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Master's Research Report

THE RELATIONSHIP BETWEEN THE PERCEPTIONS OF MAJOR DEPRESSIVE DISORDER AND HELP SEEKING BEHAVIOURS IN THE SOUTH AFRICAN HINDU COMMUNITY

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Abstract

The lifetime prevalence of Major Depressive Disorder (MDD), as reported for South Africa, is 9.7%. However, significant cultural differences occur in the clinical presentation of MDD which are connected to notions of religion, social principles and norms of relationships. With this in mind, this study explores the extent to which Hindu community members' knowledge of MDD, their beliefs about the aetiology of MDD and their attitudes towards people with MDD impacted their perceptions on the care and management of MDD as well as their help seeking behaviours. The study also explored the extent to which Hindu religious identity mediates or moderates the relationship between aetiology, knowledge and attitudes towards MDD and the care and management of MDD and help seeking behaviour. A questionnaire consisting of a demographics section, a religious identity scale, a MDD knowledge, attitudes and practices scale and the attitudes towards seeking professional psychological help scale was completed by a convenience sample of 264 Hindus from Johannesburg and surrounding areas. Data was analysed using descriptive statistics and multiple regression analyses. Participants in this study had a moderate religious identity and generally positive attitudes towards MDD. This sample believed that stress was the main cause of MDD and that talking to their friends, family and their general practitioner would be the most beneficial in terms of care and management of MDD. Participants also had positive attitudes towards seeking professional help. Two multiple regression analyses were conducted with the attitudes towards professional help seeking as well as all the care and management factors as the dependent variables and religious identity, knowledge of MDD, attitudes towards MDD and all four aetiological factors of MDD as the independent variables. These analyses yielded varying results. Following these analyses, religious identity was explored as both a potential mediator and moderator variable between attitudes towards MDD and help seeking behaviours. These results are discussed within the broader debates on depression and its manifestation across cultures.

Keywords: help seeking behaviours; Hindu community; Major Depressive Disorder (MDD); religious identity, South Africa

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Declaration

I, Binita Daya, declare that this research report is my own, unaided work. It is submitted for the degree of Master of Arts in Social and Psychological Research by Coursework and Research Report 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.

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Chapter One: Introduction

1.1 Rationale

Approximately 16.5% of South Africans report that they suffer from a mental illness in a given year and 30.3% experience a lifetime prevalence of chronic mental health disorders which include mood, impulse control, substance use and anxiety disorders (Scull, 2014). Of particular interest is depression; specifically MDD, which is said to be the common cold of psychiatry as it occurs so frequently among the population. It is said that 15-20% of the population display significant levels of depressive symptoms (Jarvis & Middleton, 2010).

The way that individuals perceive and respond to mental illness is influenced by the culture to which they belong (Cheon & Chiao, 2012). People from various cultural backgrounds are likely to hold contrasting conceptualisations of MDD. Given the potential influence of culture on MDD, it is important to understand the extent to which peoples' understanding of and attitudes towards MDD are related to the care and management of MDD and how their understanding and attitudes may influence help seeking behaviours. Research findings indicate that sociocultural conceptualisations of depression affect individuals' decisions and preferences of help seeking sources (Bullard, 2010).

Individuals may engage in various help seeking methods which may include professional, relational, spiritual, self-reliance and traditional healthcare methods (Bullard, 2010). Hence, this study aims to explore whether Hindu community members' knowledge of MDD, their beliefs about the aetiology of MDD and their attitudes towards people with MDD influences their perceptions of the care and management of MDD as well as their help seeking behaviours.

Hinduism is a broad religion which incorporates a variety of cultural, philosophical and religious elements which are more than 4000 years old. The South African Hindu community is the third largest in the world following India and Sri Lanka (Oladipo, 2006). As there are many Hindus in South Africa, it is imperative that this group is studied in relation to mental illness as they do not conform to the western notions and ideals which are currently being used to address the psychological needs of these people (Laher, 2014). Given the potential role of religious identity in all aspects of life for the Hindu individual, this study explored the extent to which Hindu religious identity mediated or moderated the relationship between aetiology, knowledge and attitudes towards MDD and professional psychological help seeking behaviour.

1.2 Research aims of the study

This study intends to explore whether Hindu community members' knowledge of Major Depressive Disorder (MDD), their beliefs about the aetiology of MDD and their attitudes towards people with MDD influenced their perceptions on the care and management of MDD as well as their help seeking behaviours.

The study also explored the extent to which Hindu religious identity mediated or moderated the relationship between aetiology, knowledge and attitudes towards MDD and the care and management of MDD and help seeking behaviour.

1.3 Research questions

What is the religious identity of the Hindu community?

What are Hindu community members' attitudes towards depression?

What are the perceptions of the causes of MDD amongst Hindu community members?

What are the attitudes towards care and management of MDD amongst Hindu community members?

What are the attitudes of Hindu community members towards seeking professional psychological help?

Does religious identity, knowledge of MDD, attitudes towards people with MDD and perceptions of the causes of MDD predict attitudes towards professional psychological help seeking behaviours amongst Hindu community members?

Does religious identity, knowledge of MDD, attitudes towards people with MDD and perceptions of the causes of MDD predict the preferences for care and management of MDD amongst Hindu community members?

Does religious identity mediate the relationship between attitudes towards people with MDD and their attitudes towards professional psychological help seeking behaviours amongst Hindu community members?

Does religious identity moderate the relationship between attitudes towards people with MDD and their attitudes towards professional psychological help seeking behaviours amongst Hindu community members?

1.4 Outline of Chapters

Chapter One provides a brief contextualisation of the study including the rationale, research aims and research questions. After briefly introducing this research study in Chapter One, the remainder of the research report will explain the process undertaken to investigate the research questions proposed.

Chapter Two explains and defines the key terms relevant for the study, namely Major Depressive Disorder (MDD) and religious identity, in terms of Hinduism and Hindu culture and help seeking behaviours. This is followed by some engagement with the theoretical frameworks of the cultural conceptions of mental illness and preferred sources for the care and management of mental illness, specifically MDD. A review of literature is presented, culminating in identifying the research gap that this study intends to address.

Chapter Three discusses the research methods used to answer the research questions and test the hypotheses of this study including important aspects such as the research design, sample, instruments, procedure, ethical considerations and data analysis.

The results attained from the analyses are presented in Chapter Four. Results pertaining to the general questions of the religious identity, attitudes and perceptions of MDD and attitudes towards professional psychological help seeking, using descriptive statistics, are presented first. This is followed by the results of the questions regarding the relationships between the key variables of the study which have been explored using inferential statistics.

Chapter Five provides a discussion of the results within the broader debates on depression and its manifestation across cultures. Hence, this chapter interprets the significant findings of the study by providing links between the results attained in this research and existing knowledge by contextualising the research.

The final chapter presents the limitations of the research in terms of conceptual and methodological limitations which outlined the major constraints and shortcomings of the research. This is followed by recommendations for future research which includes suggestions on how this research could inform future research on mental illness and culture.

Chapter Two: Literature review

2.1 Introduction

Hinduism is an important part of many lives and features prominently in everyday activities which usually permeate an individual's beliefs and perceptions. South Africa has a large Hindu community, many of whom actively practise the rituals and forms of worship that are part of the Hindu religion (Afolayan, 2004). This is important as religious beliefs often define an individual's relationship within a family and community. Religious belief systems have implications on mental health as well as mental illness. Beliefs with regard to mental illness are connected to notions of religion, social principles and norms of relationships. These beliefs determine the framework used to interpret the symptoms of mental illness and the best possible way to treat the illness which may include using traditional methods (Austin & Boyd, 2010).

Significant cultural differences have been noted to occur in the clinical presentation of Major Depressive Disorder (MDD) which is a specific example of a mental illness and will be the primary focus of this research. Culture influences many facets of MDD, including the source of distress, the interpretation of symptoms, how the individual copes with the distress, help seeking behaviours, the social response to distress, the disability experienced from the disorder, the interactions between the doctor and the sufferer of the disorder and the outcomes of the disorder as well as the practices of professionals (Chakraborty, Das, Dan, Bandyopadhyay & Chatterjee, 2013).

This chapter will introduce the various facets of MDD. Depression will be defined according to the DSM 5 and ICD-10 criteria, after which a brief review of the aetiological factors of MDD and the cultural presentation of MDD will be discussed. A discussion of the symptoms and causes of mental illness in Hinduism are presented which is followed by a discussion on mental illness and then MDD from a Hindu religious perspective. Religious identity is discussed next as it is acknowledged as an important variable in predicting help seeking behaviours. Lastly, the possibility of religious identity as a mediating or moderating factor between knowledge, attitudes and perceptions of MDD and help seeking behaviour is explored.

2.2 Understanding Depression

According to the Diagnostic and Statistical Manual of Mental Disorders fifth edition (DSM 5, APA, 2013), MDD is defined by the presence of a depressed mood or the loss of interest or pleasure in all activities for a minimum duration of two weeks. Any four of the following symptoms should be present for most of the day, nearly every day for two consecutive weeks: changes in appetite or weight, sleeping patterns, psychomotor activity, decreased energy, feeling worthless or guilty, problems with concentrating or making decisions and recurrent thoughts of death, suicidal ideation or suicide plans and attempts. For a diagnosis to be made there should also be a noticeable impairment in social, occupational or other important areas of functioning (APA, 2013, pp. 160-161).

The ICD-10 classification system (WHO, 1992) classifies depression by a code and is based on the severity and number of symptoms that are classified as being mild, moderate or severe. The ICD-10 criteria for a depressive episode mirrors most of the DSM 5 criteria, with the exception that ICD-10 also recognises diminished energy or increased fatigue as a core criterion. ICD-10 excludes patients who have met criteria for a lifetime hypomanic or manic episode. In addition, ICD-10 recognises the loss of confidence and self-esteem as a criterion and does not require clinically significant distress or impairment for the diagnosis to be made. The diagnostic threshold in the ICD-10 is four symptoms instead of five as in DSM 5; therefore, ICD-10 may identify less severe depressive states than DSM 5 (Fawcett & Hager, 2013).

Cross-cultural differences in the prevalence of MDD reflect cultural tendencies to describe distress in affective and somatic terms. The DSM criteria include both affective and somatic symptoms but emphasises affective symptoms over somatic symptoms. An individual cannot meet the criteria for MDD without endorsing one of the key emotional symptoms (depressed mood, reduced pleasure or interest in formerly pleasurable activities). These criteria may not adequately capture presenting complaints reported in clinics around the world (Chentsova-Dutton, 2009). Relative to individuals from western cultural contexts, individuals from Asian, Middle Eastern, South American, and Eastern and South European cultural contexts tend to describe their distress in somatic terms, focusing on complaints such as headaches, sleep difficulties and low energy rather than feeling depressed, experiencing a loss of pleasure or feeling worthless. Since emotional symptoms are integral to the DSM diagnosis of MDD, these individuals' symptoms may fail to meet the criteria for diagnosis despite substantial

impairment due to the differences in symptom presentation as a result of cultural models of conceptualising and communicating distress (Chentsova-Dutton, 2009). Depressed individuals in non-western cultural contexts may believe that it is inappropriate for them to reveal emotional distress which is another cultural issue as they may feel that their clinicians expect to hear reports of somatic symptoms or that clinicians should be able to infer the existence of affective symptoms from the report of somatic symptoms. In addition, the tendency to emphasise somatic symptoms during initial presentation reflects the fact that in many parts of the world, physicians have reduced chances of developing ongoing relationships with their patients. Additionally, across cultures, depressed individuals may not feel comfortable sharing their emotional complaints with strangers, such as unfamiliar primary care doctors, and may become more willing to discuss their emotional complaints once rapport is developed with their clinicians. Cross-cultural ways of communicating distress influence the symptoms reported and therefore affect the diagnoses given to sufferers of MDD (Chentsova-Dutton, 2009).

2.3 Aetiology of MDD

The aetiology of MDD is multifactorial and is divided into biological, psychological and psychosocial factors. Various complex biological processes have been implicated in the aetiology of MDD; however, research in this field has not been able to clarify whether these processes are underlying causal factors, correlate with or are consequences of MDD. These biological processes include the interactions between genetic vulnerabilities, brain structure, brain function, neurotransmitter and neuroendocrine processes as well as immune system processes (England & Sim, 2009). The biological causes of mood disorders may include genetic vulnerability, altered neurotransmitter activity, primarily decreased availability of serotonin, norepinephrine and dopamine as well as abnormalities of the hypothalamic-pituitary-adrenal axis (HPA). There is evidence that MDD and HPA axis functioning are related from studies on patients with the following: elevated cortisol in plasma, urine and CSF; MDD patients show resistance to the normal suppression of cortisol and corticotrophin secretion; hypertrophy of the adrenal glands and increased sensitivity to corticotrophin. This pattern of HPA dysregulation does not suggest any definitive mechanism but it has been suggested that HPA dysregulation in MDD results from impaired signalling through corticosteroid receptors and antidepressants work by normalising this signalling (Hasler, 2010). There is evidence from family, twin and adoption studies that MDD is a familial disorder due to genetic factors. However, specific genes as well as specific gene by

environment interactions have not been found in the pathogenesis of MDD (Hasler, 2010). The most clinically relevant neurobiological theory of depression is the monoamine-deficiency theory which posits that the underlying pathophysiological basis of depression is a depletion of the neurotransmitters serotonin, norepinephrine or dopamine in the central nervous system. Most established antidepressant medication targets the monoamine systems but there is sometimes full or partial resistance to these medications as well as delayed onset of action which may indicate that the monoamine deficiencies prevalent in MDD patients are indicative of the after effects of primary abnormalities elsewhere in the brain (Hasler, 2010). Biological theories have focused on genetic and biochemical models. A shift has occurred from focusing on disturbances of single neurotransmitter systems in favour of studying neurobehavioral systems, neural circuits and more intricate neuro-regulatory mechanisms. Thyroid functioning abnormalities such as elevated basal thyroid-stimulating hormone (TSH) level, altered sleep architecture and impaired immunology have also been implicated in depression (Sadock & Sadock, 2011). Impaired immunology has been established as a link between stress and depression. Chronic stress activates the immune system which leads to chronic inflammation which in turn leads to symptoms of depression. These symptoms include sickness behaviours such as appetite, sleep and social activity disruptions (England & Sim, 2009).

In addition to biochemical models, psychological theories have also sought to explain the aetiology of depression, namely the psychodynamic model and cognitive theory. The psychodynamic understanding of MDD known as the classic view of depression, as defined by Freud and expanded by Karl Abraham, is centred on four points. Firstly, disturbances in the infant–mother relationship during the oral phase of development results in a predisposition to depression. The second point is that depression may be linked to real or imagined object loss. Thirdly, an introjection of the departed object occurs as a defence mechanism in order to cope with the distress caused by the lost object. Lastly, the lost object is regarded with a mixture of love and hate; therefore, these feelings invoke anger which is directed towards the self (Sadock & Sadock, 2011). Alternatively, cognitive theory focuses on the types of cognition that characterise depression as opposed to the emotions associated with the developmental history of the sufferer of MDD in the psychodynamic understanding of depression. A cognitive theoretical understanding of depression emphasises specific cognitive distortions that are present in persons susceptible to depression. This is called cognitive vulnerability which is the way in which an individual's style of thinking and

responding to information makes him or her more or less vulnerable to depression. Aaron Beck identified a cognitive triad of depression (1976 as cited in Sadock & Sadock, 2011) that consists of views about the self, the environment and the future. These thoughts are automatic and negative and are prominent in depressed individuals. Depressed individuals have negative self-precepts and tend to view the world as hostile and demanding as they expect suffering and failure in the future. Depressed individuals usually have faulty information processing and negative self-schemas that result in a selective attendance to negative aspects and to ignore positive aspects. They also hold negative sets of beliefs about themselves through experiences of negative or critical parents. Thus, these aspects result in a perpetuation of negative, automatic and disabling thoughts (Sadock & Sadock, 2011).

Lastly, psychosocial factors such as negative life events and environmental stress increase the risk of suffering from MDD (Sadock & Sadock, 2011). Most major depressive episodes are triggered by stressful life events. The severity of the impact of the negative life event depends on the subjective meaning that the individual attributes to it. For example, an individual may become depressed only under extreme conditions of loss and deprivation whereas another individual might become depressed because of his or her personal vulnerabilities which leads to an exaggeration of the meaning of a life event that may be comparatively minor (England & Sim, 2009). Depression is said to occur following the loss of something important to the sense of self, such as relationships or significant others or loss of sense of worth and competence. The importance of the role of life events in the onset and timing of depression has been debated by clinicians (Sadock & Sadock, 2011). Hence, research has been conducted in each of these areas as well as in studies to determine the interactions between biological processes, environmental and personal factors that result in an increased risk of suffering from MDD (England & Sim, 2009). Due to the heterogeneous nature of MDD with respect to clinical and aetiological factors, the exact aetiological underpinnings of MDD have remained elusive (Hasler, 2010). However, there is evidence that chronic or recurring stress in conjunction with biological vulnerabilities, plays an important role in the aetiology and course of MDD (England & Sim, 2009). After having discussed the aetiology and presentation of MDD; Hinduism and Hindu culture will be discussed as this forms the other important variable of the study.

