

**Exploring attitudes, aetiology and help-seeking behaviours for  
Mental illness in the community of Diepsloot**



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## **Abstract**

Mental illness is a serious nation-wide health concern, with many individuals suffering from mental disorders. This study explored the attitudes of Diepsloot community members towards mental illness, their beliefs about the aetiology of mental illness and their help-seeking behaviours. Further the study explored whether attitudes and aetiology beliefs predict help-seeking behaviours in Diepsloot community members. Furthermore, issues of stigma and poverty were explored as factors contributing to understanding of and help-seeking behaviours for mental illnesses. A convenience sample of 154 community members in Diepsloot completed a questionnaire consisting of a demographics section, the Living Standards Measure, the Public Perceptions of Mental Illness questionnaire and two open ended questions asking about the factors that contribute to mental illness and the kind of advice the participants would give to a person who has mental illness. Quantitative data were analysed using descriptive statistics and multiple regression analyses. The open-ended questions were analysed qualitatively using thematic analysis.

The results indicated that the participants had more neutral attitudes towards mental illness overall but an item-by-item analysis of the attitudes scale indicated negative attitudes. The participants perceived mental illness to be caused by biological and stress related causes but did identify other causes in their responses to the open ended question. In particular, psychological factors, substance use, social components/aspects in their community, financial challenges, biological influences and cultural influences were all identified. Among the participants, there was an endorsement of help-seeking behaviours that were aligned with western medicine, hospitalization, consulting with family and friends, and religion in both the quantitative and qualitative analyses. Seeking help from traditional healers was less dominant in the responses to the open ended question. The multiple regression results, with regard to predicting attitudes towards mental illness, suggested that the participants had positive attitudes towards mental illness if their level of knowledge was higher. A variety of predictors were revealed regarding the various help-seeking behaviours. An overlap was observed among the stress aetiology and the cultural beliefs aetiology as predictors. These results are discussed within the broader context of access to mental healthcare in South Africa as well as the need for more collaborative interventions.

Keywords: attitudes, collaborative care, help-seeking, mental health, mental illness, traditional healing

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### **Declaration**

I, Sandile Mkhize, declare that this research report is my own, unaided work. It is submitted for the degree of Masters of Arts by Research Dissertation in the department of psychology at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any other degree or examination at this or any other university.

Signature: \_\_\_\_\_

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## **Chapter 1: Introduction**

Among poor communities, mental illness is very common, since unemployment and unfavourable social conditions can lead to a wide range of negative emotions and psychological distress (Patel & Kleinman, 2003). It is therefore quite essential to provide an understanding that is contextual. The study will provide a different lens of viewing mental illness, by moving away from just a medical perspective towards a more holistic perspective that take into consideration of different environments and the implications therein.

It is also quite vital to provide information on broad trends about a certain phenomenon in certain community contexts. Specifically, this study will provide information about the broad trends of mental illness in low socio-economic communities to understand the impact of mental illness in this specific context. These broad trends can then be useful in applying them to other community contexts, of similar backgrounds to understand various ways of managing mental illness.

The literature has shown that many African individuals would rather consult traditional healers than to seek psychological help, this is a result of being unfamiliar with western practices and psychological concepts (Nkosi, 2012). However, psychological interventions cannot be completely ruled out, as they are of great significance and helpful in various ways.

In conclusion, the study will provide a platform whereby Western ideas and African ideas can be appropriately integrated to provide effective conceptualisations and treatment of mental illness applicable to all South Africans. Moreover, the study will provide space whereby Western and African knowledge can co-evolve to re-define mental illness and provide solutions that can meet the needs of South Africans.

### **1.1 Research Aims**

The main aim of the study was to explore the attitudes of Diepsloot community members towards their beliefs about the aetiology of mental illness and their help-seeking behaviours. The study also sought to explore whether attitudes and aetiology beliefs predict help-seeking behaviours in Diepsloot community members. Furthermore, issues of stigma and poverty were explored as factors contributing to understanding of and help-seeking behaviours for mental illnesses.

## 1.2 Research Questions

1. What attitudes do the Diepsloot community hold towards mental illness?
2. What are the aetiology beliefs regarding mental illness in the Diepsloot community?
3. What are the help-seeking options that affected individuals in the Diepsloot community use?
4. Does gender, level of education, age, knowledge of mental illness, beliefs of aetiology and socio-economic status predict attitudes towards mental illness?
5. Does gender, level of education, age, knowledge of mental illness, beliefs of mental aetiology and socio-economic status predict help-seeking behaviour for mental illness?

## 1.3 Outline of Chapters

Chapter One is the introduction chapter. It provides a rationale for the research topic of mental illness, within the South African context. Furthermore, the research aims and questions are presented.

Chapter Two is the literature review. It discusses the relevant literature associated with the research topic. Key aspects of mental illness are discussed, such as the concept of mental illness, the aetiology and treatment of mental illness. Furthermore, the study is contextualised by discussing the impact of mental health literacy, stigma, untreated mental illness, the health care system and the impact of low socio-economic conditions on mental health, within the country. The chapter also discusses the theoretical framework of the study and the community context of Diepsloot.

Chapter Three outlines the research methods. It provides details pertaining to the sample, research design, the instruments used and the research procedure. Moreover, the chapter discusses the ethical considerations and the data analysis used to answer the research questions.

Chapter Four is the results chapter. The results of the research questions pertaining to attitudes, aetiology beliefs and help-seeking behaviours, are presented first. These were questions that were answered using descriptive statistics. This is followed by the results of

the prediction research questions, the last two, which were answered using backwards multiple regressions. Lastly, the results of the two open ended questions are presented, which were analysed using thematic analysis.

Chapter Five is the discussion chapter. The results of the quantitative research questions and the two open ended questions are discussed within the broader context of literature concerned with the causal beliefs of mental illness, attitudes and how this influences help-seeking options. The chapter is also discussed within the South African context and take into account of cultural factors. The findings of the current study are also interpreted by making links to previous studies of similar research topics. Lastly, the chapter also consists of the limitations of the current study and recommendations for future research.

## Chapter 2: Literature Review

### 2.1 Introduction

Mental illness is a serious nation-wide health concern, with many individuals suffering from mental disorders. The South African Depression and Anxiety Group reports have revealed that one in six South Africans suffer from anxiety, depression or substance abuse (The South African College of Applied Psychology, 2018). The developing country of South Africa faces many challenges associated with mental illness. Firstly, an estimated 5% of the public health budget is allocated to mental health services (Docrat, Besada, Cleary, Daviaud & Lund, 2019). Secondly, there are huge constraints with regard to human resource availability and mental health infrastructure. These challenges have negative implications on service delivery, thus resulting in large scale treatment gaps and resources being inequitably distributed and inefficiently used (Docrat et al., 2019). Consequently, this affects many communities, as communities are hugely stratified and are not provided with the same health care services (Hugo, Boshoff, Traut, Zungu-Dirwayi, & Stein, 2003). Most of the population in South Africa suffering from mental illness remain undetected due to a number of reasons, among them, are stigma, ignorance and the inaccessibility of appropriate resources (Hugo et al., 2003). In the health care sector, HIV/AIDS remains a huge burden and much attention is being focused on the illness, with less attention on other health illnesses such as mental illness (World Health Organisation, 2007). Studies have revealed that about 40% of people living with HIV in the South African population suffer from depression. However, since the two go hand in hand, mental illness is now being recognised, especially in areas of minimal resources, as a major health concern (Sorsdahl, Mall, Stein, & Joska, 2010).

It therefore seemed appropriate to explore factors leading to the misconceptions of mental illness and what influences the choices of treatment with regard to mental illness. Thus, the aim of this study was to explore the attitudes of Diepsloot community members towards their beliefs about the aetiology of mental illness and their help-seeking behaviours. The study also sought to explore whether attitudes and aetiology beliefs predict help-seeking behaviours in Diepsloot community members. Furthermore, issues of stigma and poverty were explored as factors contributing to understanding of and help-seeking behaviours for mental illnesses.

The following literature review will discuss the key aspects of mental illness that are essential to this specific study. Firstly, the concept of mental illness will be discussed, highlighting the

westernised nature of defining mental illness. This will be followed by an overview on the aetiology of mental illness, which will include theories of causation. The literature will further explore the treatment of mental illness, the impact of mental health literacy, the issue of stigma in communities, untreated mental illness, the health care in South African communities, the impact of low socio-economic status on mental health, the community context of Diepsloot and lastly, the theoretical framework will be discussed and how it can be applied in this research study.

## 2.2 The concept of mental illness

Defining the concept of mental illness in the South African context can be quite challenging, however, westernised definitions take the forefront (Winkelman, 2008). Given the complexities of South Africa and different community contexts, it is important to understand that western conceptualizations of mental illnesses cannot be blindly applied across cultures (Winkelman, 2008). This is especially in cultures that have different values and different belief systems, as this also changes how they perceive mental illnesses (Winkelman, 2008).

From the Western perspective, with the use of the Diagnostic and Statistical Manual of Mental Disorders-5 (DSM-5), a mental illness is defined as follows, “a mental disorder is a syndrome characterised by clinically significant disturbance in an individual’s cognition, emotion regulation, or behaviour that reflects a dysfunction in the psychological, biological, or developmental processes underlying mental functioning” (American Psychiatric Association, 2013, p.20). The distress manifests in a disability whereby there is a presentation of an impairment in functioning of areas that are of importance to a human being. An individual with mental illness is recognised as being at a position of a high risk of suffering death, feeling pain, disability, or experiencing the loss of freedom and control (APA, 2013).

This definition, derived from a Western perspective, has been extensively used across all contexts (Watters, 2010). Western categories of mental illness have gained so much dominance that other micro-cultures that shape the illness experiences of individuals are being negated (Watters, 2010). Not only are the categories westernized, even the way mental illness is expressed has shifted to support western views, to a point where cultural trends and beliefs are of no significance. Mental health practitioners are largely implicated by putting the DSM at first priority and forgetting that some illnesses are culture bound (Watters, 2010).

In South Africa, at a general level, two prominent cultures can be distinguished; western and African/traditional cultures (Truter, 2007). Every cultural group has a set of values and ideas

around what is normal behaviour. As an individual, there are many factors that determine our behaviour (Campbell & Long, 2014). Culture is a factor that plays an important role in the way we communicate, how we cope with certain issues, our values and beliefs (Campbell & Long, 2014). Cultural values are applied in conceptualizations of illnesses and in health behaviour particularly in the way individuals express and perceive mental illnesses (Gopalkrishnan, 2018). Definitions, perceptions and causes of mental illness are constructed as a result of social and cultural environments (Gopalkrishnan, 2018).

African culture adopts a collective way of living, which translates to an interdependence of group members (Papadopoulos, Foster & Caldwell, 2013). There is a high value on conformity and harmony (Papadopoulos et al., 2013). A collectivist culture is a very tight culture and has very strict rules with regard to appropriate behaviours and anything outside the norm is seen as a threat to the culture, these values then inform conceptualisations of mental illness (Altweck, Marshall, Ferenczi & Lefringhausen, 2015; Papadopoulos et al., 2013). Such values are reflected in African proverbs, such as the isiZulu saying, “*Umuntu ngumuntu ngabantu*” (Sehoana & Laher, 2015). This is a primary distinguishing factor from Western cultures as they are more individualistic and conceptions of mental illness are causative by nature and the focus is mainly on the individual (Altweck et al., 2015). There are significant differences in the different world views, especially regarding the interpretation of maladaptive behaviour, however, there are certain similarities that can be found (Mufamadi & Sodi, 2010).

The idea of harmony and cohesion is best represented in how health is perceived (White, 2015). The unitary African view of reality describes health as an integrated balance of different elements in one’s life; which includes mental, physical, spiritual and emotional stability, of oneself, family members and the community (White, 2015). Optimal functioning and health is regarded to be attributed to appropriate behaviours that are aligned with values and norms of society (Ahmedani, 2011). This also means having good relations with the community members and viewing oneself as a collective member of the community (Zuma, Wight, Roachat & Moshabela, 2016). Additionally, it is essential to have good relations with the non-living, the ancestors, as they protect the living and restore the spiritual aspect of health (Zuma et al., 2016). A deviance in behaviour, such as showing symptoms that are not aligned with traditional social norms, can be regarded as a sign of mental illness (Ahmedani, 2011). For example, ‘Dogon people of Malawi recognise someone to be mentally ill when

he/she talks loudly when speaking to elders; is always alone; and refuses to be with others of his/her own age group' (Mufamadi & Sodi, 2010, p.254).

The integrated view of health is also extended into the view of the self (White, 201). The person is acknowledged to consist of the mind, body and spirit; which are elements that are constantly interacting with each other to maintain harmony within the person (Laher, 2014). This reflects a contrast in the approach of Western practitioners as they are more often trained with theoretical frameworks that only consider the mind-body dualism and negate the mind-body-spirit continuum (Gendle, 2016; Laher, 2014).

An emphasis on the spirit represents a connection with the supernatural (Kpanake, 2018). The person is viewed to exist in an environment that consists of two dimensions, the one dimension represents the physical realm and the other represents the supernatural realm that is associated with intangible and unseen forces (Laher, 2014). Illnesses may arise if there is a disruption in the two dimensions, and therefore impacting the balance of the interacting parts of the self. Illnesses manifest in physical, mental or spiritual form (Laher, 2014).

Certain similarities, with western notions of mental illness, can be found among traditional healers with regard to manifestations and symptoms (Mufamadi & Sodi, 2010). There is a consideration of the psychological element in the conceptualisation of mental disorders (Okonji, Njenga, Kiima, Ayuyo, Kigamwa, Shah & Jenkins, 2008). There are beliefs that imbalances may be attributed to disrupted social relationships and psychological intrapersonal conflicts that present as mental and physical problems (Okonji et al, 2008). It is also a common understanding among traditional healers that psychological factors such as worry, strain and tension may result to mental illness (Mufamadi & Sodi, 2010). Similarly, it is expected that people who consult may present with various physical and psychological complaints, which are then regarded as signs of mental illness. There are common symptoms which traditional healers associate with mental illness, these include: restlessness, irritability, aggression, social withdrawal, confusion and strange behaviour (Mufamadi & Sodi, 2010). These symptoms are not too far off from abnormal psychology. Given the essential role of cultural values in the conceptualization of illness and health behaviour, it is important to understand that perceptions of aetiology around mental illness are constructed as a result of social and cultural environments (Campbell & Long, 2014). It is therefore common to anticipate divergences in the aetiology theories of the different world views, western and African cultures.

### 2.3 Aetiology of mental illness

There are many theories around the causation of mental illness. There are theories that are culture-bound and then there are clinical theories of causation. Clinical causes are associated with the environment whereby an individual may face numerous day-to-day stressors that result in certain mental disorders (Jorm, 2012). Furthermore, gene-environment interactions are known to be crucial influences in the development of mental illness, particularly in severe mental illness, such as schizophrenia, bipolar disorder and severe depression (Uher, 2014). Additionally, mental illnesses may be caused by inner psychic disturbances which are a result of internal tensions between the unconscious and conscious, or more elaborately, the id, ego and superego (Bouchard & Lecours, 2004).

African conceptualisations of illnesses and health acknowledge various types of illnesses which may take the form of physical or mental illness, these conceptualisations are aligned with some understandings of Western literature (Laher, 2014). However, the collectivist nature of African traditions results in much stigma being attached to mental illness (Altweck et al., 2015; Laher, 2014). A western diagnosis of an individual with mental illness may be easily interpreted as 'madness' by the community (Mehrabby, 2009). This often contributes to a loss of value and social standing in the community (Laher, 2014). When an individual suffers from mental illness, it is seen as a weakness and this does not contribute to the wellness of the group or community (Altweck et al., 2011). An additional category of spiritual illness is therefore recognised (Laher, 2014). Spiritual illnesses are very often a frame of reference for understanding manifestations of distress within cultural frameworks and other forms of illnesses (van Rensburg, Myburgh, Szabo & Poggenpoel, 2013). When an individual presents with mental illness, understood in the spiritual perspective, hidden cultural meanings are believed to be the cause (Mwelase, 2019). These meanings are interpreted in socially accepted notions of illnesses (Mwelase, 2019). Understandings of spiritual illnesses therefore are acknowledged to reduce the stigma associated with the labelling of 'mental illnesses' (Mehrabby, 2009).

Additionally, the concept of spiritual illness supports the idea of culture-bound syndromes. Culture-bound theories of causation are associated with different belief systems and different cultural affiliations (Kaiser & Jo Weaver, 2019). Culture-bound syndromes are originally understood as categories of mental illness that are specific to certain societies and are associated with folk belief. They represent a collection of signs and symptoms believed of a

certain culture to be associated with psychosocial problems (Kaiser & Jo Weaver, 2019). The etiologies are largely driven by culture-based knowledge, beliefs and practices. Folk beliefs of mental illness are common in rural areas of South Africa (Vergunst, 2018). Somatization is an example of a common culturally driven manifestation of mental illness, among many people of Non-western cultures (Ma-Kellams, 2014). The expression of psychological distress usually takes the form of physical complaints such as headaches, backaches and stomach aches (Ma-Kellams, 2014; Mehraby, 2009).

According to Nkosi (2012) culture-based causes of mental illness in African cultures are associated with spirituality in two ways. Nkosi (2012) describes a distinction between causes of a spirit of darkness and a spirit of light. A spirit of darkness represents supernatural forces of ancestral influence, disobedience to the ancestors results in misfortune and mental illness as a form of punishment (Nkosi, 2012). A spirit of light is associated with religion, for example Christianity. Christians who disobey the word of God are cursed. Curses in this perspective, bring about illness and diseases of evil. Other notions of mental illness associated with religion are attributed to the will and plan of God (Nkosi, 2012).

There are other several ways to understand the causes of mental illness in African traditions. However, in most cultures, witchcraft seems to be a widespread cause of mental illness (Ally & Laher, 2008). Beliefs associated with witchcraft or evil spirits are mostly associated with non-western cultures and are dominant within the African continent (Igwe, 2004). For example, many Nigerian religious and ethnic backgrounds attribute mental illness to be caused by witchcraft (Igwe, 2004). Other beliefs of aetiology are associated with ancestral displeasure and the disobedience of taboos (White, 2015).

Witchcraft is a common cause of mental illness that happens through spell-casting by people with evil powers (Laher, 2014). Witchcraft is often used as a weapon against enemies as a form of punishment. Victims of witchcraft suffer from *Amafufunyana*, which is a form of spirit possession (Mwelase, 2019). Victims of *Amafufunyana* usually experience symptoms of hysteria which involve auditory hallucinations (Laher, 2014).

Ancestors form an integral part of African traditions (Ikuenobe, 2014). They are acknowledged to maintain the balance between the visible and invisible dimension (Senokoane, 2013). They improve the quality of life through the protection of their living relatives (Ikuenobe, 2014; Senokoane, 2013). Families are therefore obliged to appease the ancestors through regular communication (Senokoane, 2013). However, if ancestors are

neglected or forgotten, misfortune and mental illness may be the result, to signal the anger of not following appropriate traditional guidelines to appease them (Ikuenobe, 2014).

A harmonious balance in African environments is also believed to be maintained by obedience of certain taboos (White, 2015). These taboos form traditional customs that protect moral structures of the universe. Actions against taboos are perceived to cause severe illness. The result of disobeying taboos does not only affect the individual involved, but also as negative impacts on the entire community (White, 2015). Punishment can take the form of physical disease, mental illness and possibly death (White, 2015). Effective treatment of mental illnesses for various cultures is hugely reliant on Western mental health practitioners being able to integrate culture-bound syndromes in the assumptions and diagnosis of mental disorders (Yamada & Marsella, 2013). This also means having an understanding of the various healing strategies within the South African context.

#### 2.4 Treatment of mental illness

The treatment of mental illness is associated and determined by various factors. Treatment plans are hugely based on community beliefs, attitudes and practices (Bedaso, Yeneabat, Yohannis, Bedasso, & Feyera, 2016). Treatment approaches vary from religious, medical and traditional strategies.

Alternative health care in low-and-middle income countries is a reality for many individuals (Van der Watt, van de Water, Nortje, Oladeji, Seedat & Gureje, 2018). In developing countries, WHO has estimated that 80% of the population rely on alternative care, such as consulting with traditional and faith healers. This form of healing strategy has become an integral part of the mental health care system (Van der Watt et al., 2018). For many Africans, it is therefore a norm to consult with traditional healers and faith healers (Nkosi, 2012). This is due to a number of reasons. Firstly, traditional healers are easily accessible and affordable for most population groups as compared to western services, which are, due to an uneven and scarce distribution of resources of formal healthcare resources, mostly located in urban areas (Nortje, Oladeji, Gureje & Seedat, 2016). Secondly, medical and psychiatric care systems do not provide optimal care for uninsured patients due to limited resources (Docrat et al., 2019). It is common for most patients in rural areas to not receive formal psychiatric care (Schoonover, Lipkin, Javid, Rosen, Solanki, Shah & Katz, 2014). Thirdly, western practices have terms such as anxiety and depression; these illnesses are not relatable to most Black Africans, and therefore, are often not detected (Sorsdahl, Flisher, Wilson, & Stein, 2010).

They remain untreated but still affect the wellbeing of individuals. However, these illnesses are not recognised or rather not acknowledged, because they are associated with weakness of character and constant complaints (Sorsdahl & Stein, 2010). Thirdly, traditional methods of healing are more accepted in communities as they align with traditional beliefs of most community members, and at times prove to be highly effective (Madamombe, 2006).

Moreover, in black African communities, culture and religion are very important as they encompass everyday living. African traditional healing concepts are highly aligned with values and beliefs related to culture (Parle, 2003). It would be very unsatisfactory to administer, to a traditional black African, a healing process that does not take into account of cultural beliefs. For this reason, certain biomedical healing processes can have conflicting implications if not applied in the context of culture, according to traditional methods (Truter, 2007).

The effectiveness of African healing is largely based on understanding the influence of context on the patient (Marsh, Cote-Meek, Young, Najavits & Toulouse, 2016). This involves investigations by healers of current and historic familial influences and community relations (Marsh et al., 2016). The course of preferred treatment relies on the perceived causes of mental illness. Distinctions of preferred treatment are based on spiritual, religious or supernatural perceived causes (Van der Watt et al., 2018).

Faith healers are consulted when causes of mental illness are perceived to be religious or spiritual (Peprah, Gyasi, Adjei, Agyemang-Duah, Abalo & Kotei, 2018). Faith healers are chosen by the Holy spirit or ancestral spirits and are usually affiliated to African based churches or mission independent churches (Laher, 2014). Determining causes and diagnosis of mental illness is aided by the Bible and prayer (Peprah et al., 2018). Common methods of effective treatment include holy water, fasting and strengthening of faith (Laher 2014; Peprah et al., 2018; Van der Watt, 2018). The provision of holy water, which has been prayed on, is perceived to provide relief (Peprah et al., 2018). Fasting is another way in which patients can be treated, loved ones can also fast on behalf of the patient; this is perceived to strengthen the spirit of the patient (Van der Watt, 2018). Improved health is also believed to be brought upon the strengthening of faith through frequent praying (Peprah et al, 2018). Faith healing also involves the use of herbs and rituals such as animal sacrifices (Laher, 2014).

Indigenous healing is often sought after for perceived supernatural and spiritual causes of mental illness (Kpobi & Swartz, 2019). African healing takes a holistic approach as it targets

physical, psychological, spiritual and social symptoms (Kpobi & Swartz, 2019). Traditional healing encompasses the various categories of healers which the Traditional Health Practitioners Act has categorized into four classifications which include diviners, herbalists, traditional surgeons and traditional birth attendants (Zuma et al., 2016). Healers are classified according to various skills, expertise and training (Mokgobi, 2014; Mothibe & Sibanda, 2019). A divine healer, which is commonly known as *isangoma in isiZulu*, describes a man or a woman who is called upon by the ancestors to become a healer and uses divination to communicate with ancestral spirits (Edwards, 2011). Diviners are able to define and identify illness, recognise causal factors and origins and ultimately advise on relevant treatment (Edwards, 2011). The herbalist, *inyanga in isiZulu*, is a practitioner who is knowledgeable with natural properties of plants, herbs, insects, animals, birds and snakes (Mothibe & Sibanda, 2019). Healing by the herbalist involves the use of this knowledge to create herbal mixtures that can be used to treat various illnesses (Mothibe & Sibanda, 2019). Traditional surgeons are usually males in the community which are qualified in skill of performing circumcision on boys (Mokgobi, 2014). They are experienced, trusted and recognised by village chiefs. Traditional birth attendants describe persons with the skill of midwifery, which is acquired through years of experience, by witnessing and assisting births in the community (Mokgobi, 2014). These are usually older women who transfer the skill from one generation to another. They also provide advice during pregnancy and recommendations for early child care (Mokgobi, 2014). Healing involves a variety of treatment methods which include diagnosis, the use of herbal remedies, cleansing rituals, sacrificial rituals, ritual enactment, vaccination and spirit protection (Laher, 2014; Madzhie, Mashamba & Takalani, 2014).

The initial stage of indigenous healing is diagnosis. Traditional diagnosis is a process used to determine the origins and causes of illness (Madzhie et al., 2014). This process is aided by divination bones and dream interpretation (Madzhie et al, 2014; Sodi, 2009). Healers are able to communicate with ancestors through bone throwing to help determine healing strategies (Madzhie et al., 2014). Dreams serve as another communication channel with the non-living. Healers use dream interpretation to understand messages passed on from ancestors; this informs the treatment plan (Laher, 2014).

Herbal remedies are commonly used for the treatment of mental illness (Madzhie et al., 2014). They are perceived to be effective in targeting emotional distress and restoring the balance between physical and natural cycles (Sorsdahl, Flisher, Wilson & Stein, 2010). These remedies are sourced from wild plants, animal fat, clay and ash (White, 2015). Herbal

remedies are administered on different body parts; they can be ingested, applied on the surface of the skin, in the nose or ear (Madzhe et al., 2014).

Cleansing rituals form another part of traditional healing, that provide meaning and support (Van Hook, 2016). They are perceived to target imbalances within the individual, especially through times of significant distress (Agyekum & Newbold, 2016). The restoration of harmony and balance happens when an individual is able to accept and acknowledge their pain when they are connected to unseen spiritual forces (Singh & Bhagwan, 2020). The process of cleansing transforms the individual from a traumatic state of mind to improved wellness (Vinesett, Price & Wilson, 2015). A spirit of connectedness transcends from just ancestors, to include the self and others, the earth, plants and animal life; thus resulting in wholesomeness (Singh & Bhagwan, 2020). These rituals also contribute positively to the community at large, as they restore broken interpersonal relationships and heal families (Singh & Bhagwan, 2020). Cleansing rituals are facilitated by various processes which include herbal emetics, purgative (*ukuphalaza*) and enemas or laxatives (*ukuchatha*) (Laher, 2014). More often individuals are instructed to make use of steam baths and to frequently fumigate with incense (White, 2015).

In cases where illness is perceived to be the result of the anger of the ancestors or the breach of taboos, sacrificial rituals are required to be performed as a means of appeasing the ancestors (Ozioma & Chinwe, 2019). In trying times or when families are overwhelmed with crises or bad luck, ancestors are called upon for guidance to overcome bad experiences (Singh & Bhagwan, 2020). The guidance is acquired through sacrificial rituals and offerings (Singh & Bhagwan, 2020). The process of sacrificial rituals involves the slaughtering of cows or goats, as a means of communicating with ancestors, and ancestral prayer (Ozioma & Chinwe, 2019). The inflicted person is usually required to bath with the blood of the sacrificed animal. Thereafter, bad luck, trauma or distress is believed to be relieved from the individual (Singh & Bhagwan, 2020).

Healers facilitate processes of casting away malevolent spirits through ritual enactments (Laher, 2014). Ritual enactments are symbolic in nature as they involve a transfer of spirits from one source to another. The inflicted person is aided by the healer to cast away malevolent spirits by a process of transference, either to domesticated animal or in the wild (Laher, 2014).

Mental illness can also be treated using African vaccinations/injections (Madzhie et al., 2014) Traditional healers perform subcutaneous incisions using razor blades. Thereafter, medicine is applied on the incised area of bloody tissue. This process allows the medicine to flow into the bloodstream (Madzhie et al., 2014) Any other forms of poison are also removed throughout the body and blood circulation is improved. When the patient shows signs of improvement, vaccination is performed again to ensure long-lasting wellness (Madzhie et al., 2014).

Spiritual protection is also offered by traditional healers when causes of mental illness or disease are believed to be the result of evil spirits (Zuma et al., 2016). It is common for a healer to provide their patients with talismans or charms (Ozioma & Chinwe, 2019).

Talismans are believed to protect individuals from negative forces of witchcraft (Ozioma & Chinwe, 2019; Zuma et al., 2016). Moreover, they have added benefits of maintaining harmony with other people, spirits and the ancestors (Zuma et al., 2016).

Additionally, community attitudes play a huge role in mental health sufferers seeking for help (Hugo et al., 2003). Positive attitudes towards mental disorders result in successful treatment and the compliance of patients. Mental health sufferers can be integrated into the community very well and receive the necessary support for treatment (Hugo et al., 2003). However, on the other hand, negative attitudes in the community, can have detrimental effects. Negative attitudes such as social rejection, isolation and abuse of mentally ill persons can serve as barriers to mental health sufferers seeking for help (Hugo et al., 2003). This often results to late detection of mental illness, and in most cases, inappropriate management and treatment of mental illness (Gary, 2005). It is suggested that negative community attitudes are usually associated with poor and low mental health literacy whereby lay community members lack the knowledge of mental disorders and are often ignorant to the advances, diagnosis and management of mental illness (Pinto-Foltz, Logsdon, & Myers, 2011).

## 2.5 The impact of mental health literacy

Mental health literacy is recognised to play a huge role in the treatment of mental illness. According to Atilola (2016), there is evidence that indicates that in Europe and America there were improvements in the public knowledge of mental illness within the past few years dating from 2010. This translated to observable improvements in mental health service utilization. However, Sub-Saharan Africa still presents with a number of challenges and barriers with regard to utilizing mainstream mental health services (Atilola, 2016). Chipps,

Oosthuizen, Buthelezi, Jeewa, Munsami, Simamane, Singh, Vaid, and Ramlal (2015) suggest that an increase in mental health awareness and knowledge may have positive impacts on service utilization and can result to the success of health care initiatives implemented.

The classical definition of mental health literacy was defined by Anthony F. Jorm and colleagues in 1997 (Jorm, Korten, Jacomb, Christensen, Rodgers & Pollitt, 1997). It was defined as “Knowledge and beliefs about mental disorders which aid their recognition, management or prevention” (Jorm et al., 1997, p. 182). The definition further stipulated that “Mental health literacy includes the ability to recognise specific disorders; knowing how to seek mental health information, knowledge of risk factors and causes, of self-treatment and of professional help available; and attitudes that promote recognition and appropriate help-seeking” (Jorm et al., 1997, p. 182). The whole concept of mental health literacy was designed to promote the awareness of mental illness. However, it may become problematic when other forms of knowledge are dismissed (Venkataraman, Patil, & Balasundaram, 2019). When focussing on the definition closely, it does not specify which knowledge is granted permissible (Kometsi, Mkhize & Pillay, 2020). Globally, with the wide range of cultures, we have adopted various world views about a number of topics. Mental illness is one of the concepts, whereby on a social and clinical level, it may be constructed differently for various cultures that may differ from Western or Euro-American beliefs (Kometsi et al., 2020). It could potentially not be plausible to assume that public beliefs of mental illness of other cultures are poor, or that most middle-income countries lack sufficient knowledge regarding mental health (Venkataraman et al., 2019). They may have different explanatory models, which take the form of indigenous African knowledge for most Sub-Saharan countries (Mayston, Frissa, Tekola, Hanlon, Prince & Fekadu, 2020). The misalignment in knowledge and beliefs may be a major contributing factor to a low service utilization of mental health services in low-and-middle income countries (Jorm, 2012).

Studies conducted in Sub-Saharan Africa have indicated that there is a general poor understanding of the nature and dynamics of mental disorders which, as a result, presents as a major obstacle to mainstream psychiatry service utilisation (Rathod, Pinninti, Irfan, Gorczynski, Rathod, Gega & Naeem, 2017). These statements suggest an ignorance to the recognition of mental disorders (Atilola, 2015). However, there are studies that provide information indicating that the recognition of mental disorders takes the African world view for most individuals in Sub-Saharan Africa (Mkhize, 2013). This view defines a mental disorder as a discrepancy between the physical, social and spiritual realms of human

existence. It is further recognised as the loss of protection from ancestors or as a result of witchcraft (Mkhize, 2013). This does not necessarily reflect a poor understanding of mental illness, but rather a significantly different conceptualisation (Kometsi et al., 2020).

From the above, it is evident that mental health knowledge can be diverse, with most of the knowledge and beliefs being derived from culture-bound explanatory models (Ventevogel, Jordans, Reis & de Jong, 2013). Research has shown that members of the public use labels for experiencing certain kinds of mental illnesses. These labels are frequently not in accordance with scientific classifications (Ventevogel et al., 2013). Furnham, Lee and Kolzhev (2015) argue that it is highly likely that lay community members may recognise and have an understanding of abnormal behavioural patterns, but may lack the diagnostic labels for illnesses. Some community members associate certain mental disorders with cultural idioms and popular local concepts (Sorsdahl et al., 2010). In this regard, it almost becomes clear where Indigenous African categories can fall short, as they do not exhibit the nuances of professional classification (Ventevogel et al., 2013). There are specific local concepts which may promote late treatment, such as stress. In the cultural perspective, it would be useful to unpack these normalizing and over-encompassing labels, to gain better insight and increase the rate of recognition of mental disorders (Kometsi et al., 2020).

Where mental health literacy is concerned as a concept developed by Jorm and colleagues, it is imperative to take into account that it is of a Western scientific origin and any assessments associated with it will take the form of a Western perspective (Jorm, 2012). Most assessments concerning the public's knowledge about mental illnesses are usually from a point of view of mainstream psychiatry which provides the explanation for the reports of low levels of mental health literacy in studies conducted in Black African communities (Atilola, 2016). However, mainstream biomedical practice is unarguably gaining dominance in Africa. It is to this end that community members may need to increase their awareness of certain concepts and practices of mainstream psychiatry and incorporate it as a form of mental health literacy (Gureje, Nortje, Makanjuola, Oladeji, Seedat & Jenkins, 2015).

Nonetheless, it is undeniable that there are socio-cultural factors that influence mental health literacy and translate to specific help-seeking behaviours (Koduah, Leung, Leung & Liu, 2019). Studies have revealed that the majority of Black Africans consult with alternative care practitioners as they provide explanatory models and remedies of mental illness that are informed by pre-existing notions that have been effective for many decades (Nortje, Oladeji,

Gureje & Seedat, 2016; Van der Watt et al., 2018). These notions are usually aligned with their world view. In Black African communities there are usually shared beliefs about mental illness among traditional healers and lay community members. These commonalities make it difficult to adapt to biomedical knowledge (Koduah et al., 2019).

The global acceptance of biomedical models has positioned them as superior when compared to alternative knowledge and care (Watters, 2010). However, for more effective mental health outcomes there needs to be a comprehensive approach to health initiatives (Kometsi et al., 2020). These approaches should be aimed at preserving indigenous knowledge and skills while simultaneously attempting to advance the knowledge of mainstream psychiatry. This can be achieved through a mutual respect between mainstream and alternative care, more especially towards alternative care (Kometsi et al., 2020). This would be a more locally accepted approach to mental health care and help overcome a number of contextual barriers (Chippis et al., 2015). Moreover, it is recommended that an integrated approach that would bring in alternative care into mainstream care would fill in the gap of limited psychological services, as there is already a shortage of human resources (Gureje et al., 2015). This holistic approach is further argued to result in cultural acceptability, accessibility, increased utilization of provided health care services, and more importantly less stigma among community members (Gureje et al., 2015). Stigma has been suggested to be associated with mental health literacy. Svensson and Hansson (2015) assert that stigmatizing attitudes appear to be relatively high in societies, accompanied with low mental health literacy among the public.

