The Impact of Religious Cultural and Traditional Beliefs and Superstitions in Shaping the Understanding of Mental Disorders and Mental Health Treatment among Arab Muslims

Submitted by

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A thesis submitted for the fulfilment of the requirements for the degree of Doctor of Philosophy

Victoria University, Australia

Institute for Health and Sport

June 2024

Abstract

This research explored the impact of religious, cultural, and traditional beliefs on Arab Muslims' understanding of mental disorders and their treatment, with a particular emphasis on the role of Islamic theology. Employing an exploratory sequential mixed-methods design, the study first conducted qualitative semi-structured interviews with 12 Arab Muslim participants (6 men and 6 women) to examine their mental health perspectives. Thematic analysis of these interviews informed the development of a quantitative survey, which was administered to 169 Arab Muslim participants using Qualtrics. The quantitative data were analysed using SPSS 29. The integration of qualitative and quantitative finding**s** revealed that Arab Muslim participants exhibited moderate to high levels of religiosity, which, along with their cultural and traditional beliefs influenced their mental health perceptions and treatment approaches. Notably, a discrepancy between participants' self-identification as religious and their actual religious practices suggests a cultural value placed on modesty. The preference for traditional healing practices and supernatural explanations for mental disorders indicates a strategic approach to navigating mental health stigma. Furthermore, education was identified as a crucial element in dispelling mental health misconceptions, with higher levels of education associated with a more accurate understanding of mental disorders and an increased likelihood of utilising formal mental health services. These insights highlight the challenges of integrating cultural, religious, and educational factors in shaping mental health perceptions and underscore the need for culturally and religiously sensitive mental health interventions and education. This study advocates for bridging the gap between traditional beliefs and formal mental health services to improve access and attitudes towards mental health care among Arab Muslims in Australia.

Declaration of Authenticity

"I, Abdulaziz Alqasir, declare that the Ph.D. thesis entitled 'The Impact of Religious Cultural and Traditional Beliefs and Superstitions in Shaping the Understanding of Mental Disorders and Mental Health Treatment Among Arab Muslims' is no more than 80,000 words in length, including quotes and exclusive of tables, figures, appendices, bibliography, references, and footnotes. This thesis contains no material that has been submitted previously, in whole or in part, for the award of any other academic degree or diploma. Except where otherwise indicated, this thesis is my own work. I have conducted my research in alignment with the Australian Code for the Responsible Conduct of Research and Victoria University's Higher Degree by Research Policy and Procedures."

Ethics Declaration

"All research procedures reported in the thesis were approved by the Victoria University Human Research Ethics Committee. The qualitative phase received approval for a duration of two years commencing on August 6, 2020, under application ID: HRE20-124. The quantitative phase was approved for a two-year period starting from January 18, 2023, under application ID: HRE20-144. Please refer to Appendix A."

Signature:  Date: 19/06/2024

Acknowledgments

The journey towards achieving a PhD is a monumental endeavour that, while immensely rewarding, is far from a solitary pursuit. It is the love, support, and guidance from a circle of incredible individuals that have illuminated my path to this achievement. To them, I owe my deepest gratitude.

Foremost, I express my heartfelt thanks to my supervisor, Dr. Keis Ohtsuka, for his exceptional mentorship, patience, and unwavering belief in my potential. His profound expertise and insightful guidance have been fundamental to my research and academic development. Similarly, my sincere appreciation goes to my second supervisor, Dr. Romana Morda, whose expertise, thoughtful advice, and encouragement have greatly enriched my work. Her rigorous critique and support have been crucial in overcoming the myriad challenges encountered along the way.

My journey would have been insurmountable without the boundless love and support from my family. To my beloved wife, Dr Afyaa, your sacrifice, patience, and love have been the cornerstone of my strength and perseverance. I am deeply sorry for the times I've been absent-minded or too engrossed in my work, and I thank you profoundly for your understanding and unwavering support.

To my cherished children, Dyala, Turki, and my new-born son, Fahad, your joy and unconditional love have been my sanctuary. I apologise for the moments missed and the times I was physically present but mentally distant, engrossed in my studies. Your smiles have been my greatest motivation, reminding me of the essence of my endeavours.

I extend my heartfelt thanks to my mom, whose love, sacrifices, and unwavering support have shaped the person I am today. Your strength, compassion, and wisdom have been my guiding light, inspiring me to pursue my dreams relentlessly. Following her, I am

equally thankful to my dad, whose hard work, perseverance, and belief in the value of education have been a constant source of motivation. Your example has taught me the importance of dedication, resilience, and kindness.

List of Abbreviations

- **RCIMA-CMD**: Religious Cultural Influence Model of Arab Muslims' Concept of Mental Disorders
- **ATSFMHS:** Attitude Toward Seeking Formal Mental Health Service Scale
- **CBMHP**: Cultural Beliefs about Mental Health Problems
- **DASS-21**: Depression, Anxiety, and Stress Scale-21
- **DID**: Dissociative Identity Disorder
- **DSI**: Dominant Society Immersion
- **EMA**: Ethnic Microaggression Scale
- **ESI**: Ethnic Society Immersion
- **KFFMHS**: Knowledge About and Familiarity with Formal Mental Health Services Scale
- **MRS**: Muslim Religiosity Scale
- **SMAS**: Stephenson Multigroup Acculturation Scale
- **SPSS**: Statistical Package for the Social Sciences

Publications-Journals and Conferences

Journal Articles

1- Abdulaziz Alqasir & Keis Ohtsuka (2023) The Impact of Religio-Cultural Beliefs and Superstitions in Shaping the Understanding of Mental Disorders and Mental Health Treatment among Arab Muslims, *Journal of Spirituality in Mental Health, DOI:10.1080/19349637.2023.2224778*

- Published in *Journal of Spirituality in Mental Health*, this publication is ranked as a Q1 journal in religious studies. (Scimago Journal & Ranking Report)

2- Abdulaziz Alqasir & Keia Ohtsuka (Manuscript). Spiritual or Ill? Arab Muslims' Preference for Supernatural Explanations over Mental Health Labels

- Currently under preparation for submission

Conferences Presentations

- Delivered a presentation titled ***"Beliefs and Perceptions about Mental Illness among the Arab-Muslim Population"*** at the Institute for Health and Sport (iHeS) HDR Student Conference, Victoria University. — Dec 10th 2020

- Delivered a presentation titled ***"The Impact of Cultural and Traditional Beliefs and Superstitions in Shaping Understanding of Mental Illness and its Treatment Among Arab Muslims"*** at IHeS HDR student conference, Victoria University — May 3rd 2022

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Chapter One: Introduction

1.1 Background

This thesis explores Arab Muslims' beliefs and perceptions of mental disorders and their treatment. Each culture or society has its own perspective of how mental disorders manifest and what factors may cause them. Cultural and traditional beliefs concerning mental disorders can act as obstacles, deterring individuals from seeking help or treatment from the mental health services (Chen & Mak, 2008). Cultural and religious beliefs, practices, and traditions can influence how individuals interpret and respond to mental disorders. For example, certain cultures may view mental disorders as a personal failing or a sign of weakness, while others may see it as a spiritual crisis (Satcher, 2001; Verghese, 2008). Religious beliefs may impact how individuals view mental disorders, as some religions may stigmatize mental disorders or view them as a punishment for sinful behaviour (Abu-Rabi, 1989) Cultural and religious norms may also dictate the types of help individuals seek, including whether they seek professional mental health services or rely on traditional healers or religious leaders (Whaley & Davis, 2007). It is important to note that culture and religion are not necessarily homogenous within a given community, and there may be variations in beliefs and practices even within a particular culture or religious group. However, understanding the impact of these factors on individuals' perceptions of mental disorders can help mental health care providers develop culturally and religiously responsive care practices.

Arabic cultural and traditional beliefs are deeply influenced by Islamic theology. Arab societies often use the Islamic faith to justify their cultures, traditions and customs or practices (Al-Omari, 2008). Decades ago, Abu-Rabi (1989) noted that it is impossible to

distinguish between Arab culture and Islamic culture as they are deeply intertwined and have been for hundreds of years. This intertwining is so profound that many Arab Muslims believe that no distinct Arabic culture exists independently of Islamic teachings and beliefs. They view their cultural identity as intrinsically linked to Islam, with the religious elements taking precedence over purely ethnic or national ones. This perspective posits that the core values, norms, and practices typically ascribed to Arab culture are fundamentally derived from Islamic teachings, which predominate and shape the cultural landscape (Al-Omari, 2008). As a result, when examining cultural influences, it is essential to consider these religious underpinnings because they are considered by many to be inseparable from the broader cultural identity. This belief in the primacy of Islam in shaping cultural and social practices significantly impacts how Arab Muslims perceive and engage with various aspects of life, including mental health. Thus, the proposed study focuses on exploring how this fused Islamic-Arabic cultural framework influences the understanding and treatment of mental disorders among Arab Muslims living in Australia, examining whether these cultural and religious beliefs affect their attitudes towards mental health and its treatment.

Islamic religious doctrine significantly influences the understanding and treatment of mental health issues among Arab Muslims (I. Al-Issa, 2000; I. E. Al-Issa, 2000; Bulbulia & Laher, 2013; Fakhr El-Islam, 2008; Rafique et al., 2019). This perspective is evident in numerous Arabic texts on mental health, which recognise Islamic teachings as a credible source of knowledge, offering valuable insight into mental health interventions and treatment (Sabry & Vohra, 2013) However, this deep-seated reverence for theology, religious tradition, and cultural beliefs often lead to misinterpretation of mental and psychological disorders among many Arab Muslims (Al-Krenawi & Graham, 2000; Fakhr El-Islam, 2008). As a result, many seek help from non-traditional sources, such as religious and traditional healers (Fakhr El-Islam, 2008). However, the existing research is sparse on how religion, cultural

beliefs, and perceptions among Arab Muslims influence their understanding of mental health and treatment options. Specifically, it is unclear how these factors shape their views and to what degree they adhere to these beliefs. This study aims to investigate the role of cultural norms and Islamic teachings in shaping Arab Muslims' perceptions of mental disorders. Furthermore, the research examined how these Islamic and cultural beliefs affect Arab Muslims' willingness to seek professional mental health care and their openness to different treatment methods.

1.2 Significance and Contribution to Knowledge

This study is important because it aims to provide a deeper understanding of the impact of cultural, traditional, and religious beliefs on Arab Muslims' perceptions and attitudes towards mental disorders. Mental disorders are growing concerns in Arab Muslim communities, and research has shown that cultural and traditional beliefs and superstitions play a significant role in shaping how individuals understand and seek treatment for mental disorders (Al-Krenawi & Graham, 2000, 2011; Dalky, 2012; Fakhr El-Islam, 2008).

By investigating the influence of cultural and traditional beliefs on Arab Muslims' understanding of mental disorders, this study can help mental health care providers develop culturally sensitive and appropriate care practices. The knowledge gained from this study may also be useful in designing targeted interventions to improve awareness of mental health issues and available treatment options among Arab Muslim communities.

Additionally, this research will contribute to identifying how perceptions and beliefs regarding mental health are practised and entwined in Arab Muslim culture. The study explores the ways in which Islamic teachings and religious practices intersect with cultural and traditional beliefs to shape understanding of mental disorders. This aspect of the research is particularly important, as it is currently an underexplored area in mental health research.

Furthermore, the study may help to establish the extent to which Arab Muslim communities are aware of available treatments and facilities for mental disorders. This information is crucial for developing appropriate and effective strategies for increasing awareness and improving access to mental health care services among Arab Muslim communities.

This study has the potential to contribute significantly to the body of knowledge on mental health and cultural diversity. By examining the impact of cultural and traditional beliefs on Arab Muslims' perceptions of mental disorders, this research can help to reduce stigma, improve access to care, and promote better mental health outcomes among Arab Muslim communities.

1.3 Research Questions

The primary objective of this study was to explore the role of Islamic Arab cultural and traditional beliefs in shaping the understanding of mental disorders and mental health treatment among first and second-generation Arab Muslim expatriates in Australia. Additionally, this study examined how these beliefs influence the perception of psychotherapy, mental health professionals, and psychological and psychiatric concepts within this population. To support the main research objective, the following research questions were proposed:

1. How do Islamic-Arabic cultural, traditional beliefs, and religiosity influence Arab Muslims' understanding of mental disorders, their attitudes towards mental health treatments, and the choice of healthcare services?
2. What factors contribute to Arab Muslims' willingness to seek help from formal mental health services and traditional healers, and to what extent are they informed about available treatments?

3. How does the Islamic-Arabic culture impact the perception of the effectiveness of psychotherapy and the support provided by mental health professionals, and how does it contribute to mental health stigma among Arab Muslims?

Table 1

Addressing Research Questions Through Qualitative and Quantitative Phases

Research Question	Qualitative Phase (Semi-Structured Interviews)	Quantitative Phase (Survey)
RQ1	Explore how Islamic-Arabic cultural, traditional beliefs, and religiosity influence understanding of mental disorders, attitudes towards treatment, and healthcare choices.	Quantify the influence of cultural and religious factors on attitudes towards mental health treatment and choice of healthcare services.
RQ2	Identify factors influencing the willingness to seek help from formal mental health services and traditional healers, and gauge awareness about available treatments.	Measure how strongly the identified factors predict willingness to seek help and assess the level of information about available treatments.
RQ3	Examine how Islamic-Arabic culture impacts perceptions of psychotherapy and mental health professionals and explore its contribution to stigma.	Assess the impact of cultural and traditional beliefs on the perception of the effectiveness of psychotherapy and mental health professionals and quantify their contribution to mental health stigma.

1.4 Research Hypotheses

Based on these research questions, the following hypotheses have been formulated:

H1: Higher adherence to Islamic-Arabic cultural and traditional beliefs among Arab Muslims predicts lower mental health knowledge of mental disorders and formal mental health treatments.

H2: Higher levels of education, socio-economic status, and exposure to mental health information among Arab Muslims predict more positive attitudes towards seeking help from formal mental health services.

> H2.1: Arab Muslims with higher levels of acculturation to Australian society will demonstrate a greater acceptance of mental health services and professionals.

H3: Cultural beliefs about mental health, Muslim religiosity and acculturation, significantly impact the attitudes of Arab Muslims towards seeking help from mental health services.

H4: The level of awareness about available treatments and facilities for mental disorders among Arab Muslims will vary depending on factors such as education, socio-economic status, and access to information.

H5: Cultural beliefs, social stigma, and personal acculturation experiences will play a significant role in determining Arab Muslims' choice of mental healthcare services.

H6: Arab Muslims' belief in psychotherapy and assistance provided by mental health professionals will be influenced by cultural and traditional beliefs, as well as their level of understanding of mental health concepts.

H7: Islamic-Arabic culture may contribute to mental health stigma among Arab Muslims by reinforcing traditional beliefs, social norms, and misconceptions about mental disorders and their treatment.

H8: The level of religiosity among Arab Muslims will be positively associated with their preference for traditional healing methods over formal mental health services.

H9: Arab Muslims who perceive mental disorders as a spiritual or moral issues will be less likely to seek help from formal mental health services.

Table 2

Relationship between Research Questions and Hypotheses

Research Question	**Corresponding Hypotheses**
RQ1	H1: Higher adherence to Islamic-Arabic cultural and traditional beliefs among Arab Muslims predicts lower mental health knowledge of mental disorders and formal mental health treatments.
	H8: The level of religiosity among Arab Muslims will be positively associated with their preference for traditional healing methods over formal mental health services.
	H9: Arab Muslims who perceive mental disorders as a spiritual or moral issues will be less likely to seek help from formal mental health services.
	H**6:** Arab Muslims' belief in psychotherapy and assistance provided by mental health professionals will be influenced by cultural and traditional beliefs, as well as their level of understanding of mental health concepts.
RQ2	H2: Higher levels of education, socio-economic status, and exposure to mental health information among Arab Muslims predicts more positive attitudes towards seeking help from formal mental health services.
	H5**:** Cultural beliefs, social stigma, and personal acculturation experiences will play a significant role in determining Arab Muslims' choice of mental healthcare services.
	H3: Cultural beliefs about mental health, Muslim religiosity and acculturation, significantly impact the attitudes of Arab Muslims towards seeking help from mental health services.
	H4: The level of awareness about available treatments and facilities for mental disorders among Arab Muslims will vary depending on factors such as education, socio-economic status, and access to information.
RQ3	

	H7: Islamic-Arabic culture may contribute to mental health stigma among Arab Muslims by reinforcing traditional beliefs, social norms, and misconceptions about mental disorders and their treatment.
	H2: Higher levels of education, socio-economic status, and exposure to mental health information among Arab Muslims are associated with more positive attitudes towards seeking help from formal mental health services.

1.5 Definition of Terms

Mental health: A condition of overall emotional and psychological well-being where a person has the capacity to fulfil their abilities, manage everyday life stressors effectively, engage in productive tasks, and actively participate in community life. Mental health encompasses emotional, psychological, and social well-being and is influenced by various factors, including biology, personal experiences, and social and cultural contexts (World Health Organization, 2022). In the context of Arab Muslims, mental health can be shaped by cultural, traditional, and religious beliefs, which can impact the understanding, recognition, and treatment of mental health issues.

Mental disorders: Conditions that affects a person's thinking, feeling, behaviour, or mood, and can disrupt their ability to function and carry out daily activities. Mental disorders include anxiety disorders, mood disorders, schizophrenia, and personality disorders, among others (World Health Organization, 2019).

Mental health treatment: Refers to the various methods and approaches used to address mental health disorders or issues. These treatments may include psychotherapy, medication, lifestyle changes, or a combination of these methods (World Health Organization, 2022). In the context of Arab Muslims, mental health treatment might also involve traditional healing practices, spiritual counselling, or other culturally specific approaches.

Religious beliefs: A group of convictions, values, and practices related to the understanding and worship of a higher power or divine being, often accompanied by a system of moral and ethical guidance. In the context of Arab Muslims, religious beliefs refer to the tenets of Islam and adherence to the teachings of the Quran and Hadith. These beliefs can influence perceptions of mental disorders, help-seeking behaviour, and the acceptance of various treatment approaches (Pargament, 2001; Stark, 1987).

Cultural beliefs: A set of values, norms, and practices shared by a particular group of people that shape their understanding of the world, their behaviour, and their interactions with others (Whaley & Davis, 2007). In the context of Arab Muslims, these beliefs include those rooted in religious, social, and historical factors.

Traditional beliefs: A collective of customs, practices, and values that are passed down from generation to generation within a particular group of people (Whaley & Davis, 2007). These beliefs often have historical or cultural significance and can influence people's understanding and approach to various aspects of life, including mental health.

Superstitions: Irrational beliefs or practices that stem from a person's faith in luck, magic, or supernatural forces. Superstitions can influence people's behaviour and decision-making, often in the context of attempting to avoid bad luck or bring about good fortune (Ohtsuka & Chan, 2010).

Arab Muslims: A demographic group comprising individuals who identify as both Arab and Muslim. Arab refers to those who have ancestry or roots in the Arab world, which consists of 22 countries in the Middle East and North Africa. Muslim refers to those who follow the Islamic faith (Haggett, 2002).

Stigma: A negative stereotype or judgment associated with a particular characteristic, often leading to discrimination, prejudice, or social exclusion. In the context of mental disorders, stigma can prevent individuals from seeking help or support and can perpetuate

harmful myths and misunderstandings about mental health (Abdullah & Brown, 2011; John R. Peteet, 2019).

Jinn (Arabic: جن, jinn): Supernatural beings in Islamic belief, often depicted as shape-shifting spirits that inhabit the world alongside humans. In some cultural contexts, jinn are believed to have the ability to possess or influence humans, and their involvement may be suspected in cases of unexplained mental health issues or other misfortunes (Dein & Illaiee, 2013; Islam & Campbell, 2014).

Evil eye (Arabic: عين, eyen): A widespread belief in many cultures, including among Arab Muslims, that an envious or malevolent gaze can cause harm, misfortune, or disorders to the person being looked upon. In the context of mental health, some individuals might attribute their mental health issues to the evil eye, which could impact their help-seeking behaviour and openness to conventional treatment methods (Abu-Rabia, 2005; Khalifa et al., 2011).

Black magic or magic (Arabic: سحر، Seher): The practice of using supernatural or occult powers to harm or manipulate others, often through rituals, spells, or incantations. In some Arab Muslim communities, black magic might be believed to cause mental health issues or other misfortunes, and individuals may seek protection or treatment from spiritual healers, traditional practitioners, or religious leaders to counteract its effects (Khalifa et al., 2011)

Hadith: A collection of sayings, actions, and approvals of the Prophet Muhammad that serve as a secondary source of guidance for Muslims in understanding and practising Islam. Hadiths are used to supplement and clarify the teachings of the Quran, and they can influence the cultural and religious beliefs of Arab Muslims, including their perspectives on mental disorders and their treatment (Khalifa, 2010).

Chapter Two: Literature Review

2.1 Arab Identity and Cultural Diversity

The term "Arab" is a complex and multifaceted concept that has been debated among scholars and researchers for decades. While some argue that the definition of an Arab is based on culture, language, race, or a combination of these factors, others suggest that it is primarily based on the ability to speak Arabic fluently (Awad et al., 2021; Kayyali, 2018; Maghbouleh et al., 2022; Wang, 2022). Despite these debates, the Arab population remains one of the largest and most diverse in the world, with over 400 million people spread across 22 countries in the Arab league (World Bank, 2020). One of the most significant challenges in defining the Arab population is the vast range of physical appearances among individuals who identify as Arab. Some have blue eyes and red hair, while others are dark-skinned (Awad et al., 2021; Wang, 2022). This diversity reflects the complex history of the Arab world, where various ethnic groups, including Persians, Turks, and Africans, have migrated and intermixed with the Arab population over time (Al-Humaidan & Prince, 2021; Eid, 2007). Despite this diversity, traditional Arabic and Islamic references tend to consider Arab as a race, particularly for those who inhabit the Arabian Peninsula (Ibn Khaldun, 1958; Tabari, 1987). This concept is rooted in the idea that Arabs are descendants of the ancient tribes that inhabited the Arabian Peninsula, such as the Qahtanites and Adnanites (Tabari, 1987).

Historically, countries such as Egypt, Sudan, Morocco, Syria, Lebanon, and Iraq did not always consider themselves part of the Arab identity. It was not until the 20th century, with the rise of Arab nationalism, that these countries began to identify more strongly as Arab. Before this period, Syrian and Lebanese identities were influenced by their rich history of ancient civilizations, including the Phoenicians and Arameans, and their connections to the broader Levantine culture. Iraq, with its Mesopotamian heritage, also had a distinct identity

tied to its ancient civilizations such as the Sumerians, Akkadians, Babylonians, and Assyrians. The pan-Arab movement, driven by leaders like Egypt's Gamal Abdel Nasser and the establishment of the Arab League in 1945, sought to unite the Arabic-speaking world under a single cultural and political identity (Hourani, 1991; Dawisha, 2003). This movement significantly influenced the perception of Arab identity, leading to the inclusion of these regions within the broader Arab world.

In Syria and Lebanon, the rise of Arab nationalism was also a response to colonialism and the mandate systems imposed by European powers after World War I. Nationalist movements in these countries emphasised Arab unity and independence from foreign rule. In Lebanon, the presence of diverse religious and ethnic communities added complexity to the formation of a unified Arab identity, leading to a unique blend of Lebanese nationalism and Arab identity (Traboulsi, 2012).

Iraq’s integration into the Arab identity was similarly influenced by political movements and the desire for independence from British control. The Ba'ath Party, which came to power in Iraq in 1968, strongly promoted Arab nationalism as part of its political ideology, emphasising the shared cultural and linguistic heritage of the Arab world (Tripp, 2007).

Traditionally, the term "Arab" was most closely associated with those originating from the Arabian Peninsula, particularly the Bedouin tribes known for their distinct cultural practices, dialects, and genealogies (Peters, 1994). This shift in self-identification has had profound implications on cultural and national identities across the region. For example, in Egypt, the embrace of Arab identity was politically motivated to strengthen ties with other Arab countries and to bolster the country’s regional influence (Gershoni & Jankowski, 1995). Similarly, in Morocco, the blending of Arab and Berber identities reflects the complex interplay of indigenous and Arab influences, which continues to shape the country's cultural

and political landscape (Miller, 2013). Despite this complexity, in this research, Arabs are considered as people who identify themselves as Arab and Muslim, and whose countries are members of the Arab League.

The Arab population is primarily concentrated in the 22 member countries of the Arab League, however, a significant number also reside outside of the Arab world, with a large diaspora population in Western countries such as the United States, Canada, the United Kingdom, France, and Australia (World Bank, 2020). The Arab world is home to a wide range of ethnic, linguistic, and religious groups, with Arabs making up the largest ethnic group in the region. The majority of Arabs are Muslims, with the majority belonging to either the Sunni or Shia denominations (Haddad, 2020). Sunni Muslims make up the majority of the Muslim population in the Arab world, while Shia Muslims are concentrated in countries such as Iran, Iraq, and Bahrain.

The main difference between Sunni and Shia Muslims is in their beliefs about the leadership of the Muslim community after the death of Prophet Muhammad. Sunni Muslims believe that the leader should be Abu Bakr, while Shia Muslims believe that the successor should be Ali. This difference in belief has led to centuries of tension and conflict between the two denominations, particularly in countries such as Iraq and Syria (Holtmann, 2014). Despite these differences, both Sunni and Shia Muslims share a common belief in the Quran as the word of God and in the Hadith, which is a record of the words, actions, and attitudes of Prophet Muhammad (Burton, 2022). These texts are the foundation of Islamic belief and practice and are central to the lives of Muslims around the world.

The Islamic-Arabic culture plays a significant role in shaping Arab culture, customs, and practices. In Arab society, Islam is not only considered a religion, but also a way of life that guides people's relationships with others, family roles, social systems, economic systems, political systems, and moral actions. Al-Omari (2008) notes that Islam is a comprehensive

way of life that encompasses all aspects of society, determining what is right and wrong. The primary sources of guidance for Muslims are the Quran and Hadith, which are considered the most sacred sources in the world and are believed to contain ultimate guidance for all people (Khalifa, 2010). Additionally, Muslims also use secondary sources such as “ijma” (consensus among Muslim theologians on a point of Islamic law or information) and “qiyas” (analogical reasoning deduced from a known Islamic judgment) as guides for their daily lives (Fairak, 2014). These sources are used within the Islamic model of the Quran, Hadith, and Islamic consensus, providing a comprehensive framework for understanding and interpreting Islamic teachings.

It is important to note that the interpretation of Islamic teachings can vary widely depending on the cultural and historical context in which they are being applied. Islamic scholars and theologians play a critical role in interpreting the Quran and Hadith and applying their teachings to contemporary issues. Additionally, the diversity of Islamic thought and practice is reflected in the various schools of Islamic jurisprudence, each with its own methods of interpretation and application of Islamic law (McCloud et al., 2013).

In Arab societies, the family is considered the cornerstone of social structure and plays a central role in the lives of most Arabs. It is believed that the family is not just a physical unit, but it is also a moral and spiritual institution that reinforces Islamic values and traditional beliefs. These values and beliefs are passed down from one generation to another and are integral to the Arab family system, which emphasises the importance of maintaining strong family ties (Alesina & Giuliano, 2010).

The Arab family system places a great emphasis on the concept of collectivism, where the needs and goals of the family are prioritized over the needs and goals of individuals. This concept is based on the belief that the family is a source of strength, support, and security, and that individuals must contribute to the well-being of the family as a whole. As a result,

the family unit acts as a powerful force in shaping an individual's personality, identity, and beliefs Moreover, the family serves as the primary source of socialization for individuals, providing them with a sense of belonging and continuity, and shaping their attitudes and behaviours. The family also acts as a mediator between the individual and the wider community, and its members are expected to uphold the values and traditions of the larger society. In addition, the Arab family system places a great emphasis on gender roles and relationships. Traditionally, men are expected to be the breadwinners and protectors of the family, while women are responsible for domestic duties and childcare. However, this dynamic is gradually changing, and women are increasingly becoming more involved in the workforce and assuming leadership roles (Joseph, 2018).

2.2 The Definition and the Prevalence of Mental Disorders

Mental disorder, also known as mental illness or psychiatric disorder, refer to a broad range of “health conditions that involve changes in emotion, thinking, or behaviour, or a combination of these” (American Psychiatric Association, 2013). These conditions are associated with distress and problems in social, work, or family activities, affecting millions of people worldwide (American Psychiatric Association, 2013). The exact causes of mental disorders are not fully understood, but various factors are thought to contribute, such as genetic predispositions, environmental factors, social and economic circumstances, substance abuse, and traumatic experiences. Mental disorders can take various forms, including anxiety disorders, mood disorders, personality disorders, psychotic disorders, and substance use disorders (Dattani et al., 2021).

Recent studies have shed light on the complex interplay between biological, psychological, and social factors in the development and progression of mental disorders. For instance, research has shown that certain genetic variations may increase the susceptibility to mental disorders (Nestler et al., 2016), while environmental factors such as early-life stress or

trauma, social isolation, or poverty can exacerbate the risk (Berry et al., 2010; Koenen et al., 2007; Merikangas et al., 2009). Moreover, psychological factors, such as cognitive biases, negative thinking patterns, or maladaptive coping strategies, can perpetuate and worsen mental health problems (Cristea et al., 2015; McEvoy et al., 2013).

Mental disorders represent a major public health challenge globally, affecting individuals of all ages, genders, and socioeconomic backgrounds (World Health Organization, 2019). Mental disorders are associated with significant disability and morbidity and can have a profound impact on individuals' quality of life, relationships, and productivity (Dattani et al., 2021; Mark Hyman Rapaport et al., 2005; Patel et al., 2016) Recent estimates suggest that around one in seven individuals worldwide experience a mental disorder in a given year, highlighting the widespread nature of these conditions (Dattani et al., 2021). Common mental disorders such as anxiety, depression, and bipolar disorders are prevalent across the globe, including in the Arab world (World Health Organization, 2019). However, there is limited data on the prevalence and burden of mental disorders in many developing countries, including those in the Arab region (Nochaiwong et al., 2021).

One of the main barriers that researchers face when conducting a mental health- based study in the Arab world is the limited of information about mental health statistics (Ghanem et al., 2009). Despite this, a systematic review and meta-analysis found that the prevalence of depression and anxiety in the Arab region was comparable to that of other regions of the world (Mokdad et al., 2014). They note an increasing prevalence of major depressive disorder in several Arab countries due to wars and economic conditions. It is worth noting that the measurement and reporting of mental disorders prevalence can be complex and may vary across countries and cultures. Factors such as the use of different diagnostic criteria, varying levels of stigma, and differences in healthcare infrastructure can impact the detection and reporting of mental disorders in different contexts (Latoo et al., 2021).

Moreover, research has shown that mental health issues are prevalent in the Arab world, with several studies reporting a high prevalence of mental disorders in countries such as Saudi Arabia, Morocco, the United Arab Emirates, and Egypt (Al-Khathami & Ogbeide, 2002; Almutairi, 2015; Okasha et al., 2012; Sulaiman et al., 2010). Despite these findings, it is important to note that mental health data and research in the Arab world are still limited, and more studies are needed to better understand the prevalence of mental health issues in the region. Moreover, there are cultural factors unique to the Arab world that may influence how mental health is perceived and addressed, and these factors need to be taken into consideration when developing interventions to improve mental health in the region.

An overview of the literature in relation to the prevalence of mental disorders in Saudi Arabia indicates that mental disorders are highly prevalent in Saudi Arabia. For example, a study by Al-Khathami and Ogbeide (2002) found that approximately one-third of primary-care clinic attendees in Saudi Arabia had a mental disorder. Another unanticipated finding was found by Al-Sughayr and Ferwana (2012) who investigated the prevalence of mental disorders among high school students selected from four schools in Saudi Arabia (N=354) and found that 48% of the students were suffering from mental disorders. Al-Sughayr and Ferwana (2012)’s study indicate that mental disorders were more common among girls (51%) than boys (41%). However, it is important to note that this study has several limitations. Firstly, the sample size is small, which limits the generalisability of the findings. Secondly, the study relied on self-reported data using the General Health Questionnaire-28 (GHQ-28), which may introduce bias and invalid responses (Sterling, 2011). Nonetheless, self-reported data is widely accepted in prevalence studies, particularly in mental health research, where internal experiences are difficult to measure through objective methods. Moreover, the use of validated tools, such as the General Health Questionnaire-28 (GHQ-28), enhances the reliability of the findings. The GHQ-28 is a well-validated instrument designed to detect

psychological distress and has been shown to have strong psychometric properties across various populations and cultural contexts (Goldberg & Williams, 1988). Additionally, it is well-documented that student populations, particularly high school and university students, are often high-stress groups due to academic pressures, social transitions, and future uncertainties (Hurst et al., 2013; Bayram & Bilgel, 2008; Dusselier et al., 2005). However, the 48% figure of mental disorders in the Saudi high school sample may seem high and require further research to validate these findings.

Moreover, some studies indicated that mental disorders are relatively prevalent in Egypt. A study was conducted in 2020 to investigate the impact of the COVID-19 pandemic on mental health in Egypt. The study found that among 510 Egyptian adults, roughly 42% of them were suffering from severe mental health impacts such as worry about being infected or getting sick, increased self-blame, and helplessness during the pandemic (El-Zoghby et al., 2020).

A preliminary study, which served as an initial step for the National Survey, aimed to accurately estimate the prevalence of mental disorders in Egypt. The research included surveys of 14,640 adults aged between 16 and 64 years, sampled from five regions across Egypt. The findings revealed that nearly 17 percent of the participants were suffering from mental disorders, with mood disorders and anxiety being the most commonly reported issues (Ghanem et al., 2009).

Despite the prevalence of mental disorders in the Arab world, mental health literacy remains poor, leading to delays in accessing mental health services and encourages reliance on informal sources for help seeking (Tambling et al., 2021). This is further exacerbated by the widespread discrimination, stigma, and human rights violations faced by individuals with mental disorders (Wogen & Restrepo, 2020). Consequently, many do not receive adequate

treatment and often have misconceptions about the symptoms and causes of mental disorders (Wang et al., 2007).

One of the primary factors that prevent individuals from seeking help from formal mental health professionals is the influence of cultural and religious beliefs about mental disorders (Aloud & Rathur, 2009; Darwish, 2016; Islam & Campbell, 2014; Kira et al., 2014; Pargament & Lomax, 2013). These beliefs can perpetuate inaccurate ideas about mental health and carry a stigma surrounding mental disorders and its treatment, In some cultures mental disorders are viewed as weaknesses or personal failing, rather than a medical conditions requiring treatment (Kirmayer, 2001). Additionally, many religious beliefs equate mental disorders with possession by evil spirits or demonic forces leading to a preference for traditional or spiritual healing methods rather than treatment from mental health practitioners (Kleinman et al., 1985). This stigma can be especially pronounced in the Middle East, where cultural and religious beliefs may discourage seeking help from mental health professionals (Okasha et al., 2012). In particular, the concept of "family honour" (sharaf) is deeply ingrained in many Arab cultures, where an individual's actions reflect upon the entire family (Kulwicki et al., 2000). Mental illness may be perceived as bringing shame or dishonour to the family, leading to concealment of symptoms and avoidance of professional help to protect familial reputation (Al-Krenawi & Graham, 2011). Additionally, gender roles within Arab societies can influence help-seeking behaviours. Women, in particular, may face greater obstacles due to societal expectations and restrictions on autonomy (Al-Krenawi et al., 2004). For example, women may require permission from male family members to access healthcare services, and concerns about privacy and confidentiality may deter them from discussing mental health issues with professionals (Afifi, 2007).

As highlighted above cultural and religious beliefs play a significant role in shaping the perceptions and treatment of mental disorders in Arab community. It is important to take

these beliefs into consideration when developing and implementing mental health policies and interventions in the region. Additionally, mental health professionals should be trained to understand and navigate the complexities of cultural and religious beliefs in their work with patients, to ensure that they are providing effective and culturally sensitive treatment. Therefore, the literature review delved into the examination of the impact of cultural and religious beliefs on mental health perceptions and understanding.

2.3 The Role of Culture and Religion in Mental Health

The literature on the impact of culture and religion on mental health and mental health services is extensive and varied. Researchers have long recognised that cultural and religious traditions and perspectives play a significant role in shaping people's perceptions and expressions of mental disorders (Prinz, 2011). For example, culture can influence how individuals understand and interpret symptoms of mental disorders, as well as their attitudes towards and coping strategies for mental health treatment (Bass et al., 2007). However, it is important to note that making generalisations about a group's understanding of mental health based solely on their culture or religion can lead to stereotypes and misconceptions. It is crucial to consider other demographic factors such as age, gender, marital status, and education, as they also play a role in shaping individuals' understanding and experiences of mental disorders.

Culture is an essential factor in how individuals communicate and express their symptoms of mental disorders, which can impact diagnosis, treatment, and outcomes. Studies have consistently shown that culture can have a significant impact on how individuals describe their symptoms to mental health professionals. For instance, Ryder et al. (2008) found that Chinese individuals tend to focus more on physical symptoms of depression compared to those in North America, which may affect the diagnosis and treatment plan for these individuals. This finding further supports the idea of Lin and Cheung (1999) that Asian

people tend to report their physical symptoms but not reporting their emotional symptoms. This may be due to the fact that patients tend to describe their symptoms in ways that are culturally acceptable (Kleinman, 1977). Similarly, cultural beliefs and practices can influence the experience and expression of symptoms in other mental health conditions, such as anxiety disorders, schizophrenia, and substance use disorders.

The impact of culture on symptom expression is not limited to the emphasis on physical or emotional symptoms. Language, terminology, and metaphors used to describe mental health symptoms can also vary across cultures and change over time. Behere et al. (2013) have noted that the way in which mental disorders symptoms are described has changed over time in clinical settings. For example, in the past, individuals may have used phrases like "someone is talking about me behind my back" to describe paranoid thoughts, while now, they may describe it as "a chip in their brain controlling them." These linguistic changes reflect the cultural understanding of mental disorders and highlight the importance of staying up to date with the changing terminology and metaphors used to describe mental health symptoms. The cultural understanding of mental disorders can also vary across different religious and ethnic groups. For instance, in Hindu communities, symptoms such as disorganized thoughts, speech, and changes in tone of voice are often attributed to possession by malevolent spirits or deities. For instance, at the Balaji temple in Mehndipur, Rajasthan, individuals exhibiting such symptoms are believed to be under the influence of supernatural entities, and the temple serves as a centre for ritualistic healing and exorcism Dwyer (1999), whereas in Islamic cultures, these same symptoms may be attributed to possession by demons or magic (Dein & Illaiee, 2013).

Furthermore, the boundaries between normal and abnormal behaviour can vary significantly across societies. In collectivist cultures such as Arab countries, deviant behaviours from social norms are often discouraged and as abnormal behaviours damage the

family reputation, which can lead to stigma and social isolation for individuals exhibiting abnormal behaviour. This adds a layer of complexity to understanding mental health in collectivist cultures, as cultural norms often dictate the line between acceptable and deviant behaviour (Weatherhead & Daiches, 2015).. Thus, cultural interpretations can act as barriers to seeking professional mental health care, as individuals may be reluctant to seek help out of fear of bringing shame to their family (Al-Krenawi, 2005).

