk/pedec/documents/EDF_Dossier_250711.pdf (accessed 18 August 2012).

Rajasekar, S, Philominathan. P & Chinnathambi, V. 2014. *Research Methodology.* From: http://arxiv.org/pdf/physics/0601009.pdf (accessed 18 August 2012).

Ran, MS, Xiang, MZ, Simpson, P & Chan, LW. 2005. *Family-Based Mental Health Care in Rural China*. Hong Kong: Hong Kong University Press.

Raosoft inc. Seattle. Raosoft online sample size calculator. From: http://www.raosoft.com/samplesize.html (accessed 11 November 2012).

Republic of South Africa. 1996. *Constitution of the Republic of South Africa 108 of 1996,* (Government Gazette of 18 December 1996, no 17678), Government Printer: Pretoria.

Read, J, Haslam, N, Sayce, L & Davies, E. 2006. Prejudice and schizophrenia: a review of the 'mental illness is an illness like any other approach. *Acta Psychiatrica Scandinavica* (114):303-318.

Reichert, CP. 2012. Mental Illness Stigma: An Examination of the Effects of Label and Gender on College Students Perceptions of Depression and Alcohol Abuse. Masters of Science (Experimental Psychology) dissertation. Seton Hall University: Seton.

Research Development and Administration. 2014. Manual/Guidelines for Post-Graduate students. University of Limpopo. From: http://www.ul.ac.za/research/application/downloads/POSTGRADUATE%20MANUAL%202014.pdf (accessed 06 January 2014).

Rochat, TJ, Richter, LM, Doll, HA, Buthelezi, N, Tomkins, A & Stein, A. 2006. Depression among pregnant rural South African women undergoing HIV testing. *Journal of the American Medical Association* 295(12):1376–1378.

Rusch, N, Todd, AR, Bodenhausen, GV & Corrigan, PW. 2010. Do people with mental illness deserve what they get? Links between meritocratic worldviews and implicit versus explicit stigma. *European Archives of Psychiatry and Clinical Neuroscience* 260, 617-625.

Saban, A, Flisher, AJ, Grimsrud, A, Morojele, N, London, L, Williams, DR, Stein, DJ 2014. The association between substance use and common mental disorders in young adults: results from the South African Stress and Health (SASH) Survey. *Pan African Medical Journal* 17(Supp 1):11.

Salve, H, Goswami, K, Sagar, R, Nongkynrih, B & Screenivas, V. 2013. Perception and Attitude towards Mental Illness in an Urban Community in South Delhi – A Community Based Study. *Indian Journal of Psychological Medicine* 35(2):154–158.

Saunders, P, Naidoo, Y & Griffiths, M. 2008. Towards new indicators of disadvantage: deprivation and social exclusion in Australia. *Australian Journal of Social Issues* 43(2):175.

Savrun, BM, Arikan, K, Uysal, O, Cetin, Gunay, B, Poyraz, BC, Aksoy, C & Bayar, MR. 2007. Gender Effect on Attitudes Towards the Mentally Ill: A Survey of Turkish University Students. *Israel Journal of Psychiatry and Related Science* 44(1): 57–61.

Scheuren, F. 2004. What is a Survey. *American Statistical Association.* From: http://www.amstat.org/sections/srms/pamphlet.pdf?q=error10 (accessed 09 October 2012).

Schutt, R. 2006. *Investigating the Social World*. New York: Sage Publications.

Shields, PM & Rangarajan, N. 2013. *A Playbook for Research Methods: Integrating Conceptual Framework and Project Management*. Stillwater OK: New Forums Press.

Silton, NR, Flannelly, KJ, Galek, K & Ellison, CG. 2013. "Beliefs about God and Mental Health among American Adults." *Journal of Religion and Health* 18(2):263–279.

Skre, I, Friborg, O, Breivik, C, Johnsen, LI, Arnesen, Y & Wang, CEA. 2013. A school intervention for mental health literacy in adolescents: effects of a non-randomized cluster controlled trial. *BMC Public Health* (13):2-15.

Smith, AL. 2008. An Investigation of Attitudes Towards Adults with Mental Illness Among Mental Health Professionals in training, Non Mental Health Professionals in training, Mental Health Professions and Non Mental Health Professionals. PhD (Philosophy studies) dissertation. The University of North Carolina:Greensboro

Smith, AL & Cashwell, CS. 2011**.** Social distance and mental illness: Attitudes among mental health and non-mental health professionals and trainees. *The Professional Counselor: Research and Practice* 1(1):13-20*.*

Sodi, T, Mudhovozi, P, Mashamba, T, Radzilani-Makatu, M, Takalani, J & Mabunda, J. 2011. *International Journal of Health Promotion and Education* 49(3):101-110.

Sorsdahl, K. (2009) *Traditional Healers and Mental Health Care in the South African Context.* University of Cape Town.