## 2.5 The issue of stigma in communities

The stigma of mental illness is a major concern as most individuals with mental illness are discriminated against and this has detrimental effects (Egbe, Brooke-Summer, Kathree, Selohliwe, Thornicroft & Peterson, 2014). Prejudices, negative attitudes and a lack of sufficient knowledge regarding mental illness, are some of the problems that have been linked to stigma (Egbe et al., 2014) Mentally ill persons are affected on a personal and social level (Upadhyay, Srivastava, Singh & Poddar, 2016). The victimization of people with mental illness leads to unfair discrimination which, as a result contributes to variety of difficulties faced by people with mental illness, such as barriers to accessing housing, employment and occupying other social roles (Kakuma, Kleintjies, Lund, Drew, Green, Flisher, MHapp Resesarch Programme, 2010). The stigmatization of the mentally ill results

in many individuals not receiving the appropriate treatment. Research has shown that stigma plays a significant role in the avoidance of treatment and as a result approximately 70% of mentally ill individuals do not receive treatment, on a global level (Mukherjee & Mukhopadhyay, 2018). Stigma slows down the process of rehabilitation and integration back into society (Egbe et al., 2014).

The concept of stigma towards mental illness can be understood as viewing the mentally ill as having undesirable traits and therefore deserving of disapproval (Upadhyay et al., 2016). Stigma is recognised as operating on three interacting levels, which can be identified as self, social and structural stigma (Buizza, Ghilardi & Ferrari, 2017). For the purposes of this study, stigma will be discussed based on two levels, the self and social levels. This is primarily due to the idea that these are levels that operate in community contexts and are influenced by collective and societal beliefs (Buizza et al., 2017).

Self-stigma is centred around the feelings and experiences of mentally ill and how this influences the perceptions of self (Mantovani, Pizzolati, & Edge, 2017). The negative attitudes of society members, such as devaluing the mentally ill, leads to maladaptive feelings and behaviours, which can be identified as feelings of shame and reduced self-efficacy (Mantovani et al., 2017). The wellbeing of the person affected is hugely impacted when their self-worth and self-esteem is eroded, as they may fail to comply with treatment or even delayed treatment seeking (Nxumalo & Mchunu, 2017). Additionally, people with mental illness are more at risk of abusing substances in these circumstances (Kakuma et al., 2010).

Social stigma is hugely associated with community norms and what is believed to be acceptable behaviours in certain community contexts (Mantovani et al., 2017) The ideas around what acceptable behaviours are, are hugely influenced by dominant community members. Social stigma is expressed through interpersonal interactions with community members. The result of social stigma towards mentally ill persons is fear, rejection and avoidance; this causes huge distress for individuals affected (Mantovani et al., 2017; Mukherjee & Mukhopadhyay, 2018). Moreover, negative stereotypes from the public and media perpetuate stigma. People with mental illness are often portrayed in a negative view, as people who are violent, dangerous, with less self-control, dependent on others, not eligible for marriage, psychologically unstable and unfit to work (Egbe et al., 2014). These negative views exacerbate the discrimination of people with mental illness and they are marginalized from society. The implications of these views are social isolation, social anxiety and poor

social skills. This translates to strained relationships and sometimes less or no social interaction (Egbe et al., 2014). The loss of peer support or community support can result to further complications, which worsen mental illness, such as comorbidities associated with depression (Kakuma et al., 2010).

The burden of mental illness and the associated stigma is not only on the mentally ill persons, but also on family members and care-givers. This hugely impacts the treatment and care of mental illness (Mukherjee & Mukhopadhyay, 2018). Family members and caregivers constantly have to be witnesses to social stigmatisation of their loved ones and they also face blame, shame and social rejection from community members (Nxumalo & Mchunu, 2017). The family also loses value in community as they are believed to have no significant role because of associations with mental illness. This creates a huge emotional burden and less motivation to assist the person with mental illness. This also directly impacts the prognosis of mental illness with added financial costs of treatment (Nxumalo & Mchunu, 2017). In most cases, the negative experiences may lead to lack of treatment or under-treatment, and a poorer rehabilitation (Mukherjee & Mukhopadhyay, 2018).

## 2.6 Untreated mental illness

Many population groups have been excluded in health and medical research, with many studies only focusing on specific groups (Bonevski, Randell, Paul, Chapman, Twyman, Bryant, Brozek & Hughes, 2014). This provides limited information on the state of mental health across cultures (Gopalkrishnan, 2018). This shifted attention results in many individuals suffering from mental but not being aware of it. Moreover, the Westernised nature of research in mental illness, makes it unrelatable for African originated people (Kometsi et al., 2020). As a result, many individuals with chronic or severe mental disorders can be missed because of the different ways in which mental illness can be manifested. Many cultural groups are left undiagnosed or misdiagnosed and therefore inadequately treated (Hugo et al., 2003). Patterns of untreated mental illness can also be observed in well developed countries that are not subjected to structural barriers of limited health care services (Schomerus, Stolzenburg, Freitag, Speerfork, Janowitz, Evans-Lacko, Muehlan & Schmidt, 2018). Untreated mental illness has negative effects of reduced long-term quality of life, higher rates of chronicity and comorbidity (Schomerus et al., 2018).

Unsuccessful, delayed or timely help-seeking is influenced largely by beliefs about the causes of mental illness, this is particularly relevant for persons who have never received or initiated

treatment for their mental health problems (Stolzenburg, Freitag, Evans-Lacko, Speerforck, Schmidt & Schomerus, 2019). Determining factors which include biological, internal, psychological and external causal attributions have different implications for the pathways of dealing with mental disorders. They inform coping and help-seeking strategies (Stolzenburg et al., 2019).

Biological explanatory models of aetiology of mental illness have been associated with negative perceptions that increase stigmatizing attitudes and thus result to reduced professional help-seeking (Lebowitz & Ahn, 2014). Moreover, biological causal beliefs have been identified to be linked to more social distance especially in individuals with schizophrenia and depression. Such negative perceptions around biological causal attributions decrease the need and intention for help-seeking (Lebowitz & Ahn, 2014). Internal and psychological causal attributions have also been found to reduce the likelihood of seeking treatment. If aetiology beliefs are perceived to be the result of current stressful situations, symptoms are believed to disappear once stressors have been resolved (Stolzenburg et al., 2019). Lack of intention to seek treatment also results from believing that one has the ability to deal with their own problems alone without the help of a mental health practitioner. Additionally, it becomes challenging to confront past traumas if symptoms are believed to be attributed to psychological childhood trauma (Stolzenburg et al., 2019). Consulting a professional is thus believed to be associated with unpleasant memories. Moreover, person-related causes are often linked to self-stigma and self-blame, positioning one-self as undeserving of professional help (Stolzenburg et al., 2019).

Stigma has also been acknowledged to play a significant role in the help-seeking process (Schomerus et al., 2018). Stigma has been identified as a principal barrier to seeking professional help so as to avoid stigmatizing views of the public and being labelled. However, people with mental untreated mental illness have their own stigmatizing attitudes which play a bigger role (Schomerus et al., 2018). Personal stigma may be of more significance as evidence indicates that it hinders the recognition of personal mental health problems. Personal stigma has been linked to lower acceptance levels of mental illness which then adds to the burden of untreated mental illness (Schomerus et al., 2018)

The costs of untreated mental illness are major and require huge consideration, as individuals can be affected greatly, personally and socially (Sher, 2020). Untreated mental illness is associated with substantial morbidity and functional impairment which is often the result of

elevated suicide risk, poverty and excessive substance abuse (Sher, 2020). In many countries suicide deaths, suicide attempts and ideation have been found to be linked mental disorders, particularly depressive disorders which have been identified as strong risk factors for suicide attempts and death (Khasakhala, Sorsdahl, Harder, Williams, Stein & Ndeti, 2011). Sher (2020) also asserts that psychiatric illnesses that have been frequently associated with suicide are mood disorders. People suffering from mood disorders are often untreated or undertreated which makes it difficult to reduce the levels of suicidal behaviour among these individuals (Sher, 2020). Untreated mental illnesses are associated reduced productivity, which, in many cases results in loss of employment. This results to major socioeconomic decline which perpetuates impairments and leads to a low quality of life (Roberts, Louie, Guerrero, Balon, Beresin, Brenner & Coverdale, 2017). Additionally, it can lead to excessive substance abuse which can result to irresponsible behaviours such as vehicle accidents. Moreover, on a social level, untreated mental illness can have a very disruptive impact on family dynamics and the wellbeing of all family members (Robinson, Rodgers & Butterworth, 2008). However, it is also important to consider that many individuals in South Africa who need psychiatric treatment do not receive it because of the failures of the South African health care system, which does not prioritize mental health. As a result, there are countrywide treatment gaps of common mental disorders (Egbe et al., 2014).

## 2.7 Health care in South African communities

The issue of mental health affects most individuals, but in South Africa, it receives less attention. The national budget allocated for mental health is alarming, with only an expenditure of about 5%, this in comparison to 95% which is an expenditure for other public health concerns. (WHO, 2007). South Africa faces many challenges with regard to access of mental health care and this has a direct impact on treatment and attitudes towards mental illness (Drew, Funk, Tang, Lamichhane, Chávez, Katontoka, Pathare, Lewis, Gostin & Saraceno, 2011). The majority of the challenges are attributed to mental health care disparities across the country (Docrat et al, 2019). As a low and middle-income country, it is expected that economic and developmental inequalities are significant contributors to low service delivery (Chisholm, Docrat, Abdulmalik, Alem, Gureje, Gurung, Hanlon, Jordans, Kangere, Kigozi, Mugisha, Muke, Olayiwola, Shidhaye, Thornicroft & Lund, 2019). Thus, resulting in barriers presenting as constraints in mental health human resources, infrastructure, low priority to mental health and treatment gaps (Docrat et al, 2019).

There are numerous presenting problems that are associated with mental health care in communities. Firstly, it is important to discuss the mental health expenditure. The current estimate of 5% on the budget on mental health care, is positioned at a lower target as per universal recommendations (Docrat et al., 2019). These universal recommendations which are directed to achieving comprehensive mental health systems in the world, stipulate that all countries are expected to allocate a minimum of 5% and a maximum of 10% of their public health budget to mental health care. As alarming as the 5% is, there are also disparities in how resources are distributed and utilised (Docrat et al., 2019). Nationally, an estimated 86% of the mental health budget is extensively directed to inpatient care, leaving a small percentage of 14% that is directed to outpatient care. Moreover, some of the costs are attributed to readmissions, which are at a rate of 24.2% within three months of previous of discharge (Docrat et al., 2019).

Secondly, the lack of mental health practitioners is a nation-wide concern (De Kock & Pillay, 2017). Nationally, there is an estimated average of 0.31 psychiatrists per 100 000 population, in the public sector (De Kock & Pillay, 2017). There is a widespread scarcity of child psychiatrists, with only three working in the public sector (Docrat et al., 2019; Mokitimi, Jonas, Schneider & De Vries, 2019). They are located in the Western Cape, Free State and the Gauteng province. Similarly, the accessibility of psychologists is also extremely low, with an average of 0.97 public sector psychologists, senior clinical psychologist and principal psychologists per 100 000 uninsured population (Docrat et al., 2019). It is reported that auxiliary health workers that provide rehabilitative support are also limited in availability (Docrat, Besada & Lund, 2019). The estimates of auxiliary health workers are as follows: 1.53 public sector occupational therapists; 1.07 public sector speech therapists and audiologists; and 1.83 social workers per 100 000 of the uninsured population (Docrat et al., 2019).

The first point of entry for primary health care, for most South African individuals, are general practitioners and nurses; their perceptions and attitudes of mental illness play a huge role in the lives of community members (Venning, Durie, Roland, Roberts, & Leese, 2000; Mohamed-Kaloo & Laher, 2014). However, general practitioners have reported that they feel unequipped to deal with or communicate with individuals of mental illness (Lester, Tritter & Sorohan, 2004). Moreover, they perceive that they do not have enough knowledge about mental illness as it is not their area of expertise. When GPs recognise mental illness in a patient, they refer the patient to a psychologist, it then becomes challenging finding accessible and affordable psychologists (Lester et al., 2004). Research has indicated that medical doctors experience

burnout, anxiety and depression attributed to a high burden of patients and lack of resources (Naidoo, Tomita & Paruk, 2020). Working in the public sector puts a further strain, this impacts negatively on patient care, and as a result medical doctors may exhibit attitudes of depersonalisation and dehumanisation (Naidoo et al., 2020) A cross-sectional study conducted in all provinces of the country, in 2003, reported on high levels of burnout. Another study conducted in Western Cape, in 2011, indicated that among junior doctors, 100% of the junior doctor participants experienced a high degree of burnout (Naidoo et al., 2020). In 2013, another similar study, with participants of medical doctors working in public sector clinics and district hospitals, revealed burnout to be at 76% among the participants (Naidoo et al., 2020). Nurses have been reported to be more available in most African countries (Monteiro, 2015). In South Africa, there is a better coverage of nurses, with 80 professional nurses per 100 000 population and 27.2 per 100 000 of specialised nurses (Docrat et al., 2019). However, nurses are usually short staffed, as they cater to the many needs of patients, especially in the public sector (Wallace, 2012). Additionally, nurses do not receive comprehensive training to fully attend to the psychological needs of mental health patients (Monteiro, 2015). There is also a pattern of low morale and motivation among nurses, as a result of understaffing and limited resources (van der Doef et al., 2012). The insufficient number of trained specialists constitutes to a larger portion of the population not being assessed, diagnosed and treated for various mental disorders (Monteiro, 2015).

South Africa's treatment gap for mental health remains large. Roberts, Robinson, Topp and Newman (2008) reported that nationally, 75% of mentally ill persons do not receive professional help because of limited health care services. However, recent research has indicated that the treatment gap for mental disorders, epilepsy and intellectual disability is at approximately 92%, in the country (Docrat et al, 2019). It is also concerning there is a huge treatment gap for children and adolescents, with regard to the availability of child psychiatrists (Mokitimi et al., 2019). However, the onset of mental disorders before the age of 18 years and an estimated 38% of the country's population is within this range (Mokitimi et al., 2019). Thus, many South Africans living with mental health illnesses do not receive the care they need (Benjamin, Vickerman-Delport, & Roman, 2021).

Thirdly, there are not enough mental health care facilities at community levels, many psychiatric hospitals are located in far proximity of rural areas and low-income communities (Chisholm et al., 2019). In most African countries the common structure for levels of care is as follows: in rural areas or villages, health posts are the first level of care for the locals; in larger

towns there are designated health centres; provision of specialised care for mental health is available in district or regional hospitals, only upon referral (Monteiro, 2015). This highlights the need for more facilities that are equipped and able to manage with the severely ill, as they are often located in urban areas (Chisholm et al., 2019). In many district hospitals, mental health inpatients are not catered for as per the mental health care act guidelines (Robertson, Janse van Rensburg, Talatala & Chiliza, 2018). A majority of district hospitals have reported that the adult mental health inpatients are placed in general wards together with other patients (Docrat et al., 2019). This is commonly evident in provinces of Kwazulu-Natal, Limpopo, Mpumalanga and the Northern Cape (Docrat et al., 2019).

A low priority of mental health is associated, in part, with a lack of clear mental health care policies (Chisholm et al., 2019). In Africa, many countries do not have formal legislation around mental health, with only 50% of African countries having mental health policies (Bird et al., 2010). However, many of the laws and strategies in these policies are not updated and in accordance to current challenges and barriers (Bird et al., 2010). Much attention is rather geared towards health policies of communicable diseases such as HIV/AIDS and tuberculosis (Ajaero, De Wet-Billings, Atama, Agwu & Eze, 2021). In South Africa, mental health care is regulated/governed by the Mental Health Care Act of 2002, which emphasises access to care and the protection of human rights for individuals with mental illness (Stein, 2014). In the year 2013, the Mental Health Policy Framework was adopted by the National Council. In this policy framework, there are eight objectives serving as a strategic plan, plans which were allocated to be implemented from 2013 to 2020 (Stein, 2020). These objectives include: ‘district-based mental health services and primary health care re-engineering; building institutional capacity; surveillance, research and innovation; building infrastructure and capacity of facilities; mental health technology, equipment and medicines; intersectoral collaboration; human resources for mental health; advocacy, mental health promotion and prevention of mental illness. These objectives have not been fully achieved (Stein, 2020). This is suggested to be disrupted by a lack of comprehensive usage of national-provincial dissemination channels that would enable effective promotion and implementation of the MHPF and MHCA (Docrat et al., 2019). In LMICs, such as South Africa, it is common to discover that certain policy aspects have not been implemented at all levels or equitably throughout the country, particularly in under-resourced or marginalised communities (Monteiro, 2015).

The dire situation of the lack of resources in mental health contributes to the negative attitudes towards seeking westernised forms of treatment (Roberts et al., 2008). Moreover, as a result,

75% of mentally ill persons do not receive professional help because of limited health care services (Roberts et al., 2008).

## 2.8 The impact of low socio-economic status on mental health

The history of South Africa has led to detrimental effects which continue today. South African communities are characterised by an unequal distribution of resources and people's access to services and facilities (Seekings, 2003). To elaborate, there is social and economic stratification beyond measure, with differences in the quality of environments, health services, employment, income and human basic needs (Seekings, 2003).

For South Africans, adverse living conditions are widespread and range from high rates of crime to poor, unstable housing and high unemployment rates (Lilenstein, Thornton, Bhorat, Monnakgotla & Zee, 2017). The burden of such living conditions comes with the high burden of mental illness such as Major Depressive Disorder, for most marginalised communities (Nglazi, Joubert, Stein, Lund, Wiysonge, Vos, Pillay-van Wyk, Roomaney, Muhwava & Bradshaw, 2016). Many rural based studies have reported on depressive symptomology and depression, with rates of 18% and 27%, respectively (Dworzanowski-Venter, 2017).

The marginalisation of communities does not only come with negative social impacts, but also affects individuals personally and psychologically. The first negative impact of marginalisation is the loss of autonomy (Bogdanović, Radulović, Šagrić, & Marković, 2007). Individuals can have a sense of poor or no control over their own lives and the available resources. This can lead to various psychological problems such as low self-confidence and low self-esteem. Secondly, there is a sense of hopelessness and helplessness, whereby it seems like the situation will never change and therefore individuals are not inspired to take charge of their lives. Thirdly, a sense of isolation develops, which is contributed by a dependency on social institutions to provide social and financial support (Bogdanović et al., 2007). However, the government is slow in providing sufficient resources and facilities for all marginalised communities. This results in most community members feeling less prioritised by institutions in power (Van Rie, West, Schwartz, Mutunga, Hanrahan, Ncayiyana & Bassett, 2018).

Essentially, it is imperative to understand that poverty and mental illness, almost act simultaneously. According to Bogdanović et al. (2007), poverty and illness are highly related; most individuals are ill because they are poor, and that they become poorer because they are sick. However, living in stressful and unfavourable conditions comes a daily struggle for

survival. It therefore becomes of less importance to focus on mental health and treat it adequately (Bogdanović et al., 2007).

Moreover, the low socioeconomic status of many individuals in South Africa means that they cannot afford to appropriate help when illness arises. Quality health care is recognised to favour the wealthy who have access to private sector services as compared to economically marginalized individuals who have to rely on the limited health care resources of the public sector (Atagula, Akazili & Mclntyre, 2011). The unique socioeconomic and environmental challenges of South Africans require explanatory models and frameworks that can be localized to address the unmet psychological needs of the people.

## 2.9 The Biopsychosocial-Spiritual Model

The study will make use of the biopsychosocial and the biopsychosocial spiritual model. The founder of the biopsychosocial model is known as George L. Engel, but Roy Grinker is the one that coined the term before Engel made use of it in psychiatry (Ghaemi, 2009). The core elements of the model are rooted within looking at the physical and psychosocial aspects of an individual. The assumption is that an individual exists within a biological, psychological and social context; and that all these three levels need to be analysed equally in one's life (Ghaemi, 2009).

The biopsychosocial model is an effective model in the sense that it recognizes a patient as an individual that cannot be separated from their attributes as a person and their social background; which is a very holistic and humanistic way of looking at individuals (George & Engel, 1980). This is essential when analysing communities. Covering all bases can be very useful for making informed decisions and future judgements.

Moreover, the solution for most health care professions is to implement the biopsychosocial model (Kinderman & Tai, 2007). This model acknowledges the role of biological factors, social factors and circumstantial factors and how they have impact on disturbing psychological processes which ultimately results to mental illness. Furthermore, explaining the biopsychosocial model involves taking into account of physical and psychosocial elements of an individual (Kinderman & Tai, 2007). The physical elements are concerning the biological nervous system of humans. The psychosocial elements involve interactions that happen with relationships, family, community and the wider society (Kinderman & Tai, 2007).

Health care institutes have long since been working with the biomedical model (Engel, 1980). The model has been derived from a Western perspective and has therefore been deemed limiting in its approach because of failing to take into account of non-western contexts. George Engel's biopsychosocial model is an effective model that recognizes a patient as an individual that cannot be separated from their attributes as a person. This information is gathered from knowing how the patient behaves and what the patient reports on himself and his life (Engel, 1980).

The biopsychosocial model is conceptualized according to the systems theory (Engel, 1980). This theory proposes that there's a hierarchy in nature with units that are more complex, larger units superordinate to the less complex, smaller units; these are presented in a continuum. Each level represents an organized structure with defining characteristics (Engel, 1980). Therefore, each level has to be studied differently. However, in doing so, it is crucial to keep in mind that nothing exists in isolation. The whole system functions as a collective, but different approaches are applied to the different levels to gain an understanding of the individual as a whole. This is the holistic and humanistic nature of the biopsychosocial model (Engel, 1980).

When applying the biopsychosocial model in clinical work, from the individual, the first level of interaction is the two-person system (Engel, 1980). This process involves reporting on feelings, any relevant memories, thoughts, opinions and sensations. Assessment goes further into detail by asking questions related to place of residence, family dynamics, cultural practices, marital status and current employment status (Engel, 1980). The purpose of this is to cover all the levels associated with the psychosocial aspect. To account for the biological aspect, medical examination is required. Covering all bases is useful for future judgements and decisions (Engel, 1980). The introduction of the biopsychosocial model provided a progressive strategy of dealing with issues of mental health, especially regarding its multidimensional nature that highlights the importance of social determinants of illness and health (Tramonti, Giorgi & Fanali, 2021). Similarly, explanatory beliefs of traditional Africans adopt a multidimensional view of illness (Monteiro, 2015). However, understandings of illness in African societies transcend social determinants and also include cultural and spiritual explanatory models which are linked to the collectivist nature of living (White, 2015). Spiritual explanations are of great significance as they are related to the supernatural realm which impacts on human affairs in African communities (Monteiro, 2015; White, 2015). Monteiro (2015) advocates for an extension of the biopsychosocial model that

represents socio-cultural-spiritual dimensions of illness and contextualizes mental health services. An extension of the biopsychosocial model, is the biopsychosocial-spiritual model. The biopsychosocial–spiritual model criticizes the biopsychosocial model for not taking into account of spirituality or death, and failing to recognise patients as persons (Sulmasy, 2002). Further criticisms have involved a disregard for cultural and transcendental factors, on every level of the biopsychosocial approach, which involve explanations within a spiritual framework, among non-western societies (Babalola, Noel & White, 2017). Additionally, the biopsychosocial approach is criticised for placing too much emphasis on the individual, even though the individual is understood to exist within a social context, interpretations and interventions are driven by analyses on the individual (Babalola et al, 2017). This moves away from concepts of health and illness within the traditional African perspective which integrates social and spiritual factors such as maintaining personal relationships, contributing to the wellness of others and sustaining relations with the non-living (Hatala, 2013). The biopsychosocial-spiritual model thus expands the understandings of illness and health in all its variations (Hatala, 2013). It provides a platform to examine the influence of spiritual beliefs and cultural practices and the impacts it has on help-seeking behaviours (Monteiro, 2015).

Moreover, the biopsychosocial-spiritual model stresses the importance of healing the souls of patients. However, it is mostly applied for dying individuals faced with life-threatening illnesses (Sulmasy, 2002). The process of applying this model includes restoring intrapersonal and extra-personal relationships. The main targets of this model are associated with the relief of pain, nausea, dyspnoea, fatigue, anxiety and depression. Additionally, issues of existence, meaning and value take centre stage for dying persons (Beng, 2004). Specific domains of life, that improve the quality of life, are addresses, such as religion, spiritual coping and support, spiritual well-being and spiritual needs (Beng, 2004).

Janse van Rensburg (2014) points out that, because of the social injustices and inequalities which result to diseases and suffering, the integration of spirituality is quite significant. Janse van Rensburg (2014) further adds that individuals living in non-favourable conditions are more prone to be faced with existential and dying crises, suggesting that impoverished communities would benefit more from the biopsychosocial-spiritual model. This was an attempt for health professions to centre their efforts and services where they are really needed, and a call for health professions to realign themselves to the context of South African individuals (Janse van Rensburg, 2014). The community of Diepsloot reflects the

socioeconomic challenges of a low-and-middle income country such as South Africa, approaches such as the biopsychosocial-spiritual model are advantageous given the complexities of culture, spirituality and environmental influences.

#### 2.10 The community context of Diepsloot

Diepsloot is an overpopulated township that faces many challenges with proper housing. It is a mixture of formal and informal communities, in the form of government housing and shacks. The settlement is characterised by a majority of low socio-economic black individuals, with low levels of education and high unemployment rates (Kaba, Khamisa & Tshuma, 2017). There is a diverse range of people that occupy the space, coming from different cultures and some of the people coming from other countries (Dworzanowski-Venter, 2017).

Prominent psychological problems in the area are identified as depression, rape, domestic violence, substance abuse and problems at school. Psychological distress takes the form of trauma, as community members are constantly exposed to crime and the dangers of living in a township (Dworzanowski-Venter, 2017).

There is no hospital in Diepsloot, however, there are two primary care clinics, private doctors and traditional healers. SADAG has intervened in Diepsloot by providing free counselling services to residents. There is a counselling container in extension 2. However, most individuals in the area consult traditional healers before they can even consider consulting western doctors (Dworzanowski-Venter, 2017).

#### 2.11 Conclusion

In conclusion, the literature has highlighted important aspects with regard to the issues centred around mental illness and the state of mental health care. The most important aspects to draw from the literature are the following; it is essential to consider that there are various beliefs and theories regarding the cause of mental illness. These beliefs have a huge influence on the attitudes that individuals have towards mental illness, thus impacting the choice of treatment or help-seeking behaviours. Mental health literacy contributes to the service utilization of mental health care. Stigmatizing attitudes have been associated with low levels of mental health literacy. There are large treatment gaps attributed to factors such as limited health care services and socioeconomic challenges. Given the various issues that have been highlighted this study will explore the attitudes of Diepsloot community members towards

their beliefs about the aetiology of mental illness and their help-seeking behaviours. The study will also explore whether attitudes and aetiology beliefs predict help-seeking behaviours. Additionally, issues of stigma and poverty will be explored as factors contributing to understanding of and help-seeking behaviours for mental illness.

## Chapter 3: Research Methods

### 3.1 Introduction

This chapter discussed the methods that were used to conduct the study. It provided the type of sampling method that was used to select the participants of the study and a description of the sample. Secondly, the research design was explained, followed by a discussion of the instruments that were utilised to collect data and the research procedure. Additionally, the chapter provided the ethical considerations for the study and the data analyses used to answer the research questions.

### 3.2 Sample and sampling

The sample consisted of 154 community members of Diepsloot. The community members were selected upon the criteria that they were currently residing in Diepsloot and over the age of 18. Participation in the study was voluntary.

The study made use of non-probability convenience sampling, by focusing on specific areas of Diepsloot which are highly marginalised and informal, specifically extension 1 and 2. The selection of these extensions was based on my experience. However, Matsheng (2017) points out that extension 1 and 2 are hugely dominated by shacks and a few RDP houses. These extensions have been identified as part of the most impoverished areas of the township.

Table 3.1 reflected that the majority of the participants were female (53.9%). The males also contributed largely to the sample (46.1%). Most people indicated their home language as IsiZulu (31.8%). This was followed by Setswana (18.5%), Sepedi (13.2%), IsiXhosa (10.6%) and Xitsonga (7.9%). Other languages were less represented in the sample, Sesotho (5.3%), IsiNdebele (4.0), Tshivenda (3.3%), English (2.0), Afrikaans (2.0%) and other unofficial languages (0.7%). A percentage of 1.9 represents participants that did not indicate their home language. The majority of the sample identified as African (96.8%). A greater number of the participants identified as Christians (75.8%). The highest level of education for most participants was high school (57.8%). Approximately 17% of the sample indicated that they had attended university. Other participants had obtained diploma certificates (15.6%) and degree/post-graduate certificate (5.8%). Only 3.9% of the sample indicated that their highest level of education was primary school. Personal monthly income was categorised into R11 000 and more (9.7%), R9 000 (2.6%), R7 000 (9.7%), R5 000 (9.7%), R3 000 (7.8%), R1 000 (9.1%), less than R1 000 (3.9%) and unemployed (47.4%).

Most of the participants reported that they knew of a person suffering from a mental illness (58.4%). A large portion of the sample reported that they had never been diagnosed with mental illness (93.5%). With regard to knowledge of mental illness, a greater number of participants indicated to have some knowledge (48.1%).

Table 3.1

Demographic information of the sample

<b>Variable</b>		<b>Frequency</b>	<b>%</b>
Gender	Female	83	53.9
	Male	71	46.1
Home Language	Afrikaans	3	2.0
	English	3	2.0
	IsiNdebele	6	4.0
	IsiXhosa	16	10.6
	IsiZulu	48	31.8
	Sepedi	20	13.2
	Sesotho	8	5.3
	Setswana	28	18.5
	Siswati	1	0.7
	Tshivenda	5	3.3
	Xitsonga	12	7.9
	Other	1	0.7
Missing	3	1.9	
Ethnicity	African	149	96.8
	Coloured	4	2.6
	Indian	1	0.6
	White	0	0
	Other	0	0

Religious affiliation	No Religion	20	13.1
	Christianity	116	75.8
	Judaism	1	0.7
	Traditional African Religion	14	9.2
	Other	2	1.3
Highest level of education	Primary School	6	3.9
	High School	89	57.8
	Some university	26	16.9
	Diploma	24	15.6
	Degree/ Post-Graduate	9	5.8
Income	R11 000 and More	15	9.7
	R9000	4	2.6
	R7000	15	9.7
	R5000	15	9.7
	R3000	12	7.8
	R1000	14	9.1
	Less than R1000	6	3.9
	Unemployed	73	47.4
Knowledge of a person suffering from a mental illness	Yes	90	58.4
	No	64	41.6
Diagnosis with a mental illness	Yes	10	6.5
	No	144	93.5
Knowledge of mental illness	No knowledge	41	26.6
	Some knowledge	74	48.1
	Sufficient knowledge	31	20.1
	More than sufficient knowledge	5	3.2

Extensive knowledge

3

1.9

Age and level of knowledge of mental illness was also reported on table 3.2. It demonstrated the mean age of the sample, which was 31.27 years (SD=9.40). The age ranged from 19 to 57 years of age. The mean for level of knowledge of mental illness was reported at 2.06 (SD=0.880). This indicates that most of the participants considered themselves as having some knowledge (48.1%), as shown in table 3.1.

Table 3.2

*Descriptive statistics for Age and Level of Knowledge of Mental Illness*

Variable	N	Minimum	Maximum	Mean	SD
Age	154	19	57	31.27	9.404
LeveloKofMI	154	1	5	2.06	.880

It is apparent from table 3.3 that a greater number of participants had access to 8 out of 25 items in the living standards measure (LSM). Most participants had an electric stove (87.0%), fridge (87.0%), tv set (85.7%), cell phone (83.8%), water (83.1%), flushing toilet (72.1%), microwave (70.8%) and a radio set (61.0%). It is also evident that the majority of the participants did not have access to 14 out of the 25 items. The following items were a built-in kitchen (100%), home security service (97.4%), sewing machine (96.1%), domestic worker (93.5%), vacuum cleaner (90.8%), tumble drier (90.2%), traditional hut (89.0%), home telephone (87.7%), dishwasher (86.4%), videocassette recorder (86.4%), motor vehicle (78.6%), hot running water (74.0), hi-fi/music centre (72.7%) and a personal computer (64.3%). Items such as Mnet/DSTV (49.0%), deep freezer (42.5%) and washing machine (40.3%) were fairly accessible to the participants.

According to Statistics South Africa (2020), the LSM group 1-4, with the least access to wealth is characterized by a number of indicators. These indicators include: individuals have primary to some high school completed, they reside in mostly urban or rural areas (not suburban), households are usually traditional huts, matchbox houses or shacks, salaries for individuals in this group generally range from R1 363 to R3 138, the major source of media

consumption is in the form commercial radio and the television usually has minimal channels (Statistics South Africa, 2020). Additionally, this group has minimal access to services, minimal ownership of durables except radio sets and stoves. Moreover, there is less participation in economic activities within this group. Individuals generally have access to some electricity, hot plates water, TV-sets and they usually have non-flush toilets (Statistics South Africa, 2020).

As shown in table 3.3, most of the participants only had access to 8 out of 25 items (32%). This justifies minimal access to resources. The sample fell under LSM group 1-4. The highest level of education as shown in table 3.1, for the participants was high school (57.8%). As described in the literature review, the township of Diepsloot has challenges with proper housing, as the majority of houses are either government houses or shacks (Kaba et al., 2017). A large number of participants were unemployed, as shown in table 3.1 (47.4%), which means less participation in economic activities. It is also evident from table 3.3 that the majority of the participants had access to radio sets, TV sets, electric stoves and water, as per the indicators of the LSM group 1-4. However, most of the participants had access to flushing toilets.

Table 3.3

*Living Standards Measure*

<b>Access to items</b>		<b>Frequency</b>	<b>%</b>
Built in kitchen	Yes	0	0
	No	154	100
Microwave	Yes	109	70.8
	No	45	29.2
Fridge	Yes	134	87.0
	No	20	13.0
Vacumm	Yes	14	9.2
	No	139	90.8
	Missing	1	0.6
Flushing toilet	Yes	111	72.1
	No	43	27.9

Cellphone	Yes	129	83.8
	No	25	16.2
Radio Set	Yes	94	61.0
	No	60	39.0
Domestic Worker	Yes	10	6.5
	No	144	93.5
Tv Set	Yes	132	85.7
	No	22	14.3
Traditional hut	Yes	17	11.0
	No	137	89.0
VCR	Yes	21	13.6
	No	133	86.4
Washing machine	Yes	63	40.9
	No	91	59.1
Electric stove	Yes	134	87.0
	No	20	13.0
Motor vehicle	Yes	33	21.4
	No	121	78.6
Personal Computer	Yes	55	35.7
	No	99	64.3
Mnet/DSTV	Yes	75	49.0
	No	78	51.0
	Missing	1	0.6
Hi-fi/music centre	Yes	42	27.3
	No	112	72.7
Hot running water	Yes	40	26.0
	No	114	74.0
Home telephone	Yes	19	12.3
	No	135	87.7
Water	Yes	128	83.1

	No	26	16.9
Tumble drier	Yes	15	9.8
	No	138	90.2
	Missing	1	0.6
Deep Freezer	Yes	65	42.5
	No	88	57.5
	Missing	1	0.6
Sewing Machine	Yes	6	3.9
	No	148	96.1
Home security service	Yes	4	2.6
	No	150	97.4
Dishwasher	Yes	21	13.6
	No	133	86.4

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### 3.3 Research design

The study made use of a quantitative research design which is on the basis of deductive reasoning from statistical information. Quantitative research allows for a wide range of statistical analysis that can be very useful for answering research questions directly and can be useful for making recommendations for future research (Lund, 2012). It was a quantitative research design that was non-experimental because there was no manipulation of any variable, no random assignment and no control group (Stangor, 2014). The research design was also cross sectional as data were collected at one point in time (Stangor, 2014).

### 3.4 Instruments

Data were collected using a questionnaire. The questionnaire was based on previous research and adapted to fit marginalised communities (van Heerden, 2018). The adaptations were made on the demographics section, a section on living standards was added and two open ended questions were also included at the end of the questionnaire. The questionnaire consisted of four sections. The first section was the demographic information. The second section consisted of questions based on the Living Standards Measure. The third section

pertained to the public perceptions of mental illness questionnaire. The final section was the two open ended questions. The inclusion of the two open-ended questions was to gain an in-depth understanding, from the participants, regarding aetiological factors and help-seeking behaviours.