Cultural differences in symptom expression are not limited to between different countries or religions. Within the same cultural group, variations can exist due to age, gender, socioeconomic status, and other factors. For instance, among African Americans, somatic symptoms, such as headaches, backaches, and sleep disturbance, are more commonly reported than psychological symptoms, such as sadness or irritability (Tylee & Gandhi, 2005). Similarly, older adults may underreport symptoms of depression or anxiety, and instead, focus more on physical symptoms, such as fatigue or loss of appetite (Lyness et al., 1995).

Culture has been identified as a significant factor in shaping individuals' perceptions and experiences of mental disorders. Studies have shown that cultural beliefs and values can influence how individuals view the severity of their mental condition, and whether they seek help from mental health professionals or traditional healers (Marsella & White, 2012). Furthermore, culture can also play a role in determining the level of support individuals receive from their family and community and can act as a motivator or demotivator for seeking professional help. For example, some cultures may prioritise the use of traditional healers over modern medicine, while others may stigmatize mental disorders, making it difficult for individuals to seek help from mental health services. In addition, cultural factors can also affect the diagnostic process, as some cultural groups may not recognise certain mental disorders or may interpret symptoms differently. As such, anyone who works in a

mental health setting is highly expected to deal with clients from different culture backgrounds. Thus, understanding the impact of culture is crucial to developing mental health services that are more responsive to the cultural and social contexts of racial and ethnic minorities (Satcher, 2001).

The relationship between religion and mental health has been well-documented throughout history. Historically, religions have played a significant role in both the treatment and persecution of individuals with mental disorders. (Koenig & Larson, 2001). Many years ago, medical explanations often coexisted with religious perceptions of mental disorders (Rosmarin & Koenig, 1998). For example, the ancient Jews considered madness to be the result of both natural and supernatural forces (Butcher et al., 2011). Similarly, Christians attributed some mental disorders to the influence of supernatural forces (Rosmarin & Koenig, 1998). Other religions such as Buddhism, Hinduism, Shintoism, and Zoroastrianism, also incorporate the idea of the influence of demons on a person's mind and body, which may lead to madness (Rosmarin & Koenig, 1998). Furthermore, in many ancient cultures, the role of religious clergy and physicians was often indistinguishable, with religious priests often overseeing the treatment of patients with mental disorders. (Farreras, 2019). Hence, the understanding of how religion and mental health have been related historically, as it can provide insights into how attitudes towards mental disorders have changed over time and the roles played by different groups in addressing mental health issues in many societies.

The understanding of mental disorders has undergone significant changes throughout history, with religious beliefs playing a prominent role in shaping societal perceptions until the end of the 19th century. At that time, religious interpretations of mental disorders made people consider mental disorders as a god’s punishment as a result of disobedience or sin, possession by evil spirits, or due to weak faith (Gureje et al., 2006). These religious interpretations have been historically criticised by psychologists for providing superstitions

about mental disorders which add to the stigma against mental disorders and prevent people to seek help from formal mental health services (Coyle, 2001). In recent years, there has been a growing effort among mental health professionals to increase public awareness and understanding of mental health and combat the myths and misconceptions surrounding mental disorders. These efforts include promoting education and de-stigmatisation campaigns, as well as increasing access to mental health services (Corrigan, 2016). These initiatives aim to create an environment where people feel comfortable seeking help and talking about their mental health without fear of judgment or discrimination.

In the 20th century, the understanding and approach to mental disorders underwent a significant transformation. Prior to this period, mental disorders were frequently attributed to supernatural or spiritual forces, often tied to religious or cultural explanations (Rosmarin & Koenig, 1998). However, by the late 19th and early 20th centuries, a paradigm shift occurred as psychologists and psychiatrists began to view mental disorders through a medical and scientific lens, recognizing them as conditions rooted in biological, psychological, and social factors (Moreira-Almeida et al., 2006). This shift was influenced by advancements in medical science, including the rise of neurology and psychiatry, as well as an increasing emphasis on evidence-based approaches in healthcare. Consequently, many leading figures in psychology and psychiatry at the time developed a more secular approach, often viewing religious explanations of mental illness with scepticism. Although, this paradigm shift to secularism did not negate the potential for positive roles that religion and spirituality could play in coping with and recovering from mental health issues, it encouraged the advancements in medical science and the growing emphasis on evidence-based approaches in healthcare. As a result of this, numerous prominent psychologists and psychiatrists held unfavourable views towards religion.

One of the influential psychologists of the 1980s, Albert Ellis, claimed that less religious people are more aware of mental disorders and tend to have better mental health (Nielsen, 1994). While Ellis's claim might be considered a personal opinion because he did not provide practice-based evidence to support it, there is a review article found that individuals who view mental disorders as a medical problem have a better response to psychotherapy than those who view mental disorders as an abnormal phenomenon that should be treated by religious healers (G. Koenig & Larson, 2001). It is important to note that not all psychologists and psychiatrists held negative attitudes toward religion. However, there was a prevailing view among some influential figures that religion was an illusion or a coping mechanism for individuals who felt unsafe or insecure. Sigmund Freud, for instance, famously argued that religion was a form of wish fulfilment, where believers projected their desires for protection and security onto a higher power. (Freud, 1964).

However, one of the primary issues contributing to mental health professionals' negative attitudes towards religion is the "religiosity gap" between them and their clients. Research indicates that many mental health professionals are less religious than their patients, which can lead to difficulties in understanding and addressing patients' religious behaviours and thoughts. For instance, Moreira-Almeida et al. (2006) surveyed 231 psychiatrists and found that 85% considered themselves less religious than their patients, correlating with a reluctance to engage in discussions about spirituality. This religiosity gap not only signifies a disparity in religious commitment but also highlights a broader issue within the mental health care system. This disconnect can lead to a lack of cultural competence among professionals, impacting the therapeutic relationship and potentially leading to poorer mental health outcomes. Lukoff et al. (1992) reported that 60% of therapists acknowledged discomfort due to this gap, which negatively affected their ability to address clients' spiritual needs.

Koenig (2015) emphasizes that integrating clients' religious beliefs into the therapeutic process can enhance resilience, provide coping mechanisms, and support recovery. Empirical evidence supports this, with Smith et al. (2013) finding a 25% improvement in treatment adherence when clients' spirituality is acknowledged. Therefore, the absence of competence in navigating religious issues can act as a barrier to effective treatment. This issue has been discussed by several scholars who highlight the importance of providing adequate training to mental health professionals. Despite this, Bergin and Jensen (1990) found that only 10% of psychologists felt adequately trained to address religious concerns, indicating a significant gap in professional education.

Moreover, van Nieuw Amerongen-Meeuse et al. (2018) found that the gap between mental health professionals and their religious clients is most significant when religion is important to the patient but not to the professional. Their study demonstrated that therapeutic alliance scores were significantly lower in such cases, suggesting that the religiosity gap can directly impact the effectiveness of therapy. This finding underscores the necessity for mental health professionals to receive training in religious and spiritual competencies to bridge this gap.

Nonetheless, the insufficient training of mental health professionals in addressing religious concerns remains a contributing factor to potential bias. Bergin and Jensen (1990) note that while professionals acknowledge the relevance of religion and spirituality in clinical settings, they are frequently ill-equipped to assist patients effectively. Koenig (2015) reported that only 30% of mental health professionals receive formal training in this area, despite 70% of patients desiring inclusion of their spiritual beliefs in treatment. This gap in training can result in misunderstandings or interventions that fail to consider the patient's religious beliefs and values adequately. Therefore, it is essential to provide comprehensive cultural competence training to mental health professionals to bridge this gap.

Such training would be designed for all mental health practitioners, including those who are atheists or come from Christian, Jewish, or other religious backgrounds. The aim is not to alter the professionals' personal beliefs but to enhance their ability to understand and respect the religious and cultural contexts of their clients.

Religion and spirituality have been integral parts of human history, and they continue to shape people's lives worldwide. Studies have found that many individuals with mental health issues tend to turn to religious practices to cope with their symptoms (Barnett & Johnson, 2011). The intersection between religion and medicine has been a topic of interest for centuries, and it continues to occur in various forms today. Religious organisations have provided compassionate care to patients, offering consolation to the sick and dying, and helping people live with pain and suffering (Ferngren et al., 2012). However, the use of religion as a therapeutic technique has been a contentious issue, with some arguing that it may lead to a misunderstanding of mental disorders and discourage individuals from seeking appropriate medical treatment (Koenig, 2013).

Despite these concerns, mental health professionals and religious leaders have acknowledged the necessity for increased cooperation to foster a deeper and more detailed comprehension of mental disorders within communities (Dimmick et al., 2022; Oxhandler & Parrish, 2016) Religious leaders can play a significant role in shaping attitudes towards mental health in their communities, as they often hold considerable influence and respect among their followers. Collaboration between mental health professionals and religious leaders can also help dispel myths and superstitions surrounding mental disorders and provide individuals with access to appropriate care (Oxhandler & Parrish, 2016). Moreover, the use of religion and spirituality in psychotherapy has gained attention in recent years, with an increasing number of mental health professionals incorporating religious or spiritual components into their treatment plans. This approach, known as religious or spiritual

integration, aims to utilise the positive aspects of religion and spirituality to enhance the therapeutic process (Pargament & Saunders, 2007). However, the integration of religion into psychotherapy must be done with care and sensitivity, as it can have potentially harmful effects if not carried out appropriately (Shafranske & Malony, 1990).

Moreira-Almeida et al. (2006) argue that religion has both favourable and unfavourable consequences for mental health and the awareness of mental health conditions. Studies have shown that religious involvement can have a positive impact on mental health, including reducing symptoms of depression and anxiety. Levin (2010) who reviewed mental health research on religion, argued similarly that even though religion may provide misconceptions about mental disorders, religion continues to be considered as something that can help people overcome their mental health issues.

Although compared to individuals with less strict religious beliefs or non-believers, religious people tend to report poorer self-esteem, lose their temper easily, have greater anxiety, and sleep fitfully (Koenig & Larson, 2001). On the other hand, the researchers also found that religious people are more satisfied with their lives, have more hope and optimism, report being less depressed, have a lower rate of suicide, and less likely to abuse alcohol or use illicit drugs (Koenig & Larson, 2001). Thus, it is crucial for healthcare professionals to take a holistic approach and consider the role of religion in their patients' lives when treating mental health issues.

However, most of the existing research in this area has been conducted within the context of Christian beliefs. (Adams et al., 2018; G. Koenig & Larson, 2001; Leavey et al., 2017; Velez, 2020; Wilson, 1974). While these studies have yielded valuable insights into the relationship between Christianity and mental health, it is crucial to explore how other religions influence perceptions of mental disorders, mental health knowledge and help

seeking attitude and behaviour particularly in regions where these religions hold significant cultural and social influence.

In the Arab world, where Islam is the dominant religion, little research has been conducted to understand how Islamic beliefs shape Arab-Muslims' attitudes towards mental disorders. It is essential to investigate this relationship, given the cultural and religious significance of mental health within the region. Religion plays a significant role in shaping the understanding and treatment of mental health problems in Muslim communities, and this influence must be considered when developing interventions and treatments. Islamic beliefs and practices around mental health place a significant emphasis on community and social support, which may influence how Arab Muslims understand mental disorders and seek help (Al-Krenawi & Graham, 2000). This communal approach involves family participation and collective decision-making in the healing process. In contrast, some Western Christian contexts may emphasise individual autonomy and confidentiality in mental health treatment, reflecting cultural values of individualism (Sue & Sue, 2016). Additionally, the stigma around mental disorders is prevalent in many Muslim communities (Al-Krenawi, 2005), and it is essential to understand how religious beliefs contribute to this stigma and how they can be leveraged to reduce it.

2.4 The Role of the Islamic-Arabic Culture in Shaping Arabs' Understanding of Mental Health and Mental Disorders.

From its inception in Mecca, situated on the Arabian Peninsula (present-day Saudi Arabia), Islam has intertwined religion with daily life, as evidenced by the practices and teachings of the Prophet Muhammad (Ayub et al., 2019). This integration is exemplified in foundational Islamic texts that guide both Sunni and Shia Muslims. For Sunni Muslims, the Sahih Al-Bukhari, compiled by Imam Bukhari in the 9th century, serves as a crucial collection of hadiths narratives describing the Prophet's words, actions, and tacit approvals

(Bukhārī, 1966). Similarly, for Shia Muslims, Al-Kafi, compiled by Al-Kulayni in the same century, holds comparable significance (Kulaini, 1999). These texts, regarded as the second most important sources after the Quran, encompass a wide array of topics that influence daily and spiritual life. They include detailed accounts on commerce, agriculture, interpersonal interactions, familial duties, and even specific areas like medicine and mental health. The inclusion of mental health topics in these texts underscores the holistic approach Islam takes towards wellbeing, integrating religious beliefs with mental health practices, and offering guidance on psychological resilience and coping mechanisms. This integration reflects the profound impact of religious doctrine on the cultural and practical aspects of life, shaping not only individual behaviours but also communal norms and health practices among Muslims.

Islam recognises the importance of mental health and well-being in the lives of its followers. Islamic teachings suggest that mental health is closely linked to spiritual and physical health. In Islamic teachings, the soul is considered to be the essence of an individual's being, and its health is vital to overall well-being. The Quran attributes emotional and mental health issues to three interacting agents in the mental apparatus: nafs al-ammara (the commanding self, in **Surah Yusuf (12:53))**, nafs al-lawwama (the self-reproaching self, - in **Surah Al-Qiyamah (75:2))**, and nafs al-mutmainna (the tranquil self, in **Surah Al-Fajr (89:27–28))**. These three agents interact to determine an individual's mental health status (Mazhar et al., 2019; Mitha, 2020).

The lowest element of the mental apparatus, nafs al-ammara, is at mercy to animalistic temptation and inclination. This agent represents the constant commanding soul, responsible for the desires and impulses that drive individuals. The second agent, nafs al-lawwama, the constant reproaching soul, enables reason and decision-making, self-reflection, and self-critique. The final agent, nafs al-mutmainna, is the desired state of attainment, which represents inner peace, tranquillity, satisfaction, and self-actualisation (Mazhar et al., 2019)

Many Muslim scholars believe that the three interacting agents determine the mental health status of individuals, which is also widely held among Muslims, Weatherhead and Daiches (2015) consider the key issues to consider in therapy with Muslims. Their view are similar to Okasha et al. (2012) who report that the Islamic view of psychology recognising three interacting souls is held predominantly among Muslims. Hence, the need to understand how Islamic "theory of mind" influence mental health knowledge, that is the understanding of mental disorders and its treatment among Arab-Muslims, and help-seeking attitudes in mental health.

However, it is important to note that while Islamic teachings may influence the way mental disorders are understood in Arab-Muslim cultures, they do not necessarily deny the existence of mental disorders as a medical condition. Muslim communities have recognised the importance of seeking medical treatment for mental disorders, and many Muslim-majority countries have established mental health services. In addition, Islamic teachings also emphasise the importance of help seeking when experiencing mental health problems. The Prophet Muhammad himself is reported to have said, "There is no disease that Allah has created, except that He also has created its treatment." (Bukhārī, 1966). This hadith may suggest that Muslims should seek help when experiencing mental health problems and that medical treatment is a valid means of addressing mental disorders.

Another compelling example that underscores the profound impact of Islam on Arabs' understanding of mental health can be found in the concept of Prophetic medicine. The term "Prophetic medicine" (الطب النبوي) refers to the health practices and remedies implemented by Prophet Muhammad and his followers during the formative Islamic period. Rooted in the teachings of the Quran and Sunnah, these practices concentrated on the utilization of natural remedies such as herbs, honey, dates, and black seed oil. Prophetic medicine highlighted the critical importance of sustaining a wholesome lifestyle. This includes adhering to a balanced

diet, committing to routine physical exercise, and ensuring healthy sleep patterns, all of which contribute significantly to overall mental wellbeing (Sheikh, 2016).

Prophetic medicine can also potentially have negative consequences when it comes to understanding and seeking treatment for mental disorders. One possible issue is that prophetic medicine tends to emphasise the importance of spiritual and natural remedies over formal medical treatment. This may lead some individuals to view mental disorders as a spiritual problem rather than a medical condition and may discourage them from seeking professional help for their symptoms (Dols, 1988). Additionally, there may be a stigma attached to mental disorders within some Muslim communities, which can be exacerbated by a focus on traditional remedies and a reluctance to acknowledge the role of modern medicine. This can lead to feelings of shame and isolation for individuals who are struggling with mental health issues and may discourage them from seeking the help they need. Moreover, the lack of formal training in mental health within the Prophetic medicine tradition can also result in misinformation and misunderstandings about mental disorders and their treatment. For example, there may be an overemphasis on the use of natural remedies and a belief that mental health issues can be cured through religious rituals or practices alone.

Despite numerous research studies delving into the influence of religion on individual perceptions of mental disorders (I. E. Al-Issa, 2000; Hamid & Furnham, 2013; Youssef & Deane, 2006; Zhang & Xu, 2007), the specific impact of Islam on Arab Muslims' comprehension of mental disorders remains insufficiently investigated. Various attempts have been undertaken to explore Arabs' understanding of mental disorders (Alosaimi et al., 2014; Aloud & Rathur, 2009; Dalky, 2012; Hamid & Furnham, 2013). Both Aloud and Rathur (2009) and Hamid and Furnham (2013) delved into the factors that influence Arab individuals' propensity to seek help from mental health services. These researchers identified religion as a significant factor influencing help-seeking behaviours among Arabs. However,

both studies fell short of exploring in depth the role of Islamic culture in moulding perceptions of mental disorders and treatment modalities for mental health conditions.

The Islamic religion significantly influences Arab Muslims' perceptions of mental health conditions and their respective treatments. Consequently, numerous Arabic texts on mental disorders and treatment consider Islamic teachings a reliable source of information for mental health interventions and therapies. One notable example is Najati's (2001) work, *Introduction to Islamic Psychology*, which highlights the significant impact of Quranic teachings and the Prophet Mohammed's guidance on people's mental health. Najati posits that these teachings, as revelations from God, hold immense importance for the mental well-being of individuals. Research has demonstrated that even Muslim psychiatrists operate within a religious and cultural framework in understanding mental disorders (Bulbulia & Laher, 2013). This emphasis on theology and cultural beliefs has often led many Arab Muslims to misunderstand mental disorders and their treatments (Fakhr El-Islam, 2008). Consequently, informal sources such as traditional and religious healers are often preferred over formal mental health services.

Religion and culture significantly influence how Arab Muslims perceive the causes of mental disorders. Symptoms are commonly attributed to supernatural causes, such as demonic possession, the evil eye, or sorcery (Al-Adawi et al., 2002). Al-Krenawi, Graham, and Kanduh (2000) highlight the role of envy ("hasad") in cultural explanations of mental illness. However, Al-Krenawi's research often focuses on the Bedouin Arab population in the Negev, Israel, a relatively small and unique subset of the broader Arab Muslim population. This narrow focus raises questions about the generalizability of his findings to other Arab communities with different socio-cultural contexts. Additionally, some of his works rely on small-scale studies, such as those conducted with university students, which may not adequately capture the diversity of beliefs and practices across Arab societies. While his work

provides valuable insights into specific populations, its applicability to wider Arab Muslim populations remains limited. Furthermore, some critiques point to a reliance on descriptive rather than analytical frameworks, which may dilute the depth of his contributions to understanding cultural influences on mental health.

Additionally, beliefs rooted in Islamic teachings often frame mental health challenges as divine tests or punishments from God, reflecting a spiritual or moral dimension to suffering (Aloud & Rathur, 2009). These experiences are sometimes viewed as acts of divine mercy, testing faith or rectifying individual behaviours. Both the Quran and Hadith the sayings and actions of Prophet Muhammad reinforce this spiritual framing of life's challenges, including health issues (Weatherhead & Daiches, 2015). Such interpretations, while offering solace to some, can create significant barriers to seeking formal mental health services. Instead, many Arab Muslims prefer traditional healing methods, such as Ruqia (Quranic recitation), or other informal resources, which can hinder the acceptance and effectiveness of psychotherapy and other formal treatments (Amri & Bemak, 2013).

This reliance on spiritual and traditional approaches underscores the complexity of addressing mental health issues within Arab Muslim communities. While the cultural and religious framing of mental health provides important context, the overemphasis on supernatural explanations and informal remedies often delays or prevents individuals from accessing evidence-based mental health care.

2.5 The understanding of common mental disorders among Arab Muslims

Various studies have highlighted the lack of understanding and misconceptions surrounding mental disorders in Arab Muslim communities. For instance, Al-Krenawi and Graham (2000) and Aloud and Rathur (2009) reported that mental disorders are often misunderstood by some Arab Muslims. Similarly, Fakhr El-Islam (2008) and Youssef and

Deane (2006) found that mental health stigma and attitudes towards seeking help for mental health problems are major issues in Arab societies.

The cause of schizophrenia in Arab culture has also been explored by several researchers. For example, Zahid et al. (2010) found that a significant number of participants in their study attributed schizophrenia to demonic possession. Similarly, Eid and Alzayed (2005) reported that their participants often associated schizophrenia symptoms with demons. It is worth noting that in Arab culture, hallucinations are often attributed to demonic possession or supernatural power, as Dein and Illaiee (2013) observed in their research on Jinn and mental health.

Disorganised speech is a common symptom of schizophrenia and is often referred to as "demon's words" (كلام الجن) [klam Aljinn] in Arab culture, as highlighted by (I. E. Al-Issa, 2000). However, this may not be the only symptom that is attributed to demons. It is essential to understand the cultural context in which such attributions are made, as they are shaped by cultural beliefs, values, and norms (Koenig, 2015). Moreover, it is important to recognise that the attribution of mental disorders symptoms to demons or supernatural powers does not necessarily imply a lack of awareness or education about mental health issues. Instead, it may reflect the cultural and religious frameworks through which people make sense of their experiences (Koenig, 2015).

Another common mental disorder that is often misunderstood by Arab Muslims is depression (Al Ali et al., 2017; Aloud & Rathur, 2009; Karnouk et al., 2021; Moritz et al., 2019; Mundy, 2020) A common misconception among some Arab Muslims is that depression arises as a result of committing sins or failing to engage in adequate prayer (Aloud & Rathur, 2009). Moreover, individuals who experience severe depression may be stigmatised or criticized for not adhering to religious practices (Dardas et al., 2018). For many Arab Muslims, religious practices serve as coping mechanisms and as primary forms of treatment

for depressive symptoms. Prayer, for instance, is often utilized as a form of meditation to counteract depression, leading to feelings of relief and comfort (I. Al-Issa, 2000). This may stem from the belief that adherence to Islamic teachings can act as a shield against sadness, implying that devout Muslims should never experience depression (Okasha et al., 2012)

This belief system can create barriers to seeking formal mental healthcare for depression among Arab Muslims. Instead, they may resort to prayer or consulting religious healers as alternative treatment options (I. Al-Issa, 2000; Darwish, 2016) While engaging in religious practices can offer some relief from mild depressive symptoms for devout individuals, it is crucial to recognise that religion alone is insufficient for effectively treating clinical depression (Sabry & Vohra, 2013).

Moreover, several studies found that post-traumatic stress disorder (PTSD) has been very common among Arab Muslims refugees in some western countries due to the many conflicts, civil wars or sectarian upheavals throughout the Middle East region (Atari-Khan et al., 2021; Georgiadou et al., 2017; Kulwicki & Ballout, 2015) One study examining the psychological impact of exposure to Israeli occupation on Palestinian school children in the West Bank and Gaza, found higher levels of posttraumatic distress among the participants and girls have more PTSD symptoms than boys. In addition, this study suggests that many cases do not receive any form of mental health treatment. The study showed that some Arab families did not even notice that their children experienced PTSD symptoms, such as flashbacks and nightmares (Neria et al., 2010). Consequently, this misunderstanding of mental disorders among Arab Muslims can contribute to a range of detrimental outcomes, including reluctance to seek mental health treatment, delayed recovery from mental disorders, substance abuse, and exposure to toxic stress (Suite et al., 2007).

There are several other mental health disorders that may be misunderstood among Arab Muslims due to the influence of religious and cultural beliefs. For example, anxiety disorders,

including generalized anxiety disorders (GAD), obsessive-compulsive disorders (OCD), and panic disorders, might be misattributed to a lack of faith or spiritual weakness (Al-Krenawi, 2005; Atari-Khan et al., 2021) Individuals suffering from these conditions may be encouraged to increase their religious devotion or engage in spiritual practices as a form of self-treatment, rather than seeking professional mental health care (Al-Krenawi & Graham, 2000).

Similarly, eating disorders, such as anorexia nervosa and bulimia nervosa, might be poorly recognised or misunderstood in Arab Muslim communities (Melisse et al., 2020) Cultural factors, including the emphasis on modesty and the importance of body image, can contribute to the development and perpetuation of eating disorders while also complicating their identification and treatment (Miller & Pumariega, 2001). Stigmatisation and shame associated with these conditions might deter affected individuals from seeking appropriate care, leading to more severe health consequences.

Bipolar disorder is another mental health condition that might be misperceived in Arab Muslim societies, with its symptoms potentially being attributed to spiritual or supernatural causes, such as possession by jinn (Zolezzi et al., 2018). This can lead to individuals with bipolar disorders seeking help from faith healers or engaging in religious rituals rather than receiving evidence-based treatments from mental health professionals.

To address these misunderstandings and promote better mental health awareness and care within Arab Muslim communities, it is crucial to develop culturally sensitive and comprehensive mental health education programs that incorporate the unique religious, social, and cultural aspects of this population. Collaboration between mental health professionals, religious leaders, and community members can help foster a more accurate understanding of various mental health disorders and reduce stigma, ultimately facilitating access to appropriate care and support for those affected by these conditions.

2.6 Demographic Impacts on Arabs' Mental Health Perceptions and Service Use

In recent years, there has been a growing awareness and understanding of mental disorders among Arab Muslims, particularly among the younger and well-educated population. Many of these individuals recognise mental disorders as conditions that influence thoughts and behaviours, occurring in individuals irrespective of their religious beliefs (Al-Krenawi & Graham, 2000). Bener and Ghuloum (2011) indicated that most of the Arab participants in their study had a good understanding of schizophrenia, depression, bipolar disorders, and other serious mental problems. Until recently, little research has investigated the differences between gender and age groups in the understanding of mental disorders and its treatment among Arab Muslims. Bener and Ghuloum (2011) suggest that women, the elderly, and less educated people tend to attribute mental disorders to demonic possession or the evil eye more than other subgroups However, this study did not provide a clear explanation of why these groups of people understand mental disorders in that way or what the factor that promote these ideas.

To address this gap in knowledge and further promote mental health literacy among Arab Muslims, it is essential to investigate the factors that contribute to these differing perceptions of mental disorders. Factors that may influence mental health understanding include cultural beliefs, religious interpretations, and the availability of educational resources on mental health. Additionally, the role of stigma and its impact on seeking help and treatment for mental health issues should be considered.

Al-Adawi et al. (2002) investigated attitudes toward mental disorders in an Arab country, Oman. The study consisted of three participant subgroups: students of medical science (37%), family members of mental health patients (13.8%), and the general populace (49.4%). Al-Adawi et al. reported no correlation between attitudes toward people with mental disorders and demographics (age, gender, marital status, education, and experience with

mental health patients). Nevertheless, the research found that most participants were likely to reject a genetic explanation for mental disorders and instead attribute their cause to demons. The study stated that the participants understand mental disorders under the umbrella of their cultural beliefs. The researchers also suggested that cultural and traditional beliefs about the origins of psychological disorders could be changed with more education and knowledge of mental health services. However, although this idea is certainly valid, the researchers do not provide evidence to support it. The study did not elaborate how religion is intertwined with Omani cultural beliefs which may make it difficult to change the Omanis' mental disorders beliefs because of the reverence that they have for their religion.

Many people with mental disorders in Arab countries do not necessarily receive proper mental health treatment. According to Aloud and Rathur (2009), people in the Arab world do not seek help for mental health problems due to the lack of mental health services. Furthermore, the research indicates that excepting the Gulf countries, Arab nations have high poverty rates. Consequently, governments cannot provide proper mental health services for their people. Consistent with this view, another study also found that few Arab countries have government support for mental health services (Okasha et al., 2012). They suggested that some Arab individuals do not seek help for mental health problems because most Arab countries do not have enough psychiatrists to fulfil mental health needs. The largest numbers of psychiatrists were found in three Gulf countries, Qatar, Bahrain and Kuwait. Meanwhile, most of the other Arab countries have less than two psychiatrists per 100,000 people. With this in mind, the wars, conflicts, and less educated people in most Arab countries may lead to the persistence of inaccurate beliefs about mental disorders among people (Okasha et al., 2012).

2.7 Formal and Informal Mental Health Treatment in the Arab Region

In numerous Middle Eastern societies, particularly those steeped in Arab culture, health comprehension is often chiefly oriented towards physical well-being, with delineations between physical and mental health rarely drawn (Okasha et al., 2012). Some of the literature indicates that Arab clients cannot distinguish emotional or psychological pain from physical disease and that most tend to consider their psychological pain as a form of physical disease (Aloud & Rathur, 2009; Erickson & Al-Timimi, 2001; Ghubash & Abou-Saleh, 1997; Nassar-McMillan & Hakim-Larson, 2003; Sayed, 2003). Moreover, another study posits that Arab Muslims tend to frame their psychological issues in the context of physical diseases as a strategy to evade the stigmatization associated with mental disorders (Amri & Bemak, 2013).

Indeed, it is not uncommon for Arab individuals to manifest their mental disorders through physical symptoms, a tendency often attributed to cultural influences (Al-Krenawi, 2005). Rassool (2015) found that certain Arab Muslims with mental disorders strongly believe in the efficacy of Quranic therapy which entails the use of Quranic verses through patient reading and listening as the ideal treatment for these disorders. This belief, therefore, negatively correlates with Arab perceptions of the effectiveness of formal mental health treatments. Aloud and Rathur (2009) proposed several factors that deter Arab Muslims from availing themselves of formal mental health services, such as perceived societal stigma, preference for informal indigenous resources, and entrenched cultural and traditional beliefs. Notably, Aloud and Rathur's (2009) study did not cite Islamic teachings and perceptions as potential discouraging factors for Arab Muslims in seeking assistance from mental health professionals. This is in contrast with the findings of Abu-Rabi (1995); (Fakhr El-Islam, 2008); Sabry and Vohra (2013) who emphasised the considerable impact of Islamic teachings on Arab cultural norms and traditional perspectives.

Shiekhs have a significant impact on shaping the attitudes and responses to mental disorders among Muslims. For instance, there is a study that interviewed 22 Muslim leaders and 102 Muslim individuals from 22 mosques in the United States. The study found that even though Muslim leaders do not have formal training in psychotherapy intervention, they play a major role in promoting mental health information to the Muslim community (Abu-Ras et al., 2008). Likewise, Ali et al. (2005) sent self-report questionnaires to 730 mosques across the U.S to investigated the roles of Muslims leaders in meeting the counselling need to their communities after September 11, 2001. Responses were received from 62 Muslim leaders, among whom only a few had received formal psychotherapy training. Ninety-five percent of these leaders reported spending at least five hours per week on counselling activities. It is common for these leaders to be asked to address mental health issues within their communities, including family-related problems. These studies underline the pivotal role of cultural and traditional beliefs bolstered by Islamic theology in deterring Arab Muslims from seeking help from medical doctors, nurses, community health service centres, or psychologists and counsellors for their mental disorders.

2.8 The Stigma of Mental Disorders and Seeking Help for Treatment.

In the last decades, mental health services have been enhanced significantly, however, many individuals still choose not to seek help for mental disorders. This is due to some factors that said to play a role in preventing people seek help from mental health services and professionals. One of the most critical factors that prevent people from seeking psychological help is the stigma attached to mental disorders and its treatment. Mental health stigma creates many problems for people with mental disorders and their families such as discrimination against them, fear of them, feeling of shame, hopelessness and isolation. Also, stigma against people with mental disorders can lead them not adhering to treatment (Ciftci et al., 2013).

The most established definition of stigma was written by Goffman (1963) who defined the stigma as “the situation of the individual who is disqualified from full social acceptance”. Taking this definition into account, mental disorders stigma can be defined as when a person with mental disorders is seen not a whole person or disqualified because of disorders. According to American Psychiatric Association (APA) there are three types of mental health stigma. First, public stigma which is “the negative or discriminatory attitudes that others have about mental disorders”. Second, self-stigma which is “the negative attitudes, including internalized shame, that people with mental disorders have about their own condition”. Third, institutional stigma which is “more systemic, involving policies of government and private organizations that intentionally or unintentionally limit opportunities for people with mental disorders” (American Psychiatric Association, 2013)

Culture is often recognised as a significant factor contributing to the stigma associated with mental disorders and their treatment. In certain societies, mental disorders are perceived as a source of shame and disapproval, leading to potential social rejection and discrimination against both the individual and their family. For instance, within Chinese culture, an individual is viewed as a representative of their family and ancestors. Thus, mental disorders are seen as impacting not just the individual, but also the entire extended family (Hsin Yang & Pearson, 2002). This familial stigma associated with mental disorders is analogous to the findings of Marrow and Luhrmann (2012) Mak and Cheung (2008), which show that in Indian and Chinese cultures, families tend to conceal members with mental disorders to prevent damaging the family's reputation. Therefore, in such societies, seeking help from a mental health professional is not merely a personal decision, but rather, a family matter.

Furthermore, while many religious teachings promote compassion, empathy, and kindness towards others, they can also contribute to mental health stigma. John R. Peteet (2019) notes that one way religion may foster this stigma is through the belief that mental

disorders are punishments from God. Some religious traditions perceive mental health issues as consequences of sin, immorality, or lack of faith. Such views can lead individuals to feel shame and guilt over their mental health struggles, complicating their ability to seek help and support.

Another way in which religion can promote mental health stigma is through the notion that mental health issues can be cured solely through prayer or religious practices. While faith can provide comfort and solace to individuals experiencing mental health challenges, it should not be the only form of treatment. This belief can discourage individuals from seeking professional help or medication, leading to untreated mental health problems. Furthermore, some religious communities may view mental health issues as a weakness or lack of faith. This attitude can lead to discrimination, ostracism, and negative labelling of individuals with mental health problems, exacerbating their conditions and reducing their quality of life (John R. Peteet, 2019).

Previous research studies have shown that mental health stigma has had adverse effects on various ethnic minority groups in the United States. Specifically, studies have documented the negative impacts of mental health stigma on Arab Muslims. (Cheung & Snowden, 1990; Ciftci et al., 2013; Dalky, 2012; Dardas & Simmons, 2015; Kira et al., 2014; Zolezzi et al., 2018). For example, Zolezzi et al. (2018) reviewed 33 papers on mental health stigma in Arab culture, and found that Arabs often view mental disorders and mental health services more suspiciously than other cultural groups. This study also discovered that some Arabs do not seek help from mental health services due to the common stereotype that mental health treatment is for “crazy people.” Labelling people with psychiatric disorders as “crazy” was reported in most literature that investigated the attached stigma to mental disorders among Arabs (Coker, 2005; Sewilam et al., 2015; Zolezzi et al., 2018). The mental disorders stigma consequences for individuals in Arab society are labelling, stereotyping, and social

isolation (Sewilam et al., 2015). Another study found that in Arab Muslim culture when individuals are in need of mental health treatment, their families may refuse psychotherapy to protect the reputation of the family (Dardas & Simmons, 2015). Zolezzi et al. (2018) highlighted several negative stereotypes of people with mental disorders in Arabic culture, who are seen as incapable of looking after themselves, incompetent, dangerous, "crazy" and less intelligent. In addition, one study shows that Arabs prefer to label people with mental disorders as demonically possessed due to the mental health-related stigma in their culture (Kira et al., 2014).

The stigma attached to mental disorders and its treatment has been studied previously in some Arab countries. For instance, a study conducted in the United Arab Emirates interviewed 325 parents to investigate the factors that impact parents to seek help for mental health disorders. Most of the participants were hesitant to admit that one of their family members has a mental health issue. 38% of the participants stated that they would seek help from mental health professionals if one of their family members has mental health issue. 28% of the parents reported that one of the main reasons that prevent them from seeking help for mental health professionals is the mental health stigma. Also, 21% of the parents were sceptical about the effectiveness of mental health treatment (Shahrour & Rehmani, 2009).

Another research study conducted in Saudi Arabia, explored the stigma of mental disorders in a general hospital staff toward the patients with mental disorders. The study found that the staff had a caring attitude towards those with mental disorders. The staff did not blame that the patients with mental disorders are responsible for their disorders. However, they had discriminatory behaviour toward patients, and they still hold the idea that people with mental disorders are dangerous (Shahrour & Rehmani, 2009).

Coker (2005) examined a part of a large data of a previous qualitative study that interviewed 208 participants to explain the stigma attached to mental disorders among

Egyptian people. The author stated that that having a mental disorder in Egypt increase the social distance between the mentally ill person and other individuals. Coker (2005) reported statements by some participants that people with mental disorders are dangerous and have impaired reasoning. Also, many participants in the study blame the mentally ill people for their disorders. This study also reported that 85% of the participants do not accept a person with mental disorders to be a schoolteacher, and 57% do not accept them as a family member.

A number of studies have investigated the stigma attached to mental disorders among Sudanese. One study conducted on 644 medical students in Khartoum in Sudan to assess the psychiatric morbidity, determine stressors, evaluate mental health care seeking behaviour and barriers of seeking treatment for mental disorders. The study found that 63% of the students reported the fear of stigmatization is the most common barriers that prevent them to seek help for their mental problems (Bashir et al., 2020). Their concern of stigma was in the form of being avoided by their family. This finding was also reported by Este et al. (2017) who indicated that in Sudanese culture, a person with mental disorders can be an embarrassment to their family.

Moreover, a study conducted by Zolezzi et al. (2017) explored mental health stigma among 282 students aged between 18-34 years in Qatar. The findings indicated significant stigma toward mental disorders; notably, 65% of the students believed that individuals with mental disorders are dangerous, and 89% stated they would not marry someone with a mental disorder. Furthermore, 33% of the respondents expressed embarrassment at the possibility of it becoming known that a family member had a mental disorder. It is important to highlight that 64% of the study participants were non-Qatari; however, the study did not specify whether these non-Qatari participants were Arabs, which could influence the generalizability of the findings.

2.9 Theoretical framework

Mental disorders remain a highly stigmatised and misunderstood concept among many societies, including Arab Muslims (Kira et al., 2014; Musbahi et al., 2022; Sewilam et al., 2015). The prevalence of mental health disorders in Arab Muslim populations is comparable to global rates, with depression, anxiety, and post-traumatic stress disorders being the most common conditions reported (Al-Krenawi & Graham, 2000; Alosaimi et al., 2014). However, due to cultural, religious, and social factors, mental health disorders often go unrecognised, undiagnosed, and untreated (Abudabbeh & Aseel, 1999; Aloud & Rathur, 2009). This section aims to present a theoretical framework that explains the influence of religious, cultural, and traditional beliefs on the understanding of mental disorders and its treatment among Arab Muslims. The proposed framework is the Religious and Cultural Influence Model of Arab Muslims' Concept of Mental Disorders (RCIMA-CMD). The RCIMA-CMD is developed by the author and is yet to be empirically tested.