2.4 Hinduism and Hindu culture

Hinduism is not only one of the oldest religions; it is also the world's third largest religion. It has been suggested that Hinduism is multifaceted and complex; therefore, it cannot be characterised as a religion in the normal sense as it has a large variety of expression and should rather be viewed as a way of life (Bhugra, 2013). Hinduism consists of many beliefs, philosophies, religious practices, rituals and a code of conduct which includes specifications relating to the day to day activities of Hindus which have been written in the Vedas, Upanishads, and the Bhagavad Gita which are the major scriptures of Hinduism (Juthani, 2001). Hindus perceive their religion as all-pervading and religious practice is usually internalised rather than being an extraneous activity (Bhugra, 2013).

The Vedas and Upanishads include a hierarchical conception of human motives that may be understood in terms of four classes of goals. The four classes of goals correspond to the physical, mental and spiritual levels of the personality. At the bottom of the hierarchy is the goal associated with the physical self which involves the pursuit of sensual pleasure (*kama).* This is followed by *artha* which is the goal associated with the psychological self and refers to the pursuit of worldly prosperity such as material wealth, fame, power and social recognition. These two classes of goals address the material needs of human beings. The third class addresses the moral needs of human beings and is associated with the social self which involves the fulfilment of social duties and adherence to an ethical conduct throughout one's lifetime (*dharma*). Social duties refer to the fulfilment of various roles throughout the course of one's life such as that of a student, a householder, getting married, raising children, honouring one's ancestors as well as performing rituals and serving the community (Roeser, 2005). At the top of the hierarchy is the fourth class of human goals which is associated with the transpersonal self and involves the pursuit of spiritual wisdom, enlightenment, and release from the cycle of reincarnation which results in *moksha* (liberation/salvation/renunciation) and is the ultimate purpose of human life. Lasting joy, happiness and contentment are conferred onto the individual that attains this goal. Attaining moksha is a subtractive process that involves a rediscovery of the true nature of human beings. The description of the classes of human goals provides an explanation of the amount of life satisfaction that each goal provides and prescribes which goals one should pursue to attain the greatest level of peace and satisfaction (Roeser, 2005). *Dharma* is the goal most inextricably linked to the concept of self as it prescribes the way of life (code of conduct) that should be embarked upon by Hindus (Gardiner & Kosmitzki, 2011). The rights and duties prescribed in the concept of

dharma differ according to age, gender and social category. Hinduism functions as a social system as well as a religion. Various hierarchies exist in the social organisation of Hindus; examples are the family structure and the caste system (Bhugra, 2013).

Family is considered to be the most important institution in Hinduism. Religion and family are considered to be the foremost sources of strength in times of illness or distress. Family support also includes networks of friends, community members and relatives. There exists a patriarchal family structure in most Hindu homes that is used to exert social control by means of shame and guilt. Gender and age are important factors that determine placement in the social structure as well as ensuing interaction patterns (Conrad & Pacquiao, 2005). Elders are ranked above juniors and males are ranked above females. Male children are valued more than female children as they will carry the family name forward. The joint family system plays a significant part in Hindu culture (Jambanathan, 2013). Due to the patrilineal system, the eldest male usually makes all the decisions and rules which all other family members have to abide by. The emphasis on the patrilineal system creates a sense of dependence, worthlessness and servitude amongst the women of the family which restricts their capacity for growth and development. Women are expected to be subservient and amenable in the first few years of marriage and are not allowed to participate in any decision making. They are socialised into accepting that their position is always inferior to men and are taught to subordinate their needs to that of others in the family. There are also strict norms that govern contact with men of the family including their husbands (Jambanathan, 2013).

There has been a shift from living in a joint family to living in a nuclear family. However, distinctions between men and women still exist in nuclear families. These ideals are enforced to maintain harmony in the family. The lines of hierarchy and authority are clear which bring about psychologically and structurally complex relationships (Jambanathan, 2013). Another example of the types of hierarchies that occur in Hinduism is the caste system.

There are four divisions in the hierarchy of the caste system. At the top are *Brahmins* who are responsible for the various duties associated with priesthood. The second highest rank consists of the *Kshtriyas* (warriors) who provide all types of military services. The *Vaisyas* are next on the hierarchy and consist of landlords and businessmen whose functions are to engage in trade, agriculture as well as cattle breeding. At the bottom of the hierarchy are the *Sudras* whose main functions are to be of service to the other castes (Bhugra, 2013).

The caste system rests on the principles of *dharma* and *karma*. *Dharma*, as discussed above, is an incorporation of the religious traditions and social norms as well as the requirements of the law. The concept of *karma* is central to Hinduism and dictates that every individual is responsible for their actions and that these actions always have consequences. *Karma*, literally translated, means action; however, the concept of *karma* incorporates a range of factors such as intentions, actions and beliefs. It is the combination of these factors from all previous lives that determines the current position of the individual in society as well as their quality of life in general (Bhugra, 2013). The "law of *karma*" is also of importance to the concept of self in Hinduism as it is a guiding principle that ensures lawfulness and order in the moral, mental, biological and physical realms. This law states that every person faces the appropriate consequences for his or her actions regardless of whether these actions are indifferent, bad or good (Gardiner & Kosmitzki, 2011). Thus, *karma* determines the circumstances that the person is born into in their next life and this refers to the actions undertaken by both the mind and body. Good *karma* is achieved by living according to one's *dharma* (Gardiner & Kosmitzki, 2011).

The Hindu worldview, characterised by various social divisions, confirms the ingrained nature of the fixed inequalities by birth and brings family, tribes and clans together (Lipner, 1994). After having briefly explored a few basic principles of Hinduism as well as the hierarchy of human motivation, to provide an overall view of Hinduism, the Hindu conceptualisation of the self will be explored. Understanding how the self is perceived is an integral part to understanding how mental illness is understood in this religion.

2.5 Mental illness from a Hindu religious perspective

In order to understand mental illness from a Hindu religious perspective, the conceptualisation of the self should be explored. The conceptualisation of the self, in Hinduism, includes the impersonal aspect of the Self called the *Atman* (soul). The *Atman* is indestructible, unchangeable and unlimited and is therefore the true source of all happiness (Roeser, 2005). In Hinduism, salvation (the release of suffering) is attained through cycles of birth and death (reincarnation) until an individual realises his/her true nature (real Self) through being united with the Supreme Being (Roeser, 2005).

According to the Upanishads, the true nature of human beings is to be in a state of *Ananda* (bliss/ pure consciousness) but there are five concentric sheaths (*koshas*) that obstruct the original state of bliss (Davies, 2013). These sheaths are akin to the layers surrounding an

onion and represent the different dimension of consciousness or different layers of the self. The sheaths function as an interconnected whole which constitute the entire being. Alterations on any one of the layers affect the balance of all the other layers. A person must balance or harmonise all of these layers to unite the *Atman* with the Supreme Being (*Brahman*) and thus attain realisation (Davies, 2013). Each subsequent layer pervades the preceding layer and becomes less tangible and more refined. The gross outer layer of consciousness, the physical bodily sheath, is the *Annamaya kosha*. This layer consists of bodily functions as well as bones, muscles and tendons. The *Annamaya kosha* is enclosed in the *Pranamaya* kosha which is the life force/breathe sheath and innervates all actions within the body. The *Manomaya kosha* is next and is the mental sheath. This layer consists of our mental acuity and our emotional traits at a conscious and unconscious level. The *Manomaya kosha* is followed by the *Vijnanamaya kosha* which is the intellectual sheath and is the source of our intellect as well as our ability to be rational. Lastly, the *Anandamaya kosha* envelops all the other bodies, like Russian dolls, and is the bliss sheath. This layer is the source of our spiritual consciousness (Davies, 2013).

Thus, the conceptualisation of the Self includes mind, body and spirit and is not separated into dichotomies of the mind and body which is common in western models of mental illness (Narendra, 1999). Hindus have a holistic approach to human phenomena. Therefore, the understanding of mental illness is closely related to general conceptualisations of illness including physical and spiritual illness.

There are descriptions of conditions similar to schizophrenia and bipolar disorder in the Vedic texts as well as other religious texts such as the Bhagavad Gita, Ramayana and Mahabharata (Nizamie & Goyal, 2010). The descriptions for physical, observable illnesses such as alcoholism and epilepsy provided in Vedic texts are excellent but the descriptions for mental illnesses such as hallucinations and delusions are unclear (Bhugra, 1992). Weiss (1986 as cited in Bhugra, 1992) has proposed that the boundaries of psychiatry are inconstant and conditional, therefore a universal conceptualisation cannot be made, but the boundaries are not so culturally relative that make mental illnesses incomparable across cultures.

Mental illness is treated with a fatalistic attitude because of the religious beliefs in the"law of *karma".* It is for this reason that Hindus generally avoid expressing their distress. Physical illnesses, which include pain and mental illnesses, are usually attributed to a punishment from God, God's will, past karma (Jambanathan, 2013) the evil eye and sorcery (Juthani, 2001).

Therefore, Hindus usually try to find meaning in their pain as opposed to finding a cure for it (Kodiath & Kodiath, 1995). Due to the holistic nature of the conceptualisation of illnesses in Hinduism, there is an overlap in terms of the understanding of the causations of mental, physical and spiritual illness. A spiritual illness may exist in isolation or cause a mental illness. Often, the distinction between spiritual and mental illnesses are blurred and are therefore misconstrued. Mental illness is primarily thought to be caused by spiritual illnesses such as spirit possession, the evil eye and witchcraft (Padayachee, 2011).

The belief in spirit possession is based on the principles of Hindu religion in that after death, a soul transitions from this life to the next without any attachments. Specific rituals are performed to ensure that this occurs, if for reasons such as premature death or unfulfilled desires, this does not occur, the spirit will linger as a *bhut*. There are good and bad spirits. The bad spirits can cause harm by possessing individuals and causing them to behave self-destructively (Laher, 2014). Other symptoms of spirit possession are hallucinations, fainting, convulsions, changes to personality, physical appearance and the voice of the individual that is possessed (Dwyer, 2003). *Bhuts* are thought to linger in houses, gardens and trees and therefore, doorways leading to gardens are considered dangerous (Spiro, 2005). Women, children and those in transitional periods, such as those experiencing marriage, pregnancy, childbirth, and childhood are more susceptible to possession than others (Dwyer, 2003).

Sorcery or witchcraft, also known as black magic or *jadoo* is usually performed by an evil sorcerer, witch or by some social relation, which could include family members, following conflict (Dwyer, 2003). Evil supernatural beings or spirits are usually called upon by the sorcerer to cause harm to others through illness or misfortune (Laher, 2014). Plants may be used to cause hallucinations, lack of motivation, social withdrawal, agitation, disturbed sleep, helplessness and despair (Dein, 2003). Another method that is used to cause harm is through the invocation of supernatural beings by chanting spells (Laher, 2014). The conceptions of the evil eye and witches are related in that witches can injure people by making them sick or cause death by simply gazing at them (Dwyer, 2003).

The evil eye or *najar* is also known as ill will and is believed to be cast by women and witches resulting in adversity for the victim. The belief in the evil eye is common in Hinduism and is rooted in the belief that the eyes are a source of immense power. Children, infants (Dwyer, 2003) and those experiencing a transition in their life are considered to be the most at risk (Spiro, 2005). Children and infants are at risk because of their health and beauty

and because women desire and cherish them. Casting the evil eye on another person is thought to be involuntary and is caused by an individual experiencing negative emotions, such as jealousy, towards another person or any of the person's possessions (Dwyer, 2003). The evil eye can cause harm by causing illness, broken marriages and bad luck (Laher, 2014). Symptoms of the evil eye include drowsiness, listlessness, fatigue, drooping eyelids, weariness, lack of concentration, restlessness, discomfort, cramps, convulsions, headaches and hiccoughs (Abu-Rabia, 2005). Since MDD is the primary focus of this research, a discussion of depression from a Hindu religious perspective will follow.

2.6 Depression from a Hindu religious perspective

Depression, in Hinduism, is explained using a different religious framework than other mental illnesses. It is usually described in quasi-spiritual or metaphysical terms as the "suffering of the spirit" (Gardiner & Kosmitzki, 2011). As physical and mental suffering is believed to be caused by past *karma*, it is seen as a natural consequence of the moral law. Acceptance is the form of coping that is used to deal with the suffering as well as acknowledging that the suffering is not random. Suffering is seen as a normal part of life in the human form as we are bound by the laws of this world until salvation has been attained. Even though the body experiences pain and suffering, the Self is not affected and therefore it is futile to be concerned over temporary suffering. Since, according to Hinduism, everything is a manifestation of God, it is neither good nor bad. Suffering is viewed as being positive if it encourages progress on the spiritual path as it is sometimes seen as a test or a lesson to be learnt (Whitman, 2007). Other concepts that are used to come to terms with suffering are attachment and detachment. Attachment is negative as it signifies being over involved in this world by clinging onto material objects or other people and prevents one from attaining salvation. Detachment is positive as maintaining objectivity towards all aspects in one's life, such as relationships, objects and circumstances, results in freedom as these aspects do not hold any power over one's state of mind. The ultimate goal is to remain neutral towards everything and follow one's dharma without getting attached to outcomes (Whitman, 2007). Extending this philosophy to depression; it is perceived as an essential occurrence to realise the hopeless nature of existence. Depression is viewed as a positive event that allows a person to understand the true nature of the world (Gardiner & Kosmitzki, 2011) and therefore detach from it to focus on God which is a primary goal in Hinduism. The perceptions of depression, in this study, will be assessed by means of a questionnaire which will incorporate the Hindu

beliefs around the aetiology and treatment of MDD as discussed, as well as knowledge about depression and attitudes towards people with depression.

There have been significant links noted between religion and mental health. There is also an increased awareness of religion's role in the coping process. In order to deal with stressful situations it is important to take into account both religious coping strategies as well as an individual's religious struggles. This is especially important when this includes individuals from ethnic and minority groups. An individual's religious identity seeks to determine the extent to which an individual's self- concept is entwined with their religion which is one of the main variables in this study.

2.7 Religious identity

Social identity theory (Tajfel & Turner, 1979) has been used to understand the relationship between identification with a social group and self-concept. Tajfel and Turner (1979) have proposed, using a social identity perspective, that identifying oneself with a group that offers high levels of status and support may alleviate threats to self-esteem or wellbeing and may lead to self enhancement. Religion has been suggested as central to self-concept, particularly during times of distress, due to the unique characteristics of religion. Religion also has a pivotal role when an individual's sense of safety and security has been undermined (Ysseldyk, Matheson & Anisman, 2010). Identification with religious groups may provide a sense of stability (Kinnvall, 2004) and could serve other social and psychological functions such as physical health, purpose and meaning, intimacy, emotional comfort as well as self-development and a shared belief in a higher power (Pargament, 2002). Those who identify strongly with their religious group share common beliefs as well as perceive their group membership as an integral part of their self-concept and, by those means, gain a sense of personal and collective self-esteem by virtue of their group membership (Ysseldyk et al., 2010). Religious identity plays a powerful role in people's lives as it is based on the collective identities of group members. This type of social identity motivates, maintains and shapes beliefs and behaviours of the religious group (Alwin, Felson, Walker & Tufiş, 2006).

Religious identity in this study is defined as the adherence to religious teachings and practices such as reading sacred texts or literature, prayer and worship as well as seeking the help of a Guru. These practices are common amongst Hindus and are therefore used to ascertain the religious identity of the sample. According to Bhagwan (2012) Hindus read sacred books such as The Ramayana, the Mahabharata, and the Bhagavad Gita for comfort and to

experience insight into a higher power. The Vedas are considered the holiest of all Hindu sacred texts as they contain prayers and rituals to worship the Hindu Gods. Prayer and worship are common in Hinduism, and studies indicate that prayer is effective in terms of reducing depression and tension (Kroll & Erickson, 2002). The Guru is known as a mystical healer who aids in terms of self-realisation and self-transformation through a variety of methods such as meditation, prayers and rituals which are said to remove suffering (Bhagwan, 2012). Hindus also engage in rituals to invoke God and to overcome their *karma* by feeding the poor, going on pilgrimages, praying, fasting, taking refuge in an *ashram* and doing yogic exercises. Hindus search for guidance from priests, Gurus and other healers who perform healing ceremonies (Laungani, 2005). In South Africa, many Hindus continue to practise the ceremonies and rituals passed down from their ancestors. This ensures the continuity of the religious practices which still retain similarities to those conducted in India (Padayachee, 2011). These rituals and religious practices are related to religious beliefs about the relationship between humans and supernatural forces. Ceremonies and rituals provide a means to maintain harmony between the supernatural world and our world (Jambunathan, 2013). In this study, an individual with a strong religious identity would adhere to more of these practices and teachings than an individual with a weak religious identity. Religious identity may thus impact help seeking behaviours used to treat illnesses and will be discussed next.

2.8 Help seeking

Help-seeking attitudes are defined as an individual's tendency towards seeking or avoiding professional psychological services (Fischer & Turner, 1970). There are three broad factors that impact on an individual's decision to seek professional help; these are: personality, interpersonal and social components. Examples of these are personal beliefs about psychiatric treatment, support from family and friends, stigma surrounding psychiatric treatment, ability to examine and to be able to talk about one's own thoughts or feelings, and the perceived seriousness of the psychological problem (Fischer & Turner, 1970).