### Demographics

This section consisted of 11 questions. The purpose of this section was to acquire background information of the community members. There were questions regarding age, gender, ethnicity, religious affiliation, levels of schooling, income bracket, rating own knowledge on mental illness, if they have ever been diagnosed with a mental illness, or know someone who has been diagnosed with a mental illness. Results obtained from this section were used for descriptive purposes.

### Living Standard Measure

This scale was used to indicate the socio-economic status of the community. These were questions pertaining to access to household variables (Martins, 2005). The South African Advertising Research Foundation (SAARF) developed the Living Standards Measure (LSM) as a means of measuring the socio-economic status and urbanisation of individuals or groups (South African Advertising Research Foundation, 2000). The LSM is a wealth measure that highlights a certain degree of urbanisation in relation to the market industry. It has been developed in a multivariate approach with various variables alluding to different aspects of socioeconomic development (SAARF, 2000). SAARF surveys are targeted at the adult population of South African individuals who reside in any type of household, hostel dwellers and residents of informal settlements (Ungerer & Joubert, 2011). The variables used to wealth represent access to services and durables, and geographic indicators (Ungerer & Joubert, 2011). This informs the standard of living of different population groups. The variables are summed up and the South African population is divided into ten LSM groups (Ungerer & Joubert, 2011). The scale consists of 25 items. These items include having access to a built-in kitchen, a microwave, fridge, vacuum cleaner, washing machine and etc. Answers were indicated with a yes or no. Results obtained from this section were used to analyse the socio-economic status of the community members.

### Public Perceptions of Mental Illness Questionnaire (PPMIQ)

This scale is based on public perceptions of mental illness. The original scale consists of 33 items which are in the form of a Likert scale (Sadik, Bradley, Al-Hasoon & Jenkins, 2010). The questionnaire was developed based on the research of Sadik et al. (2010) in Iraq, however, van Heerden (2018) adapted it to the South African context. The items are grouped according to four sections; one section has 21 items that focus on the causes of mental illness, the second section has 10 items related to the knowledge of people with mental illness, the third section has 12 items that focus on attitudes towards people with mental illness, the last section has 21 items which are related to the care and management of people with mental illness. The questionnaire was not reported for any prior validity and reliability (Sadik et al., 2010). Motivations for including the questionnaire that were provided by van Heerden (2018) were sufficient to also make use of the questionnaire in the current study. The most compelling rationale was based on context, the original questionnaire focused on a developing country, this is relevant to the South African context. Additionally, van Heerden (2018) reported on high face validity. The study of van Heerden (2018) adapted the scale and added additional items in the knowledge of people with mental illness section and in the section of care and management of people with mental illness. Calculated reliability estimates for knowledge items and attitude items were 0.428 and 0.713. In the current study, the two sections were combined and the calculated combined reliability was 0.773. The Public Perceptions of Mental Illness Questionnaire provided data to analyse the beliefs around the causes of mental illness, attitudes and help-seeking behaviours. Furthermore, the scale assessed if there are more positive or negative attitudes towards stigma, as a means of exploring the issue of stigma in the community.

With regard to the causes of mental illness section, an exploratory factor analysis (EFA) was conducted to test for construct validity. The EFA was based on principal components analysis with oblimin rotation and Kaiser Normalisation. The results generated four factors. There were a number of high factor loadings which indicated strong construct validity. A substantive total of 57.63% variance was obtained to explain the model. Table 3.4 presents the four factors obtained for the causes of mental illness. Component one which represented cultural beliefs, had 8 items that loaded on it. The items were: 'Jealousy beliefs', 'Beliefs jinn', 'Beliefs spirit possession', 'Possession ancestral', 'Unhappy ancestors', 'Witchcraft', 'Past karma' and 'Evil eye'. Component two represented mental illness attributed to stress, four items loaded onto this factor. The items were: 'Family stress', 'My own stress', 'External stress' and 'Financial stress'. The third component represented aetiology beliefs

associated with religion. Three items loaded on the component were: ‘God’s punishment religion’, ‘God’s test religion’ and ‘Lack of religious involvement’. Lastly, component four was associated with biological causes of mental illness. Three items loaded onto this factor, namely, ‘Genesbio’, ‘Biosubstance’ and ‘Brain dysfunction’. The reliability estimates for the factors were: 0.866, 0.747, 0.764 and 0.449, respectively.

Table 3.4

*Four Factor solution for aetiology beliefs items*

	Component			
	1	2	3	4
Genesbio	-0.039	-0.019	0.065	<b><u>0.454</u></b>
Biosubstance	0.165	0.088	-0.209	<b><u>0.625</u></b>
God’s punishment religion	0.046	-0.069	<b><u>0.838</u></b>	-0.076
God’s test religion	-0.075	0.023	<b><u>0.893</u></b>	0.174
Lack of religious involvement	0.204	0.015	<b><u>0.623</u></b>	-0.206
Jealousy beliefs	<b><u>0.590</u></b>	0.081	0.037	-0.278
Beliefs jinn	<b><u>0.847</u></b>	0.009	-0.083	-0.143
Beliefs spirit possession	<b><u>0.728</u></b>	0.139	0.089	-0.103
Possession ancestral	<b><u>0.826</u></b>	0.023	-0.077	0.053
Unhappy ancestors	<b><u>0.803</u></b>	-0.045	0.037	0.103
Witchcraft	<b><u>0.645</u></b>	-0.051	-0.031	0.356
Brain dysfunction	-0.044	0.206	-0.008	<b><u>0.718</u></b>
Family stress	-0.097	<b><u>0.796</u></b>	0.040	0.154
Past karma	<b><u>0.561</u></b>	0.001	0.256	0.282
My own stress	0.051	<b><u>0.812</u></b>	0.043	-0.129
External stress	0.133	<b><u>0.694</u></b>	-0.033	-0.048
Evil eye	<b><u>0.534</u></b>	0.015	0.204	-0.063
Financial stress	-0.063	<b><u>0.687</u></b>	-0.063	0.125

Exploratory factor analysis was also conducted to assess the care and management of people with mental illness section (help-seeking behaviours). The analysis produced a six factor solution which is presented in table 3.5. The EFA solution was able to explain 62.45% of variance of the model. Component 1 represented community care, and four items loaded on it. The items were: ‘Mental illness can be treated outside of a hospital’, ‘Consult with a priest’, ‘Consult with an elder member of the family’ and ‘Consult with an elder member of the community’. Component 2 was indicative of hospitalisation and interpersonal circle, and four items loaded on it. The items were: ‘Consult with a General Practitioner’, ‘Talk to his/her family’, ‘Reconnect with his/her friends’ and ‘Be admitted to a psychiatric hospital’. Component 3 was aligned with western medicine, three items loaded on it. The items were: ‘Seek the help of a psychologist’, ‘Consult with a psychiatrist’ and ‘Take medication’. Component 4 was associated with local clinics and three items loaded on it. The items were: ‘Information about mental illness is available at my local clinic’, ‘Local clinics can provide good care for mental illness’ and ‘If I was concerned about a mental health issue with a member of my family or myself, I would feel comfortable discussing it with someone at my local clinic’. Component 5 was indicative of complementary medicine and two items loaded on it. The items were: ‘Consult with a traditional healer’ and ‘Use holistic treatments’. Component 6 was aligned with religion and two items loaded on it. The items were: ‘It is very important for the mentally ill person to seek help from a professional from the same religion/culture’ and ‘Pray to God’. The reliability estimates for the respective factors were: 0.654, 0.617, 0.806, 0.542, 0.460 and 0.380, in order of factor 1 to 6.

Table 3.5

*Six factor solution for help-seeking behaviours*

	Component					
	1	2	3	4	5	6
Mental illness can be treated outside of a hospital	<b>.623</b>	.122	-.269	-.249	-.22 0	-.261
Information about mental illness is available at my local clinic	.003	.478	-.171	<b>.630</b>	-.235	.136
Local clinics can provide good care for mental illness.	.062	-.073	.056	<b>.800</b>	.028	-.046

If I was concerned about a mental health issue with a member of my family or myself, I would feel comfortable discussing it with someone at my local clinic.	.437	.048	.098	<b><u>.528</u></b>	.406	-.224
It is very important for the mentally ill person to seek help from a professional from the same religion/culture.	.094	.118	.186	.462	.095	<b><u>.440</u></b>
Consult with a General Practitioner.	.164	<b><u>.454</u></b>	.180	.175	.243	.059
Talk to his/her family.	.242	<b><u>.531</u></b>	.185	.139	.049	.277
Reconnect with his/her friends.	.436	<b><u>.422</u></b>	.212	.034	-.045	.124
Consult with a priest.	<b><u>.610</u></b>	.007	.392	-.007	.082	.339
Consult with an elder member of the family.	<b><u>.751</u></b>	.037	.063	.230	.115	.250
Consult with an elder member of the community.	<b><u>.617</u></b>	.106	.020	.159	.340	.054
Consult with a traditional healer.	.156	.076	-.121	.043	<b><u>.815</u></b>	.096
Pray to God.	.159	.201	.071	-.065	.078	<b><u>.812</u></b>
Seek the help of a psychologist.	.076	.103	<b><u>.897</u></b>	-.010	.003	.112
Consult with a psychiatrist.	.077	.552	<b><u>.627</u></b>	.010	-.207	-.015
Take medication.	.023	.464	<b><u>.634</u></b>	.197	.132	.104
Use holistic treatments.	-.012	.443	.165	-.076	<b><u>.580</u></b>	.086
Be admitted to a psychiatric hospital.	-.027	<b><u>.725</u></b>	.087	-.092	.212	.052

### Open Ended Questions

This section consists of two open-ended questions. One question is related to factors that influence people developing mental illness, namely, "What in your opinion are the factors that contribute to mental illness developing in individuals?". The other question is related to

advice, to assess the kind of support individuals might give to mentally ill persons, namely, “What kind of advice would you give to someone who has a mental illness?”.

### 3.5 Research procedure

Once ethical clearance was obtained, the Psychology Honours students were invited to take part in the data collection of the study. These were students that volunteered to be research assistants for the study and wanted to gain experience in the research process. The students were invited in the form of emails to all the students in the honours class, to inform the students about the details of the research study. Eligible students were those that were either residing in Diepsloot or had access to community members in Diepsloot and students that are bilingual, students who can speak English and an African language.

Research assistants were chosen based on the abovementioned. Four research assistants were selected. Only one research assistant was trained as to how to administer the questionnaires as other research assistants were not available on research collection dates. The questionnaires were only available in paper format and data collection entailed the task of explaining to the participants some of the items that were difficult to understand. The questionnaires were administered to Diepsloot community members that resided in extensions 1 and 2. Individuals within the surrounding households and public areas were approached by the research assistant and I, to participate. The questionnaires were administered in the SADAG counselling container. Translation was provided by the research assistant and I, upon request. Items were read to the participants to assess conception, interpretation and translation were provided, prior to the responses being recorded. Additionally, the open-ended questions were read and explained to the participants. Participants who had difficulty understanding the questions were provided with translation and responses were recorded by the research assistant and I, on their behalf.

### 3.6 Ethical Considerations

Ethical clearance was obtained from the Human Research Ethics Committee (Protocol number: MACC/19/009IH). Participants were provided with a Participant Information Sheet together with the questionnaire. The Participant Information served as an invitation to participate in the study and provided information about the research. The information sheet and the questionnaire were in the form of hardcopies. Participants were informed that participation is strictly voluntary. It was further explained that participation had no benefits. Moreover, participants were informed about the duration of filling in the questionnaire, which

was approximately 30 minutes. Participants were assured of confidentiality, as no identifying information was required on the questionnaires, however the participants could not be assured of anonymity as the researcher and research assistant administered the questionnaires. Feedback will only be provided upon request; the researcher's email address was provided on the information sheet. Since the questionnaire required no identifying information, no individual feedback can be provided. If feedback is requested, a summary will be provided and displayed at the community hall in extension 2. The information sheet also contained details of free counselling services specifically the SADAG free counselling container, if the questionnaire provoked any vulnerabilities. The findings of the study were reported in the current research report. It may also be used in conference presentations and journal articles. The questionnaires will be kept in a locked cupboard. Informed consent was considered by the completion and return of the questionnaire.

### 3.7 Data Analysis

Data analysis was accomplished by using SPSS, which is a Statistical Package for the Social Sciences, using the latest IBM version 25. The first step of analysing the questionnaire involved creating a spreadsheet, where all the data were captured. The data were checked and revised for errors. The data were scored. Thereafter, the data were summarised using the necessary descriptive statistics to answer the relevant research questions. The demographics section consisted of nominal variables, these variables were analysed by using frequencies; variables such as gender, age, care, religion and language but this was used for descriptive purposes only. Questions 1 to 3 was answered using descriptive statistics, namely, the mean, median, standard deviations and frequencies.

The scores that were obtained from using the scale, Public Perceptions of Mental Illness scale, were analysed using means, standard deviations; as well as the skewness of the scales. The scale was further examined for internal consistency reliability by using Cronbach alpha. Exploratory factor analysis was conducted to test for construct validity. Exploratory factor analysis is a statistical procedure that simplifies interrelated measures and it assists in discovering patterns in a set of variables (Yong & Pearce, 2013). The EFA was based on principal component analysis with varimax rotation. The type of rotation was dependent on whether the factors were related or independent. Items were considered to belong to a factor if the item presented with the largest factor loading for that particular factor. Factor loadings of a minimum of 0.40 were considered during interpretation (Field, 2013)

Furthermore, to answer the question 4 and 5, which has a component of prediction, multiple regression was used. Multiple regression is a statistical technique that assesses the impact of a number of independent variables on a dependent variable (Stangor, 2014). The analysis is also able to provide information on the effects of each independent variable on the dependent variable (Stangor, 2014). The assumptions for using multiple regression were first checked. Hence assumptions linked to linearity normality of residuals, multicollinearity, and homoscedasticity were checked (Osborne & Waters, 2002). Once all assumptions were met, the data analysis proceeded with the multiple regression.

Backward elimination multiple regression was used, which is a type of stepwise multiple regression analysis (Smith, 2018). Stepwise multiple regression involves a series of steps, evaluating the effects of the independent variables, individually, by using statistics for the coefficients of the independent variables being considered (Smith, 2018). The initial step of backward elimination regression involves all the independent variables and then eliminates the least statistically significant independent variables at every step (Smith, 2018).

The open-ended questions were analysed qualitatively using thematic analysis as indicated by Braun and Clarke (2006). Thematic Analysis is a widely used method for analysing qualitative data. It is a useful tool for organizing, structuring and providing insight across a data set (Nowell, Norris, White & Moules, 2017). Thematic Analysis, which comprises a 6 step process, entails identifying patterns and collectively making sense of shared meanings and experiences through a description and interpretation of the data set (Braun & Clarke, 2006; Maguire & Delahunt, 2017). The analysis adopted a theoretical (deductive) approach as the main focus was geared towards finding themes and patterns relating to the two open ended questions. Responses to the questions were first transcribed before conducting the thematic analysis. The steps of Thematic Analysis are as follows: firstly, familiarising oneself with the data; secondly, generating initial codes; thirdly, searching for themes; fourthly, reviewing themes; fifth, defining and naming the themes and lastly, producing the report (Braun & Clarke, 2006). To familiarize oneself with the data, the responses to the two open ended questions were entered on excel as per participant, this information was read thoroughly to gain a better understanding of the individual responses. The coding process was carried out manually to identify patterns within the data. The two open ended questions were analysed separately and not across the two questions. This was done to gain a better understanding of how the participants understood each question. Themes were then generated for each question individually. The final write-up generated six themes for the first question

and five themes for the second question. The themes were arranged in the order of themes that were most dominant followed by the less prevalent themes.

### 3.8 Conclusion

This chapter discussed the research methods that were undertaken to conduct this study. The sample was extensively described using descriptive statistics of the demographic information and the living standards measure. The research design was explained adequately. Necessary details were provided for the instruments used. The research procedure, ethical considerations and data analysis were also explained adequately.

## Chapter 4: Results

### 4.1 Introduction

The results of the research questions were presented in this chapter. They followed the order of the research questions as stated in chapter 1. The results of the research questions regarding attitudes, aetiology beliefs and help-seeking behaviours were presented first using descriptive statistics. This was followed by the prediction research questions which were presented using the outcomes of the backwards multiple regressions. Lastly, the results of the thematic analysis open ended questions were presented as individual analyses for the two separate questions.

### 4.2 What attitudes do the Diepsloot community hold towards mental illness?

From table 4.1, it is evident that overall the majority of participants had neutral attitudes towards mental illness but closer examination of items indicated more negative attitudes among the participants. This is represented by a total mean of 3.48 and a standard deviation of 0.525. Six items had the lowest means. These were items that most of the participants disagreed with. The following items were: “Mental illness is like any other illness.” ( $\bar{x}$ =2.92, SD= 1.236), “People with mental illness experience aches and pains in their body.” ( $\bar{x}$ =2.92, SD=1.126), “It’s better to have a physical illness rather than a mental illness.” ( $\bar{x}$ =2.86, SD=1.334). “Mentally ill persons are usually dangerous.” ( $\bar{x}$ =2.75, SD=1.255), “I could marry someone with a mental illness.” ( $\bar{x}$ =2.94, SD=1.290), “One should hide his/her mental illness from his/her community.” ( $\bar{x}$ =2.42, SD=1.266). Out of the six items, three items demonstrated positive attitudes. The items were: “It’s better to have a physical illness rather than a mental illness”, “Mentally ill persons are usually dangerous” and “One should hide his/her mental illness mental illness from his/her community”. Most of the participants disagreed with these items. Three items demonstrated negative attitudes. The items were: “Mental illness is like any other illness”, “People with mental illness experience aches and pains in their body” and “I could marry someone with a mental illness”. These are items that most of the participants also disagreed with.

Similarly, there were also six items that however, had higher mean scores. These were items that most of the participants were in agreement with. The items were: “People with mental

health problems are largely to blame for their own condition.” ( $\bar{x}$ = 3.73, SD=1.258), “The mentally ill should not get married.” ( $\bar{x}$ =3.56, SD=1.247), “One should avoid all contact with the mentally ill.” ( $\bar{x}$ =3.73, SD=1.221), “I would be afraid to have a conversation with a mentally ill person.” ( $\bar{x}$ =3.53, SD=1.95), “People with mental health illnesses should have the same rights as anyone else.” ( $\bar{x}$ = 3.86, SD=1.194), “I would be ashamed if people knew that someone in my family had been diagnosed with a mental illness.” ( $\bar{x}$ =3.90, SD=1.192). Out of the six items, five items represented negative attitudes. These items were; “People with mental health problems are largely to blame for their own condition”, “The mentally ill should not get married”, “One should avoid all contact with the mentally ill”, “I would be afraid to have a conversation with a mentally ill person” and “I would be ashamed if people knew that someone in my family had been diagnosed with a mental illness”. One item out of the six items represented slightly more positive attitudes. The item was, “People with mental health issues should have the same rights as anyone else”.

Table 4.1

*Descriptive statistics of attitudes toward mental illness*

Variable	N	Min	Max	Mean	SD	Skewness	Std. Error
Mentally ill persons can work	154	1	5	3.18	1.212	-0.266	0.195
Anyone can suffer from a mental illness	154	1	5	3.75	1.088	-1.084	0.195
Mental illness is like any other illness.	154	1	5	2.92	1.236	-0.027	0.195
People with mental illness experience aches and pains in their body.	154	1	5	2.92	1.126	-0.055	0.195
People with mental health problems are largely to blame for their own condition.	154	1	5	3.73	1.258	-0.721	0.195
Spiritual illnesses are better than mental illnesses.	154	1	5	3.49	1.259	-0.463	0.195
One can always tell a mentally ill person by his or her physical appearance.	154	1	5	3.38	1.314	-0.236	0.195
Mentally ill persons are not capable of true friendships.	154	1	5	3.46	1.264	-0.335	0.195
It's better to have a physical illness rather than a mental illness.	154	1	5	2.86	1.334	0.370	0.195

Mentally ill persons are usually dangerous.	154	1	5	2.75	1.255	0.411	0.195
Suffering from a mental illness is shameful.	154	1	5	3.32	1.332	-0.149	0.195
The mentally ill should be prevented from having children	154	1	5	3.45	1.294	-0.293	0.195
The mentally ill should not get married.	154	1	5	3.56	1.247	-0.422	0.195
One should avoid all contact with the mentally ill.	154	1	5	3.73	1.221	-0.698	0.195
The mentally ill should not be allowed to make decisions, even those concerning routine events.	154	1	5	3.44	1.278	-0.306	0.195
I could maintain a friendship with someone with a mental illness.	154	1	5	3.49	1.222	-0.583	0.195
I could marry someone with a mental illness.	154	1	5	2.94	1.290	0.147	0.195
I would be afraid to have a conversation with a mentally ill person.	154	1	5	3.53	1.195	-0.637	0.195
People with mental health illnesses should have the same rights as anyone else.	154	1	5	3.86	1.194	-1.133	0.195
I would be upset or disturbed about working on the same job as a mentally ill person.	154	1	5	3.35	1.245	-0.261	0.195
I would be ashamed if people knew that someone in my family had been diagnosed with a mental illness.	154	1	5	3.90	1.192	-0.888	0.195
People are generally caring and sympathetic towards people with mental illness.	154	1	5	3.19	0.929	-0.053	0.195

One should hide his/her mental illness from his/her community.	154	1	5	2.42	1.266	0.681	0.195
TOTALATTITUDES	154	50	103	3.33	0.50	0.292	0.195

#### 4.3 What are the aetiology beliefs regarding mental illness in the Diepsloot community?

Table 4.2 demonstrates the average responses, regarding aetiology beliefs of mental illness, across all the participants. The factors with the lowest mean scores were cultural beliefs and religious beliefs. The mean score for items related to cultural beliefs as a cause for mental illness, was 2.889 (SD=0.887). The mean score was closer to 3 than 2. This indicates that most of the most of the participants were neutral with cultural beliefs as a plausible cause of mental illness. Secondly, another low mean score of 2.221(SD=0.947) was obtained for items related to religious beliefs as a cause for mental illness. The mean score was closer to 2 than 3. This reflects a level of disagreement across the participants with religious beliefs as a cause of mental illness. The other two factors had slightly higher mean scores. The mean score for items related to stress was 3.45 (SD=0.865). The mean score indicates that there were more participants that provided neutral responses for stress related causes than the participants that agreed with stress related causes of mental illness. The mean score for items related to biological causes was 3.504 (SD=0.754). This mean score reflects that there were responses that were neutral and other responses where participants agreed with biological causes. However, the mean score is closer to 4 than 3. The participants were therefore more aligned with biological causes of mental illness.

Table 4.2

#### *Descriptive statistics for aetiology beliefs of mental illness*

	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Skewness</b>
<b>CulturalBeliefs</b>	154	1.00	5.00	2.889	0.887	-.039
<b>Stress</b>	153	1.00	5.00	3.456	0.865	-.137
<b>ReligiousBeliefs</b>	154	1.00	5.00	2.221	0.947	.132
<b>Biological</b>	154	1.00	5.00	3.504	0.754	-.061

4.4 What are the help-seeking options that affected individuals in the Diepsloot community use?

Table 4.3 presented results for the help-seeking behaviours of the participants. The factors obtained in table 3.5 were labelled and the relevant items were grouped together. The descriptive statistics were divided by the number of items per factor. As reported in table 4.3, there are three factors with the higher mean scores and three factors with the lower mean scores. The factors with the higher mean scores were western medicine, hospitalisation and interpersonal circle and religion. The western medicine had the highest mean score of 4.097(SD=0.808) and three items were combined together. This indicates that the average response was closer to 4 than 5. There was therefore agreement with items for the western medicine factor, among the participants. The hospitalisation and interpersonal circle factor had the second highest mean score of 3.802(SD=0.698) and it had a combination of four items. The mean score for this factor was closer to 4 than 3, indicating that on average, participants agreed with items related to hospitalisation and interpersonal circle. The religion factor had a mean score of 3.704(SD=0.831) and two items were combined together. The mean score was closer to 4 than 3, suggesting that on average, the participants agreed with items associated to religion.

The three items with the lower mean scores were community care, complementary medicine and local clinics. The mean score obtained for community care was 3.415(SD=0.769) and the factor had a combination of four items. The mean score was close to 3 than 4. Thus, the average response was indicative of neutral responses with items related to community care. The complementary medicine factor had a mean score of 3.301(SD=0.933) and two items were combined. The mean score was closer to 3 than 4. On average, participants were neutral towards items related to complementary medicine. The mean score for local clinics was 3.291(SD=0.825) and three items were combined for this factor. The mean score was close to 3 than 4, which shows that on average, the participants were neutral with items on the local clinics factor.

Table 4.3

*Descriptive statistics for help-seeking behaviours*

N	Minimum	Maximum	Mean	Std. Deviation	Skewness
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Community Care	154	1.00	5.00	3.415	0.769	-.131
Hospitalization and Interpersonal circle	154	1.00	5.00	3.802	0.698	-.154
Western Medicine	154	1.00	5.00	4.097	0.808	-.346
Local Clinics	154	1.00	5.00	3.291	0.825	-.136
Complementary Medicine	154	1.00	5.00	3.301	0.933	-.067
Religion	154	1.00	5.00	3.704	0.831	-.284

#### 4.5 Does gender, level of education, age, knowledge of mental illness, beliefs of aetiology and socio-economic status predict attitudes towards mental illness?

Backward elimination multiple regression was performed to answer this question. The assumptions for multiple regression were checked and they were within acceptable limits. Firstly, the dependent variable and independent variables were normally distributed. Secondly, a scatterplot of residuals was used to check for homoscedasticity. Thirdly, histograms in combination with box plots were used to check for outliers. Lastly, the variance inflation factor was used to check for multicollinearity. The independent variables that were used were: gender, level of education, age, knowledge of mental illness, aetiology factors (Cultural beliefs, Stress, Religious beliefs and the Biological factor) and socioeconomic status.

The overall model obtained for the prediction of attitudes towards mental illness was statistically significant ( $F(9, 143)=8.977, p<0.001, R^2=0.361$ ), as shown in table 4.4. The final model was carried out in 5 steps and explained 34% of variance ( $F(1, 146)=1.787, p=0.183, R^2=0.348$ ).

It is evident from the final model in table 4.5 that level of knowledge of mental illness ( $B=3.524$  and  $p<0.001$ ), the biological factor ( $B=0.798$  and  $p=0.026$ ), religious beliefs factor ( $B=-1.170$  and  $p<0.001$ ) and the cultural beliefs factor ( $B=-0.328$  and  $p=0.007$ ) were significant predictors of attitudes towards mental illness. The most significant predictors were, level of knowledge of mental illness ( $B=3.524$  and  $p>0.001$ ) and religious beliefs ( $B=-1.170$  and  $p>0.001$ ). Level of knowledge of mental illness had the largest effect size of 3.894 and was thus the strongest predictor. This suggests that the participants had positive attitudes towards mental illness if their level of knowledge of mental illness was higher.

Table 4.4

*Multiple regression results for the prediction of attitudes towards mental illness using the variables: gender, level of education, age, knowledge of mental illness, beliefs of aetiology and socio-economic status.*

<b>Model Summary</b>									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.601 <sup>a</sup>	.361	.321	9.517	.361	8.977	9	143	<.001
2	.600 <sup>b</sup>	.360	.325	9.489	-.001	.167	1	143	.683
3	.599 <sup>c</sup>	.359	.328	9.464	-.001	.246	1	144	.621
4	.597 <sup>d</sup>	.356	.330	9.454	-.003	.670	1	145	.414
5	.590 <sup>e</sup>	.348	.326	9.479	-.008	1.787	1	146	.183

Table 4.5

*Multiple regression results for the prediction of attitudes towards mental illness using the variables: gender, level of education, age, knowledge of mental illness, beliefs of aetiology and socio-economic status.*

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	76.294	7.711		9.894	<.001
	Gender	-.669	1.636	-.029	-.409	.683
	YearsofEducation	.214	.268	.057	.797	.427
	Age	-.135	.085	-.110	-1.588	.114
	LevelofKnowledgeofMentalIllness	3.626	.928	.276	3.907	<.001
	SESTOTAL	-.083	.200	-.029	-.416	.678
	Stress	.348	.249	.104	1.401	.163
	Biological	.629	.371	.123	1.695	.092

	ReligiousBeliefs	-1.114	.312	-.275	-3.573	<,001
	CulturalBeliefs	-.343	.130	-.211	-2.628	.010
2	(Constant)	75.526	7.457		10.128	<,001
	YearsofEducation	.227	.266	.060	.853	.395
	Age	-.138	.084	-.113	-1.644	.102
	LevelofKofMI	3.623	.925	.276	3.914	<,001
	SESTOTAL	-.097	.196	-.034	-.496	.621
	Stress	.353	.248	.106	1.427	.156
	Biological	.634	.369	.124	1.716	.088
	ReligiousBeliefs	-1.120	.311	-.276	-3.604	<,001
	CulturalBeliefs	-.352	.128	-.217	-2.741	.007
3	(Constant)	75.010	7.365		10.184	<,001
	YearsofEducation	.216	.264	.058	.819	.414
	Age	-.138	.084	-.113	-1.643	.103
	LevelofKofMI	3.549	.911	.270	3.895	<,001
	Stress	.338	.245	.101	1.381	.170
	Biological	.643	.368	.126	1.748	.083
	ReligiousBeliefs	-1.123	.310	-.277	-3.625	<,001
	CulturalBeliefs	-.352	.128	-.217	-2.754	.007
4	(Constant)	78.558	5.948		13.208	<,001
	Age	-.149	.083	-.122	-1.803	.074
	LevelofKofMI	3.461	.904	.264	3.830	<,001
	Stress	.327	.244	.098	1.337	.183
	Biological	.667	.366	.131	1.821	.071
	ReligiousBeliefs	-1.100	.308	-.271	-3.569	<,001

	CulturalBeliefs	-.375	.125	-.231	-3.012	.003
5	(Constant)	80.960	5.685		14.242	<,001
	Age	-.149	.083	-.122	-1.800	.074
	LevelofMI	3.524	.905	.268	3.894	<,001
	Biological	.798	.354	.156	2.252	.026
	ReligiousBeliefs	-1.170	.304	-.289	-3.845	<,001
	CulturalBeliefs	-.328	.120	-.202	-2.739	.007

4.6 Does gender, level of education, age, knowledge of mental illness, beliefs of mental aetiology, attitudes towards mental illness and socio-economic status predict help-seeking behaviour of mental illness?

Backward elimination multiple regression was performed to answer this question. Five backward elimination multiple regression analyses were performed for the prediction of the five factors of the help-seeking behaviours (Restorative/curative care, Community/social help, Local clinics, Institutional health care and Integrative/alternative care). The assumptions for multiple regression were checked and they were within acceptable limits. Firstly, the dependent variable and independent variables were normally distributed. Secondly, a scatterplot of residuals was used to check for homoscedasticity. Thirdly, histograms in combination with box plots were used to check for outliers. Lastly, the variance inflation factor was used to check for multicollinearity. The independent variables that were used were: gender, level of education, age, knowledge of mental illness, aetiology factors (Cultural beliefs, Stress, Religious beliefs and the Biological factor), attitudes towards mental illness and socioeconomic status. The results for the five multiple regression analyses are discussed below.

#### 4.6.1 Community care

The overall model obtained for the community care factor was not statistically significant ( $F(10, 141)=1.097$ ,  $p=0.368$ ,  $R^2=0.072$ ), as reported in table 4.6. The final model was carried

out in 10 steps and explained 5% of variance in the community care factor as a preference for help-seeking ( $F(1, 149)=1.887, p=0.172, R^2=0.049$ ).

The significant predictor of the community care factor was the stress factor ( $B=0.197, p=0.006$ ) of the aetiology beliefs, as evident in table 4.7. The results indicated a positive relationship between the help-seeking option, community care and the stress factor. The stress factor had an effect size of 0.222. This can be interpreted as the participants of the sample being more inclined to using help-seeking behaviours related to community care if perceived causes of mental illness were stress related factors.

Table 4.6

*Multiple regression results for the prediction of community care factor using the variables: gender, level of education, age, knowledge of mental illness, beliefs of aetiology, attitudes towards mental illness and socio-economic status.*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Change	F Change	df1	df2	Sig. F Change
1	.269 <sup>a</sup>	.072	.006	3.07628	.072	1.097	10	141	.368
2	.269 <sup>b</sup>	.072	.013	3.06551	.000	.007	1	141	.933
3	.268 <sup>c</sup>	.072	.020	3.05497	.000	.018	1	142	.893
4	.268 <sup>d</sup>	.072	.027	3.04463	.000	.027	1	143	.871
5	.268 <sup>e</sup>	.072	.033	3.03449	.000	.036	1	144	.849
6	.267 <sup>f</sup>	.071	.039	3.02472	.000	.062	1	145	.804
7	.265 <sup>g</sup>	.070	.045	3.01627	-.001	.179	1	146	.672
8	.259 <sup>h</sup>	.067	.048	3.01088	-.003	.472	1	147	.493
9	.247 <sup>i</sup>	.061	.048	3.01050	-.006	.962	1	148	.328
10	.222 <sup>j</sup>	.049	.043	3.01939	-.012	1.887	1	149	.172

Table 4.7

*Multiple regression results for the prediction of community care factor using the variables: gender, level of education, age, knowledge of mental illness, beliefs of aetiology, attitudes towards mental illness and socio-economic status.*

Model		Unstandardized		Standardized	T	Sig.
		Coefficients		Coefficients		
		B	Std. Error	Beta		
1	(Constant)	9.706	3.236		3.000	.003
	Age	.019	.028	.058	.681	.497
	Gender	.074	.530	.012	.139	.889
	YearsofEducation	.040	.087	.040	.460	.646
	LeveloKofMI	.063	.317	.018	.200	.842
	CulturalBeliefs	.066	.043	.152	1.518	.131
	Stress	.165	.081	.185	2.029	.044
	ReligiousBeliefs	-.098	.105	-.091	-.930	.354
	Biological	-.029	.121	-.021	-.238	.812
	TOTALATTITUDES	-.004	.027	-.013	-.132	.895
	SESTOTAL	.005	.065	.007	.085	.933
2	(Constant)	9.732	3.211		3.031	.003
	Age	.019	.028	.057	.681	.497
	Gender	.081	.520	.013	.157	.876

	YearsofEducation	.041	.086	.041	.473	.637
	LeveloKofMI	.068	.312	.019	.217	.829
	CulturalBeliefs	.066	.043	.151	1.521	.130
	Stress	.166	.080	.186	2.065	.041
	ReligiousBeliefs	-.098	.105	-.091	-.933	.352
	Biological	-.029	.121	-.021	-.242	.809
	TOTALATTITUDES	-.004	.027	-.014	-.135	.893
3	(Constant)	9.455	2.466		3.835	<.001
	Age	.019	.027	.059	.707	.481
	Gender	.084	.518	.014	.163	.871
	YearsofEducation	.040	.086	.040	.467	.641
	LeveloKofMI	.055	.296	.016	.184	.854
	CulturalBeliefs	.067	.042	.154	1.592	.114
	Stress	.165	.080	.185	2.070	.040
	ReligiousBeliefs	-.094	.100	-.087	-.937	.350
	Biological	-.032	.119	-.023	-.265	.791
4	(Constant)	9.561	2.369		4.035	<.001
	Age	.020	.027	.060	.729	.467
	YearsofEducation	.039	.085	.038	.454	.650
	LeveloKofMI	.056	.294	.016	.191	.849
	CulturalBeliefs	.068	.041	.157	1.646	.102
	Stress	.164	.079	.184	2.074	.040
	ReligiousBeliefs	-.093	.100	-.086	-.933	.352
	Biological	-.032	.118	-.024	-.274	.785

5	(Constant)	9.693	2.259		4.290	<,001
	Age	.019	.027	.059	.715	.476
	YearsofEducation	.037	.084	.037	.437	.662
	CulturalBeliefs	.067	.041	.156	1.643	.103
	Stress	.165	.079	.185	2.094	.038
	ReligiousBeliefs	-.095	.099	-.088	-.961	.338
	Biological	-.029	.117	-.021	-.248	.804
6	(Constant)	9.456	2.041		4.633	<,001
	Age	.020	.027	.060	.743	.459
	YearsofEducation	.036	.084	.035	.424	.672
	CulturalBeliefs	.067	.041	.154	1.635	.104
	Stress	.160	.075	.179	2.116	.036
	ReligiousBeliefs	-.092	.098	-.085	-.939	.349
7	(Constant)	10.040	1.500		6.691	<,001
	Age	.018	.026	.055	.687	.493
	CulturalBeliefs	.063	.040	.146	1.586	.115
	Stress	.158	.075	.177	2.102	.037
	ReligiousBeliefs	-.088	.097	-.081	-.906	.366
8	(Constant)	10.606	1.252		8.471	<,001
	CulturalBeliefs	.066	.040	.152	1.666	.098
	Stress	.156	.075	.175	2.086	.039
	ReligiousBeliefs	-.094	.096	-.087	-.981	.328
9	(Constant)	10.141	1.159		8.751	<,001
	CulturalBeliefs	.049	.035	.112	1.374	.172

Stress	.173	.073	.194	2.376	.019
10 (Constant)	10.931	1.009		10.831	<,001
Stress	.197	.071	.222	2.785	.006

#### 4.6.2 Hospitalisation and interpersonal circle

For the hospitalisation and interpersonal circle factor, the overall model was statistically significant ( $F(10,141)=2.132$ ,  $p=0.026$ ,  $R^2=0.131$ ), as shown in table 4.8. The final model was reached in 9 steps and explained 11% of variance ( $F(1, 148)=1.310$ ,  $p=0.254$ ,  $R^2=0.110$ ).