Culture plays a significant role in shaping the attitudes and beliefs of Arab Muslims towards mental disorders. In many Arab Muslim societies, mental disorders is still considered a taboo subject, and those who suffer from them may face social rejection, discrimination, and stigmatization (Al-Krenawi, 1999; Bener & Ghuloum, 2011). Cultural beliefs and values, such as honour, shame, and family loyalty, also influence how mental disorders are perceived and responded to within the Arab Muslim community (Aloud & Rathur, 2009; Khawaja et al., 2009)

In Arab Muslim societies, traditional healers have long been a primary source of healthcare, including mental healthcare. (Al-Krenawi & Graham, 2000). While these healers are respected figures who employ a variety of techniques to address both physical and mental disorders, their prominence poses a barrier to the accessibility of evidence-based mental health services (Al-Krenawi & Graham, 2000). This reliance on traditional methods could

delay timely and effective mental health intervention, leading to worsened outcomes (Alosaimi et al., 2014; Assad et al., 2015) Furthermore, the use of traditional healers may contribute to the stigmatization of mental disorders by reinforcing cultural beliefs that such conditions are the result of moral failings or supernatural forces, rather than being medical issues that require professional treatment (Darwish, 2016; Sewilam et al., 2015).

Religion, particularly Islam, plays a vital role in shaping the attitudes and beliefs of Arab Muslims towards mental disorders. Islam is the predominant religion in many Arab Muslim societies, and its teachings and principles influence many aspects of daily life, including healthcare. Some studies suggest that religion has a significant impact on Muslims' attitudes towards mental health treatment (I. Al-Issa, 2000; Hamid & Furnham, 2013; Youssef & Deane, 2006; Zhang & Xu, 2007).

2.9.1 The Religious Cultural Influence Model of Arab Muslims' Concept of Mental Disorders (RCIMA-CMD)

The RCIMA-CMD is a theoretical framework that aims to explain the influence of religious, cultural, and traditional beliefs on the understanding of mental disorders and its treatment among Arab Muslims. The model is composed of four main factors: religious beliefs, cultural beliefs, traditional healing practices, and mental health literacy (see Figure 1).

Religious beliefs, particularly those influenced by Islamic teachings, shape the attitudes and perceptions of Arab Muslims towards mental disorders (Youssef & Deane, 2006). Islam emphasises the importance of maintaining mental and physical well-being, and mental disorders are recognised as legitimate health conditions that require treatment (Youssef & Deane, 2006). However, some religious beliefs and practices may contribute to the stigmatisation of mental disorders, such as the belief that mental disorders are a punishment from God (I. Al-Issa, 2000). The role of Islam in shaping Arab Muslims'

understanding of mental disorders has been widely debated in the literature. Some works argue that Islam promotes a holistic view of health that includes physical, mental, and spiritual well-being (Heydari et al., 2016; Najati, 2001). Conversely, some studies suggest that Islam may contribute to negative attitudes towards mental disorders due to misconceptions and stigma associated with mental health issues in some Islamic societies (Al-Krenawi, 2005; Darwish, 2016)

Another cultural value that may influence Arab Muslims' understanding of mental health is honour. The concept of honour is highly valued in Arab culture, and it is tied to the family's reputation and respect in the community. Mental disorders can be perceived as a threat to the family's honour, and families may try to hide it from others to avoid shame and stigma. Consequently, mental disorders are often viewed as personal and private issues that should be resolved within the family (Youssef & Deane, 2006)

Moreover, traditional beliefs and practices play a crucial role in shaping Arab Muslims' perceptions of mental health. Traditional healers, such as faith healers and herbalists, are often consulted before seeking formal medical treatment (Abou-Elhamd, 2009). Before seeking medical help, many Arab Muslims consult traditional healers like faith healers and herbalists. These individuals are revered for their supposed spiritual and supernatural abilities to treat conditions often attributed to supernatural causes like the "evil eye" or witchcraft. Their methods are often considered more accessible, affordable, and culturally aligned, providing a tempting alternative to formal medical treatment (Darwish, 2016).

This model was developed through a comprehensive review of existing literature that investigated various aspects: the stigma associated with mental health within the Arab Muslim community (Dardas & Simmons, 2015; Kira et al., 2014; Musbahi et al., 2022; Shahrour & Rehmani, 2009), attitudes towards seeking professional mental health assistance

(Al Ali et al., 2017; Al-Krenawi, 2005; Aloud & Rathur, 2009; Amri & Bemak, 2013; Zolezzi et al., 2017), Islamic teachings found in primary sources like the Quran and Hadiths, and other studies that have explored mental health in an Arab and Islamic context (Abdel-Khalek, 2011; Alqasir & Ohtsuka, 2023; Islam & Campbell, 2014; Mahmood et al., 2007; Rafique et al., 2019; Sabry & Vohra, 2013).

The RCIMA-CMD proposes that the influence of religion on Arab Muslims' understanding of mental disorders is mediated by cultural and traditional beliefs. The model suggests that Islamic teachings on mental health may be influenced by cultural and traditional beliefs and practices and that these beliefs and practices may either promote or hinder the understanding of mental disorders among Arab Muslims. The model also suggests that the influence of cultural and traditional beliefs on mental disorders may be moderated by the level of religious commitment and knowledge. This is because Islamic texts offer guidance on mental health. Therefore, individuals with a high level of religiosity and adherence to Islamic teachings may possess a multifaceted and sophisticated understanding of mental health, mental disorders, and the treatments available.

Within the RCIMA-CMD, four core constructs are identified: cultural and traditional beliefs, religious beliefs, knowledge and education, and attitudes and behaviours toward mental disorders. The first pertains to specific Arab cultural norms that may affect mental health perceptions. The second involves the potential influences of Islamic teachings, while the third focuses on the general level of mental health awareness. The last considers how all these factors combine to shape the community's overall response to mental health issues.

The RCIMA-CMD proposes that cultural and traditional beliefs have a direct and indirect effect on attitudes and behaviours towards mental disorders. Cultural and traditional beliefs may directly influence attitudes and behaviours towards mental disorders by promoting stigma and misconceptions about mental health. On the other hand, cultural and

traditional beliefs may indirectly influence attitudes and behaviours towards mental disorders by influencing the level of religious commitment and knowledge.

Also, Islamic teachings may directly influence attitudes and behaviours towards mental disorders by promoting positive attitudes towards seeking medical treatment and emphasising the importance of mental health. On the other hand, Islamic teachings may indirectly influence attitudes and behaviours towards mental disorders by moderating the influence of cultural and traditional beliefs on mental disorders.

Knowledge and education are proposed to have a direct effect on attitudes and behaviours towards mental disorders. The level of education and awareness among Arab Muslims is another crucial factor affecting their understanding of mental health. Lack of knowledge and awareness about mental disorders can lead to misconceptions and stigmatization. According to a study by Alosaimi et al. (2014), the majority of the Arab population has limited knowledge and understanding of mental disorders, which leads to a negative attitude towards mental health and its treatment. The study suggests that improving education and awareness about mental disorders can positively impact the Arab population's perception of mental health, leading to an increase in the acceptance of mental health services.

Furthermore, traditional healers play a significant role in shaping Arab Muslims' understanding of mental health. Traditional healers are often relied upon as the first point of contact for mental health treatment in Arab communities, where traditional and cultural beliefs are prominent (Al-Krenawi, 1999). Traditional healers are valued for their cultural competence and ability to integrate spiritual practices into treatment. They offer a different perspective on mental health that often contrasts with western medical models. In Arab communities, traditional healers are often preferred over psychiatric services, as they are seen as more accessible, affordable, and culturally appropriate (Alosaimi et al., 2014).

The impact of religion on Arab Muslims' perception of mental health has also been highlighted in previous research. For example, (Youssef & Deane, 2006) suggest that Islam can be both a protective and a risk factor for mental health. Islam, as a religion, emphasises the importance of psychological well-being and advocates for the recognition and treatment of mental disorders. However, cultural interpretations of Islamic teachings may lead to the stigmatization of mental disorders, hindering individuals' access to mental health services. The interplay between cultural beliefs and religion can be complex, and it is important to explore these factors further to gain a deeper understanding of their impact on Arab Muslims' understanding of mental health.

Social stigma surrounding mental health is a prevalent issue in Arab communities. Mental disorders are often stigmatised, leading to a reluctance to seek help or even acknowledge the existence of mental health problems (Al-Krenawi & Graham, 2000). Stigma can be attributed to cultural beliefs, which often view mental disorders as a result of supernatural or spiritual factors, and to the lack of education and awareness surrounding mental health. The stigma surrounding mental health in Arab communities can result in social isolation and discrimination, leading to further negative consequences on mental health.

Factors such as family loyalty, the level of education and awareness, traditional healers, the role of religion, and social stigma surrounding mental health are crucial components of the RCIMAM-CMD. This model provides a basis for further research and interventions to improve the understanding of mental health and reduce stigma in Arab communities. Understanding the impact of cultural and traditional beliefs, as well as religion, can contribute to the development of culturally sensitive mental health services that meet the needs of Arab Muslims.

The model proposes six dimensions that are influenced by Islamic culture and teachings: Concept of Mental Health, Beliefs on Mental Health Treatment Effectiveness,

Perceived Societal Stigma, Attributing Mental Disorders to Supernatural Forces and Physical Diseases, Attitudes Towards Seeking Professional Help, and Choice of Healthcare Providers. In this section, these dimensions and their importance in understanding Arab Muslims' perception of mental disorders are elaborated.

The first dimension in the RCIMAM-CMD is the concept of Mental Health. This dimension refers to the understanding of mental health and disorders, its causes, and its treatment among Arab Muslims. Islamic culture has a significant influence on the concept of mental health among Arab Muslims. Mental health is viewed as an essential aspect of overall health in Islamic teachings, and it is believed that a healthy mind is necessary for a healthy body. Additionally, Islamic teachings emphasise the importance of spirituality in maintaining mental health. Many Arab Muslims believe that mental disorders can be caused by a lack of faith, and as such, spiritual remedies may be preferred over medical treatment.

The second dimension in the RCIMAM-CMD is Beliefs on Mental Health Treatment Effectiveness. This dimension refers to Arab Muslims' beliefs about the effectiveness of various treatments for mental disorders, including medical and spiritual treatments. Arab Muslims often prefer spiritual remedies for mental disorders, as they believe that mental health and spirituality are interconnected (Assad et al., 2015; Darwish, 2016). However, some Arab Muslims may also believe in the effectiveness of medical treatments, particularly if they are recommended by a religious authority (Padela, 2007).

The third dimension in the RCIMAM-CMD is Perceived Societal Stigma. Arab Muslims often face significant societal stigma surrounding mental disorders, which can prevent individuals from seeking help for mental health issues. This stigma is often rooted in cultural beliefs and misconceptions surrounding mental disorders. Arab Muslims may believe that mental disorders is a result of personal weakness or a lack of faith, leading to a perception that individuals with mental disorders are to blame for their condition.

The fourth dimension in the RCIMAM-CMD is Attributing Mental Disorders to Supernatural Forces and Physical Diseases. Arab Muslims may attribute mental disorders to supernatural forces or physical diseases, rather than recognising it as a medical condition. This belief is often rooted in cultural and religious teachings, which suggest that mental disorders is a result of a spiritual or supernatural imbalance.

The fifth dimension in the RCIMAM-CMD is Attitudes Towards Seeking Professional Help. Arab Muslims may have negative attitudes towards seeking professional help for mental disorders, particularly from psychologists and counsellors. This reluctance may be rooted in cultural beliefs and misconceptions surrounding mental disorders, as well as a lack of knowledge about the effectiveness of professional treatment.

The sixth dimension in the RCIMAM-CMD is Choice of Healthcare Providers. Arab Muslims may prefer to seek treatment from traditional healers or religious leaders rather than seeking professional medical treatment. This preference may be influenced by cultural and religious teachings that emphasise the importance of spirituality in maintaining mental health.

The RCIMAM-CMD provides a theoretical framework for understanding how Islamic culture and teachings shape Arab Muslims' perceptions of mental disorders. The model proposes that Islamic culture has a significant influence on all of its dimensions, highlighting the need for cultural sensitivity and awareness when addressing mental health issues among Arab Muslims. Understanding these dimensions can help mental health professionals tailor their approach to meet the specific needs of Arab Muslim patients and improve their overall mental health outcomes.

In order to validate the RCIMAM-CMD, the study utilized a mixed-methods approach that combines both qualitative and quantitative research methods. The study employed a survey questionnaire to collect data from a sample of Arab Muslims. The questionnaire included items that measure the six dimensions proposed in the RCIMAM-CMD, as well as

demographic questions about the participant's age, gender, education level, occupation, and religious beliefs. The study also utilized semi-structured interviews to provide more in-depth information about the participants' understanding of mental health and their beliefs and perceptions of mental disorders and their treatment.

Data collected from the survey questionnaire and semi-structured interviews were analysed using both descriptive and inferential statistics, as well as thematic analysis. The descriptive statistics provide information on the distribution of responses to each item on the questionnaire, while the inferential statistics were used to determine the relationship between the six dimensions proposed in the RIMA-CMD and the participants' demographic characteristics. Thematic analysis of the interview data was conducted to identify common themes and patterns in the participants' responses.

The findings of this study are expected to provide important insights into the influence of Islamic culture and teachings on Arab Muslims' understanding of mental disorders and its treatment. Specifically, the study clarified the extent to which Islamic teachings affect Arab Muslims' attitudes towards seeking professional help from mental health providers, and whether Islamic beliefs and values influence the extent to which Arab Muslims attribute mental disorders to supernatural forces or physical diseases.

Furthermore, the study may provide recommendations for mental health professionals and policymakers on how to address cultural and religious factors that may impact Arab Muslims' access to mental health care. For example, the study may suggest the need for culturally appropriate mental health services that take into account the specific cultural and religious beliefs and practices of Arab Muslims. Additionally, the study may highlight the importance of addressing the societal stigma surrounding mental disorders within Arab Muslim communities and the need for education and awareness campaigns that promote understanding and acceptance of mental health issues.

The RCIMAM-CMD model considers education, gender, and age as important quantitative variables that may impact the understanding of mental disorders among Arab Muslims. These variables may shape attitudes and behaviours related to mental health, including help-seeking and consulting behaviours. For example, individuals with higher levels of education may have greater access to information and resources related to mental health and may be more likely to seek treatment. Gender may also play a role, with women in some Arab Muslim societies facing additional barriers to accessing mental health services due to gendered norms and restrictions on mobility. Age is another factor that may impact mental health perceptions and behaviours, with younger individuals potentially being more open to seeking treatment and adopting new attitudes towards mental health.

In addition to these demographic variables, the RCIMAM-CMD model recognises the importance of cultural and traditional beliefs in shaping attitudes towards mental health and help-seeking behaviours in Arab Muslim communities. For example, cultural values such as family honour and privacy may impact whether individuals seek mental health treatment or share their experiences with others. Religious beliefs may also shape attitudes towards mental disorders and treatment, with some individuals viewing mental disorders as a test from God or believing that seeking treatment goes against religious teachings.

The RCIMAM-CMD provides a theoretical framework for understanding the influence of Islamic culture and teachings on Arab Muslims' understanding of mental disorders and their treatment. To validate the RCIMA-CMD model, an exploratory sequential design employing mixed methods was utilised. The first phase involved qualitative semi-structured interviews, aimed at gaining an in-depth understanding of cultural and religious factors influencing Arab Muslims' understanding of mental health. Insights from these interviews informed the second phase, which consisted of a quantitative survey designed to empirically test the model's assumptions and predictions on a larger scale. Together, these

two phases aim to offer a robust evaluation of the model, examining its applicability, reliability, and generalizability within the context of Arab Muslims' unique challenges in accessing and receiving appropriate mental health care.

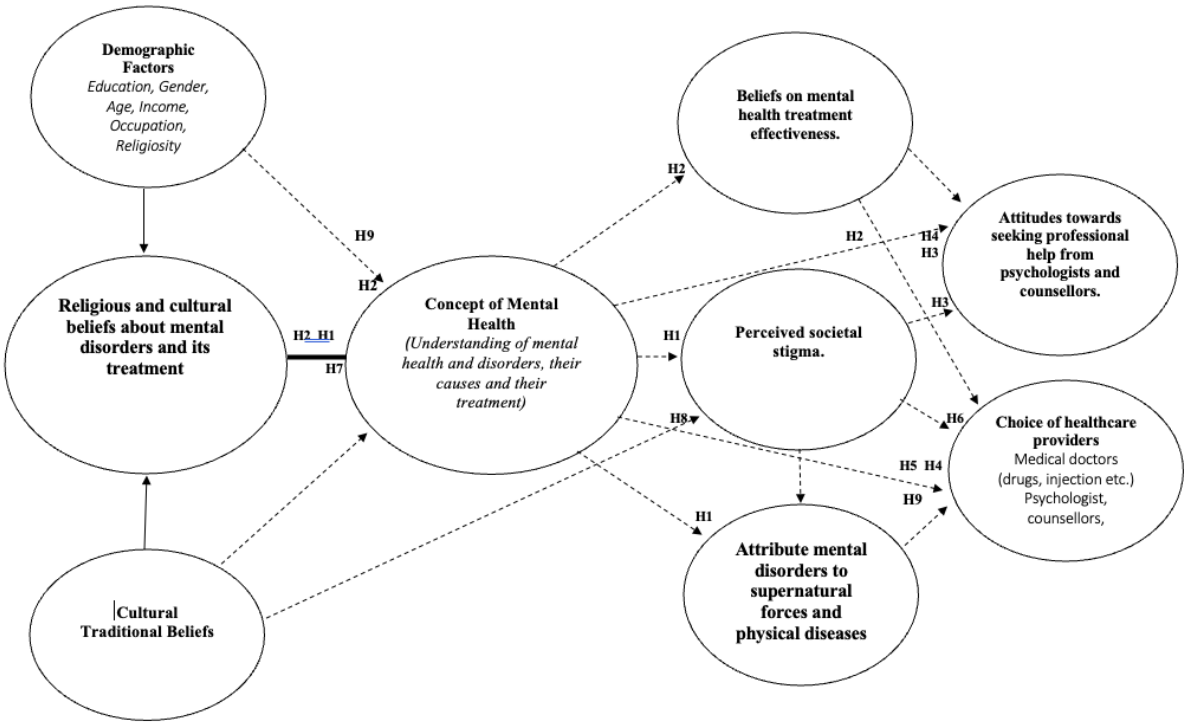

Figure 1: The Religious and Cultural Influence Model of Arab Muslims' Concept of Mental Disorders (RCIMAM-CMD).

Chapter Three: Methodology

3.1 The Rationale for Mixed Methods Exploratory Sequential Design

The mixed methods approach, specifically the exploratory sequential design, offers a comprehensive framework for this research. It seeks to explore the impact of Islamic-Arabic cultural and traditional beliefs on Arab Muslims' perceptions of mental disorders and their treatments. The combination of qualitative and quantitative data gives a deep insight into these beliefs and their wider implications at the population level. According to Creswell and Creswell (2017), the integrated approach provides a more complete view of complex subjects. For this study, it first captures individual perspectives through qualitative interviews and then generalises these insights to a larger Arab Muslim community in Australia via a quantitative survey.

The increasing prominence of mixed methods in human sciences underscores its suitability for exploring the connection between Islamic-Arabic culture, traditional beliefs, and mental health perceptions among Arab Muslims. This design not only broadens understanding through various viewpoints but also refines tools based on initial qualitative outcomes, explaining subsequent quantitative results. Newman et al. (1998) advocate for viewing quantitative and qualitative methods as complementary, with mixed methods bridging the two. By adopting this viewpoint, the research captures the best of both approaches, offering a richer comprehension of how Islamic-Arabic cultural beliefs affect Arab Muslims' mental health perspectives in Australia.

The strength of this research lies in the combination of qualitative depth with quantitative breadth. This dual approach uncovers varied viewpoints, authenticates outcomes, and dives deep into the Islamic-Arabic cultural impact on mental health understanding and behaviour. The design surpasses potential individual data constraints, yielding stronger and more insightful conclusions, fortifying the study's base (Creswell & Creswell, 2017).

Mixed methods can be segmented into three primary designs: explanatory sequential, exploratory sequential, and convergent parallel (Creswell & Creswell, 2017) Each offers distinct benefits depending on the research nature. For this study, the exploratory sequential design is most pertinent. It begins with qualitative data collection and analysis, apt for this broad topic. It then transitions to quantitative data analysis, testing the primary findings on a broader Arab Muslim audience in Australia (Clark & Creswell, 2008). While the other designs have their merits, they don't align with this study's objectives as closely as the exploratory sequential design.

The choice of mixed methods is dictated by research goals, topic intricacy, and available resources. Every design brings a unique approach to blending qualitative and quantitative insights, potentially offering a fuller understanding of the subject (Creswell et al., 2011). Given the limited existing literature on Islamic culture's influence on Arab Muslims' mental health understanding, the exploratory sequential design is ideal. It allows for new variable creation in the quantitative phase, making it essential for this less-explored subject. Furthermore, it effectively connects qualitative insights from a select sample to a larger group, ensuring a thorough understanding of the topic and meeting research queries. the exploratory sequential design facilitates a detailed and holistic investigation into how Islamic-Arabic culture and traditions shape mental health perceptions, offering profound insights into this critical area among Arab Muslims (Creswell & Creswell, 2017).

3.2 Research Paradigm

Given the nature of this thesis, which explores how Islamic-Arab cultural and traditional beliefs impact the perception of mental disorders and attitudes towards mental health treatment among Arab Muslim expatriates in Australia, a pragmatic mixed methods methodology was adopted. The primary aim was to concentrate on "what works" as opposed to delving into the semantics of "what is real". The pragmatic paradigm offers a practical,

adaptable approach, empowering the researcher to zero in on the research problem and exploit an array of methodologies to unpack the complexities of the phenomenon under study. This philosophy is not constricted by stringent epistemological rules, but instead, it promotes fluidity in the adoption of methods that align with the study's objectives (Clark & Creswell, 2008).

The selection of the pragmatic paradigm was not arbitrary, but a calculated decision, influenced by the research problem and the requirement for a methodology that seamlessly integrates both qualitative and quantitative data. Unlike paradigms that perceive the world as an indivisible unity, pragmatism advocates for flexibility and adaptability in the quest for understanding. It enables the researcher to harness the power of various data collection methods, to explore diverse perspectives and propositions, and to adopt an array of techniques for analysing findings. This methodological pluralism strengthens the research process, allowing for a more comprehensive understanding of the research problem. In this study, the pragmatic paradigm is particularly suited for scrutinizing the influence of religious culture and traditional beliefs on Arab Muslims' understanding of mental disorders, as it allows for the marriage of personal narratives with empirical data, thereby providing a more holistic insight into the research problem (Creswell & Creswell, 2017).

The choice of a mixed-methods design was also informed by the research problem, which required an in-depth exploration of the beliefs and perceptions of Arab-Muslim participants regarding mental disorders. A mixed-methods design is particularly well-suited for research problems that require both qualitative and quantitative data, as it allows the researcher to collect and analyse data from multiple perspectives, using different methods and techniques (Creswell & Creswell, 2017; Morgan, 2007).

The first phase of the study involved collecting qualitative data through semi-structured interviews with 12 participants, aimed at eliciting their perceptions of the

phenomenon under study. The qualitative data were analysed using thematic analysis, which allowed the researcher to identify the key themes and patterns in the data. The research followed an organic process, where the findings from the first qualitative phase contributed directly to the design of the subsequent quantitative phase. This allowed the study to explore the prevalence of perceptions identified in Phase 1 with a larger sample, ensuring that the quantitative phase was tailored to the specific themes and insights that emerged during the qualitative exploration.

The second phase of the study involved collecting quantitative data using a structured questionnaire administered to a larger sample of participants. The quantitative data were analysed using descriptive and inferential statistics, which allowed the researcher to explore the prevalence of the themes identified in the qualitative phase and to test hypotheses related to the relationship between Arab-Muslim participants' beliefs and mental disorders.

In the mixed methods approach, researchers often try to choose methods, variables, and units of analysis best suited to address the set research questions. Thus, the pragmatic paradigm makes it possible for researchers to combine quantitative and qualitative methods to answer questions in the most thorough and effective way to understand the topic better (Creswell, 2009). Moreover, using this design in this study helps enable generalizability and limit the interpretation of the qualitative findings (Ford & Norrie, 2016). For a detailed comparison of the chosen research paradigm with others and further justification for its selection, please refer to Appendix H

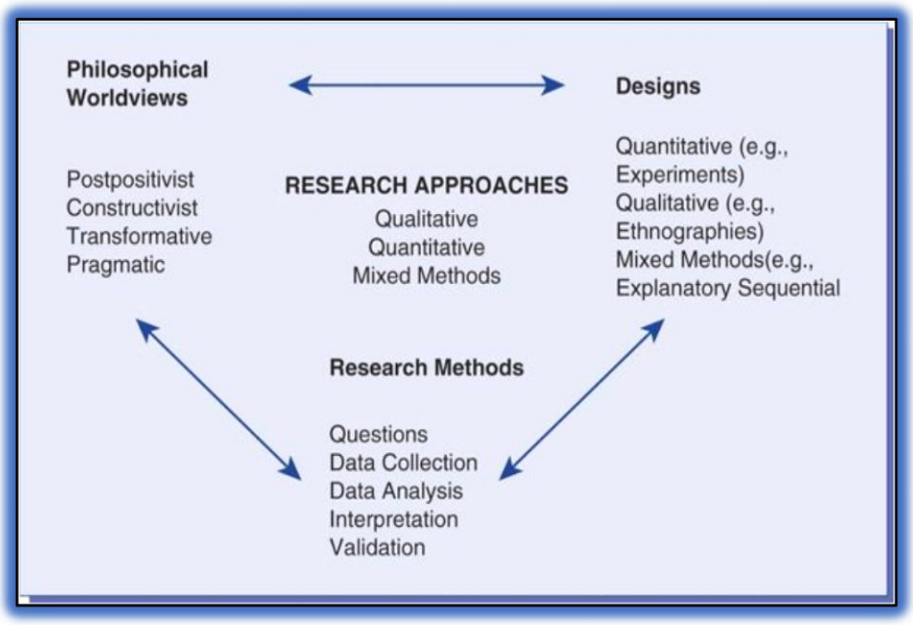

Figure 2: A Framework for Research- The Interconnection of paradigms, design, and research methods (Creswell & Creswell, 2017, p. 35).

3.3 Study Design

3.3.1 QUALITATIVE + quantitative Design

The current study has used a mixed methods exploratory sequential design, which is a two-phase design that begins with an initial qualitative phase, followed by a quantitative phase (Creswell, 2009). The purpose of this design is to provide a more comprehensive understanding of the research problem by first exploring the topic in-depth through qualitative data collection and analysis, and then validating the findings through quantitative data collection and analysis (Creswell et al., 2011)

In this study, the qualitative phase was the *dominant phase* because the primary aim was to explore the beliefs and perceptions of Arab Muslim informants regarding mental disorders. The qualitative phase used a purposive sampling strategy to select 15 Arab Muslim participants with experience or knowledge of mental disorders. The interviews were conducted face-to-face or via telephone, and the data were analysed using thematic analysis, a method that involves identifying, analysing, and reporting patterns within data (Braun &

Clarke, 2006). The themes that emerged from the qualitative data analysis were used to develop the questionnaire for the quantitative phase of the study.

The quantitative phase aimed to measure the prevalence of specific beliefs and attitudes towards mental disorders among Arab Muslim informants. The questionnaire consisted of 167 closed-ended questions that were based on the themes that emerged from the qualitative data analysis.

The questionnaire was translated into Arabic and pilot-tested on a sample of ten participants to ensure its clarity and cultural appropriateness. The translation process involved a forward translation by a bilingual translator fluent in both English and Arabic (the researcher). To ensure accuracy, a back-translation was conducted by an independent bilingual individual who had not seen the original English version. The back-translation was then compared to the original English version, and any discrepancies were identified and resolved. Additionally, feedback from the pilot test participants was gathered regarding the clarity and cultural relevance of the questions, leading to minor adjustments to improve the questionnaire's cultural appropriateness. The final questionnaire was administered to a sample of 169 Arab Muslim informants recruited through social media platforms and snowball sampling. The data collected were analysed using descriptive statistics to provide a general overview of the prevalence of beliefs and attitudes towards mental disorders among the sample.

While the qualitative phase of this research was predominant, the use of quantitative survey data was essential in extending the investigation and obtaining a larger sample size. By doing so, it was possible to generalize the findings to a broader population of Arab Muslims and provide more precise conclusions for the research's aim. The survey data helped to identify patterns and trends among respondents, providing a more comprehensive understanding of the research topic. Moreover, the quantitative data allowed for statistical

analysis, enabling the researchers to test hypotheses and measure the relationships between variables. This analysis helped to validate and support the qualitative findings, adding further strength to the overall conclusions of the research. It should be noted that while the quantitative data provided valuable insights, the qualitative phase was still crucial in gaining a deeper understanding of the research topic. The qualitative data facilitated a thorough examination of participants' experiences, perspectives, and attitudes, yielding rich and detailed observations on the research topic. Fundamentally, the application of both qualitative and quantitative approaches in this investigation led to a more extensive comprehension of the topic. This dual-method strategy boosted the dependability and validity of the research findings.

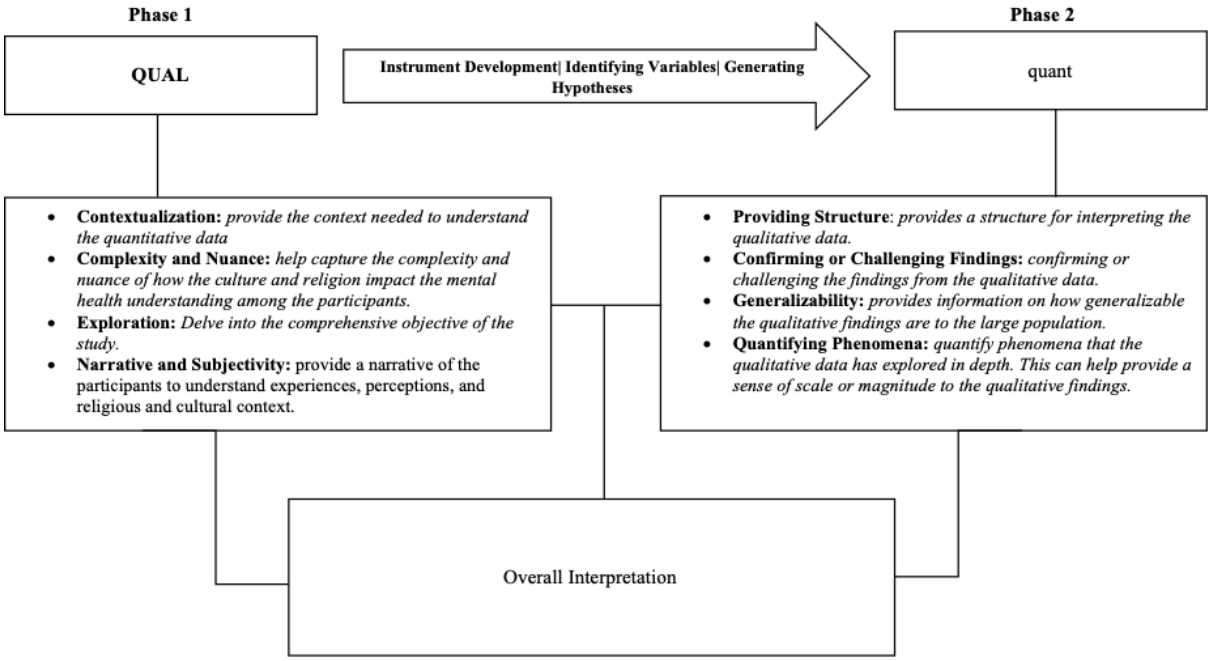

Figure 3: Study design QUAL+quant

3.4 Ethics Approval

This study examined perceptions of mental disorders among Arab Muslims using semi-structured interviews. Given the cultural sensitivity around mental health in Arab

culture and its ties to religious beliefs (Al-Krenawi, 1999; Aloud & Rathur, 2009; Fakhr El-Islam, 2008; Okasha et al., 2012), ethical considerations, such as informed consent and confidentiality, were paramount. Informed consent, especially vital when studying sensitive topics (Nijhawan et al., 2013), was discussed with participants, outlining the study's aim and their role. Participants had the autonomy to join or withdraw without justification, with an option to erase their data upon withdrawal.

Confidentiality was ensured by anonymizing participant data. With consent, only nationality and age were disclosed to facilitate comparative analyses. Data security was upheld through storage on a password-protected computer, with a backup on Victoria University's R: Drive, where access was strictly limited to the researcher and their supervisor. This study adhered to the National Health and Medical Research Council’s Guidelines for Ethical Conduct in Human Research (2007). The qualitative phase received approval from the Victoria University Human Research Ethics Committee for a duration of two years, commencing on August 6, 2020, under application ID: HRE20-124. Additionally, the quantitative phase was approved for a two-year period starting from January 18, 2023. Please refer to the Appendix A.

Chapter Four: Study I: Qualitative Component

4.1 Overview

The qualitative component of this study provides an in-depth exploration of the influences of Islamic-Arabic beliefs on the perceptions of mental disorders and mental health treatment among the participants. This chapter outlines the methodology and findings from semi-structured interviews with participants who share a common cultural and religious background. The section on Qualitative Participants details the demographics of these individuals, offering insight into their varied experiences and perspectives shaped by their age, gender, educational level, and length of stay in Australia. The Data Collection Procedures describe the culturally sensitive approaches employed to facilitate open and honest dialogues. The Data Analysis methods are discussed, illustrating the systematic techniques used to derive meaningful insights from the interview data. Verification Procedures, which ensure the credibility and reliability of the findings, are presented. The chapter culminates in the Qualitative Study Findings, where the results are presented, including an assessment of participants' religiosity and a detailed exploration of thirteen emergent themes that highlight the complex interplay between cultural identity, religious beliefs, and attitudes towards mental health within the community.

4.2 Qualitative Participants

The qualitative phase of this research involved the participation of twelve Arab Muslims living in Melbourne, Australia, with ages ranging from 28 to 53. The participants came from three Arab countries: Egypt, Saudi Arabia, and Sudan, with two male and two female participants being interviewed from each country. The interviews were conducted online using the ZOOM platform, which allowed for flexibility in scheduling and ensured the safety of participants during the ongoing pandemic.

The participants were recruited through the researcher's social networks, specifically from Muslim communities in Melbourne. Invitations to participate in the study were sent to 15 prospective participants using email and WhatsApp. To ensure ethical standards were met, all participants were provided with an information sheet (Appendix C) and an informed consent form (Appendix D), which detailed the project's purpose, confidentiality protection, research procedures, participant rights, and risks and benefits of participation in the research. Participants who agreed to participate in the study signed the consent form and were provided with further details about the semi-structured interview procedures before participating in the interviews. It is important to note that three prospective participants were excluded from the study as they did not meet the inclusion criteria. All the study participants were given fictitious names in this thesis as provided in Table 3, to ensure confidentiality.

The demographic characteristics of the twelve participants varied. All participants, except for Amal and Aleaa, were born and raised in their home country. However, Amal and Aleaa revealed that they were born in Sudan but raised in Australia. All participants identified as Arab Muslims, and six were male while six were female.

The twelve Arab Muslim participants in this study provided valuable insights into the research topic, with their diverse backgrounds and experiences contributing to the richness and depth of the data collected. The researcher's careful recruitment process and adherence to ethical standards ensured that the participants' confidentiality and safety were protected throughout the study. The combination of qualitative and quantitative methods in this study allowed for a comprehensive understanding of the topic and ensured that the findings were both reliable and valid.

4.2.1 Participants' Demographic Characteristics

The following are demographic characteristics of the twelve study participants, who have been assigned pseudonyms to maintain confidentiality. A diverse group of Arab

Muslims was selected for this study to ensure a wide range of perspectives and experiences were captured. Participants were divided into two groups based on gender, with six male and six female participants. Their demographic information, including age, nationality, length of time living in Australia, educational background, and profession, is detailed in the following paragraphs and summarised in Table 3. This information provides valuable context for understanding the participants' perspectives on mental health and help-seeking behaviours within the Arab Muslim community. All study's participants have been given fictitious names in this thesis as provided in Table 3, to ensure confidentiality.

Male Participants' Demographic Characteristics: Ahmad is 35 years old Egyptian male, born and raised in Elbehiera, Egypt. He is married and has three kids. He has been in Australia for 7 years. He speaks Arabic and English. He is currently working as an Arabic teacher in an institute in Melbourne. He has a bachelor's degree in science.

Bader is 32 years old Egyptian male, unmarried, born and raised in Cairo, Egypt. He has been in Australia for 5 years. He speaks Arabic and English. He is currently working as an Executive Secretary in Melbourne. He has a bachelor's degree in human resource management.

Salem is 32 years old Saudi male, born and raised in Jeddah, Saudi Arabia. He is married has two kids. He has been in Australia for 2 years. He is currently doing his PhD in Mechanical Engineering. He also has a master's degree in the same discipline.

Dbean is 30 years old Saudi male, born and raised in Riyadh, Saudi Arabia. He has been in Australia for 4 years. He is married and has two kids. He has just finished his master's degree in management.

Essa is a 28-year-old Sudanese Australian man who was born and raised in Khartoum, Sudan. He is unmarried. He has been in Australia for 12 years. He is currently working as an engineer in Melbourne. He holds a bachelor's degree in engineering.

Fahmy is a 53-year-old, Sudanese Australian man who was born and raised in Agbara, Sudan. He is divorced and has 5 children. He has been in Australia for 23 years. He stated that he is working as an interpreter and he has worked with psychologists and psychiatrists, therefore, he thought that helped him have a good understanding of mental health and mental disorders. He holds a master's degree in social work.

Female Participants' Demographic Characteristics: *Najwa* is 32 years old Egyptian female. She is born and raised in Alexandria, Egypt. She is married and has three kids. she has been in Australia for 4 years. She speaks Arabic and English. She is currently working as a bank clerk in Melbourne. She has a bachelor's degree in science.

Shema is 40 years old Egyptian female, born and raised in Cairo Egyptian. She is married and has 4 kids. She speaks only Arabic. She has been in Australia for 10 years and a half. She said she used to work as an Islamic teacher in a mosque but now, she is a housewife. She has a high school degree.

Najd is 28 years old Saudi female, born and raised in Riyadh, Saudi Arabia. She is unmarried. She speaks Arabic and English. She has been in Australia for 2 years. She is in her first year as PhD student in Latrobe University in Melbourne. She has a master's degree in management.

Areej is 29 years old Saudi female, born and raised in the Eastern Province in Saudi Arabia. She is unmarried. She speaks Arabic and English. She has been in Australia for 5 years. She is the only Shiite Muslim among the twelve participants. She just finished her master's degree in chemistry.