Sufferers of mental illness do not always seek professional help. This may be due to many reasons such as negative attitudes towards seeking help, concerns about money, transport, confidentiality, believing that they can deal with the problem by themselves, thinking that treatment will not be effective and stigma (Gulliver, Griffiths & Christensen, 2010).

The treatment of psychological disorders in many cultures is associated with pervasive stigma which may deter a person from seeking professional psychiatric help (Fischer & Turner, 1970). There are two types of stigma: public stigma and self-stigma (Latalova, Kamaradova & Prasko, 2014). Public stigma is the general perception held by people that being mentally ill is socially undesirable. Public stigma leads to stigmatising attitudes and prejudices held by patients' families and the general community that may even affect the attitudes of health care professionals. Public stigma may be internalised by the mentally ill causing them to feel ashamed and embarrassed due to decreased self-esteem as a result of being mentally ill. Self-stigma negatively affects social interactions and occupational functioning (Latalova et al., 2014). Seeking professional psychological or psychiatric help is generally avoided in the Hindu community; the reasons for this will be discussed.

2.9 Help seeking in the Hindu community

Hindus are usually responsible for their own health care but prefer personal, social and religious resources over professional psychological services. In accordance with Hindu beliefs, illnesses or discomfort are either denied or accepted. Hindu medical beliefs consist of a mix of modern and more traditional theories and practices (Jambunathan, 2013). A belief in the interrelatedness of the mind, body and spirit system also delays seeking professional psychological services as Hindus seek holistic treatments before resorting to the western modes of treatment (Jambunathan, 2013). There is also a belief that time is the best healer among Hindus (Jambunathan, 2013). Treatment strategies include confinement, medication, exorcisms, Ayurvedic practices, yogic exercises, vising shrines and temples, pilgrimages, or withdrawing into a hermitage (Laungani, 2005). A person affected by spirit possession and bewitchment is usually taken to a spiritual healer who heals the possessed individual by invoking a deity, chanting mantras and performing rituals and ceremonies. The effect of the evil eye can be detected and expelled by female kin through rotating the following pungent substances around the affected individual's head seven times and discarding it without looking at it: water in a small brass vase, chillies, salt or lime (Spiro, 2005).

There are many reasons that professional psychological help is not sought by the Hindu community resulting in an underutilisation of professional services. The first reason is that the occurrence of mental illness is sometimes denied in the patient as well as the families of the patients suffering from mental illness as there is an immense fear of stigmatisation. This perceived cultural stigmatisation is a result of the Hindu belief of suffering as a consequence

of bad deeds done in the past as well as believing that mental illness is caused by a lack of faith, spirit possession and the evil eye, resulting in fear that it will bring shame upon the family (Conrad & Pacquiao, 2005). The family structure and social status are also factors that act as barriers to help seeking in the Hindu community. Western models of treatment emphasise individual treatment but because Hindu culture is collectivistic and group wellbeing is emphasised over individual wellbeing, this model is often in conflict with preferred treatment strategies (Conrad & Pacquiao, 2005). Family, social networks and religion are seen as crucial sources of support in times of distress and are preferred over external sources as seeking help from others is usually construed as being self-serving and disrespecting the family because of the stigma associated with mental illness (Segal, 1998). The dependency and reliance on family members, friends and social networks are seen as being barriers to seeking professional help (Jambunathan, 2013).

Another reason that mental health services are not sought for mental health problems in the Hindu community is because of the tendency of Hindus to present with somatic symptoms when experiencing mental distress. This is the reason that general practitioners are usually consulted more than mental health practitioners as it is seen as being more acceptable because it is associated with less stigma (Segal, 1998). Hindus also tend to self-medicate which results in the masking of disease symptoms until the illness is at an advanced stage which hinders help seeking (Jambunathan, 2013). The reasons for somatisation vary; some authors claim that somatisation is common in Asian cultures due to the cultural disapproval of the expression of negative emotions (Thakker & Ward, 1998) or that cultural stigma conditions mental illness to be expressed as somatisation (Conrad & Pacquiao, 2005). Psychological distress is most often expressed in somatic symptoms, especially in women. Common symptoms reported are burning sensations in the soles of the feet or forehead, headaches, general pain as well as a tingling pain the lower extremities (Jambunathan, 2013).

This study includes measures that aim to determine the proclivity of the sample to utilising professional psychological help as well as to determine whether other forms of care and management are more acceptable to the Hindu community.

2.10 The relationship between religious identity, knowledge, attitudes and perceptions towards MDD and help seeking behaviour

After reviewing various aspects of the cultural presentations of MDD, Hindu religion, religious identity and help seeking behaviours, religious identity acting as a mediator or

moderator variable is presumed between attitudes towards MDD and attitudes towards professional psychological help seeking as attitudes and perceptions towards mental illness are or could be influenced by one's cultural and religious values and beliefs (Chong et al., 2007). These attitudes and perceptions towards MDD may determine help seeking behaviours which is of paramount importance for the effective treatment and management of depression among the Hindu community and more generally for a deeper understanding of the complex relationships between attitudes and help seeking behaviours amongst non-western individuals.

2.11 Conclusion

Based on the literature reviewed in this chapter, it can be concluded that views on depression may not be homogenous across this group as there are a plethora of variables that may impact attitudes and perceptions towards MDD and affect subsequent help seeking behaviours. The complexities associated with Hinduism, religious identity as well as the understanding of mental illness, specifically MDD, have been briefly discussed, thus this study aims to explore the relationship between religious identity, attitudes and perceptions of depression and help seeking behaviour.

Chapter Three: Research methods

3.1 Introduction

The methods used in the study will be outlined in this chapter. The hypotheses of the study are presented first, followed by the research design, sample and sampling strategy and instruments used will be discussed next followed by the procedure, ethical considerations and, lastly, the data analysis approach used to answer the research questions will be presented.

3.2 Hypotheses

Religious identity, knowledge of MDD, attitudes towards people with MDD and perceptions of the causes of MDD predict attitudes towards professional psychological help seeking behaviours.

Religious identity, knowledge of MDD, attitudes towards people with MDD and perceptions of the causes of MDD predict preferred methods of care and management for MDD.

Hindu religious identity mediates and/or moderates the relationship between attitudes towards people with MDD and their attitudes towards professional psychological help seeking behaviours.

3.3 Research Design

The research design used in this study was a quantitative, non-experimental research design as the independent variable was not manipulated, there was no control group and lastly there was no random assignment. The subtype is a cross-sectional research design as this study was only done at one point in time (Barker, Pistrang, & Elliott, 2002). The advantages of cross-sectional designs are that they are economical and easier to manage. Data is collected at one point in time which reduces the effects of testing and maturation. The advantages of non-experimental designs are that they are less expensive and time-consuming than other designs, they are therefore easier to replicate over various regions and areas which leads to increased external validity. These designs are also less politically and ethically controversial than other designs (Barker et al., 2002). This design was appropriate as it was cost effective and time efficient and allowed the research questions to be answered.

3.4 Sample and Sampling

The sample consisted of individuals from the Hindu community in South Africa. The selection criteria of the sample were that the participants themselves identified as being from the Hindu religion. Any participant who has been diagnosed with Major Depressive Disorder was excluded from the sample. Four hundred and twenty-two hard copies were distributed in Johannesburg and 132 were returned yielding a response rate of 31.3%. This is considered inadequate as a response rate of 50% is required for analysis and reporting. A response rate of 60% is considered good and a response rate of 70% is considered very good (Rubin & Babbie, 2009).

A non-probability convenience sampling strategy was used. Various Hindu religious organisations in South Africa were approached for a database of members of the community and these individuals were invited to participate in the study. Friends and family were approached to send out emails or to give out hard copies of the questionnaire on behalf of the researcher. Thereafter, snowball sampling was used to access a wider range of members from the Hindu community. The sample consisted of 132 hard copy and 229 online responses in total. Of these, 97 responses were excluded due to incomplete questionnaires, not identifying as a Hindu and having been diagnosed with MDD. The final sample consisted of 264 responses. The demographic information of the sample is presented in Table 3.1.

Table 3.1

Demographic information of sample

Variable		**Frequency**	**%**
Gender	Male	91	34.5
	Female	172	65.2
	Missing	1	0.4
Population Group	Indian	264	100
Religious affiliation	Hinduism	264	100
Home Language	English	194	73.5
	Gujarati	35	13.3
	Hindi	3	1.1
	Tamil	4	1.5
	Telegu	0	0
	Selecting more than one home language	28	10.6
Highest level of education	Some High school grade	8	3
	Matric	81	30.7
	University Degree	137	51.9
	Other post-Matric qualification	37	14
	Missing	1	0.4
Vernacular grouping	Gujarati	187	70.8
	Hindi	34	12.9
	Tamil	31	11.7
	Telegu	7	2.7
	Selecting more than one vernacular grouping	5	1.9

Knows someone suffering from MDD	Yes	76	28.8
	No	185	70.1
	Missing	3	1.1
Someone in the family diagnosed with MDD	Yes	22	8.3
	No	242	91.7
Self-rated knowledge of depression (1 being 'no knowledge' and 5 being 'extensive knowledge')	1	15	5.7
	2	54	20.5
	3	124	47
	4	47	17.8
	5	21	8
	Missing	3	1.1

Table 3.2

Descriptive statistics for Age and Knowledge of Depression

	N	Mean	SD	Minimum	Maximum
Age	260	36.87	14.73	18	75
Self-rated knowledge of Depression	261	3.02	0.971	1	5

As evident from Table 3.1, all of the participants were Indian and self-identified as Hindus. The majority of the sample was female (65.2%) and Gujarati (70.8%) followed by Hindi (12.9%), Tamil participants (11.7%) and lastly, 2.7% were Telegu participants. Five (1.9%) participants selected more than one vernacular group yielding a mixed identification. Twenty six (9.8%) participants identified English and Gujarati as their home language. One (0.4%) participant identified English and Tamil as their home language and one (0.4%) participant identified English, Gujarati and Hindi as their home language. Half of the participants (51.9%) had a university degree and 30.7% had a matric certificate. The majority of participants (70.1%) did not know anyone suffering from depression and did not have anyone in their family diagnosed with depression (91.7%). From Table 3.2, the mean age of the

participants was 36.87 years (SD= 14.73) and their mean self-rated knowledge of depression was 3.02 (SD= 0.97).

3.5 Instruments

A questionnaire consisting of four sections was used in this study (see Appendix C). The first section requested participants to provide their demographic information and to ascertain their knowledge of depression. The second section was based on determining their religious identity, the third section was based on their knowledge and attitudes towards depression, perceived causes of depression and preferred sources for the care and management of depression. The fourth section asked about their attitudes towards seeking professional psychological help. All scales in the questionnaire used a five point Likert scale, ranging from 'Strongly Disagree' (0) to 'Strongly Agree' (5).

3.5.1 Demographics

This section requested the participants' age, gender, highest level of education, population group, religious affiliation and home language. Age, gender, highest level of education, population group and home language was used for descriptive purposes. Religious affiliation was asked so that if an individual did not identify with the Hindu religion, they were excluded as this study is based on individuals identifying as Hindu.

3.5.2 Exposure to Major depressive disorder

These four items (question number 8 to 11 in the demographic information section on the questionnaire, see Appendix C) were used to determine the participants' prior exposure to depression. The first two questions asked whether the participant knows of anyone or has a family member suffering from depression. The third item was directed at the participant asking if they have been diagnosed with MDD. They were excluded if they were diagnosed with MDD. The last question in this scale asked about their self-rated knowledge of depression. These items were self-developed and the response format was a yes or no question which asked the participants to specify their answer. These questions were asked so that the researcher could gain an indication of the participants' familiarity with MDD which was used to gain understanding into the phenomenon being explored.

3.5.3 Religious identity

This scale consisted of 28 items in total. The first 23 items were from the Hindu Religious Coping scale created by Tarakeshwar, Pargament and Mahoney (2003). The religious coping subscales possess reliability alphas ranging from 0.69 to 0.85. The discriminant validity of the measure is reinforced by correlation values ranging from 0.35 to 0.62 (Tarakeshwar et al., 2003). Five items (question number 24 to 28 in the second section of the questionnaire after the demographic information section, see Appendix C) were taken from the Religious Identity Scale from Chaudhury (2011). These items were to determine an individual's participation in religious practices which determined their religious identity. Questions included how religious an individual considers themselves to be, the frequency of prayer, religious practices such as fasting and reading religious literature, and consulting religious leaders such as Gurus. The items in this scale were originally created to ascertain Muslim religious identity but were adapted to determine Hindu religious identity. There was no reliability or validity information given for this scale (Chaudhury, 2011). High scores were indicative of greater adherence to religious beliefs and practices. A factor analysis was conducted for this scale and only one factor was found. The Cronbach's alpha for this scale was found to be 0.901 in this study.

3.5.4 Knowledge, Attitudes and Practice Survey on MDD

This scale included four subscales which were from the Public Perceptions of Mental Illness in Iraq Baseline survey. This questionnaire was developed in Iraq to assess public attitudes towards mental illness in general. These were adapted to assess knowledge, attitudes and practices specifically relating to Major Depressive Disorder (MDD) in the Hindu community. There was no reliability or validity information given for this scale. The answers on the original scale were recorded on a 5 point Likert scale consisting of the following: agree, somewhat agree, neutral, somewhat disagree and disagree. No scoring information was provided, nor was there any indication of how these items were scored (Sadik, Bradley, Al-Hasoon, & Jenkins, 2010). The scale consisted of three subscales, namely knowledge of people with depression and attitudes towards people with depression, causes of depression and care and management of people with depression.

3.5.4.1 Knowledge of people with depression and attitudes towards people with depression

This subscale consists of 20 items (question number 1 to 20 in the third section of the questionnaire, see Appendix C). Items assessed knowledge of MDD with regard to the appearance, dangerousness and the ability to work with people with MDD (Sadik et al., 2010). Two items were added to this subscale which asked whether depression is like any other illness (question number 7, section 3, see Appendix C) and if people with depression experience aches and pains in their body (question number 8, section 3, see Appendix C). Other items in this subscale measured attitudes towards people with depression and included positive questions such as willingness to marry someone diagnosed with depression, maintaining a friendship with someone with depression, depressed individuals having the same rights as others, and if other people are caring and sympathetic towards people with depression. Negative items included asking questions about whether depressed individuals should be prevented from getting married, having children and making decisions. Other negative items included issues relating to stigma such as secrecy around being diagnosed, and shame if a family member was diagnosed (Sadik et al., 2010). High scores were indicative of positive attitudes towards people with MDD. A factor analysis was conducted on this joint scale which revealed a single factor scale with no sub factors. This means that all the items in this scale measured a single construct. The reliability for the total scale was 0.657; thereafter, items 1, 6, 7, 8, 13 and 14 were removed from the analysis and Cronbach's alpha increased to 0.809. The items that were removed from this scale are presented in Table 3.3 below. There were 14 items remaining in the final scale.

Table 3.3

Items removed from knowledge of people with depression and attitudes towards people with MDD scale

Items	
1	Depressed persons can work
6	Anyone can suffer from depression
7	Depression is an illness like any other illness
8	People with depression experience aches and pains in their body
13	I could maintain a friendship with someone with depression
14	I could marry someone with depression

3.5.4.2 Causes of depression

The original scale consisted of six items (question number 21, 23, 29, 30, 33, 35, section 3, see Appendix C) to assess perceptions of the most likely cause of depression. A number of items were listed ranging from genetic inheritance to God's punishment (Sadik et al., 2010).

A further nine items (question number 22, 24, 25, 26, 27, 28, 31, 32, 34, section 3, see Appendix C) were added to this subscale. The items were added as they are linked to Hindu individuals' perceptions of the origins of mental illness as discussed in Padayachee (2011) and Laher (2014). A factor analysis was conducted on this scale and four factors were present. As is evident from Table 3.4, there are four factors for the causes of depression. Factor one, which was the supernatural causes of depression, has four items loading on it. These are items: 26, 27, 28 and 29. The Cronbach's alpha for Factor 1 was 0.846. The second factor was stress attributed to the causation of depression. Five items load on this factor, namely, items 22, 23, 24, 32 and 35. The Cronbach's alpha for Factor 2 was 0.678. Factor 3 was the biological reasons for depression and three items load onto this factor, which were: 21, 33 and 34. The Cronbach's alpha for Factor 3 was 0.718. The last factor was the God-related causes of depression; three items load onto this factor, namely items 25, 30 and 31. The Cronbach's alpha for Factor 4 was 0.751. High scores indicated a belief in that factor as the cause of MDD.

Table 3.4

The four factors of the perceived causes of MDD

	Component			
	1	2	3	4
Genetic inheritance	-.113	.011	.696	.104
Family stress	.001	.774	.224	-.013
Substance abuse	.021	.773	.376	.036
Financial stress	.202	.822	.153	-.120
Past karma	.383	.105	.101	.736
Spirit possession	.787	-.025	.089	.497
Evil Eye	.842	.042	.065	.466
Black magic	.901	.012	.072	.361
Bad things happening	.660	.297	.192	.143
God's punishment	.640	-.051	.008	.695

Test of strength from God	.400	-.015	.044	.822
External stress	.310	.513	.425	-.268
Brain Dysfunction	.238	.296	.842	-.020
Chemical imbalance	.198	.368	.848	-.028
Personal weakness	.403	.459	-.019	-.020

Note. Extraction Method: Principal Component Analysis. Rotation Method: Promax with Kaiser Normalization.