Sorsdahl, K, Stein, DJ, Grimsrud, A, Seedat, S, Flisher, AJ, Williams, DR & Myer, L. 2009. Traditional healers in the treatment of common mental disorders in South Africa. *Journal of Nervous Mental and Mental Disease* 197 (6):434-441.

Sorsdahl, K, Stein, DJ & Lund, C. 2012. Mental Health Services in South Africa: Scaling up and future directions*. African Journal of Psychiatry* 93(15):168-171.

Spataro, J, Mullen, PE, Burgess, PM, Wells, DL & Moss, SA. May 2004. Impact of child sexual abuse on mental health: prospective study in males and females. *British Journal of Psychiatry* 184(5): 416–21.

Stanford, MS. 2007. Demon or disorder: A survey of attitudes toward mental illness in the Christian church. *Mental Health, Religion & Culture* 10(5): 445-449.

Stats SA. 2012. *Census 2011 Municipal report – Limpopo/ Statistics South Africa*.

Steel, C, Marnane, I, Iranpour, C, Chey, T, Jackson, WJ, Patel, V & Silove, D. 2014. The global prevalence of common mental disorders: a systematic review and meta-analysis 1980–2013. *International Journal of Epidemiology* 43(2): 476-493.

Stein, DJ. 2014. "What is a mental disorder? A perspective from cognitive-affective science". *Canadian journal of psychiatry* 58(12): 656–62.

Stein, DJ, Seedat, S, Herman, A, Moomal, H, Heeringa, SG, Kessler. RC & Williams, DR. 2008. Lifetime prevalence of psychiatric disorders in South Africa. *The British Journal of Psychiatry* (192):112–117.

Stuart, H & Arboleda-Flórez, J. 2001. Community attitudes towards people with schizophrenia. *Canadian Journal of Psychiatry* (46):245–252.

Stuber, JP, Rocha, A, Christian, A & Link, BG. 2014. Concepts of mental illness: attitudes on mental health professionals and the general public. *Psychiatric Services* (4):65.doi: 10.1176/appi.ps.201300136.

Taylor, D & Procter, M. 2008. Writing in the Health Sciences: a comprehensive guide. *Writing in the Health Sciences* 1:(1). From: http://hswriting.library.utoronto.ca/index.php/hswriting/article/view/3092/1238. (accessed 10 March 2014).

Teferra, S & Shibre, T. 2012. Perceived cause of severe mental disturbance and preferred interventions by the Borana semi-nomadic population in South Ethiopia: a qualitative study. *BMC Psychiatry* 78(12): 1-9.

Teicher, MH, Samson, JA, Polcari, A & McGreenery, CE. 2006. Sticks, stones, and hurtful words: relative effects of various forms of childhood maltreatment. *American Journal of Psychiatry* 163(16): 993–1000.

Terwee, CB, Bot, SDM, de Boer, MR, van der Windt, D, AWM, Knol, DL, Dekker, J, Bouter, LM & de Vet, HCW. 2007. Quality criteria were proposed for measurement properties of health status questionnaires. *Journal of Clinical Epidemiology* 60 (2007) 34-42.

The Local Government Handbook: A Complete Guide to Municipalities in South Africa. 2012. From: http://www.localgovernment.co.za/locals/view/121/polokwane-local-municipality (accessed 11 October 2012).

The National Commission for the protection of human subject of biomedical and behaviour research. 1979. *The Belmond Report: Ethics principles and Guidelines for the protection of human subject in research.* Volume II, DHEW Publication No. (OS) 78-0014.

The World Health Report. 2001. Mental Health: New Understanding, New Hope. From: http://www.who.int/whr/2001/en/index.html. (07 May 2012)

Thornicroft, G. 2006. *Discrimination against People with Mental Illness*. Oxford: Oxford University Press.

Todor, I. 2013. Opinions about Mental Illness. *Procedia - Social and Behavioural Sciences* (82):209 – 214.

Tromp, B, Dolley, C, Laganparsad, M & Goveneder, S. 2014. *One in three South Africans suffer from mental illness - most won't get any hel*p. *Sunday Time*s, 06 July 2014. From: http://www.timeslive.co.za/local/2014/07/07/one-in-three-south-africans-suffer-from-mental-illness---most-won-t-get-any-help (accessed 07 July 2014).

Tuovinen, S, Räikkönen, K, Pesonen, A-K, Lahti, M, Heinonen, K, Wahlbeck, K, Kajantie, E, Osmond, C, Barker, DJP & Eriksson, JG. 2012. Hypertensive disorders in pregnancy and risk of severe mental disorders in the offspring in adulthood: The Helsinki Birth Cohort Study. *Journal of Psychiatric Research* 79(15):1578-1582.