Amal is a 23-year-old Sudanese Australian female who was born Sudan, but she stated that she raised in Malborne Australia. She is unmarried. She speaks Arabic and English. She has been in Australia for 18 years. She is currently studying her bachelor's degree in English literature.

Aleaa is a 22-year-old Sudanese Australian female who was born in Sudan but was raised in Melbourne, Australia. She is unmarried and speaks fluent English, though her Arabic is not as proficient. Having lived in Australia for 20 years, she is currently pursuing a bachelor's degree in science.

Table 3

Demographics of Interviewees: Age, Nationality, Length of Living in Australia, Education, and Profession (N=12)

Participant pseudonym	Age	Place of berth/ Nationality	Sex	Length of living in Australia (in years)	Marital status	Education	Profession	Language
Ahmed	35	Egypt	M	7	Married	bachelor's in science.	working as an Arabic teacher	Speaks Arabic and English
Bader	32	Egypt	M	5	Unmarried	bachelor's in HR	working as an Executive Secretary	Speaks Arabic and English
Najwa	32	Egypt	F	4	Married	bachelor's in science	working as a bank clerk	Speaks Arabic and English
Shema	40	Egypt	F	10	Married	high school	Homemaker	She stated that she is limited in English and speaks only Arabic
Salem	32	Saudi Arabia	M	2	Married	master's in engineering	PhD Student	Speaks Arabic and English
Dbean	30	Saudi Arabia	M	4	Married	master's in Management.	Business consultant	Speaks Arabic and English
Najd	28	Saudi Arabia	F	2	Unmarried	master's in management	PhD student	Speaks Arabic and English
Asma	29	Saudi Arabia	F	5	Unmarried	master's in chemistry	Not working as she just finished her master	Speaks Arabic and English
Essa	28	Sudan	M	12	Unmarried	bachelor's in engineering	working as an engineer	Speaks Arabic and English
Fahmy	53	Sudan	M	23	Divorced	master's in Social Work.	working as an interpreter and he has worked with psychologists and psychiatrists, therefore, he thought that helped him have a good understanding of mental health problems	Speaks Arabic and English
Amal	23	Sudan	F	18	Unmarried	bachelor's in English literature	Not working	Speaks Arabic and English
Aleaa	22	Sudan	F	20	Unmarried	studying bachelor's in IT	Student	She could speak Arabic but not as fluent as her English.

4.3 Data Collection Procedures

Since the participants were from three different Arab-Muslim countries and each country has its unique culture, a qualitative semi-structured interview design was chosen to gather information from the participants. The design allowed the researchers to explore the participants' perceptions and beliefs about mental disorders within the context of their upbringing, family, cultural context, educational experience, and subsequent migration experiences to Australia.

Interviews were carried out remotely via the ZOOM platform, owing to COVID-19-related restrictions and the declared state of disaster in Victoria, which precluded face-to-face interviews. These sessions were audio-recorded and subsequently transcribed for analysis. Translations from Arabic to English were performed by the author, Arabic native speaker, ensuring accuracy in data interpretation.

Prior to each interview, participants' comfort with using ZOOM was confirmed, offering the flexibility to choose an alternative telecommunication tool if preferred. Informed consent was obtained from all participants, who were assured of confidentiality and anonymity in the dissemination of findings, with the possibility of pseudonyms replacing real names. Nonetheless, details such as nationality, age, educational background, and occupation were noted to contextualise the presented views.

Interviews typically lasted about an hour, engaging participants with open-ended questions designed to elicit detailed insights into their understanding, attitudes, and behaviours concerning mental health issues. These questions were carefully crafted to resonate with the study's primary objectives and specific research inquiries. For a comprehensive list of the interview questions and their intended purposes, refer to Appendix F.

The study aimed to illuminate the perceptions and treatment of mental disorders within Arab-Muslim communities, where such issues often encounter significant stigma. This stigma can deter individuals from seeking necessary support, with those opting for help potentially facing judgment and negative reactions from their family and broader community. Thus, understanding these communities' viewpoints is vital for devising effective interventions and mitigating stigma.

Qualitative research is particularly adept at unravelling the complexities of human experience and perception. The semi-structured interview format not only allowed for the collection of candid participant perspectives but also facilitated deeper investigation through follow-up inquiries. Moreover, the utilisation of online interview platforms like ZOOM is increasingly recognised in qualitative studies for its ability to connect researchers with geographically dispersed participants, thereby enriching the study with a wider array of participant experiences and perspectives. Recent research has shown that the quality of data obtained through Zoom is comparable to that of face-to-face interviews, particularly when it comes to depth and richness of the data (Archibald et al., 2019; Gray et al., 2020).

4.4 Data Analysis

The semi-structured interviews, conducted in Arabic, were meticulously transcribed and translated into English prior to analysis. The process of thematic analysis was employed to manually examine the data, allowing for a detailed exploration of the qualitative information gathered. Thematic analysis was chosen for its flexibility, enabling the researcher to navigate the varied subjective experiences shared by participants from diverse Arab countries and cultural backgrounds. This analytical approach facilitated a focused examination of interviewees' personal perceptions and experiences related to mental disorders. This method, as outlined by Braun and Clarke (2006), empowers researchers to

delve deeply into the qualitative data, ensuring that the complexity of individual experiences is captured and understood within the broader context of the study.

In the processing of the data analysis, the interview data were read and re-read several times, finding the common beliefs and perceptions about mental disorders and coding them throughout the text. Subsequently, the codes were grouped together into key themes. Thirteen themes were generated from interview data. All themes were created to meet the overall question of the research. All themes were re-reviewed to see whether they were in line with previous literatures that studied the understanding of mental disorders among Arab Muslims, or completely new and unexpected. Then, the themes were revised to provide more details about how the participants view and understand mental disorders (Lewis et al., 2003). For a comprehensive account of the coding process and the subsequent generation of themes, refer to (Appendix G).

4.5 Verification Procedures

To ensure the reliability and validity of the study's findings, several measures were implemented throughout the research process. For reliability, the interviews were conducted using a semi-structured format with a set of open-ended questions designed to maintain consistency across all participants. Audio recordings and subsequent transcriptions further safeguarded the consistency and accuracy of the data collected.

Regarding validity, the study employed thematic analysis, a widely recognised method in psychology research for analysing qualitative data. This approach allowed for an in-depth and contextual exploration of the participants' views, thereby enhancing the internal validity of the study. Moreover, the generated themes were reviewed and compared against existing literature on mental disorders within Arab-Muslim communities (e.g., Abu-Rabi (1989); Aloud and Rathur (2009); Islam and Campbell (2014). This cross-referencing helped establish external validity by corroborating the study's findings with previous research. The

use of participant informed consent, along with anonymous reporting, aimed to encourage honest and open responses, thus contributing to the criterion validity. By focusing on participants from diverse Arab-Muslim backgrounds, the study also sought to improve its ecological validity, making the findings more generalizable within this cultural context. The systematic approach to data collection and analysis, along with the rigorous verification against existing literature, were geared towards ensuring both the reliability and validity of the study's findings.

4.6 Qualitative Study Findings

Before delving into the analysis of the themes that emerged from the findings, it is important to provide an overview of the participants' religiosity.

4.6.1 Participants' Religiosity

All participants were asked whether they consider themselves to be religious or not. The following paragraph explains the religiosity of each participant.

Ahmad stated that he is not very religious, but he prays and reads the *Quran* every day. ***Bader*** said that *"I do not know how to answer this question, but I believe in God and Islam, and I pray every day and read Quran constantly."* ***Najwa*** called herself as a regular Muslim woman who preys five times a day and read Quran, but she did not identify herself as religious. ***Shema*** consider herself a Muslim woman who does not worship Allah as he deserved even though she stated that she prays five times a day, read Quran, and wearing "niqab" (a garment that covers the face, worn by many Muslim women as modest dress). ***Salem*** considered himself as somewhat a religious person. He stated that he often listens to Muslims scholars' lessons, reads the *Quran*, and prays five times a day. ***Dbean*** said "I wish that I was a religious person, but I only pray and read the *Quran and sometimes I skip some prayers, but I make them up as soon as I remember"*. ***Asma*** was the only "shia" among the twelve participants. She stated that she is not religious, and she prays occasionally, and read

Quran only in "Ramadhan" (holy month of fasting for Muslims). ***Najd*** said that *"I always have been trying to be a religious and good person, but it is hard. I pray, fast, and read Quran; but that is not enough to consider yourself as a religious person".* ***Essa*** stated that he is not that religious, but he is trying to follow Islamic teachings in his lifestyle. ***Fahmy*** stated that he is not a religious person and he considered himself as a liberal person although he prays sometimes. He indicated that he was raised in a liberal community in Agbara, Sudan. ***Amal*** said that *"I am just a normal Muslim woman who trying to follow Islamic teaching as much as I can. It is hard to consider myself as a religious person but at least I pray on time".* ***Aleaa*** stated that she is not religious person, but she loves to listen to Quran and pray.

4.6.2 The Thirteen Themes Generated from the twelve Semi-Structured Interviews

Most of the interviews traversed a wide range of topics, and in this section, the researcher focused only on those aspects relevant to the study aims. The following 13 themes emerged from the findings.

4.6.2.1 Good mental health: All the participants except one believe that when a person has no issues in their life and free of mental disorders that is a sign of a good mental health.

> *I believe that when a person has no issues in their life and can live his life without any problems that mean he has good mental health.* (Ahmed, 35 years old, Egypt).

Several thought when a person has a good relationship with God that could help them in maintaining mental health and well-being. Seven participants emphasised that religion always helps them when they encounter difficulties in their life.

> *You know if you have a good relationship with Allah that would make you have good mental health and be satisfied with your life.* (Dbean, 30 years old, Saudi Arabia)

Actually, I never seen anyone who has a good relationship with God, and he is unhappy, even me when I feel depressed, I pray or read the Quran and that makes me calm and happier. (Najd, 28 years old, Saudi Arabia).

A good attachment to Allah provides you good mental health. First thing that comes to my mind when I feel I am struggling with my life is praying and reading Quran, you do not know how it could help a person. Once I start praying and reading Quran, I found myself falling asleep safely and peacefully. (Shema, 40 years old, F, Egypt).

Allah Says in Quran "whosever not worship me properly and not listen to my orders, I will make him depressed and I will make his life hard". So, it obvious that sometimes people get depressed because of Allah is mad at them (Ahmed, 35 years old, M, Egypt).

Some suggested that to maintain good mental health, you need to have a good relationship with your family and friends.

Good mental health means that you are optimistic, and you have a good relationship with your friends and family. (Bader, 32-year-old, M, Egypt).

If you are happy and you are not sad and you can work and you have good interaction with other people, I think that means you have a good mental health (Asma, 29 years old, F, Saudi Arabia).

Furthermore, two participants suggested that religion might help but not always.

For some people being in a good relationship with God help them to maintain good mental health but I do not think it works with everyone or every problem. (Aleaa, 22 years old, F, Sudan).

On the other hand, Fahmy defined good mental health as people's ability to cope with stresses of life and contribute to their community. He stated that religion does not affect directly on the mental health status but could be used as a technique for some people.

> *In my opinions, good mental health is people's ability to cope with stresses of life and contribute to their community. I do not think religion can affect directly on mental health as other said but I think we can use it as a technique.* (Fahmy, 53 years old, M, Sudan).

Essa suggested that all other religions could help their believers have good mental health status; however, Islam is more effective than other religions because it came from the creator (God).

> *I believe that other religions like Christianity and Judaism could help their believers to have good mental health, but Islam is more effective because it came from God.* (Essa, 28 years old, M, Sudan).

A participant claimed that there is scientific evidence that Islam help to maintain good mental health.

> *There are many studies found that Muslims are happier and less depressed than others, so I think there is something like a magic in Islam that can provide you with a good mental health.* (Najd, 28 years old, F, Saudi Arabia).

4.6.2.2 Mental health issue as a problem in behaviour, thinking and interpersonal interactions: For the understanding of mental disorders, all participants were asked about what mental disorders are in their opinions. All participants understand mental disorders as issues in a person's behaviour, thinking, or interaction with people.

> *I can recognise the person with mental disorders when he cannot control his action, has irrational thoughts, or cannot interact properly with others.* (Bader, 32 years old, M, Egypt)
>
> *I think mental disorders is when you have issues in emotions, thinking, and behaviour. Also, I think when you cannot maintain good relationship with people that means you have a mental health issue.* (Fahmy, 53 years old, M, Sudan).

One participant suggested that non-believers could be mentally ill.

Also, I think that non-believers such as atheists may have mental disorders. It is dangerous to be surrounded by like these people because they are not fear of God. (Shema, 40 years old, M, Egypt).

4.6.2.3 Natural and supernatural causes of mental disorders: The participants suggested several factors as causes of mental disorders. All the participants agreed that environment may play a role in causing mental disorders.

First, I think environmental factor is the most important factor that can cause mental disorders because when you lose one of your loved ones that would make you depressed, and when you have a tough time in your life that makes you stressed and anxious (Aleaa, 22 years old, F, Sudan).

I do not know if I am right, but I think almost all mental disorders come from the environment that you live in like your family, school, or neighbourhood. (Amal, 23 years old, F, Sudan).

Some suggested that genetic factor has a role to play in causing mental disorders.

You know, I think environment and genes are the most important factors that may cause mental disorders for people. (Ahmed, 35 years old, M, Egypt).

I think genes can make you have a mental disorder; I have seen some families where all the members are depressed or obsessive. (Asma, 29 years old F, Saudi Arabia).

Eleven participants believed that supernatural factors can also cause mental disorders for people. They suggested magic as a common supernatural cause of mental disorders.

All people believe that magic can hurt you physically and mentally. Sure, you have seen some people who are affected by magic. You can search up YouTube videos and you will find many videos for people who either died, got crazy, or got disability because of magic (Ahmed, 35 years old, M, Egypt).

I also believe magic can cause mental disorders; you know even prophet Muhammed was affected by magic once. (Salem, 32 years old, M, Saudi Arabia).

Magic can harm people physically or mentally. So, I think magic is one of the major causes of mental disorders that is often overlooked by psychiatrists (Aleaa 22 years old, F, Sudan).

Six participants claimed that they have seen some people who have mental disorders caused by magic. However, they did not provide a clear explanation why they believed that magic could cause mental disorders.

I know many people who also were affected by magic, and that makes them mentally ill (Salem, 32 years old, M, Saudi Arabia).

The influence of magic can't be deniable. I have seen a number of people who lost their life or got crazy because of black magic and also magic can make you hate your spouse or kids. Magic can change your emotions towards your loved ones (Shema, 40 years old, F, Egypt).

Moreover, except Fahmy, all the participants believe that the demons "Jinn" can possess a person's body and control his actions. They claimed that demonic possession can cause some symptoms for people like irrational thoughts, disorganised behaviour, aggression, and self-harm.

Jinn can make someone speaks irrationally and they can control him and make him be aggressive and he may hurt and kill others. (Essa, 28 years old, M, Sudan)

You can see on YouTube many people who are demonically possessed, and they have symptoms like aggressive or creepy behaviour. Jinn can also make people harm themselves. (Ahmed, 35 years old, M, Egypt).

> *Jinn able to change your personality; they can make you be a thief or a murder. When you see someone who is very aggressive so that he might be demonically possessed not mentally ill.* (Asma, 29 years old, F, Saudi Arabia).

Two participants reported that "Jinn" demons may fall in love with human beings. Once they love a person the possessed his or her body, control their actions and thoughts and can change people identity.

> *Jinn just like human, there are female and male of jinn. The female of the jinn may fall in love with human male and vice versa. When a jinni loves a person, they possess his body and control it (Dbean, 30 years old, M, Saudi Arabia).*

Some also claimed that they have seen a number of people who were demonically possessed. Three participants explained more that mental health professionals sometimes cannot understand demonic possession and they think their patients are mentally ill.

> *I have seen several people who were demonically possessed, and psychologists could not diagnose and treat them but when they got Quranic therapy by "Shikes" they got better. Actually, mental health professionals always overlook the spiritual aspects.* (Salem, 32 years old, M, Saudi Arabia).

In addition, ten participants suggested evil eye has a role to play in causing mental disorders.

> *I think "*eyen*" (العين) (evil eye) can affect people's health physically and mentally. As we know the evil eye can make you sad, anxious, or even crazy.* (Salem, 30 years old, M, Saudi Arabia).

Shema claimed that she got effected by evil eye or "Hasad". And that made her depressed and change her emotions toward her husband.

> *After two years of marriage, I started to be depressed and began to hate my husband for no reason. Until someone told me that one of my distant relatives envied us and "gave us an evil eye". Later, I had a chance to get a cup of water that had been drunk*

by that person. I put the cup on a pot and poured water on that pot. Then, I took the water and poured it over me. After that, I started to feel much better and my relationship with my husband became stronger than ever. (Shema, 40 years old, F, Egypt).

On the other hand, Fahmy stated that genes, environment, and biological factors are the only causes of mental disorders. He excluded supernatural factors such as magic, demons, and evil eye as causes of mental disorders.

Genes, environment, biological factors are the only factors that can cause mental disorders as I read. Actually, I do not believe that evil eye and magic and so on can cause mental disorders. I believe in these things only because they are mentioned in Quran, but I do not think they can affect people directly (Fahmy, 53 years old, M, Sudan)

4.6.2.4 The Quran and other Islamic books as sources of knowledge about mental health: The participants in this study were asked a question about their main source of learning about mental health and mental disorders. All the participants (except Fahmy) mentioned the *Quran* and other Islamic books and teachings as sources that affect their understanding about mental health.

I have studied in a mosque when I was kid, and the "shikh" (Islamic priest) *were constantly teaching us how to be always satisfied and avoid sadness and grief by reading Quran.* (Dbean, 30 years old, M, Saudi Arabia).

Salem emphasised that the *Quran* is the first and best source of learning for everything and not just mental health. However, he mentioned some other books that he used for learning about mental health and mental disorders.

All of us know that Quran has an answer for everything not just the mental health aspect. I think the Quran is the best source to know more about your feelings. Also, I

have read some books that provide more about the psychology field such as "Alroah" the soul and "Islam and psychology". I know these books were written by Muslim scholars, but they are really helpful. There is a psychologist in Saudi Arabia that I often watch on the YouTube, he sometimes helps to know more about psychological problems. (Salem, 32 years old, M, Saudi Arabia).

To be honest with you when I face any problems in my life I searched up in internet and all I find is the Islamic sources that provide you with great information about everything even psychology. There is a Sheikh that I always listen to, he often talks about mental disorders and how to be optimistic and satisfied with your life (Shema, 40 years old, F, Egypt).

4.6.2.5 Non-scientific books, internet, family, and profession as sources of knowledge about mental health: Dbean indicated that he read some neuro-linguistic programming books, and they helped him change his negative thoughts and deal with life stressors. Moreover, Dbean reported that there are many Arabic videos on the internet that provide information about mental health and mental disorders. When he was asked to suggest some psychological videos, all the videos he suggested were by Muslim scholars. When he was asked why his psychological video suggestions were by Muslim scholars, he explained that there is no one can who talk about mental health issues in the Arab region as good as them.

Have you heard about Neure- linguistic programming? I think it really help; I have read some Neure- linguistic programming books and they helped me change my negative thoughts and deal with life stressors. There are some videos on the internet can really help. I know these videos were done by "Shikes" but you know when I search up about mental health issues in the internet mostly I find Shikes talk about them. (Dbean, 30 years old, M, Saudi Arabia).

Essa talked about the role of his father in shaping his understanding of mental health. He stated that his father has good psychological Islamic knowledge.

> *My father has a bachelor's degree in psychology, and he often talks about mental health issues to the family. My father always combined modern psychology with prophet Muhammad teachings.* (Essa, 28 years old, M, Sudan).

Amal said that when she searched about mental health in English, she finds scientific articles explain the mental health. However, when she searches in Arabic, she finds videos for Islamic priests talk about mental health or Islamic websites that talk how to deal with mental health issues.

> *You know sometimes I search about mental health in Arabic and English. In English, I always find scientific articles that talk about mental disorders but in Arabic all I find is religious people or Islamic websites that talk about mental health problems (Amal, 23 years old, M, Sudan).*

Fahmy expressed that his long-standing professional interactions with psychologists and psychiatrists as an interpreter greatly influenced his comprehension of mental health. Furthermore, he acknowledged that his perspective on mental health during his adolescence was significantly shaped by the teachings of Islam.

> *My understanding of mental health when I was a teenager was affected by the Islamic teachings. For example, I thought a person with hallucinations and delusions is demonically possessed. But, when I get older and learn more about the mental diseases, I became aware of the causes and symptoms of mental disorders. Now, I do not listen to the religious priests when they talk about mental health because they are not mental health professionals.* (Fahmy, 53 years old, M, Sudan)

4.6.2.6 Islam teachings promote mental health: Seven participants indicated that when they feel depressed or anxious, they read the *Quran* and pray as a first treatment choice.

When I feel depressed, first I read Quran then I pray and that helps me get better. If that does not work, I may consider other choices such as psychotherapy. (Najd, 28 years old, F, Saudi Arabia).

Except Fahmy, all the participants talked about the Islamic ideas of mental health when they were asked about their opinions of mental health and disorders. Five participants mentioned some verses of the *Quran* when they tried to explain mental issues. Participants Ahmed, Salem, and Essa believed Islam was the first to try and explain mental health and mental disorders to people.

Before the psychological scientists, Islam was talking about mental health and prophet Muhammed was the first one who taught his followers how to deal properly with depression, anxiety, and negative thoughts. (Ahmed, 35 years old, M, Egypt)

Upon inquiring about their belief in supernatural causes, all five participants credited references found within the Quran. In addition, Salem strongly contended that every Muslim is obliged to believe in the existence of demons and their influence on human behaviour and cognition, citing a specific Quranic chapter - "Surah Al-Jinn", which exclusively discusses the entity of "Jinn" or demons.

Actually, there is a whole chapter in the Quran talks about "Jinn" and their effects on people's actions. Every Muslim must believe in "Jinn" it is not our choice. (Salem, 32 years old, M, Saudi Arabia)

If you are a Muslim, so, you must believe in the existence of "Jinn", evil eye, and magic because they are mentioned in Quran and Hadith" (Ahmed, 35 years old, M, Egypt).

On the other hand, Fahmy said Islamic ideas still affected his understanding of mental health.

> *In fact, I do not believe that demons can cause mental disorders, however, sometimes I find myself believing that there is some supernatural force may affect individuals. I think I still somewhat believe in some irrational beliefs I attribute these beliefs to the impact of Islamic culture in my early life.* (Fahmy, 53 years old, M, Sudan).

4.6.2.7 Lack of information about mental disorders: Before the participants were asked about common mental disorders, they were asked if they have heard about psychotic and neurotic disorders; all the participants reported that they have no idea about psychosis and neurosis. All the participants were asked about what the common mental disorders they know. They stated that they know depression and anxiety. Nine of the participants mentioned that they also know "Infosam", that is, dissociative identity disorders (DID). Four of the participants explained that they know DID because Arab media and movies often talk about this disorder. Furthermore, Salem stated that in Saudi Arabia, they call someone who contradicts himself as a person with "infosam" multiple personalities.

> *Beside depression and anxiety, I also know "infosam". The Arabic media always talks about these disorders. Also, in Saudi Arabia when a person has double standards or if he tells something and tell others the opposite, we usually say this person has multiple identities* (Salem, 32 years old, M, Saudi Arabia).
>
> *I know "Infosam" is such an interesting disorder that when a person has two personalities. Sometimes I think some people I know have this disorder, especially, if one says something and do the opposite* (Najwa, 32 years old, F, Egypt).

All the participants were asked to provide some information about the common mental disorders that are often misunderstood by Arab Muslims (Youssef & Deane, 2006). The following paragraphs provide information about the understanding of the participants about three mental disorders: schizophrenia, depression, and post-traumatic stress disorder (PTSD).

4.6.2.8 Confusion between schizophrenia and DID: The Twelve participants were asked if they know about "fosam", that is, schizophrenia. All of them reported that they know and understand it. Thereafter, all the participants were asked to explain what schizophrenia is. Surprisingly, the participants were confused between "fosam" (schizophrenia) and "infosam" (DID). The participants explained schizophrenia as when a person has two or more different identity or personality states.

> *I think "fosam" when a person has two personalities like sometimes, he thinks he is a kid and sometimes he thinks he is a woman.* (Bader, 32 years old, M, Egypt).
>
> *Is "fosam" different than "infosam"? because for me they are alike. Once I heard "fosam" it came to my mind that it is a word that describes a person with two personalities" (Najwa, 32 years old, M, Egypt).*

Because of the confusion between schizophrenia and DID, the researcher explained the schizophrenia symptoms to the participants. In this case, some participants explained that the confusion occurred because the Arabic words "fosam" (schizophrenia) and "infosam" (DiD) are startlingly close in pronunciation. However, they reported that they often heard about "infosam", but they never heard about "fosam".

> *I thought you asked me about "infosam" because it is hard to recognise the deference between these two words. Indeed, I have heard about "infosam" DID, but I have not heard about "fosam" schizophrenia".* (Fahmy, 53 years old, M, Sudan)

4.6.2.9 Attribute schizophrenia symptoms to demonic possession and madness: Even after explaining the schizophrenia symptoms to the participants, nine of them do not exclude the possibility of demonic possession when a person has schizophrenic symptoms.

> *The symptoms you just explained to me are similar to the symptoms of demonic possession. As I told you I believe in mental disorders but some mental disorders'*

symptoms such as "fosma" it may be not really a mental disorder, I think it may be demonic possession. (Amal, 23 years old, F, Sudan).

These symptoms sound like demonic possession. When a person has disorganised speech or he claims that he sees something that does not exist in reality that may mean he is demonically possessed (Asma, 29 years old, F, Saudi Arabia).

Eight participants reported that they have seen people with some schizophrenic symptoms, but they thought whether they were demonically possessed or crazy. Furthermore, Dbean believed people with these symptoms must be seen by religious priests first.

Actually, I know someone with these symptoms, but I thought he was demonically possessed. Also, his family believed that he was demonically possessed" "I believe that people with these symptoms must be seen by "Shikhs" first. If a person starts shouting once he listens to Quran that means he is possessed (Dbean, 30 years old, M, Saudi Arabia).

Amal believed that not everyone with these symptoms is schizophrenic but might be demonically possessed. He believed that the symptoms of schizophrenia and demonic possession were closed.

These symptoms are pretty closed to demonic possession. So, I think not everyone with these symptoms is schizophrenic, but he may be demonically possessed. (Bader, 23 years old, F, Sudan).

On the other hand, Fahmy said,

Before you (the researcher) explained to me the schizophrenia disorders, I would have considered anyone with schizophrenic symptoms as a crazy person. (Fahmy, 53 years old, M, Sudan)

4.6.2.10 The understanding of Depression's Causes and Symptoms: In answering how well the participants understood depression, all the participants indicated that they

understood well. The participants explained depression as a disorder characterised by feelings of sorrow, anger, loss of interest in life and disruptions of sleep. All the participants had the same understanding regarding the symptoms of depression.

> *Yeah, I think depression is when you feel sad, and you feel the life is worthless and you always want to be alone.* (Ahmed, 35 years old, M, Egypt)

However, the participants have different ideas about the causes of depression. All of them concentrated on environmental factors and life events such as trauma, sad events, childhood violence and the loss of a loved one.

> *Depression happens to everybody when they face sad or painful moments, some people can deal with it and other cannot (*Najwa, 32 years old, F, Egypt).
>
> *It happens because of sad moments like if one of your family member die or you fail in an exam* (Essa, 28 years old, M, Sudan).

Fahmy excluded any cause other than environmental factors for being the cause of depression.

> *As I understand it, Depression and anxiety occur because of environmental factors such as the loss of loved ones, using drugs, or job loss. I do not think there are other factors that cause depression rather than environment (Fahmy, 53 years old, M, Sudan).*

All participants except Fahmy suggested that evil eye and envy have roles to play in causing depression.

> *I think evil eye can cause depression and can harm people physically because the prophet Muhammed said, "The evil eye is real, and if anything were to overtake the divine decree it would be the evil eye".* (Dbean, 30 years old, Saudi Arabia)

As I told you I have been depressed because of the evil eye. My depression was cured when I drank a glass of water used by the person who caused me the evil eye. (Shema, 40 years old, F, Egypt).

Moreover, eleven participants also suggested depression could be God's punishment for those who do not believe in him or do not pray to him. Three participants mentioned that in the Holy *Quran*, there is a verse that explicitly indicates that people who turn away from God's remembrance will have a miserable life.

Yes, I think God's can cause depression and other disorders as a punishment. I can see that when I miss a prayer for any reason, I feel sad, fear, and anxiety. (Bader, 32 years old, M, Egypt).

You can see non-Muslim countries have the highest rate of depression and suicide mortality which may consider as God's punishment. I think that also confirms the impact of being Muslim on people's mental health. (Asma, 29 years old, F, Saudi Arabia)

4.6.2.11 The Understanding of PTSD: Causes and Symptoms: All the participants reported that they never heard about PTSD. Therefore, the researcher explained to the participants the symptoms of PTSD to investigate how the participants understand these symptoms. Four participants said they have seen some people who had symptoms like these.

I had a relative who experienced a terrifying event at sunset, then, he got some of the PTSD symptoms such as nightmares, depressed mood, and anger. His family thought their son was demonically possessed. Actually, I also think he was demonically possessed; especially because when someone begins reciting Quranic verses, he started screaming for no reason; so, can you explain to me why he started screaming once he listened to Quran if that is not demonic possession? (Amal, 23 years old, F, Sudan)

Another participant talked about the risk of witnessing a terrifying event around the times of sunset.

> *The prophet Mohamed warned all Muslims to go out of their home at times of sunset because demons would be active at the that period of day.* (Dbean, 30 years old, M, Saudi Arabia).

Moreover, after explaining the PTSD symptoms to the participants, two of the Saudi participants suggested another name for PTSD in their culture which is panic (Roaah).

> *Okay, you know our culture, when a person has like these symptoms, that means he has "Roaah" or he is panicked, and he must be treated by safflower "Esfar"* (Salem, 32 years old, M, Saudi Arabia).

Another Saudi participant suggested safflower "Esfar" as a medicine for psychologically traumatised people.

> *I always hear that among Saudi people using "Esfar" is really help people who are traumatised. I am not sure if it helps because I have never been traumatised* (Najd, 28 years old, F, Saudi Arabia).

4.6.2.12 Mental Health Treatment and Traditional Treatment: All the participants reported that they had never been in psychotherapy. Meanwhile, three of the participants reported that they had been treated by Muslim priests once in their life for different reasons. All the participants stated they had never been in psychotherapy because they never needed it. Four participants stated that they would seek help for only severe mental health problems.

> *I have not been in mental health treatment before because I do not need. I think mental health treatment is for those who cannot dealing with people properly, have irrational thoughts, or have aggressive behaviours.* (Essa, 28 years old, M, Sudan)

The participants were asked to explain the psychotherapy process; 6 participants failed to explain them properly and five of them stated that they could not explain because they had never been in psychotherapy before.

> *To be honest, I have never been in therapy before, but I have seen psychiatrists in movies, they talk with their patients and give them advice.* (Aleaa, 22 years old, F, Sudan).

Only one participant provided a proper explanation and definition.

> *I think psychotherapy is when a client lying down on the couch with the psychologist sitting behind, taking down notes throughout the conversation… I have been in psychotherapy but not as a client but as an interpreter for some refugees. I know in psychotherapy that therapist try to help their clients with their problems through a treatment plan* (Fahmy, 53 years old, M, Sudan).

Furthermore, all the participants were asked to name the types of treatments of mental disorders they know. Five participants could not name any type of psychotherapy. Fahmy stated that he has heard about psychoanalytic therapy.

> *I actually have heard about psychoanalytic therapy I think it was created by Sigmond Freud, but I did not know how it works* (Fahmy, 53 years old, M, Sudan)

The participants were asked about what the proper treatment for mental disorders is in their opinion. Five participants suggested psychotherapy as a first-choice treatment for most of the mental disorders. Some participants also suggested Quranic healing as a second choice in case the psychotherapy does not work.

> *If the psychotherapy does not work, then, you can have someone recite the Quran to heal the sick who were suffering from mental disorders.* (Aleaa, 22 years old, F, Sudan).

Dbean talked about the effectiveness of "ruqia", which is invoking the names of God and reading the *Quran* to people who have mental issues or demonic possessions. Furthermore, he suggested the best treatment for depression is the *Quran* because it often helps him have a sense of relaxation and be happy. Five participants also stated that reading or listing to the *Quran* makes them feel happier and relaxed. In addition, three participants believed that religious treatment could be more effective with depression and anxiety than other mental treatment. On the other hand, Fahmy said he does not believe in religious treatment for mental disorders but reading the *Quran* may help when a person is depressed.

> *You know the "ruqia" it is really good choice for those who are suffering from mental disorders and demonic possession. It also good for those who are depressed. Sometimes I use the "ruqia" when I feel depressed, it is really help.* (Najwa, 32 years old, F, Egypt).
>
> *I read and listen to the Quran almost every day because it helps me be relaxed and happier, I use it as a meditation.* (Ahmed, 35 years old, M, Egypt)
>
> *For me, I think religious treatment is very good for people who are suffering from depression and anxiety than others treatment because I can realize that it makes me satisfied.* (Shema, 40 years old, F, Egypt)
>
> *Actually, I don't believe in religious treatment for mental disorders, but I have seen many people use reciting the Quran as a cure for depression; so, I think the Quran may help some people.* (Fahmy, 53 years old, M, Sudan).

Few participants mentioned "Talbinah" as a potential medicine for depression.

> *I know Talbinah, I never used it, but I have heard some people use it for sadness and it helps. I never seen anyone who doubts about the effectiveness of Talbinah* (Najd 28 years old, F, Saudi Arabia).

Yeah, I often see some videos in social media talking about prophetic medicine such Talbinah. I believe it is good for depression. If I get depressed, I may try it. (Shema, 40 years old, F, Egypt).

4.6.2.13 Stigma Towards Mental Disorders and Seeking Help for Treatment: All the participants were asked what they feel when they meet someone with mental health problems; two of the participants stated they feel compassionate for people with mental disorders, whereas four participants stated that they feel threatened when they are surrounded by mentally ill people.

Actually, I feel sorry for them, and I hope I could help them. (Najd, 28 years old, F, Saudi Arabia).

When I see people with mental disorders, I feel threatened because people with mental disorders often have aggressive behaviour and not responsible for their actions, they may hurt anytime. (Aleaa, 22 years old, F, Sudan).

Essa stated that if he had a mental disorder, he would not tell anyone about it, because in his culture, people with mental disorders were often perceived as crazy. Another participant indicated that in Arabic culture if one of the family members had mental disorders, it is better for the family to isolate the mentally ill member to protect the family's reputation.

Ok, If I got a mental disorders sure I would not tell anybody about it even my family. It is hard to reveal such a thing, people would think I am crazy, most of them do not distinguish between mental disorders and craziness (Esaa, 28 years old, M, Sudan).

If I have mental disorders, I will not tell anyone about it because you know they may think I am crazy and not responsible. Also, that would affect my family too. (Dbean, 30 years old, Saudi Arabia)

The participants were asked what would prevent them from seeking help for mental disorders. Five participants indicated that the only reason that might prevent them from seeking help for mental disorders is the stigma. Some of the participants explained that in their culture, people who are seen by mental health professional are often labelled "crazy" which may affect their career and reputations.

> *The only reason that may prevent to seek help for mental disorders is that people may think I am crazy because you know in our culture, we consider people who go to psychotherapy as crazy people* (Amal, 23 years old, F, Sudan).

Eight participants stated that if they had a mental disorder, they prefer to tell people that whether they were possessed by jinn, affected by evil eye, or affected by magic rather than telling them that they are mentally ill.

> *"For me, I prefer people labelling me as a person who is affected by evil eye rather than a mentally ill, I have seen many people who say they are affected by evil eye. Also, if you are affected by evil eye that means you are a successful person.* (Ahmed, 35 years old, Egypt).
>
> "Even p*rophet Muhammed was affected by magic. If you got affected by magic or evil eye that means people envy you or want to be like you unlike being mentally ill which means for some people that you are crazy or have less faith. So, if I had to choose between being mentally ill or affected by evil eye, sure, I would choose affected by evil eye (Najd, 28 years old, Saudi Arabia).*

Therefore, two of the participants said they prefer to seek help from religious healers instead.

> *I would seek help from "shikhes" because even when people see me go there, they would not attach a stigma to me.* (Bader, 32 years old, M, Egypt).

Only Fahmy said he does not attach stigma to mental disorders, and he would seek help from mental health professionals.

> *Actually, I have no issue with that and if I think I need to be seen by mental health professionals I would seek help from them.* (Fahmy, 53 years old, M, Sudan)

Chapter Five: Study II: Quantitative Component

5.1 Overview

This chapter is dedicated to presenting the findings from the quantitative data collected for the study, exclusively focusing on this aspect before integrating interpretations in the discussion chapter alongside qualitative data. Structured into 11 sections, it begins with a concise quantitative phase overview that recaps the data collection methods and research methodology utilized. Following this, the chapter restates the research questions and hypotheses, outlining the aims of the quantitative phase. It then details the participants involved in the quantitative phase and the measures used, including demographic questionnaires, acculturation scales, religiosity scales, concepts of mental health, attitudes towards seeking professional help, knowledge of mental disorders, experiences of ethnic microaggressions, and levels of depression, anxiety, and stress. The chapter continues with a description of data collection procedures and data analysis and treatment, including preparation and analysis procedures in SPSS. Verification procedures are also discussed, followed by a descriptive analysis of the survey scales. This includes participants' demographic analysis, and analyses of the Stephenson Multigroup Acculturation Scale (SMAS), Muslim Religiosity Scale (MRS), attitudes towards seeking mental health services (ATSFMHS), cultural misconceptions in mental health (CBMHP), knowledge and familiarity with formal mental health services scale (KFFMHS), ethnic microaggression (EMA), and the Depression, Anxiety, and Stress Scale-21 (DASS21). The chapter concludes with regression analysis results, correlation analysis of variables, and testing of the research hypotheses, addressing each hypothesis in detail.

5.2 Quantitative Phase Overview

Using a mixed methods exploratory sequential design, the study has so far analysed qualitative findings drawn from personal interviews and focus groups. As a complement to these qualitative insights, this chapter provides a systematic analysis of quantitative data gathered from an extensive survey administered to Arab Muslim participants residing in Australia.

This survey, detailed in Appendix E, consisted of eight distinct sections assessing various facets of the research subject, namely: demographic details, acculturation, religiosity, concept of mental health, attitudes towards seeking professional help and perceived societal stigma, knowledge and familiarity with common mental disorders and mental health services, experiences of ethnic microaggression, and the DASS21 scale to evaluate depression, anxiety, and stress. A total of 169 participants completed the survey, representing a diverse array of Arab countries. The primary aim of this quantitative study is to shed light on the subtleties of mental health perceptions, attitudes, and behaviours within the Arab Muslim community in Australia. Specifically, this chapter seeks to address seven critical research questions, exploring the interplay of cultural and religious beliefs, attitudes towards mental health treatment, knowledge of mental disorders, and the choice of mental health services. Furthermore, the role of acculturation, stigma, and the perception of psychotherapy effectiveness within this community is examined.