3.5.4.3 Care and management of people with depression

This subscale consisted of nine items (question number 36 to 44, section 3, see Appendix C) which included items to determine perceptions relating to the curability of depression, the awareness of services available at the local clinic and how depression should be treated. Eleven items (question number 45 to 55, section 3, see Appendix C) were added from Chaudhury (2011), which included seeking help from professionals, family, friends and religious leaders or God. One item asked whether it is important for the professional and depressed person to be of the same religion. As is evident from Table 3.5, a factor analysis was conducted on this scale and six factors emerged. The first factor was concerned with the clinic. Four items loaded onto this factor, which were 37, 41, 43 and 44. The Cronbach's alpha for Factor 1 was 0.697. Factor 2 was the "talking cure" factor, i.e. that one will get better by talking about MDD. Three items loaded onto this factor, namely items 45, 46 and 47. The Cronbach's alpha for Factor 2 was 0.548. Factor 3, the institutionalisation factor, consisted of three items. These items were 39, 54 and 55. The Cronbach's alpha for Factor 3 was 0.564. Factor 4 consisted of three items and grouped psychiatric and psychological help together, these were items 50, 51 and 52. The Cronbach's alpha for Factor 4 was 0.585. Factor 5 was concerned with the self-management of depression, two items loaded onto this factor. These items were 40 and 42. The Cronbach's alpha for Factor 5 was 0.513. The last factor was consulting religious help for the care and management of depression. Three items loaded onto this factor and these were items 48, 49 and 53. The Cronbach's alpha for Factor 6

was 0.552. High scores indicated a preference for that factor of the care and management of MDD.

Table 3.5

The six factors of the Care and Management of MDD

	Component					
	1	2	3	4	5	6
There are mental health services in my community	.605	.126	-.143	.150	-.450	.169
Depressed people should be in an institution where they are under supervision and control	-.005	.030	-.678	-.195	-.048	.146
Depression can be treated outside a hospital	.160	.032	-.350	.106	.709	.194
Information about depression is available at my local clinic	.758	-.005	-.003	.121	.086	.220
The majority of people with depression recover	.109	.170	.132	-.109	.781	-.096
Local clinics can provide good care for depression	.741	.093	.124	-.141	.279	-.069
If I was concerned about a mental health issue with a member of my family or myself, I would feel comfortable discussing with someone at my local clinic	.662	.262	.146	.198	.027	-.032
Depressed persons should consult with Physicians	.275	.637	.107	.052	-.130	-.028

Depressed persons should talk to their family	.176	.614	-.197	.166	.117	-.016
Depressed persons should reconnect with their friends	-.038	.658	-.224	.171	.324	-.062
Depressed persons should consult with a priest or another local religious elder	.169	.501	.190	-.071	-.079	.556
Depressed persons should pray to God	-.171	.563	.185	-.071	.322	.476
Depressed persons should seek the help of a counsellor or a psychotherapist	.010	.450	-.019	.538	-.013	.207
Depressed persons should consult with a psychiatrist	.002	.194	.061	.807	-.016	.012
Depressed persons should take antidepressants	.257	-.040	.232	.630	-.034	.063
Depressed persons should use holistic treatments	.125	-.100	-.078	.206	-.010	.816
Depressed persons should be admitted to a psychiatric hospital	.107	-.059	.724	.352	-.120	-.010
It is very important for the depressed person to seek help from a professional of the same religion	.081	-.016	.676	-.185	.003	.253

Note. Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. Rotation converged in 10 iterations.

3.5.5 Attitudes towards Seeking Professional Psychological Help Scale

An abbreviated form of the Attitudes towards Seeking Professional Psychological Help Scale was used as seen in Fischer and Farina (1995). The abbreviated form was used as the original scale consisted of too many items which would make the entire questionnaire lengthy. The original scale consisted of 29 items (Fischer & Farina, 1995) and the abbreviated scale consists of 10 items (question number 1 to 10, section 4, see Appendix C). Items measure willingness to seek help from mental health professionals for relief from psychological problems. The scale has a Likert-type response format which consists of the following: agree, partly agree, partly disagree, and disagree. The scores from the abbreviated form of the scale correlated 0.87 with the original scale. The internal consistency of the 10 items was 0.84. A one month interval administration of the abbreviated form resulted in a test-retest correlation of 0.80 and the same for the original form resulted in 0.82 (Fischer & Farina, 1995). The Cronbach's alpha for this scale was found to be 0.727 in this study. This is a one factor scale with no sub factors, thus all of the items in this scale measured a single construct. High scores were indicative of a greater proclivity to seeking professional psychological help.

3.6 Procedure

There were two methods of data collection in this study. The first was electronic and the second was by distributing hard copies. The first method was carried out by approaching various Hindu religious organisations in South Africa to gain access to an email database of Hindu individuals. The questionnaire was available on Google Forms, a research site, for approximately three months. The administrator of these databases emailed potential participants a link to the questionnaire which included an information sheet that detailed the nature of the study.

The second method was executed by distributing hard copies of the questionnaire to the Hindu community at religious gatherings and functions which included an information sheet. Hard copies were handed to volunteers who were interested in participating and were told to return the questionnaires after completion to a box left at the temple.

Friends and family were approached and asked to forward emails and to distribute hard copies of the questionnaire to individuals from the Hindu community on behalf of the

researcher. Thereafter, snowball sampling was used to gain access to a wider range of members from the Hindu community.

3.7 Ethical considerations

Ethical clearance (see Appendix A) for this study was obtained from the Human Research Ethics Committee at the University of the Witwatersrand (MPSYC/15/005 IH). Potential participants were sent an email and invited to participate in the research. Potential participants were also approached to fill out hard copies of the questionnaire verbally by the researcher and through other participants. The email that was sent to potential participants contained a participant information sheet. There was also an information sheet attached (see Appendix B) to the hard copies of the questionnaire which the participants were told to read. This information sheet contained information about the research and invited the potential participants to participate in the study. The potential participants were assured of the voluntary nature of participation. Participants were informed that the questionnaire takes approximately 30 to 45 minutes to complete. The participants were informed that there were no benefits associated with participating in the study. The participants were assured of the confidentiality and anonymity of the questionnaire as there was no identifying information required on the hard copies and their IP addresses were deleted from the online questionnaire; therefore, the researcher had no method of tracing them. The information sheet contained information of a free counselling service if the questionnaire left the participants feeling vulnerable. They were assured that no one other than the researcher and the researcher's supervisor had access to the results of the questionnaires which are kept in a locked cupboard and will be destroyed after a period of five years. Participants were informed that feedback will be available in the form of a summary sheet which they may email the researcher to receive. They were also welcomed to email the researcher should they have any further questions with regard to the study. The researcher's email address was provided on the information sheet. The completion and return of the questionnaire was considered as giving consent to participation.

3.8 Data analysis

All the data was analysed using SPSS (Statistical Package for the Social Sciences) version 23. The first step in data analysis is to describe or summarise the data using descriptive statistics. This allows the researcher to describe many pieces of data with a few indices (Warren, Denley & Atchley, 2014). This was done by analysing the mean, standard deviation,

the minimum and maximum score, as well as the skewness of the scales (values between -1 and +1 are acceptable) to determine the distribution of the scales which has implications in terms of the assumptions for inferential statistics (Warren et al., 2014). This was followed by an examination of the internal consistency reliability of the scales used which is the extent to which the scores on the items of a scale correlate with each other (Stangor, 2011).

Construct validity of the theoretical constructs used in this study were examined by means of exploratory factor analysis (EFA) with a principal component analysis extraction method for all of the scales. Promax and Varimax rotation methods were used on the scales depending on whether the factors were related or independent. Factor analysis is a statistical technique used to examine whether the questionnaire reflects the theoretical constructs postulated. The primary aim of EFA is to draw common factors from a series of variables measured by a scale. The largest factor loadings for each item was indicative of the factor it belonged to; however, a minimum loading of 0.40 was considered during interpretation (Cudeck, 2000).

Multiple regression analyses were used to test the relationships between the variables. This technique is used to examine the effects of each independent variable on the dependent variable while holding the effect of the other variables constant (Stangor, 2011); thus multiple regression was conducted on the data to establish the relationship between the independent variables and the dependent variable. The assumptions underlying multiple regression were tested. The first assumption was that there was no multicollinearity between the independent variables, that is, the independent variables do not have a strong linear relationship with each other. The second assumption was that there was a linear relationship between the dependent and independent variables. The third assumption was homoscedasticity, that is, that all of the error terms have the same variance and lastly, the assumption of normality, that is that all independent variables and dependent variables are normally distributed (Stangor, 2011). Analyses were conducted to determine whether there were any influential points or outliers in the data set (Stangor, 2011).

The standard (simultaneous) method of multiple regression was conducted as all of the independent variables were entered together. This method involves conducting a literature review and examining theories to identify potential predictors, thus building a “theoretical” variate, which may reflect the clinical relevance of the variable (Meyers, Gamst & Guarino, 2016). This method of multiple regression was used to test the two research questions that asked whether any of the predictors, namely, religious identity, self-rated knowledge of

MDD, attitudes towards people with MDD and perceptions of the causes of MDD predicted professional psychological help seeking behaviour and any of the care and management factors.

The following steps, as prescribed by Baron and Kenny (1986) were used to establish mediation; this can be seen in Figure 1 below. Step one consisted of running a regression analysis between the independent variable (attitudes towards MDD) and the dependent variable (attitudes towards professional psychological help seeking). Step two consisted of running a regression analysis between the dependent variable and the mediator (religious identity) with the dependent variable (attitudes towards professional psychological help seeking) as the predictor. Step three consisted of running a regression analysis between the independent variable and the mediator and, lastly, step four consisted of a multiple regression analysis with both the independent variable and mediator as predictors and the dependent variable such that the independent variable should not be statistically significant when the mediator has been included in the analysis (Baron & Kenny, 1986).

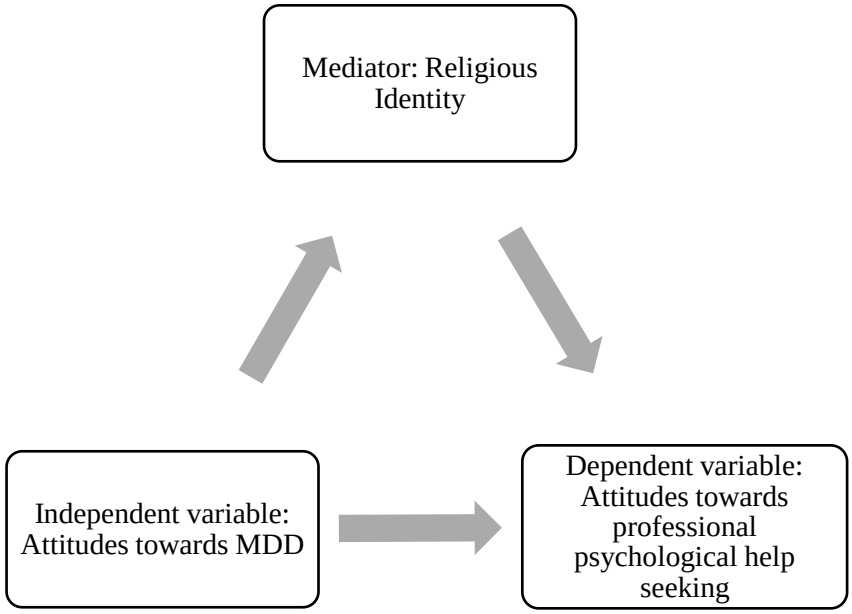

Figure 1: Mediator Model (Baron & Kenny, 1986)

Thereafter, a moderator analysis was conducted to establish whether there was a moderation effect. A moderator variable is one that produces an interaction between two variables such that the relationship between them is different at different levels of the moderator variable (Baron & Kenny, 1986). The following steps as prescribed by Baron and Kenny (1986) were executed; this can be seen in Figure 2 below. Step one includes centreing the independent and

the moderator variables by subtracting the mean from all of the values. Step two consists of creating an interaction term by multiplying the centred independent variable and the centred moderated variable. Step three consists of testing the assumptions for moderated multiple regression. Step four includes running the moderated multiple regression and lastly, step five includes generating interaction plots for any significant results. The strength of the causal relationship between the independent and dependent variables may be altered by the moderator variable. Complete moderation occurs when there is a zero causal effect of both the independent and dependent variable after the moderator variable is added to the model (Baron & Kenny, 1986).

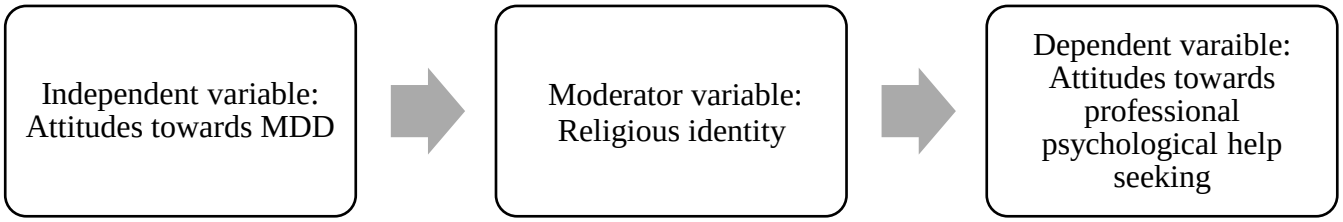

Figure 2: Moderator Model (Baron & Kenny, 1986)

3.9 Conclusion

This chapter discussed the research methods used to conduct the study, namely the hypotheses of the study, research design, sample and sampling strategy and instruments used were presented next followed by the procedure, ethical considerations and lastly, the data analysis approach used to answer the research questions was discussed.

Chapter Four: Results

4.1 Introduction

The results obtained from the analysis will be presented in this chapter. Descriptive statistics for all of the scales will be presented followed by a multiple regression analysis to determine whether attitudes towards professional help seeking and the factors of care and management are predicted by religious identity, knowledge of MDD, attitudes towards people with MDD and perceptions of the causes of MDD. Lastly, a mediator and moderate regression was conducted to determine whether religious identity mediates or moderates the relationship between attitudes towards MDD and help seeking behaviours.

4.2 What is the religious identity of the Hindu community?

From Table 4.1, it is evident from the mean of 89.16 and standard deviation of 15.08 that the individual responses vary in this group of people. The minimum score of 38 and maximum score of 127 out of a possible range of 28 and 140 indicate that the participants in this study display a moderate religious identity. This scale is normally distributed with a skewness coefficient of -0.40.

Table 4.1

Descriptive Statistics for Religious Identity

Variable	Mean	SD	Minimum	Maximum	Skewness
Religious Identity	89.16	15.08	38	127	-0.40

4.3 What are Hindu community members' attitudes towards depression?

From Table 4.2, it is evident that the participants have positive attitudes towards people with depression. This can be seen by the high average of 52.96 and the low standard deviation of 7.15 which means that the individual responses did not vary too much from the mean. The minimum score was 30 and maximum score was 68 out of a possible range of 14 and 70. The scale was normally distributed with a skewness coefficient of -0.560.

Table 4.2

Descriptive Statistics for Knowledge and Attitudes towards MDD

Variable	Average	SD	Minimum	Maximum	Skewness
Attitudes towards MDD	52.96	7.15	30	68	-0.560

4.4 What are the perceptions of the causes of MDD amongst Hindu community members?

As is evident from Table 4.3, the average response to the items on the supernatural causes of depression is 2.53 (SD=0.94). This means that most people disagree with or are neutral towards supernatural causes as an aetiological factor of depression. The average response to the items on stress as a cause for depression is 3.90 (SD=0.52); participants generally agree that stress is an aetiological factor for depression. For biological aetiology, the participants are divided between being neutral and agreeing that tangible physical elements are causing depression as the average response to the items is 3.40 (SD=0.76). Lastly, for the God related factor, the average is 2.36 (SD=0.88) which means that most people disagree that depression occurs due to Divine interference. Stress and biological factors had greater averages than supernatural and God related understandings for the aetiology of depression.

Table 4.3

Descriptive Statistics for the perceived aetiological factors of MDD

Factors	Average	SD	Minimum	Maximum	Skewness
Stress	3.90	0.52	2	5	-0.15
Biological reasons	3.40	0.76	1	5	-0.30
Supernatural	2.53	0.94	1	5	0.18
God related	2.36	0.88	1	5	0.19

4.5 What are the attitudes towards care and management of MDD amongst Hindu community members?

From Table 4.4, the average response to the items for the clinic factor is 3.27 (SD=0.68). This means that the participants are neutral towards using local clinics for the care and

management of MDD. For the "talking cure" factor the average is 3.94 (SD=0.56) suggesting that participants generally agree that talking to someone about MDD is helpful. The third factor, which is the institutionalisation of individuals with MDD, has an average of 2.80 (SD=0.49); participants are neutral towards institutionalisation for the care and management of people with MDD. For the psychiatric and psychological factor the average is 3.76 (SD=0.59). Participants agree that consultation with a psychiatrist and a psychologist is beneficial to the care and management of MDD. The self-management factor of MDD has an average of 3.82 (SD=0.61). Participants agree that MDD can be treated outside a hospital and that the majority of people recover from MDD. The average for religious help is 3.43 (SD=0.68). Participants are neutral towards the efficacy of religious help for the care and management of MDD. The "talking cure" factor and the self-management factor were seen as being the most beneficial for the care and management of MDD as evident from the greater averages, followed by the psychiatric and psychological factor and the religious help factor. The clinic factor and the institutionalisation factor were seen as the least helpful sources for the care and management of MDD due to their comparatively lower averages.