Ukpong, DI & Abasiubon, F. 2010. Stigmatising attitudes towards the mentally ill: A survey in a Nigerian university teaching hospital. *South African Journal of Psychiatry* 16(2):51-58.

Ventevogel, P, Jordans, M, Reis, R & de Jong, J. 2013. Madness or sadness? Local concepts of mental illness in four conflict-affected African communities. *Conflict and Health* 7(3):2 -16.

Walonick, DS. 2010. *A selection from Survival Statistics*. Bloomington: StatPac Inc.

Weiss, MG, Ramakrishna, J & Somma, D. 2006. Health related stigma: rethinking concepts and interventions. *Psychology Health Medicine* 11(3):277-287.

Werner, P. 2005. Lay perceptions about mental health: where is age and where is Alzheimer's disease? *International Psychogeriatric* 7(3):371-382.

West, K, Hewstone, M & Holmes, EM. 2010. Rethinking 'Mental Health Stigma. *European Journal of Public Health* 20(2): 131-132.

Wirth, JH & Bodenhausen, GV. 2009. The Role of Gender in Mental-Illness Stigma A National Experiment. *Psychological Science* 20(2)*:*169-173.

WHO. 2008. *WHO Global Burden of Disease 2004 update*. World Health Organization: Geneva.

WHO. 2010. *Mental health and development: targeting people with mental health conditions as a vulnerable group.* Geneva: World Health Organization

WHO. 2011. *Mental health atlas 2011*: Geneva, World Health Organization.

WHO 2011. *Mental Health Gap Action Programme Scaling up care for mental, neurological and substance use disorders*. Geneva: World Health Organization.

WHO. 2014. *Consolidated Guidelines on HIV Prevention, Diagnosis, Treatment and Care for Key Populations.* Geneva.

Zahir, FR & Brown, CJ. 2011. Epigenetic Impacts on Neurodevelopment: Pathophysiological Mechanisms and Genetic Modes of Action. *Paediatric Research.* 69, 92: R–100R.

Zartaloudi, A & Madianos, M. 2010. Stigma related to help-seeking from a mental health professional. *Health Science Journal* 4(2): 77-83.

APPENDICES

Appendix A: letter requesting consent of participation

Dear Participant

I am a student in Masters of Development (MDev) at the Turfloop Graduate School of Leadership (TGSL), University of Limpopo (Turfloop Campus). You are invited to participate in my study titled: ***Lay opinion of Dikgopheng community on mental illness in Polokwane Municipality.***

The purpose of the study find out the opinion of the lay people on mental illness in Dikgopheng community in Polokwane Local Municipality in the Limpopo Province You will be required to participate by completing a questionnaire.

Please note:

- Permission has been obtained from you're the university of Limpopo and Dikgale Tribal Authority to conduct this study;
- Your participation in the study is voluntary and you can refuse to participate or stop at any time without stating any reason;
- You will not be remunerated in any way for participating in this study;
- For the purpose of confidentiality and anonymity you will not be required to write on the questionnaire;
- The completion of the questionnaire may take about 20 minutes;
- You are allowed to ask question pertaining to the study;
- Your completing the questionnaire implies that informed consent has been obtained from you.
-

After the study a copy of the report will be made available to the Dikgale Tribal. If you need further information regarding the study please Mr Marota Aphane.

Thank you

Mr Aphane M.A

Appendix B: letter requesting permission to conduct a study in your area

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To: Dikgale Tribal Authority
From: Mr Aphane, M.A.
Date: 29th July 2012

REQUEST FOR PERMISSION TO CONDUCT A STUDY IN DIKGOPHENG COMMUNITY

I am a student in Masters of Development (MDev) at the Turfloop Graduate School of Leadership (TGSL), University of Limpopo (Turfloop Campus). I would like to request for permission to conduct a study in Dikgopheng community entitled: ***Lay opinions and knowldge of Dikgopheng community about mental illness in Polokwane Municipality.***

The purpose of the study is to find out about the opinions of lay people on mental illness in Dikgopheng community in Polokwane Local Municipality in the Limpopo Province

Kindly note:

- The ethical clearance to conduct this study was given by the School Research Ethics of Turfloop Graduate School of Leadership;
- The study will only involve consented adults members of the Dikgopheng community;
- After the study a copy of the report will be made available to the Dikgale Tribal Council.

If you need further information regarding the study please Mr Marota Aphane.

Yours sincerely,

_____

MR M.A. APHANE

Mobile No.: _____

Appendix C: research questionnaire

The research questionnaire consisted of 3 sections:

Table 5.1: Questionnaire focus areas.

Section	Focus area
A	Biographical information.
B	KRF-SDQ: knowledge of risk factors associated with the development of mental illness (self- designed-questionnaire).
C	OMMIC: Opinions about Mental Illness in a Chinese Community.

Source: author's contribution.

The contents of the different sections are provided below.