The data from each survey section was thoroughly analysed using descriptive and inferential statistics, offering an empirical lens to the collective attitudes, beliefs, and knowledge of the Arab Muslim community towards mental health and treatment options. These quantitative findings, combined with the previously analysed qualitative data, aim to provide a comprehensive understanding of the complex factors influencing mental health perceptions and treatment seeking behaviours among Arab Muslims in Australia. The

findings outlined in this chapter aim to illuminate the research questions, thereby setting the stage for an in-depth discussion and solid recommendations for improving mental health comprehension and service utilisation within the Arab Muslim community in Australia.

5.2.1 Restatement of the Research Questions

To address the main research objective, the following research questions were formulated:

- How do Islamic-Arabic cultural, traditional beliefs, and religiosity influence Arab Muslims' understanding of mental disorders, their attitudes towards mental health treatments, and the choice of healthcare services?
- What factors contribute to Arab Muslims' willingness to seek help from formal mental health services and traditional healers, and to what extent are they informed about available treatments?
- How does the Islamic-Arabic culture impact the perception of the effectiveness of psychotherapy and the support provided by mental health professionals, and how does it contribute to mental health stigma among Arab Muslims?

Each of these research questions is designed to further the understanding of the complex ways in which cultural and traditional beliefs, religiosity, and societal norms shape Arab Muslims' understanding of and attitudes towards mental disorders and their treatment.

5.2.2 Restatement of Hypotheses

To support the exploration of the research questions, the study was guided by the following hypotheses:

H1: Islamic-Arabic cultural and traditional beliefs significantly influence Arab Muslims' understanding of mental disorders and mental health treatment.

H2: Factors such as education level, socio-economic status, and exposure to mental health information are likely to predict Arab Muslims' attitudes towards seeking help from formal mental health services.

> H2.1: Arab Muslims with higher levels of acculturation to Australian society will demonstrate a greater acceptance of mental health services and professionals.

H3: Cultural beliefs about mental health, Muslim religiosity and acculturation, significantly impact the attitudes of Arab Muslims towards seeking help from mental health services.

H4: The level of awareness about available treatments and facilities for mental disorders among Arab Muslims will vary depending on factors such as education, socio-economic status, and access to information.

H5: Factors such as cultural beliefs, social stigma, and personal experiences will play a role in determining Arab Muslims' choice of mental healthcare services.

H6: Arab Muslims' belief in psychotherapy and assistance provided by mental health professionals will be influenced by cultural and traditional beliefs, as well as their level of understanding of mental health concepts.

H7: Islamic-Arabic culture may contribute to mental health stigma among Arab Muslims by reinforcing traditional beliefs, social norms, and misconceptions about mental disorders and their treatment.

H8: The level of religiosity among Arab Muslims will be positively associated with their preference for traditional healing methods over formal mental health services.

H9: Arab Muslims who perceive mental disorders as a spiritual or moral issues will be less likely to seek help from formal mental health services.

5.3 The aims of the Quantitative Phase

The findings from the qualitative study indicate that participants exhibited a notable knowledge gap concerning certain mental disorders, with the majority either misunderstanding or failing to identify them accurately. Additionally, the results revealed a preference among participants for informal sources of mental health treatment, such as seeking guidance from religious leaders or relying on support from extended family members. Consequently, it was deemed essential to conduct further quantitative research to validate and generalise these qualitative findings, as well as to delve deeper into the connections between the perception of mental disorders, its origins, the selection of healthcare providers, and available treatment options. The quantitative phase also examined people's attitudes towards seeking help from health professionals, prevailing social norms, and their ability to access reliable health information. Furthermore, the quantitative data enabled the development and evaluation of a predictive model that focuses on the health behaviours of Arab Muslims in relation to formal mental health treatment, attitudes towards healthcare providers, and mental health knowledge. This phase aims to contribute valuable insights that can help tailor effective mental health interventions and awareness campaigns for the Arab Muslim community.

By employing a robust quantitative methodology, this research phase shed light on the prevalence and extent of misconceptions surrounding mental disorders, as well as the factors influencing the choice of healthcare providers and treatment options within the Arab Muslim population. Additionally, the quantitative phase explored the role of sociocultural factors, such as stigma and cultural beliefs, in shaping individuals' attitudes towards mental health help-seeking behaviours. This allowed for a more comprehensive understanding of the barriers to accessing formal mental health treatment and support services, enabling the

development of culturally sensitive and effective interventions to improve mental health outcomes for this population.

5.4 Quantitative Phase Participants

Before participants began the survey, they were presented with an initial page containing detailed information about the study and a consent form. To proceed, participants were required to actively choose one of two options: "Yes" to continue with the survey or "No" to exit. This process ensured informed consent was obtained from all participants engaging in the survey. For further details on the consent form and the informational content provided to participants, please refer to Appendix B.

The sample comprised 169 respondents, with a near-even gender split of 53.2% males (*n*=84) and 46.8% females (*n*=74) among the 158 who provided valid gender data. The age distribution of participants spanned from younger individuals, potentially more attuned to Australian culture, to older participants, likely to maintain more traditional views. While a minority (23.7%) were born in Australia, the majority (69.8%) were born overseas, predominantly from Saudi Arabia, Lebanon, and Sudan. The duration of residence in Australia varied widely, from less than a year to as long as 46 years, reflecting a broad spectrum of experiences and perspectives within the Arab Muslim community. This demographic diversity offers a rich foundation for exploring the influence of cultural and religious beliefs on mental health perceptions and treatment among Arab Muslims in Australia. For a more detailed analysis of the participants' demographics, refer to the quantitative findings chapter, which provides an in-depth exploration of these aspects.

5.5 Measures:

For data collection, an electronic questionnaire was used, and the actual questions were adapted from studies that were the subject of the literature review. The questionnaire

was organised into eight different sections or scales to assess all the research's model contrasts, please see Appendix E. The first section is about participants' demographic data. The second section measures the acculturation attitudes of the participants. The third incorporates aspects of religiosity and religious beliefs. Fourthly, the concept of mental health includes an understanding of mental health and disorders, their causes and their treatment; beliefs on mental health treatment effectiveness; choice of healthcare providers; and attributing mental disorders to supernatural forces and physical diseases. Fifthly, attitudes towards seeking professional help from psychologists and counsellors and perceived societal stigma are covered. Sixthly, knowledge and familiarity with common mental disorder types and formal mental health professionals and services. Seventhly, Ethnic Microaggression (EMA) Scale. Eighthly, the depression, anxiety, and stress scale-21 (DASS-21). The questionnaire's eight scales are explained in more detail below:

5.5.1 Section 1: Demographic questionnaire:

Participants responded to 15 questions about their gender, country of birth, original nationality, annual income, years of living in Australia, age, academic degree/qualification, employment, and family status. The responses consisted of binary options ("yes" or "no") and self-assessment items.

5.5.2 Section 2: Acculturation Scale:

Acculturation were measured using Stephenson Multigroup Acculturation Scale (SMAS) (Stephenson, 2000). SMAS is a self-report, 32-item scale that primary measure expatriates' degree of immersion in a different dominant culture verses their traditional culture. 15 items in the scale assess the dominant culture and 17 items assess the non-dominant culture. Each item is scored on a four-point Likert scale ranging from (1 =True, 2 =Partly true, 3 =Partly false, and 4 =False). Examples of the items includes "I speak my

native language with my friends and acquaintances from my country" and "I am familiar with important people in Australian history". The scoring on the SMAS allows for a maximum score of 60 on the Dominant Society Immersion (DSI) section and a maximum of 68 on the Ethnic Society Immersion (ESI) section. These scores reflect the degree to which the participant engages with and identifies with each culture, providing a measure of their acculturation process. The reliability analysis of the SMAS with the study sample revealed a Cronbach's Alpha of .847, indicating a high level of internal consistency among its 32 items. This suggests that the scale is a reliable tool for assessing acculturation processes in diverse cultural groups, particularly in the context of the study's population.

5.5.3 Section 3: Religiosity:

Religiosity was measured using Muslim Religiosity Scale (MRS) (Koenig et al., 2015) The MRS consists of 13 items stratified into two distinct subscales. One subscale encompasses religious practices, captured by 10 items, and the second subscale gauges intrinsic religious beliefs via 3 items. For each item, participants respond using a 5-point Likert scale. To compute the total religiosity score for each participant, the individual scores from the two subscales were aggregated, as suggested by Al Zaben et al. (2015) The scoring methodology included a preliminary step of reverse coding for items 2, 12, 13, and 14 to ensure the correctness of the interpretation. Following this, the religious practices subscale score was calculated by summing the scores of items 2 through 11, providing a potential score range of 10 to 50. Similarly, the intrinsic religiosity subscale score was calculated by adding the scores of items 12 through 14, with a possible range of 3 to 15. In this scoring system, a higher score directly corresponds to a higher level of participant religiosity. For the purposes of this study, The final score was formed by combining the scores from both the religious practices subscale and the intrinsic religiosity subscale, following the methodology outlined by Al Zaben et al. (2015) and Koenig et al. (2015). This amalgamated score was

utilised as a more comprehensive indicator of participants' overall religiosity, with higher scores pointing to a high level of religiosity. In this study, the reliability coefficient (Cronbach's Alpha) was .840, based on 13 items. This result confirms the scale's strong internal consistency, indicating that it effectively captures the dimensions of religiosity within the Muslim population in this study.

5.5.4 Section 4: Concept of Mental Health; choice of healthcare providers; beliefs on mental health treatment effectiveness; attributing mental disorders to supernatural forces and physical diseases.

A modified version of cultural beliefs about mental health problems (CBMHP) scale developed by Aloud and Rathur (2009) was used to assess: the influence of religious and cultural beliefs on people's understanding of mental disorders, its causes and treatment; choice of healthcare providers; beliefs on mental health treatment effectiveness; attribute mental disorders to supernatural forces and physical diseases (see appendix E). Aloud and Rathur (2009) developed this scale to assess the impact of cultural, traditional and religious beliefs about the causes and treatment of mental health and mental disorders on Arab-Muslims. The original scale follows a Likert structure, comprising 11 questions. The choices for each question are scored on a range of 0 to 3, where 0 signifies 'false', 1 represents 'probably false', 2 means 'probably true', and 3 denotes 'true'. Higher scores suggest that religious beliefs significantly influence the individual's understanding of mental disorders, their causes, and treatments. Examples of the items includes "Mental health or psychological problems can be caused by "Seher" (magic)" and "Mental health or psychological problems can be treated using professional mental health or psychological counselling services". According to the author, the scale's reliability analysis of all items yielded a Cronbach's alpha of 0.73 (Aloud & Rathur, 2009). Al Ali et al. (2017) used CBMHP in their study and the reliability analysis of all items yielded a Cronbach's alpha of 0.7 which is in the

acceptance range. Another study has used CBMHP and they found Cronbach's alpha of 0.65 which is moderate and acceptable (Tanhan & Young, 2021). In assessing CBMHP, the scale showed a Cronbach's Alpha of .826 across 12 items. This indicates a strong internal consistency, suggesting that the scale reliably measures various beliefs and attitudes related to mental health and healthcare choices.

In this study, the scale was expanded to include a 12th item: "Jinn (demons) can possess a person's body, control it, and speak through the mouth of a human being". The incorporation of this additional statement was necessitated by its commonality within Arab-Muslim belief systems, as substantiated by prior research and evidenced in the accounts of several participants during the semi-structured interviews of the qualitative phase.

5.5.5 Section 5: Attitudes Towards Seeking Professional Help from Psychologists and Counsellors and Perceived Societal Stigma.

In this study, a modified version of the Attitude Toward Seeking Formal Mental Health Service scale (ATSFMHS) was utilised. Originally developed by Aloud and Rathur (2009), The ATSFMHS was adapted from Attitudes Toward Seeking Professional Psychological Help Scale (ATSPPH) by Fischer and Farina (1995). Aloud and Rathur (2009) made an extensive revision on the items of ATSPPH to make it understandable by Arab Muslims. For instance, an ATSPPH item reading "A person with a strong character can get over mental conflicts by himself, and would have little need of a therapist," has been changed in the ASFMHS to be "A person with strong IMAN [faith] can get rid of a mental health or psychological problem without the need of professional help."

The Aloud and Rathur (2009) instrument contains 20 questions and were constructed based on a Likert-type scale (1 = Strongly Agree, 2 = Agree, 3 =Disagree, 4 = Strongly Disagree); higher scores imply more favourable attitudes toward the seeing of formal help. Moreover, Aloud and Rathur (2009) added five items in this scale to assess the perceived

societal stigma associated with seeking and using formal mental health/psychological services. Aloud and Rathur (2009) indicated that reliability analyses of all items yielded Cronbach's Alphas of .74 (ATSFMHS) and .72 (stigma items), respectively. Another study used ATSFMHS and the reliability for each item yielded Cronbach's alphas of 0.59 (Al Ali et al., 2017). In this study, the ATSFMHS exhibited a Cronbach's Alpha of .853 for its 21 items. This high level of reliability demonstrates the scale's robustness in assessing attitudes towards mental health services, reaffirming its applicability in the research context.

In this study, an additional item was included, bringing the total number of items in the scale to 21. The added item reads as follows: "To avoid social stigma, I prefer referring to my family member with a mental illness or myself as being demonically possessed, rather than acknowledging them as someone with a mental health condition." This inclusion was prompted by insights gained from participants during the qualitative phase, where some individuals expressed a preference for attributing mental health issues to external factors such as "Jinn" or "Alayn" (evil eye) to evade the stigma commonly associated with mental disorders.

5.5.6 Section 6: Knowledge and Familiarity with Common Mental Disorders Types and Formal Mental Health Professionals and Services:

In this section, a modified version of the Knowledge About and Familiarity with Formal Mental Health Services scale (KFFMHS) was used. Originally developed by Aloud and Rathur (2009), the primary aim of this scale is to investigate participants' awareness of various mental disorder types, such as anxiety, depression, schizophrenia, among others. Additionally, the KFFMHS assesses participants' understanding of the roles played by mental health professionals and the available mental health services and treatments. The original KFFMHS consisted of 11 questions, utilizing a four-point Likert scale with responses ranging from "1=Not at all," "2=Very little," "3=Somewhat," to "4=Very familiar." Examples of

items from the KFFMHS include statements such as "The type of problems that might require professional mental health or psychological intervention (e.g. mental instability, an abnormal fear or feeling, a depressed mood, etc)" and "The psychiatrist's role in mental health and psychological counselling settings." Higher scores on the MH Knowledge scale (KFFMHS) represent a more accurate understanding of evidence-based mental health issues. Conversely, lower scores on this scale represent a limited understanding of mental health issues and a lack of mental health literacy.

For the purpose of this study, an additional item was incorporated into the KFFMHS scale: "A person with schizophrenia (Fosam) has two or more separate personalities, and these identities control a person's behaviour at different times." The inclusion of this item was motivated by a recurring misunderstanding observed among participants during the qualitative phase, where many individuals could not differentiate between schizophrenia and dissociative identity disorders (DID). (For further information, please refer to the qualitative findings in chapter 4.) The objective of adding this item was to assess the prevalence of this misunderstanding among Arab-Muslim participants.

In Aloud and Rathur's (2009) original study, the KFFMHS displayed strong reliability, with all items yielding a Cronbach's Alpha of .88. This high level of reliability signifies the scale's effectiveness in measuring participants' knowledge and familiarity with formal mental health services. In this study, the KFFMHS yielded a Cronbach's Alpha of .879, calculated over 12 items. This high reliability score underscores the scale's effectiveness in evaluating participants' knowledge and familiarity with mental health disorders and services.

5.5.7 Section 7: Ethnic Microaggression (EMA) Scale:

The Ethnic Microaggression (EMA) Scale, developed by Huynh (2012) was used to measure both the frequency and the emotional impact of ethnic microaggressions experienced

by the research's participants. Microaggressions are subtle, everyday slights and insults that individuals from minority groups might face. The EMA Scale aims to assess these experiences to provide better insights into how they affect mental health and well-being.

The EMA Scale consists of two sections. The first section measures the frequency of ethnic microaggressions using a 6-point Likert scale, which ranges from 0 (Never) to 5 (Almost always). The second section assesses the emotional impact of these experiences by asking participants to rate the extent to which the microaggressive events bothered or upset them on a separate 5-point Likert scale, ranging from 1 (Not at all bothered/upset) to 5 (Extremely bothered/upset).

The reliability of the EMA Scale has been assessed using Cronbach's alpha, which is a measure of internal consistency. In the initial study by Huynh (2012), the Cronbach's alpha for the overall EMA Scale was .92, indicating a high level of internal consistency. The subscales also demonstrated good reliability, with Cronbach's alphas ranging from .79 to .89. In this study, the EMA Scale demonstrated a Cronbach's Alpha of .844, with 24 items contributing to this measure. This indicates a high level of internal consistency, validating the scale's use in assessing the frequency and emotional impact of ethnic microaggressions experienced by minority groups.

In addition to its strong reliability, the EMA Scale has also demonstrated validity. Huynh (2012) found that the scale had strong convergent validity, as it was significantly correlated with measures of perceived racial discrimination, as well as divergent validity, as it was not significantly correlated with measures of social desirability. Since its development, the EMA Scale has been used in numerous studies to examine the impact of ethnic microaggressions on mental health outcomes and overall well-being in various populations.

5.5.8 Section 8: The Depression, Anxiety, and Stress Scale-21 (DASS21):

The Depression, Anxiety, and Stress Scale-21 (DASS-21) is a widely used self-report questionnaire designed to measure the severity of core symptoms related to depression, anxiety, and stress. Developed by Lovibond and Lovibond (1995), the scale is a short version of the original 42-item DASS, which was designed to differentiate between these three emotional states and provide a comprehensive assessment of psychological distress (Lovibond & Lovibond, 1995).

The DASS-21 consists of 21 items divided into three subscales: Depression (7 items), Anxiety (7 items), and Stress (7 items). Each item is scored on a 4-point Likert scale, ranging from 0 (did not apply to me at all) to 3 (applied to me very much or most of the time). The total score for each subscale is calculated by summing the scores of the relevant items, and higher scores indicate greater levels of distress (Lovibond & Lovibond, 1995). In this study, scores for each of the DASS-21 subscales were multiplied by 2 to maintain consistency with the original 42-item DASS.

The reliability and validity of the DASS-21 have been well-established in numerous studies across diverse populations. For instance, Antony et al. (1998) indicated that had excellent internal consistency for the three scales and the total score. Convergent and discriminant validity have also been supported by strong correlations with other established measures of depression, anxiety, and stress (Antony et al., 1998; Brown et al., 1997)

In the context of this research on the impact of religion and culture on the understanding of mental disorders and mental health treatment among Arab Muslims, the DASS-21 can serve as a valuable instrument to assess the psychological distress experienced by the target population. Previous studies have also demonstrated the applicability of the DASS-21 in diverse cultural settings, including among Arab populations (Dalky et al., 2022; Zanon et al., 2020).

In this study, the DASS21 demonstrated excellent internal consistency, evidenced by a Cronbach's Alpha of .948 for its 21 items. This exceptional reliability reinforces the scale's efficacy in assessing the severity of symptoms associated with depression, anxiety, and stress within the research sample.

5.6 Data Collection Procedures

The data collection for this thesis was conducted using Qualtrics, a sophisticated online survey tool designed for professional research. To accommodate the diverse linguistic preferences of our participants, the electronic questionnaires were made available in two languages: Arabic, to honour the native language of the participants, and English, to ensure inclusivity and broader comprehension. To reach a wide audience, the survey link accompanied by an explanation of the study's rationale and objectives was disseminated through multiple channels. These included the university's official Facebook page and Twitter account, which provided a direct link to the academic and local communities. Additionally, to further extend the reach within the Arab-Muslim community, the survey was promoted through personal networks, utilizing both WhatsApp and email. These platforms were chosen for their widespread use and accessibility among the target demographic, allowing for efficient and effective communication with potential participants. This multifaceted approach to distribution aimed to maximise participant engagement and ensure a comprehensive representation of the Arab-Muslim expatriate community in Australia.

5.7 Data Analysis and Treatment

5.7.1 Data Preparation and Analysis Procedure in SPSS

Following the collection of survey data through Qualtrics, the dataset was imported into The IBM Statistical Package for the Social Sciences (SPSS 29) for comprehensive quantitative analysis. The initial step involved a thorough data cleaning process to ensure

accuracy and reliability of the analyses. This process was facilitated by the use of SPSS syntax, a powerful feature of SPSS that allows for automated and reproducible data manipulation tasks. Syntax scripts were developed to perform a range of preliminary treatments on the dataset, including identifying and addressing missing values, recoding variables for consistency, and creating new variables that were necessary for the analysis.

The use of syntax in SPSS significantly enhanced the efficiency and accuracy of the data treatment process. For instance, syntax commands were utilized to systematically check for missing data across key variables such as place of birth, duration of residence, and nationality. This step was critical, as missing values can impact the validity of statistical analyses. Where appropriate, missing data were either imputed based on relevant criteria or flagged for exclusion in cases where imputation was not feasible, ensuring that the subsequent analyses were based on robust data.

In addition to data cleaning, syntax scripts were developed for the execution of the main statistical analyses, including descriptive statistics, correlation analyses, and multiple regression models. The use of syntax for these analyses ensured that each step was precisely documented and reproducible, a crucial aspect of rigorous quantitative research. For example, syntax commands specified the exact variables included in each model, the criteria for statistical significance, and the handling of assumptions such as multicollinearity.

5.7.2 Data Analysis for the Survey Scales

Descriptive statistics were utilised extensively to summarise the demographic characteristics of the participants, including gender distribution, mean age, age range, and median age calculations. This use of nominal and ratio scales provided a foundational understanding of the sample composition, which is crucial for interpreting the results in the context of the study's objectives. Similarly, frequency analysis was used to explore

participants' birthplaces, duration of residence in Australia, and nationalities, using nominal scales to categorize and understand the diversity within the sample. This analysis was instrumental in identifying patterns and trends within the data, such as predominant countries of origin and common lengths of residency in Australia, which could influence perceptions of mental health and treatment.

The Chi-Square test was utilised to examine the association between gender and variables such as education level and employment status. This non-parametric test was used to test for independence between categorical variables. Significant findings from this analysis, particularly regarding the association between gender and employment status, provided insights into the socio-economic factors that may influence mental health perceptions and treatment-seeking behaviours among the study population.

For scales measuring aspects such as Ethnic Society Immersion (ESI), Dominant Society Immersion (DSI), and religiosity, descriptive statistics were used, this time employing ratio scales to analyse scores. This included computing mean scores, standard deviations, and measures of skewness and kurtosis, which offered a quantitative assessment of participants' levels of immersion in their ethnic and the dominant society, as well as their religious practices and beliefs. Such analysis was fundamental in identifying the degree of cultural and religious influence on mental health perceptions.

Cronbach's Alpha was calculated for all scales to assess their internal consistency, ensuring that the instruments used in the study were reliable measures of the constructs they intended to assess. This step was vital for validating the survey tools and ensuring that the findings drawn from them were robust and trustworthy.

Similar analytical approaches were applied to scales measuring attitudes towards formal mental health services (ATSFMHS), knowledge about mental health services (KFFMHS), and mental health outcomes (DASS-21). Descriptive statistics provided a

snapshot of the participants' attitudes, knowledge levels, and mental health states, while the analysis of skewness and kurtosis helped to understand the distribution of these attitudes and knowledge levels across the sample. This was complemented by analyses that explored the impact of demographic factors, duration of residency in Australia, education levels, and religiosity on mental health perceptions and stigma, using cross-tabulation and the Chi-Square test of Independence to evaluate the associations between categories.

5.7.3 Data Analysis for the Hypotheses Testing -Inferential Statistical analysis

The inferential statistical analysis was presented Pearson correlation analysis among research variables namely, demographics such as education, Muslim religiosity, cultural misconceptions, mental health knowledge, and help seeking attitudes, then, multiple linear regression analysis to test regression models to predict mental health knowledge and help seeking attitudes from Muslim religiosity, and cultural misconceptions. . These statistical methods were chosen based on their suitability for testing the predictor relationships between predictors Arab Muslim knowledge of mental health and help seeking attitudes from mental health services. Pearson correlation analysis was used to justify the use of multivariate analysis by demonstrating underlying overlaps of variance between predictors and two dependent variables, mental health knowledge and help seeking attitudes. The predictors are the Muslim Religiosity Scale (MRS), Cultural Misconceptions in Mental Health (CBMHP), and selected demographics. Mental health knowledge was measured by Knowledge and Familiarity with Mental Health Services (KFFMHS), help-seeking attitudes by Attitudes Towards Seeking Mental Health Services Scale (ATSFMHS). Furthermore, including acculturation and microaggression experience, the multiple regression analysis explored how mental health knowledge and help seeking attitudes are predicted from religiosity, cultural misconception and their acculturation experience. Multiple regression analysis was conducted to predict attitudes towards mental health services (ATSFMHS), incorporating several

predictors simultaneously. This approach allowed for the examination of the unique contribution of each predictor (e.g., Muslim Religiosity Scale, Dominant Society Immersion, Cultural Misconceptions in Mental Health) to the variance in ATSFMHS, while controlling for the influence of other variables in the model. The significant findings from these models highlighted the dominant negative impact of cultural misconceptions over the positive effect of religiosity on attitudes towards mental health services, as well as the relationship between religiosity and levels of acculturation measured by Dominant Society Immersion (DSI).

Linear regression analysis was employed to further examine the impact of specific predictors (e.g., Knowledge and Familiarity with Mental Health Services (KFFMHS), Cultural and Traditional Beliefs about Mental Health (CBMHP)) on attitudes towards seeking formal mental health services (ATSFMHS). This method was chosen for its ability to model the relationship between a single dependent variable and one or more independent variables, providing a clear understanding of how knowledge about mental health services and cultural beliefs individually affect attitudes towards seeking help. The use of collinearity diagnostics, such as the Variance Inflation Factor (VIF), ensured that the predictors in the model did not exhibit problematic levels of multicollinearity, which could distort the regression analysis results.

Cross-tabulation analysis was utilized to compare beliefs among different demographic groups, such as gender, age, and place of birth. This method was instrumental in identifying variations in beliefs about traditional factors affecting mental health across demographic segments, offering a detailed view of how cultural and demographic factors intertwine to shape mental health perceptions.

The application of these statistical tools in SPSS allowed for a comprehensive exploration of the relationships and predictive factors influencing Arab Muslims' attitudes

towards mental health and services. The findings from Pearson correlation analysis, multiple regression analysis, and linear regression analysis provided a robust foundation for testing the research hypotheses, demonstrating the complex interplay between cultural beliefs, religiosity, knowledge of mental health services, and acculturation in shaping attitudes towards mental health care among Arab Muslim expatriates in Australia. These analyses not only affirmed the significant impact of cultural and religious beliefs on mental health perceptions but also underscored the importance of education and knowledge in potentially mitigating some of the negative effects of these beliefs on attitudes towards seeking formal mental health services.

5.8 Verification Procedures

To ensure the robustness and validity of the findings, a series of rigorous verification procedures were implemented throughout the data analysis phase. Initially, data integrity checks were conducted to confirm the accuracy of the data importation process from Qualtrics to SPSS, verifying that no data were lost or incorrectly formatted during the transition. Following this, a meticulous data cleaning protocol was enacted, involving the examination of outliers and the assessment of missing data patterns to identify any systematic biases or data entry errors.

Subsequently, the reliability of the scales used in the study was assessed using Cronbach's alpha, ensuring that each scale demonstrated adequate internal consistency for the constructs being measured. To further validate the analytical models, assumptions underlying each statistical test, such as normality, homoscedasticity, and multicollinearity, were thoroughly tested. Where assumptions were violated, corrective measures, such as transformation of variables or the use of non-parametric tests, were employed.

Cross-validation techniques were also applied to critical findings, involving a split-half method where the dataset was divided into two parts. Analyses were performed separately on each subset to verify that the results were consistent across different samples of the data, enhancing the generalizability and reliability of the conclusions drawn.

Moreover, to safeguard against potential biases and to substantiate the robustness of the regression models, bootstrapping methods were used. This approach provided empirical distributions for the estimators, allowing for a more accurate assessment of their stability and the significance of the predictors.

5.9 Descriptive Analysis of Survey Scales

5.9.1 Participants' Demographic Analysis

The study included a diverse sample of 169 Arab Muslim migrants and expatriates in Australia (see Table 4). Of the 169 respondents, 158 provided valid data.

Gender: The gender distribution was nearly even, with males comprising 53.2% and females 46.8% of the participants.

Age: The median age of the sample was 31 years, reflecting a predominantly young to middle-aged demographic. Female participants had a slightly higher mean age (M = 34.4 years) compared to male participants (M = 32.5 years).

Birthplace: The majority of participants (69.8%) were born overseas, outside Australia, while 23.7% were born in Australia. Missing data accounted for 6.5% of the responses (see Table 4).

Culture of Origin (Nationality): The most common countries of origin were Saudi Arabia (31.4%), Lebanon (11.2%), and Sudan (10.1%). Iraq and Kuwait accounted for 8.3% and 7.1%, respectively. Less common nationalities, such as Djibouti, Yemen, Somalia, and

Jordan, each represented less than 2% of the total. Additionally, 1.2% (2 participants) identified with a nationality not pre-listed and were classified under the "Other" category. Missing responses accounted for 9.5% of this question (see Table 4). Duration of Residence in Australia: The duration of residence varied widely, ranging from less than a year to 46 years, indicating a mix of recent arrivals and long-term residents. A small number of participants, particularly those who had resided in Australia for less than a year, reported specific durations as low as 0.10, 0.40, 0.50, and 0.70 years. The most frequently reported duration was exactly one year, cited by 10.7% (18 participants). On the longer side, 3.6% (6 participants) reported residing in Australia for 20 years, with the maximum duration being 46 years, reported by one participant. Notably, 30.8% of responses were missing for this question, indicating potential gaps or hesitations in providing this information.

Marital Status: Over half of the participants were married (51.5%). A substantial proportion held higher education degrees, with 29.0% having a university undergraduate degree and 21.9% holding a postgraduate degree (see Table 4). Other marital statuses included divorced (5.9%), separated (1.2%), widowed (0.6%), or in a de facto relationship (0.6%). Missing responses accounted for 9.5% of this question (see Table 4).

Education: Almost a third (29.0%) of respondents completed an university undergraduate degree. About one fifth of the participants completed a high school certificate (20.7%), or acquired a postgraduate degree (21.9%), or reported they are currently full-time students (29.6%) Fewer participants attended vocational education, TAFE, or community college (4.1%), or only achieved up to Secondary School Year 10 or equivalent (3.6%). About 10.1% of the data on educational attainment was missing (See Table 4).

In a gender breakdown of education, among males, 28.4% attained a university postgraduate degree, 25.9% a university undergraduate degree, and 24.7% a high school certificate. For

females, 39.4% obtained a university undergraduate degree, 19.7% a university postgraduate degree, and 21.1% a high school certificate. The Chi-Square test did not reveal a significant association between gender and education level, $\chi^2(2, N = 169) = 1.05$, $p = .59$.

Employment Status: The employment status of participants varied, with many either employed full-time (32.0%) or being full-time students (29.6%). Smaller segments included part-time workers (8.3%), those not actively seeking employment (12.4%), and individuals who were unemployed or between jobs (5.3%). Approximately 12.4% of the participants did not provide their employment status. When analysing employment status by gender (see Table 4), 37.2% of male participants worked full-time, compared to 35.7% of females. A higher percentage of female respondents were full-time students (39.7%) compared to males (27.1%).

Income: participants spanned various income brackets. The largest segment (33.1%) earned between $400-$999 per week, followed by those with an income of $1,000 - $1,499 per week (21.9%) and $2,000 - $2,999 per week (8.3%). A smaller group (5.3%) earned $3,000 or more per week, while 7.1% had no income. Income data was missing for 10.7% of participants.

In examining the help-seeking behaviours of the participants, it was observed that over the past 12 months, a majority (55.7%) had never sought help from a psychologist or a counsellor. While 35.6% consulted 1 or 2 times, a smaller proportion of 7.4% sought help 3 to 6 times, and a mere 1.3% did so more than 6 times. It's noteworthy that 11.8% of the data was missing from this segment. With respect to visiting a general practitioner (GP) for consultation in the past year, 10.7% of the respondents never sought a GP's assistance. The majority (57.7%) had 1 or 2 consultations, 22.1% visited 3 to 6 times, and 9.4% consulted more than 6 times.

Table 4

Demographic Characteristics of Study Participants (N = 169)

Demographic Variable	Category	Frequency (n)	*Percentage (%)
Gender	Male	84	53.2%
	Female	74	46.8%
	Total Valid Responses	**158**	**100%**
	Missing	11	
Age	M (Males)		32.5 years
	Range (Males)		18 - 58 years
	Average Age (Females)		34.4 years
	Range (Females)		18 - 62 years
	Median Age (Total Sample)		31 years
Place of Birth	Born in Australia	40	25.3%
	Born Outside Australia	118	74.7%
	Total Valid Responses	**158**	**100%**
	Missing	11	
Culture of Origin (Nationality)	Saudi Arabia	53	35.8%
	Lebanon	19	12.8%
	Sudan	17	11.5%
	Iraq	14	9.5%
	Kuwait	12	8.1%
	Other (Including Djibouti, Yemen, Somalia, Jordan, etc.)	16	10.8%
	Not Specified	16	10.8%
	Total	**148**	**100%**
Marital Status	Married	87	57.2%
	Single	52	34.2%
	Divorced	10	6.6%
	Separated	2	1.3%
	Widowed	1	0.7%
	De facto Relationship	1	0.7%
	Total Valid Responses	**152**	**100%**
	Missing	17	
	University Undergraduate Degree	49	32.9%

Demographic Variable	Category	Frequency (n)	*Percentage (%)
Educational Attainment			
	High School Certificate	35	23.5%
	University Postgraduate Degree	37	24.8%
	Vocational/TAFE/Community College	7	4.7%
	Secondary School Year 10	6	4.0%
	Full-Time Student	15	10.1%
	Total Valid Responses	**149**	**100%**
	Missing	20	
Employment Status	Employed Full-Time	54	36.7%
	Full-Time Student	50	34.0%
	Part-Time Worker	14	9.5%
	Not Seeking Employment	21	14.3%
	Unemployed/Between Jobs	9	6.1%
	Total Valid Responses	**148**	**100%**
	Missing	21	
Weekly Income	$400 - $999	56	40.6%
	$1,000 - $1,499	37	26.8%
	$2,000 - $2,999	14	10.1%
	$3,000 or more	9	6.5%
	No Income	12	8.7%
	Not Specified	10	7.3%
	Total Valid Responses	**138**	**100%**
	Missing	31	
Help-Seeking Behaviour	**Visited Psychologist/Counsellor**		
	Never	94	61.0%
	1 - 2 times	60	39.0%
	3 - 6 times	0	0.0%
	More than 6 times	0	0.0%
	Total Valid Responses	**154**	**100%**
	Missing	15	
	Visited General Practitioner (GP)		
	Never	18	11.8%
	1 - 2 times	97	63.4%
	3 - 6 times	37	24.2%

Demographic Variable	Category	Frequency (n)	*Percentage (%)
	More than 6 times	1	0.6%
	Total Valid Responses	**153**	**100%**
	Missing	16	

When participants were inquired about their likelihood to seek help for mental health issues from various professionals or individuals, distinct patterns emerged (see Table 5).

Table 5

Likelihood of Seeking Mental Health Support for Mental Health Issues

Source of Help	Very Unlikely	Unlikely	Likely	Very Likely
General Practitioner (GP)	13.5%	37.8%	37.2%	11.5%
Pharmacist	26.5%	36.7%	34.0%	2.7%
Psychologist	6.8%	15.8%	61.6%	15.8%
Social Worker	28.8%	32.9%	33.6%	4.8%
Sheik (for Ruqia)	23.3%	26.0%	46.6%	4.1%
Family Member	9.7%	20.0%	51.7%	18.6%
Close Friend	9.7%	23.4%	58.6%	8.3%
Prayer	2.1%	11.1%	38.2%	48.6%

Help-Seeking History. Among the male participants, 59.5% had never sought help from a psychologist or counsellor in the past year, compared to 51.4% of females. Further breakdown revealed that 32.9% of males consulted 1 or 2 times, and 5.1% did so 3 to 6 times, while a mere 2.5% sought help more than 6 times. Female participants, on the other hand, had 38.6% consulting 1 or 2 times and 10.0% consulting 3 to 6 times. Notably, none of the female

respondents sought help more than 6 times. The Chi-Square test yielded a p-value of 0.288, suggesting no significant association between gender and consultation frequency with a psychologist or counsellor.

When questioned about the likelihood of consulting a GP for mental health issues, 11.5% of males responded as very unlikely, compared to 15.7% of females. A detailed distribution showed that males were 43.6% unlikely, 34.6% likely, and 10.3% very likely. In contrast, the female percentages were 31.4% unlikely, 40.0% likely, and 12.9% very likely. The statistical analysis revealed a p-value of 0.489, indicating no significant gender-based preference for GP consultations.

The data showed a slight difference between genders. For males, the distribution was 24.7% very unlikely, 33.8% unlikely, 40.3% likely, and 1.3% very likely. Females reported 28.6% as very unlikely, 40.0% unlikely, 27.1% likely, and 4.3% very likely. The Chi-Square test provided a p-value of 0.301, confirming no significant gender-based distinction.

In this category, 6.6% of males and 7.1% of females were very unlikely to speak to a psychologist. The broader distribution for males was 21.1% unlikely, 57.9% likely, and 14.5% very likely. Females reported 10.0% unlikely, 65.7% likely, and 17.1% very likely. The derived p-value of 0.338 indicates a lack of significant gender influence in this preference.

Males showed a distribution of 26.3% very unlikely, 31.6% unlikely, 36.8% likely, and 5.3% very likely. The female participants had 31.4% very unlikely, 34.3% unlikely, 30.0% likely, and 4.3% very likely. The statistical p-value stands at 0.803, highlighting no gender-based trend.

The data revealed that 21.1% of males and 25.7% of females were very unlikely to seek Ruqia from a Sheik. Further analysis showed males at 32.9% unlikely, 40.8% likely, and

5.3% very likely, while females were 18.6% unlikely, 52.9% likely, and 2.9% very likely. The p-value of 0.182 confirmed no significant association based on gender.

Among the participants, 8.0% of males and 11.4% of females were very unlikely to seek help from family members. In-depth analysis displayed that 18.7% of males were unlikely, 52.0% likely, and 21.3% very likely. Females stood at 21.4% unlikely, 51.4% likely, and 15.7% very likely. The Chi-Square test, with a p-value of 0.754, suggests that gender does not predict this preference.

In the study, 12.0% of males and 7.1% of females were very unlikely to seek help from close friends. Detailed percentages for males were 24.0% unlikely, 57.3% likely, and 6.7% very likely. Females reported 22.9% unlikely, 60.0% likely, and 10.0% very likely. The statistical p-value of 0.697 indicates a lack of significant gender disparity in this category.