Table 4.4

Descriptive Statistics for the care and management factors of MDD

Factors	Average	SD	Minimum	Maximum	Skewness
"Talking cure"	3.94	0.56	2	5	-0.34
Self-management	3.82	0.61	1	5	-0.94
Psychiatric/Psychological	3.76	0.59	2.33	5	-0.004
Religious help	3.43	0.68	1	5	-0.22
Clinic	3.27	0.68	1.50	5	-0.41
Institutionalisation	2.80	0.49	1.67	5	0.69

4.6 What are the attitudes of Hindu community members towards seeking professional psychological help?

From Table 4.5, the mean is 33.70 and the standard deviation is 5.22; this indicates that the participants have overall positive attitudes towards professional help seeking. The minimum score is 19 and the maximum is 49 out of a possible range of 10 and 50 which indicates a wide range of responses for this scale with participants tending to have more positive

attitudes. The skewness coefficient is 0.23 which indicates that the data is normally distributed.

Table 4.5

Descriptive Statistics for Attitudes towards Professional Psychological Help Seeking

Variable	Mean	SD	Minimum	Maximum	Skewness
Attitudes towards Professional Help Seeking	33.70	5.22	19	49	0.23

4.7 Does religious identity, knowledge of MDD, attitudes towards people with MDD and perceptions of the causes of MDD predict attitudes towards professional psychological help seeking behaviours amongst Hindu community members?

A multiple regression analysis was conducted to explore this question. The parametric assumptions were checked for these variables. All of the independent variables and the dependent variable were normally distributed. The homoscedasticity assumption was tested by means of a scatterplot of the residuals and this assumption was met. Outliers were checked by means of box plots and histograms. There were no outliers found in this data set. Lastly, multicollinearity was checked by using the variance inflation factor (VIF) and this was less than 10 which means that there was no multicollinearity between the independent variables (Meyers et al., 2016). All of the parametric assumptions were met for multiple regression.

The overall model obtained to explore this question was significant ($F (7, 252) = 6.434$ $p= .000$, $R^2 = .152$). However, this model only explained 15.2% of the variation in help seeking behaviour.

Attitudes towards MDD (B= .095, p= .036), biological reasons (B= .641, p= .000) and God-related (B= -.392, p= .012) aetiological factors were significant predictors of attitudes towards professional help seeking as is evident from Table 4.6.

The effect sizes of the predictors may also be seen from Table 4.6. Attitudes towards MDD with an effect size of 0.131 and biological reasons as a cause for MDD with an effect size of 0.280 were significant positive predictors of help seeking behaviour. The God related

aetiological factor with an effect size of 0.199 was a significant negative predictor of attitudes towards help seeking behaviour. Based on the coefficients and effect sizes, biological reasons as a cause for MDD was the strongest predictor of attitudes towards help seeking behaviour suggesting that, for this sample, participants who think that physical reasons are the cause of depression, are more likely to seek professional help. The second strongest predictor was the God related aetiological factor, but the direction was reversed as is evident from the coefficient. This means that participants who cite God related causes for MDD express negative attitudes towards professional help seeking. Lastly, the third predictor was the attitudes towards MDD suggesting that participants who have positive attitudes towards MDD are more likely to seek professional help.

Table 4.6
Multiple regression analysis exploring the role of religious identity, self- rated knowledge of MDD, attitudes towards MDD and all four aetiological factors of MDD in predicting attitudes towards professional help seeking

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	27.007	3.818		7.074	.000
	Religious identity	.024	.023	.069	1.062	.289
	Knowledge of MDD	.008	.218	.002	.038	.970
	Attitudes towards MDD	.095	.045	.131	2.113	.036*
	Causes-supernatural	-.044	.104	-.032	-.426	.671
	Causes-stress	-.193	.123	-.096	-1.564	.119
	Causes-biological	.641	.141	.280	4.540	.000*
	Causes-God related	-.392	.154	-.199	-2.539	.012*

*p< 0.05

4.8 Does Religious identity, knowledge of MDD, attitudes towards people with MDD and perceptions of the causes of MDD predict the preferences for care and management of MDD amongst Hindu community members?

Multiple regression analyses were conducted to explore this question. The parametric assumptions were checked for all of the multiple regression analyses. All of the independent variables and the dependent variables were normally distributed. The homoscedasticity assumption was tested by means of a scatterplot of the residuals and this assumption was met. Outliers were checked by means of box plots and histograms. There were no outliers found in this data set. Lastly, multicollinearity was checked by using the variance inflation factor (VIF) and this was less than 10 for all of the independent variables which means that there was no multicollinearity between the independent variables (Meyers et al., 2016). All of the parametric assumptions were met for all of the multiple regressions conducted. For this question, religious identity, self-rated knowledge of MDD, attitudes towards MDD and the four aetiological factors namely, supernatural, stress, biological and God related factors were entered as independent variables in the multiple regression analysis. The six care and management factors were entered separately as dependent variables for each multiple regression conducted. The results are presented below.

4.8.1 Clinic factor

The overall model obtained to explore this question was significant (F (7, 252) = 6.832 p= .000, R^2= .160). This model explained 16 % of the variation in preference for using the clinic for MDD treatment.

From Table 4.7 it is evident that self-rated knowledge of depression (B= .152, p= .000) and stress (B= .172, p=.033) were the most significant predictors of the clinic factor. Biological reasons (B=.109, p= .049) and attitudes towards MDD (B=.011, p=.05) were also predictors of the clinic factor. The strongest predictor of the clinic factor was the self-rated knowledge of MDD with an effect size of 0.217. This suggests that, for this sample, participants who rate themselves as highly knowledgeable about MDD are likely to use local clinics as a source of care and management for MDD. The second strongest predictor was stress as a cause for depression with an effect size of 0.131. Participants who perceive stress as a cause of MDD

are likely to seek help from clinics. The last two predictors, biological reasons and attitudes towards MDD both have an effect size of 0.121 which suggests that in this sample, participants who perceive biological reasons as the cause of MDD and those that have positive attitudes towards MDD are likely to seek help from clinics but this result must be interpreted with caution as the p-values were equal to the 0.05 level of significance. A small effect size was also evident.

Table 4.7

Multiple regression analysis exploring the role of religious identity, self- rated knowledge of MDD, attitudes towards MDD and all four aetiological factors of MDD in predicting the clinic factor

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.000	.496		2.013	.045
	Religious identity	-.003	.003	-.070	-1.078	.282
	Knowledge of MDD	.152	.042	.217	3.611	.000*
	Attitudes towards MDD	.011	.006	.121	1.966	.050*
	Causes-supernatural	.071	.054	.099	1.320	.188
	Causes-stress	.172	.080	.131	2.138	.033*
	Causes-biological	.109	.055	.121	1.976	.049*
	Causes-God related	.111	.060	.144	1.851	.065

*p< 0.05

4.8.2 "Talking cure" factor

The overall model obtained to explore this question was significant (F (7, 252) = 5.435 p= .000, R^2= .131). This model explained 13.1 % of the variation in the "talking cure" factor.

Attitudes towards MDD (B=.014, p = .004) and the stress aetiological factor (B=.283, p= .000) were significant predictors of the "talking cure" factor as is evident from Table 4.8. Stress as a cause of MDD had an effect size of 0.271 and was therefore the strongest predictor of the "talking cure" factor for care and management of MDD. This suggests that in

this sample, stress as a perceived cause of MDD would result in an increased likelihood of using talk as a method of managing MDD. Attitudes towards MDD had an effect size of 0.183 and was the other significant predictor of the "talking cure" factor. This means that participants with positive attitudes towards MDD favour the use of talking for the care and management of MDD.

Table 4.8

Multiple regression analysis exploring the role of religious identity, self- rated knowledge of MDD, attitudes towards MDD and all four aetiological factors of MDD in predicting the "talking cure" factor

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	1.884	.403		4.676	.000
	Religious identity	.004	.002	.119	1.811	.071
	Knowledge of depression	.020	.034	.036	.592	.555
	Attitudes towards MDD	.014	.005	.183	2.916	.004*
	Causes- supernatural	-.066	.044	-.115	-1.512	.132
	Causes-stress	.283	.065	.271	4.346	.000*
	Causes-biological	.003	.045	.004	.062	.951
	Causes-God related	-.024	.049	-.039	-.493	.623

*p< 0.05

4.8.3 Institutionalisation factor

The overall model obtained to explore this question was significant (F (7, 252) = 4.407 p= .000, R^2= .109). However, this model only explained 10.9 % of the variation in the institutionalisation factor.

From Table 4.9, it is evident that attitudes towards MDD (B= -.015, p= .001) and the God related aetiological factor (B= .090, p= .043) were significant predictors of the institutionalisation factor. However, the God related aetiological factor was just significant at

the 0.05 level of significance at p=0.043. Attitudes towards MDD, with an effect size of 0.222, was the strongest predictor of the institutionalisation factor. As is evident from the coefficient, attitudes towards MDD was negatively related to the institutionalisation factor; this means that participants with positive attitudes towards MDD are less likely to recommend institutionalisation as care and management for MDD. The God related factor was the second predictor with an effect size of 0.163. This suggests that in this sample, participants who perceive God related reasons as the cause of MDD are more likely to favour institutionalisation for the care and management of MDD; however, this result must be interpreted with caution given the p-value and the small effect size.

Table 4.9

Multiple regression analysis exploring the role of religious identity, self- rated knowledge of MDD, attitudes towards MDD and all four aetiological factors of MDD in predicting the institutionalisation factor

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	3.549	.367		9.675	.000
	Religious identity	.002	.002	.072	1.088	.278
	Knowledge of depression	.031	.031	.062	1.001	.318
	Attitude towards MDD	-.015	.004	-.222	-3.494	.001*
	Causes- supernatural	-.045	.040	-.086	-1.119	.264
	Causes- stress	-.044	.059	-.046	-.735	.463
	Causes- biological	-.054	.041	-.084	-1.324	.187
	Causes-God related	.090	.044	.163	2.034	.043*

*p< 0.05

4.8.4 Psychiatric/Psychological factor

The overall model obtained to explore this question was significant (F (7, 252) = 5.259 p= .000, R^2= .127). This model only explained 12.7% of the variation in the psychiatric/ psychological factor.

Biological reasons (B=.217, p= .000) as the cause of MDD was the strongest and only predictor of the Psychiatric/Psychological factor as is evident from Table 4.10. Biological reasons had an effect size of 0.277 suggesting that in this sample, biological reasons being perceived as the cause of MDD results in an increased likelihood that participants consult psychologists and psychiatrists for the care and management of MDD.

Table 4.10

Multiple regression analysis exploring the role of religious identity, self- rated knowledge of MDD, attitudes towards MDD and all four aetiological factors of MDD in predicting the psychiatric/psychological factor

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	2.237	.441		5.067	.000
	Religious identity	-.001	.003	-.036	-.549	.583
	Knowledge of depression	.042	.037	.070	1.137	.257
	Attitude towards MDD	.005	.005	.061	.964	.336
	Causes- supernatural	-.029	.048	-.046	-.603	.547
	Causes- stress	.134	.071	.117	1.878	.062
	Causes-biological	.217	.049	.277	4.429	.000*
	Causes-God related	.032	.054	.048	.604	.546

*p< 0.05

4.8.5 Self-management factor

The overall model obtained to explore this question was significant (F (7, 252) = 6.437 p= .000, R^2= .152). This model only explained 15.2% of the variation in the self-management factor.

From Table 4.11, it is evident that religious identity (B= .006, p= .030), supernatural aetiological factor (B=.096, p= .044), stress factor (B=.356, p= .000) and the God related aetiological factor (B= -.198, p= .000) were all significant predictors of the self-management factor. The strongest predictor of the self-management factor was the stress factor with an effect size of 0.307 suggesting that participants who perceive stress as the cause of MDD believe that self-management is effective as care and management of MDD. The second strongest predictor was the God related aetiological factor which has an effect size of 0.290. The direction was reversed which means that in this sample, participants who cite God related reasons for MDD do not believe in the self-management of MDD. The third predictor was the supernatural causes of MDD factor with an effect size of 0.152. This suggests that participants who believe in the supernatural causes of MDD favour self-management for MDD. The last predictor was religious identity which had an effect size of 0.141 which suggests that in this sample, the more religiously inclined people are, the more likely they are to resort to the self-management of MDD.

Table 4.11

Multiple regression analysis exploring the role of religious identity, self- rated knowledge of MDD, attitudes towards MDD and all four aetiological factors of MDD in predicting the Self-management factor

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	2.371	.440		5.386	.000
	Religious identity	.006	.003	.141	2.181	.030*
	Knowledge of depression	.000	.037	.000	.008	.994
	Attitudes towards MDD	9.596E-5	.005	.001	.019	.985
	Causes- supernatural	.096	.048	.152	2.021	.044*

	Causes- stress	.356	.071	.307	4.997	.000*
	Causes- biological	-.064	.049	-.080	-1.305	.193
	Causes- God related	-.198	.053	-.290	-3.710	.000*

*p< 0.05

4.8.6 Religious help factor

The overall model obtained to explore this question was significant (F (7, 252) = 18.613 p= .000, R^2= .341). This model explained 34.1% of the variation in the religious help factor.

Religious identity (B= .023, p= .000), stress aetiological factor (B= 0.147, p= .042) and the biological factor (B= .125, p= .012) were all significant predictors of the religious help factor as is evident from Table 4.12. However, the stress aetiological factor was just significant at p=.042. The strongest predictor was religious identity with an effect size of 0.497 suggesting that the more religiously inclined people are, the more likely they are to resort to seeking religious help. The second strongest predictor was biological reasons as perceived causes of MDD with an effect size of 0.138 which suggests that participants who perceive biological reasons for the cause of MDD are likely to seek religious help for the care and management of MDD. The final predictor was the stress factor with an effect size of 0.111 suggesting that participants who perceive stress as a cause of MDD are likely to seek religious help but this result must be interpreted with caution given the p-value as well as the small effect size.

Table 4.12

Multiple regression analysis exploring the role of religious identity, self- rated knowledge of MDD, attitudes towards MDD and all four aetiological factors of MDD in predicting the religious help factor

		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	-.025	.443		-.057	.954
	Religious identity	.023	.003	.497	8.690	.000*
	Knowledge of depression	.012	.038	.017	.325	.746

Attitude towards MDD	.005	.005	.054	.993	.322
Causes-supernatural	.024	.048	.033	.507	.613
Causes-stress	.147	.072	.111	2.043	.042*
Causes-biological	.125	.049	.138	2.536	.012*
Causes- God related	.033	.054	.042	.613	.540

*p< 0.05

Given the results of the two multiple regressions conducted, religious identity could be acting as either a mediator and/or moderator of the relationship between attitudes towards MDD and help seeking behaviours.

4.9 Does religious identity, mediate the relationship between attitudes towards people with MDD and their attitudes towards professional psychological help seeking behaviours amongst Hindu community members?

Religious identity is not a mediator of the relationship between attitudes towards MDD and help seeking behaviours as the four conditions proposed by Baron and Kenny (1986) were not met. The results of the multiple regression analysis between attitudes towards MDD and attitudes towards professional help seeking was significant; however, the rest of the conditions were not met, such as religious identity not being a significant predictor of help seeking behaviours as well as attitudes towards MDD. Additionally, according to Baron and Kenny (1986), a significant relationship should exist between the mediator and the independent variables as well as the mediator and the dependent variable. The results of the fourth step are presented below in Table 4.13.

Table 4.13

Mediator regression results exploring the role of religious identity as the mediator, self- rated knowledge of MDD, attitudes towards MDD and all four aetiological factors of MDD in predicting attitudes towards professional help seeking

	Unstandardized Coefficients		Standardized Coefficients		
Model	B	Std. Error	Beta	t	Sig.
1 (Constant)	23.923	3.355		7.130	.000

Attitudes towards MDD	.138	.035	.241	3.998	.000*
Religious identity	-.007	.021	-.021	-.349	.727

*p< 0.05

Given that religious identity was not a mediator between attitudes towards MDD and attitude towards professional psychological help seeking, this study explored whether religious identity could be acting as a moderator variable between attitudes towards MDD and help seeking behaviours as attitudes towards MDD predicted help seeking behaviours as seen in the first regression. Religious identity may alter the relationship between attitudes towards MDD and help seeking behaviours at different levels of religious identity. A final analysis will be conducted to test this assertion.

4.10 Does religious identity, moderate the relationship between attitudes towards people with MDD and their attitudes towards professional psychological help seeking behaviours amongst Hindu community members?

As can be seen from Table 4.14, both of the models obtained to explore this question were significant. From Table 4.15 it can be seen that Model 1 explained 5.1% of the variation in help seeking behaviours (F (2, 260) = 6.934 p= .001, R^2= .051). Model 2 explained 5.6 % of the variation in help seeking behaviours (F (3, 259) = 5.102 p= .002, R^2= .056). There was no significant change in variance between model 1 and model 2 (p= .235) which means that religious identity was not a moderator between attitudes towards MDD and help seeking behaviours. This can be further seen as only attitudes towards MDD (B= 0.164, p= .000) in model 1 is a significant predictor of help seeking behaviours as is evident from Table 4.16. There are no significant predictors in model 2 suggesting that religious identity does not moderate the relationship between attitudes towards MDD and help seeking behaviours.