The only significant predictor of the hospitalisation and interpersonal circle factor was the stress factor ( $B=0.207$  and  $p=0.002$ ) of aetiology beliefs, as shown in table 4.9. The multiple regression resulted in a positive relationship between the help-seeking behaviour, hospitalisation and interpersonal circle factor and the stress factor. The effect size was 0.256. This suggests that the participants only favoured help-seeking behaviours related to hospitalisation and interpersonal circle if causes of mental illness were perceived to be attributed to stress related factors.

Table 4.8

*Multiple regression results for the prediction of hospitalisation and interpersonal circle factor using the variables: gender, level of education, age, knowledge of mental illness, beliefs of aetiology, attitudes towards mental illness and socio-economic status.*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.362 <sup>a</sup>	.131	.070	2.70290	.131	2.132	10	141	.026
2	.362 <sup>b</sup>	.131	.076	2.69339	.000	.003	1	141	.956
3	.362 <sup>c</sup>	.131	.083	2.68401	.000	.005	1	142	.944
4	.362 <sup>d</sup>	.131	.088	2.67549	-.001	.088	1	143	.767
5	.361 <sup>e</sup>	.130	.094	2.66705	-.001	.087	1	144	.768

6	.357 <sup>f</sup>	.127	.097	2.66258	-.003	.511	1	145	.476
7	.350 <sup>g</sup>	.123	.099	2.66029	-.004	.747	1	146	.389
8	.343 <sup>h</sup>	.118	.100	2.65879	-.005	.832	1	147	.363
9	.332 <sup>i</sup>	.110	.098	2.66155	-.008	1.310	1	148	.254

Table 4.9

*Multiple regression results for the prediction of hospitalisation and interpersonal circle factor using the variables: gender, level of education, age, knowledge of mental illness, beliefs of aetiology, attitudes towards mental illness and socio-economic status.*

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	10.859	2.859		3.799	<.001
Age	-.019	.024	-.062	-.759	.449
Gender	.532	.465	.095	1.144	.255
YearsofEducation	-.080	.076	-.088	-	.296
				1.049	
LevelofKofMI	-.078	.278	-.025	-.281	.779
CulturalBeliefs	-.003	.038	-.007	-.072	.943
Stress	.194	.071	.241	2.730	.007
ReligiousBeliefs	-.023	.093	-.024	-.253	.801
Biological	.172	.106	.139	1.613	.109
TOTALATTITUDES	.014	.024	.059	.598	.551
SESTOTAL	-.003	.057	-.005	-.056	.956

2	(Constant)	10.844	2.835		3.825	<,001
	Age	-.018	.024	-.062	-.760	.448
	Gender	.528	.457	.094	1.155	.250
	YearsofEducation	-.081	.076	-.089	-	.289
					1.064	
	LevelofKofMI	-.081	.274	-.025	-.294	.769
	CulturalBeliefs	-.003	.038	-.007	-.071	.944
	Stress	.194	.070	.240	2.757	.007
	ReligiousBeliefs	-.023	.092	-.024	-.254	.800
	Biological	.172	.106	.139	1.622	.107
	TOTALATTITUDES	.014	.024	.059	.603	.547
3	(Constant)	10.794	2.736		3.945	<,001
	Age	-.019	.024	-.062	-.765	.446
	Gender	.523	.450	.093	1.162	.247
	YearsofEducation	-.080	.074	-.088	-	.285
					1.072	
	LevelofKofMI	-.081	.273	-.025	-.296	.767
	Stress	.192	.067	.238	2.862	.005
	ReligiousBeliefs	-.026	.086	-.026	-.298	.766
	Biological	.171	.105	.138	1.630	.105
	TOTALATTITUDES	.015	.023	.060	.635	.526
4	(Constant)	10.783	2.727		3.953	<,001
	Age	-.018	.024	-.061	-.748	.455
	Gender	.517	.448	.092	1.153	.251

	YearsofEducation	-.077	.073	-.084	-	.297
					1.046	
	Stress	.192	.067	.238	2.866	.005
	ReligiousBeliefs	-.025	.086	-.026	-.295	.768
	Biological	.168	.104	.136	1.613	.109
	TOTALATTITUDES	.013	.022	.052	.573	.567
5	(Constant)	10.385	2.364		4.393	<.001
	Age	-.017	.024	-.057	-.715	.476
	Gender	.505	.445	.090	1.135	.258
	YearsofEducation	-.078	.073	-.086	-	.288
					1.066	
	Stress	.193	.067	.239	2.884	.005
	Biological	.169	.104	.137	1.631	.105
	TOTALATTITUDES	.015	.020	.063	.770	.442
6	(Constant)	9.634	2.114		4.558	<.001
	Gender	.481	.443	.086	1.086	.279
	YearsofEducation	-.070	.072	-.077	-.971	.333
	Stress	.192	.067	.237	2.875	.005
	Biological	.173	.103	.140	1.670	.097
	TOTALATTITUDES	.017	.020	.070	.864	.389
7	(Constant)	10.687	1.726		6.193	<.001
	Gender	.433	.439	.077	.985	.326
	YearsofEducation	-.066	.072	-.072	-.912	.363
	Stress	.197	.066	.243	2.961	.004

	Biological	.191	.101	.154	1.888	.061
8	(Constant)	9.711	1.354		7.174	<,001
	Gender	.496	.434	.089	1.144	.254
	Stress	.204	.066	.253	3.106	.002
	Biological	.186	.101	.150	1.844	.067
9	(Constant)	10.476	1.178		8.891	<,001
	Stress	.207	.066	.256	3.143	.002
	Biological	.179	.101	.145	1.774	.078

#### 4.6.3 Western medicine

The overall model obtained for the western medicine factor was statistically significant, as reported in table 4.10, ( $F(10, 142)=3.751, p>0.001, R^2=0.209$ ). The final model was carried out in 7 steps and explained 19% of variance in the western medicine factor ( $F(1, 147)=1.406, p=0.238, R^2=0.189$ ).

As reported in table 4.11, it is evident that the biological factor ( $B=0.220$  and  $p=0.011$ ) of aetiology beliefs and attitudes towards mental illness ( $B=0.048$  and  $p=0.004$ ) were significant predictors of the western medicine factor (in the final model). The biological factor ( $B=0.220$  and  $p=0.011$ ) was the most significant predictor out of the two. The results indicated positive relationships between the variables. The strongest predictor of the western medicine factor was attitudes towards mental illness as it obtained an effect size of 0.228. This indicates that, for this sample, participants who had more positive attitudes towards mental illness were more likely to use help-seeking behaviours related to western medicine. The second predictor was the biological factor of aetiology beliefs, it had an effect size of 0.205. This suggests that participants who perceived mental illness to be caused by biological related factors were likely to use help-seeking behaviours related to western medicine for mental illness.

Table 4.10

*Multiple regression results for the prediction of western medicine factor using the variables: gender, level of education, age, knowledge of mental illness, beliefs of aetiology, attitudes towards mental illness and socio-economic status.*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.457 <sup>a</sup>	.209	.153	2.23832	.209	3.751	10	142	<.001
2	.456 <sup>b</sup>	.208	.158	2.23158	-.001	.140	1	142	.709
3	.455 <sup>c</sup>	.207	.163	2.22491	-.001	.140	1	143	.708
4	.453 <sup>d</sup>	.205	.166	2.22079	-.003	.463	1	144	.497
5	.448 <sup>e</sup>	.201	.168	2.21895	-.004	.759	1	145	.385
6	.443 <sup>f</sup>	.196	.169	2.21726	-.004	.776	1	146	.380
7	.434 <sup>g</sup>	.189	.167	2.22030	-.008	1.406	1	147	.238

Table 4.11

*Multiple regression results for the prediction of western medicine factor using the variables: gender, level of education, age, knowledge of mental illness, beliefs of aetiology, attitudes towards mental illness and socio-economic status.*

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error			
1 (Constant)	6.961	2.354		2.957	.004
Age	-.014	.020	-.055	-.709	.479
Gender	-.719	.385	-.148	-1.868	.064
YearsofEducation	-.026	.063	-.033	-.409	.683
LevelofKofMI	.223	.230	.081	.970	.334
CulturalBeliefs	.033	.031	.098	1.064	.289
Stress	.070	.059	.100	1.192	.235
ReligiousBeliefs	-.070	.077	-.082	-.916	.361
Biological	.199	.088	.185	2.256	.026

	TOTALATTITUDES	.041	.020	.196	2.096	.038
	SESTOTAL	.018	.047	.029	.375	.709
2	(Constant)	7.042	2.337		3.013	.003
	Age	-.015	.020	-.056	-.724	.470
	Gender	-.694	.378	-.143	-	.068
					1.836	
	YearsofEducation	-.024	.063	-.030	-.375	.708
	LeveloKofMI	.237	.226	.086	1.047	.297
	CulturalBeliefs	.033	.031	.097	1.057	.292
	Stress	.073	.058	.104	1.256	.211
	ReligiousBeliefs	-.070	.076	-.082	-.918	.360
	Biological	.197	.088	.183	2.250	.026
	TOTALATTITUDES	.041	.020	.194	2.091	.038
3	(Constant)	6.679	2.120		3.150	.002
	Age	-.013	.020	-.052	-.680	.497
	Gender	-.680	.375	-.140	-	.072
					1.813	
	LeveloKofMI	.247	.224	.089	1.106	.270
	CulturalBeliefs	.035	.031	.103	1.148	.253
	Stress	.075	.058	.106	1.288	.200
	ReligiousBeliefs	-.073	.076	-.086	-.968	.335
	Biological	.195	.087	.181	2.237	.027
	TOTALATTITUDES	.041	.019	.192	2.077	.040
4	(Constant)	6.083	1.927		3.156	.002
	Gender	-.708	.372	-.145	-	.059
					1.902	
	LeveloKofMI	.254	.223	.092	1.139	.257
	CulturalBeliefs	.034	.031	.100	1.119	.265
	Stress	.074	.058	.105	1.279	.203
	ReligiousBeliefs	-.065	.074	-.076	-.871	.385

	Biological	.199	.087	.185	2.283	.024
	TOTALATTITUDES	.042	.019	.201	2.199	.029
5	(Constant)	5.367	1.742		3.081	.002
	Gender	-.709	.372	-.146	-	.058
					1.908	
	LeveloKofMI	.258	.223	.093	1.158	.249
	CulturalBeliefs	.025	.029	.074	.881	.380
	Stress	.081	.057	.115	1.412	.160
	Biological	.203	.087	.189	2.339	.021
	TOTALATTITUDES	.047	.019	.222	2.523	.013
6	(Constant)	6.042	1.563		3.866	<.001
	Gender	-.646	.365	-.133	-	.078
					1.773	
	LeveloKofMI	.264	.222	.095	1.186	.238
	Stress	.094	.055	.134	1.717	.088
	Biological	.209	.086	.195	2.424	.017
	TOTALATTITUDES	.041	.017	.194	2.366	.019
7	(Constant)	5.864	1.558		3.764	<.001
	Gender	-.618	.364	-.127	-	.092
					1.697	
	Stress	.096	.055	.137	1.749	.082
	Biological	.220	.086	.205	2.560	.011
	TOTALATTITUDES	.048	.016	.228	2.948	.004

#### 4.6.4 Local clinics

As reported in table 4.12, the overall model obtained for the local clinics factor was not statistically significant ( $F(10, 141)=1.272$ ,  $p=0.252$ ,  $R^2=0.083$ ). The group of independent variables did not reliably predict the dependent variable. The final model was carried out in 9 steps and explained 6% of variance ( $F(1, 148)=1.775$ ,  $p=0.185$ ,  $R^2=0.055$ ).

It is evident from the final model in table 4.13 that the only significant predictor of the local clinics factor was level of education (B=0.144 and p=0.027). The results indicated a positive relationship between the local clinics factor and level of education. The effect size was 0.178. This indicates that the participants only favoured help-seeking behaviours related to local clinics if the level of education of the participants was higher.

Table 4.12

*Multiple regression results for the prediction of local clinics factor using the variables: gender, level of education, age, knowledge of mental illness, beliefs of aetiology, attitudes towards mental illness and socio-economic status.*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.288 <sup>a</sup>	.083	.018	2.46313	.083	1.272	10	141	.252
2	.287 <sup>b</sup>	.082	.024	2.45503	.000	.068	1	141	.795
3	.286 <sup>c</sup>	.082	.031	2.44698	.000	.063	1	142	.802
4	.285 <sup>d</sup>	.081	.037	2.43944	-.001	.114	1	143	.736
5	.282 <sup>e</sup>	.079	.041	2.43334	-.002	.276	1	144	.600
6	.279 <sup>f</sup>	.078	.046	2.42727	-.002	.273	1	145	.602
7	.269 <sup>g</sup>	.073	.047	2.42577	-.005	.818	1	146	.367
8	.258 <sup>h</sup>	.066	.048	2.42541	-.006	.956	1	147	.330
9	.235 <sup>i</sup>	.055	.043	2.43171	-.011	1.775	1	148	.185

Table 4.13

*Multiple regression results for the prediction of local clinics factor using the variables: gender, level of education, age, knowledge of mental illness, beliefs of aetiology, attitudes towards mental illness and socio-economic status.*

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
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	B	Std. Error	Beta		
1 (Constant)	7.104	2.592		2.741	.007
Age	-.023	.022	-.086	-	.311
				1.017	
Gender	.236	.424	.048	.557	.578
YearsofEducation	.142	.070	.176	2.023	.045
LeveloKofMI	.066	.254	.023	.260	.795
CulturalBeliefs	-.013	.035	-.038	-.384	.701
Stress	.041	.065	.057	.626	.532
ReligiousBeliefs	.142	.084	.163	1.690	.093
Biological	.101	.097	.092	1.037	.302
TOTALATTITUDES	-.007	.022	-.032	-.321	.749
SESTOTAL	-.055	.052	-.090	-	.288
				1.067	
2 (Constant)	7.098	2.584		2.747	.007
Age	-.023	.022	-.087	-	.300
				1.039	
Gender	.238	.423	.048	.563	.574
YearsofEducation	.139	.069	.172	2.013	.046
CulturalBeliefs	-.013	.035	-.038	-.382	.703
Stress	.040	.065	.056	.622	.535
ReligiousBeliefs	.142	.084	.163	1.692	.093
Biological	.104	.096	.094	1.078	.283
TOTALATTITUDES	-.005	.021	-.024	-.252	.802
SESTOTAL	-.053	.051	-.086	-	.300
				1.041	
3 (Constant)	6.671	1.942		3.436	<.001
Age	-.022	.022	-.084	-	.311
				1.017	
Gender	.240	.421	.048	.571	.569

	YearsofEducation	.138	.069	.172	2.012	.046
	CulturalBeliefs	-.011	.034	-.032	-.338	.736
	Stress	.038	.064	.053	.596	.552
	ReligiousBeliefs	.148	.080	.170	1.860	.065
	Biological	.099	.094	.090	1.053	.294
	SESTOTAL	-.053	.051	-.086	-	.297
					1.046	
4	(Constant)	6.571	1.913		3.435	<.001
	Age	-.023	.022	-.085	-	.302
					1.037	
	Gender	.218	.414	.044	.525	.600
	YearsofEducation	.143	.067	.177	2.128	.035
	Stress	.033	.062	.046	.529	.597
	ReligiousBeliefs	.137	.072	.156	1.910	.058
	Biological	.097	.094	.088	1.033	.304
	SESTOTAL	-.053	.051	-.086	-	.299
					1.043	
5	(Constant)	6.863	1.826		3.758	<.001
	Age	-.021	.022	-.081	-.989	.324
	YearsofEducation	.137	.066	.170	2.076	.040
	Stress	.032	.062	.045	.523	.602
	ReligiousBeliefs	.141	.071	.162	1.995	.048
	Biological	.096	.093	.087	1.026	.307
	SESTOTAL	-.048	.050	-.078	-.966	.336
6	(Constant)	7.198	1.705		4.221	<.001
	Age	-.021	.021	-.081	-.996	.321
	YearsofEducation	.132	.065	.164	2.027	.044
	ReligiousBeliefs	.139	.070	.158	1.967	.051
	Biological	.111	.088	.101	1.259	.210
	SESTOTAL	-.044	.049	-.072	-.905	.367

7	(Constant)	6.810	1.649		4.129	<,001
	Age	-.021	.021	-.080	-.978	.330
	YearsofEducation	.130	.065	.161	1.988	.049
	ReligiousBeliefs	.138	.070	.158	1.966	.051
	Biological	.110	.088	.100	1.246	.215
8	(Constant)	5.890	1.355		4.347	<,001
	YearsofEducation	.141	.064	.175	2.203	.029
	ReligiousBeliefs	.144	.070	.165	2.056	.042
	Biological	.117	.088	.107	1.332	.185
9	(Constant)	7.183	.949		7.571	<,001
	YearsofEducation	.144	.064	.178	2.233	.027
	ReligiousBeliefs	.131	.070	.150	1.884	.061

#### 4.6.5 Complementary medicine

For the complementary medicine factor, the overall model obtained was statistically significant ( $F(10, 142)=3.755$ ,  $p<0.001$ ,  $R^2=0.209$ ), as reported in table 4.14. The final model was carried out in 10 steps and explained 15% of variance ( $F(1, 150)=2.664$ ,  $p=0.105$ ,  $R^2=0.158$ ).

It is evident from the final model in table 4.15 that the cultural beliefs factor ( $B=0.104$  and  $p<0.001$ ) of aetiology beliefs of mental illness was the only significant predictor of the complementary medicine factor. The results indicated a positive relationship between complementary medicine and cultural beliefs. The cultural beliefs factor had an effect size of 0.397. This can be interpreted as the participants only being inclined to making use of help-seeking behaviours related to complementary medicine if perceived beliefs of the causes of mental illness were cultural.

Table 4.6.14

*Multiple regression results for the prediction of complementary medicine factor using the variables: gender, level of education, age, knowledge of mental illness, beliefs of aetiology, attitudes towards mental illness and socio-economic status.*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change in R Square	F Change	df1	df2	Sig. F Change
1	.457 <sup>a</sup>	.209	.153	1.71951	.209	3.755	10	142	<.001
2	.457 <sup>b</sup>	.209	.159	1.71349	.000	.001	1	142	.976
3	.457 <sup>c</sup>	.209	.165	1.70773	.000	.034	1	143	.854
4	.455 <sup>d</sup>	.207	.169	1.70397	-.002	.361	1	144	.549
5	.451 <sup>e</sup>	.203	.171	1.70199	-.004	.661	1	145	.418
6	.446 <sup>f</sup>	.199	.172	1.70070	-.004	.779	1	146	.379
7	.439 <sup>g</sup>	.193	.171	1.70156	-.006	1.150	1	147	.285
8	.431 <sup>h</sup>	.186	.170	1.70304	-.007	1.259	1	148	.264
9	.415 <sup>i</sup>	.173	.162	1.71125	-.013	2.449	1	149	.120
10	.397 <sup>j</sup>	.158	.152	1.72065	-.015	2.664	1	150	.105

Table 4.6.15

*Multiple regression results for the prediction of complementary medicine factor using the variables: gender, level of education, age, knowledge of mental illness, beliefs of aetiology, attitudes towards mental illness and socio-economic status.*

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.644	1.808		2.568	.011
	Gender	.009	.296	.002	.031	.976
	Age	-.013	.015	-.068	-.868	.387
	YearsofEducation	.009	.049	.015	.186	.853
	LevelofKnowledgeofMentalIllness	-.100	.176	-.047	-.565	.573
	Stress	.037	.045	.068	.816	.416
	Biological	.123	.068	.149	1.816	.071
	ReligiousBeliefs	.059	.059	.091	1.011	.314
	CulturalBeliefs	.081	.024	.307	3.343	.001
	TOTALATTITUDES	-.016	.015	-.101	-1.078	.283
2	(Constant)	4.655	1.762		2.642	.009
	Age	-.013	.015	-.067	-.872	.385
	YearsofEducation	.009	.048	.015	.184	.854
	LevelofKnowledgeofMentalIllness	-.100	.176	-.047	-.566	.572

	Stress	.037	.045	.068	.818	.415
	Biological	.123	.067	.149	1.823	.070
	ReligiousBeliefs	.060	.059	.091	1.016	.311
	CulturalBeliefs	.081	.024	.307	3.400	<.001
	TOTALATTIT	-.016	.015	-.101	-1.083	.281
	UDES					
	SESTOTAL	-.038	.035	-.083	-1.085	.280
3	(Constant)	4.781	1.618		2.955	.004
	Age	-.014	.015	-.070	-.913	.363
	LevelofKofMI	-.104	.173	-.049	-.601	.549
	Stress	.036	.045	.067	.809	.420
	Biological	.124	.067	.150	1.847	.067
	ReligiousBeliefs	.061	.058	.092	1.045	.298
	CulturalBeliefs	.080	.023	.304	3.443	<.001
	TOTALATTIT	-.016	.015	-.100	-1.077	.284
	UDES					
	SESTOTAL	-.038	.035	-.082	-1.077	.283
4	(Constant)	4.851	1.610		3.012	.003
	Age	-.013	.015	-.068	-.896	.372
	Stress	.036	.045	.067	.813	.418
	Biological	.120	.067	.145	1.799	.074
	ReligiousBeliefs	.062	.058	.094	1.065	.289
	CulturalBeliefs	.079	.023	.301	3.425	<.001
	TOTALATTIT	-.019	.014	-.116	-1.325	.187
	UDES					
	SESTOTAL	-.041	.035	-.089	-1.189	.236
5	(Constant)	4.979	1.601		3.110	.002
	Age	-.013	.015	-.067	-.882	.379
	Biological	.133	.064	.161	2.069	.040
	ReligiousBeliefs	.055	.057	.084	.966	.336
	CulturalBeliefs	.085	.022	.323	3.849	<.001
	TOTALATTIT	-.017	.014	-.108	-1.239	.217
	UDES					
	SESTOTAL	-.038	.034	-.081	-1.100	.273
6	(Constant)	4.337	1.425		3.043	.003
	Biological	.137	.064	.165	2.131	.035
	ReligiousBeliefs	.064	.057	.097	1.125	.262
	CulturalBeliefs	.083	.022	.317	3.797	<.001

	TOTALATTIT	-.015	.014	-.095	-1.109	.269
	UDES					
	SESTOTAL	-.037	.034	-.079	-1.072	.285
7	(Constant)	4.046	1.400		2.890	.004
	Biological	.136	.064	.165	2.121	.036
	ReligiousBeliefs	.063	.057	.097	1.122	.264
	s					
	CulturalBeliefs	.083	.022	.315	3.767	<.001
	TOTALATTIT	-.016	.014	-.098	-1.145	.254
	UDES					
8	(Constant)	4.732	1.260		3.755	<.001
	Biological	.129	.064	.156	2.019	.045
	CulturalBeliefs	.090	.021	.344	4.334	<.001
	TOTALATTIT	-.021	.013	-.128	-1.565	.120
	UDES					
9	(Constant)	3.175	.777		4.086	<.001
	Biological	.100	.062	.122	1.632	.105
	CulturalBeliefs	.102	.020	.389	5.228	<.001
10	(Constant)	4.183	.474		8.825	<.001
	CulturalBeliefs	.104	.020	.397	5.321	<.001

#### 4.6.6 Religion

As reported in table 4.16, the overall model for the religion factor was statistically significant ( $F(10, 142)=2.364, p=0.013, R^2=0.143$ ). The final model was carried out in 8 steps and explained 12% of variance ( $F(1, 148)=1.379, p=0.242, R^2=0.122$ ).

The significant predictors, as reported in table 4.17, were cultural beliefs ( $B=0.073, p<0.001$ ) and attitudes towards mental illness ( $B=0.024, p=0.046$ ). The multiple regression resulted in positive relationships between the variables. The most significant predictor was the cultural beliefs factor ( $B=0.073, p<0.001$ ) of aetiology beliefs and was the strongest predictor with an effect size of 0.314. Thus suggesting that the participants endorsed religious help-seeking behaviours more if perceived causes of mental illness were related to cultural beliefs. The results also suggest that participants also favoured religious help-seeking behaviours if they had positive attitudes towards mental illness.

Table 4.16

*Multiple regression results for the prediction of religion factor using the variables: gender, level of education, age, knowledge of mental illness, beliefs of aetiology, attitudes towards mental illness and socio-economic status.*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.378 <sup>a</sup>	.143	.082	1.59364	.143	2.364	10	142	.013
2	.378 <sup>b</sup>	.143	.089	1.58809	.000	.004	1	142	.947
3	.376 <sup>c</sup>	.142	.094	1.58346	-.001	.162	1	143	.688
4	.374 <sup>d</sup>	.140	.099	1.57944	-.002	.265	1	144	.608
5	.372 <sup>e</sup>	.138	.103	1.57559	-.002	.289	1	145	.592
6	.369 <sup>f</sup>	.136	.107	1.57247	-.002	.418	1	146	.519
7	.361 <sup>g</sup>	.131	.107	1.57208	-.005	.928	1	147	.337
8	.350 <sup>h</sup>	.122	.105	1.57408	-.008	1.379	1	148	.242

Table 4.17

*Multiple regression results for the prediction of religion factor using the variables: gender, level of education, age, knowledge of mental illness, beliefs of aetiology, attitudes towards mental illness and socio-economic status.*

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error			
1 (Constant)	3.971	1.676		2.369	.019
Age	-.016	.014	-.093	-1.140	.256
Gender	.422	.274	.127	1.538	.126
YearsofEducation	-.025	.045	-.046	-.552	.582

	LeveloKofMI	-.066	.164	-.035	-.401	.689
	CulturalBeliefs	.075	.022	.323	3.374	<,001
	Stress	-.034	.042	-.070	-.806	.421
	ReligiousBeliefs	-.004	.055	-.006	-.067	.947
	Biological	.037	.063	.050	.591	.556
	TOTALATTITUDES	.023	.014	.161	1.655	.100
	SESTOTAL	.037	.033	.091	1.120	.265
2	(Constant)	3.931	1.559		2.522	.013
	Age	-.016	.014	-.092	-	.254
					1.146	
	Gender	.421	.273	.126	1.542	.125
	YearsofEducation	-.025	.045	-.047	-.565	.573
	LeveloKofMI	-.065	.163	-.035	-.402	.688
	CulturalBeliefs	.075	.021	.320	3.584	<,001
	Stress	-.033	.041	-.070	-.807	.421
	Biological	.037	.062	.051	.599	.550
	TOTALATTITUDES	.023	.013	.163	1.753	.082
	SESTOTAL	.037	.033	.091	1.123	.263
3	(Constant)	3.943	1.554		2.538	.012
	Age	-.016	.014	-.090	-	.260
					1.130	
	Gender	.419	.272	.126	1.539	.126
	YearsofEducation	-.023	.044	-.042	-.515	.608
	CulturalBeliefs	.075	.021	.320	3.590	<,001
	Stress	-.033	.041	-.069	-.805	.422
	Biological	.035	.062	.047	.559	.577
	TOTALATTITUDES	.022	.013	.150	1.721	.087
	SESTOTAL	.035	.033	.085	1.076	.284
4	(Constant)	3.557	1.357		2.621	.010

	Age	-.015	.014	-.084	-	.288
					1.067	
	Gender	.435	.270	.131	1.613	.109
	CulturalBeliefs	.076	.021	.327	3.722	<,001
	Stress	-.031	.041	-.065	-.762	.447
	Biological	.033	.062	.045	.538	.592
	TOTALATTITUDES	.022	.013	.151	1.731	.086
	SESTOTAL	.034	.033	.082	1.041	.299
5	(Constant)	3.714	1.322		2.809	.006
	Age	-.015	.014	-.086	-	.273
					1.099	
	Gender	.430	.269	.129	1.598	.112
	CulturalBeliefs	.077	.020	.331	3.792	<,001
	Stress	-.026	.040	-.053	-.646	.519
	TOTALATTITUDES	.023	.012	.161	1.899	.060
	SESTOTAL	.034	.033	.081	1.034	.303
6	(Constant)	3.619	1.311		2.760	.007
	Age	-.015	.014	-.088	-	.263
					1.123	
	Gender	.439	.268	.132	1.637	.104
	CulturalBeliefs	.073	.019	.314	3.785	<,001
	TOTALATTITUDES	.021	.012	.148	1.800	.074
	SESTOTAL	.031	.032	.075	.963	.337
7	(Constant)	3.837	1.291		2.971	.003
	Age	-.016	.014	-.092	-	.242
					1.174	
	Gender	.482	.264	.145	1.823	.070
	CulturalBeliefs	.073	.019	.313	3.785	<,001
	TOTALATTITUDES	.022	.012	.152	1.844	.067
8	(Constant)	3.235	1.187		2.726	.007

Gender	.449	.263	.135	1.706	.090
CulturalBeliefs	.073	.019	.314	3.787	<,001
TOTALATTITUDES	.024	.012	.164	2.016	.046

4.7 What, in your opinion, are the factors that contribute to mental illness developing in individuals?

Table 4.6.17

*Themes from the data, in the order of themes that were most dominant followed by the less prevalent themes.*

Themes
Psychological factors
Social components/aspects in their communities
Substance use
Financial challenges
Biological influences
Cultural Influences

#### *Psychological factors*

Psychological factors were a major theme that emerged from the text analysed. The majority of the participants (n=67) asserted that intrapersonal factors such as stress and overthinking are significant contributors to people developing mental illness. This was best represented by participant 60 who said, **“Stress and overthinking may lead to mental problems”**.

Relevant factors were also outlined as anxiety (n=10), depression (n=13), past trauma (n=6), ongoing stressful events (n=5) and personal problems (n=4). There were a number of particularly noteworthy statements, such as participant 77 stating that, **“Not dealing with issues as you experience them and bottling up stuff”**. Additionally, another participant (participant 16) stated that **“people are overwhelmed, they do not know healthy mechanisms to help them cope and deal”**, this participant further added that **“people do not have safe environments to express their emotions”**.

### *Social components/aspects in their communities*

The influence of interpersonal relations emerged as a theme with participants (n=30) identifying factors that may contribute to mental illness being associated with other people. Participants (n=7) identified being in abusive relationships, emotionally and physically. Participant 33 said, “**Being in a relationship that involves emotional, vocal, physical and economical abuses**”. Participant 152 stated, “**You can have stress if there is someone abusing you**”. Another recurrent pattern in the theme was loss and bereavement as reported by 7 participants. This pattern was represented by participant including factors such as death and the passing away of a family member. Participant 40 said, “**The death of someone you love or someone you depend on**” and participant 92 reported, “**The death of someone in your family**”.

Other relevant factors related to intimate relationships were divorce, disappointments from partners and break ups. Participant 145 reported, “**Divorce or separating from a loved one**”. Participant 40 also said, “**Factors such as breakdown in disappointment and breakups from partners**”. Another participant mentioned, “**Relationship problems**”.

The effects of familial relations were also outlined, whereby participants indicated that bad behaviour from family members, immense pressure from the family and jealousy within the family, as factors that may have a significant influence. Participant 49 said, “Family members being jealous of you”. Participant 108 reported, “Not dealing with pressure from your family”. Another participant mentioned, “**Family stress**”.

Additionally, the pressures of society were foregrounded. A participant (participant 19) highlighted how “**black communities do not understand or acknowledge mental illness, people are expected to just accept life as it becomes and move on**”.

Moreover, it was thought-provoking to recognise the impacts of social media and societal changes of less human interaction. For example, a participant responded by stating that “**The pressures of today and the ever-changing society that people are forced to catch up with every day. Just when you’re familiar with a certain way of living, comes another one to replace it, e.g. social media. One on one communication has become extinct, people bottle up the pressures and feel isolated and underappreciated.**”.

### *Substance use*

Across the responses it was very clear that according to the participants (n=28), substances plays a role in individuals developing mental illness. For example, participant 17 said, **“Substance use like smoking some drugs or drinking alcohol”**. There were participants that made distinctions in stating that extensive substance use may cause mental illness, whereas other participants indicated that substance use alone may have a significant impact. For example, participant 74 said, **“Overusing substances, like too much drinking”**. Participant 83 stated that, **“mental illness can be caused by drugs”** and participant 17 asserted that, **“substance use like smoking drugs or drinking can be a factor”**.

Substances that were mentioned include alcohol and drugs such as dagga (cannabis) and wunga (nyaope). Some participants suggested that preceding events such as losing a loved one leads to substance abuse and eventually mental illness. For example, a participant asserted that **“A main factor could be drug abuse and alcohol abuse. Most people, when they lose someone close to them, they start drinking and using drugs and then end up developing a mental illness”** (participant 96). Another participant mentioned that, **“some people are unable to think about their future as they are controlled by alcohol”** (participant 6).

#### *Financial challenges*

Some of the participants recognised the impact of financial challenges. Across the text, unemployment presented as a major obstacle being identified by 23 participants.

Residing in an underprivileged community, the participants identified that not having an income source, poverty and accumulating debts lead to stress. For example, participant 131 mentioned that **“Unemployment, hunger and unfavourable living conditions are important factors”**. Participant 143 indicated that **“Poverty, life changes. Class transitions from middle to lower class”**, suggesting that financial instability can eventually lead to one developing mental illness.

#### *Biological influences-*

The participants (n=22) recognised the impact of biological influences on mental illness. This impact was not very well represented across the text. However, it was clear that some participants have an understanding that mental illness can be hereditary and contributed by physiological factors. Participant 36 stated that **“mental illness could be a problem passed down genetically or it could be caused by hormonal imbalances”**. Another participant

(participant 83) mentioned that **“mental illnesses can be hereditary, most people are born with it, especially those born with or suffer from down syndrome”**. A number of the participants also mentioned factors such as brain dysfunction (n=5) and chemical imbalances (n=1) in the body. Participant 60 said, **“Physiological factors such as brain issues”**. Participant 77 reported, **“Mental illness can be caused by chemical imbalances in the body”**.

*Cultural influences*

The influence of cultural factors was a less dominant theme. A small portion of the participants (n=22) recognised its influence. Nonetheless, there were a number of participants which made reference to witchcraft (n=19), ancestors (n=1), sorcery (n=1) and evil spirits (n=2). In this theme, a recurrent pattern was identified as mental illness being caused by things not being right, which suggests not doing right by the ancestors. For example, **“sometimes if you are not doing the right thing, it causes mental illness”** (participant 57), was one of the responses. Another recurrent pattern was the participants (n=3) mentioning that other people inflict mental illness on individuals by consulting with sangomas. Participant 39 stated, **“Witchcraft and someone going to sangoma so that you can start losing your mind”**. Another participant (participant 53) reported that, **“If a person steals things and they bewitch him”**.

4.8 What kind of advice would you give to a person with mental illness?

Table 4.18

*Themes from the data, in the order of themes that were most dominant followed by the less prevalent themes.*

Themes
Western professional assistance
The role of social support structures
Lifestyle changes
Religious Support
Traditional treatment

*Western professional assistance*

The most dominant suggestion was the participants advising for professional help (n=99). This was well represented by indicating that individuals with mental illness would be better assisted by psychologists, psychiatrists, counsellors and doctors. Participants (n=8) emphasised seeking help as soon as possible. For example, **“Advise him/her to see a psychologist and or clinical psychologist to seek help”** (participant 72) and **“Seek professional help before it’s too late”** (participant 83).