Only 1.4% of males and 2.9% of females found it very unlikely to pray to Allah for mental health issues. The broader male distribution was 12.2% unlikely, 36.5% likely, and 50.0% very likely. Females were 10.0% unlikely, 40.0% likely, and 47.1% very likely. With a p-value of 0.869 from the Chi-Square test, there appears to be no significant gender-based distinction in this religious inclination.

Help-Seeking History and Birthplace. Among the participants, those born in Australia displayed diverse tendencies in seeking professional psychological help. Approximately 31.6% reported that they had never sought help in the past 12 months, while 47.4% had consulted 1 or 2 times. Furthermore, 21.1% sought help between 3 to 6 times, and notably, none reported consulting more than 6 times. In contrast, participants born outside Australia exhibited a heightened reluctance to seek professional assistance, with 64.0% refraining from any consultations. Only 31.5% and 2.7% had 1-2 and 3-6 consultations, respectively, with a minor 1.8% consulting more than 6 times. The Chi-Square test yielded a

significant p-value of <.001, underlining a pronounced association between birth location and the frequency of consultation with a psychologist or counsellor.

The propensity to consult a General Practitioner (GP) for mental health issues also varied based on birthplace. Participants born in Australia generally leaned towards consulting a GP, with 52.6% being 'likely' and a mere 7.9% being 'very unlikely'. However, for those born outside Australia, the data showed a more balanced distribution, with 31.8% 'likely' and 15.5% 'very unlikely' to seek a GP's advice.

Pharmacists are often the first point of contact in healthcare. Among Australian-born participants, 50.0% were 'likely' to approach a pharmacist, contrasting with 28.4% of participants born outside Australia. The latter group displayed a higher inclination towards the 'very unlikely' category at 29.4%, compared to the 18.4% of their Australian-born counterparts.

On analysing the data regarding the inclination to consult a psychologist, Australian-born participants exhibited a strong propensity, with 65.8% falling under the 'likely' category. Comparatively, those born outside Australia were also inclined, with 60.2% being 'likely'. However, the Chi-Square test produced a p-value of 0.693, suggesting that the observed differences, though present, may not have a statistically significant association with the place of birth.

The utility of social workers in mental health scenarios was also explored. Australian-born participants showed a balanced approach, with 44.7% being 'likely' and 21.1% 'very unlikely'. Participants from outside Australia had comparable figures, with 29.6% 'likely' and 31.5% 'very unlikely'.

In terms of spiritual interventions, seeking Ruqia from a Sheik, the data illustrated diverse preferences. For Australian-born participants, 47.4% were 'likely' to consult a Sheik,

whereas 46.3% of participants born outside Australia expressed the same inclination. The Chi-Square test for this category indicated a p-value of 0.703, suggesting the absence of a significant association based on birth location. Regarding praying to Allah, among Australian-born participants, both 'likely' and 'very likely' categories had an equal distribution of 37.8%. In stark contrast, participants from outside Australia showed a stronger inclination towards praying, with 52.3% being 'very likely' and 38.3% 'likely'. The Chi-Square test for this category revealed a p-value of 0.087, suggesting a potential association.

Source of Support. Family often acts as the primary support system. Participants born in Australia showed 2.7% very unlikely, 18.9% unlikely, a major 70.3% as likely, and 8.1% very likely to seek help from family members. Those born outside Australia revealed 12.0% very unlikely, 20.4% unlikely, 45.4% likely, and a considerable 22.2% very likely. Friends can be pivotal in providing emotional support. Among those born in Australia, 5.4% were very unlikely, 18.9% unlikely, and a significant 75.7% were likely, with none in the very likely bracket. Participants born outside Australia had 11.1% very unlikely, 25.0% unlikely, 52.8% likely, and 11.1% very likely to seek help from friends.

The inclination of individuals to handle their mental health issues without seeking external help is a significant aspect that requires exploration in this research. Responding to the survey question, "If you have mental health issues, how likely are you NOT to speak to anyone and to deal with them yourself?", 143 participants provided valid answers, while 26 opted not to respond. The responses, on average, leaned towards an inclination to handle issues autonomously, with a mean score of 7.81. This inclination was further emphasised by a median and mode of 8.

Investigating deeper the distribution of these responses, a minor 5.6% of respondents felt it was very unlikely they'd manage issues on their own. About 30.8% expressed being

unlikely to do so, while a significant 40.6% leaned towards the likelihood of self-management. The remaining 23.1% were very confident about addressing their mental health issues independently. Considering the influence of gender on these preferences, the data presents an interesting picture. Among male participants, the distribution across the spectrum of 'very unlikely' to 'very likely' was 5, 22, 30, and 16 respectively. In contrast, females reported a distribution of 3, 22, 28, and 17. However, a Chi-Square test rendered a p-value of 0.911, indicating that gender isn't a significant determinant in this preference.

Age too, while offering a spectrum of responses, didn't emerge as a decisive factor. For instance, those aged 23 recorded varied inclinations, with 4 finding it unlikely, 2 likely, and 3 very likely to navigate their mental health challenges alone. The Chi-Square test's p-value of 0.140 further confirmed age's limited influence on this aspect of mental health management.

Birthplace, often seen as a determinant of cultural and societal attitudes, also didn't display a significant influence. Those born in Australia were generally more inclined to open up about their issues, but the difference with those born outside wasn't statistically significant, with a p-value of 0.219.

Educational background, another potential influencer, displayed varied responses but lacked a clear trend. For instance, those with a university undergraduate degree showed a distribution of Very Unlikely (3), Unlikely (10), Likely (21), and Very Likely (14). Yet, the overall p-value of 0.157 indicated that education doesn't play a pivotal role in this preference.

Regarding the professional status of the respondents, while showing some variance, didn't emerge as a decisive factor either. Full-time workers, for instance, largely leaned towards the likelihood of managing their mental health issues alone. However, the Chi-

Square test's p-value of 0.471 suggested that employment status isn't a defining factor in this choice.

While many participants exhibited a preference for autonomous management of their mental health, this choice isn't majorly influenced by factors like gender, age, birthplace, educational, or professional background. The individual's choice is likely shaped by a combination of personal, societal, and deeper cultural elements,

In examining the preferences for sources of support among participants dealing with mental health or psychological counselling, the data presents intriguing insights. An analysis of the responses indicates that general practitioners (GPs) are fairly considered as a go-to resource, as evidenced by the 49 individuals ranking them within their top three preferences, yielding an average ranking of 2.22 on a scale that extends up to 6. This preference for GPs suggests a moderate level of trust and reliance on primary care providers for mental health support, albeit with a slight right skewness in the distribution, reflecting a minority of participants with lower preference rankings.

Pharmacists were less frequently considered, with only 16 participants ranking them in their top three. The average ranking of 2.87 out of a possible 5 signifies a moderate preference, suggesting that pharmacists might serve a more complex role in mental health support, perhaps as supplementary advisors instead of primary sources of counsel.

Psychologists are evidently a popular choice, with 107 participants ranking them within their top three, and an average ranking of 2.41 out of 6. The distribution reveals a moderate right skewness and a notably sharp peak in the kurtosis, signifying a substantial number of high rankings, which underscores the recognised value of specialized psychological support among the participants.

The role of social workers appears to be more modestly regarded, with 19 individuals considering them within their top three choices, resulting in an average ranking of 1.89 out of 4. This less pronounced preference could reflect a perception of social workers as being less directly involved in psychological counselling or perhaps less available in the context considered by the participants.

A significant finding is the pronounced preference for spiritual support, as 'Praying to Allah' was chosen by 116 participants, highlighting the substantial weight of religious and spiritual coping mechanisms in managing mental health. The rankings ranged from 1 to 7, with an average of 1.32, exhibiting a heavily right-skewed distribution and a steep kurtosis. This pattern indicates a high level of importance placed on spiritual practices, with many participants considering it their foremost option.

The Sheikh is also a notable source of support, with 20 individuals ranking this choice in their top three, averaging at 3.13 with rankings between 2 and 7. The distribution suggests a select group of participants who highly regard the Sheikh's role in providing counsel, as reflected in the positive skewness and high kurtosis.

Family members are acknowledged as a cornerstone of support, with 84 participants rating them within their top three preferences, and an average ranking of 2.42 out of 6. The moderately right-skewed distribution and significant kurtosis value indicate a collective recognition of the family's integral role in mental health support, albeit with some variability in how prominently they are regarded among the participants' choices. (see Table 6).

Table 6:

Ranking of Preferred Sources of Support for Seeking Mental Health Counselling

Preference Options	1st Choice	2nd Choice	3rd Choice
Pray to Allah	98	7	9
GP (General Practitioner)	13	16	18
Psychologist	10	47	48
Social Worker	8	6	4
Family Member	4	50	30
Pharmacist	1	4	9
Sheikh	0	4	16

5.9.2 Analysis of the Stephenson Multigroup Acculturation Scale (SMAS)

In the descriptive analysis of the Stephenson Multigroup Acculturation Scale (SMAS) for this sample of Arab Muslim informants, two subscales were assessed: Ethnic Society Immersion (ESI) and Dominant Society Immersion (DSI). The valid responses for ESI were obtained from 138 participants, while DSI had 136 valid responses, indicating a small amount of missing data.

The Ethnic Society Immersion scores revealed a higher mean of 56.52 (SD = 9.50), suggesting a strong immersion in ethnic society among the participants. This is further evidenced by a median score of 59, with the most frequently occurring score (mode) being 67, at the higher end of the scale. The scores ranged from 29 to 68, showcasing a diverse level of ethnic society immersion within the group. The data exhibited a negative skewness (-.743), indicating that the distribution of scores is skewed towards the higher end, meaning that more participants reported higher levels of ethnic society immersion. In contrast, the Dominant Society Immersion scores presented a lower mean of 39.74 (SD = 8.62), with a median of 38 and a mode of 32. These scores ranged from 21 to 58, indicating a more

moderate level of immersion in the dominant society. The skewness for DSI scores was positive (.226), suggesting a slight tendency towards lower scores among the participants.

The distribution of responses for the Ethnic Society Immersion displayed a peak at the scale's maximum value, with 8.7% of participants scoring at 67 out of a possible 68, followed by another peak at the score of 65, where 5.8% of participants were grouped. This pattern suggests that a significant number of participants feel very much immersed in their ethnic society.

In the Dominant Society Immersion, the most common score was 32, accounting for 8.8% of the valid responses, followed by a score of 40 with 7.4%. This distribution indicates a variation in the degree of immersion within the dominant society among the participants, with some showing moderate to high levels of immersion.

The first quartile (25th percentile) for ESI was 49.5, and the third quartile (75th percentile) was 65, indicating that 50% of the participants scored between 49.5 and 65 on ethnic society immersion. For the DSI, the first quartile was 32.25 and the third quartile was 47, suggesting that half of the participants scored within this range for dominant society immersion.

The differences between the mean scores of ESI and DSI highlight the variance in acculturation experiences within the Arab Muslim community in Australia. The higher level of ethnic society immersion suggests that traditional cultural ties remain strong, while the lower mean score for dominant society immersion may reflect challenges or preferences in engaging with the broader Australian culture. These findings provide a quantitative reflection of the acculturation processes among the participants and set the stage for further analysis on how these processes affect their mental health perceptions and help-seeking behaviours.

5.9.3 Analysis of the Muslim Religiosity Scale (MRS)

In the analysis of the Muslim Religiosity Scale (MRS), one observes a multifaceted representation of the participants' religious engagement. When examining the 'Religious Practice' dimension, the data from 132 participants reveal a mean score of 27.82 with a standard deviation of 7.39, spanning a range from 4 to 43. The median of 28 suggests a symmetrical distribution of scores around the central tendency. The skewness of -0.488 indicates a distribution with fewer low scores, and the kurtosis of 0.320 suggests a distribution shape that is neither particularly peaked nor flat when compared to a normal distribution. The histogram for 'Religious Practice' would likely show a distribution that is balanced across the range of scores.

For 'Intrinsic Religiosity', the mean score is 11.85 with a standard deviation of 2.72, based on responses from 129 participants. This dimension of religiosity has a more constrained range of scores from 4 to 15. The mode at 15 signifies that a substantial number of participants report a strong intrinsic religious sentiment. Despite this, the median of 12 indicates that half of the respondents report a lower level of intrinsic religiosity. The negative skewness of -0.643 and a kurtosis close to zero at -0.318 reveal a slight asymmetry in distribution and a shape that mirrors the normal curve. The corresponding histogram for 'Intrinsic Religiosity' would typically display a concentration of scores around the higher end, tapering off for lower levels of intrinsic belief.

Regarding the overall 'Muslim Religiosity Scale', the mean score stands at 39.40 with a standard deviation of 9.42 among 132 valid responses. The range of scores extends from 4 to 58, with a median of 40. A skewness of -0.868 coupled with a kurtosis of 1.637 suggests a distribution with fewer instances of lower scores and a more pronounced peak than a normal

distribution. This is expected to be evident in the histogram as a distinct peak around the median, with sparse occurrences of very low religiosity scores.

The MRS data suggest that the participants generally exhibit moderate to high levels of religious practice and intrinsic religiosity. The distributions of these scores, as denoted by skewness and kurtosis, indicate modest deviations from normality, implying that the participants' religiosity is relatively evenly distributed with a slight inclination towards higher degrees of religious engagement. The distribution of MRS scores was unimodal distribution with a slight negative skew clustering of religiosity scores around 40.

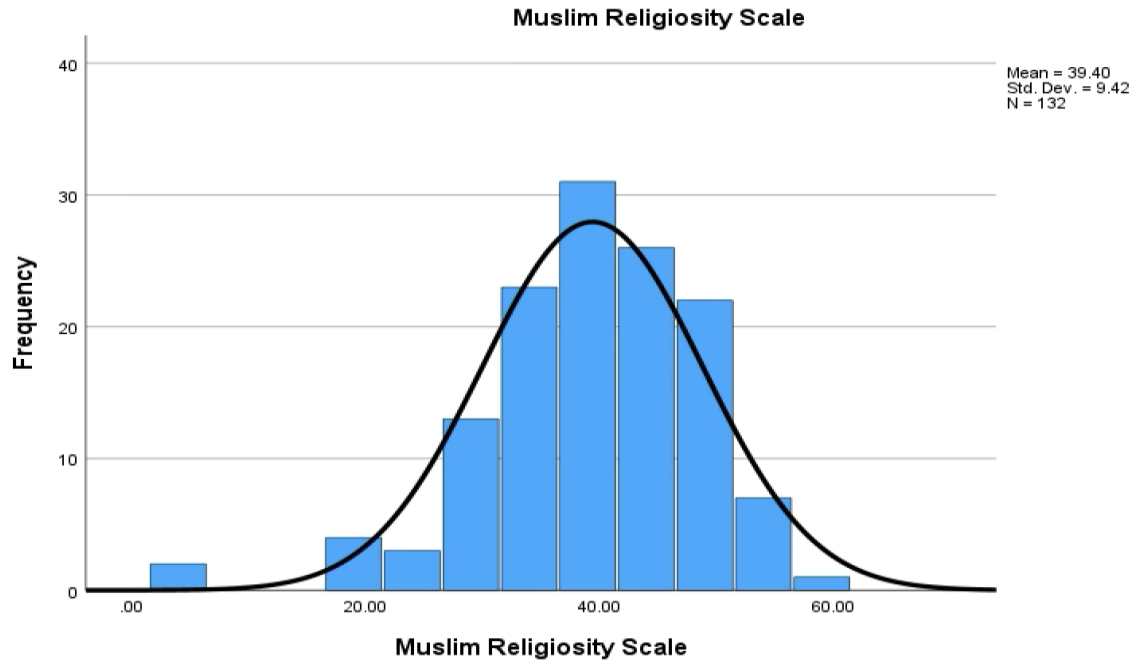

Figure 4:Distribution of Scores on the Muslim Religiosity Scale (MRS)

5.9.4 Analysis of Attitudes Towards Seeking Mental Health Services (ATSFMHS)

The mean score on this scale was 51.65, with a standard error of mean at 0.83915, indicating a moderately favourable attitude toward seeking formal mental health services in

the sample. This trend was further underscored by the median and mode scores of 50 and 48, respectively. The standard deviation of 9.41940 and a variance of 88.725 suggested a broad range of attitudes within the sample, indicative of diverse perspectives toward mental health services.

The distribution of responses exhibited a slight leftward skew (-0.350), though it was not pronounced enough to significantly deviate from a normal distribution. This finding, combined with a kurtosis value of 2.003, indicated a leptokurtic distribution, suggesting a concentration of responses around the mean with some extreme values. This pattern reflects the sample's general tendency to hold moderately favorable views toward seeking mental health services, with a subset of individuals displaying significantly differing attitudes.

The range of scores was 13 to 77, illustrating a wide spectrum of attitudes. While some participants exhibited highly unfavorable attitudes toward mental health services, others expressed extremely favorable views. The lower quartile (46) and upper quartile (59) highlighted the central tendency of responses, with most participants clustering around these values.

The frequency distribution of ATSFMHS scores showed that the most frequently recorded scores fell between 45 and 56, comprising a significant portion of responses. The mode of the ATSFMHS scores was 48, accounting for 11.1% of valid responses. Additionally, higher scores above 60, while less frequently reported, indicated that a considerable number of participants held very favourable attitudes toward seeking formal mental health services. Conversely, scores below 40 were relatively rare, suggesting that extremely unfavourable attitudes were not a predominant sentiment within the sample.

For the modified item: *"To avoid social stigma, I prefer referring to my family member with a mental illness or myself as being demonically possessed rather than*

acknowledging them as someone with a mental health condition," a noteworthy portion of Arab Muslim participants expressed agreement. Specifically, 32.5% agreed, and 16.0% strongly agreed, meaning nearly half of the respondents (48.5%) favoured traditional or supernatural explanations of mental disorders over medical ones to avoid stigma. In contrast, 14.8% disagreed, and 10.1% strongly disagreed, together accounting for 24.9% of responses. This indicates that while a significant minority resisted conflating mental disorders with demonic possession, cultural and religious beliefs heavily influenced many participants' perspectives on mental health issues. These attitudes may reflect an adaptive response to the stigmatization of mental health conditions within the Arab Muslim community.

5.9.5 Analysis of Cultural Misconceptions in Mental Health (CBMHP)

The Cultural Misconceptions in Mental Health (CBMHP) scale results from the study reveal significant insights into the participants' attitudes and beliefs. This scale, administered to 124 participants out of a total of 169, aimed to measure misconceptions surrounding mental health within a specific cultural context.

The mean score on the CBMHP scale was 30.49, with a standard deviation of 4.90, indicating a moderate level of variability in responses. The median score was slightly higher at 32, and the most frequently occurring score (mode) was 34. This suggests a central tendency towards recognizing some level of cultural misconceptions in mental health.

The skewness of the data was calculated at -0.758, which implies a slight leftward (negative) skew in the distribution. This indicates that while most participants scored around the mean or higher, a smaller subset had significantly lower scores, reflecting less acknowledgment of cultural misconceptions. The kurtosis value was close to zero, suggesting that the distribution of scores was neither too peaked nor too flat compared to a normal distribution.

An examination of the frequency distribution further illustrates these patterns. Scores ranged from a minimum of 19 to a maximum of 41, covering a 22-point range. The lower quartile (25th percentile) stood at 27, indicating that 25% of the participants scored below this number. Conversely, the upper quartile (75th percentile) was at 34, showing that 75% of the respondents scored below this figure.

The frequency distribution reveals that higher scores were more common, with a noticeable accumulation of responses in the 33 to 34 score range, where approximately 24% of the participants' scores fell. On the lower end, scores such as 19 and 20 were less frequent, suggesting that a smaller proportion of the sample held significantly fewer misconceptions based on cultural aspects of mental health.

These findings are indicative of the sample's general perception of cultural misconceptions in mental health. While there is an acknowledgment of these misconceptions among most participants, as reflected in the mean and mode, the distribution also shows a diversity in views, ranging from very few to quite a number of misconceptions. This diversity underscores the complexity of cultural influences on mental health perceptions and the need for detailed and considerate strategies in mental health education and awareness within diverse cultural contexts.

5.9.6 Analysis of Knowledge and Familiarity with Formal Mental Health Services Scale (KFFMHS)

In the quantitative analysis of the Knowledge and Familiarity with Formal Mental Health Services scale (KFFMHS), the data reflects participants' awareness and understanding of various mental health disorders and services. The valid responses numbered 122, with 47 responses missing, accounting for a significant proportion of the total sample size of 169.

The mean score on the KFFMHS was 33.72, with a median of 34 and a mode of 33, indicating a moderate level of knowledge and familiarity among participants. The standard deviation was 6.82973, suggesting some variability in responses, but not excessively so. The range of scores was 32, from a minimum of 17 to a maximum of 49, demonstrating a wide spectrum of knowledge and familiarity levels within the sample.

The distribution of scores showed a relatively normal spread, as evidenced by the skewness (-.032) and kurtosis (-.394) values being close to zero. This indicates that the data did not significantly deviate from a normal distribution. The majority of participants scored in the mid-range, with the 25th percentile at 28.75 and the 75th percentile at 39, further supporting the conclusion of a moderately informed sample.

In terms of frequency distribution, lower scores (17-22) were less common, while scores clustered around the mode (33) were more frequent. This pattern suggests a concentration of participants with a moderate level of knowledge and familiarity, although there remained a significant portion with either higher or lower levels of understanding. These findings indicate a varied level of knowledge and familiarity with mental health services among the participants. While a substantial number demonstrated a reasonable understanding, there remains a noticeable portion with limited awareness, underscoring the need for enhanced mental health education and awareness programs. This variability in knowledge levels could have implications for how mental health services are utilized and perceived in the community, highlighting areas for potential improvement in public health strategies.

Moreover, a modified item from KFFMHS scale was analysed to address a prevalent misunderstanding identified during the qualitative phase of the research. The statement, "A person with schizophrenia (Fosam) has two or more separate personalities. These identities

control a person's behaviour at different times," was crafted to assess the community's knowledge about schizophrenia, a condition often confused with dissociative identity disorder (DID).

The frequency analysis shows that out of 122 respondents, 9 (7.4%) believe this statement to be 'False', 32 (26.2%) think it's 'Probably false', 56 (45.9%) consider it 'Probably true', and 25 (20.5%) accept it as 'True'. These responses indicate a significant portion of the sample holds a misconception about schizophrenia.

Gender-based cross-tabulation results indicate that among male participants, 4 (6.6%) believe the statement is 'False', while 9 (14.8%) consider it 'True'. Female participants are slightly more likely to believe the statement is 'True', with 16 (25.8%) endorsing it as such, compared to 5 (8.1%) who believe it's 'False'.

Age-wise, the belief that schizophrenia involves multiple personalities is dispersed across various age groups, with a notable affirmation in the 23-27 and 30-34 age brackets, suggesting that this misconception is not confined to a specific age group.

Cross-tabulation by place of birth indicates that those not born in Australia are more likely to believe the statement is 'True' (42 out of 92), compared to those born in Australia (14 out of 30). This may reflect the influence of cultural narratives prevalent in their countries of origin.

Finally, educational background plays a significant role in this belief. Those with a university undergraduate degree or higher are more likely to identify the statement as 'False' or 'Probably false'. In contrast, individuals with secondary school education are more inclined to believe it's 'True'.

These results underscore the need for educational interventions to address and correct misunderstandings about mental health conditions like schizophrenia within the Arab Muslim

community. It also highlights the potential impact of cultural background and educational level on the perception of mental health disorders.

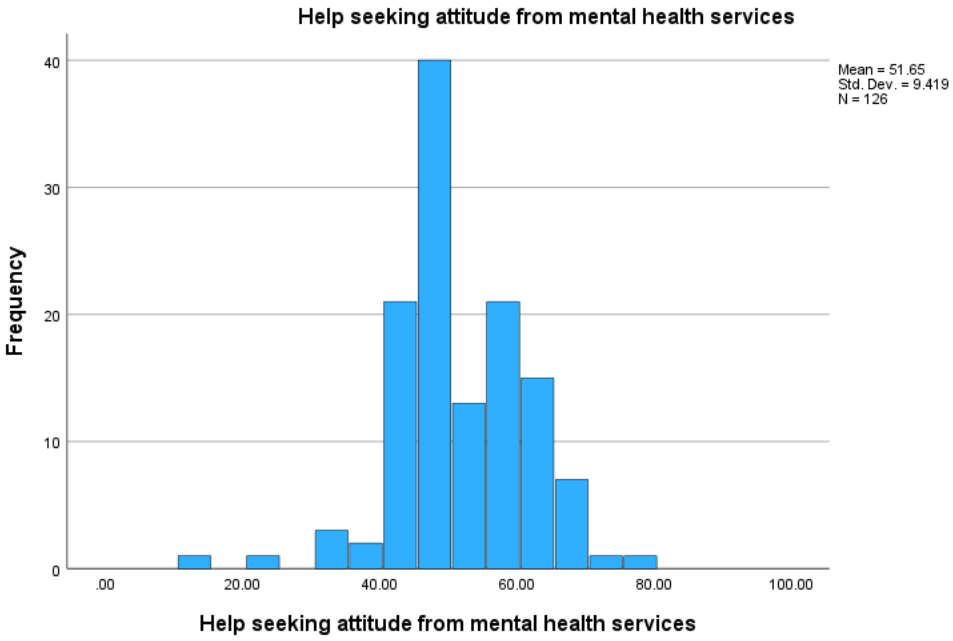

Figure 5: Distribution of scores of ASTFMHS

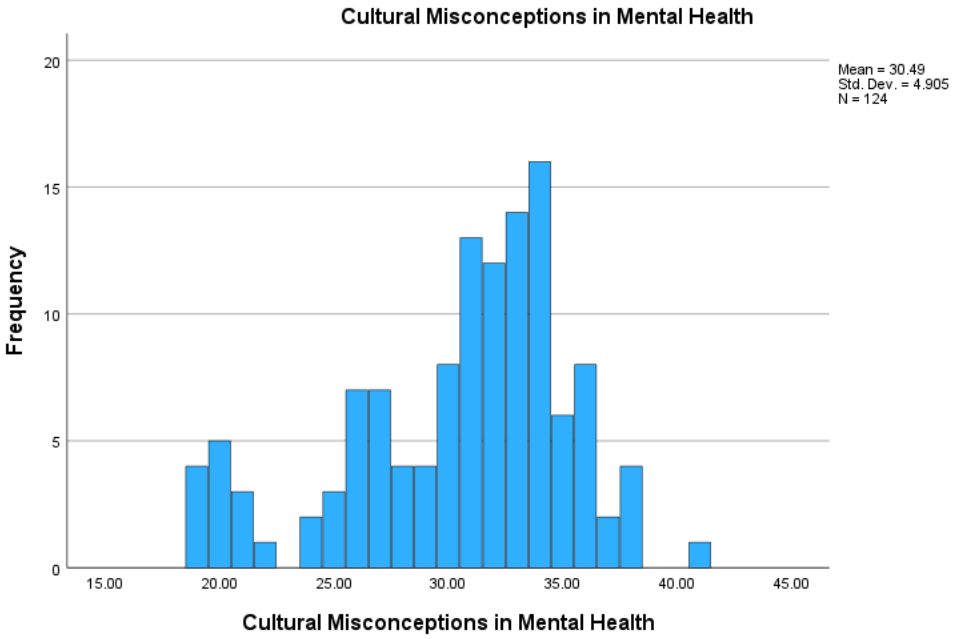

Figure 6: Distribution of scores CBMHP

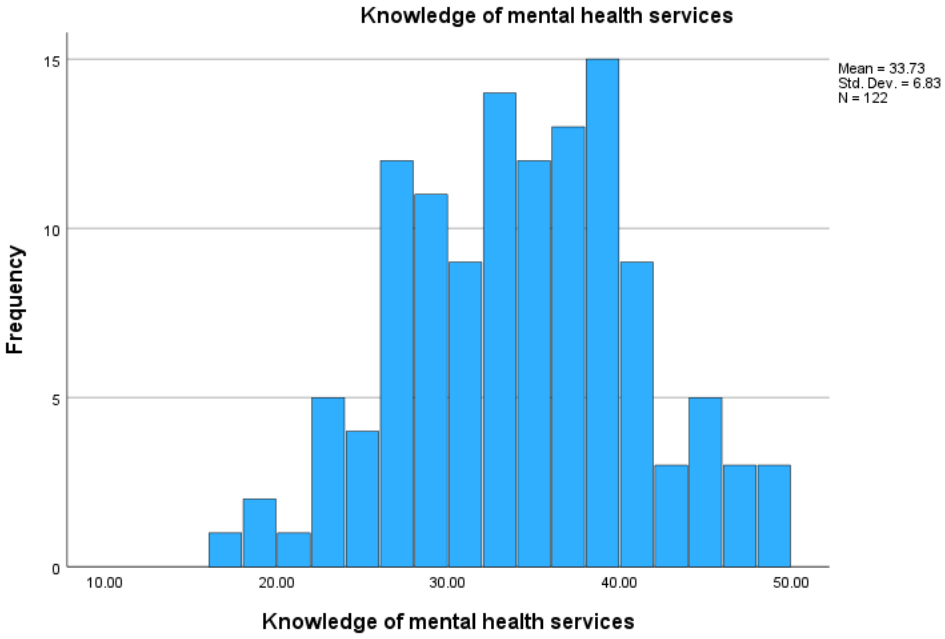

Figure 7: Distribution of scores of KFFMHS

5.9.7 Analysis of Ethnic Microaggression (EMA)

The data from the Ethnic Microaggression (EMA) Scale in this study reflects the prevalence of ethnic microaggressions experienced by the participants. A total of 122

participants provided valid responses, with a mean frequency score of 16.57, indicating a notable occurrence of microaggressions. The standard deviation of 9.87 suggests a wide variability in these experiences among the participants. The most commonly reported frequency was 13, as indicated by the mode of 13.00. The distribution of responses, with a skewness of 0.486, shows a slight tendency towards higher frequency scores. The range of reported experiences was broad, stretching from 0 (never experiencing microaggressions) to 49 (indicating frequent experiences), underscoring the diverse range of experiences among the participants.

The emotional response to these microaggressions, as measured by the EMA Scale, reveals the significant impact they have on individuals. The average emotional response score was 9.21, with a standard deviation of 7.36, pointing to considerable variation in how deeply participants were affected. The mode of 8.00 indicates that a sizeable segment of the participants was moderately to significantly bothered by these microaggressions. The skewness value of 0.684 in the distribution of emotional impact scores indicates a lean towards higher levels of distress. The range of emotional responses, from -4 to 32, reflects a complex spectrum of feelings, from minimal impact to severe distress.

The findings from the EMA Scale demonstrate the prevalent and varied experiences of ethnic microaggressions among the study's participants. The frequency of these experiences, coupled with their emotional impact, underscores the importance of addressing microaggressions in multicultural and multi-ethnic environments. These results align with existing literature that highlights the pervasive nature of ethnic microaggressions and their potential to cause psychological distress. The study's findings suggest the need for increased awareness and interventions aimed at reducing the occurrence of microaggressions and supporting those who are affected by them. Additionally, the wide range of experiences and

emotional impacts calls for a personalized approach in addressing the consequences of ethnic microaggressions in mental health practices.

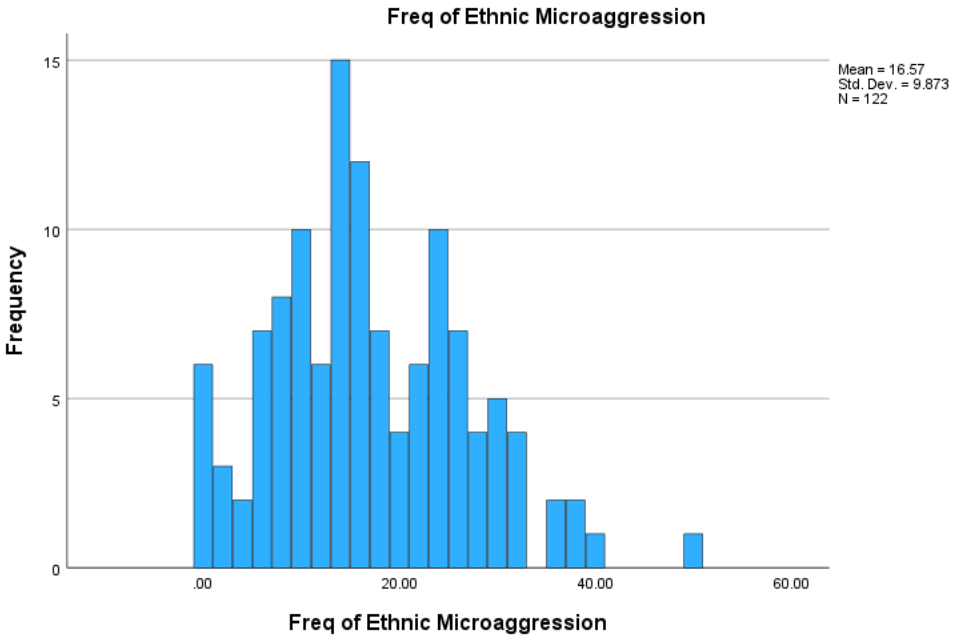

Figure 8: Distribution of scores of EMA frequency

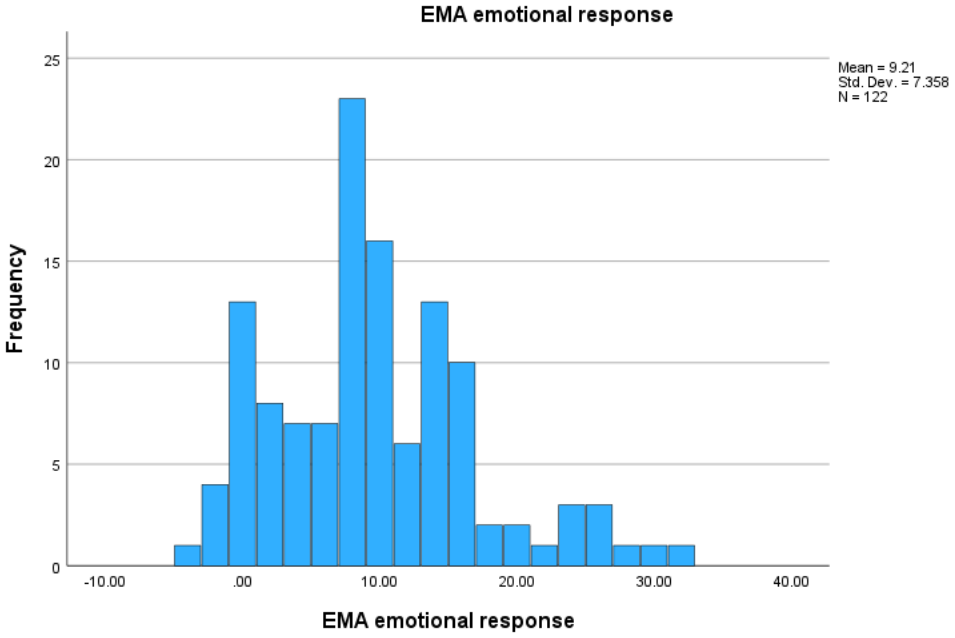

Figure 9: Distribution of scores of the EMA emotional responses

5.9.8 Analysis of Depression Anxiety Stress Scales (DASS21)

The DASS-21 were administered to participants to assess their mental health status. The valid responses for each of the subscales Depression, Anxiety, and Stress as well as the total DASS-21 score were obtained from 122 participants, with 47 responses missing from the total sample of 169.

The analysis of the Depression scale from the DASS-21 revealed that among the 122 participants who completed this section, the mean score was 14.25 (SD = 8.94), with a median of 14. The most frequently observed score was 14, indicating a commonality in the level of depression among participants. The distribution of scores ranged from 0 to 42, showing a wide variance in depressive symptoms. The data exhibited a slight positive skewness (.215), suggesting a small number of individuals with higher depression scores. However, the skewness was within acceptable limits, reflecting a fairly symmetrical distribution. The kurtosis value of -0.445 indicated a platykurtic distribution, suggesting fewer outliers than in a normal distribution.

For the Anxiety scale, 122 participants provided valid responses. The mean anxiety score was 14.11 (SD = 8.47), with a median and mode of 14 and 16, respectively. The scores ranged from 0 to 32, indicating varying levels of anxiety among the respondents. The skewness of .131 and kurtosis of -0.871 suggested a distribution that was fairly symmetrical and somewhat platykurtic, respectively. This distribution reflects a relatively even spread of anxiety scores among the participants, with a slight tendency towards lower scores.

In the Stress scale, the analysis included responses from 122 participants. The mean stress score was 14.87 (SD = 9.33), with a median of 14. The range of scores stretched from 0

to 42, indicating diverse stress levels among the respondents. The skewness (.344) pointed to a slight asymmetry in the distribution, leaning towards higher stress levels. The kurtosis value of -0.126 indicated a distribution similar to the normal curve in terms of the presence of outliers.

When considering the DASS-21 total scores, which combine depression, anxiety, and stress, the mean score among the 122 respondents was 43.23 (SD = 25.44), with a median score of 42. Scores varied extensively, ranging from 0 to 110. The skewness (.166) and kurtosis (-0.651) values suggested a distribution that was symmetrical and slightly platykurtic. This range and distribution indicate a diverse experience of mental health symptoms among the participants, with some experiencing minimal symptoms and others reporting much higher levels.

These analyses provide a detailed understanding of the mental health status of the participants in terms of depression, anxiety, and stress, as measured by the DASS-21. Each scale shows a unique pattern of responses, indicating the varied experiences of the participants in these domains.

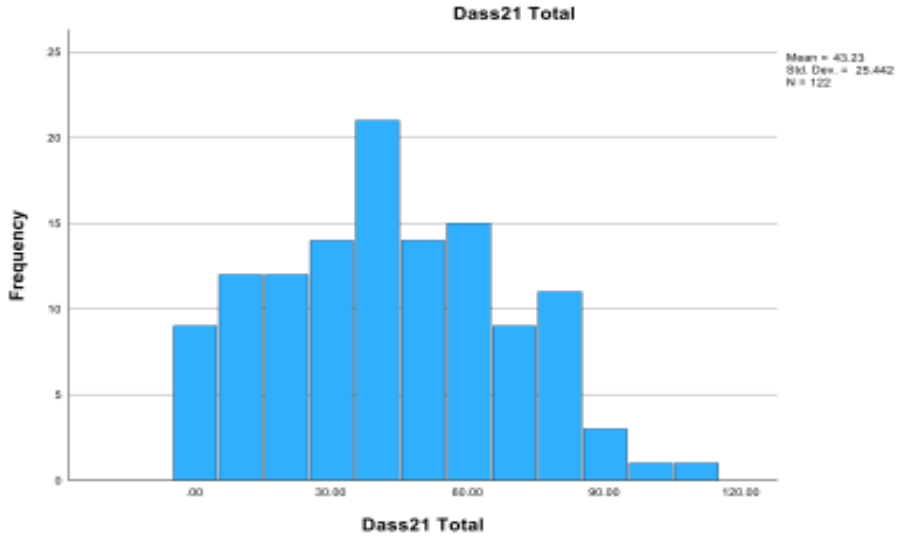

Figure 10: Frequency Distributions of DASS-21 Subscales:

5.10 Correlation Analysis of Variables

Before testing the research hypotheses, it is important to understand the interrelationships among the variables used in this study. The correlation analysis, as presented below, helps identify significant associations between these variables, which is essential for the formulation and justification of the subsequent regression models. This section outlines the Pearson correlation coefficients for variables such as knowledge of mental health services, attitudes towards mental health help-seeking, cultural beliefs about mental health, and additional psychosocial factors. Understanding these correlations ensures that the variables included in the regression models are relevant and interrelated, providing a solid empirical foundation for the hypothesis testing that follows.