SECTION A: BIOGRAPHICAL INFORMATION

Instructions: Please complete the following questions as honestly as you can. Write in your answer in the space provided and tick **[X]** in the appropriate box.

Age (in numbers)

Gender	1.	Male
	2.	Female
Religion	1.	Christianity
	2.	Indigenous African religion
	3.	Combination of both
Highest level of education	1.	No formal schooling
	2.	Primary school completed
	3.	High school completed
	4.	Tertiary education
Employment type	1.	Not employed
	2.	Employed
	3.	Self-employed
	4.	Student
	5.	Student
Your house-hold income per month	1.	Less than R1 000
	2.	R1000 – R5000
	3.	R 5001 – R 10000
	4.	Above R10001

SECTION B: KNOWLEDGE OF RISK FACTORS FOR THE ONSET OF MENTAL ILLNESS (KRF-SDQ)

Instructions: Please indicate if you ***[1] Agree (A),*** [***2] Do not Agree (DNA), [3] Not Sure (NS)*** with the following statements by marking **[X]** in the appropriate box.

STATEMENTS	**A**	**DNA**	**NS**
Biological and psychosocial			
Stressful circumstances in his/her life	1	2	3
A genetic or inherited problem	1	2	3
Poverty	1	2	3
Diseases	1	2	3
Substance and drug abuse	1	2	3
Supernatural & Cultural			
God's punishment	1	2	3
Failure to appease the ancestors	1	2	3
Witchcraft	1	2	3
Curse	1	2	3

Source: Dissertation author's contribution

SECTION C: ADAPTED OPINIONS ABOUT MENTAL ILLNESS IN A CHINESE COMMUNITY

Instructions: Please indicate if you **[1] Strongly Agree, [2] Agree, [3] Neither Agree nor Disagree, [4] Disagree and [5] Strongly Disagree** with the following statements by marking **[X]** in the appropriate box.

STATEMENTS	SA	A	N	D	SD
1. People with mental illness have unpredictable behaviour.	1	2	3	4	5
2. If people become mentally ill once, they will easily become ill again.	1	2	3	4	5
3. If a mental health facility is set up in my street or community, I will move out of the community.	1	2	3	4	5
4. Even after a person with mental illness is treated, I would still be afraid to be around them.	1	2	3	4	5
5. Mental patients and other patients should not be treated in the same institution.	1	2	3	4	5
6. When a spouse is mentally ill, the law should allow for the other spouse to file for divorce.	1	2	3	4	5
7. People with mental illness tend to be violent.	1	2	3	4	5
8. People with mental illness are dangerous.	1	2	3	4	5
9. People with mental illness should be feared.	1	2	3	4	5
10. It is easy to identify those who have a mental illness.	1	2	3	4	5
11. You can easily tell who has a mental illness by the characteristics of their behaviour.	1	2	3	4	5
12. People with mental illness are generally less intelligent than most people.	1	2	3	4	5
13. All people with mental illness are unpredictable.	1	2	3	4	5
14. It is not appropriate for a person with mental illness to get married.	1	2	3	4	5
15. Those who have a mental illness cannot fully recover.	1	2	3	4	5
16. Those who are mental ill should not have children.	1	2	3	4	5
17. There is no future for people with mental illness.	1	2	3	4	5

18. People with mental illness are reliable to continue working regardless of their condition.	1	2	3	4	5
19. The care and support of family and friends can help people with mental illness to get better.	1	2	3	4	5
20. Business and the community (including government) should offer jobs to people with mental illness.	1	2	3	4	5
21 After a person is treated for mental illness they can return to their former job position.	1	2	3	4	5
22. The best way to help those with mental illness is to let them stay in the community and live a normal life. .	1	2	3	4	5
23. After people with mental illness have had treatment, we still should not make friends with them.	1	2	3	4	5
24. After people with mental illness have had treatment, they are still more dangerous than normal people.	1	2	3	4	5
25. It is possible for everyone to have mental illness.	1	2	3	4	5
26. We should not laugh at mentally ill people even though they act strangely.	1	2	3	4	5
27. It is harder for those who have a mental illness to receive the same pay for the same job.	1	2	3	4	5
28. After treatment it will be difficult for the mentally ill to return to the community.	1	2	3	4	5
29. People are prejudiced towards those with mental illness.	1	2	3	4	5
30. It is hard to have good friends if you have a mental illness.	1	2	3	4	5
31. It is unusual for people who are successful at work to have mental illness.	1	2	3	4	5
32. It is shameful to have mental illness.	1	2	3	4	5
33. Mental illness is punishment for doing some bad things.	1	2	3	4	5
34. I suggest that those who have mental illness do not tell anyone about their illness.	1	2	3	4	5

Source: Adapted from Opinions about Mental Illness in the Chinese Community (OMICC) by Ng *et al.,* 2000).

THANK YOU FOR TAKING PART IN THE STUDY