Another recurrent suggestion was associated with health institutions and organisations. The participants suggested that individuals with mental illness should consider visiting their local clinics and hospitals, where they can be referred to specialists. For example, **“Consult with the local clinic so they can refer the person to a psychologist/psychiatrist”**. Several participants (n= 32) also recognised the importance of taking relevant medication. This was further emphasised by indicating that treatment should be taken timeously and consistently. For example, participant 13 reported, **“Take your medication on time, take treatment so that you can recover on time. Go to the doctor on time, be calm and keep well”**. Some of the participants also mentioned that they would advise going to community centres such as SADAG, youth centres and the department of social development. One participant stated that, **“one should visit an organisation which deals with mental health such as SADAG”** (Participant 79).

#### *The role of social support structures*

The participants (n=31) highlighted the role of support within social relations. The participants felt that communicating about problems would be a better solution. A participant stated that, **“sometimes talking to someone or people of close relation can help reduce levels of stress”** (Participant 97). Family and friends were recognised as playing a huge role in assistance individuals suffering from mental illness. For example, **“to talk with one of his/her family members and friends that can support him/her in this difficult condition that the person might be going through”** (Participant 72).

Another recurrent pattern was the participants suggesting that it would be of great help for individuals suffering with mental illness to associate themselves with other people, by spending more time loved ones and strengthening social relationships. This was identified by 9 participants. For example, **“being around people helps you relax your mind and not to over think”** (Participant 147) and participant 31 reported, **“We should avoid isolation, we must build our relationships with positive supportive people”**.

### *Lifestyle changes*

The participants (n=21) advised for lifestyle changes associated with health and a realignment of intrapersonal thoughts. This was outlined by making suggestions of modifications in diets, exercising and abstaining from the use of substance. For example, **“eat healthy, keep busy and be involved in things that make the brain work”** (participant 15), and, **“stop smoking drugs, cocaine and many more”** (participant 21).

Another recurrent pattern was making the suggestion for a realignment of thoughts, from negative to positive thinking (n=15). This was highlighted by mentioning intrapersonal changes such as acceptance, building self-confidence and not over thinking. For example, **“try to have positive thoughts, positive affiliations and create a vision board”**, and, **“I can tell the person to accept their situation and see themselves as part of the family and the community”**. Participant 36 also stated that, **“You must keep fighting, stay off social media and always speak positively”**.

### *Religious support*

A less prevalent theme was religious support (n=11). Some of the participants advised for individuals with mental illness to believe in the power of prayer and the strengthening of religious involvement (n=8). This was outlined by suggesting more church attendance and praying for complete healing. For example, participant 23 stated, **“Speak to God regularly”**, participant 103 reported, **“God can heal them to be normal”**, and participant 91 stated, **“Pray to God, he can provide complete healing”**. Additionally, there was also an indication of collective religious support by recommending assistance from various religious leaders (n=3). For example, **“prayers with every man of God”** (participant 47). Moreover, participant 33 asserted, **“Seek assistance from religious leaders”**, and participant 9 stated, **“Must be prayed to, by a believer of Jesus Christ”**.

### *Traditional treatments*

The least widespread theme was advising for traditional treatments with only 8 participants identifying this. A small portion of the participants recognised the importance of consulting with sangomas and traditional healers. Consulting with indigenous healers presented as twofold. Firstly, participants advised to consult with traditional healers for traditional medicine that would help for healing mental illness (n=5). For example, participant 22 reported, **“To get help from a traditional healer for treatment”**. Secondly, it was advised

to consult with sangomas to communicate with ancestors and seek guidance (n=3). For example, **“go consult a sangoma and try to figure out what the ancestors want”** (Participant 25).

#### 4.9 Conclusion

The descriptive statistics in this chapter indicated that the participants had neutral attitudes towards mental illness. The participants perceived mental illness to be caused by biological and stress related causes. Among the participants, there was an endorsement of help-seeking behaviours that were aligned with western medicine, hospitalization and interpersonal circle, and religion. A backward elimination multiple regression was performed to assess if the independent variables (gender, age, level of education, knowledge of mental illness, beliefs of mental illness aetiology and socio-economic status), predicted attitudes towards mental illness. Level of knowledge of mental illness was the strongest predictor. The findings suggested that the participants had positive attitudes towards mental illness if their level of knowledge of mental illness was higher. Another five backward elimination multiple regressions were conducted to assess if the independent variables (gender, age, level of education, knowledge of mental illness, beliefs of mental illness aetiology, attitudes towards mental illness and socio-economic status), predicted the help-seeking behaviours: community care, hospitalization and interpersonal circle, western medicine, local clinics, complementary medicine and religion. A variety of predictors were revealed regarding the various help-seeking behaviours. The analysis of the two open ended questions resulted in six themes for the first question and five themes for the second question. The themes for the first question were: psychological factors, social components/aspects in their community, substance use, financial challenges, biological influences and cultural influences. The themes for the second question were: western professional assistance, the role of social support structures, lifestyle changes, religious support and traditional treatment. A comparison of the qualitative and quantitative analyses revealed similarities of western professional assistance, which was a dominant theme, as advice suggested by the participants and western medicine, as a help-seeking behaviour that most of the participants were in agreement with. Moreover, psychological factors were a dominant theme, as factors contributing to developing mental illness. This was in accordance with the stress aetiology which some of the participants endorsed.

## Chapter Five: Discussion

### 5.1 Introduction

This chapter presents a discussion of the findings obtained from the results. The main aim of the study was to explore the attitudes of Diepsloot community members towards their beliefs about the aetiology of mental illness and their help-seeking behaviours. As noted in the literature review, the biopsychosocial model has been acknowledged to provide a progressive strategy of dealing with issues of mental health, especially regarding its multidimensional nature that highlights the importance of social determinants of illness and health (Tramonti et al., 2021). This was important for the current study, as Africans have been known to adopt a multidimensional view of illness (Monteiro, 2015).

The addition of the biopsychosocial-spiritual model was based on the criticisms of the biopsychosocial model. This was an attempt to address some of the limitations, as the current study also had to be understood in socio-cultural-spiritual perspective. The biopsychosocial-spiritual model provides a platform to examine the influence of spiritual beliefs and cultural beliefs, and how these factors impact help-seeking behaviours (Monteiro, 2015). This theoretical model has also been advocated for application in non-favourable and impoverished living conditions (van Rensburg, 2014).

The multiple regression analyses results may provide insights into understanding the motivational factors associated with preferred help-seeking behaviours of the community members of Diepsloot. This chapter follows a similar order of the research questions and the results chapter. The results obtained from the analyses of the attitudes, aetiology beliefs and help-seeking behaviours of mental illness are discussed first. This is followed by discussing results obtained from the prediction analyses of help-seeking behaviours. Lastly, a discussion of the thematic analysis of the open ended questions is provided, the interpretation of the themes of question one is presented first, followed by the interpretation of themes for second question.

### 5.2 Attitudes of mental illness

The participants in this current study had neutral attitudes towards mental illness. However, most of the participants agreed with negative statements, these were items related to shame and disapproval of mental illness, and most of the positive statements were disagreed with, these were items related to an acceptance of/and people with mental illness. Negative

attitudes of mental illness are associated with prejudice and discrimination of people with mental illness, this exacerbates the stigma around mental illness (Eissa, Elhabiby, El Serafi, Elrassas, Shorub & El-Madani, 2020). As a result, people with mental illness are usually isolated, have limited life chances and exhibit delayed help-seeking behaviours (Eissa et al., 2020).

A study focused on the sub-Saharan African communities, reported on common public stigma and self-stigma (McCann, Renzaho, Mugavin & Lubman, 2018). Participants in the study reported on deterred help-seeking behaviours as a consequence of public stigma and self-stigma. Additionally, the participants highlighted feelings of personal shame, fear of community rejection if help-seeking behaviours were pursued (McCann et al., 2018). The stigma experienced by people living with mental illness can be derived from a number of sources. Shrivastava, Johnston and Bureau (2012) describe stigma as originating from personal, social and family sources and from the nature of the illness itself. The stigma arises as a result of a number of reasons which includes a lack of awareness, lack of education, lack of perception, and the nature and complications of the mental illness, which may be for example, odd behaviours and violence (Shrivastava et al., 2012). Gyamfi, Hegadoren and Park (2018) highlight that the discrimination and negative attitudes of community members and the society at large reinforces negative self-perceptions which translates to negative health outcomes such as not adhering to treatment or delayed help-seeking behaviours. Gyamfi et al. (2018) interviewed 12 outpatients in Ghana and their findings indicated that the participants' perceptions about personal impacts of stigma were influenced by self-stigma, anticipated stigma and discrimination, perceived discrimination, and their knowledge about their illness.

### 5.3 Aetiology beliefs of mental illness

The results indicated that the participants were more aligned with biological causes of mental illness as this factor had the highest mean score when compared to the stress, religious beliefs and cultural beliefs factors. Angermeyer, Matschinger and Schomerus (2013) provided findings that indicate that biological causes of mental illness have been associated with severe mental illness such as schizophrenia. However, for common mental health disorders such as depression, it appears that public perceptions of aetiology beliefs are less inclined with biogenetic causes and more aligned with stress related factors (Angermeyer et al., 2013). A review on beliefs and perceptions about mental health issues revealed that there is

sufficient previous research that supports biomedical and genetic causes of mental disorders (Choudhry, Mani, Ming & Khan, 2016). The review further highlighted that marginalized populations that have spiritual aetiology beliefs of mental, still have an awareness and appreciation of medical causes of mental illness. (Choudhry et al., 2016).

Biological causal attributions of mental illness have serious implications on social acceptance. Lebowitz and Ahn (2014) highlighted findings that revealed that negative perceptions of patients with psychopathology attributed to biological explanations. The study outlined that patients are viewed as abnormal, distinct from the rest of the population, worthy of social exclusion and less human (Lebowitz & Ahn, 2014). Schomerus, Matschinger and Angermeyer (2014) also reported on lower social acceptance for causal beliefs associated with biological and genetic factors, particularly with schizophrenia and depression. However, their findings also revealed that psychosocial causal beliefs had opposite effects, there was higher accepted of schizophrenia if causes were believed to be the result of stress (Schomerus et al., 2014). Additionally, Lebowitz, Ahn and Nolen-Hoeksema (2013) also reported on prognostic pessimism for biomedical and genetic causal attributions of depression. Contrary to what has been highlighted, there is current research that outlines positive implications of biological causes of mental illness. Mann and Contrada (2020) revealed that among the participants in their study, there was less stigma for biological attributions of depression. Moreover, help-seeking intentions were reported to be stronger in biomedical attributions of mental illness (Stolzenburg, Freitag, Evans-Lacko, Speerforck, Schmidt & Schomerus, 2019).

#### 5.4 Help-seeking behaviours

It was evident from the results that western medicine and hospitalisation and interpersonal circle factor were the most favoured help-seeking options among the participants. This was followed by religious help-seeking behaviours. Community care, complementary medicine and local clinics were the least favoured. The western medicine factor had the highest level of agreement. The two factors, western medicine and hospitalisation and interpersonal circle, were indicative of western help-seeking behaviours and lay help-seeking options.

Recent research in low and middle income countries suggests that communities are becoming more aware of mental illness and thus more accepting thereof (Benjamin et al., 2021). A previous South African study reported on findings that supported western help-seeking behaviours, where the majority of the participants (82.5%), which were mental health out-patients, preferred western treatment and taking medication for better health outcomes

(Chipps et al., 2015). The use of alternate treatment was low as only 13.8% of the participants indicated a preference for traditional healing (Chipps et al., 2015). Hospitalisation, is still of importance within the range of mental health services (Chow & Priebe, 2013). Community care, which has become more popular, may not be suitable and appropriate for patients with acute mental illness. The benefits of psychiatric hospitalisation have been highlighted as the following: in-patient treatment provides structure and symptoms can be controlled and psychiatric institutionalization is also acknowledged for providing care and protection for individuals with chronic mental illness (Chow & Priebe, 2013). Research has however, also shown that there is a complementary use of alternate treatment and western mental health services among South African patients (Chipps et al., 2015; Labys, Susser & Burns, 2016). This is consistent with help-seeking behaviours in other parts of Africa. Patients in Congo were reported to consistently move between both biomedical treatments and indigenous healing practices (Cooper, 2016). The use of the two systems has been suggested to meet different needs, with one addressing symptom alleviation and the other providing cultural meaning (Chipps et al., 2015). Although there is evidence for a preference for western help-seeking behaviours, there is also literature that highlights the barriers of obtaining western treatment (Benjamin et al., 2021). The barriers have been described as social, organizational and structural. They include, a low perceived need for treatment, stigmatization by society, affordability, accessibility of health care and a shortage of mental health service providers (Benjamin et al., 2021).

### 5.5 Predicting help-seeking behaviours

The discussion of the help-seeking behaviors in 5.4 provided valuable insights regarding the preferred help-seeking behaviours of the community members of Diepsloot. However, its is also important to understand the predictors of the help-seeking behaviours. Table 5.1 presents a summary of the significant predictors of the help-seeking behaviours.

Table 5.1

*Summary of multiple regression analyses of predictors and help-seeking behaviours*

Predictors	Help-seeking Factors					
	Community care	Hospitalization and interpersonal circle	Western medicine	Local clinics	Complemen entary medicine	Religion
Gender						

Level of education				X	
Age					
Knowledge of mental illness					
Aetiology-cultural					X X
Aetiology-stress	X		X		
Aetiology-religious					
Aetiology – biological				X	
Attitudes				X	X
SES					

### 5.5.1 Community care

The community care factor included items that represented informal/lay help-seeking. The factor can be described as help-seeking that is sought from within the social environment of the individual (such as religious leaders, community leaders and family) and not prioritizing mental health services. The items in the community care factor were, ‘mental illness can be treated outside of a hospital’, ‘consult with priest’, ‘consult with an elder member of the family’, ‘consult with an elder member of the community’. As shown in the results chapter, the only predictor of community care was the stress factor of aetiology beliefs, suggesting that the participants were more likely to utilize community care if perceived causes of mental illness were related or associated with stress factors.

As previously highlighted in the literature review, South Africa still faces a huge treatment gap for common mental disorders (Grant, Luvuno, Bhana, Mntambo, Gigaba, Ntswe & Petersen, 2021). As much as the treatment gaps are hugely attributed to a low supply of mental health services, they are also a result of affected individuals not seeking professional help (Grant et al, 2021). Shidhaye, Shrivasta, Damle, Raja, Nadkarni and Patel (2017) have provided evidence that in low and middle income countries, interventions at community level are affective and they promote eventual help-seeking at health facility level.

The influence of community care and stress causal beliefs of mental illness is research area that is under-researched. However, previous research aligned to African countries highlights

the significance of collectivism cultures and how this shapes help-seeking behaviours, which are usually linked to the community and social aspects of the affected individual.

Collectivism is a way of living that is adopted by social groups that value interdependence among human beings (Chadda & Deb, 2013). Priorities are focused and directed at enhancing and developing the group rather than focusing on individual goals. Additionally, there is high value on adherence to social norms (Chadda & Deb, 2013). The influence of cultural norms on seeking professional help, is highly significant for collectivist groups as the individual is viewed as fundamentally interconnected in a larger social unit (Mojavern, Hashimoto & Kim, 2013).

Previous research has indicated that mental illness becomes a communal concern for collectivist cultures and informal sources of help, which include family members, spiritual leaders and members of the community, are utilized (Altweck et al., 2015). Altweck et al. (2015) had findings that indicated that social causes of mental illness, which were presented as family problems, traumatic events and stress, were aligned with more informal help-seeking behaviours. Participants in the study were inclined to reaching out to their social environment, if causes were perceived to social, for the alleviation of symptoms associated with mental illness. Reaching out to one's community has also been highlighted in other studies. Umubeyi, Mogren, Ntaganira and Krantz (2016) reported on findings where the majority of the participants indicated that they sought help from trusted people in their communities. Similar findings were revealed by Anderson, Shrierenbeck, Strumpher, Krantz, Topper, Backman, Ricks and Van Rooyen (2013), where 91% of their sample sought help from trusted people in the community. Brown, Evans-Lacko, Aschan, Henderson, Hatch and Hotopf (2014) outlined that informal sources of help from non-health professionals were rated highly by the public and acknowledged to be more effective than the help of professionals. However, even in collectivist cultures, the utilization of lay sources of help also depends on how supportive the social networks of an affected individual are (Villatoro, Morales & Mays, 2014). Mental health services are used less when support from social networks is perceived to be great, and more if social networks are perceived to be less supportive (Villatoro et al., 2014).

In most parts of Africa, prophets and pastors are usually consulted for diagnosis of various diseases (Khorombi, Masola & Sigida, 2019). Research suggests that, in South Africa,

prophets and pastors are consulted because of shared explanatory models of mental illness which involve similar beliefs, values and norms (Khorommbi et al., 2019).

### 5.5.2 Hospitalisation and interpersonal circle

The hospitalisation and interpersonal circle factor included items that endorsed the institutionalization of individuals with mental illness i.e. hospitalization and support from one's interpersonal circle. The items in the factor were, 'consult with a General Practitioner', 'talk to his/her family, 'reconnect with his/her friends' and 'be admitted to a psychiatric hospital'. The stress aetiology factor was the only predictor of the hospitalisation and interpersonal circle factor. It was a positive predictor, suggesting that the participants believed that stress causal factors warranted hospitalization and help from one's interpersonal circle.

As mentioned in previous sections, mental health care services in low-and middle-income countries, are usually readily available in specialized psychiatry units which are located in hospital care facilities i.e. within the public health sector (Hamdani, Huma, Masood, Zhou, Ahmed, Nazir, Amin, Akhtar, Bryant, Dawson, Wang, Rahman & Minhas, 2021). This might have impacted the results of the current study, as participants may have been of the knowledge that mental illness, particularly disorders that are related to stress, may require specialised care from hospitals, as they might have had limited access to other forms of mental health services within the public sector.

Moreover, stress may have been perceived, by the participants, to be debilitating to an extent that hospitalization would a viable option for treatment. The current study was based in Diepsloot and Kaba et al. (2017) have described it as a township with individuals of low socioeconomic status, low levels of education and high unemployment rates. These are very unfavourable circumstances which can cause great distress. A higher burden of mental illness has been reported to be linked to poverty (Lake & Turner, 2017). This has been observed through strong associations with variables such as education, food insecurity, housing, social class, socioeconomic status and financial stress (Lake & Turner, 2017). These findings are aligned with other literature. Assari and Caldwell (2017) have outlined that the risk of serious psychiatric disorders is increased by perceived socioeconomic disadvantage. They further revealed disorders that are linked to financial difficulty and they include depression, anxiety, conduct disorder and substance use (Assari & Caldwell, 2017). Rotenburg, Tuck and

McKenzie (2017) have also reported on psychosocial stressors, that involve occupational and housing difficulties, as major contributing factors to the relapse of schizophrenia. Rotenburg et al (2017) further revealed that other social environmental stressors, such as social isolation and a lack of social support, also increased the risk of hospital admission to the psychiatric emergency department.

Choudhry et al. (2016) outlined lay help-seeking behaviours which involve social support from friends, family and other loved ones. Social support, for less severe mental health problems (such as those caused by stress), is recognised to also be an effective treatment option for mental health issues (Choudhry et al, 2016). Jithoo (2018), reported on South African university students with stress related notions of mental illness, whereby mental illness was conceptualised as poor decision-making skills, living in poverty, irrationality and impulsivity, but did not pursue any professional help-seeking behaviours (Jithoo, 2018). However, the students still acknowledged that mental illness can be effectively treated by psychologists and other western treatment options. They reported on a lack of trust with psychologists and preferred non-professional help-seeking (Jithoo, 2018).

### 5.5.3 Western medicine

The items western medicine factor were, 'seek the help of a psychologist', 'consult with a psychiatrist' and 'take medication'. The items in the restorative/curative care factor were aligned with western professional help-seeking. The results indicated that the biological factor of aetiology beliefs, together with attitudes towards mental illness were significant predictors of the western medicine factor. The strongest predictor was attitudes towards mental illness followed by the biological factor of aetiology beliefs. The results suggest that attitudes towards mental illness play a significant role participants utilizing western medicine. Additionally, the participants are more likely to utilize western medicine if mental illness aetiology beliefs are attributed to biological factors.

Help-seeking behaviours influenced by biological explanations of mental illness have been endorsed by a number of studies. The results of this study, in line with other research, showed an absence of negative impacts in help-seeking behaviours associated with biological notions of mental illness. Lebowitz (2014) also reported on previous research that provided evidence for a lack of negative impacts of treatment usage or compliance for psychopathology that is conceptualised biologically. Choudhry et al. (2016) provided research trends reflecting that a greater endorsement of biological causal beliefs was positively related to the likelihood of

seeking professional help. The endorsement of biological causes was also reported to reflect better knowledge of mental illness, hence the willingness to seek appropriate help (Choudhry et al., 2016). Howard, Griffiths, Mcketin and Ma (2018) also revealed that biological attributions of mental illness are effective in increasing professional help-seeking. Howard et al. (2018) have proposed that the increased willingness to seek professional help, for biological etiologies, may possibly be the result of reduced stigma as perceived control of the condition is placed outside of the individual. Studies have also reported on findings that indicate that beliefs in biological aetiology of mental illness are commonly positively associated with biological interventions being the most effective or rather that mental illnesses caused by biological factors require biological interventions (Lebowitz, 2014; Prost, Hopman, Musisi & Okello, 2013).

Literature linked to stress related factors of mental illness highlight western professional help-seeking and lay help-seeking behaviours. A South African study conducted on psychiatric service users reported on findings that attribute mental illness to be the result of stress caused by extreme poverty (Brooke-Summer, Petersen & Lund, 2014). Participants in this study held beliefs of stress related causes of mental illness and the results indicated that the majority of participants appreciated the benefits of medication and reported good adherence to medication (Brooke-Summer et al., 2014). However, a number of the participants also reported challenges to adherence, which involved financial implications of collecting medication, but still believed in the efficacy of medication for mental illness associated with stress (Brooke-Summer et al., 2014).

The present findings, which indicate that attitudes play a significant role in predicting help-seeking behaviours, are compatible with previous research. Literature highlights that in recent years, public attitudes have become more positive towards mental health help-seeking and treatment. Thus, resulting in the increased use of psychiatric medication and psychotherapy (Mojtabai, Evans-Lacko, Schomerus & Thornicroft, 2016). Angermeyer et al. (2013) reported on findings that revealed that the public has become more accepting of consulting psychiatrists and psychotherapists, highlighting how this is slowly becoming the norm. Moreover, their findings also revealed more favourable attitudes towards psychiatric hospitals (Angeremeyer et al., 2013). However, there is also conflicting research that has shown the opposite effect. Mackenzie, Erikson. Deane and Wright (2014) conducted a review on changes in attitudes towards seeking mental health services and found that public attitudes towards seeking mental health services have become increasingly more negative despite

public awareness and education programmes directed towards reducing the stigma of mental illness.

#### 5.5.4 Local clinics

The local clinics factor included items that were associated with trusting primary health care for mental health issues and the belief that local clinics would provide adequate care and treatment i.e. sufficient resources. The items in the local clinics factor were, 'information about mental illness is available at my local clinic', 'local clinics can provide good care for mental illness' and 'if I was concerned about a mental health issue with a member of my family or myself, I would feel comfortable discussing it with someone at my local clinic'.

The predictor of this factor was the level of education of the participants and it was a positive significant predictor. This suggests that the utilization of local clinics for mental health related issues was endorsed by participants with higher years of education. The sample consisted of a majority of participants (57.8%) with an educational level of high school completed. There were also participants who had obtained a diploma (15.6%) and participants who had attended university (16.9%). It is therefore appropriate that a sociodemographic factor, such as education, had a positive relationship with the utilisation of a health service i.e. local clinics.

A number of studies have foregrounded the importance of education in help-seeking behaviours. Abera Abaerei, Ncayiyana and Levin (2017) asserted that the significance of education can be observed through intentions, decisions and the manner in which health services are utilised. Education may act as an enabling or disabling factor in the utilisation of health services (Abera Abaerei et al, 2017). In South Africa, local clinics are the first of health services for rural communities (Mbula, Ndabeni & Maharajh, 2015). At primary health care facilities, communication and materials for imparting health education are delivered in English (Janse van Rensburg, 2020). It has been argued that the ability to understand most health education information requires a reading level above a grade 8 school level (Janse van Rensburg, 2020).

Similar findings, supporting the results of the current study, were obtained by Muriithi (2013), where education was a positive and statistically significant predictor of help-seeking. Inversely, Latunji and Akinyemi (2018) reported on findings that indicated that decreased levels of seeking health care from formal sources were associated with a completion of only basic education and an increased delay of seeking treatment.

Education, with regard to health service usage, has also been linked to health literacy and other sociodemographic factors. Health literacy has been defined by Janse van Rensburg (2020) as “the degree to which patients have the capacity to obtain information and services to make appropriate health decisions” (p.1). Education, age and English proficiency have been reported to be the determinants of health literacy. However, education has been acknowledged to be a key determinant. Marimwe and Dowse (2019) reported on significant correlations of health literacy and education. Janse van Rensburg (2020), in addition, suggested that it may be challenging for patients with low health literacy levels to understand health education and health instructions. Govender, Girdwood, Letswalo, Long, Meyer-Rath and Miot (2021) revealed that, in their study, factors such as education, health-insurance and socio-economic status were strong predictors of utilising health facilities. Okoronkwo, Onwujekwe and Fani (2014) investigated the level of inequities in the patterns of utilisation of primary health care services in Nigeria and found a significant influence of education on the use of primary health care services. Okoronkwo et al. (2014) further revealed that individuals with low socio-economic status and individuals with higher educational levels made use of primary health services at a greater extent when compared to individuals with the lowest socio-economic status. Education is thus recognised as essential to the utilization of health services.

The results thus highlight the importance of integrating mental health services into lower levels of care. However, this is still a challenge in South Africa, as the integration of mental health services remains incomplete and consequently leads to inconsistent care and difficulties such as undetected mental disorders (Mokwena & Mokwena, 2022). There is indeed a recognition for the process of integration to be expedited. Maconik, Jenkins, Fisher, Petrie, Boon and Reuter (2018) have reported on an increased momentum to integrate mental health care into primary health care due to a lack of human resources in the public health sector, these shortages are most observable in rural areas.

#### 5.5.5 Complementary medicine

The complementary medicine factor included items that can be understood as complementary and alternative care which can be integrated with conventional treatment modalities for mental illness. The items in the factor were, ‘consult with a traditional healer’ and ‘use holistic treatments’. The only significant predictor was the cultural beliefs aetiology factor and this was a positive prediction, suggesting that the participants would be more inclined to

pursuing help-seeking behaviours aligned to integrative/alternative care if they believed the causes of mental illness to be related to cultural factors.

Research aligned to this assumption advocates for appropriate care to be sought after for different conceptualizations of illnesses. For example, van der Watt, Biederman, Abdulmalik, Mbanga, Das-Brailsford and Seedat (2021) describe ‘cultural/spiritual’ problems and ‘psychiatric’ problems and highlights that ‘ukuthwasa’, which can sometimes be confused for schizophrenia, is a cultural/spiritual problem which can only be understood and treated by a sangoma, a Western-trained practitioner would not be of any assistance. Additionally, Sehoana and Laher (2015) indicated that the Pedi culture understand mental illnesses to be spiritual and therefore can only be resolved by consulting traditional healers. There is also an emphasis on shared beliefs or similar explanatory models with alternative healers and patients. Tan, Shahwan, Goh, Ong, Samari, Abdin, Kwok, Chong and Subramaniam (2020) stated that professional mental health services are viewed as ineffective for mental illnesses attributed to supernatural causes and that affected individuals are more likely to then seek cultural traditional or religious forms of healing. Zuma, Wight, Rochat and Moshabela (2016) described reasons for consulting traditional health practitioners, they are mainly related to the link of health that traditional health practitioners have with their patients’ social and cultural beliefs. Zingela, van Wyk and Pietersen (2019) also revealed that patients consult with traditional healers because they understand the significance of ancestral spirits, supernatural forces and the reality of witches.

Traditional healing is acknowledged to be a more a holistic approach as it targets psychological, social and emotional aspects of the individual (Gureje, Nortje, Makanjuola, Oladeji, Seedat & Jenkins, 2015). This form of healing which is in line with traditional beliefs, also aims to understand the origins of illness rather targeting just the symptoms (Gureje et al., 2015). It therefore seems appropriate to incorporate such services into mainstream mental health services. Collaboration can scale up services and can potentially lead to advantages such as cultural acceptability, accessibility, a perceived holistic approach and less stigma (Gureje et al., 2015).

#### 5.5.6 Religion

The religion factor had items related to religious help-seeking behaviours. The items were, ‘it is important for the mentally ill to seek help from a professional from the same religion/culture’ and ‘pray to God’. The cultural beliefs factor and attitudes towards mental

illness were the predictors of the religion factor. The strongest predictor was the cultural beliefs factor, suggesting that the participants endorsed religious help-seeking behaviours more if perceived causes were related to cultural beliefs. The results implied a relationship between culture and religion. Additionally, the results also suggested that the participants also favoured religious help-seeking behaviours if they had positive attitudes towards mental illness.

The relationship between religion and culture is warranted. Beyers (2017) has argued that culture and religion cannot be separated and that the two should be viewed as relatives. Beyers (2017) has emphasized the relationship between culture and religion by stating that religion is determined by culture and that religion also influences culture. Furthermore, Beyers (2017) has suggested that in many parts of science, art and literature, there are elements known to be part of religion, that are also connected to cultural elements. In many parts of the world, when you belong to certain religion, it also implies belonging to a specific culture (Beyers, 2017). Thus, it is important to understand that religion is embedded within a culture and that the two have values that work synchronously (Caplan, 2019).

Within the South African context, the influence of culture on religion and spirituality is evident through the African independent churches (Mokgobi, 2014). In these settings it is common for the religious leaders i.e. the priests and prophets to have simultaneous roles as traditional healers and leaders of the church (Mokgobi, 2014). This provides the indication that in the African worldview, it is difficult to view traditional African healing, which embodies cultural values, and religion or spirituality as two separate entities (Mokgobi, 2014).

Potgieter and van Rooyen (2017) examined perceptions of mental health care consumers regarding their conditions and there was an indication that consumers consulted spiritual or traditional healers if they had perceived their symptoms to be of a cultural or spiritual cause. Choudhry et al. (2015) highlighted spiritual treatment of mental illness that involves consulting spiritual healers, practicing prayers, recitation of sacred texts and the use of holy water. This spiritual treatment is suggested to be associated with supernatural forces and religious practices of different faiths (Choudhry et al., 2015). The relationship between religion and culture in the treatment of mental illness can also be observed in cases where bewitchment is believed to be the cause of illness, faith healers prescribe certain rituals and religious practices that can be carried out to alleviate symptoms (Mokgobi, 2014). These are

common practices in rural communities of South Africa that highlight the complex nature in which religious and cultural views are interwoven (Mokgobi, 2014).

Attitudes towards mental illness was also a predictor of religious help-seeking. This was a positive relationship. However, the effect size was minimal and the relationship should therefore be interpreted with caution. There is research that suggest healthy influences of religiousness on help-seeking and research to the opposite effect.

Kingston (2016) has argued for positive associations between psychiatry and religion by making reference to soul care, which was informed by psychiatry. In many settings, the clergy provides spiritual support which is informed by psychotherapeutic training. This knowledge guides pastoral work in issues related to biblical counselling (Kingston, 2016). However, it is worth noting that the attitudes held by the clergy play a significant role in members of the church seeking guidance on health related issues (Lefevor, Piaz, Milburn, Sheffield & Tamez Guerro, 2022). Lefevor et al. (2022) have highlighted the religious individuals have the preference of seeking help from the clergy before consulting psychotherapists. This preference is encouraged by positive attitudes towards mental health held by the clergy and perceived positive norms about help-seeking. Lefevor et al. (2022) further revealed findings that suggest that frequent discussions of mental health issues in the church related to more positive attitudes towards seeking help and an increased ability and sense of control, among the church members, to seek help. Moreno and Cardemil (2013) reported on findings that revealed that the majority of their participants preferred religious counselling services (from religious leaders) when facing adversity, as these services were more aligned with their religious beliefs. Moreover, the participants expressed a sense of trust and comfort with their religious leaders, with the belief that their leaders would have positive attitudes towards their mental health concerns (Moreno & Cardemil, 2013).

Hays and Lincoln (2017) reported on literature in support of positive attitudes towards mental health in relation to religious help-seeking, where frequent church attendance was aligned with more emotional support from the church. Thus, resulting in more positive attitudes associated with the belief that religious coping is effective when facing adversity (Hays & Lincoln, 2017).

Positive influences of religion and help-seeking have been outlined, however there are previous studies that have highlighted the negative attitudes aligned with religious help-seeking. Adams, Whatley, Brown, Taylor and Neal (2018) have demonstrated negative

interactions of church members with the Christian church, in instances where church members have sought help from the church and their illnesses were attributed to sin or demonic involvement. Mantovani et al. (2017) reported on findings that similarly indicate that faith leaders may attribute mental illness to moral failing on the part of the individual. The negative attitudes and negative conceptualisations of mental illness by the church, such as attributing it to personal weakness, can become problematic for affected individuals who seek assistance from the church and this can contribute to ill-informed conceptions about mental illness.

5.6 What, in your opinion, are the factors that contribute to mental illness developing in individuals?

*Psychological factors*

The majority of the participants (n=67) acknowledged psychological factors as major contributors to the development of mental illness. This presents a congruency with the literature reviewed, which suggests commonalities between western and African traditional notions of mental illness. Mufamadi and Sodi (2010) indicated that psychological factors such as worry, strain and tension are common to traditional healers, these factors are usually understood as signs of mental illness or may potentially result to the development of mental illness (Mufamadi & Sodi, 2010). Additionally, a number of studies have associated causes of mental health issues with psychological factors that include unhappiness, low self-esteem, rejection, overthinking, self-downing and blaming, anxiety and worry (Bowers, Manion, Papadopoulos & Gauvreau, 2013; Choudhry & Bokharey, 2013; Fellmeth, Plugge, Paw, Charunwatthana, Nosten, & McGready, 2015; Naeem, F., Ayub, M., Kingdon, D., & Gobbi, M, 2012).

‘Stress and overthinking’ made frequent appearances in this theme. Such terms have been indicated to represent idioms of distress or culture bound syndromes (Kaiser, Haroz, Kohrt, Bolton, Bass & Hinton, 2015). These terms characterize some of the ways in which different cultural groups may communicate, experience and understand emotions or thoughts that are troubling (Kaiser et al., 2015).

Kaiser et al. (2015) assert that ‘thinking too much’ is more often used as an explanation or cause of a mental health problem or other associated physical problems. Research has also

highlighted that ‘thinking too much can also represent a symptom of a broader mental health syndrome (Okello, Ngo, Ryan, Musisi, Akena, Nakasujja, Wagner, 2012).

Associations of ruminating about worries and psychiatric constructs have been linked to disorders such as major depressive disorder, generalized anxiety and Post Traumatic Stress Disorder, or the potential progression of such conditions, which have also been highlighted in this theme (Hinton, Kredlow, Pich, Bui & Hofmann, 2013).

The use of idioms of distress have been useful on one end and potentially ineffective on the other. Idioms of distress have been suggested to be less stigmatizing and could potentially prove to be better for clinical communication and therapeutic intervention (Kaiser et al., 2015). The benefits of idioms of distress are on the social and communicative aspects of health exchange but do not serve any use for diagnostic specificity (Kaiser et al., 2015). Moreover, studies have revealed that stress and trauma have been normalized, even in cases that may be indicative of serious mental health issues (Choudhry et al., 2016). Symptoms of mental issues have been underestimated and described in the context of stress and poor coping. Shielding against stress and poor coping mechanisms have been associated with the exacerbation of mental illness or fast progression of such conditions (Choudhry et al., 2016).

However, it is important to consider that these idioms of distress are not specific to single psychiatric diagnoses but rather represent heterogeneous lay categories that may or may not indicate mental illness (Kaiser et al., 2015). Furthermore, interventions or treatments may not be necessary for all cases that are described by idioms of distress, as some cases may be non-pathological (Yarris, 2014).