Table 7:

Pearson Correlation Coefficients Among Study Variables

Correlations

		Knowledge of mental health services	Help seeking attitude from mental health services	Cultural Misbeliefs in Mental Health	Depression	Anxiety	Stress	Ethnic Society Immersion	Dominant Society Immersion	Muslim Religiosity Scale	Intrinsic Religiosity	Religious Practice	EMA emotional response	Freq of Ethnic Microaggression	Dass21 Total
Knowledge of mental health services	Pearson Correlation	--													
	N	127													
Help seeking attitude from mental health services	Pearson Correlation	.330**	--												
	Sig. (2-tailed)	<.001													
	N	127	133												
Cultural Misbeliefs in Mental Health	Pearson Correlation	-.204*	-.581**	--											
	Sig. (2-tailed)	.021	<.001												
	N	127	129	129											
Depression	Pearson Correlation	.073	.001	.170	--										
	Sig. (2-tailed)	.423	.993	.060											
	N	124	124	124	124										
Anxiety	Pearson Correlation	.113	-.090	.199*	.865**	--									
	Sig. (2-tailed)	.211	.320	.027	<.001										
	N	124	124	124	124	124									
Stress	Pearson Correlation	.183*	.080	.035	.887**	.812**	--								
	Sig. (2-tailed)	.042	.380	.697	<.001	<.001									
	N	124	124	124	124	124	124								
Ethnic Society Immersion	Pearson Correlation	-.187*	-.156	.129	-.273**	-.142	-.331**	--							
	Sig. (2-tailed)	.036	.073	.145	.002	.115	<.001								
	N	127	133	129	124	124	124	149							
Dominant Society Immersion	Pearson Correlation	.307**	.054	.023	.099	.115	.085	-.152	--						
	Sig. (2-tailed)	<.001	.540	.800	.273	.205	.346	.068							
	N	127	133	129	124	124	124	146	146						
Muslim Religiosity Scale	Pearson Correlation	.056	.026	.280**	-.010	.053	-.001	.304**	-.187*	--					
	Sig. (2-tailed)	.534	.765	.001	.913	.563	.994	<.001	.027						
	N	127	133	129	124	124	124	141	141	141					
Intrinsic Religiosity	Pearson Correlation	-.001	-.074	.206*	-.147	-.138	-.149	.304**	-.148	.660**	--				
	Sig. (2-tailed)	.995	.395	.019	.103	.127	.099	<.001	.084	<.001					
	N	127	133	129	124	124	124	137	137	137	137				
Religious Practice	Pearson Correlation	.069	.061	.262**	.046	.119	.058	.243**	-.189*	.953**	.405**	--			
	Sig. (2-tailed)	.444	.485	.003	.610	.187	.520	.004	.025	<.001	<.001				
	N	127	133	129	124	124	124	141	141	141	137	141			
EMA emotional response	Pearson Correlation	.236**	.203*	-.134	.182*	.199*	.301**	-.137	.036	.081	-.039	.115	--		
	Sig. (2-tailed)	.008	.024	.138	.043	.028	<.001	.131	.690	.369	.666	.202			
	N	124	124	124	124	124	124	124	124	124	124	124	124		
Freq of Ethnic Microaggression	Pearson Correlation	.256**	-.026	.235**	.288**	.374**	.339**	-.169	.099	.220*	-.034	.284**	.364**	--	
	Sig. (2-tailed)	.004	.772	.009	.001	<.001	<.001	.061	.276	.014	.704	.001	<.001		
	N	124	124	124	124	124	124	124	124	124	124	124	124	124	
Dass21 Total	Pearson Correlation	.131	.000	.138	.965**	.935**	.950**	-.265**	.104	.014	-.152	.077	.241**	.351**	--
	Sig. (2-tailed)	.148	.998	.125	<.001	<.001	<.001	.003	.249	.879	.091	.393	.007	<.001	
	N	124	124	124	124	124	124	124	124	124	124	124	124	124	124

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

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

5.11 Regression Analysis Results

Multiple regression analysis was used to test the mental health knowledge prediction model from the following predictors: Muslim Religiosity, Dominant Society Immersion, Cultural Misconceptions about Mental Health, and Emotional Impact of Microaggressions. These four predictors explained 20.4% of the variance in mental health knowledge (R^2 = .204), with the model being statistically significant (F (4, 119) = 7.616, MSE = 37.917, p < .001).

This indicates that these variables collectively have a meaningful impact on the level of mental health knowledge among the participants. Specifically, Dominant Society Immersion (β = .338, t = 4.038, p < .001) was a significant positive predictor, meaning that higher levels of integration and engagement with the dominant Australian society are associated with greater mental health knowledge. This suggests that acculturation to the dominant society enhances understanding of mental health issues.

Similarly, the Emotional Impact of Microaggressions (β = .179, t = 2.143, p = .034) also significantly predicted mental health knowledge, though to a lesser extent. This indicates that experiencing emotional impacts from microaggressions might increase awareness and knowledge about mental health, possibly due to increased interactions with mental health concepts or services as a coping mechanism.

On the other hand, Cultural Misconceptions (β = -.236, t = -2.719, p = .008) were found to be a significant negative predictor of mental health knowledge. This means that stronger adherence to cultural misconceptions about mental health is associated with lower levels of mental health knowledge. In essence, those who hold incorrect or culturally based misconceptions about mental health are less likely to have accurate knowledge about mental health disorders and treatments. (see Table 8).

Table 8:

Regression Analysis Predicting Mental Health Knowledge

Predictor	Estimate	Standardised Coefficient (β)	SE (Standard Error)	p
Constant	27.226		4.779	< .001 **
Muslim Religiosity Scale	0.120	0.170	0.062	.055 *
Dominant Society Immersion	0.264	0.338	0.065	< .001 **
Cultural Misconceptions	-0.331	-0.236	0.122	.008 **
Emotional Impact of Microaggressions	0.163	0.179	0.076	.034 *

Notes. * p < .05; ** p < .01

Multiple regression analysis was used to test the prediction model of help-seeking attitudes from Knowledge of Mental Health Services, Muslim Religiosity, Cultural Misconceptions, Dominant Society Immersion, Ethnic Society Immersion, and Emotional Impact of Microaggressions. The prediction model was statistically significant (F(6, 117) = 14.656 , *MSE* = 53.657 , *p* < .001). The model accounted for 42.9% of the variance in help-seeking attitudes (R^2 = .429).

This indicates that these variables collectively have a substantial impact on attitudes towards seeking help for mental health issues. Muslim Religiosity (β = .219, *t* = 2.736, *p* = .007) was found to be a significant positive predictor, meaning that higher levels of religiosity among Muslims are associated with more positive attitudes towards seeking help. This suggests that religious beliefs and practices encourage help-seeking behaviours.

Cultural Misconceptions (β = -.592, t = -7.754, p < .001) were identified as a significant negative predictor of help-seeking attitudes. This means that stronger adherence to cultural misconceptions about mental health significantly reduces the likelihood of seeking help. Thus, while cultural misconceptions predicted negative help-seeking attitudes, it is important to note that Muslim religiosity was a positive predictor of help-seeking attitudes. (see Table 9).

Table 9:

Regression Analysis Predicting Help-Seeking Attitudes

Predictor	Estimate	Standardised Coefficient (β)	SE (Standard Error)	p
Constant	74.979		7.672	< .001 **
Muslim Religiosity Scale	0.215	0.219	0.079	.007 **
Dominant Society Immersion	0.048	0.044	0.083	.568
Cultural Misconceptions	-1.156	-0.592	0.149	< .001 **
Ethnic Society Immersion	-0.104	-0.104	0.076	.172
Emotional Impact of Microaggressions	0.069	0.055	0.093	.456
Knowledge of Mental Health Services	0.210	0.151	0.110	.060

Notes. * p < .05; ** p < .01

Multiple regression analysis was used to test the prediction model of cultural misconceptions from Muslim Religiosity, Dominant Society Immersion, Ethnic Society Immersion, and Emotional Impact of Microaggressions. These predictors accounted for 11.1% of the variance in cultural misconceptions (R^2 = .111), and the prediction model was statistically significant ($F(4, 119) = 3.710$, $MSE = 21.540$, $p = .007$).

This indicates that these variables collectively have a modest impact on cultural misconceptions about mental health. Notably, Muslim Religiosity (β = .300, $t = 3.241$, $p = .002$) was found to be a significant independent predictor, meaning that higher levels of religiosity among Muslims are associated with stronger cultural misconceptions about mental health.

This prediction holds true even when considering the effects of acculturation patterns (Dominant Society Immersion and Ethnic Society Immersion) and the emotional impact of microaggressions. In other words, Muslim religiosity predicted cultural misconceptions even when acculturation patterns and emotional responses to microaggressions were also taken into account in the prediction model. (see Table 10).

Table 10:

Regression Analysis Predicting Cultural Misconceptions

Predictor	Estimate	Standardised Coefficient (β)	SE (Standard Error)	p
Constant	22.680		3.756	< .001 **
Muslim Religiosity Scale	0.151	0.300	0.047	.002 **
Dominant Society Immersion	0.050	0.089	0.049	.317
Ethnic Society Immersion	0.015	0.030	0.047	.749

Emotional Impact of Microaggressions	-0.102	-0.157	0.057	.076

Notes. * $p < .05$; ** $p < .01$

5.12 Research Hypotheses Testing

5.12.1 H1: *Higher adherence to Islamic-Arabic cultural and traditional beliefs among Arab Muslims is associated with a lower likelihood of understanding mental disorders and formal mental health treatments.*

The initial exploration of the relationships among the study variables was conducted using Pearson correlation analysis. A significant positive correlation was found between the Muslim Religiosity Scale (MRS) and Cultural Misconceptions in Mental Health (CBMHP) (r (124) =.282, $p < .001$), indicating that higher levels of religiosity are associated with stronger cultural misconceptions regarding mental health. In contrast, the MRS did not show a significant correlation with attitudes towards seeking mental health services (ATSFMHS), suggesting that religiosity, in isolation, may not be a strong predictor of help-seeking attitudes.

Furthermore, a notable negative correlation emerged between CBMHP and ATSFMHS (r = -.592, $p < .001$). This result implies that individuals with stronger cultural misconceptions about mental health are less likely to have positive attitudes towards seeking mental health services. On the other hand, Dominant Society Immersion (DSI), a component

of the Stephenson Multigroup Acculturation Scale, did not demonstrate significant correlations with MRS, CBMHP, or ATSFMHS, suggesting its limited bivariate correlation with these variables in this context.

Table 11:

Pearson Correlation Coefficients among Study Variables (MRS, CBMHP, DSI, KFFMHS and ATSFMHS) (n=124)

Variables	Muslim Religiosity Scale (MRS)	Dominant Society Immersion (DSI)	Cultural Misconceptions in Mental Health (CBMHP)	Help Seeking Attitude from Mental Health Services (ATSFMHS)	Mental Health Knowledge (KFFMHS)
Muslim Religiosity Scale (MRS)	1	-0.128*	0.282**	-0.009	0.056
Dominant Society Immersion (DSI)	-0.128*	1	0.034	0.089	0.307**
Cultural Misconceptions in Mental Health (CBMHP)	0.282**	0.034	1	-0.592**	-0.204*
Help Seeking Attitude from Mental Health Services (ATSFMHS)	-0.009	0.089	-0.592**	1	0.330**

Notes. ** p < .001, * p < .01

A multiple linear regression analysis was conducted to predict help-seeking attitudes from mental health services (ATSFMHS) based on the Muslim Religiosity Scale (MRS) and Cultural Misconceptions in Mental Health (CBMHP). This analysis format follows the structured reporting used in the first analysis predicting mental health knowledge (see Section

5.11). The model explained a significant portion of the variance in ATSFMHS, with an Adjusted R^2 of .370, indicating that approximately 37% of the variance in ATSFMHS can be accounted for by these predictors (F (2,121)=37.138, p <.001, MSE=6.872).

Within this model, the Muslim Religiosity Scale (MRS) had a significant positive effect on ATSFMHS (β=.181, t (121) =2.432, p=.016). Conversely, the Cultural Misconceptions in Mental Health (CBMHP) had a substantial negative impact on ATSFMHS (β=−.643, t (121) =−8.618, p <.001). These results suggest that while religiosity encourages positive attitudes towards seeking help, cultural misconceptions significantly hinder these attitudes. This underscores the dominant role that cultural misconceptions play in shaping mental health help-seeking behaviours among the participants.

Table 12:

Multiple regression analysis predicting Help Seeking Attitude from Mental Health Services from Religiosity, Acculturation to Dominant Society, and Cultural Misconception

Regression Model: Impact on ATSFMHS		R	R Square	Adjusted R Square	Std. Error of the Estimate	
Impact of Religious and Cultural Beliefs		.625	0.390	0.375	6.84423	
Variable	**Unstandardized Coefficients (B)**		**Standard Error**	**Standardized Coefficients (Beta)**	**t-value**	**Significance (p)**
Constant	74.651		5.450		13.697	< .001
Muslim Religiosity Scale	0.212		0.078	0.207	2.709	.008
Dominant Society Immersion	0.105		0.074	0.104	1.411	.161
Cultural Misconceptions in Mental Health	-1.154		0.132	-0.654	-8.753	< .001

To further test H1, five items from the CBMHP scale were analysed. This analysis aimed to gauge the prevalence of traditional beliefs within the Arab Muslim community and their potential impact on the perception of mental health issues, as well as to assess the prevalence of believing in supernatural forces, which were mentioned by participants in the qualitative study. The results shed light on the community's stance towards culturally specific explanations for mental health issues. A considerable segment of the sample, 42.7% considering it probable and 12.9% affirming it as true, attributed mental health or psychological problems to 'Aieen' (evil eye). Beliefs in 'Seher' (magic) as a causative factor for such problems were also significant, with 67.8% of participants either true or probably true. The influence of 'Jinn' (demons) was acknowledged by a substantial portion of respondents, with 47.6% deeming it probable and 25.0% confirming it as true that Jinn can cause psychological disturbances. In addition, the concept that certain mental health issues necessitate 'Ruqia' (spiritual healing) rather than conventional psychological treatment was viewed as probably true by 42.7% and true by 21.8% of participants.

In assessing the differences between male and female Arab Muslim participants regarding beliefs about mental health, responses to five items from the Cultural Beliefs about Mental Health Problems (CBMHP) scale were analyzed using cross-tabulation. For the belief that mental health issues can be caused by 'Aieen' (evil eye), men (50%) were slightly more inclined to endorse this statement as 'Probably true' or 'True' compared to women (48.4%). Regarding 'Seher' (magic) as a causative factor, a similar pattern emerged, with more men (74.2%) endorsing this belief than women (61.3%). The belief that 'Jinn' (demons) can cause psychological problems was more pronounced among men (77.4%) than women (67.7%). Similarly, when considering whether 'Jinn' can possess and speak through individuals, a higher percentage of men (66.1%) supported this belief compared to women (62.9%). Lastly, regarding the notion that some psychological issues require 'Ruqia' (spiritual healing) rather

than conventional treatment, more men (69.4%) than women (59.7%) endorsed this view. Although men generally showed slightly higher agreement with these beliefs than women, no significant gender differences were found in adherence to traditional beliefs regarding mental health.

Cross-tabulation analysis reveals patterns in the beliefs about mental health issues among Arab Muslims of varying ages. In relation to 'Aieen' (evil eye), the data does not suggest a strong age-related trend, but there is a slight increase in belief among those in the 23-27 age group, with several participants in this range finding it 'Probably true.' For 'Seher' (magic), the belief that it can cause mental health problems appears to be more commonly held among participants in their late twenties and early thirties, with those aged 27 and 31 most frequently considering it 'True.' The influence of 'Jinn' (demons) is consistently acknowledged across a broad age spectrum, with notable agreement in the 23-27 and 33-37 age brackets. Belief in possession by 'Jinn' shows an interesting age variation, with younger participants (18-22 years old) and those in their mid-thirties more likely to believe it's 'Probably true' or 'True.' Lastly, the notion that some psychological problems require 'Ruqia' (spiritual healing) as opposed to conventional treatment is most strongly supported by participants aged 29 and 35-37.

Cross-tabulation has illuminated differences in the beliefs about mental health between Arab Muslims born in Australia and those born outside Australia. Among the beliefs analysed, those concerning 'Aieen' (evil eye) show that a higher proportion of those not born in Australia find it 'Probably true' or 'True' (77.4% of n=93) compared to those born in Australia (58.1% of n=31). In regard to 'Seher' (magic), those born outside Australia (72.0% of n=93) are more likely to attribute mental health issues to it than Australian-born individuals (54.8% of n=31).

When considering the influence of 'Jinn' (demons), again, a larger fraction of those born outside Australia (70 out of 93) hold the belief that these entities can cause psychological problems, in contrast to the smaller group born in Australia (23 out of 31). The belief in possession by 'Jinn' presents a similar pattern, with those not born in Australia more frequently affirming the belief (52 out of 93) compared to their Australian-born counterparts (18 out of 31). Lastly, the notion that some mental health problems cannot be treated with conventional medicine but instead require 'Ruqia' (spiritual healing) is more commonly held among participants not born in Australia (64 out of 93) than those born in Australia (16 out of 31).

These findings suggest that Arab Muslims born outside Australia are more inclined toward traditional and supernatural explanations for mental health issues than those born in Australia. This could be reflective of cultural retention among immigrants and a possible shift towards more medical perspectives on mental health among Australian-born individuals.

Moreover, the cross-tabulation of educational levels against beliefs in traditional causes of mental health issues reveals a discernible trend within the Arab Muslim community. For the belief in 'Aieen' (evil eye), among participants with a secondary school education, 2 consider it 'False', and 1 each deems it 'Probably true' and 'True'. In contrast, those with a university postgraduate degree show varying opinions, with 6 labelling it 'False', 4 considering it 'Probably false', 9 finding it 'Probably true', and 6 agreeing it is 'True'.

Concerning the belief in 'Seher' (magic), out of those with high school certificates, 3 regard it as 'False', 5 as 'Probably false', 14 as 'Probably true', and 9 as 'True'. Meanwhile, individuals with university undergraduate degrees demonstrate greater skepticism, with 7 finding it 'False', 5 'Probably false', 23 'Probably true', and 9 'True'.

For the belief in 'Jinn' (demons), 2 of those with postgraduate diplomas consider the belief 'False', none 'Probably false', 4 'Probably true', and 2 'True'. Among those with university postgraduate degrees, 10 label the belief as 'False', 4 as 'Probably false', 9 as 'Probably true', and 6 as 'True'.

In terms of beliefs about 'Jinn' possession, among respondents with a high school certificate, 7 believe it's 'False', 13 find it 'Probably false', 11 'Probably true', and none 'True'. This contrasts with those holding university postgraduate degrees, where 8 consider it 'False', 5 'Probably false', 8 'Probably true', and 4 'True'.

Lastly, for the belief that certain psychological problems require 'Ruqia' instead of medical treatment, 2 individuals with some university undergraduate education regard this as 'False', 2 as 'Probably false', 2 as 'Probably true', and 1 as 'True'. Those with a university postgraduate degree show more conviction, with 6 considering it 'False', 4 'Probably false', 9 'Probably true', and 6 'True'.

These findings reflect a general trend where those with higher education levels exhibit more scepticism towards traditional beliefs about the causes and treatments of mental health conditions, suggesting a potential influence of education on the acceptance of traditional versus scientific explanations of mental health within this community.

5.12.2 H2: ***Higher levels of education, socio-economic status, and exposure to mental health information among Arab Muslims are associated with more positive attitudes towards seeking help from formal mental health services.***

Table 10 presents the results of a multiple regression analysis predicting help-seeking attitudes based on demographic factors, including age, years lived in Australia, marital status, education, income, and knowledge of mental health services. The regression model was

statistically significant and accounted for approximately 27.5% of the variance in help-seeking attitudes ($R^2 = 0.275$).

Table 13:

Multiple Regression Analysis Predicting Attitudes Towards Seeking Formal Mental Health Services

Predictor	Estimate	Standardized Coefficient (β)	p-value
Age	0.31	-	0.032
Years in Australia	-	-	0.331
Marital Status	-	-	0.139
Education Level	2.0323	0.218	<0.001
Income	0.5283	-	0.003
Knowledge of Mental Health Services	-	0.313	<0.001

Age emerged as a statistically significant independent predictor, with older participants demonstrating more positive attitudes toward seeking mental health services. Education level and income were also significant predictors, with higher education levels ($\beta = 0.218$, $p < 0.001$) and greater income (estimate = 0.5283, $p = 0.003$) associated with more positive attitudes. Interestingly, years of residency in Australia ($p = 0.331$) and marital status ($p = 0.139$) were not statistically significant predictors. These findings support hypothesis 2, highlighting the critical roles of education and income in shaping help-seeking attitudes among Arab Muslims. This insight underscores the need for tailored educational and awareness programs to address barriers to mental health care in this community effectively.

H2.1: Arab Muslims with higher levels of acculturation to Australian society will demonstrate a greater acceptance of mental health services and professionals: To test H2.1, a multiple regression analysis was conducted with ATSFMHS as the dependent

variable and Ethnic Society Immersion (ESI) and Dominant Society Immersion (DSI) as independent variables (refer to Section 5.11).

Table 14:

Summary of Multiple Regression Analysis for Predictors of Attitudes Toward Seeking Mental Health Services (H2.1)

Predictor	Standardized Coefficient (β)	p-value
Ethnic Society Immersion (ESI)	-0.175	0.052
Dominant Society Immersion (DSI)	0.064	0.519

As shown in Table 1, ESI demonstrated a marginally non-significant negative trend ($\beta = -0.175$, $p = 0.052$), suggesting that higher immersion in an ethnic society might slightly decrease acceptance of mental health services. Conversely, DSI ($\beta = 0.064$, $p = 0.519$) was not a significant predictor, indicating no substantial impact on help-seeking attitudes.

These results only provided limited support that greater ethnic society immersion might be associated with the reduced the likelihood of seeking mental health services, while dominant society immersion does not predict attitudes. This underscores the complexity of acculturation and suggests a need for culturally sensitive mental health approaches that align with the values of ethnic communities.

5.12.3 H3: *Cultural beliefs about mental health, Muslim religiosity and acculturation, significantly predict the attitudes of Arab Muslims towards seeking help from mental health services.*

To test Hypothesis 3, which states that cultural and traditional beliefs, along with knowledge about mental disorders and mental health services, significantly predict attitudes

towards seeking formal mental health services among Arab Muslims, a multiple regression analysis was conducted. The model included the following predictors: cultural misconceptions about mental health (CBMHP), knowledge and familiarity with formal mental health services (KFFMHS), and religiosity.

The results of the regression analysis are presented in **Table 9** in Section 5.11. The model explained a significant portion of the variance in attitudes towards seeking formal mental health services, indicating that cultural beliefs, knowledge, and religiosity play important roles in shaping help-seeking behaviors.

The analysis revealed that greater knowledge of mental health services is associated with more positive attitudes towards seeking formal help, whereas stronger adherence to cultural misconceptions and higher levels of religiosity are associated with less likelihood of seeking formal mental health services. These findings highlight the need for targeted interventions that address cultural beliefs and misconceptions to increase the use of ment

5.12.4 H4: *The level of awareness about available treatments and facilities for mental disorders among Arab Muslims will vary depending on factors such as education, socio-economic status, and access to information.*

To explore factors contributing to the awareness of mental health services among Arab Muslim expatriates in Australia, the fourth hypothesis (H4) was tested, positing that awareness levels would be associated with education, socio-economic status, and access to information.

A statistically significant positive correlation was found between the length of residence in Australia and awareness of mental health services, r (92) = .303, p = .003. This indicates that participants who have lived in Australia longer tend to have greater awareness

of available mental health services. This relationship likely reflects increased exposure to and integration within the Australian healthcare system over time.

Although age was positively correlated with the number of years lived in Australia, r (117) = .713, $p < .001$, it did not significantly correlate with awareness of mental health services, r (122) = .149, p = .100. This suggests that age alone is not a significant predictor of awareness, and other factors associated with length of residency may be more influential.

Employment status showed a significant negative correlation with the length of residency, r (110) = -.516, $p < .001$, yet did not significantly correlate with awareness of mental health services, r (122) = -.097, p = .287. This indicates a complex relationship where employment status and acculturation factors interact in ways that do not straightforwardly affect awareness of mental health services.

The analysis did not find significant correlations between awareness of mental health services and education or income levels, challenging the initial assumptions that these socio-economic factors would be direct predictors of mental health service awareness among Arab Muslims.

Table 15:

Correlation Analysis for Predictors of Awareness of Mental Health Services

Variable	Correlation with Awareness (r)	p-value
Length of Residency in Australia	0.303	0.003
Age	0.149	0.100
Employment Status	-0.097	0.287
Education Level	-	-
Income Level	-	-

5.12.5 H5: *Factors such as cultural beliefs, social stigma, and personal experiences will play a significant role in predicting Arab Muslims' choice of mental healthcare services.*

To test the hypothesis (H5) that factors such as cultural beliefs, social stigma, and personal experiences significantly predict Arab Muslims' choice of mental healthcare services, a quantitative analysis was conducted. In this study, personal experiences were measured by the Muslim Religiosity Scale (MRS), Cultural Misconceptions in Mental Health (CBMHP), Dominant Society Immersion (DSI), and Response to Microaggression (EMA).

As reported earlier (see Section 5.11), these predictors significantly influenced help-seeking attitudes and mental health knowledge. The regression analysis indicated that each of these factors plays a crucial role in shaping attitudes and behaviours related to seeking mental health services among Arab Muslims. Higher levels of religiosity were associated with more positive attitudes towards seeking mental health services, while greater cultural misconceptions about mental health led to less favourable attitudes towards professional mental health services. Greater immersion in the dominant society was linked to better knowledge of mental health services and more positive help-seeking attitudes. Additionally, experiences of ethnic microaggressions and their emotional impact influenced mental health service utilisation, with those experiencing higher levels of microaggressions being more cautious in seeking help.

Additionally, the modified ATSFMHS item "To avoid social stigma, I prefer referring to my family member with a mental illness or myself as being demonically possessed" had a significant and strong positive association with help-seeking attitudes ($\beta = 3.071$, $p < .001$), suggesting that cultural stigma may lead individuals to attribute mental health issues to supernatural causes rather than seeking formal treatment. Moreover, the belief that utilising mental health services poses more challenges than seeking general medical services due to

anticipated stigma, as captured by the item "Using mental health or psychological services is more difficult than using general medical services because of the shame (societal stigma)," was another significant predictor (β = 1.223, *p* = .007). This indicates that stigma can make access to mental health care comparatively more daunting than other types of healthcare.

Table 16:

Summary of Multiple Regression Analysis for Predictors of Choice of Mental Healthcare Services

Predictor	Standardized Coefficient (β)	p-value
Muslim Religiosity Scale (MRS)	0.219	0.007
Cultural Misconceptions in Mental Health (CBMHP)	-0.592	0.001
Dominant Society Immersion (DSI)	0.338	0.001
Response to Microaggression (EMA)	0.179	0.034
Supernatural Attribution (Modified ATSFMHS Item)	3.071	0.001
Stigma Associated with Mental Health Services (Modified ATSFMHS Item)	1.223	0.007

5.12.6 H6: *Arab Muslims' belief in psychotherapy and assistance provided by mental health professionals will be influenced by cultural and traditional beliefs, as well as their level of understanding of mental health concepts.*

To test H6, which posits that Arab Muslims' belief in psychotherapy and mental health professionals is influenced by cultural and traditional beliefs, as well as their understanding of mental health concepts, a regression analysis was conducted. The model

was robust, with an R^2 of .429, indicating that it explained a significant proportion of the variance in help-seeking attitudes (Adjusted R^2 = .400).

The item "Discussing mental health or psychological concerns with a mental health professional is a poor way to solve mental health or psychological difficulties" emerged as a significant predictor, with a positive unstandardized coefficient (β = 2.062, p < .001). This suggests that those who disagree with this statement, viewing discussions with mental health professionals as valuable, are more likely to have a positive attitude towards seeking mental health services.

Conversely, the item "Mental health professionals often experience more psychological problems than their patients" was not a significant predictor (β = -0.129, p = .723), indicating that this belief does not significantly influence help-seeking attitudes in this sample. Similarly, the item "I might need to contact professional mental health or psychological services in the future" did not significantly predict help-seeking attitudes (β = -0.327, p = .397), suggesting that anticipated future use of mental health services is not a driving factor in current attitudes towards seeking help.

Items reflecting social stigma continued to show significant predictive value. Concern about being judged for using mental health services (β = 2.409, p < .001) and the preference for attributing mental health issues to demonic possession (β = 2.515, p < .001) remained strong predictors, reinforcing the findings from H5.

Table 17:

Regression Analysis of Predictors Influencing Belief in Psychotherapy and Mental Health Professionals

Predictor	β	p-value
Value of Discussing Mental Health with Professionals	2.062	0.001

Belief: Professionals Have More Problems Than Patients	-0.129	0.723
Anticipation of Future Need for Mental Health Services	-0.327	0.397
Concern About Being Judged for Using Services	2.409	0.001
Preference for Attributing Issues to Demonic Possession	2.515	0.001

The regression analysis for H6, while overlapping with items from H5, introduced new items targeting beliefs about psychotherapy and mental health professionals. The findings suggest that stigma-related beliefs continue to significantly shape attitudes toward seeking mental health services. The belief in the utility of discussing mental health issues with professionals stands out as a positive influence on help-seeking attitudes, underscoring the importance of trust in the therapeutic process among the Arab Muslim population. This emphasises the need for culturally sensitive approaches to psychotherapy that acknowledge and address the unique perspectives within this community.

5.12.7 H7: *Islamic-Arabic culture may contribute to mental health stigma among Arab Muslims by reinforcing traditional beliefs, social norms, and misconceptions about mental disorders and their treatment.*

The regression analysis exploring the impact of Islamic-Arabic cultural and traditional beliefs on mental health stigma among Arab Muslims shows that these beliefs account for 28.8% of the variance in cultural misconceptions about mental health ($R^2 = .288$). The model is statistically significant ($F (7, 116) = 6.690$, $p < .001$), highlighting the substantial role these beliefs play in shaping mental health perceptions.

Key predictors include the belief that referring to a family member with a mental disorder as demonically possessed is significantly associated with greater stigma ($\beta = -1.712$,

$p < .001$). Additionally, the belief that using mental health services is more difficult due to shame significantly contributes to misconceptions ($\beta = -1.391$, $p = .023$). Other predictors, such as concerns about negative perceptions and discomfort seeking help due to others' opinions, were not significant.

These findings suggest that while cultural beliefs and stigma related to shame are influential, the fear of judgment from others may not be as impactful. This insight can guide the development of interventions to address and reduce misconceptions and barriers within the Arab Muslim community. (Refer to Sections 5.10 and 5.11).

5.12.8 H8: The level of religiosity among Arab Muslims will be positively associated with their preference for traditional healing methods over formal mental health services.

A multiple regression analysis tested the hypothesis that higher levels of religiosity among Arab Muslims are associated with a preference for traditional healing methods over formal mental health services (refer to Section 5.11). The dependent variable was the Muslim Religiosity Scale (MRS), with independent variables including seeking help from professionals, family, friends, and engaging in personal prayer. The model explained 6.2% of the variance in religiosity scores ($R^2 = .062$, Adjusted $R^2 = .001$), indicating minimal influence of these behaviours on religiosity. The overall model was not statistically significant ($F(8, 123) = 1.012$, $p = .430$).

Individual analysis revealed that only praying to Allah for mental health support had a significant relationship with MRS scores ($\beta = .220$, $p = .017$), indicating a positive correlation between prayer and higher religiosity. Other help-seeking behaviours did not show significant associations with MRS scores. The significant relationship between prayer and religiosity highlights the personal nature of spiritual practices, while the nonsignificant associations for other behaviours suggest these activities may be influenced by factors other than religiosity.

Residual statistics showed reasonable dispersion in the model's predictions, though the presence of outliers suggests the need for further investigation. While H8 was partially supported through the link between prayer and religiosity, the broader hypothesis was not substantiated.

These findings emphasise the complexity of treatment preferences and the unique role of prayer in religious life. Mental health interventions for this demographic may benefit from integrating religious practices, particularly prayer, into their frameworks, advocating for a tailored approach that honours the spiritual dimensions of care in the Arab Muslim community.

5.12.9 H9: ***Arab Muslims who perceive mental disorders as spiritual or moral issues are less likely to seek help from formal mental health services than those who perceive them as medical conditions.***

A standard multiple regression analysis tested the hypothesis that Arab Muslims who perceive mental disorders as spiritual or moral issues are less likely to seek formal mental health services. The model explained 33.9% of the variance in help-seeking attitudes (R^2 = .339, Adjusted R^2 = .305), indicating moderate explanatory power.

The significant F-change (F (6, 117) = 10.002, $p < .001$) confirmed the impact of cultural belief predictors on help-seeking attitudes. However, not all beliefs showed significant relationships with these attitudes. Beliefs in "Aieen" (evil eye), "Seher" (magic), and the use of "Ruqia" (Quranic Recitation) were not significant predictors ($p > .05$).

A trend was observed with the belief that mental health issues can be caused by "Jinn" (demons), with an unstandardized β of -2.085, $p = .103$, approaching significance. This suggests a potential negative association between belief in Jinn and seeking formal mental

health services. The belief in Jinn possession also showed a possible influence (β = -1.744, *p* = .153), though it did not reach statistical significance.

Table 18:

Regression Analysis of Cultural Beliefs Influencing Help-Seeking Attitudes (H9)

Predictor	**β**	**p-value**
Belief in "Aieen" (Evil Eye)	-	>0.05
Belief in "Seher" (Magic)	-	>0.05
Use of "Ruqia" (Quranic Recitation)	-	>0.05
Belief in "Jinn" (Demons)	-2.085	0.103
Belief in Jinn Possession	-1.744	0.153

The residuals were well-behaved, with a mean close to zero and consistent variance, indicating robust model assumptions. These results highlight the complex interplay between cultural beliefs and attitudes towards mental health services among Arab Muslims, suggesting that while some beliefs do not notably obstruct help-seeking behaviour, beliefs related to Jinn may subtly influence attitudes.

Chapter Six: Discussion

6.1 Overview

This chapter is structured into four sections, beginning with an introduction that sets the analytical framework for the discussion and outlines the chapter's aims. It then progresses to a detailed interpretation of the study's findings in relation to the research questions, elucidating the connections between observed outcomes and the research aims, thereby highlighting the significance of the discoveries within the broader research context. Following this, the implications of the study are explored, discussing both the practical relevance and theoretical contributions of the findings to existing practices, policy-making, and scholarly debates, emphasising the potential impact on mental health understanding and treatment within Arab Muslim communities. The chapter concludes with a critical examination of the study's limitations and an outline of recommendations for future research, acknowledging the study's constraints while proposing avenues for further investigation to

deepen our understanding and address identified gaps, thus framing the research within a continuum of scholarly inquiry and practical application.

6.2 Research Framework and Methodology Overview

This research embarked on a comprehensive exploration of the impact of the religious cultural beliefs on the understanding of the mental disorders and their treatment among Arab Muslims residing in Australia, adopting a mixed-methods exploratory sequential design to delve into this multifaceted issue. The qualitative phase, which served as the cornerstone of the study's investigation, provided an in-depth understanding of the beliefs, experiences, and perceptions held by Arab Muslim informants regarding mental disorders. Through semi-structured interviews with twelve participants from diverse backgrounds, this study illuminated the complex interplay between cultural, religious, and personal factors influencing mental health perceptions within this community. The thematic analysis of these interviews, conducted with meticulous attention to ethical standards and participant confidentiality.

Following the qualitative exploration, the quantitative phase sought to extend these findings by measuring the prevalence of specific beliefs and attitudes towards mental disorders within a broader segment of the Arab Muslim population in Australia. Utilising a carefully designed questionnaire informed by the qualitative themes, this phase engaged 169 participants, offering a statistical representation of the community's mental health perceptions. The use of SPSS for data analysis facilitated a rigorous examination of the survey responses, providing a quantifiable dimension to the qualitative insights and enhancing the study's reliability and validity.

The integration of qualitative and quantitative methods in this research not only enriched the understanding of the topic but also underscored the complexity of mental health

perceptions among Arab Muslims in Australia. By encompassing the depth of individual experiences and the wide range of community-wide attitudes, this mixed-methods approach has facilitated a detailed analysis that acknowledges the diversity within the participant group.

It is essential to consider the demographic backdrop of the research' participants, whose diverse characteristics have undoubtedly shaped their perspectives and experiences related to mental health. The qualitative phase engaged participants spanning a broad age range and hailing from various countries within the Arab world, ensuring a rich tapestry of cultural and personal narratives. Similarly, the quantitative phase attracted a wide array of respondents, whose responses have contributed to a comprehensive overview of the community's mental health landscape.

The qualitative phase engaged 12 Arab Muslims, with an equitable gender distribution six males and six females ranging in age from 28 to 53 years. Notably, the mean age of these participants is 32 years, indicating a group that straddles the boundary between youth and middle age. This demographic composition is essential for understanding the diverse viewpoints on mental health that surface through their stories.

In the quantitative phase, the study further delineates the community's demographic profile, revealing a slightly younger median age of 31 years for the broader participant cohort. The mean age of male participants is noted at 32.5 years, spanning from 18 to 58 years, while female participants present a slightly higher mean age of 34.42 years, ranging from 18 to 62 years. This age distribution underscores a predominantly young to mid-aged demographic profile, suggesting an openness to integrating traditional beliefs with contemporary mental health frameworks in Australia.

A significant aspect of the study's demographic findings is the nativity of participants. A substantial majority of the quantitative phase participants were born outside of Australia, highlighting the expatriate nature of the sample and bringing into focus the diverse experiences that shape their perceptions of mental health. This detail enriches the study, offering a lens through which to explore the impact of cultural and acculturative influences on mental health attitudes and behaviours.

Educational attainment among participants further contextualises the discussion. Both phases of the study report a high level of educational achievement, suggesting a community well-equipped with the resources to engage with information on mental health. This high educational level may influence the community's openness to and awareness of mental health issues, potentially facilitating or hindering help-seeking behaviours based on cultural, religious, or systemic barriers.

As the discussion chapter unfolds around the study's research questions, these demographic characteristics provide essential insights into the complex interplay of factors that influence mental health perceptions among Arab Muslims in Melbourne. The analysis aims to bridge individual experiences with broader trends, exploring the multifaceted nature of mental health perceptions and identifying pathways toward more culturally sensitive mental health services.