Table 4.14

ANOVA Table from moderated multiple regression analysis exploring the role of religious identity as the moderator, self-rated knowledge of MDD, attitudes towards MDD and all four aetiological factors of MDD in predicting attitudes towards professional help seeking

Model	Sum of Squares	df	Mean Square	F	Sig.
		2	181.526	6.934	.001*

*p< 0.05

Table 4.15

Multiple regression results exploring the role of religious identity as the moderator, self- rated knowledge of MDD, attitudes towards MDD and all four aetiological factors of MDD in predicting attitudes towards professional help seeking

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.225	.051	.043	5.11639	.051	6.934	2	260	.001	
2	.236	.056	.045	5.11232	.005	1.414	1	259	.235	2.187

*p< 0.05

Table 4.16

Moderated regression results exploring the role of religious identity as the moderator, self- rated knowledge of MDD, attitudes towards MDD and all four aetiological factors of MDD in predicting attitudes towards professional help seeking

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations		
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part
1	Constant	25.274	3.279		7.708	.000	18.817	31.730			
	Attitude towards MDD	.164	.045	.224	3.655	.000	.075	.252	.225	.221	.221
	Religious identity	-.003	.021	-.008	-.128	.898	-.045	.039	-.043	-.008	-.008
2	constant	9.751	13.459		.724	.469	-16.753	36.254			
	Attitude towards MDD	.444	.240	.606	1.851	.065	-.028	.916	.225	.114	.112
	Religious identity	.170	.147	.488	1.158	.248	-.119	.459	-.043	.072	.070
	Moderator Attitudes towards MDD * Religious identity	-.003	.003	-.581	-1.189	.235	-.008	.002	.102	-.074	-.072

*p< 0.05

4.11 Conclusion

Based on the descriptive statistics discussed in this chapter, participants in this study had a moderate religious identity and generally positive attitudes towards MDD. This sample believed that stress was the main cause of MDD and that talking to their friends, family and their general practitioner would be the most beneficial in terms of care and management of MDD. Participants also had positive attitudes towards professional help seeking. Two multiple regression analyses were conducted with the attitudes towards professional help seeking as well as all the care and management factors as the dependent variables and religious identity, knowledge of MDD, attitudes towards MDD and all four aetiological

factors of MDD as the independent variables. These analyses yielded varying results. Following these analyses, religious identity was explored as both a potential mediator and moderator variable between attitudes towards MDD and help seeking behaviours. Religious identity did not mediate nor moderate the relationship between attitudes towards MDD and help seeking behaviours. These results are discussed in the next chapter.

Chapter Five: Discussion

5.1 Introduction

This chapter presents a discussion of the significant findings from the results. The primary aim of this research was to determine the relationships between the variables in this study namely, attitudes towards MDD, perceived causes of MDD, attitudes towards care and management of MDD and attitudes towards professional help seeking. There is ample research to attest to the assertion that understanding the numerous explanatory models for the causation of mental illnesses have important treatment implications (Grover, 2010; Khalsa, McCarthy, Sharpless, Barrett & Barber, 2011; Tirodkar et al., 2011). According to Kleinman's theory of explanatory models, individuals and groups may have very different conceptions of health and diseases and therefore may have different explanatory models for illnesses. Social and cultural contexts as well as prior experiences influence individuals' explanatory models which in turn influence receptivity towards preventative action and treatment seeking health behaviours. Explanatory models determine the type of healer or doctor visited, the course of treatment chosen, medication adherence, and social or spiritual activities that are believed to aid recovery (Tirodkar et al., 2011). However, explanatory models assume that people have static mental templates that provide fixed strategies for action but in reality there is an ongoing dynamic process between the broader social context, the practicalities of coping with everyday life, personality and cultural factors (Weiss, 1997).

Individuals from non-western cultures usually have a holistic conception of health and disease that incorporates spiritual aspects of disease causation in addition to biopsychosocial concepts (Tirodkar et al., 2011). This has important treatment implications. Health care professionals should seek to tailor interventions based on these explanatory models to improve treatment adherence and outcomes for non-western patients (Grover, 2010).

The results of the multiple regressions from this study may lend insight into the complicated relationship between explanatory models of depression and the preferred type of treatment for Hindus living in South Africa. There was a lot of overlap in terms of the predictors of the care and management of MDD and attitudes towards professional psychological help seeking as was evident in the results chapter. Table 5.1 presents a summary of the results of the multiple regression analyses conducted in the results chapter.

Table 5.1

Summary of multiple regression analyses of predictors and care and management factors

Predictors	Self-rated knowledge	Religious identity	Attitudes	Cause-stress	Cause-Supernatural	Cause-Biological	Cause-God related
Care and Management							
Religious help		X		X		X	
Self-management		X		X	X		X*
Institutionalisation			X*				X
Talking cure			X	X			
Clinic	X		X	X		X	
Professional help seeking			X			X	X*
Psychiatric/ psychological						X	

Note. * denotes a negative relationship

Therefore, the results of these multiple regression analyses will be discussed together with the questions pertaining to descriptive information and not as separate questions as this will detract from the complexity and interconnectedness of these factors. The overlap between the predictors and care and management factors are a common occurrence among Indian individuals as a study conducted in Vellore, India on schizophrenic patients and relatives revealed that participants frequently held multiple and contradictory beliefs about the aetiology and treatment of schizophrenia (Charles, Manoranjitham & Jacob, 2007) and it has also been noted in many studies that the majority of Indian individuals use multimodal therapies for the care and management of mental illnesses (Thara, Islam & Padmavati, 1998). This has treatment implications as there is evidence that one's beliefs about the aetiology of mental illness affects one's preference for treatment and that the treatment is rated as more helpful when there is congruency between aetiology and treatment (Iselin & Addis, 2003). However, the extent of the relationship between causal attributions and help seeking behaviours is unknown (van den Boogaard, Verhaak, van Dyck & Spinhoven, 2011). Thus,

this research begins to delineate the complex relationships between religious identity, attitudes towards MDD, perceived causes of MDD and care and management of MDD and attitudes towards professional psychological help seeking. A combination of three overarching factors predicted the type of treatment that would be sought for MDD, namely: attitudes towards MDD, religious identity and beliefs about the aetiology of MDD which will be discussed further.

5.2 Attitudes towards MDD

Attitudes towards MDD, in this study, included items to ascertain stigma such as negative stereotypical beliefs, negative emotional reactions and discriminatory behaviours towards MDD (Corrigan & Watson, 2002). Overall, participants in this study had positive attitudes towards people with depression, disagreeing with negative statements and agreeing with positive statements. Similarly, participants in a study conducted in Gujarat, India were also knowledgeable and open-minded toward depression (Liu, Tirth, Appasani, Shah & Katz, 2014). Unlike another study conducted in Gujarat, India where health workers displayed a considerable amount of stigma and misinformation about depression (Almanzar et al., 2014). Attitudes towards MDD was a significant predictor of four care and management factors, namely, the "talking cure" factor, attitudes towards professional psychological help seeking, the clinic factor and was the strongest predictor of the institutionalisation factor, although attitudes towards MDD and the institutionalisation factor were negatively related.

Individuals with negative attitudes towards the mentally ill express stigmatising views such as perceived dangerousness, incompetence, character weakness, reacting with anger or fear towards the mentally ill, and display discriminatory behaviour such as avoiding the mentally ill, withholding employment as well as withholding help (Corrigan & Watson, 2002). These negative attitudes result in a preference for institutionalisation as it has negative connotations associated with it such as being dehumanising and damaging as well as there being a lack of freedom for patients (Chow & Priebe, 2013). A preference for institutionalisation for the care and management of MDD is associated with a belief in authoritarianism that is that people with mental illness are irresponsible and therefore their life decisions should be made by others (Corrigan & Watson, 2002).

In contrast, attitudes towards MDD was positively related to the "talking cure", attitudes towards professional psychological help seeking and the clinic factor suggesting that participants who have positive attitudes towards MDD are more likely to seek professional

psychological help and the help of a GP, family and friends. Clinics are comparable to primary health care facilities which include psychological, psychiatric as well as general medical care. Clinics provide psychological, psychiatric and general medical care; therefore, this factor can be seen to include the "talking cure" factor and the psychological/psychiatric factor from this study. This is evident from the results of the multiple regression analyses as the predictors of this factor were a combination of the "talking cure" factor and the psychological/ psychiatric factor. The only difference in the predictors was the self-rated knowledge of MDD which was the strongest predictor for the clinic factor and makes intuitive sense in that individuals who perceive that they are well informed and have considerable knowledge of MDD would recommend clinics as they recognise that multiple factors contribute to the onset of depression and thus a combination of treatment methods would benefit patients. The "talking cure" factor, attitudes towards professional help seeking and the clinic factor are similar in that they involve seeking help from others and will thus be discussed holistically.

Vogel, Wade and Hackler (2007) conducted a study to investigate the effects of self-stigma on attitudes towards counselling. The results suggested that the perceptions of public stigma associated with mental illness predicted the self-stigma associated with seeking counselling. This predicted attitudes toward seeking help and willingness to seek counselling services for psychological and interpersonal concerns. Similarly, Segal, Coolidge, Mincic and O' Riley (2004), found that negative attitudes about mental illness are associated with a lower willingness to seek psychological help. Lastly, Rayan and Jaradat (2016) conducted a study in Jordan on students on stigma and attitudes towards professional help seeking. Stigma was the strongest correlate of attitudes towards professional help seeking. Stigma impedes help seeking as sufferers of mental illness feel threatened by social disapproval and reduced self-esteem as a result of being labelled as mentally ill which has far reaching negative consequences (Corrigan, 2004) and is thus consistent with the extensive literature on stigma as a barrier to help seeking. Family and social networks, in the Hindu culture, are seen as crucial sources of support in times of distress and are preferred over external sources as this is usually construed as being self-serving and disrespecting the family because of the stigma implications associated with mental illness (Segal, 1998). However, mental illness may be hidden from friends and family in the event that the sufferer perceives public stigma as being rife thus resulting in an internalisation of this stigma preventing help seeking behaviour. Thus attitudes towards MDD predicted the "talking cure" factor. Similarly, in a study conducted in

Australia on the views of seeking help from friends and family for depression, the respondents identified both positive and negative aspects of seeking help from friends and family. The positive aspects included social support, emotional support, informational support and accessibility of support. Negative aspects included stigma and inappropriate support such as stigmatising responses, anticipated stigma and self-stigma. These types of stigma would prevent an individual from seeking help from their friends and family (Griffiths, Crisp, Barney & Reid, 2011). Thus, in line with this study, it is important to have positive attitudes towards MDD before help from family and friends may be sought. In summary, although attitudes towards MDD predicted the majority of the care and management factors such as "talking cure" factor, attitudes towards professional psychological help and the clinic factor and was related negatively to the institutionalisation factor, it did not predict religious help and the self-management factor which were predicted by religious identity, which was the other overarching factor that predicted the preferred type of care and management. Previously assumed to mediate or moderate the relationship between knowledge, attitudes and perceptions of MDD and help seeking behaviour, religious identity may have a different relationship to the pathways to help seeking behaviours which will be discussed.

5.3 Religious identity

Religious identity did not mediate nor moderate the relationship between attitudes towards MDD and attitudes towards professional psychological help seeking; however, it did have a positive relationship with both the religious help factor and the self-management factor. Religious identity was the strongest predictor of using religious help for the care and management of depression suggesting that the more religiously inclined people are, the more likely they are to resort to seeking religious help. Religious identity was the weakest predictor of the self-management factor. Religious help in the context of this study included consulting with a priest or another local religious elder, using holistic treatments and praying to God. Those who identify strongly with Hinduism, perceive this group membership as being an integral part of their self-concept (Ysseldyk et al., 2010). Thus, this identity would motivate and shape the beliefs and behaviours of these individuals (Alwin et al., 2006). Individuals that have a strong religious identity would thus use religious coping mechanisms which include the belief systems associated with the religion or religious practices which help to maintain mental health in times of distress (Behere, Das, Yadav & Behere, 2013). The last

overarching factor that predicted the different types of care and management factor was beliefs about the aetiology of MDD and will be discussed next.

5.4 Beliefs about the aetiology of MDD

5.4.1 Psychosocial stress and biological causes of MDD

The participants in this study identified stress and biological reasons as the two main causes of MDD. Similarly, psychosocial stress, such as job or family issues, have been emphasised as a cause of depression over any other cause in reviews conducted by Angermeyer and Dietrich (2006) and Hagmayer and Engelmann (2014). Studies conducted in developing countries have consistently shown that participants favour socio-psychological beliefs over biomedical models (Swami, Loo & Furnham, 2010). Similarly, participants in a study conducted by Nieuwsma and Pepper (2010), endorsed biological reasons for depression as much as psychosocial reasons. This suggests that both aetiological models are equally accepted among lay persons and are not mutually exclusive, as was previously thought as the public may view these aetiological explanations as complementary. In a review conducted by Hagmayer and Engelmann (2014), to compare perceived aetiologies and treatment preferences of depression between western and non-western cultural groups, it was found that there was agreement between cultural groups with respect to psychological and environmental factors but there was significant variation between the non-western cultural groups and the western groups regarding supernatural causes as the supernatural causes were mostly culture specific. The aim of the review was to determine the relationship between causal beliefs and decision making in different cultural groups. Good agreement between causal beliefs and treatment preferences was found for the western groups but not for non-western cultural groups as the results were mixed and thus there appears to be other factors apart from causal beliefs that impact the type of treatment sought (Hagmayer & Engelmann, 2014).

Two predictors, namely, stress and biological causes of MDD were predictors for many of the care and management factors. The stress causal factor consisted of many types of stress such as family, financial, external stress, substance abuse and personal weakness and as such, it was a predictor of the self-management and the religious help factor as well as the talking cure and the clinic factor. This was similar to the biological causes of MDD which predicted religious help, psychological/psychiatric help, attitudes towards professional help seeking and

clinical factor. The biological causes of MDD factor included brain dysfunction, chemical imbalance and genetic inheritance.

Stress and biological causes as predictors of four of the care and management factors may be interpreted as the proclivity of non-western individuals to seek different modes of treatment due to the availability of parallel access to different forms of care resources such as religious, traditional, medical resources and social networks (Thara & Padmavati, 2010) or because of other factors such as negative attitudes towards help seeking, concerns about money, transport and confidentiality (Gulliver et al., 2010). The sociocultural milieu also influences treatment seeking behaviour patterns as the main sources of information about the causes of mental illnesses and resources tend to be from social networks such as friends, relatives or significant persons in the community (Thara & Padmavati, 2010). The frequent use of multimodal therapies among Indian individuals for the treatment of mental illness is said to be informal with no apparent pattern nor a concern for the different epistemologies underlying the nature of mental illnesses as was evident in a study conducted in Kerala that found that mentally ill patients had radically different experiences with Ayurveda (indigenous), allopathic psychiatric and religious healing. The different types of therapies were thought to be helpful by some patients and ineffective by others (Thara & Padmavati, 2010). The psychosocial stress factor will be discussed further.

5.4.1.1 Psychosocial stress

The stress causal factor was a predictor of the self-management and the religious help factor as well as the talking cure and the clinic factor. As mentioned before, stress as a causal factor for the development of mental illness is often overemphasised in lay persons' conceptualisation of the aetiology of mental illnesses (Srinivasan & Thara, 2001). Additionally, because this factor includes so many different types of stressors, it predicted different types of care and management for depression. Similar results were obtained in a study conducted at a South African university to investigate beliefs about the aetiology and treatment of mental illness where significant correlations were found for the relationships between aetiological and treatment beliefs. Weak positive relationships were found between stressful events and talking with friends or family for depression (Samouilhan & Seabi, 2010) similar to the "talking cure" factor in this study. The support from friends and family is seen to be important for depressed persons, even for suffers who have low intentions to seek help. Sufferers of depression often hide their emotions, therefore, friends and family are important

people to help sufferers by assisting them to realise their own illness and seek help (Hui, Wong & Fu, 2014). This was reflected in this study as the "talking cure" factor was the most recommended care and management factor. A similar result was found in another study conducted at a South African university, of which the main findings were that mental illnesses were most often conceptualised as stress-related and recommended treatments were "talking it over" rather than approaching a medical professional or taking medication (Hugo, Boshoff, Traut, Zungu-Dirwayi & Stein, 2003). A strong positive relationship was also found between belief in social factors and belief in self-help treatment (Samouilhan & Seabi, 2010) mirrored in this study as stress was the strongest predictor of self-management. A significant positive relationship was also found between belief in the social factors as aetiology for depression and the clergy and prayer as a treatment (Samouilhan & Seabi 2010). The stress aetiological factor was also a significant predictor of the religious help factor which was also found in Angermeyer, Breier, Dietrich, Kenzine & Matschinger (2005). Following psychosocial stress, biological reasons were the second choice for the cause of MDD and will be discussed next.