#### *Social components/aspects in their communities*

This theme represented the significant impact of interpersonal relations on mental health. The participants (n=30) viewed abuse, death, divorce, family stress and social media as important factors that can contribute to the development of mental illness.

Research has revealed that abuse has deleterious effects on emotional, mental and physical health of an individual, consequently increasing the risk for psychiatric disorders, most commonly depression (Radell, Abo Hamza, Daghestani, Perveen & Moustafa, 2021). Severe depression has been strongly linked to emotional and physical abuse. Abuse leads to a range of self-suffering issues which include: low self-esteem, pessimistic thinking and negativity, worthlessness, hopelessness, helplessness and loss of pleasure in daily activities (Radell et al.,

2021). Victims of sexual assault, on the other hand, are more likely to experience an array of mental disorders such as depression, anxiety, trauma and stressor-related disorders (Dworkin, Pittenger, & Allen, 2016). Additionally, there is consensus among researchers that there are gender differences regarding reactivity and responses to abuse (Bale & Epperson, 2015). Women have been linked to higher levels of stress and increased prevalence of depression when compared to men. Moreover, when reacting to effects of sexual assault, men externalize their negative emotions, which are expressed in aggressive and/or antisocial behaviours. This is in contrast to women, who internalize their emotions (Bale & Epperson, 2015).

Losing loved ones is an evitable part of life and yet it can feel so overwhelmingly stressful for survivors (Boerner Stroebe, Schut & Wortman, 2015). Most individuals go through normal bereavement processes where they are able to reconcile their emotions without developing any prolonged impairment (Jordan & Litz, 2014). Whereas, others may struggle significantly, leading to the development of mental disorders. Bereaved individuals are known to suffer from mental disorders such as major depression, prolonged grief disorder and posttraumatic stress disorder (Jordan & Litz, 2014). Struggling with the resolution of grief is usually attributed to risk factors such as a history of prior trauma or loss, a history of mood and anxiety disorders, insecure attachment style, a violent cause of death and a lack of social support after the loss (Lobb, Kristjanson, Aoun, Monterosso, Halkett & Davies, 2010). Depression in bereaved individuals has the global characteristics of pervasive misery, pessimistic rumination, guilt or a sense of personal worthlessness (Jordan & Litz, 2014). Prolonged grief disorder is characterized by an intense preoccupation with the lost loved one to an extent whereby there is reduced quality of life, social and occupational impairment, sleep disturbance, suicidal thoughts and behaviour, substance use problems and a general sense of emptiness (Jordan & Litz, 2014). Bereaved individuals experience posttraumatic stress disorder when they have intrusive thoughts that are focused on the death event. They may also experience a sense of threat which ultimately results to bereaved individuals avoiding internal and external reminders of the death event (Jordan & Litz, 2014).

Evidence has shown that separating from a loved one, for example divorce, also has a significant impact on mental and physical health (Thomas, Liu & Umberson, 2017). The wellbeing of an individual can be undermined by strenuous aspects of marriage and marital dissolutions. As a result, partners in stressed marriages report poorer health and are at heightened risks for a range of illnesses (Thomas et al., 2017). Public health risks are associated with obesity, lack of regular exercise and excessive alcohol intake (Sbarra,

Hasselmo & Bourassa, 2015). Some individuals experience substantial emotional distress and divorce becomes a chronic stressor, therefore reducing psychological wellbeing. Many individuals are faced with the task of discovering themselves again (Sbarra et al., 2015). However, other studies have revealed that not everyone will experience poor mental health outcomes after a divorce (Sbarra, Emery, Beam & Ocker, 2014). People with a history of mental illness are more likely to experience anxiety, major depression and other mood disorders (Sbarra et al., 2014).

Additionally, strained family ties can contribute negatively to personal well-being (Thomas et al., 2017). Family relationships are known to play a major role in shaping the individual's well-being across their lifespan, and providing social support and experience for future relations (Thomas et al., 2017). A greater sense of meaning can be fostered by strong family connections. In contrast, weak family ties, especially with parents and siblings result to inadequate social integration, poor emotional support and a lack of belonging. Strained family relationships are characterized by too many arguments, being very critical of each other and making too many demands (Thomas et al., 2017). Conflict with siblings has been associated with major depression and greater drug use. Lower socioeconomic status has been linked to more reports of low sibling bonds, which consequently lead to poor health outcomes such as obesity, major depression and substance use (Van Gundy, Mills, Tucker, Rebellon, Sharp, & Stracuzzi, 2015).

Although participants highlighted the use of social media as a contributing factor to mental illness, research studies have provided heterogeneous results regarding its impacts. (Berryman, Ferguson & Negy, 2018). The use of social media can have harmful effects if it is associated with negative social comparison. Rumination on other people's lives can ultimately lead to depression. However, there is also research that has reported on positive findings regarding social media and mental health. Positive well-being in social media users is associated with authentic self-presentation (Berryman et al., 2018). Pittman and Reich (2016) have reported on higher levels of loneliness in societies with the most social media usage.

### *Substance use*

Substance use was highlighted by the participants (n=28) as contributing to the development of mental illness. This was presented in twofold. Firstly, by suggesting that substance abuse of drugs such as cannabis, nyaope and alcohol leads to mental health problems. Secondly, the

emotional problems result to substance dependency and consequently other mental health issues. Additionally, there were implications of negative attitudes around individuals with substance use problems. This was best represented by participant 96 who mentioned that, “some people are unable to think about their future as they are controlled by alcohol”, which may indicate stigma around such topics.

The DSM-5 describes substance use disorder as, “a cluster of cognitive, behavioural, and physiological symptoms indicating that the individual continues using the substance despite significant substance-related problems” (APA, 2013, p. 483). Substance related disorders, in the DSM-5, have been associated with 10 categories of drugs: alcohol, caffeine cannabis, hallucinogens, inhalants, opioids, sedatives, hypnotics, stimulants, tobacco and other unknown substances (APA, 2013).

In South Africa, research has indicated that prevalent substance use is associated with associated with certain sociodemographic factors, such as the male gender, younger age, lower income or unemployment and locality (Peltzer & Phaswana-Mafuya, 2018). Substances have adverse consequences on health, as they are 8major risk factors for morbidity, disability, premature death and common mental disorders (depression and anxiety disorders) (Tindimwebwa, Ajayi & Adeniyi, 2021).

A number of studies that have examined gender differences in substance use have indicated that prevalence of risky alcohol use and psychoactive drugs is higher among males than females (Erol & Karpyak, 2015; Owolabi, Ter Goon, Adeniyi & Seekoe, 2018; Substance Abuse and Mental Health Services Administration, 2014; Wilsnack, Wilsnack, Gmel & Kantor, 2018). This is suggested to be influenced by societal norms and traditional gender roles which vary in different cultural groups. Factors associated with a high prevalence of youth using substances include: peer pressure, bullying, the need to belong and gang affiliations (Tindimwebwa et al., 2021). Locality explained in the form of environmental factors can pose as a risk factor for substance use disorders and mental illness. Such factors involve chronic stress, trauma and adverse childhood experiences. Stress is known as an aetiological factor for a range of mental disorders (Kelly & Daley, 2013). Stressful environments, chronic stress and higher levels of stress are linked to decreased behavioural control and increased impulsivity and thus increased susceptibility to substance abuse (Kelly & Daley, 2013). Individuals that are constantly exposed to traumatic events are more likely to abuse substances and eventually develop substance use disorders. Substances are used as

unfavourable coping mechanisms to reduce anxiety and traumatic flashbacks (Boden, Kimerling, Kulkarni, Bonn-Miller, Weaver & Trafton, 2014).

Certain mental disorders can be induced or triggered by substance use and addiction (Fontenelle, Oostermeijer, Harrison, Pantelis & Yücel, 2011). In most cases, an individual usually has a predisposition for mental illness and certain substances can trigger the onset of that mental illness (Fontenelle et al., 2011). Common mental disorders that can develop as a result of substance use and addiction are schizophrenia, anxiety, mood or impulse-control disorders and substance-induced psychotic disorder (Stoychev, 2019). Cannabis has been identified to be highly associated psychosis and other mental disorders (Singh, & Balhara, 2017; Thothela, Van der Watt & Janse van Rensburg, 2014). Alcohol and cannabis are most used substances in South Africa. The global prevalence for alcohol consumption among adults is estimated at 32.5%, in South Africa the prevalence is around 33.1% (Tindimwebwa et al., 2021). Cannabis is the most widely used psychoactive drug on a global scale (Thothela et al., 2014; Tindimwebwa et al., 2021). Among individuals of 15 to 65 years of age, cannabis is estimated at 3.8% (188 million) (Tindimwebwa et al., 2021). Additionally, people living with mental illnesses are at higher risk for developing substance use disorders (Stoychev, 2019). Substances are indicated to be used as self-medication for individuals with severe, mild or subclinical mental disorders. Substances are used to reduce symptoms and associated negative effects, which ultimately results to a psychological dependence of substance use (Stoychev, 2019; Thothela et al., 2014). Substance use and dependence is usually viewed negatively by the public, which exacerbates comorbidities with substance use disorders, most commonly depression. Substance use disorders are frequently associated with poor character and morals (McGinty, Pescosolido, Kennedy-Hendricks & Barry, 2018).

### *Financial challenges*

The participants identified financial challenges as another contributing factor to mental illness. This was described as factors relating to unemployment, poverty, hunger and unfavourable living conditions. The findings are consistent with some of the literature that has been reviewed in the study (Lilenstein et al., 2017). A number of studies that have also demonstrated the effects of poverty, low socio-economic status and hunger on mental health, in low and middle income countries (Gibbs, Govender & Jewkes, 2018; Lund, Breen, Flisher, Kakuma, Corrigan, Joska, Swartz & Patel, 2010; Muldoon, Duff, Fielden & Anema, 2013).

Unfavourable circumstances characterized as poor social, economic and physical environments, shape the mental health of people living in such environments (Wahlbeck, Cresswell-Smith, Haaramo & Parkkonen, 2017). Thus contributing to many common mental disorders (Wahlbeck et al., 2017). Globally, social inequality, poverty and low socio-economic status have been found to have strong associations with poor mental health outcomes (Gibbs et al., 2018). In South Africa, the legacy of apartheid has translated to high levels of poverty which contributes negatively to mental health (Gibbs et al., 2018).

Markers of poverty associated with mental health, which are also known as social determinants of mental disorders, include unemployment, adverse neighbourhood characteristics, low income, education, social class, socio-economic status, food security, financial stress and income inequality (Gibbs et al., 2018; Lund et al., 2010). Clear associations of poor mental health outcomes with markers of poverty such as food security, education, social class and financial stress have been established, thus providing stronger evidence. However, markers such as income, earnings and consumption demonstrate weaker evidence as they result in mixed relationships with poor mental health outcomes. (Gibbs et al., 2018).

Consistent with the literature reviewed, research has indicated that the psychological effects of poverty on the individual include stress and strain, social isolation and exclusion, and powerlessness (Goodman, Pugach, Skolnik & Smith, 2013). People living in poverty are constantly faced with multiple chronic and acute stressors, with most of the strain coming from the inability to meet basic needs for families. The ongoing exposure to stressful and threatening events such as community violence, imprisonment of self or spouse, intimate partner violence and other crimes, exacerbate feelings of hopelessness, hostility, anger, fear and worry (Goodman et al., 2013). Individuals living in poverty experience social isolation and exclusion, as research has indicated that middle class individuals associate negative traits with the poor, often describing the poor as unmotivated, uneducated, unpleasant, dirty, angry, stupid, criminal, violent, immoral, alcoholic and abusive (Goodman et al., 2013; Nghiem-Olson, 2017). Goodman et al. (2013) have also revealed that people living in poverty have less opportunities to exercise control over their circumstances, which often leads to feelings of powerlessness. This translates to internalized feelings of inferiority, self-doubt and low self-esteem. These experiences of powerlessness often become part of one's identity.

Matlala, Maponya, Chigome, and Meyer (2018) demonstrate that disadvantaged, poor and marginalized communities face the burden of common mental disorders, which often result to low income and unemployment. They have also revealed that depression and anxiety is associated with poor educational attainment, which is often associated with low income (Matlala et al., 2018). In South Africa, depressive symptomology is often seen manifesting in young people that are marginalized socially, politically and economically (Gibbs et al., 2018). In particular, the depression has been linked to limited employment opportunities, which manifests differently for men and women. Depressive symptomology for women in poverty is associated with a lack of economic autonomy which often leaves women disempowered and vulnerable to violence in relationships (Gibbs et al., 2018). Men experience depressive symptomology that is linked to an adherence to rigid norms of traditional masculinity, and failing to attain these aspirations has detrimental emotional effects (Coleman, 2015). Moreover, hunger in people living in poverty has been reported to be associated with higher levels of stress, anxiety, irritability, social isolation and depression (Muldoon et al., 2013). Households experiencing food insecurity often report on high levels of anxiety characterized by fear and worry around the possibility of running out of food (Muldoon et al., 2013). Several studies have supported the negative psychological impacts of food insecurity, on mental and physical health (Gundersen & Ziliak, 2015; Jones, 2017).

### *Biological influences*

The participants acknowledged biological influences as causal factors to mental illness, however, this was less emphasized in the findings. Pang, Subramaniam, Lee, Lau, Abdin, Chua, Picco, Vaingankar and Chong (2018) suggest that it is common for non-Westerners to have more sociological and theological notions of mental illness than biological and psychological notions, which are predominantly adopted by Westerners. This might be a possible explanation, as the sample is best represented by non-Westerners. However, the findings indicate there is an appreciation of biological influences. A meta-synthesis revealed that marginalized populations with strong beliefs in spiritual perspectives on mental illness, still had an awareness of biological causes (Choudhry et al., 2016). Lebowitz and Ahn (2014) state that the public has become more inclined to accepting biological understandings of mental illness. Thus recognising the plausibility of the biological perspective and associated treatment measures.

The biological influences were described as hereditary/genetic and hormonal. Research related to hereditary causes of mental illness has highlighted the impact of fetal growth and development, which has been identified to predict the risk of non-communicable and chronic illnesses (O'Donnell & Meaney, 2017). O'Donnell and Meaney (2017) further emphasise that antenatal maternal wellbeing and fetal growth are considerable risk factors for later pathology. Generally, mental disorders that are high in heritability and largely discussed are schizophrenia, bipolar affective disorders and major depression (Wu, Dang, Li., Jin & Yang, 2019). The pathogenesis of these disorders is the resultant of genetic and environmental factors, interacting simultaneously (Wu et al., 2019). Hormones have also been associated with the development of mental disorders such as schizophrenia (Rao, Pongiya, Khan & Chinnasamy, 2014). Stress hormones within the brain are usually involved in the development of mood disorders such as depression and they are also associated with anxiety. Moreover, the disturbed balance of sexual hormones have been linked to schizophrenic disorders. However, recent evidence has suggested that oestrogen may have a protective function against the onset of schizophrenia (Rao et al., 2014).

Additionally, the global acceptance of the biological perspective on mental illness was expected to reduce stigma and increase empathy (Schomerus, Matschinger & Angermeyer, 2014). The promotion of biological correlates of mental illness was directed towards portraying mental disorders as medical conditions and reducing perceived blameworthiness (Lebowitz & Ahn, 2014; Schomerus et al., 2014). However, biological understandings of the public have resulted to more negative social attitudes and dehumanization (Lebowitz & Ahn, 2014). Research has revealed that people have become less tolerant, with increasing perceptions of people living with mental illness being physiologically different from “normal” people. Biological causal beliefs are also suggested to create more strict social boundaries between groups of people (Lebowitz & Ahn, 2014).

### *Cultural influences*

The literature review highlighted that aetiology beliefs of mental illness in non-Western communities are usually associated with cultural factors (Igwe, 2004). However, this was not the dominant view across participants (n=22). A small portion of the participants acknowledged cultural influences as contributing factors. This can be due to a number of reasons.

Possible explanations can be associated with increased awareness of psychopathological models which explain mental disorders in terms of psychological and biological factors, this has also been indicated above in previous sections (Altweck et al., 2015). The acceptance of these models has been suggested to reflect better knowledge of mental illnesses and an increased need for consulting with professionals (Altweck et al., 2015).

Nonetheless, supernatural beliefs of mental illness in communities still exist. A few of the participants made reference to witchcraft, ancestors, sorcery and evil spirits. Witchcraft, among Xhosa people, is believed to be common in overcrowded community contexts (Campbell, Sibeko, Mall, Baldinger, Nagdee, Susser & Stein, 2017). The effects of witchcraft are suggested to be experienced by those individuals who have lost the protection of their ancestors (Campbell et al., 2017). The Sesotho people also associate schizophrenia with witchcraft. Similar explanatory frameworks can be found in other Southern African cultures, including neighbouring countries like Namibia (Campbell et al., 2017). Evil spirits, as a cause of mental illness, are also recognised internationally (Choudhry et al., 2016). This was reflected in a study conducted in Switzerland, with the findings demonstrating that demons were considered as a significant factor of mental illness (Choudhry et al., 2016).

#### 5.7 What kind of advice would you give to a person with mental illness?

##### *Western professional assistance*

The use of western professional assistance has become a norm to many. This is in conjunction with the majority of participants in this current study (n=99) who advised for seeking western professional help regarding matters of mental health. The participants also placed high value on taking medication and reaching out to community centres and organisations for counselling. A number of studies have highlighted these assumptions. For example, a study conducted by Tesfaye, Agenagnew, Tucho, Anand, Birhanu, Ahmed, Getenet and Yitbarek (2020) revealed that the participants preferred medication and professional counselling as treatment for people with mental illness. Tesfaye et al. (2020) also reported that similar results were discovered in studies conducted in Tanzania and Southern India. Additionally, Furnham and Hamid (2014) described findings that favoured psychotherapy (69.7%) and consulting a general practitioner (54.5%) as interventions outlined by participants for mental illness. However, psychotherapy was viewed as most appropriate for depression and panic disorder. Moreover, medication was mentioned as effective treatment for disorders such as schizophrenia (Furnham & Hamid, 2014).

It has been further noted that there is a great need for brief psychological interventions in many poor countries (Pillay, Ahmed & Bawa, 2013). Interventions that focus on reducing symptoms of distress that are associated with trauma, anxiety and depression (Pillay et al., 2013). Research has indicated that African communities, particularly in South Africa, experience similar mental health problems which include psychosocial problems, anxiety, financial difficulties, learning problems and violence (Pillay et al., 2013). Such communities are recommended to benefit from group psychological interventions in addition to individual psychotherapy. Pillay et al. (2013) outlined that low-middle-income show favourable results with group psychological interventions in the treatment of depressive conditions.

Benjamin et al. (2021) revealed that community members in low-middle-income countries are becoming more aware and accepting of mental illness, which explains the increased need for psychological interventions. However, the increased awareness has not diminished the challenges of health care availability and accessibility (Benjamin et al., 2021).

Treatment, in low-middle-income countries is mainly available for severe mental illness and is provided at specialized psychiatric facilities (Gamieldeen, Galvaan, Myers & Sorsdahl, 2021). At primary levels of care there are minimal resources allocated for mental health services and there is further less or more often non-existent integration between hospitals and community-based services (Gamieldein et al., 2021).

#### *The role of social support structures*

From the results, it was evident that making use of support structures was an important help-seeking option for the participants (n=31). Dixon, Holoshitz and Nossel (2016) have indicated that feelings of alienation, marginalization and of being stigmatized are common among individuals with serious mental illness. Individuals are better able to handle adversities and challenges when they are supported by family, friends, colleagues, organisations and the community (Sippel, Pietrzak, Charney, Mayes & Southwick, 2015). This support is also known to improve psychological and physical health (Sippel et al., 2015).

Social support has been documented to reduce depressive and anxiety symptoms among people with chronic illnesses (Liu, Pang, Sun, Wu, Qu, Lu, & Wang, 2013). This has been elucidated and confirmed in cross-sectional and longitudinal studies examining the positive effects of social support on reducing psychological distress among people living with HIV/AIDS (Liu et al., 2013). Similar evidence has also been provided on literature regarding military veterans, where links between social support, psychological resilience and mental

health have been illustrated (Sippel et al., 2015). Data provided from cross-sectional military veterans studies showed that veterans characterized as resilient had more social support, more social connectedness and were integrated well back into their communities (Pietrzak & Cook, 2013). Furthermore, a combination of postdeployment social support and military unit support has been shown to buffer against posttraumatic stress disorder (Sippel et al., 2015).

Numerous stress models have been used to elucidate the function of social support on individuals (Camara, Bacigalupe & Padilla, 2017). For example, the principal effect model maintains that having the knowledge of social resources being present in one's life is beneficial independently of the situation, provides people with positive effect, sense of predictability and self-value acknowledgement. Consequently, lower rates of depression have been reported with having and using social supports (Camara et al., 2017). Additionally, the buffering hypothesis proposed by Cohen and Wills (1985) suggests that social support is a buffer of the impact that stressful events have on distress. This positions individuals with greater support as having better mental health outcomes when faced with adversities than individuals with lower support, who are suggested to be more likely to become depressed (Cohen & Wills, 1985). Perceived social support, actual social support and seeking out social support are ultimately protective factors to distress and result to better psychological and physical health (Camara et al., 2017).

### *Lifestyle changes*

Research has outlined that a number of unhealthy behaviours are more prominent with individuals suffering from mental illness, than the general population (Cabassa, Camacho, Vélez-Grau & Stefancic, 2017). These unhealthy behaviours have been identified as tobacco smoking, physical inactivity, poor dietary habits and risky sexual behaviours (Cabassa et al., 2017). While adverse effects of a bad lifestyle within/among people suffering from mental illness have been highlighted, the current study does not reflect a great significance for modifications in lifestyle choices, considering that a small portion of participants (n=21) advised for a healthy lifestyle. However, the results provided suggested lifestyle changes that are in alignment with research trends.

Prior research suggests that interventions targeted at modifying high risk behaviours reduce disease mortality and morbidity (Kazdin & Rabbitt, 2013). Favourable effects of lifestyle changes have been found in many psychological disorders, including depression, anxiety, schizophrenia, eating disorders, substance use disorders, and cognitive dysfunction in

physical disorders. Symptoms have been witnessed to be reduced by controlling diets, exercising, reducing or eliminating the consumption of alcohol and nicotine and engaging in activities that can reduce stress and improve functioning (Kazdin & Rabbitt, 2013). Such strategies have also been employed by a number of psychologists in practice, e.g. incorporating some aspects of lifestyle change and various activities into the treatment of depression (Kazdin & Rabbitt, 2013). Benefits of lifestyle interventions have been widely recorded in patients with schizophrenia. However, long-term implementation of such interventions has been noted to be still lacking in daily clinical practice (Blanner Kristiansen, Juel, Vinther Hansen, Hansen, Kilian & Hjorth, 2015).

Moreover, Dr. Roger Walsh's work advocates for psychiatrists to examine, assess and/or provide lifestyle intervention counselling (Tessier, Erickson, Meyer, Baker, Gelberg, Arnold, Kwan, Chamberlin, Rosen, Shah, Helleman, Lewis, Nguyen, Sachinvala, Amrami, Pierre & Ames, 2017). The work of Dr. Walsh was formed on the premise that mental health professionals underestimate the importance of lifestyle factors in the contribution and treatment of mental illness (Walsh, 2011). Dr Walsh has provided evidence for the effectiveness of incorporating eight therapeutic lifestyle changes into clinical practice and for everyday use for people with any mental illness (Walsh, 2011). The eight therapeutic lifestyle changes include exercise, nutrition/diet, stress management and relaxation, time in nature, relationships, service to others, religious or spiritual involvement and recreation (Tessier et al., 2017). Each therapeutic lifestyle change is described to have positive outcomes and improvements in quality of life, medical health and/or psychiatric symptoms (Tessier et al., 2017). Dr. Walsh's conceptualization of wellness reflects the assumptions of the biopsychosocial and the biopsychosocial spiritual model, which are the theoretical frameworks of the current study. From this perspective, health is viewed holistically and interconnected with biological, psychological, social and spiritual factors (Tessier et al., 2017).

In addition to personal lifestyle changes, community recreation programs have been established, over the last ten years, as effective in promoting recovery and social inclusion in individuals with mental illness (Litwiller, White, Gallant, Gilbert, Hutchinson, Hamilton-Hinch & Lauckner, 2017). Various community recreation types which include physical recreation and activity/exercise, social recreation and creative pursuits have been documented to have positive impacts on physical health and to reduce symptoms associated with mental illness. Litwiller et al. (2017) further highlight the social benefits of community recreation

programs by indicating that they promote social connections. This is achieved through expanded social networks, obtaining a sense of belonging and acquiring more social skills. This is important in individuals with mental illness as the attention is shifted from thinking about their condition to thinking more about the community and others (Litwiller et al., 2017).

Another important aspect to lifestyle changes is having a healthy mind-set. Participants in the current study have outlined that a realignment of thoughts (having more positive thoughts) among people with mental illness is another option of treating and dealing with mental illness. This assumption is supported by existing literature which describes how people's thoughts and feelings about health affect their behaviours and outcomes (Conner, Boles, Markus, Eberhardt & Crum, 2019). Studies, over the past years, have increasingly demonstrated the effects of healthy mind-sets over a range of health relevant variables which include exercise, impacts of stress and the length of lives (Crum, Salovey & Achor, 2013 Levy, Slade, Kunkel & Kasl, 2002).

Conner et al. (2019) have provided research trends that have documented that people who die sooner than expected are usually people with negative mind-sets who generally hold the mind-set that aging leads to physical or mental deterioration. This is an example of how people's mind-sets influence their physical and mental health (Conner et al., 2019).

Another area of research within the healthy mind-set sphere is associated with the way individuals conceptualize stress and having the understanding that the effects of stress are malleable (Huebschmann & Sheets, 2020). It has been outlined that having a stress-is-enhancing mind-set is linked to positive outcomes. Negative effects of stress are usually experienced by individuals who hold a stress-is-debilitating mind-set (Huebschmann & Sheets, 2020). These various aspects of lifestyle choices and changes all have meaning contributions to people living with mental illness.

### *Religious support*

The majority of the participants ascribed to Christianity as reflected in the sample characteristics (n=75.8%). A low percentage of the sample ascribed to no religion (n=13.1). It would not be incorrect to anticipate strong religious beliefs among the participants. However, this was not strongly emulated in the results. A small portion of the participants (n=11) advised for religious support as a help-seeking option for mental illness.

This theme could've been less prevalent due to the idea that there are religious individuals who adopt the belief that mental illness is real and benefits from the use of mental health services (Sullivan, Pyne, Cheney, Hunt, Haynes & Sullivan, 2014). Religious individuals who adopt this perspective have mental illness aetiology beliefs that are associated with biopsychosocial and spiritual risk factors (Sullivan et al., 2014). Effective treatment and healing is believed to be the result of medication, psychotherapy, other mental health services and the incorporation of spiritual practice. The use of mental health services is however, put at the forefront. Faith communities who adopt this view are known to have less stigmatizing attitudes towards mental illness (Sullivan et al., 2014).

Despite the relatively low results for religious support, there were still some beliefs in its efficacy. More religious involvement was outlined, by the participants in the current study, as one of way of treating mental illness. This assumption supports existing literature, as prior studies have reported that individuals who are more religious have lower rates of mental health disorders including obsessive-compulsive disorder and suicide (Taylor, Chatters & Joe, 2011; Himle, Taylor & Chatters, 2012). This positions religion as a protective factor mental illness (Hays, 2015). Reports of extensive studies relating to religion, spirituality and mental health have been outlined by Jeppsen, Possel, Black, Bjerg and Wooldridge (2015), describing how religion and spirituality offer protection against the negative effects of psychological distress. Additionally, Anshel and Smith (2014) indicated that superior health outcomes are observed in individuals who practice a religious or spiritual lifestyle in combination with attending weekly services. This is further highlighted by providing evidence of lower blood pressure and less depression (lower rates) among individuals who are more religious (Anshel & Smith, 2014).

Certain aspects of religion have been noted by the participants to have benefits to mental health, such as the comfort of prayer and the social support of church attendance. Participants also believed that religious leaders are influential in the healing and treatment process of mental illness. Creating a close relationship to God through prayer is known to be positively associated with a number of mental health indicators, such as greater life satisfaction, optimism, a higher sense of self-worth and decreased depression (Jeppsen et al., 2015). A sense of control over one's life is also attained from believing that God answers prayers (Jeppsen et al., 2015). Positive health outcomes are linked with regular church attendance. This positive influence is achieved through a religious community with individuals who provide support, understanding and motivation (Anshel & Smith, 2014). Creating this strong

social support system results to healthier individuals that suffer less from mental illness and disease. Anshel and Smith (2014) further highlight the importance of religious leaders by describing the strong influence they have on the behaviours of members of their religious institutions and communities. Religious leaders can achieve desirable health outcomes by promoting healthy living, particularly when accompanied with religious texts and scriptures (Anshel & Smith, 2014). Religion is therefore associated with positive health and mental health outcomes when religious leaders and members provide a supportive and non-judgemental environment.

### *Traditional treatments*

For many years, the dominant view was that of Africans looking to traditional methods of healing when faced with illness (Zingela, van Wyk & Pietersen, 2019). However, the use of traditional treatments was the less prevalent theme in the results (n=8). This presents a contradiction with the literature reviewed, as it highlights that alternative care in low and middle income countries is widely used, especially in the form of traditional and faith healers (Van der Watt et al., 2018). It has also been outlined that traditional, complementary and alternative medicine users are more likely to be of low socioeconomic and educational status (James, Wardle, Steel & Adams, 2018). These assumptions are consistent with the sample characteristics.

The declined use of traditional treatments for mental illness, as highlighted by the responses of the participants, suggest that mixed views are starting to emerge regarding alternative care and can also be explained by a number of possibilities.

Firstly, the integration of traditional healers in mental health care has not been successfully implemented (Green & Colucci, 2020). This often results to discrimination by medical health care workers, as they view traditional medicine underdeveloped (Krah, de Kruif & Ragno, 2018). Biomedical superiority and advocacy has resulted to a shift of perception, from viewing traditional healers as experts to being unqualified (Krah et al., 2018). This influences help-seeking behaviours of mental health users. Chipps et al. (2015) reported on findings that indicated decreased beliefs in alternate treatment, which included God and traditional healing, most of the participants in their study believed in the efficacy of medication. Secondly, the lack of conclusive scientific evidence in alternate medicine has become a common barrier for health users (James et al., 2018). Consequently, leading to increased beliefs of traditional medicine not being safe and ineffective. African studies have reported

on unhygienic practices in product preparation and inappropriate doses for traditional medicine (Ahwinahwi & Chukwudi, 2016; Gyasi, Asante, Yeboah, Abass, Mensah & Siaw, 2016). Thirdly, there are beliefs that healing practices of alternative medicine (traditional and faith healing) are inhumane and potentially harmful, as they include beating, shackling, scarification, starvation and the use of prolonged seclusion and isolation (Esan, Appiah-Poku, Othieno, Kola, Harris, Nortje, Makanjuola, Oladeji, Price, Seedat & Gureje, 2019). Lastly, it is common for traditional, complementary and alternative medicine users to not disclose using traditional medicine due to negative attitudes associated with it (James et al., 2018). This might have been the issue with the participants in the current study. As with the majority of studies, the current study is subjected to a number of limitations which are discussed below.

## 5.8 Limitations

### 5.8.1 Limitations with regard to the scales used

The data collection was carried out through the use of a questionnaire. Most of the items in the questionnaire were structured in the form of a five point Likert scale. There were also items that were dichotomous. The choice of structure, regarding the manner in which the participants had to respond was limiting for the participants. The participants were not provided with a variety of response options that matched their exact responses.

The choice of questionnaires and particularly a five point Likert scale was based on the perception that using questionnaires with scales would be an efficient method for collecting the data and that they would be less challenging to understand. However, Likert scales have been critiqued and limitations have been foregrounded, especially regarding the closed nature of the format of Likert scales. For example, Li (2013) asserted that important information is frequently lost in research due to the limitations of the Likert method. This is particularly due to the fact that participants are provided with given options that they are forced to select from, that may however not be a true reflection of their exact responses (Li, 2013). This has also been linked to the insufficient range of responses that participants are often presented with (Li, 2013). Another limitation is regarding the ability of the Likert scale to assess actual attitudes towards statements, since attitudes are multidimensional in reality, but the Likert scale provides options that are single dimensional (Pervez, Maniruzzaman, Shah, Nabi & Ado, 2020). It has also been acknowledged that participants often avoid extreme opinions even though it may be their preferred or accurate view. Thus not resulting in the true reflections of the participants' attitudes (Pervez et al., 2020).

Particularly, because the participants, as evident from observation, were more willing to engage with certain items. Two open ended questions were provided at the end of the questionnaire to accommodate for more insightful responses, however, considering the length of the questionnaire, most participants were fatigued when it came to answering the open ended questions.

Furthermore, limitations regarding false impressions of attitudes, have been linked to central tendency bias, acquiescence bias and social desirability bias (Subedi, 2016).

### 5.8.2 Central tendency bias

Among the biases that have been mentioned above, central tendency bias was the most prominent and most problematic. Douven (2018) has described central tendency bias as one of the most obstinate response biases in psychology. The notion of central tendency bias can be referred to, as the inclination of participants to avoid extreme response choices and where they opt for middle/neutral responses (Pimentel & Pimentel, 2019; Taherdoost, 2019).

Central tendency bias has been acknowledged to be a common distortion and weakness for 5-point Likert scales (Nadler, Weston & Voyles, 2015). Douven (2018) has also supported this by stating that central tendency bias has been well documented in data obtained by using Likert-type questionnaires. It has further been noted to cause errors during the process of data analysis, such as analysis of variance tests (Nadler et al., 2015). The issue of central tendency bias in this current study was observed in the data collection process and it was evident in the results section concerning aetiology beliefs of mental illness.

Researchers have included midpoints for specific reasons. However, research has shown that participants do not always make use of the midpoint in alignment with researchers'/scale developers' intentions (Chyung, Roberts, Swanson & Hankinson, 2017). One of the purposes of a Likert scale is to provide a platform for participants to have an opportunity to express their opinions in a meaningful way, with both direction and strength, about any given topic (Chyung et al., 2017). The midpoint is included so that participants are not forced to select a 'disagree' or 'agree' option (Nadler et al., 2015). Participants are preferably provided with a midpoint to select a neutral response when their attitudes truly reflect an opinion that is neutral or when their attitudes fall in between a level of agreement and disagreement (Nadler et al., 2015). Nonetheless, participants have been known to select the midpoint even when their opinions do not reflect a sense of neutrality (Chyung et al., 2017). Nadler et al. (2015) further suggested that participants use the midpoint for the following reasons: lacking

knowledge or being indifferent, feeling ambivalent or disputing aspects of the question. Additionally, Chyung et al. (2017) have attributed the use of midpoints to satisficing behaviour. Satisficing behaviour is explained as a pattern of behaviour whereby participants select a minimally acceptable response as soon it is available, instead of applying themselves and seeking the optimal response (Chyung et al., 2017). Considering the sample of the current study, which was comprised of a majority of isiZulu speaking participants (31.8%) and a minority of English speaking participants (2.0%), it might have a possibility that the participants were unfamiliar with the information/or particular items in the questionnaire because of the language barrier. It might have been the more convenient option to select the neutral response, instead of constantly asking for items to be translated. Furthermore, midpoints have also been associated with social desirability, whereby participants select neutral responses for items they perceive to be socially undesirable (Nadler et al., 2015). This might have the explanation for items that portrayed negative attitudes towards mental illness, that participant might have selected neutral responses for. In the current study social desirability was a significant limitation due to the self-report nature of the questionnaire.

### 5.8.3 Self-report measures

Self-report measures have been critiqued in various and shortcomings have been outlined. The limitations of self-report measures might have contributed to the current study. Despite the convenience and importance of self-report measures as research tools in psychology, controversies have also been reported, which predominantly involve social desirability and inflated self-representation (Johns & Miraglia, 2015). These factors may contribute to inaccurate information being provided by participants (Johns & Miraglia, 2015).

Given the issue of anonymity not being guaranteed with the participation of the study, since the questionnaires had to administered with the assistance of translating, social desirability might have had a huge impact in the responses of the participants. Thus, the participants might have had the fear of scrutiny once the questionnaires were completed. The presence of a researcher may lead to under-reporting or exaggeration, which may not be contributing factors in the absence of a researcher (Kormos & Gifford, 2014). Under-reporting or exaggeration plays a role when privacy is perceived to be compromised during data collection (Kormos & Gifford, 2014). Hence participants may find it challenging to select extreme choices due to the idea of being observed. This is particularly observed in research concerning sensitive issues (Demetriou, Ozer & Essau, 2015). Self- representation concerns

are common in research of health psychology, which present significant limitations in the interpretation of research results (Johns & Miraglia, 2015). The target of measuring attitudes thus becomes challenging to attain as misrepresentations of actual behaviour are provided.

Moreover, another important bias to consider in self-report measures is acquiescence bias. This form of bias occurs when participants are inclined to agree with statements without regarding the content provided (Navarro-González, Lorenzo-Seva & Vigil-Colet, 2016). Acquiescence bias can be detected when a questionnaire has a balance of positive and negatively worded items (Kreitchmann, Abad, Ponsoda, Nieto & Morillo, 2019). The interpretation of data should thus be approached with caution, as it may provide inconclusive or inaccurate behaviours and attitudes of participants. Self-report measures have also been associated with the risk of obtaining responses that have interpreted differently by participants because of a lack of clarity of the items (Demetriou et al., 2015). In this study, this limitation might have contributed largely, as participants might have avoided seeking translation on certain items due to social desirability effects. This highlights issues concerning language barriers.

#### 5.8.4 Language

The issue of language within the South African context has many complexities which are obstinate in nature. South Africa has 11 official languages with different cultures associated with them. The sample of the current study comprised of a majority of isiZulu-speaking (31.8%) participants (as their home language). However, there was a diverse distribution of other South African spoken languages. English (2.0%) was among the lowest percentages of home languages of the participants. Squires, Sadarangani and Jones (2020) have indicated that in countries with multiple official languages, it is possible that citizens may be able to speak of all them, or may exhibit a high level of proficiency in one or two. However, it is not guaranteed that they may be able to read or write in any of the other languages (Squires et al., 2020). Most research tools/questionnaires are available in English. This has become a universal limitation for low and middle-income countries such as Asian, Middle Eastern, Latin American and African countries (Ransing, Vadivel, Halabi, Jatchavala, Shalbafan, Noël, Noor, Gürcan & Ramalho, 2021). Considering the fact that participants were assisted with translation only upon request. The barrier of language might have contributed to the response biases that have been discussed above (central tendency bias, acquiescence bias and

social desirability bias). This is particularly relevant in a society where it might seem more socially acceptable to be fluent and proficient in English (Cele, 2021).

As previously highlighted in the literature review, culture informs different conceptualisations of mental illness, which are drawn from different sources of knowledge i.e. indigenous African knowledge or biomedical/scientific knowledge which is based on Western/Euro-American beliefs (Kometsi et al., 2020). Societies can thus have diverse mental health knowledge, which sometimes can be derived from culture-bound explanatory models (Ventevogel et al., 2013). This becomes evident when members of the public use their own cultural labels for experiencing mental illness. Cultural idioms and labels can be used to explain certain kinds of mental illness and to describe associated symptoms; labels are often not in accordance with scientific classification/health vocabulary and may lack the nuances of professional classification (Ventevogel et al., 2013). Squires et al. (2020) have cautioned for appropriate translation of research instruments, as they may be affected by nativity and dialects. In connection to language and particularly health vocabulary, the understanding of mental illness, as evident from observation and translation, was limited to common mental disorders, such as depression and schizophrenia. This might have influenced the responses of the participants and consequently the results, particularly the attitudes of the participants towards mental illness.

In the current study, the use of common or cultural labels was evident in the responses of the open-ended questions. There was an over-reliance on the word 'stress', to describe and explain mental illnesses. Additionally, a number of participants also found it challenging to understand the health vocabulary of the items in the questionnaire. It has been acknowledged that participants may have difficulty articulating their experiences when the research involves discussing sensitive issues (Lee, Sulaiman-Hill & Thompson, 2014). Additionally, it is common that participants may not even have the vocabulary in their own language to express their views when participating in research regarding sensitive topics (Lee et al., 2014). Effective translation is required for research that is truly representative of the experiences and views of participants, when a language barrier is involved (Squires et al., 2020). Based on the limitations that have been highlighted, recommendations for future research have been provided.

## 5.9 Recommendations for future research

The first recommendation relates to large sample sizes. More quantitative studies with large sample sizes should be conducted, as they allow for a variety of statistical analyses.

Quantitative studies of large sample sizes can provide insight on the patterns of human behaviour and allow for predictions that can be beneficial to policy-makers. Additionally, large sample sizes improve the generalizability of research findings and can be used to inform contextual interventions of mental health. Given the large sample size of the current study, comparisons between groups could have been investigated i.e. gender differences in relation to the research topic. The sample consisted of 53,9% of females and 46.1% of males, which represents a distribution that is nearly even. The research topic, could've therefore been narrowed down to exploring attitudes, aetiology beliefs and help-seeking behaviours across genders. Thus granting the platform to contribute to the research field in South Africa with gender specific conceptualisations, perceptions and treatment options for mental illness among lay people. However, further research is to be conducted with the dataset as this was beyond the aim of the current study.

Similar studies to the current study, have been conducted in South Africa (Anderson et al., 2013; Hathorn, Lochner, Stein & Bantjies, 2021; Hugo et al., 2003; Labys et al., 2016; Madlala, Joubert & Masenge, 2022). Hugo et al. (2003) had a sample of 63.1% females and 36.9% males. Labys et al. (2016) had a sample of 63.8 females and 36.1% males. Anderson et al. (2013) had a sample of 48% females and 52% males. Madlala et al. (2022) had a sample of 77% females and 22.3% males. Hathorn et al. (2021) had a sample of 58% females and 42% males. Among the studies that have been mentioned, most of them had a majority of females in their samples, with the exception of Anderson et al. (2013). Anderson et al. (2013) provided results that were inclusive of gender related differences regarding help-seeking behaviours. Similarly further analyses on the influence of other sociodemographic factors such as age, education, religion, employment and socioeconomic status are required.

Secondly, an alteration to the Likert scale questionnaire is required to reduce the effect of response biases such as central tendency and acquiescence bias, which were significant limitations to the current study. To combat these challenges, the use of alternative forms of the Likert scale have suggested. These include a two-stage Likert scale and a phrase completion scale approach (Li, 2013). A two-stage Likert scale approach involves two stages, with the first entailing the participants to indicate whether they agree or disagree with a given

statement. The participants are then required to indicate their level of agreement/disagreement with the statement (Li, 2013). This method is acknowledged to capture extreme positions which participants often avoid, thus reducing the effects of central tendency bias (Li, 2013). The phrase completion Likert scale approach involves a process whereby the participants are required to complete a sentence to a given statement, in order to measure their level of agreement or disagreement (Li, 2013). In this approach, participants are provided with an incomplete sentence, for example an incomplete sentence relating to attitudes towards mental illness and two phrases which signify agreement and disagreement, which the participants have to choose from to complete the sentence. The phrases are linked to a scale ranging from 0 to 10 (Li, 2013). This method may reduce acquiescence bias. It would be beneficial for future studies to make use of alternative forms of the Likert scale to mitigate the effects of such response biases.

Thirdly, it would be efficient for future studies to consider translating research instruments before commencing with the data collection process. This would require thorough research on the proposed sample of choice, to gain a better understanding of the dominant spoken languages in the geographical location of interest. This process would be aided by including professional translators who are proficient in different languages and competent in the health vocabulary of the given research topic. The hiring of professional translators involves significant costs and funding is essential for such measures to be undertaken. However, based on the limitations that have been highlighted in the current study, it would be the most favourable course of action. The process of pre-data collection evaluation, concerning translation of instruments has been encouraged for the following purposes, firstly, to ensure that the items in the instrument will be well understood i.e. to make certain that the wording is correct and secondly to assess the appropriateness of the literacy level of the instrument for the population being studied (Squires et al., 2020). Additionally, it is imperative that, during the translation process, conceptual, semantic, technical, content and construct equivalence are maintained (Squires et al., 2020). Demetriou et al. (2015) have foregrounded the importance of cross-cultural adaptation of self-report questionnaires when translation is required. This is particularly to ensure that content validity is maintained, as self-report questionnaires are used across different cultures.

Fourthly, based on the findings of the current study, more research focused at the implementation and use of community care in mental health services, is required. Community care was evidently as help-seeking option for the participants. Thus, the effectiveness and

sustainability of community care needs to be assessed within the context of South Africa. Informal community care constitutes part of the plans proposed by WHO as a solution to mitigate the demands of formal services (Brown et al., 2014). The effective use of community care can address the health constraints and treatment gaps that have been outlined in the literature reviewed (Docrat et al., 2019). Consequently, community care has been identified to be more relevant in low and middle-income countries (Brown et al., 2014; Kohrt, Asher, Bhardwaj, Fazel, Jordans, Mutamba, Nadkarni, Pedersen, Singla & Patel, 2018). Community care has been supported due to the accessibility, acceptability and affordability that it promotes (Kohrt et al., 2018). Moreover, it has been identified to play a crucial role in increasing positive mental health outcomes which include mental health awareness, decreasing the levels of stigma and discrimination, reintegration into society and efficient recovery. Additional benefits of community level involvement are associated with increased utilization of mental health services at health facility level (Grant et al., 2021). Such outcomes have also been observed with the use of community health workers (Grant et al., 2021). Gopalkrishnan (2018) recommended partnerships with community members such as community elders and traditional healers, to develop more effective mental health systems in diverse cultural communities. Efforts to further develop community care in South Africa have been made. Grant et al. (2021) developed a Community Mental Health Education and Detection tool for adults that can be administered by community health teams. The tool was developed in partnership with the Department of Health in KwaZulu-Natal and it has been found to be culturally sensitive and aligned to community services (Grant et al., 2021). Taking into account of what has been outlined, it appears essential to determine how effectively community care can be used to deliver mental health services in marginalised and low-resourced community settings.

Lastly, a mixed methods approach is recommended for future studies. The inclusion of the two open-ended questions in the current study provided significant results that contributed to valuable insights with regard to the various aetiology beliefs of mental illness and help-seeking behaviours of the community members of Diepsloot, which could benefit from further exploration. Furthermore, the participants showed a keen interest of discussing the questionnaire items in detail and desired a platform to provide their subjective experiences on issues related to mental illness. The use of mixed methods design has gained acceptance among researchers (Caruth, 2013; Palinkas, 2014). Mixed methods research is advantageous as it addresses the shortcomings and preserves the strengths associated with both qualitative

and quantitative research designs (Caruth, 2013). Information that is frequently failed to be noticed in one research design, is conveniently captured with the utilization of the mixed methods approach. Mixed methods research thus provides richer insights to research topics, enhances study validity, provides increased levels of generalizability and can impart more robust conclusions (Caruth, 2013). The synergy of such research is maintained when the qualitative methods are used to explore and obtain a depth of understanding, and the quantitative methods used to test and confirm hypotheses and provide a breadth of understanding, for the research topic of interest (Palinkas, 2014). Laher, Bemath and Subjee (2018) used a mixed methods research design to explore the understandings of major depressive disorder among Muslim Indian women. The justification for a mixed methods design was based on an in-depth exploration and obtaining generalizable trends of the research topic (Laher et al., 2018). The results obtained from the qualitative and quantitative data were combined and consequently revealed a detailed understanding and significant issues related to major depressive disorder within Indian Muslim communities. Additionally, robust conclusions regarding issues of stigma in the communities were drawn, aided by the effective use of the mixed methods approach (Laher et al., 2018).

#### 5.10 Conclusion

This study mainly aimed to explore the attitudes of Diepsloot community members towards their beliefs about the aetiology of mental illness and their help-seeking behaviours. The study also sought to explore whether attitudes and aetiology beliefs predict help-seeking behaviours in Diepsloot community members. Furthermore, issues of stigma and poverty were explored as factors contributing to understanding of and help-seeking behaviours for mental illnesses. The results revealed that overall participants had neutral attitudes towards mental illness. The participants perceived mental illness to be caused by biological and stress related causes. Among the participants, there was an endorsement of help-seeking behaviours that were aligned with western medicine, hospitalization and interpersonal circle, and religion. The findings suggested that the participants had positive attitudes towards mental illness if their level of knowledge of mental illness was higher. A variety of predictors were revealed regarding the various help-seeking behaviours, which evidently presented in slight overlaps. The open ended questions resulted in six themes for the first question and five themes for the second question. The themes for the first question were: psychological factors, social components/aspects in their community, substance use, financial challenges, biological influences and cultural influences. The themes for the second question were: western

professional assistance, the role of social support structures, lifestyle changes, religious support and traditional treatment. The findings of the study were adequately discussed and the limitations that contributed to significant challenges were highlighted. Based on the limitations that were provided, recommendations were made for future studies. In conclusion, negative attitudes towards mental illness still persist in marginalised and low-resourced communities, such as the community of Diepsloot. Furthermore, the study provided an understanding of various aetiology beliefs of mental illness among lay persons within communities and their motivations for help-seeking behaviours. Overall, within the context of South Africa, it is important to consider issues of language and culture when conducting research.

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## Appendix A: Participant Information sheet

Dear Sir/Madam

Hello! My name is Sandile Mkhize. I am currently doing my Masters degree in Psychology at the University of the Witwatersrand. As part of my studies I am required to conduct a research project. My research involves exploring attitudes, causes and help-seeking behaviours for mental illness in Diepsloot. I would like to invite you to participate in my study

Participation in this study is voluntary. Participation will require you to complete the attached questionnaire that will take approximately 30 minutes to complete. Furthermore, your responses will remain confidential as the questionnaire requires no identifying information. Anonymity cannot be assured, but the results will be reported in a manner that is confidential. Any participation would be extremely helpful and highly appreciated. However, should you choose not to participate, this will not be held against you in any way. There are no risks or benefits associated with participation in this study.

The findings of the study will be reported in a research report. It may also be used in conference presentations and journal articles. The questionnaires from this study will be kept in a safe place at the university. Reports will be focused on group trends. Since the questionnaire requires no identifying information, no individual feedback can be provided. Feedback will only be provided upon request; the researcher's email address will be provided on the information sheet. If feedback is requested, a summary will be provided and displayed at the community hall in extension 2

Thinking about mental illness can be difficult, if you feel vulnerable or stressed after answering this questionnaire or if you know of a friend who may need assistance please call any of the free counselling service listed below or visit the South African Depression and Anxiety Group free counselling container in Diepsloot, extension 2.

- The South African Depression and Anxiety Group - 0800 567 567 or 011 234 4837
- Lifeline Southern Africa – 011 715 2000

If additional information is required please do not hesitate to contact the course co-ordinator (insert details), my supervisor (Prof Sumaya Laher – [Sumaya.laher@wits.ac.za](mailto:Sumaya.laher@wits.ac.za)) or myself. Contact details are provided below. Return of the completed questionnaire will be taken as consent to use your response in my study. Please detach and keep this sheet for future reference.

Thank you for taking the time to read this. Please detach and keep this sheet.

Sandile Mkhize

Sumaya Laher [sandile495@gmail.com](mailto:sandile495@gmail.com)

011 7174532

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## Appendix B: Ethics Clearance Certificate

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

HUMAN RESEARCH ETHICS COMMITTEE (SCHOOL OF HUMAN & COMMUNITY DEVELOPMENT)

CLEARANCE CERTIFICATE

PROTOCOL NUMBER: MACC/19/009 IH

PROJECT TITLE:

Exploring attitudes, etiology and help seeking behaviours for mental illness in the community of Diepsloot.

INVESTIGATORS

Mkhize Sandile

DEPARTMENT

Psychology

DATE CONSIDERED

16 May 2019

DECISION OF COMMITTEE\*

Approved

This ethical clearance is valid for 2 years and may be renewed upon application

DATE: 16 May 2019

CHAIRPERSON  
(Dr Vinitha Jithoo)



cc Supervisor:

Prof. Sumaya Laher  
Psychology

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**DECLARATION OF INVESTIGATOR (S)**

To be completed in duplicate and **one copy** returned to the Secretary, Room 100015, 10<sup>th</sup> floor, Senate House, University.

I/we fully understand the conditions under which I am/we are authorized to carry out the abovementioned research and I/we guarantee to ensure compliance with these conditions. Should any departure be contemplated from the research procedure, as approved, I/we undertake to submit a revised protocol to the Committee.

**This ethical clearance will expire on 31 December 2021**

PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES

## Appendix C: Questionnaire

All responses are confidential. Please answer all questions as truthfully as possible.

1. Age (years) \_\_\_\_\_

2. Gender  Male  Female

3. What is your home language\*? (please choose one)

Afrikaans  English  IsiNdebele  IsiXhosa  
 IsiZulu  Sepedi (North Sotho)  Sesotho  Setswana  
 SiSwati  Tshivenda  Xitsonga

Other(s) \_\_\_\_\_

4. Ethnicity\*:

African  Coloured  White  Indian  Other:  Please Specify \_\_\_\_\_

**\*Required for research purposes only. This is not intended to offend or discriminate.**

5. Religious Affiliation:

No religion  Christianity  Hinduism  Islam  Judaism

Traditional African Religion  Other:  Please Specify \_\_\_\_\_

6. Levels of schooling (mark most appropriate)

Primary school  High School  Some University  Diploma  Degree Post-graduate

7. Indicate the number of years of education

Years of schooling \_\_\_\_\_

8. Income bracket - I make more than or equal to (mark most appropriate):

- R11 000 per month  R9 000 per month  R7 000 per month  R5 000 per month  
 R3000 per month  R1000 per month less than R1000 unemployed

**9. Do you know anyone who has suffered from a mental illness?**

Yes:  No:

**10. Have you been diagnosed with a mental illness in your life at any time?**

Yes:  No:

**11. How would you rate your knowledge of mental illnesses? (mark most appropriate)**

- 1: No knowledge  2: Some knowledge  3: Sufficient knowledge   
4: More than sufficient knowledge  5: Extensive knowledge

Living Standard Measure

Please indicate an answer with a yes or no, by ticking in the appropriate column

Do you have access to the following items in your house?	Yes	No
1. Built in kitchen		
2. Microwave oven		
3. Fridge		
4. Vacuum cleaner		
5. Flushing toilet		
6. Cellphone in the household		
7. Radio set in the household		
8. Domestic worker in the household		
9. Tv set		
10. Traditional hut		
11. VCR		
12. Washing machine		
13. Electric stove		
14. Motor vehicle in the household		
15. Personal Computer		
16. M-net /DSTV subscription		
17. Hi-fi/music centre		
18. Hot running water		
19. Home telephone		
20. Water		

21. Tumble drier		
22. Deep freezer		
23. Sewing machine		
24. Home security service		
25. Dishwasher		

<p align="center"><b>(PPMIQ - PUBLIC PERCEPTIONS OF MENTAL ILLNESS QUESTIONNAIRE)</b></p> <p align="center"><b>There are no right or wrong answers to the following questions. We are interested in your perceptions and opinions. Please place a cross (X) on the response that best indicates your level of agreement.</b></p>	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	1	2	3	4	5
Mentally ill persons can work. (K – Knowledge)	1	2	3	4	5
Anyone can suffer from a mental illness. (K)	1	2	3	4	5
Mental illness is like any other illness. (+ – Added)	1	2	3	4	5
People with mental illness experience aches and pains in their body. (+)	1	2	3	4	5
People with mental health problems are largely to blame for their own condition. (K)	1	2	3	4	5
Spiritual illnesses are better than mental illnesses (+)	1	2	3	4	5
One can always tell a mentally ill person by his or her physical appearance. (K)	1	2	3	4	5
Mentally ill persons are not capable of true friendships (K)	1	2	3	4	5
Its better to have a physical illness rather than a mental illness (+)	1	2	3	4	5
Mentally ill persons are usually dangerous. (K)	1	2	3	4	5
Suffering from a mental illness is shameful (+)	1	2	3	4	5
The mentally ill should be prevented from having children. (A - Attitude)	1	2	3	4	5
The mentally ill should not get married (A)	1	2	3	4	5
One should avoid all contact with the mentally ill. (A)	1	2	3	4	5
The mentally ill should not be allowed to make decisions, even those concerning routine events (A)	1	2	3	4	5
I could maintain a friendship with someone with a mental illness. (A)	1	2	3	4	5

I could marry someone with a mental illness. (A)	1	2	3	4	5
I would be afraid to have a conversation with a mentally ill person. (A)	1	2	3	4	5
People with mental health illnesses should have the same rights as anyone else. (A)	1	2	3	4	5
I would be upset or disturbed about working on the same job as a mentally ill person. (A)	1	2	3	4	5
I would be ashamed if people knew that someone in my family had been diagnosed with a mental illness. (A)	1	2	3	4	5
If I was suffering from a mental health illness, I wouldn't want people to know about it. (A)	1	2	3	4	5
People are generally caring and sympathetic towards people with mental illness. (A)	1	2	3	4	5
<b>Mental illness is caused by:</b>					
genetic inheritance. (C - Cause)	1	2	3	4	5
substance abuse. (C)	1	2	3	4	5
bad things happening to you. (C)	1	2	3	4	5
God's punishment. (C)	1	2	3	4	5
a test from God. (+ – Added)	1	2	3	4	5
a lack of religious involvement. (+)	1	2	3	4	5
jealousy. (+)	1	2	3	4	5
supernatural beings like djinn or takaloshe. (+)	1	2	3	4	5
spirit possession. (+)	1	2	3	4	5
ancestral possession. (+)	1	2	3	4	5
ancestors who may not be happy with you. (+)	1	2	3	4	5
witchcraft and/or sorcery. (+)	1	2	3	4	5
brain dysfunction. (C)	1	2	3	4	5
personal weakness. (C)	1	2	3	4	5
family stress. (+)	1	2	3	4	5
chemical imbalance. (+)	1	2	3	4	5
past karma. (+)	1	2	3	4	5
my own stress. (+)	1	2	3	4	5

external stress (e.g. crime). (+)	1	2	3	4	5
the evil eye being cast upon you. (+)	1	2	3	4	5
financial stress. (+)	1	2	3	4	5
One should hide his/her mental illness from his/her community.	1	2	3	4	5
Mental illness cannot be cured.	1	2	3	4	5
There are mental health services available in my community that can assist with treating individuals with mental illnesses. (CM)	1	2	3	4	5
Mentally ill people should be in an institution where they are under supervision and control. (CM)	1	2	3	4	5
Mental illness can be treated outside a hospital. (CM)	1	2	3	4	5
Information about mental illness is available at my local clinic. (CM)	1	2	3	4	5
The majority of people with mental illnesses recover. (CM)	1	2	3	4	5
Local clinics can provide good care for mental illnesses. (CM)	1	2	3	4	5
If I was concerned about a mental health issue with a member of my family or myself, I would feel comfortable discussing it with someone at my local clinic. (CM)	1	2	3	4	5
It is very important for the mentally ill person to seek help from a professional from the same religion/culture. (+ – Added)	1	2	3	4	5
<b>A mentally ill person should:</b>					
consult with physicians (GP). (+)	1	2	3	4	5
talk to his/her family. (+)	1	2	3	4	5
reconnect with his/her friends. (+)	1	2	3	4	5
consult with a priest. (+)	1	2	3	4	5
consult with an elder member of the family. (+)	1	2	3	4	5
consult with an elder member in the community. (+)	1	2	3	4	5
consult with a traditional healer. (+)	1	2	3	4	5
pray to God. (+)	1	2	3	4	5
seek the help of a counsellor/ psychologist. (+)	1	2	3	4	5
consult with a psychiatrist. (+)	1	2	3	4	5
take medication. (+)	1	2	3	4	5

use holistic treatments. (+)	1	2	3	4	5
be admitted to a psychiatric hospital. (+)	1	2	3	4	5

### Open Ended Questions

1. What, in your opinion, are the factors that contribute to mental illness developing in individuals?

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2. What kind of advice would you give to a mentally a person who has mental illness?

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Thank you for your co-operation!

### Appendix D: Statistical Tables

Complete multiple regression output for the prediction of attitudes towards mental illness

*Multiple regression results for the prediction of attitudes towards mental illness using the variables: gender, level of education, age, knowledge of mental illness, beliefs of aetiology and socio-economic status.*

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#### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Change	F Change	df1	df2	Sig. F Change
1	.601 <sup>a</sup>	.361	.321	9.517	.361	8.977	9	143	<,001
2	.600 <sup>b</sup>	.360	.325	9.489	-.001	.167	1	143	.683
3	.599 <sup>c</sup>	.359	.328	9.464	-.001	.246	1	144	.621
4	.597 <sup>d</sup>	.356	.330	9.454	-.003	.670	1	145	.414
5	.590 <sup>e</sup>	.348	.326	9.479	-.008	1.787	1	146	.183

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Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7317.191	9	813.021	8.977	<,001 <sup>b</sup>
	Residual	12950.691	143	90.564		
	Total	20267.882	152			
2	Regression	7302.032	8	912.754	10.137	<,001 <sup>c</sup>
	Residual	12965.850	144	90.041		

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	Total	20267.882	152			
3	Regression	7279.915	7	1039.988	11.611	<,001 <sup>d</sup>
	Residual	12987.968	145	89.572		
	Total	20267.882	152			
4	Regression	7219.906	6	1203.318	13.464	<,001 <sup>e</sup>
	Residual	13047.976	146	89.370		
	Total	20267.882	152			
5	Regression	7060.197	5	1412.039	15.716	<,001 <sup>f</sup>
	Residual	13207.685	147	89.848		
	Total	20267.882	152			

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error				Tolerance	VIF
1	(Constant)	76.294	7.711		9.894	<,001		
	Gender	-.669	1.636	-.029	-.409	.683	.891	1.122
	YearsofEducation	.214	.268	.057	.797	.427	.878	1.140
	Age	-.135	.085	-.110	-1.588	.114	.932	1.073
	LevelofKofMI	3.626	.928	.276	3.907	<,001	.894	1.119
	SESTOTAL	-.083	.200	-.029	-.416	.678	.925	1.081
	Stress	.348	.249	.104	1.401	.163	.806	1.241
	Biological	.629	.371	.123	1.695	.092	.849	1.178
	ReligiousBeliefs	-1.114	.312	-.275	-3.573	<,001	.755	1.325
	CulturalBeliefs	-.343	.130	-.211	-2.628	.010	.692	1.444
2	(Constant)	75.526	7.457		10.128	<,001		

	YearsofEdu cation	.227	.266	.060	.853	.395	.890	1.124
	Age	-.138	.084	-.113	-1.644	.102	.942	1.062
	LeveloKof MI	3.623	.925	.276	3.914	<,001	.894	1.119
	SESTOTAL	-.097	.196	-.034	-.496	.621	.954	1.049
	Stress	.353	.248	.106	1.427	.156	.808	1.238
	Biological	.634	.369	.124	1.716	.088	.850	1.177
	ReligiousBe liefs	-1.120	.311	-.276	-3.604	<,001	.756	1.323
	CulturalBeli efs	-.352	.128	-.217	-2.741	.007	.712	1.405
3	(Constant)	75.010	7.365		10.184	<,001		
	YearsofEdu cation	.216	.264	.058	.819	.414	.895	1.117
	Age	-.138	.084	-.113	-1.643	.103	.942	1.062
	LeveloKof MI	3.549	.911	.270	3.895	<,001	.918	1.089
	Stress	.338	.245	.101	1.381	.170	.820	1.220
	Biological	.643	.368	.126	1.748	.083	.852	1.174
	ReligiousBe liefs	-1.123	.310	-.277	-3.625	<,001	.756	1.322
	CulturalBeli efs	-.352	.128	-.217	-2.754	.007	.712	1.405
4	(Constant)	78.558	5.948		13.208	<,001		
	Age	-.149	.083	-.122	-1.803	.074	.968	1.033
	LeveloKof MI	3.461	.904	.264	3.830	<,001	.931	1.075
	Stress	.327	.244	.098	1.337	.183	.822	1.216
	Biological	.667	.366	.131	1.821	.071	.857	1.166
	ReligiousBe liefs	-1.100	.308	-.271	-3.569	<,001	.763	1.311
	CulturalBeli efs	-.375	.125	-.231	-3.012	.003	.748	1.336
5	(Constant)	80.960	5.685		14.242	<,001		
	Age	-.149	.083	-.122	-1.800	.074	.968	1.033

Level of Education	3.524	.905	.268	3.894	<,001	.933	1.072
MI							
Biological	.798	.354	.156	2.252	.026	.923	1.084
Religious Beliefs	-1.170	.304	-.289	-3.845	<,001	.786	1.272
Cultural Beliefs	-.328	.120	-.202	-2.739	.007	.814	1.229

Complete multiple regression output for western medicine factor

*Multiple regression results for the prediction of western medicine factor using the variables: gender, level of education, age, knowledge of mental illness, beliefs of aetiology, attitudes towards mental illness and socio-economic status.*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics R Square Change	F Change	df1	df2	Sig. F Change
1	.457 <sup>a</sup>	.209	.153	2.23832	.209	3.751	10	142	<,001
2	.456 <sup>b</sup>	.208	.158	2.23158	-.001	.140	1	142	.709
3	.455 <sup>c</sup>	.207	.163	2.22491	-.001	.140	1	143	.708
4	.453 <sup>d</sup>	.205	.166	2.22079	-.003	.463	1	144	.497
5	.448 <sup>e</sup>	.201	.168	2.21895	-.004	.759	1	145	.385
6	.443 <sup>f</sup>	.196	.169	2.21726	-.004	.776	1	146	.380
7	.434 <sup>g</sup>	.189	.167	2.22030	-.008	1.406	1	147	.238

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	187.915	10	18.792	3.751	<,001 <sup>b</sup>
	Residual	711.431	142	5.010		
	Total	899.346	152			
2	Regression	187.212	9	20.801	4.177	<,001 <sup>c</sup>
	Residual	712.134	143	4.980		

	Total	899.346	152			
3	Regression	186.513	8	23.314	4.710	<,001 <sup>d</sup>
	Residual	712.833	144	4.950		
	Total	899.346	152			
4	Regression	184.222	7	26.317	5.336	<,001 <sup>e</sup>
	Residual	715.124	145	4.932		
	Total	899.346	152			
5	Regression	180.478	6	30.080	6.109	<,001 <sup>f</sup>
	Residual	718.868	146	4.924		
	Total	899.346	152			
6	Regression	176.658	5	35.332	7.187	<,001 <sup>g</sup>
	Residual	722.689	147	4.916		
	Total	899.346	152			
7	Regression	169.745	4	42.436	8.608	<,001 <sup>h</sup>
	Residual	729.601	148	4.930		
	Total	899.346	152			

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	6.961	2.354		2.957	.004		
Age	-.014	.020	-.055	-.709	.479	.916	1.092
Gender	-.719	.385	-.148	-1.868	.064	.890	1.123

	YearsofEducation	-.026	.063	-.033	-.409	.683	.874	1.145
	LeveloKofMI	.223	.230	.081	.970	.334	.808	1.238
	CulturalBeliefs	.033	.031	.098	1.064	.289	.660	1.514
	Stress	.070	.059	.100	1.192	.235	.795	1.258
	ReligiousBeliefs	-.070	.077	-.082	-.916	.361	.693	1.443
	Biological	.199	.088	.185	2.256	.026	.832	1.202
	TOTALATTITUDE S	.041	.020	.196	2.096	.038	.639	1.565
	SESTOTAL	.018	.047	.029	.375	.709	.924	1.083
2	(Constant)	7.042	2.337		3.013	.003		
	Age	-.015	.020	-.056	-.724	.470	.917	1.091
	Gender	-.694	.378	-.143	-1.836	.068	.918	1.090
	YearsofEducation	-.024	.063	-.030	-.375	.708	.882	1.133
	LeveloKofMI	.237	.226	.086	1.047	.297	.829	1.206
	CulturalBeliefs	.033	.031	.097	1.057	.292	.661	1.513
	Stress	.073	.058	.104	1.256	.211	.809	1.237
	ReligiousBeliefs	-.070	.076	-.082	-.918	.360	.693	1.443
	Biological	.197	.088	.183	2.250	.026	.833	1.200
	TOTALATTITUDE S	.041	.020	.194	2.091	.038	.640	1.563
3	(Constant)	6.679	2.120		3.150	.002		

	Age	-.013	.020	-.052	-.680	.497	.935	1.069
	Gender	-.680	.375	-.140	-	.072	.927	1.079
	LeveloKofMI	.247	.224	.089	1.106	.270	.842	1.187
	CulturalBeliefs	.035	.031	.103	1.148	.253	.683	1.463
	Stress	.075	.058	.106	1.288	.200	.812	1.231
	ReligiousBeliefs	-.073	.076	-.086	-.968	.335	.701	1.426
	Biological	.195	.087	.181	2.237	.027	.837	1.195
	TOTALATTITUDE S	.041	.019	.192	2.077	.040	.642	1.557
4	(Constant)	6.083	1.927		3.156	.002		
	Gender	-.708	.372	-.145	-	.059	.938	1.066
	LeveloKofMI	.254	.223	.092	1.139	.257	.844	1.185
	CulturalBeliefs	.034	.031	.100	1.119	.265	.685	1.460
	Stress	.074	.058	.105	1.279	.203	.812	1.231
	ReligiousBeliefs	-.065	.074	-.076	-.871	.385	.720	1.389
	Biological	.199	.087	.185	2.283	.024	.839	1.191
	TOTALATTITUDE S	.042	.019	.201	2.199	.029	.655	1.526
5	(Constant)	5.367	1.742		3.081	.002		
	Gender	-.709	.372	-.146	-	.058	.938	1.066

	LeveloKofMI	.258	.223	.093	1.158	.249	.844	1.184
	CulturalBeliefs	.025	.029	.074	.881	.380	.769	1.300
	Stress	.081	.057	.115	1.412	.160	.828	1.208
	Biological	.203	.087	.189	2.339	.021	.842	1.188
	TOTALATTITUDE S	.047	.019	.222	2.523	.013	.705	1.419
6	(Constant)	6.042	1.563		3.866	<.001		
	Gender	-.646	.365	-.133	-1.773	.078	.974	1.027
	LeveloKofMI	.264	.222	.095	1.186	.238	.845	1.183
	Stress	.094	.055	.134	1.717	.088	.894	1.119
	Biological	.209	.086	.195	2.424	.017	.848	1.179
	TOTALATTITUDE S	.041	.017	.194	2.366	.019	.809	1.235
7	(Constant)	5.864	1.558		3.764	<.001		
	Gender	-.618	.364	-.127	-1.697	.092	.978	1.023
	Stress	.096	.055	.137	1.749	.082	.894	1.118
	Biological	.220	.086	.205	2.560	.011	.858	1.166
	TOTALATTITUDE S	.048	.016	.228	2.948	.004	.918	1.090

Complete multiple regression output predicting community care factor

*Multiple regression results for the prediction of community care factor using the variables: gender, level of education, age, knowledge of mental illness, beliefs of aetiology, attitudes towards mental illness and socio-economic status.*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.269 <sup>a</sup>	.072	.006	3.07628	.072	1.097	10	141	.368
2	.269 <sup>b</sup>	.072	.013	3.06551	.000	.007	1	141	.933
3	.268 <sup>c</sup>	.072	.020	3.05497	.000	.018	1	142	.893
4	.268 <sup>d</sup>	.072	.027	3.04463	.000	.027	1	143	.871
5	.268 <sup>e</sup>	.072	.033	3.03449	.000	.036	1	144	.849
6	.267 <sup>f</sup>	.071	.039	3.02472	.000	.062	1	145	.804
7	.265 <sup>g</sup>	.070	.045	3.01627	-.001	.179	1	146	.672
8	.259 <sup>h</sup>	.067	.048	3.01088	-.003	.472	1	147	.493
9	.247 <sup>i</sup>	.061	.048	3.01050	-.006	.962	1	148	.328
10	.222 <sup>j</sup>	.049	.043	3.01939	-.012	1.887	1	149	.172

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	103.854	10	10.385	1.097	.368 <sup>b</sup>
	Residual	1334.357	141	9.464		
	Total	1438.211	151			
2	Regression	103.786	9	11.532	1.227	.283 <sup>c</sup>
	Residual	1334.424	142	9.397		
	Total	1438.211	151			
3	Regression	103.614	8	12.952	1.388	.207 <sup>d</sup>
	Residual					
	Total					