5.4.1.2 Biological causes

The biological aetiological factor was a significant predictor of the religious help care and management factor, this is surprising given that the biological aetiological factor is part of the biomedical model of mental illness and, generally, individuals who have biological explanations for the aetiology of mental illness are more likely to seek biologically focused treatments such as psychiatrists, prescription medication, mental hospitalisation, and doctors (Kuppin & Carpiano, 2006). This was evident in the results as biological causes predicted the psychiatric/psychological factor and attitudes towards professional help seeking as well as the clinic factor. Similarly, in a study conducted on students in the US, endorsing the biological factor was associated with greater help-seeking behaviour and an increased belief in the effectiveness of psychotherapy as a treatment for MDD. It was also associated with positive beliefs about depressed individuals such as less of a belief that depressed people are to blame for their condition (Goldstein & Rosselli, 2003). Similar results were once again found in the South African study in that the more the participants believed that chemical imbalances were to blame, the more they would propose medication as a viable treatment option for depression. However, a moderate negative relationship was found between chemical imbalances and psychotherapy. Thus the students did not believe in psychotherapy when the aetiological factor was chemical imbalance but did believe in psychotherapy when stressful

events were the causal factor (Samouilhan & Seabi, 2010). People who gave a biological cause for schizophrenia were almost 13 times more likely to seek professional medical help than those who gave other reasons for mental illness in a study conducted in Pakistan (Zafar et al., 2008). However, the results found in this study, that the biological aetiological factor was a significant predictor of the religious help factor may be explained as follows: according to Thara and Padmavati (2010), the frequent use of religious or traditional treatment for mental illness has been documented in research throughout the years due to sociocultural explanatory systems. This system underpins this phenomenon as it allows for the coexistence of many different explanations of mental illness at the same time and also allows for the evolution of these explanations. Therefore, it allows for the huge overlaps between aetiological explanations and treatment preferences for mental illnesses. In a study conducted in India, it was found that it is common practice to visit traditional healers first, not only for mental and physical illness but also for help with general life problems (Schoonover et al., 2014). This leads to supernatural and God-related causes of MDD which will be discussed next.

5.4.2 Supernatural causes and God-related causes of MDD

The participants in this study were neutral towards supernatural causes as the aetiology of MDD and disagreed that God-related reasons could cause MDD as evident from the means of these factors. This was similar to the results of studies conducted in India where supernatural causes were not attributed to mental illnesses (Srinivasan & Thara, 2001; Kermode, Bowen, Arole, Joag & Jorm, 2009). However, the self-management factor and religious help were preferred second and fourth respectively for the care and management of MDD. This seeming paradox is similar to a study conducted in India on the relatives of schizophrenic patients where the results indicated that even though the participants did not believe in the supernatural causes of schizophrenia, magico-religious treatment was sought (Kulhara, Avasthi & Sharma, 2000).

5.4.2.1 Supernatural causes

Supernatural causes was only a predictor of the self-management factor. The self-management factor included items asking whether depression can be treated outside a hospital and whether the majority of people with depression recover; this factor has not been explicated and thus may include aspects that have not been asked such as questions regarding the use of other types of faith healers, such as *tantriks* (individuals who conduct practices

based on holy Sanskrit texts) and *ojhas* (low caste males that perform divination and exorcism based in folk practices) (Salve, Goswami, Sagar, Nongkynrih & Sreenivas, 2013). Considering that supernatural and God related causes were predictors of the self-management factor, this factor may have inadvertently included these aspects as supernatural causes did not predict any of the other factors. Supernatural causes was a positive predictor of self-management which is similar to a comparison study conducted in East London on four different types of ethnic outpatients with schizophrenia. The four groups were: Bangladeshis, Whites, African- Caribbean and West Africans on explanatory models of mental illness. Bangladeshis, who cited supernatural causes more frequently, either wanted alternative forms of treatment such as religious activities or no treatment at all (McCabe & Priebe, 2004). Participants, in a study conducted in Delhi, believed that supernatural causes of mental disorders such as spirit possession may be treated by *tantriks* and *ojhas* but religious practices and rituals such as *hawans* (sacred fire ceremony) and *poojas* (prayer ritual to worship God) are used to remove bad effects (Kishore, Gupta, Jiloha & Bantman, 2011). This concept was not elaborated upon in the study. Thus this indicates that there is a difference between seeking religious help in the form of religious leaders and practices and seeking help from faith healers such as *tantriks/ojhas* for specific perceived causes of MDD (Salve et al., 2013). This may explain the relationships in the next factor which is the God related causes of MDD.

5.4.2.2 God related causes

The negative relationship between God related causes of MDD and self-management may be explained by the fact that causes such as *karma*, a test of strength from God and God's punishment may not be removed by faith healers but by conducting religious rituals and practices, hence religious identity strongly predicted religious help and only weakly predicted self-management. God related causes predicted both attitudes towards professional psychological help and the institutionalisation factor. God related causes and attitudes towards professional psychological help seeking were negatively related unlike God related factors and the institutionalisation factor which were positively related. This suggests that in this sample, participants who perceive God related reasons as the cause of MDD were more likely to favour institutionalisation and those that do not perceive God related reasons as causing MDD favour attitudes towards professional psychological help seeking for the care and management of MDD. This was similar to a study conducted in South Africa on mental illness, specifically for schizophrenia, the most significant correlation was a positive

relationship between belief in spiritual forces and belief in hospitalisation as a treatment. According to the authors, this could be seen as a belief in the power of authority such as the ancestors, God or medical personnel (Samouilhan & Seabi, 2010). The relationship between God related factors and attitudes towards professional help seeking was similar to a study conducted in Macao, China, to investigate the relationship between traditional Chinese beliefs related to the aetiology of mental disorders and help-seeking attitudes among elderly participants. The relationship between traditional Chinese aetiology beliefs and attitudes towards mental health help seeking was explored using correlation and a significant negative correlation was indicated (Found, 2016). The author hypothesised that individuals who endorse traditional Chinese aetiology beliefs may view mental illness and help seeking as more stigmatising than others who endorse a biological model which would lead to less professional help seeking. These traditional Chinese understandings of mental illness tend to blame the individual for the illness which promotes higher levels of stigma and thus acts as an inhibitory factor for professional psychological help seeking (Found, 2016).

5.5 Conclusion

The key finding from this study was that even though religious identity did not mediate nor moderate the relationship between attitudes towards MDD, perceived causes of MDD and care and management of MDD and attitudes towards professional psychological help seeking, it does play a role in the preference of religious help and self-management for the care and management of MDD. Attitudes towards MDD predicted the “talking cure” factor, attitudes towards professional psychological help as well as the clinic factor and was negatively related to the institutionalisation factor. These results are interesting in that there seems to be a mutually exclusive relationship between religious identity and attitudes towards MDD as religious identity predicted two of the care and management factors and attitudes towards MDD predicted the other four factors. These results may be indicative of the differential mediating role of stigma on help seeking behaviours that was also evident in the study conducted by Vogel et al. (2007). The considerable overlap evident in the results points to the multiple causal and treatment beliefs for mental illness consistent with many studies (Thara & Padmavati, 2010; Hagmayer & Engelmann, 2014) and points to the recognition that multiple factors contribute to depression (Goldstein & Rosselli, 2003). Overall, studies on attitudes towards mental illness suggest that the public is well informed and may not always have negative attitudes towards people with mental illness. There is also a noticeable growing trend in recent years such that folk conceptions of mental illness such as God's punishment

and that mental illness is untreatable are being replaced by scientific explanations. This phenomenon has usually been explained by attributing these trends to social desirability, acculturation and globalisation (Srinivasan & Thara, 2001; Halliburton, 2005). According to Charles et al. (2007), the conceptualisation of mental illness and the resulting search for diverse treatments may be advantageous from an evolutionary perspective as it allows patients to seek treatment from diverse sources of healing. Similarly, Goldstein and Rosselli (2003) have noted that the endorsement of different aetiological models have differing stigma implications resulting in both positive and negative outcomes. Perfect synchrony between aetiological beliefs and preferences for treatment were not found in this study, as evident from the low percentage of variation explained by the independent variables which reflects the combination of complex psychological, behavioural and cultural factors that impact beliefs about mental illness and the resulting pattern of interventions sought (Banerjee & Roy, 1998). Even though Charles et al. (2007), has provided an apparent advantage of holding diverse and sometimes contradictory beliefs simultaneously, these may result in the delay of early recognition of mental illness, prevent and interfere with medication compliance and follow up; thus resulting in poor outcomes (Joel et al., 2003) which subsequently leads to a poorer prognosis, higher burden on society and a higher cost of the disease (Zafar et al., 2008). These findings bring to light the inherent complexity of these issues and highlight the need for further research in this area which will be discussed next.

Chapter Six: Limitations and Recommendations for future research

6.1 Introduction

This study explored the relationships between religious identity, attitudes towards MDD, perceived causes of MDD and care and management of MDD and attitudes towards professional psychological help seeking. Even though the results of this study failed to identify religious identity as a mediator or moderator variable, there were other significant results that will contribute to the cross-cultural psychological research field by enhancing the understanding of the conceptualisations of mental illness in non-western cultures, specifically Hinduism. These preliminary findings may be used towards developing an understanding of indigenous approaches to mental illness and eventually incorporating this into mainstream understandings. Research into the relationship between causal attributions and resulting treatment preferences is currently sparse (Iselin & Addis, 2003; Zafar et al., 2008 Chakraborty et al., 2013) and thus this research contributes to this field by attempting to examine the complex relationships between religion, attitudes and perceptions, causal attributions and treatment preferences in the Hindu community. However, this research was not without flaws. The limitations of this study are presented in terms of conceptual and methodological limitations followed by recommendations for future research.

6.2 Conceptual limitations

The overarching conceptual limitation in this study is that the current models of mental illnesses are based predominantly on western philosophical systems. These western models fail to adequately account for cultural beliefs and fail to take into account the psychological needs and experiences of people from different cultural backgrounds (Mkhize, 2004). There is also a shortage of studies in this field relating to attitudes towards MDD, religious identity and attitudes towards professional psychological help seeking behaviour in the Hindu population and, specifically, in South Africa. This was a limitation as this affected the conceptualisation of the study in that there weren't many scales that measured these variables and not much research that could be used to base the current study on which affected the operationalization of the study. The lack of studies and the lack of distinction between religions also influenced the degree to which the results attained in this study could be discussed in an effective manner by locating it in existing literature.

Currently, there are a few quantitative research studies conducted with the variables of interest in this study and on the population in question; therefore, attitudes towards mental

illness in general was used to discuss the results on MDD. This is not ideal as MDD is seen as being different to other mental illnesses in the Hindu religion and in the general public (Angermeyer & Dietrich, 2006). MDD is seen as being an essential part of realising the true nature of this world which is said to provide a spiritual awakening (Gardiner & Kosmitzki, 2011); whereas other mental illness are seen as spirit possession or a violation of religious principles (Ramisetty- Mikler, 1993). This affected the conceptual framework that was used to understand both MDD and mental illness as the results may have differed if the questionnaire asked about mental illness in general. More qualitative studies have been conducted (Thara et al., 1998; McCabe & Priebe, 2004); however, the extent to which these studies may be used to contextualise quantitative studies is limited due to the difference in paradigms.

6.3 Methodological limitations

One of the methodological limitations of this study was the size of the sample. The sample size was too small which could have been due to the time constraints of the study and also perhaps due to the unwillingness of individuals to participate in the study. This may have been the reason for the low response rate and can be attributed to the fact that MDD and religion can be seen as sensitive topics and may have been avoided by individuals. This may be particularly true for the Hindu community in this study as mental illness stigma is said to be rife in this group of people and thus, to avoid reporting these views, they may have chosen not to respond to these sensitive questions. Highly sensitive behavioural and attitudinal items are more susceptible to response effects than items of a less sensitive nature (Barnett, 1998). Sensitive questions affect survey outcomes in three ways. These are response rates, item non-response rates and the accuracy of the responses (see Tourangeau & Yan, 2007).

The time constraint that is inherent in a study for completion for degree purposes was the reason that more participants could not be located to participate in this study. Specific statistical analyses on different groups, such as language groupings, education and gender, could not be conducted due to the small numbers of participants in each group. This affected the extent to which the results could be analysed to determine the impact that the various groupings have on attitudes towards MDD and help seeking.

There were twice as many participants who completed the online version of the questionnaire than the hard copy and this is indicative of a sample bias in that individuals who complete online questionnaires differ to those that complete hard copies in important ways. Those that

answer online surveys are usually more experienced internet users, computer literate and are usually younger and from households with fairly high incomes compared to those that answer hard copies of the questionnaire (Andrews, Nonnecke, & Preece, 2003). Thus, economics, age and ethnicity have been shown to produce gaps between online and offline populations (Andrews et al., 2003). These factors may explain why relationships between certain variables were not attained as the demographic estimates were not consistent between online and offline populations (Andrews et al., 2003). The questionnaire was also aimed at a certain group of individuals in terms of religious beliefs and attitudes towards MDD, and it is unlikely that the sample attained was the sample sought. The participants who answered the questionnaire online may have also perceived the least stigma and felt the most safe when answering the questionnaire because of the anonymity of online completion. A reason for the imbalance in the number of responses between online and hard copy questionnaires is that more people received a link to respond online whereas less people were approached to fill out hard copies. Since more people completed online questionnaires, it is unlikely that this sample is representative of the Hindu population in South Africa. Thus the results cannot be generalised to the community at large but can be used as a preliminary understanding of the complexities underlying the relationships between the variables.

There were twice as many female respondents than male respondents which is common in psychological studies and in particular this sample as women are responsible for propagating traditions and rituals in the household and are therefore more connected to issues surrounding Hinduism (Gopal et al., 2014). This influenced the results as perceptions and attitudes towards MDD, causes of MDD and help seeking behaviour may differ across gender.

Most of the participants (70.8%) were from the Gujarati vernacular grouping; this is a sample limitation and was due to the fact that the researcher is Gujarati and that potential participants were contacted by means of snowball sampling. The researcher did attempt to contact people with access to Hindu individuals from different language groupings but this was unsuccessful.

The results attained in this study are based on self-report responses which could mean that there is a discrepancy between actual attitudes and reported attitudes towards MDD and help seeking behaviour. This means that the participants may not actually seek professional psychological help and because the information sheet attached to this questionnaire stated that the researcher was completing a psychology degree, it could have biased the responses

whereby participants acted on a social desirability bias which would lead them to respond positively to psychological help seeking.

There were a large number of neutral responses for every scale in the questionnaire which affected the analysis of the data. The purpose of a midpoint, in this case the neutral, is for participants to express their ambivalence towards a specific subject, yet it has been used for many reasons in psychological studies which will be discussed. The vast majority of no opinion responses are not due to a lack of opinions or attitudes but occur when there is genuinely no opinion, ambivalent attitudes, social desirability and satisficing (Korsnick, 2002).

Social desirability, defined as a response style, is the tendency of some respondents to answer questionnaires in terms of what they deem to be socially desirable answers as opposed to their true answer thereby minimising the chance of being evaluated negatively. Social desirability is said to occur at the last stage of cognitive processing before the response is communicated to the researcher (Johnson & van der Vijver, 2003).

Ambivalence is an important component of attitude strength. Attitude strength refers to the extent to which an attitude is consequential. Respondents who have highly ambivalent attitudes often select the scale midpoint (Eaton & Visser, 2008). There are three types of ambivalence in attitudinal research. These are cognitive ambivalence, affective ambivalence and cognitive-affective ambivalence. Cognitive ambivalence is having beliefs about a subject that are associated with inconsistent evaluations. Affective ambivalence exists when positive and negative emotions are harboured at the same time. The third type, affective cognitive ambivalence, consists of positive affect combined with negative cognitions, or vice versa (Jonas, Broemer & Diehl, 2000).

Another reason for no opinion responses is satisficing. This concept will be introduced briefly. There are four stages of cognitive processing that respondents use when answering a survey optimally. The first stage is the interpretation phase; respondents must interpret the intended meaning of the questions. The second stage involves memory where respondents must search their memories for the relevant information. The third stage is the integration stage, respondents must integrate the information retrieved from their memory into a summary judgment and lastly, the fourth stage requires respondents to map these summary judgments onto the response options that have been provided (Tourangeau, 1984).

Completing these stages diligently when answering a survey is called optimising (Krosnick, 1991). If these stages are not followed and respondents choose to answer the questions in a perfunctory manner by skipping stages it is called satisficing (Krosnick, 1991). Some respondents do not intend to optimise right at the beginning of the questionnaire but some intend to expend the effort and optimise but their motivation decreases as the questionnaire progresses. There are many reasons for the decrease in motivation such as a long questionnaire, questions that are difficult to comprehend and respondents may start experiencing feelings of fatigue, being distracted and they may even lose interest in answering the questions but they are nevertheless expected to complete the questionnaire. At this point, some respondents may continue to optimise whereas other respondents choose to satisfice that is, answering questions in a cursory fashion thereby expending less mental effort by not following the stages of cognitive processing necessary for the optimal response strategy (Krosnick, 1991). Optimising and satisficing are placed on a continuum thus indicating the degree of thoroughness and bias in retrieval and integration, optimising represents complete thoroughness in the retrieval and integration stages and satisficing represents no retrieval or integration (Krosnick, 1991).

There are many forms of satisficing that take place that can be grouped into weak satisficing and strong satisficing. Weak satisficing occurs when all the stages of cognitive processing are performed but one or more of these stages are performed carelessly, such as agreeing with any assertion made and selecting the first response that seems reasonable. Strong satisficing occurs when respondents skip stages and choose answers at random or identify plausible answers based on cues in the question without reference to any internal psychological cues that are directly relevant to the belief and attitude being asked about. This allows these respondents to answer questions with little to no cognitive effort. Examples of strong satisficing are endorsing the status quo, non-differentiation in using rating scales, saying that they don't know the answer to the question and lastly, randomly choosing an answer. Satisficing is a function of three conditions, namely ability, motivation and task difficulty (Krosnick, 1991).

There is also some research to suggest that Asian participants avoid extreme answers and prefer midpoint responses which is culturally based on being a part of a collectivist culture that emphasises harmony and not individual opinions. Therefore, participants from the Asian culture would prefer neutral responses as opposed to extreme responses as a way of avoiding conflict (Wang, Hempton, Dugan & Komives, 2008). Due to the large percentage of neutral

responses, it is unclear as to what the true attitudes and perceptions towards MDD, aetiological factors, care and management and attitudes towards professional help seeking are. Thus, these neutral responses may be concealing the true opinions of this group and further research needs to take this phenomenon into account.

A moderate religious identity was found in this sample and individuals with a very high or very low religious identity did not participate. This could be because of individuals from both extremes being reluctant to participate or it could be because of the nature of the self-report format of the questionnaires. The responses may have been biased because of this as participants may be responding in a socially desirable manner due to the sensitive nature of the questions being asked, satisficing, or the Asian preference for midpoint responses.

Another limitation of this study was that participants were not asked to give reasons for their answers which affected the extent to which the researcher could interpret the results and thus the conclusions made. The elaboration of responses would be useful in this field of research as there are very complex relationships between religions, beliefs about mental illness and help seeking. Due to the paucity of literature in this field, qualitative exploration would have enhanced the understanding of the relationship between the variables.

The instruments used in this study may be another methodological limitation. Firstly, the instruments were not validated in this population which limits the extent to which the results can be interpreted. Secondly, there was no acculturation scale in this study. Additionally, these scales may not have adequately operationalized the variables in this study which may have affected the results and the interpretations made. Taking these limitations into account, recommendations for future research have been provided.

6.4 Recommendations for future research

Firstly, the researcher recommends a larger sample size which could be more representative of the population under study. The larger sample size would also be useful to understand the complex relationships between the variables in this study. Statistically, increasing the sample size would increase the power of the results which would enable the researcher to detect subtle differences in the relationships between the variables by using different statistical techniques.

A more representative sample would include an equal and greater number of participants from different educational levels and socioeconomic statuses, a more even gender split and

participants from more geographical areas in South Africa as well as participants of differing ages. A varied sample is also recommended by recruiting Hindu people of different language groupings to assist with data collection. This would enable a clearer understanding of the relationship between the variables and how this relationship may differ amongst different groups in the Hindu community. Gender, educational level, socioeconomic status (Das & Phookun, 2013) and age (McClelland, Khanam & Furnham, 2014) have shown to impact knowledge, attitudes and perceptions towards mental illness. This diversity would enable the researcher to determine the impact of these demographic factors on the results.

Altering the response format of the questionnaire could prove useful by removing the neutral option in the Likert scale, this is recommended by Johns (2005). This would avoid the difficulty with too many neutral responses.

The use of vignettes describing MDD could enhance the responses provided by participants by focusing on specific scenarios which would provide a common point of reference for all participants yielding more varied answers and reduced social desirability due to the framing of questions in the third person which would allow participants to unconsciously project when answering questions.

Acculturation may be defined as the process by which an individual from a minority cultural group adapts to the values, behaviours, norms and lifestyle from the dominant culture in which they live (Kim, 2007 as cited in Kim, 2007). Thus, an acculturation scale could also be included with the other scales in this study, this would serve to measure the level of acculturation amongst individuals in the Hindu community in South Africa which could shed some light on the level of acculturation and see if this influences beliefs and perceptions with regard to MDD and mental illness in general. This variable may in fact be the “missing link” that may be acting as a moderator or mediator variable.

Adding a separate scale measuring various aspects of stigma would also be useful as there were only a few questions in this study asking about stigma. Stigma plays an important role in determining the methods of help seeking used by individuals from the Hindu community and the general population and it is seen as one of the biggest barriers to seeking professional psychological help. These concepts are vital in studies about perceptions of mental illness and help seeking behaviour and should have been included to ascertain the impact of these concepts on the other variables.

A similar study that focuses on mental illness as a whole and not MDD specifically may also prove useful as most of the studies that are available are based on mental illnesses and this may be more informative than just measuring variables on MDD as this may provide holistic information on the treatment of mental illnesses in this population.

Mixed method studies would be valuable in this field as there has been a scarce amount of research conducted in this population regarding MDD and attitudes towards professional psychological help seeking. A mixed method study would allow participants to explain the subtle complexities that are present around religious identity, attitudes towards MDD and attitudes towards psychological help seeking and they could also provide insight into the low response rate as well as any other any concerns they may have had with answering the questionnaire.

Lastly, a large scale multi-factorial quantitative study would also be beneficial to this field of research. This study could include measuring all of these variables on participants from different religious and indigenous groups in South Africa. This would allow for comparisons to be made between these groups and certain trends could be discovered which would assist in gaining a deeper understanding of the best possible way to treat these groups as well as to enhance African models of mental illness in South Africa. The use of a comprehensive model to understand the relationship between religious identity, attitudes towards MDD, aetiological beliefs, care and management and attitudes towards professional help seeking would be useful to represent and explain the complex relationships between these variables.

Overall, the literature appears to be inconsistent and sometimes contradictory regarding the attitudes towards mental illness, causal attributions and help seeking behaviours (Hagmayer & Engelmann, 2014) and thus further research needs to include rigorous methodology to investigate the complex relationship between culture, attitudes towards mental illness and subsequent help seeking behaviour as there may be alternate explanations for the results of this study and all the other studies.

6.5 Concluding comments

This study aimed to elucidate the relationship between religious identity, attitudes towards MDD, perceived causes of MDD, care and management of MDD and attitudes towards professional help seeking behaviour. Overall, participants had positive attitudes towards MDD. The participants in this study identified stress and biological reasons over supernatural or God related understandings for the aetiology of depression. The participants identified the

"talking cure" factor and the self-management factor as being the most beneficial for the care and management of MDD, followed by the psychiatric and psychological factor and the religious help factor. The clinic factor and the institutionalisation factor were seen as the least helpful sources of care and management for MDD. The multiple regression analyses revealed overlaps between the predictors and care management factors, pointing to the multiple causal and treatment beliefs for mental illness. Significant relationships were found between attitudes towards MDD, perceived causes of MDD, care and management of MDD and attitudes towards professional psychological help seeking which were discussed. The conceptual and methodological limitations were discussed followed by recommendations for future research. Further research in this field is required to expand on these preliminary results which could provide valuable information towards developing an understanding of indigenous approaches to mental illness and could eventually incorporate these into mainstream understandings which would have treatment implications for the Hindu community in South Africa.

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Appendix A: Ethical clearance

Appendix B: Participant Information sheet

Psychology
School of Human & Community Development
University of the Witwatersrand
Private Bag 3, Wits, 2050
Tel: 011 717 4503 Fax: 011 717 4559

Dear Sir/Madam

Good day! My name is Binita Daya. I am studying towards a Master's degree in Research Psychology at the University of the Witwatersrand. Part of my degree involves the completion of a research project. I am working in a broader project on cultural perceptions of illness and my project focuses on depression. I would like to invite you to participate in my study. Participation in this study will require you to fill out a questionnaire which will take approximately 30 - 45 minutes to complete.

Participation in the study is voluntary and there are no advantages or disadvantages for participating in the research. Your responses will remain confidential and anonymity is guaranteed. At no time will we know who you are, since the questionnaire requires no identifying information. Should you choose not to participate, this will not be held against you in any way. As I will only focus on group trends and have no way of linking any individual's identity to a particular questionnaire I will not be able to give you individual feedback.

A summary of the results of the study can be requested by contacting me telephonically or sending me an email about 6 months after the completion of this questionnaire. The findings of the study will be reported in a research report and may also be used in conference presentations and academic articles. The questionnaires from this study will be kept in a locked cupboard at the university for five years and will be destroyed thereafter. The results from the online questionnaires and the raw data will be stored in a password protected computer at the university thus ensuring the safety and confidentiality of your responses.

Thinking about depression can sometimes be difficult, so if you feel vulnerable or stressed after answering the questionnaire or if you know of a friend who may need assistance please call any of the free counselling services listed below.

- The South African Depression and Anxiety Group - 0800 567 567
- Hindu Helpline - 011 854 9890

If additional information is required please do not hesitate to email me. My contact details and my supervisor's details are provided below. Return of the completed questionnaire will be taken as consent to use your responses in my study. Please detach and keep this sheet for future reference. Thank you for taking the time to read this.

Binita Daya
binitadaya@gmail.com

Prof Sumaya Laher
sumaya.laher@wits.ac.za

Appendix C: Questionnaire

Demographic Information

1. Age: _____

2. Gender: MALE FEMALE

3. Population Group (Required for purpose of research and is not intended to offend any participant):

WHITE INDIAN AFRICAN COLOURED OTHER

If other, please specify: _____

4. Home language:

ENGLISH GUJARATI HINDI TAMIL

TELEGU OTHER

If other, please specify:_____

5. Highest Level of Education:

SOME HIGH SCHOOL GRADE MATRIC UNIVERSITY DEGREE OTHER POST MATRIC QUALIFICATION

OTHER

If other, please specify: _____

6. Religious Affiliation:

CHRISTIANITY HINDUISM ISLAM JUDAISM

TRADITIONAL AFRICAN RELIGION OTHER

7. Which vernacular grouping do you identify with?

GUJARATI | HINDI | TAMIL | TELEGU

OTHER

If other, please specify: _____

8. Do you know anyone suffering from Clinical Depression?

YES | NO

9. Has anyone in your family been diagnosed with Clinical depression?

YES | NO

Please specify: _____

10. Have you been diagnosed with Clinical Depression?

YES | NO

Please specify: _____

11. How would you rate your knowledge of depression? With 1 being 'no knowledge' and 5 being 'extensive knowledge'?

1 2 3 4 5

	Religion means different things for different people. Please cross (x) the one number for each question that comes closest to reflecting your opinion about it.	Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
1	I try to see how God might be trying to strengthen me in all situations.	1	2	3	4	5
2	I seek God's love and care.	1	2	3	4	5
3	I stick to the teachings and practices of my religion (eg. Doing my duty, fasting on specific days)	1	2	3	4	5
4	I ask for forgiveness for my sins.	1	2	3	4	5
5	I try to put my plans into action together with God.	1	2	3	4	5
6	I do what I can and put the rest in God's hands.	1	2	3	4	5
7	I look for a stronger connection with a higher power.	1	2	3	4	5
8	I practice psychophysical exercises such as yoga and meditation.	1	2	3	4	5
9	I look for a total spiritual awakening.	1	2	3	4	5
10	I pray to discover my purpose in living.	1	2	3	4	5
11	I offer spiritual support to family or friends.	1	2	3	4	5
12	I believe that I am being punished for bad actions in the past.	1	2	3	4	5
13	I voice anger that God didn't answer my prayers.	1	2	3	4	5
14	I feel punished by God for my lack of devotion.	1	2	3	4	5
15	I look for love and concern from friends in the temple or in the Hindu community.	1	2	3	4	5
16	I don't do much; just expect God to solve my problems for me.	1	2	3	4	5
17	I pray and perform rituals to get my mind off of my problems.	1	2	3	4	5
18	I plead with God to make things turn out okay.	1	2	3	4	5
19	I try to make sense of the situation without relying on God.	1	2	3	4	5
20	I realize that God cannot answer all my prayers.	1	2	3	4	5
21	I seek help from God in letting go of my anger.	1	2	3	4	5
22	I disagree with what my temple wants me to believe and practice.	1	2	3	4	5
23	I read books and or attend talks to learn more about my religion.	1	2	3	4	5
24	I am a very religious person	1	2	3	4	5
25	I read the Bhagavad Gita and other religious literature regularly	1	2	3	4	5

26	I pray very often	1 2 3 4 5
27	I fast on every religious day and during the holy month	1 2 3 4 5
28	I consult a religious leader (for e.g. Guru) for advice regularly	1 2 3 4 5

	Depression like any other illness can be complicated. It can be caused by one or more factors. There are no right or wrong answers to the following questions. We are interested in your perceptions and opinions.	Strongly Disagree Disagree Neutral Agree Strongly Agree
1	Depressed persons can work	1 2 3 4 5
2	Depressed persons are usually dangerous	1 2 3 4 5
3	One can always tell a depressed person by his or her physical appearance.	1 2 3 4 5
4	People with depression are largely to blame for their own condition.	1 2 3 4 5
5	Depressed persons are not capable of true friendships	1 2 3 4 5
6	Anyone can suffer from depression	1 2 3 4 5
7	Depression is an illness like any other illness	1 2 3 4 5
8	People with depression experience aches and pains in their body	1 2 3 4 5
9	Depressed persons should be prevented from having children	1 2 3 4 5
10	Depressed persons should not get married	1 2 3 4 5
11	One should avoid all contact with depressed persons	1 2 3 4 5
12	Depressed persons should not be allowed to make decisions, even those concerning routine events	1 2 3 4 5
13	I could maintain a friendship with someone with depression	1 2 3 4 5
14	I could marry someone with depression	1 2 3 4 5
15	I would be afraid to have a conversation with a depressed person	1 2 3 4 5
16	People with depression should have the same rights as anyone else	1 2 3 4 5
17	I would be upset or disturbed about working on the same job as a depressed person	1 2 3 4 5
18	I would be ashamed if people knew that someone in my family had been diagnosed with depression.	1 2 3 4 5
19	If I was suffering from depression, I wouldn't want people to know about it	1 2 3 4 5

20	People are generally caring and sympathetic towards people with depression	1 2 3 4 5
Depression is caused by:		
21	genetic inheritance	1 2 3 4 5
22	family stress	1 2 3 4 5
23	substance abuse	1 2 3 4 5
24	financial stress	1 2 3 4 5
25	past karma	1 2 3 4 5
26	spirit possession (bhut)	1 2 3 4 5
27	the evil eye (najar) being cast upon you	1 2 3 4 5
28	black magic (jadoo)	1 2 3 4 5
29	bad things happening to you	1 2 3 4 5
30	God's punishment	1 2 3 4 5
31	a test of strength from God	1 2 3 4 5
32	external stress (e.g. crime)	1 2 3 4 5
33	brain dysfunction	1 2 3 4 5
34	chemical imbalance	1 2 3 4 5
35	personal weakness	1 2 3 4 5
36	One should hide his/her depression from his/her family	1 2 3 4 5
37	There are mental health services available in my community	1 2 3 4 5
38	Depression cannot be cured	1 2 3 4 5
39	Depressed people should be in an institution where they are under supervision and control	1 2 3 4 5
40	Depression can be treated outside a hospital	1 2 3 4 5
41	Information about depression is available at my local clinic	1 2 3 4 5
42	The majority of people with depression recover	1 2 3 4 5
43	Local clinics can provide good care for depression	1 2 3 4 5
44	If I was concerned about a mental health issue with a member of my family or myself, I would feel comfortable discussing with someone at my local clinic.	1 2 3 4 5
45	Depressed persons should consult with physicians (GP)	1 2 3 4 5
46	Depressed persons should talk to their family	1 2 3 4 5
47	Depressed persons should reconnect with their friends	1 2 3 4 5

48	Depressed persons should consult with a priest or another local religious elder	1 2 3 4 5
49	Depressed persons should pray to God	1 2 3 4 5
50	Depressed persons should seek the help of a counsellor or a psychotherapist	1 2 3 4 5
51	Depressed persons should consult with a psychiatrist	1 2 3 4 5
52	Depressed persons should take antidepressants	1 2 3 4 5
53	Depressed persons should use holistic treatments	1 2 3 4 5
54	Depressed persons should be admitted to a psychiatric hospital	1 2 3 4 5
55	It is very important for the depressed person to seek help from a professional of the same religion	1 2 3 4 5

	People seek help from different places. There are no right or wrong answers to the following questions. We are interested in your perceptions and opinions.	Strongly Disagree / Disagree / Neutral / Agree / Strongly Agree
1	If I believed I was having a mental breakdown, my first inclination would be to get professional attention	1 2 3 4 5
2	The idea of talking about problems with a psychologist strikes me as a poor way to get rid of emotional conflicts.	1 2 3 4 5
3	If I were experiencing a serious emotional crisis at this point in my life, I would be confident that I could find relief in psychotherapy.	1 2 3 4 5
4	There is something admirable in the attitude of a person who is willing to cope with his or her conflicts without resorting to professional help.	1 2 3 4 5
5	I would want to get psychological help if I were worried or upset for a long period of time.	1 2 3 4 5
6	I might want to have psychological counselling in the future.	1 2 3 4 5
7	A person with an emotional problem is not likely to solve it alone; he or she is likely to solve it with professional help.	1 2 3 4 5
8	Considering the time and expense involved in psychotherapy, it would have doubtful value for a person like me.	1 2 3 4 5
9	A person should work out his or her own problems; getting psychological counselling would be a last resort.	1 2 3 4 5
10	Personal and emotional troubles, like many things, tend to work out by themselves.	1 2 3 4 5

Thank you for participating!