	Residual	1334.596	143	9.333		
	Total	1438.211	151			
4	Regression	103.367	7	14.767	1.593	.142 <sup>e</sup>
	Residual	1334.844	144	9.270		
	Total	1438.211	151			
5	Regression	103.030	6	17.172	1.865	.091 <sup>f</sup>
	Residual	1335.181	145	9.208		
	Total	1438.211	151			
6	Regression	102.464	5	20.493	2.240	.053 <sup>g</sup>
	Residual	1335.747	146	9.149		
	Total	1438.211	151			
7	Regression	100.822	4	25.205	2.770	.029 <sup>h</sup>
	Residual	1337.389	147	9.098		
	Total	1438.211	151			
8	Regression	96.528	3	32.176	3.549	.016 <sup>i</sup>
	Residual	1341.683	148	9.065		
	Total	1438.211	151			
9	Regression	87.810	2	43.905	4.844	.009 <sup>j</sup>
	Residual	1350.400	149	9.063		
	Total	1438.211	151			
10	Regression	70.705	1	70.705	7.756	.006 <sup>k</sup>
	Residual	1367.506	150	9.117		
	Total	1438.211	151			

Model	Unstandardized Coefficients	Standardized	t	Sig.	Collinearity Statistics
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		Coefficients					Tolerance	VIF
		B	Std. Error	Beta				
1	(Constant)	9.706	3.236		3.000	.003		
	Age	.019	.028	.058	.681	.497	.917	
	Gender	.074	.530	.012	.139	.889	.893	
	YearsofEducation	.040	.087	.040	.460	.646	.878	
	LeveloKofMI	.063	.317	.018	.200	.842	.809	
	CulturalBeliefs	.066	.043	.152	1.518	.131	.660	
	Stress	.165	.081	.185	2.029	.044	.790	
	ReligiousBeliefs	-.098	.105	-.091	-.930	.354	.692	
	Biological	-.029	.121	-.021	-.238	.812	.832	
	TOTALATTITUDES	-.004	.027	-.013	-.132	.895	.639	
	SESTOTAL	.005	.065	.007	.085	.933	.924	
2	(Constant)	9.732	3.211		3.031	.003		
	Age	.019	.028	.057	.681	.497	.918	
	Gender	.081	.520	.013	.157	.876	.920	
	YearsofEducation	.041	.086	.041	.473	.637	.887	
	LeveloKofMI	.068	.312	.019	.217	.829	.830	
	CulturalBeliefs	.066	.043	.151	1.521	.130	.660	
	Stress	.166	.080	.186	2.065	.041	.804	

	ReligiousBeliefs	-.098	.105	-.091	-.933	.352	.692	1.445
	Biological	-.029	.121	-.021	-.242	.809	.833	1.201
	TOTALATTITUD ES	-.004	.027	-.014	-.135	.893	.640	1.563
3	(Constant)	9.455	2.466		3.835	<.001		
	Age	.019	.027	.059	.707	.481	.934	1.070
	Gender	.084	.518	.014	.163	.871	.922	1.085
	YearsofEducation	.040	.086	.040	.467	.641	.890	1.123
	LeveloKofMI	.055	.296	.016	.184	.854	.917	1.090
	CulturalBeliefs	.067	.042	.154	1.592	.114	.692	1.446
	Stress	.165	.080	.185	2.070	.040	.814	1.228
	ReligiousBeliefs	-.094	.100	-.087	-.937	.350	.754	1.327
	Biological	-.032	.119	-.023	-.265	.791	.850	1.176
4	(Constant)	9.561	2.369		4.035	<.001		
	Age	.020	.027	.060	.729	.467	.943	1.060
	YearsofEducation	.039	.085	.038	.454	.650	.899	1.112
	LeveloKofMI	.056	.294	.016	.191	.849	.918	1.089
	CulturalBeliefs	.068	.041	.157	1.646	.102	.710	1.408
	Stress	.164	.079	.184	2.074	.040	.815	1.228
	ReligiousBeliefs	-.093	.100	-.086	-.933	.352	.756	1.323

	Biological	-.032	.118	-.024	-.274	.785	.852	1.174
5	(Constant)	9.693	2.259		4.290	<,001		
	Age	.019	.027	.059	.715	.476	.954	1.048
	YearsofEducation	.037	.084	.037	.437	.662	.910	1.099
	CulturalBeliefs	.067	.041	.156	1.643	.103	.712	1.404
	Stress	.165	.079	.185	2.094	.038	.817	1.224
	ReligiousBeliefs	-.095	.099	-.088	-.961	.338	.764	1.309
	Biological	-.029	.117	-.021	-.248	.804	.873	1.146
6	(Constant)	9.456	2.041		4.633	<,001		
	Age	.020	.027	.060	.743	.459	.962	1.039
	YearsofEducation	.036	.084	.035	.424	.672	.914	1.094
	CulturalBeliefs	.067	.041	.154	1.635	.104	.716	1.397
	Stress	.160	.075	.179	2.116	.036	.888	1.127
	ReligiousBeliefs	-.092	.098	-.085	-.939	.349	.779	1.284
7	(Constant)	10.040	1.500		6.691	<,001		
	Age	.018	.026	.055	.687	.493	.986	1.014
	CulturalBeliefs	.063	.040	.146	1.586	.115	.748	1.337
	Stress	.158	.075	.177	2.102	.037	.890	1.123
	ReligiousBeliefs	-.088	.097	-.081	-.906	.366	.786	1.273

8	(Constant)	10.606	1.252		8.471	<,001		
	CulturalBeliefs	.066	.040	.152	1.666	.098	.755	1.324
	Stress	.156	.075	.175	2.086	.039	.891	1.122
	ReligiousBeliefs	-.094	.096	-.087	-.981	.328	.794	1.260
9	(Constant)	10.141	1.159		8.751	<,001		
	CulturalBeliefs	.049	.035	.112	1.374	.172	.941	1.063
	Stress	.173	.073	.194	2.376	.019	.941	1.063
10	(Constant)	10.931	1.009		10.831	<,001		
	Stress	.197	.071	.222	2.785	.006	1.000	1.000

Complete multiple regression output predicting local clinics factor

*Multiple regression results for the prediction of local clinics factor using the variables: gender, level of education, age, knowledge of mental illness, beliefs of aetiology, attitudes towards mental illness and socio-economic status.*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics R Square Change	F Change	df1	df2	Sig. F Change
1	.288 <sup>a</sup>	.083	.018	2.46313	.083	1.272	10	141	.252
2	.287 <sup>b</sup>	.082	.024	2.45503	.000	.068	1	141	.795
3	.286 <sup>c</sup>	.082	.031	2.44698	.000	.063	1	142	.802
4	.285 <sup>d</sup>	.081	.037	2.43944	-.001	.114	1	143	.736
5	.282 <sup>e</sup>	.079	.041	2.43334	-.002	.276	1	144	.600
6	.279 <sup>f</sup>	.078	.046	2.42727	-.002	.273	1	145	.602
7	.269 <sup>g</sup>	.073	.047	2.42577	-.005	.818	1	146	.367
8	.258 <sup>h</sup>	.066	.048	2.42541	-.006	.956	1	147	.330
9	.235 <sup>i</sup>	.055	.043	2.43171	-.011	1.775	1	148	.185

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	77.177	10	7.718	1.272	.252 <sup>b</sup>
	Residual	855.448	141	6.067		
	Total	932.625	151			
2	Regression	76.767	9	8.530	1.415	.187 <sup>c</sup>
	Residual	855.858	142	6.027		
	Total	932.625	151			
3	Regression	76.385	8	9.548	1.595	.131 <sup>d</sup>
	Residual	856.240	143	5.988		
	Total	932.625	151			
4	Regression	75.702	7	10.815	1.817	.088 <sup>e</sup>
	Residual	856.923	144	5.951		
	Total	932.625	151			
5	Regression	74.062	6	12.344	2.085	.058 <sup>f</sup>
	Residual	858.563	145	5.921		
	Total	932.625	151			
6	Regression	72.444	5	14.489	2.459	.036 <sup>g</sup>
	Residual	860.181	146	5.892		
	Total	932.625	151			
7	Regression	67.623	4	16.906	2.873	.025 <sup>h</sup>
	Residual	865.002	147	5.884		
	Total	932.625	151			
8	Regression	61.995	3	20.665	3.513	.017 <sup>i</sup>
	Residual	870.630	148	5.883		
	Total	932.625	151			

9	Regression	51.553	2	25.777	4.359	.014 <sup>j</sup>
	Residual	881.072	149	5.913		
	Total	932.625	151			

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	7.104	2.592		2.741	.007		
Age	-.023	.022	-.086	-1.017	.311	.918	1.089
Gender	.236	.424	.048	.557	.578	.893	1.120
YearsofEducation	.142	.070	.176	2.023	.045	.862	1.160
LevelofKofMI	.066	.254	.023	.260	.795	.799	1.251
CulturalBeliefs	-.013	.035	-.038	-.384	.701	.671	1.489
Stress	.041	.065	.057	.626	.532	.789	1.268
ReligiousBeliefs	.142	.084	.163	1.690	.093	.700	1.428
Biological	.101	.097	.092	1.037	.302	.831	1.203
TOTALATTITUDE	-.007	.022	-.032	-.321	.749	.646	1.549
SESTOTAL	-.055	.052	-.090	-1.067	.288	.919	1.089
2 (Constant)	7.098	2.584		2.747	.007		

Age	-.023	.022	-.087	-	.300	.922	1.08
				1.03			5
				9			
Gender	.238	.423	.048	.563	.574	.893	1.12
							0
YearsofEducation	.139	.069	.172	2.01	.046	.882	1.13
				3			4
CulturalBeliefs	-.013	.035	-.038	-.382	.703	.672	1.48
							9
Stress	.040	.065	.056	.622	.535	.789	1.26
							7
ReligiousBeliefs	.142	.084	.163	1.69	.093	.700	1.42
				2			8
Biological	.104	.096	.094	1.07	.283	.842	1.18
				8			7
TOTALATTITUDE	-.005	.021	-.024	-.252	.802	.719	1.39
S							0
SESTOTAL	-.053	.051	-.086	-	.300	.945	1.05
				1.04			8
				1			
3 (Constant)	6.671	1.942		3.43	<.00		
				6	1		
Age	-.022	.022	-.084	-	.311	.941	1.06
				1.01			2
				7			
Gender	.240	.421	.048	.571	.569	.894	1.11
							9
YearsofEducation	.138	.069	.172	2.01	.046	.883	1.13
				2			2
CulturalBeliefs	-.011	.034	-.032	-.338	.736	.703	1.42
							2
Stress	.038	.064	.053	.596	.552	.803	1.24
							6
ReligiousBeliefs	.148	.080	.170	1.86	.065	.770	1.29
				0			9
Biological	.099	.094	.090	1.05	.294	.870	1.15
				3			0

	SESTOTAL	-.053	.051	-.086	-	.297	.945	1.05
					1.04			8
					6			
4	(Constant)	6.571	1.913		3.43	<,00		
					5	1		
	Age	-.023	.022	-.085	-	.302	.943	1.06
					1.03			0
					7			
	Gender	.218	.414	.044	.525	.600	.917	1.09
								0
	YearsofEducation	.143	.067	.177	2.12	.035	.920	1.08
					8			7
	Stress	.033	.062	.046	.529	.597	.857	1.16
								7
	ReligiousBeliefs	.137	.072	.156	1.91	.058	.953	1.04
					0			9
	Biological	.097	.094	.088	1.03	.304	.875	1.14
					3			2
	SESTOTAL	-.053	.051	-.086	-	.299	.946	1.05
					1.04			7
					3			
5	(Constant)	6.863	1.826		3.75	<,00		
					8	1		
	Age	-.021	.022	-.081	-.989	.324	.954	1.04
								8
	YearsofEducation	.137	.066	.170	2.07	.040	.944	1.05
					6			9
	Stress	.032	.062	.045	.523	.602	.857	1.16
								6
	ReligiousBeliefs	.141	.071	.162	1.99	.048	.968	1.03
					5			3
	Biological	.096	.093	.087	1.02	.307	.876	1.14
					6			2
	SESTOTAL	-.048	.050	-.078	-.966	.336	.977	1.02
								3
6	(Constant)	7.198	1.705		4.22	<,00		
					1	1		
	Age	-.021	.021	-.081	-.996	.321	.954	1.04
								8

	YearsofEducation	.132	.065	.164	2.02	.044	.964	1.03
					7			7
	ReligiousBeliefs	.139	.070	.158	1.96	.051	.973	1.02
					7			7
	Biological	.111	.088	.101	1.25	.210	.973	1.02
					9			8
	SESTOTAL	-.044	.049	-.072	-.905	.367	.997	1.00
								3
7	(Constant)	6.810	1.649		4.12	<,00		
					9	1		
	Age	-.021	.021	-.080	-.978	.330	.954	1.04
								8
	YearsofEducation	.130	.065	.161	1.98	.049	.966	1.03
					8			5
	ReligiousBeliefs	.138	.070	.158	1.96	.051	.973	1.02
					6			7
	Biological	.110	.088	.100	1.24	.215	.973	1.02
					6			7
8	(Constant)	5.890	1.355		4.34	<,00		
					7	1		
	YearsofEducation	.141	.064	.175	2.20	.029	.999	1.00
					3			1
	ReligiousBeliefs	.144	.070	.165	2.05	.042	.980	1.02
					6			0
	Biological	.117	.088	.107	1.33	.185	.980	1.02
					2			0
9	(Constant)	7.183	.949		7.57	<,00		
					1	1		
	YearsofEducation	.144	.064	.178	2.23	.027	1.000	1.00
					3			0
	ReligiousBeliefs	.131	.070	.150	1.88	.061	1.000	1.00
					4			0

Complete multiple regression output predicting hospitalisation and interpersonal circle factor

*Multiple regression results for the prediction of hospitalisation and interpersonal circle factor using the variables: gender, level of education, age, knowledge of mental illness, beliefs of aetiology, attitudes towards mental illness and socio-economic status.*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics R Square Change	F Change	df1	df2	Sig. F Change
1	.362 <sup>a</sup>	.131	.070	2.70290	.131	2.132	10	141	.026
2	.362 <sup>b</sup>	.131	.076	2.69339	.000	.003	1	141	.956
3	.362 <sup>c</sup>	.131	.083	2.68401	.000	.005	1	142	.944
4	.362 <sup>d</sup>	.131	.088	2.67549	-.001	.088	1	143	.767
5	.361 <sup>e</sup>	.130	.094	2.66705	-.001	.087	1	144	.768
6	.357 <sup>f</sup>	.127	.097	2.66258	-.003	.511	1	145	.476
7	.350 <sup>g</sup>	.123	.099	2.66029	-.004	.747	1	146	.389
8	.343 <sup>h</sup>	.118	.100	2.65879	-.005	.832	1	147	.363
9	.332 <sup>i</sup>	.110	.098	2.66155	-.008	1.310	1	148	.254

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	155.739	10	15.574	2.132	.026 <sup>b</sup>
	Residual	1030.097	141	7.306		
	Total	1185.836	151			
2	Regression	155.716	9	17.302	2.385	.015 <sup>c</sup>
	Residual	1030.119	142	7.254		
	Total	1185.836	151			
3	Regression	155.680	8	19.460	2.701	.008 <sup>d</sup>

	Residual	1030.155	143	7.204		
	Total	1185.836	151			
4	Regression	155.048	7	22.150	3.094	.005 <sup>e</sup>
	Residual	1030.788	144	7.158		
	Total	1185.836	151			
5	Regression	154.425	6	25.738	3.618	.002 <sup>f</sup>
	Residual	1031.410	145	7.113		
	Total	1185.836	151			
6	Regression	150.790	5	30.158	4.254	.001 <sup>g</sup>
	Residual	1035.045	146	7.089		
	Total	1185.836	151			
7	Regression	145.493	4	36.373	5.140	<.001 <sup>h</sup>
	Residual	1040.342	147	7.077		
	Total	1185.836	151			
8	Regression	139.602	3	46.534	6.583	<.001 <sup>i</sup>
	Residual	1046.233	148	7.069		
	Total	1185.836	151			
9	Regression	130.345	2	65.172	9.200	<.001 <sup>j</sup>
	Residual	1055.491	149	7.084		
	Total	1185.836	151			

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error				Tolerance	VIF

1	(Constant)	10.859	2.859		3.799	<,001		
	Age	-.019	.024	-.062	-.759	.449	.913	1.095
	Gender	.532	.465	.095	1.144	.255	.893	1.120
	YearsofEducation	-.080	.076	-.088	-	.296	.874	1.145
	LevelofKofMI	-.078	.278	-.025	-.281	.779	.811	1.234
	CulturalBeliefs	-.003	.038	-.007	-.072	.943	.660	1.514
	Stress	.194	.071	.241	2.730	.007	.793	1.261
	ReligiousBeliefs	-.023	.093	-.024	-.253	.801	.692	1.445
	Biological	.172	.106	.139	1.613	.109	.832	1.202
	TOTALATTITUDE S	.014	.024	.059	.598	.551	.639	1.566
	SESTOTAL	-.003	.057	-.005	-.056	.956	.926	1.080
2	(Constant)	10.844	2.835		3.825	<,001		
	Age	-.018	.024	-.062	-.760	.448	.915	1.093
	Gender	.528	.457	.094	1.155	.250	.919	1.088
	YearsofEducation	-.081	.076	-.089	-	.289	.882	1.134
	LevelofKofMI	-.081	.274	-.025	-.294	.769	.830	1.205
	CulturalBeliefs	-.003	.038	-.007	-.071	.944	.661	1.513
	Stress	.194	.070	.240	2.757	.007	.808	1.238

	ReligiousBeliefs	-.023	.092	-.024	-.254	.800	.692	1.445
	Biological	.172	.106	.139	1.622	.107	.833	1.200
	TOTALATTITUDE S	.014	.024	.059	.603	.547	.640	1.563
3	(Constant)	10.794	2.736		3.945	<.001		
	Age	-.019	.024	-.062	-.765	.446	.915	1.093
	Gender	.523	.450	.093	1.162	.247	.940	1.063
	YearsofEducation	-.080	.074	-.088	-1.072	.285	.912	1.096
	LevelofMI	-.081	.273	-.025	-.296	.767	.830	1.205
	Stress	.192	.067	.238	2.862	.005	.876	1.141
	ReligiousBeliefs	-.026	.086	-.026	-.298	.766	.786	1.272
	Biological	.171	.105	.138	1.630	.105	.844	1.186
	TOTALATTITUDE S	.015	.023	.060	.635	.526	.670	1.492
4	(Constant)	10.783	2.727		3.953	<.001		
	Age	-.018	.024	-.061	-.748	.455	.919	1.088
	Gender	.517	.448	.092	1.153	.251	.942	1.061
	YearsofEducation	-.077	.073	-.084	-1.046	.297	.928	1.077
	Stress	.192	.067	.238	2.866	.005	.877	1.141
	ReligiousBeliefs	-.025	.086	-.026	-.295	.768	.786	1.272

	Biological	.168	.104	.136	1.61	.109	.853	1.17
					3			2
	TOTALATTITUDE	.013	.022	.052	.573	.567	.741	1.35
	S							0
5	(Constant)	10.38	2.364		4.39	<.00		
		5			3	1		
	Age	-.017	.024	-.057	-.715	.476	.940	1.06
								4
	Gender	.505	.445	.090	1.13	.258	.950	1.05
					5			3
	YearsofEducation	-.078	.073	-.086	-	.288	.931	1.07
					1.06			4
					6			
	Stress	.193	.067	.239	2.88	.005	.877	1.14
					4			0
	Biological	.169	.104	.137	1.63	.105	.854	1.17
					1			0
	TOTALATTITUDE	.015	.020	.063	.770	.442	.899	1.11
	S							3
6	(Constant)	9.634	2.114		4.55	<.00		
					8	1		
	Gender	.481	.443	.086	1.08	.279	.955	1.04
					6			7
	YearsofEducation	-.070	.072	-.077	-.971	.333	.953	1.05
								0
	Stress	.192	.067	.237	2.87	.005	.878	1.13
					5			9
	Biological	.173	.103	.140	1.67	.097	.856	1.16
					0			8
	TOTALATTITUDE	.017	.020	.070	.864	.389	.912	1.09
	S							6
7	(Constant)	10.68	1.726		6.19	<.00		
		7			3	1		
	Gender	.433	.439	.077	.985	.326	.971	1.03
								0
	YearsofEducation	-.066	.072	-.072	-.912	.363	.957	1.04
								4
	Stress	.197	.066	.243	2.96	.004	.884	1.13
					1			1

	Biological	.191	.101	.154	1.88	.061	.894	1.11
					8			9
8	(Constant)	9.711	1.354		7.17	<.00		
					4	1		
	Gender	.496	.434	.089	1.14	.254	.996	1.00
					4			4
	Stress	.204	.066	.253	3.10	.002	.899	1.11
					6			3
	Biological	.186	.101	.150	1.84	.067	.896	1.11
					4			6
9	(Constant)	10.47	1.178		8.89	<.00		
		6			1	1		
	Stress	.207	.066	.256	3.14	.002	.900	1.11
					3			1
	Biological	.179	.101	.145	1.77	.078	.900	1.11
					4			1

Complete multiple regression output predicting complementary medicine factor

*Multiple regression results for the prediction of complementary medicine factor using the variables: gender, level of education, age, knowledge of mental illness, beliefs of aetiology, attitudes towards mental illness and socio-economic status.*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics	R Square Change	F Change	df1	df2	Sig. F Change
1	.457 <sup>a</sup>	.209	.153	1.71951	.209	3.755	10	142	<.001	
2	.457 <sup>b</sup>	.209	.159	1.71349	.000	.001	1	142	.976	
3	.457 <sup>c</sup>	.209	.165	1.70773	.000	.034	1	143	.854	
4	.455 <sup>d</sup>	.207	.169	1.70397	-.002	.361	1	144	.549	
5	.451 <sup>e</sup>	.203	.171	1.70199	-.004	.661	1	145	.418	
6	.446 <sup>f</sup>	.199	.172	1.70070	-.004	.779	1	146	.379	
7	.439 <sup>g</sup>	.193	.171	1.70156	-.006	1.150	1	147	.285	
8	.431 <sup>h</sup>	.186	.170	1.70304	-.007	1.259	1	148	.264	
9	.415 <sup>i</sup>	.173	.162	1.71125	-.013	2.449	1	149	.120	
10	.397 <sup>j</sup>	.158	.152	1.72065	-.015	2.664	1	150	.105	

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	111.024	10	11.102	3.755	<,001 <sup>b</sup>
	Residual	419.852	142	2.957		
	Total	530.876	152			
2	Regression	111.021	9	12.336	4.201	<,001 <sup>c</sup>
	Residual	419.854	143	2.936		
	Total	530.876	152			
3	Regression	110.922	8	13.865	4.754	<,001 <sup>d</sup>
	Residual	419.954	144	2.916		
	Total	530.876	152			
4	Regression	109.868	7	15.695	5.406	<,001 <sup>e</sup>
	Residual	421.008	145	2.904		
	Total	530.876	152			
5	Regression	107.950	6	17.992	6.211	<,001 <sup>f</sup>
	Residual	422.926	146	2.897		
	Total	530.876	152			
6	Regression	105.694	5	21.139	7.308	<,001 <sup>g</sup>
	Residual	425.182	147	2.892		
	Total	530.876	152			
7	Regression	102.369	4	25.592	8.839	<,001 <sup>h</sup>
	Residual	428.507	148	2.895		
	Total	530.876	152			
8	Regression	98.723	3	32.908	11.346	<,001 <sup>i</sup>
	Residual	432.153	149	2.900		
	Total	530.876	152			
9	Regression	91.619	2	45.810	15.643	<,001 <sup>j</sup>
	Residual	439.256	150	2.928		
	Total	530.876	152			
10	Regression	83.818	1	83.818	28.311	<,001 <sup>k</sup>

Residual	447.058	151	2.961
Total	530.876	152	

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error				Beta	Tolerance
1	(Constant)	4.644	1.808		2.568	.011		
	Age	-.013	.015	-.068	-.868	.387	.916	1.092
	Gender	.009	.296	.002	.031	.976	.890	1.123
	YearsofEducation	.009	.049	.015	.186	.853	.874	1.145
	LevelofKofMI	-.100	.176	-.047	-.565	.573	.808	1.238
	CulturalBeliefs	.081	.024	.307	3.343	.001	.660	1.514
	Stress	.037	.045	.068	.816	.416	.795	1.258
	ReligiousBeliefs	.059	.059	.091	1.011	.314	.693	1.443
	Biological	.123	.068	.149	1.816	.071	.832	1.202
	TOTALATTITUDE S	-.016	.015	-.101	-1.078	.283	.639	1.565
	SESTOTAL	-.039	.036	-.083	-1.070	.286	.924	1.083
2	(Constant)	4.655	1.762		2.642	.009		
	Age	-.013	.015	-.067	-.872	.385	.925	1.082

	YearsofEducation	.009	.048	.015	.184	.854	.885	1.130
	LeveloKofMI	-.100	.176	-.047	-.566	.572	.808	1.238
	CulturalBeliefs	.081	.024	.307	3.400	<,001	.677	1.478
	Stress	.037	.045	.068	.818	.415	.796	1.256
	ReligiousBeliefs	.060	.059	.091	1.016	.311	.693	1.442
	Biological	.123	.067	.149	1.823	.070	.833	1.201
	TOTALATTITUDE S	-.016	.015	-.101	-1.083	.281	.640	1.563
	SESTOTAL	-.038	.035	-.083	-1.085	.280	.952	1.050
3	(Constant)	4.781	1.618		2.955	.004		
	Age	-.014	.015	-.070	-.913	.363	.946	1.057
	LeveloKofMI	-.104	.173	-.049	-.601	.549	.825	1.212
	CulturalBeliefs	.080	.023	.304	3.443	<,001	.704	1.420
	Stress	.036	.045	.067	.809	.420	.801	1.249
	ReligiousBeliefs	.061	.058	.092	1.045	.298	.701	1.426
	Biological	.124	.067	.150	1.847	.067	.837	1.195
	TOTALATTITUDE S	-.016	.015	-.100	-1.077	.284	.643	1.555
	SESTOTAL	-.038	.035	-.082	-1.077	.283	.958	1.043

4	(Constant)	4.851	1.610		3.01	.003		
					2			
	Age	-.013	.015	-.068	-.896	.372	.947	1.056
	CulturalBeliefs	.079	.023	.301	3.42	<,00	.706	1.416
					5	1		
	Stress	.036	.045	.067	.813	.418	.801	1.249
	ReligiousBeliefs	.062	.058	.094	1.06	.289	.702	1.424
					5			
	Biological	.120	.067	.145	1.79	.074	.846	1.182
					9			
	TOTALATTITUDE S	-.019	.014	-.116	-	.187	.708	1.412
					1.32			
					5			
	SESTOTAL	-.041	.035	-.089	-	.236	.982	1.018
					1.18			
					9			
5	(Constant)	4.979	1.601		3.11	.002		
					0			
	Age	-.013	.015	-.067	-.882	.379	.947	1.056
	CulturalBeliefs	.085	.022	.323	3.84	<,00	.776	1.289
					9	1		
	ReligiousBeliefs	.055	.057	.084	.966	.336	.715	1.399
	Biological	.133	.064	.161	2.06	.040	.902	1.109
					9			
	TOTALATTITUDE S	-.017	.014	-.108	-	.217	.718	1.392
					1.23			
					9			
	SESTOTAL	-.038	.034	-.081	-	.273	.997	1.003
					1.10			
					0			
6	(Constant)	4.337	1.425		3.04	.003		
					3			
	CulturalBeliefs	.083	.022	.317	3.79	<,00	.780	1.282
					7	1		

	ReligiousBeliefs	.064	.057	.097	1.12	.262	.734	1.36
					5			2
	Biological	.137	.064	.165	2.13	.035	.905	1.10
					1			5
	TOTALATTITUDE S	-.015	.014	-.095	-	.269	.738	1.35
					1.10			4
					9			
	SESTOTAL	-.037	.034	-.079	-	.285	.998	1.00
					1.07			2
					2			
7	(Constant)	4.046	1.400		2.89	.004		
					0			
	CulturalBeliefs	.083	.022	.315	3.76	<,00	.781	1.28
					7	1		1
	ReligiousBeliefs	.063	.057	.097	1.12	.264	.734	1.36
					2			2
	Biological	.136	.064	.165	2.12	.036	.905	1.10
					1			5
	TOTALATTITUDE S	-.016	.014	-.098	-	.254	.739	1.35
					1.14			3
					5			
8	(Constant)	4.732	1.260		3.75	<,00		
					5	1		
	CulturalBeliefs	.090	.021	.344	4.33	<,00	.866	1.15
					4	1		5
	Biological	.129	.064	.156	2.01	.045	.914	1.09
					9			4
	TOTALATTITUDE S	-.021	.013	-.128	-	.120	.817	1.22
					1.56			4
					5			
9	(Constant)	3.175	.777		4.08	<,00		
					6	1		
	CulturalBeliefs	.102	.020	.389	5.22	<,00	.995	1.00
					8	1		5
	Biological	.100	.062	.122	1.63	.105	.995	1.00
					2			5
1 0	(Constant)	4.183	.474		8.82	<,00		
					5	1		

CulturalBeliefs	.104	.020	.397	5.32	<,00	1.000	1.00
				1	1		0

Complete multiple regression output predicting religion factor

*Multiple regression results for the prediction of religion factor using the variables: gender, level of education, age, knowledge of mental illness, beliefs of aetiology, attitudes towards mental illness and socio-economic status*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.378 <sup>a</sup>	.143	.082	1.59364	.143	2.364	10	142	.013
2	.378 <sup>b</sup>	.143	.089	1.58809	.000	.004	1	142	.947
3	.376 <sup>c</sup>	.142	.094	1.58346	-.001	.162	1	143	.688
4	.374 <sup>d</sup>	.140	.099	1.57944	-.002	.265	1	144	.608
5	.372 <sup>e</sup>	.138	.103	1.57559	-.002	.289	1	145	.592
6	.369 <sup>f</sup>	.136	.107	1.57247	-.002	.418	1	146	.519
7	.361 <sup>g</sup>	.131	.107	1.57208	-.005	.928	1	147	.337
8	.350 <sup>h</sup>	.122	.105	1.57408	-.008	1.379	1	148	.242

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	60.042	10	6.004	2.364	.013 <sup>b</sup>
	Residual	360.638	142	2.540		
	Total	420.680	152			
2	Regression	60.031	9	6.670	2.645	.007 <sup>c</sup>
	Residual	360.649	143	2.522		
	Total	420.680	152			
3	Regression	59.623	8	7.453	2.972	.004 <sup>d</sup>
	Residual	361.056	144	2.507		

	Total	420.680	152			
4	Regression	58.959	7	8.423	3.376	.002 <sup>e</sup>
	Residual	361.720	145	2.495		
	Total	420.680	152			
5	Regression	58.238	6	9.706	3.910	.001 <sup>f</sup>
	Residual	362.442	146	2.482		
	Total	420.680	152			
6	Regression	57.201	5	11.440	4.627	<.001 <sup>g</sup>
	Residual	363.479	147	2.473		
	Total	420.680	152			
7	Regression	54.907	4	13.727	5.554	<.001 <sup>h</sup>
	Residual	365.773	148	2.471		
	Total	420.680	152			
8	Regression	51.498	3	17.166	6.928	<.001 <sup>i</sup>
	Residual	369.182	149	2.478		
	Total	420.680	152			

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	3.971	1.676		2.369	.019		
Age	-.016	.014	-.093	-1.140	.256	.916	1.092
Gender	.422	.274	.127	1.538	.126	.890	1.123

	YearsofEducation	-.025	.045	-.046	-.552	.582	.874	1.145
	LeveloKofMI	-.066	.164	-.035	-.401	.689	.808	1.238
	CulturalBeliefs	.075	.022	.323	3.374	<,001	.660	1.514
	Stress	-.034	.042	-.070	-.806	.421	.795	1.258
	ReligiousBeliefs	-.004	.055	-.006	-.067	.947	.693	1.443
	Biological	.037	.063	.050	.591	.556	.832	1.202
	TOTALATTITUDE S	.023	.014	.161	1.655	.100	.639	1.565
	SESTOTAL	.037	.033	.091	1.120	.265	.924	1.083
2	(Constant)	3.931	1.559		2.522	.013		
	Age	-.016	.014	-.092	-1.146	.254	.935	1.070
	Gender	.421	.273	.126	1.542	.125	.891	1.122
	YearsofEducation	-.025	.045	-.047	-.565	.573	.884	1.131
	LeveloKofMI	-.065	.163	-.035	-.402	.688	.808	1.238
	CulturalBeliefs	.075	.021	.320	3.584	<,001	.751	1.332
	Stress	-.033	.041	-.070	-.807	.421	.807	1.239
	Biological	.037	.062	.051	.599	.550	.836	1.196
	TOTALATTITUDE S	.023	.013	.163	1.753	.082	.696	1.437
	SESTOTAL	.037	.033	.091	1.123	.263	.924	1.083
3	(Constant)	3.943	1.554		2.538	.012		

	Age	-.016	.014	-.090	-	.260	.937	1.06
					1.13			7
					0			
	Gender	.419	.272	.126	1.53	.126	.891	1.12
					9			2
	YearsofEducation	-.023	.044	-.042	-.515	.608	.902	1.10
								8
	CulturalBeliefs	.075	.021	.320	3.59	<.00	.751	1.33
					0	1		2
	Stress	-.033	.041	-.069	-.805	.422	.807	1.23
								9
	Biological	.035	.062	.047	.559	.577	.847	1.18
								1
	TOTALATTITUDE	.022	.013	.150	1.72	.087	.780	1.28
	S				1			2
	SESTOTAL	.035	.033	.085	1.07	.284	.948	1.05
					6			5
4	(Constant)	3.557	1.357		2.62	.010		
					1			
	Age	-.015	.014	-.084	-	.288	.959	1.04
					1.06			3
					7			
	Gender	.435	.270	.131	1.61	.109	.903	1.10
					3			7
	CulturalBeliefs	.076	.021	.327	3.72	<.00	.769	1.30
					2	1		1
	Stress	-.031	.041	-.065	-.762	.447	.814	1.22
								8
	Biological	.033	.062	.045	.538	.592	.849	1.17
								8
	TOTALATTITUDE	.022	.013	.151	1.73	.086	.780	1.28
	S				1			2
	SESTOTAL	.034	.033	.082	1.04	.299	.954	1.04
					1			8
5	(Constant)	3.714	1.322		2.80	.006		
					9			
	Age	-.015	.014	-.086	-	.273	.962	1.04
					1.09			0
					9			

	Gender	.430	.269	.129	1.598	.112	.905	1.105
	CulturalBeliefs	.077	.020	.331	3.792	<,001	.775	1.291
	Stress	-.026	.040	-.053	-.646	.519	.873	1.146
	TOTALATTITUDE S	.023	.012	.161	1.899	.060	.819	1.221
	SESTOTAL	.034	.033	.081	1.034	.303	.954	1.048
6	(Constant)	3.619	1.311		2.760	.007		
	Age	-.015	.014	-.088	-1.123	.263	.963	1.039
	Gender	.439	.268	.132	1.637	.104	.907	1.103
	CulturalBeliefs	.073	.019	.314	3.785	<,001	.856	1.168
	TOTALATTITUDE S	.021	.012	.148	1.800	.074	.868	1.153
	SESTOTAL	.031	.032	.075	.963	.337	.969	1.032
7	(Constant)	3.837	1.291		2.971	.003		
	Age	-.016	.014	-.092	-1.174	.242	.965	1.036
	Gender	.482	.264	.145	1.823	.070	.933	1.072
	CulturalBeliefs	.073	.019	.313	3.785	<,001	.856	1.168
	TOTALATTITUDE S	.022	.012	.152	1.844	.067	.869	1.151
8	(Constant)	3.235	1.187		2.726	.007		
	Gender	.449	.263	.135	1.706	.090	.944	1.060

CulturalBeliefs	.073	.019	.314	3.78	<.00	.856	1.16
				7	1		8
TOTALATTITUDE	.024	.012	.164	2.01	.046	.885	1.13
S				6			0