6.3 Interpretation of Combined Qualitative and Quantitative Data

6.3.1 Influence of Islamic-Arabic Cultural and Traditional Beliefs on Understanding Mental Disorders and Attitudes Towards Mental Health Treatments

Expanding on the understanding of religiosity within the Arab Muslim community, particularly in the context of mental health perceptions, necessitates a deep exploration into the cultural and religious ethos guiding these perceptions. Participants generally exhibit

moderate to high levels of religious practice and intrinsic religiosity. This is especially notable when juxtaposed with qualitative insights revealing most participants did not overtly consider themselves religious despite engaging in religious practices like prayer and Quran reading. This contradiction underscores a complex interplay between personal identity and cultural expectations, suggesting that religiosity in this context may be more of a cultural norm than a personal conviction.

This apparent discrepancy might suggest that if the quantitative phase participants were directly asked about their religiosity, they too might refrain from self-identifying as religious to avoid self-praise, aligning with the qualitative findings. This hypothesis is grounded in the broader Islamic Arab cultural context, where humility and modesty in one's religious practice are deeply valued. The cultural aversion to self-praise or flaunting one's piety is encapsulated in the Quranic verse, "do not flaunt your piety: He (Allah) knows best those who are Godwary" (Quran 53:32), emphasising the principle of humility before God.

The reluctance to self-identify as religious, thus, may derive not from a lack of religious engagement but from a cultural and religious ethos that esteems modesty in expressions of faith. This ethos is underscored by research highlighting the importance of modesty in religiosity within Muslim communities, suggesting that Muslims may view the expression of one's religiosity as a deeply personal facet of their faith, not to be paraded for external approval (Abdullab & Somaya, 2007).

The role of religiosity in shaping mental health perceptions is profound. The moderate to high levels of religious practice and intrinsic religiosity, as indicated by the MRS scores, imply a significant influence of religion on the lives of participants, potentially impacting their views on mental health and treatment. Religiosity can serve as both a source of comfort

and a potential barrier to seeking help from mental health professionals, depending on cultural and religious preferences for addressing mental health issues (Rassool, 2015).

Recognising these cultural and religious subtleties is essential for mental health practitioners when engaging with Muslim communities. It's imperative to devise mental health care strategies that are culturally attuned and honour the religious convictions and rituals of Muslim patients. This entails acknowledging the significance of religious practices while also addressing any hesitancy in openly identifying with religion during clinical interactions (Abu-Raiya et al., 2015)

The qualitative data underscore the significant role of faith, where a strong relationship with God and adherence to religious practices such as praying and reading the Quran are deemed essential for mental well-being. This perspective aligns with the narratives of participants who view good mental health as synonymous with the absence of life issues and a harmonious relationship with the divine, highlighting the profound influence of religion on mental health conceptualisation and coping mechanisms within this community (Dein & Illaiee, 2013; Gearing et al., 2013).

Conversely, the quantitative analysis from mental health knowledge (KFFMHS) reveals a moderate level of knowledge and familiarity with mental health disorders and services among participants. This range of understanding indicates a complex relationship between cultural-religious beliefs and objective knowledge of mental health disorders and treatments, suggesting variability in mental health literacy within the community (Gearing et al., 2015).

The qualitative findings resonate with the literature emphasising the significance of spirituality and religious practices in managing psychological distress among Muslims. These practices are frequently cited as primary coping mechanisms, reflecting a broader trend of

utilising faith-based approaches to mental health within Islamic communities (Dein & Illaiee, 2013). Meanwhile, the quantitative data align with research indicating varied levels of mental health literacy among Muslim populations, pointing towards the necessity for mental health education that is both culturally and religiously sensitive (Aloud & Rathur, 2009).

These insights underscore the importance of culturally tailored approaches in mental health care, suggesting that integrating clients' religious beliefs with psychological interventions could bridge the gap between traditional religious coping mechanisms and formal mental health treatments. The reliance on religious practices for coping with distress, coupled with varying levels of mental health awareness, highlights the potential for developing mental health services that respect and incorporate Islamic teachings, fostering more effective care for Arab Muslims (Gearing et al., 2013; Padela, 2007).

This analysis illuminates the intricate ways in which Islamic-Arabic beliefs intersect with mental health understanding, attitudes towards treatment, and healthcare choices, advocating for a holistic model of mental health care that harmonizes religious and psychological perspectives (Abu-Ras, Gheith, & Cournos, 2008; Rassool, 2015).

The qualitative findings reveal a notable confusion between schizophrenia ("fosam") and Dissociative Identity Disorder (DID, "infosam"), with participants mistakenly equating the two. This confusion is exemplified by participants' descriptions of schizophrenia as a condition where a person has multiple personalities, a characteristic associated with DID. This misunderstanding underscore the challenges in accurately recognising and differentiating mental health disorders within the community, potentially influenced by linguistic similarities and the prevalence of certain terms in popular media and cultural discussions.

The quantitative analysis further explores this misconception through a modified item from the KFFMHS scale, assessing the community's understanding of schizophrenia. The responses indicate a substantial portion of the sample harbours incorrect beliefs about the disorder, with a significant majority considering the false statement that schizophrenia involves multiple personalities as probably true or true. This misperception is evident across genders, age groups, and birthplaces, suggesting a widespread issue not confined to specific demographic segments. Interestingly, educational background emerges as a critical factor, with those attaining higher education levels more likely to correctly identify the statement as false, highlighting the role of education in dispelling mental health misconceptions.

This confusion between schizophrenia and DID among Arab Muslims resonates with broader findings in mental health literacy research, which has consistently shown gaps in the public's understanding of mental health disorders (Jorm et al., 1997; Kessler et al., 2005). These gaps are particularly pronounced in communities where mental health education is limited or where cultural and linguistic factors contribute to misconceptions (Al-Krenawi & Graham, 2000; Gearing et al., 2015).

The role of education in mitigating these misconceptions is critical, as indicated by the quantitative findings. Education can serve as a vital tool in enhancing mental health literacy, aligning with studies that advocate for the integration of mental health education into general education curricula to improve the population's ability to recognise and understand mental health disorders accurately (Jorm et al., 1997).

The observed misconceptions about mental disorders among Arab Muslims, particularly regarding schizophrenia, underscore the necessity for culturally and linguistically tailored mental health education and awareness programs. Addressing these misconceptions is crucial for improving mental health literacy, reducing stigma, and fostering a more

accurate understanding of mental health disorders within the community. Mental health professionals working with Arab Muslim populations should be aware of these cultural and linguistic subtleties, employing strategies that clarify misconceptions while respecting cultural sensitivities.

Moreover, these findings highlight the potential for leveraging educational initiatives to enhance understanding and awareness of mental health issues among Arab Muslims. By incorporating mental health education that respects Islamic-Arabic beliefs and cultural practices, there is an opportunity to bridge the gap between cultural perceptions and medical understandings of mental disorders, thereby improving the community's overall mental health literacy and facilitating more effective engagement with mental health services.

The qualitative findings from this study underscore the significance of spiritual practices, like prayer and Quranic recitation, in coping with mental distress, echoing the role of religion in mental health management observed in other Muslim communities (Abu-Ras et al, 2008). This reliance on spiritual interventions is consistent with findings by Dein and Illaiee (2013), who noted the therapeutic role of religious faith among Arab-Muslim refugees. However, this study broadens the discussion by pinpointing a complex challenge: although spiritual practices are highly esteemed, they might also lead to cultural misunderstandings that obstruct interactions with formal mental health services.

The quantitative data reveal a complex relationship between religiosity, cultural misconceptions, and attitudes toward mental health care. The positive correlation between high levels of religiosity and stronger cultural misconceptions regarding mental health found in this study aligns with Cinnirella and Loewenthal’s (1999) findings, which suggest that religious beliefs can influence mental health perceptions in ways that may not always align with contemporary psychiatric understandings. However, unlike studies that suggest a direct

negative impact of religiosity on the utilisation of mental health services (Aloud & Rathur, 2009), this study finds that religiosity alone does not predict attitudes toward seeking such services, indicating a more complex interplay than previously understood.

Furthermore, the significant negative impact of cultural misconceptions on attitudes toward formal mental health services underscores the barriers posed by cultural beliefs, consistent with broader literature that identifies cultural stigma as a major impediment to accessing mental health care among ethnic minorities (Cinnirella & Loewenthal, 1999). Yet, the positive association between knowledge of mental health services and the likelihood of seeking such services suggests an important avenue for overcoming these barriers, highlighting the role of mental health education in bridging the gap between traditional beliefs and formal care a finding that resonates with the work of Abu-Ras et al. (2008) on the importance of culturally sensitive mental health interventions.

This study's findings also suggest that higher religiosity correlates with lower levels of acculturation, a relationship not widely explored in existing literature. This insight adds a new dimension to the discourse on religion, culture, and mental health, suggesting that more religious individuals may prioritise traditional and spiritual coping mechanisms over engagement with formal mental health services due to a stronger adherence to cultural norms and beliefs.

By comparing and contrasting these findings with existing research, it becomes evident that the influence of Islamic religion and culture on mental health understanding and treatment among Arab Muslims is both complex and multifaceted. While deeply rooted religious and cultural beliefs provide a framework for interpreting mental health that is rich in spiritual significance, they also present challenges for the integration of formal mental health services. This underscores the need for mental health professionals to adopt culturally

informed approaches that respect and incorporate clients' spiritual beliefs into treatment plans, thereby ensuring that mental health care is both effective and culturally congruent.

In the discourse on the intersection of religious practices and mental health among Arab Muslims, the qualitative and quantitative data converge to underscore the profound significance attributed to the relationship with Allah. This relationship is not merely a facet of personal belief but is deeply intertwined with participants' understanding and management of mental health. The qualitative insights reveal a common perception among participants that a strong bond with Allah, cultivated through prayer and Quranic recitation, is inherently linked to mental well-being. This notion is supported by participants' narratives, which articulate a clear sense of solace and psychological relief derived from religious practices during times of distress. For instance, the belief articulated by some that never having seen anyone unhappy who maintains a good relationship with God highlights the perceived direct impact of spiritual practices on mental health.

The quantitative findings provide a broader perspective on these personal narratives, illustrating a substantial inclination towards utilising prayer as a primary coping mechanism for mental health issues across the participant group. This is particularly evident in the significant preference for prayer over other forms of support, including professional mental health services. The statistical analysis further reinforces the connection between heightened religiosity and the propensity to use prayer as a coping mechanism, suggesting a pervasive cultural and religious norm that prioritises spiritual over professional interventions.

However, this reliance on spiritual practices raises critical questions about the implications for mental health understanding and treatment within the Arab Muslim community. While the therapeutic benefits of prayer and spiritual connection are well-documented (Pargament, et al, 2000), exclusive reliance on these practices may potentially

limit engagement with formal mental health services. This phenomenon invites an in-depth exploration, especially considering the existing literature that suggests religious and spiritual coping mechanisms can coexist with, rather than replace, formal mental health interventions (Koenig, 2015; Rosmarin et al., 2009).

The potential hindrance to seeking formal mental health treatment arises from a complex interplay of cultural, religious, and social factors. The qualitative data suggest that the conceptualisation of mental health issues within a religious framework might lead some individuals to view mental distress as a spiritual test or a consequence of weakened faith. This perspective, while fostering a turn towards religious practices for solace, might also contribute to underutilisation of formal mental health services, driven by beliefs that spiritual solutions are both necessary and sufficient for mental health challenges (Abu-Ras, et al, 2008).

The critical discourse on this topic is enriched by contrasting these findings with broader research, which indicates that integrating religious practices with professional mental health services can enhance treatment outcomes for individuals who hold strong religious beliefs (VanderWeele et al., 2017). This integrative approach suggests that rather than viewing religious coping as a barrier to formal treatment, it can serve as a complementary strategy that enhances the cultural and spiritual relevance of mental health interventions.

The discussion, therefore, should not only focus on the potential limitations of exclusive reliance on spiritual coping mechanisms but also explore avenues for integrating these practices within a broader mental health care framework. This approach aligns with the growing recognition of the importance of culturally and religiously sensitive mental health care, which acknowledges and incorporates individuals' spiritual beliefs into treatment plans (Hodge, 2015; Koenig, 2015).

The findings from this study bring to light the deeply entrenched beliefs among Arab Muslims regarding supernatural factors such as magic, Jinn, and the evil eye as causes of mental disorders. These beliefs are not merely anecdotal but are supported by a significant portion of the participant population, indicating a widespread cultural acceptance of these supernatural explanations for mental health issues. This acceptance poses a substantial challenge to mental health professionals in distinguishing between culturally endorsed supernatural beliefs and symptoms of mental disorders, such as schizophrenia, which are often attributed to possession by Jinn. The belief in supernatural causes for mental disorders, such as the influence of Jinn or the impact of the evil eye, aligns with findings from other studies that have explored the role of cultural and religious beliefs in mental health perceptions within Muslim communities (Al-Adawi et al., 2001; Dein & Illaiee, 2013). These studies highlight the prevalence of such beliefs and their potential to shape attitudes toward mental health treatment, often favouring spiritual or religious interventions over formal psychological or psychiatric services. However, this study extends the conversation by elucidating the specific nature of these beliefs among Arab Muslims and their implications for mental health treatment.

The challenge of reconciling these deeply held beliefs with the principles of contemporary mental health care is significant. The qualitative data suggest that participants attribute symptoms that could be clinically diagnosed as schizophrenia to demonic possession, reflecting a profound cultural and religious understanding of mental health phenomena. This perspective is particularly challenging for mental health professionals, who must navigate these cultural beliefs sensitively while providing evidence-based care. The quantitative findings further underscore the prevalence of these beliefs, with a considerable portion of participants endorsing supernatural explanations for mental health issues.

Comparing these findings with existing literature, it becomes evident that the belief in supernatural factors as causes of mental disorders is not unique to this study's participant group but is a common theme across various Muslim populations (Al-Krenawi & Graham, 2000; Youssef & Deane, 2006). However, the robust association between these beliefs and the reluctance to engage with formal mental health services, as indicated by the negative correlation between cultural misconceptions and attitudes toward seeking mental health services, offers new insights into the barriers faced by Arab Muslims in accessing mental health care.

The difficulty in challenging these beliefs lies in their deep cultural and religious roots, which are reinforced by community narratives and personal experiences. Efforts to address these misconceptions must therefore be culturally sensitive, incorporating an understanding of the significance of these beliefs while gently introducing evidence-based perspectives on mental health. This approach aligns with recommendations from the literature that advocate for integrating cultural and religious considerations into mental health interventions to enhance their acceptance and effectiveness within Muslim communities (Padela & Curlin, 2013; Rassool, 2015).

In comparison with existing literature, this analysis underscores the intricate relationship between cultural, religious, and supernatural beliefs and their influence on the comprehension and treatment of mental health within Arab Muslims. Tackling these challenges necessitates a sophisticated strategy that honours cultural and religious convictions while advocating for evidence-based approaches to mental health. Achieving this equilibrium is important for enhancing mental health outcomes and guaranteeing that Arab Muslims receive mental health care that is both culturally sensitive and efficacious.

6.3.2 Factors Influencing Arab Muslims' Willingness to Seek Formal Mental Health Services

The findings of this study underscore the significance of religious texts, particularly the Quran and Islamic teachings, as primary sources of mental health information among the participants. This reliance on religious and cultural sources over conventional mental health resources highlights a distinct cultural approach to understanding mental health. Similar to past research, which has documented the reliance on religious and spiritual frameworks for comprehending and managing mental health issues within Muslim communities (Rassool, 2015), this study participants also exhibited a preference for integrating their religious beliefs with their understanding of mental health. For example, the participants Dbean and Salem's reliance on religious teachings to navigate mental health challenges echoes findings by Hussain and Cochrane (2004) who noted that for many Muslims, spiritual and religious resources are central to coping with life's difficulties.

Contrarily, Amal's observation about the dichotomy in mental health resources available in English versus Arabic suggests a gap in culturally and linguistically appropriate mental health information. This gap indicates a potential area for intervention, where increasing the availability of mental health resources in Arabic that are not solely religiously oriented could enhance the accessibility and acceptability of mental health services for Arab Muslims.

The quantitative analysis further enriches the understanding by identifying age, education level, and income as significant predictors of attitudes toward seeking formal mental health services, aligning with the works of Aloud and Rathur (2009), who found similar socio-demographic influences among Arab populations. Interestingly, the finding that higher education levels predict more positive attitudes towards seeking formal mental health services contradicts the commonly held belief that strong religious or cultural identities might

deter such attitudes. This suggests that education may play a crucial role in shaping perceptions of mental health care, potentially by providing exposure to alternative narratives around mental health and treatment.

This study also revealed the complex role of Muslim religiosity in predicting help-seeking attitudes. Muslim religiosity was found to predict cultural misconceptions in mental health. However, when considering cultural misconceptions, acculturation, and the experience of microaggressions, Muslim religiosity predicted positive help-seeking attitudes in mental health. This highlights the nuanced influence of religiosity, suggesting that while it may contribute to cultural misconceptions, it can also promote positive attitudes towards seeking formal mental health services when other contextual factors are taken into account (see p. 152).

The findings from this study underscore the importance of considering the multifaceted nature of religiosity and its interaction with other variables. For instance, while strong religious beliefs may contribute to misconceptions about mental health, they can also foster supportive attitudes towards seeking professional help when integrated with broader cultural and social experiences. This complexity must be acknowledged in the development of culturally sensitive mental health interventions aimed at Arab Muslim communities.

The role of acculturation and the experience of microaggressions in shaping help-seeking behaviours highlights the broader socio-cultural context that influences mental health attitudes. Acculturation processes, which involve the degree of immersion in the dominant society, and experiences of discrimination or microaggressions, significantly impact mental health perceptions and behaviours. Understanding these dynamics is crucial for developing effective mental health strategies that address both individual and community-level factors.

Moreover, the association between higher income levels and an increased likelihood of seeking mental health services supports previous research indicating that economic factors significantly influence access to and perceptions of mental health care (Gearing et al., 2011). It implies that economic stability may reduce barriers to accessing mental health services, such as cost and availability, thereby facilitating a more favourable view towards seeking professional help.

The significant relationship between knowledge and familiarity with mental health services and positive attitudes towards seeking formal mental health services (KFFMHS and ATSFMHS) highlights the pivotal role of awareness and education in influencing help-seeking behaviours. This finding resonates with the work of Jorm et al. (1997), who emphasised the importance of mental health literacy in improving individuals' attitudes towards and intentions to seek mental health care. It suggests that interventions aimed at increasing knowledge about mental health services could potentially shift attitudes in a positive direction, thus encouraging engagement with mental health services among Arab Muslims in Australia.

The negative association between Cultural Misconceptions in Mental Health (CBMHP) and attitudes towards seeking formal mental health services underscores the potential barrier that strong cultural and religious beliefs can pose to accessing conventional mental health services. This is in line with Ishaq et al. (2021) who found that cultural and religious beliefs could significantly impact mental health service utilisation.

The exploration into the factors influencing help-seeking behaviour and awareness of treatments has unveiled a critical dimension regarding the accessibility and awareness of formal mental health information among Arab Muslims in Australia. This aspect is particularly salient when considering the qualitative insights that reveal a substantial reliance

on religious and culturally familiar sources for understanding and managing mental health, alongside the quantitative findings highlighting the impact of cultural misconceptions on mental health perceptions.

Participants' narratives, such as Salem's and Shema's, emphasise a profound reliance on the Quran and Islamic teachings as primary sources of information on mental health. This preference underscores a broader trend where formal mental health resources, especially those not aligned with Islamic perspectives, are either unknown or underutilised by this community. The qualitative data suggest a potential lack of awareness about formal mental health references or a gap in accessing such information. For instance, the participants' engagement with neuro-linguistic programming (NLP) and psychology-related content, primarily through Islamic scholars and resources available in Arabic, highlights an interesting paradox. While there is an interest in psychological concepts, the primary lens through which this information is accessed and interpreted is religious.

This observation aligns with previous literature indicating that among many Muslim communities, there is a significant preference for integrating religious beliefs with the understanding of mental health (Amer & Bagasra, 2013). However, it also points to a critical gap in public health communication and mental health service provision: the need for accessible, culturally relevant mental health information that bridges the gap between traditional Islamic teachings and contemporary psychological science.

The quantitative findings further illuminate this discussion by revealing a diversity in views regarding cultural misconceptions about mental health. This variance in perceptions indicates a complex landscape where individuals navigate a myriad of cultural, religious, and social influences to form their understanding of mental health and help-seeking behaviours. It suggests that while there is a base level of awareness regarding mental health within the

community, misconceptions persist, potentially influenced by the lack of accessible formal mental health education and resources that resonate with the community's cultural and religious values.

The qualitative narratives, such as Essa's mention of his father's psychological Islamic knowledge, reinforce the importance of trusted sources within the community for disseminating mental health information. These trusted sources, however, are often not formally trained in mental health care, which may perpetuate certain misconceptions and limit the community's exposure to a broader spectrum of mental health knowledge and services.

The reliance on religious and cultural sources for mental health information, coupled with the reported lack of awareness or access to formal mental health resources, underscores a critical need. There is a necessity for mental health initiatives that are not only culturally and linguistically appropriate but also integrated with the community's religious beliefs and values. Such initiatives could bridge the gap between the community's current reliance on religious teachings for mental health guidance and the broader psychological principles and practices that underpin formal mental health services.

Considering these findings, it becomes imperative for mental health professionals and policymakers to consider innovative approaches to mental health education and service provision. These approaches should aim to increase the visibility and accessibility of formal mental health information within Arab Muslim communities, potentially through collaboration with religious leaders and the use of culturally resonant media platforms. By addressing the unique interplay between cultural, religious, and educational factors highlighted in this discussion, there is an opportunity to enhance mental health literacy,

reduce misconceptions, and promote positive attitudes towards seeking formal mental health services among Arab Muslims in Australia.

The qualitative insights highlight a pervasive unfamiliarity with psychotherapy among participants, underscored by a unanimous lack of personal experience with such treatments and a general consensus that psychotherapy is sought only in severe mental disturbances. Essa's perspective, viewing psychotherapy as a last resort for those unable to function socially or suffering from severe mental health symptoms, mirrors a broader misconception about mental health services often observed in communities where mental health literacy is low (Ciftci et al., 2013). This view not only reveals a stigma associated with mental health issues but also indicates a significant gap in understanding the scope and purpose of psychotherapy, which is not limited to severe cases but is beneficial across a spectrum of mental health needs.

The majority's inability to explain psychotherapy, with references to stereotypical portrayals in media as seen in Aleaa's account, suggests a cultural barrier to understanding mental health treatments that extend beyond the Arab Muslim community, reflecting global challenges in mental health literacy (Jorm et al., 1997). Fahmy's unique position as the only participant with a correct understanding of psychotherapy gained through his role as an interpreter rather than a patient or client underscores the importance of direct exposure and education in shaping accurate perceptions of mental health services.

Despite acknowledging psychotherapy as a potential treatment, the participants' preference leans towards religious and traditional healing methods, such as Quranic healing ("ruqia") and listening to the Quran for mental comfort and relief. The preference for integrating or supplementing formal treatments with religious practices reflects not only a

cultural and spiritual alignment but also a potential apprehension towards or lack of awareness about the benefits of psychotherapy.

Furthermore, the endorsement of religious treatments for conditions like depression and anxiety, as discussed by Shema and Dbean, suggests a cultural conceptualisation of mental health that deeply intertwines with spiritual wellbeing. This perspective challenges the predominantly biomedical approach of Western psychotherapy, calling for a more integrative approach that respects and incorporates patients' cultural and religious backgrounds into treatment plans (Hodge, 2015).

The quantitative analysis complements these qualitative insights by illustrating a spectrum of attitudes towards formal mental health services, with a moderately favourable mean attitude score. This spectrum, marked by diversity in responses, suggests that while there is a foundational openness towards formal mental health services, significant variability exists, likely influenced by individual experiences, cultural backgrounds, and socioeconomic status. The broad range of attitudes from highly unfavourable to extremely favourable, and the association of more positive attitudes with higher education and income levels, underscores the complexity of factors influencing mental health service utilization. These findings echo the literature that suggests socioeconomic status and educational attainment play critical roles in shaping health-seeking behaviours and attitudes towards mental health services (Gulliver et al., 2010).

The integration of the qualitative and quantitative findings with existing literature elucidates a multifaceted challenge: bridging the gap between cultural and religious preferences for mental health treatment and the underutilisation or misunderstanding of formal mental health services. This challenge calls for targeted interventions aimed at increasing mental health literacy, demystifying psychotherapy, and developing culturally

sensitive mental health services that respect and integrate the religious and cultural values of the Arab Muslim community.

The findings reveal a critical need for culturally and religiously informed mental health services that acknowledge and bridge the gap between traditional healing preferences and the potential benefits of formal psychotherapy. Such efforts require collaborative engagement with community leaders, tailored psychoeducation programs, and the development of integrative treatment models that resonate with the Arab Muslim community's values and beliefs, ultimately fostering a more inclusive and effective mental health care landscape.

6.3.3: Influence of Islamic-Arabic Culture on Psychotherapy Effectiveness and Contribution to Mental Health Stigma

The qualitative insights from the study reveal a deep-rooted inclination towards integrating religious practices, like reading the Quran and praying, as foundational responses to mental distress among Arab Muslims. This finding is particularly interesting when juxtaposed with the narrative presented by Razali et al. (2002), who found a similar reliance on religious and spiritual interventions in Malaysian Muslim populations. The preference for spiritual over conventional psychological interventions reflects a broader cultural and religious paradigm that values spiritual healing and the power of divine intervention in personal well-being. However, this study extends the conversation by suggesting that such preferences do not necessarily preclude the acceptance of psychotherapy or formal mental health services, challenging the binary often presented in literature between traditional/spiritual and formal/medical approaches to mental health.

The pervasive belief in supernatural explanations for mental health issues, such as Jinn and magic, underscores the cultural context within which mental health understanding

and treatment are navigated. Al-Krenawi and Graham (2000) noted similar beliefs in Middle Eastern populations, highlighting the cultural specificity of mental health perceptions. The qualitative data unveil a stark reality where the fear of being labelled as "crazy" significantly impacts individuals' willingness to disclose mental health struggles or seek help. Essa's and Dbean's testimonies reflect a pervasive concern over the societal repercussions of being perceived as mentally ill, which is deeply intertwined with cultural narratives that conflate mental disorders with craziness or moral failing. This societal stigma is further compounded by a preference among many participants for attributing mental distress to supernatural causes, such as jinn possession or the evil eye, rather than recognising it as a mental health issue. Such preferences are not mere reflections of religious or cultural beliefs but are strategic responses to the stigma associated with mental disorder, as evidenced by the participants Ahmed and Najd's preference for being labelled as affected by the evil eye over being considered mentally ill.

The quantitative findings corroborate this tendency, with a substantial portion of participants expressing a preference for supernatural explanations over medical ones to avoid social stigma. The significant association between shorter residency in Australia and agreement with the preference for traditional or supernatural explanations suggests that acculturation plays a crucial role in shaping attitudes towards mental health. This trend indicates that integration into societies with less stigmatised views of mental health may gradually influence Arab Muslims to adopt a more accepting attitude towards mental health issues and services.

However, the complex relationship between levels of religiosity and attitudes towards mental health, as revealed through the cross-tabulation analysis of the Muslim Religiosity (MRS) scores and attitudes towards the modified item, suggests that religiosity alone does not dictate attitudes towards mental disorder and stigma. Instead, it points to a multifaceted

interplay where cultural, societal, and individual factors converge to shape perceptions and responses to mental health challenges.

These findings challenge earlier literature that may have oversimplified the relationship between supernatural beliefs and mental health stigma among Muslim populations. For instance, while Al-Krenawi and Graham (2000) highlighted the cultural specificity of mental health perceptions, the current study reveals the strategic navigation of stigma through the preference for supernatural explanations. This strategy reflects a deeply ingrained cultural mechanism aimed at preserving personal and familial dignity within a context that harshly judges mental disorder.

The significant negative association found between the belief in demonic possession as an explanation for mental disorder and the stigma associated with mental health conditions is particularly telling. This preference for supernatural over medical explanations not only reflects the cultural specificity of mental health perceptions but also reinforces the stigmatisation of mental disorder by implicitly valuing traditional and religious interpretations over scientific and medical ones. This finding resonates with the work of Corrigan and Watson (2002), who discuss how stigma is often fuelled by a lack of understanding or fear of the unknown, suggesting that cultural narratives that favour supernatural explanations can exacerbate these fears and misunderstandings.

Furthermore, the significant contribution of shame associated with using mental health services, as opposed to general medical services, to the misconceptions underscores the barrier that stigma represents in seeking help for mental health issues. This barrier is not merely about personal or family reputation but reflects broader cultural norms that prioritise physical health over mental well-being and stigmatise the latter. Aloud and Rathur (2009) highlighted similar findings, noting that cultural and religious beliefs could significantly

impact attitudes towards seeking professional mental health services, further complicating the pathway to accessing care.

Interestingly, the analysis indicates that while traditional beliefs and shame are potent factors in stigma, the fear of others' judgments may not be as influential in this sample. This suggests a complex landscape of stigma, where cultural and individual factors interplay in complex ways to influence attitudes towards mental health and service utilisation. It points to the need for culturally sensitive interventions that address not just the symptoms of mental health issues but also the cultural narratives that shape perceptions and attitudes towards these issues.

In synthesising these points with the broader literature, this discussion highlights the complex and multifaceted relationship between religious and cultural beliefs and the perception and acceptance of psychotherapy among Arab Muslims. By critically engaging with these themes and comparing them with existing studies, we uncover a landscape marked by both unique cultural specificities and universal challenges in mental health service delivery and acceptance. This ongoing exploration emphasises the importance of culturally informed and flexible mental health services that can navigate the rich tapestry of beliefs, practices, and preferences within Arab Muslim communities. The findings contrast with narratives that posit a direct aversion to psychotherapy resulting solely from supernatural beliefs. Instead, it illustrates that the reluctance to seek formal mental health services is intricately linked to broader societal and cultural dynamics, including stigma, fear of judgment, and the preservation of family reputation. These dynamics underscore the necessity for mental health interventions and services that are not only culturally sensitive but also actively engage in destigmatising mental disorder within Arab Muslim communities. Engaging with and addressing the societal and cultural underpinnings of mental health stigma emerges as a pivotal challenge for mental health professionals and policymakers seeking to

improve access to and acceptance of mental health services among Arab Muslims.

6.4 Implications

The implications of this study extend across various domains, significantly impacting mental health practitioners, policymakers, community leaders, and researchers. The findings, revealing moderate to high levels of religiosity among participants and a cultural and religious ethos that values modesty in expressions of faith, emphasise the necessity for culturally sensitive mental health interventions. Mental health practitioners, particularly those from or serving the Muslim community, are encouraged to develop a deeper understanding of their clients' religiosity, thoughtfully incorporating religious practices into treatment plans where appropriate. This approach not only respects the client's cultural and religious background but also potentially enhances the effectiveness of mental health interventions. However, it is crucial for practitioners to maintain a clear distinction between their therapeutic role and that of religious authorities. Incorporating religious practices should not lead practitioners to assume the role of religious priests; doing so could blur professional boundaries and potentially undermine the therapeutic process. This distinction is vital to maintain the integrity of the therapeutic relationship and ensure that interventions remain within the scope of mental health practice, respecting the separate domains of religious guidance and psychological support.

For policymakers and community leaders, the study highlights the importance of creating mental health programs that acknowledge and integrate religious beliefs and practices. Collaborating with religious leaders to develop these programs could make them more accessible and acceptable to Arab Muslim communities. Additionally, launching educational campaigns that respect the cultural subtleties around religiosity and mental health could help normalize these discussions, encouraging individuals to seek help when needed.

One significant finding is the role of acculturation and interactions within the Muslim community in shaping help-seeking behaviours. The study shows that greater immersion in the dominant Australian society is associated with better knowledge of mental health services and more positive attitudes towards seeking help. Conversely, strong ties to ethnic society can sometimes reinforce cultural misconceptions that hinder formal help-seeking. Additionally, interactions with fellow Muslims can provide both support and reinforcement of cultural beliefs. This dual influence means that while supportive Muslim networks can encourage help-seeking through shared experiences and communal support, they can also perpetuate cultural misconceptions that deter individuals from accessing formal mental health services. Understanding this dynamic is crucial for designing interventions that leverage community support while addressing and correcting harmful beliefs.

This research further investigated individual acculturation factors, specifically dominant society immersion and ethnic society immersion, and how these factors, along with negative interactions with the dominant society such as microaggressions, significantly contribute to explaining mental health knowledge and help-seeking attitudes among Arab Muslims in Australia. The study found that being Arab Muslim and exercising their cultural rights and heritage often invites unwanted scrutiny and hostile interactions, such as Islamophobia. When seemingly innocuous unkind comments persist, there is no doubt that they further impact Arab Muslims' views on mental health and their attitudes towards seeking help.

The discrepancy observed between participants' self-perception of religiosity and their actual religious practices opens new avenues for research. This phenomenon warrants further exploration into how cultural modesty influences the expression of religiosity and its impact on mental health perceptions. Researchers are also called to conduct cross-cultural comparisons to understand the universal and culturally specific aspects of religious

expressions and mental health perceptions among Muslims globally.

The complex relationship between religiosity and mental health stigma, along with the strategic navigation of stigma through supernatural explanations, indicates that addressing mental health in Arab Muslim communities requires a multifaceted approach. This approach should consider the cultural, societal, and individual factors that influence attitudes toward mental disorder and treatment.

Integrating the study's insights into mental health practice, policy formulation, and ongoing research can significantly enhance the support provided to Arab Muslim communities. Acknowledging and incorporating the deeply ingrained cultural and religious values into mental health services are crucial steps toward addressing the mental health needs of these communities effectively, paving the way for more inclusive and culturally competent mental health care.

6.5 Limitations and Recommendations for Future Research

This study, while providing insightful observations on the influence of religiosity and cultural beliefs on mental health perceptions among Arab Muslim expatriates in Australia, encounters several limitations that concurrently pave the way for future research directions. Firstly, the qualitative phase involved interviews with a balanced gender representation but was limited to 12 participants. While this provided valuable insights into individual experiences and perceptions, the sample size may restrict the depth and breadth of understanding the diversity within the Arab Muslim community's experiences with mental health. Future research could expand on this foundation with a larger qualitative sample to explore a wider range of experiences and perspectives across different age groups, socioeconomic statuses, and levels of religiosity.

The transition from qualitative insights to quantitative analysis allowed for the exploration of broader patterns within a larger participant pool. Yet, the generalizability of these quantitative findings might be constrained by the sample's demographic makeup, primarily Arab Muslim expatriates residing in Australia. This specificity highlights the need for future studies to include a more diverse participant group, potentially incorporating Muslims living in non-expatriate conditions and in varied geographical locations, to examine if and how context influences mental health perceptions and the role of religiosity and cultural beliefs.

Another limitation stems from the cross-sectional nature of the quantitative phase, which does not capture the dynamic evolution of mental health perceptions over time. Longitudinal mixed methods research could yield richer, more detailed insights into how these perceptions evolve in response to life events, changes in societal attitudes towards mental health, or variations in religious engagement.

Additionally, while the study employed a mixed methods approach to provide a more comprehensive understanding of the research topic, future research could further integrate these methods by using the qualitative findings to inform the development of new quantitative measures that better capture the complexity of religiosity and mental health perceptions. This could include the development of scales that more accurately reflect the intricacies of religious practice and belief as it pertains to mental health within the Arab Muslim community.

Considering these limitations, future research should strive to broaden the scope of mixed methods studies in this area. Emphasising longitudinal designs, expanding participant diversity, and further integrating qualitative insights into quantitative measures can deepen our understanding of the intricate ways in which cultural and religious beliefs intersect with mental health perceptions. Such research is crucial for developing culturally sensitive mental

health interventions and policies that effectively address the needs of Muslim communities, both within Australia and globally, fostering a more inclusive and comprehensive approach to mental health care across diverse cultural landscapes.

Chapter Seven: Conclusion

This study embarked on an exploratory journey to unravel the intricate ways in which Islamic-Arabic cultural and traditional beliefs shape the understanding of mental disorders and their treatment among Arab Muslim expatriates in Australia. With a keen focus on first and second-generation expatriates, the research aimed to delve deeply into how these beliefs influence perceptions of psychotherapy, mental health professionals, and the broader psychological and psychiatric concepts within this community. The primary objective was to provide a comprehensive understanding of the role these cultural, traditional beliefs, and religiosity play in shaping Arab Muslims' attitudes towards mental health treatments and their choices of healthcare services. Additionally, the study sought to identify the factors

contributing to the willingness of Arab Muslims to seek help from formal mental health services and traditional healers, alongside assessing their awareness about available treatments. Through this exploration, the research addressed pivotal questions about the impact of Islamic-Arabic culture on the effectiveness of psychotherapy, the support provided by mental health professionals, and the contribution of these cultural underpinnings to the stigma surrounding mental health among Arab Muslims. The development of research questions and hypotheses was motivated by the necessity to unravel the intricate relationship between cultural identity, religious beliefs, and mental health perceptions, establishing a foundation for an in-depth examination of the mental health scenario within the Arab Muslim community in Australia.

The investigation revealed that participants generally exhibit moderate to high levels of religiosity, with a significant emphasis on Islamic teachings and the Quran as pivotal sources of guidance on mental health. This finding underscores the profound influence of religious and cultural beliefs on the community's understanding and management of mental health issues. Despite high levels of religious engagement, such as regular prayer and Quran reading, a notable discrepancy emerged: many participants hesitated to self-identify as religious. This hesitation is rooted in a cultural ethos valuing modesty and humility, particularly in the expression of one's religiosity, suggesting a complex interplay between personal faith practices and cultural norms regarding the public acknowledgment of one's piety.

Furthermore, the study uncovered a substantial reliance on traditional healing practices and a strong belief in supernatural explanations for mental disorders among the community. This preference frequently acts as a strategic measure to manoeuvre through the stigma linked to mental disorders, reflecting a complex approach of ascribing mental distress to supernatural reasons instead of recognising it as a health concern. The exploration also

highlighted the critical role of education in shaping mental health perceptions. Higher levels of education were associated with a better understanding of mental disorders and a greater likelihood of seeking formal mental health services, indicating the potential of education as a tool for dispelling misconceptions and enhancing mental health literacy.

Quantitative findings from the study further emphasised the widespread misconceptions about mental disorders, particularly schizophrenia, suggesting a pressing need for culturally and linguistically tailored mental health education and awareness programs. The analysis revealed that knowledge and familiarity with mental health services significantly influence positive attitudes toward seeking formal mental health care. However, cultural beliefs about mental health problems emerged as potential barriers to accessing these services, underscoring the necessity for mental health initiatives that respect and integrate the community's religious beliefs and cultural practices.

This study makes several significant contributions to the field of mental health research, particularly in understanding the intersection of cultural, religious, and traditional beliefs with mental health perceptions among Arab Muslim communities. By employing a mixed-methods exploratory sequential design, this research has provided an in-depth examination of the complex ways in which Islamic-Arabic beliefs influence mental health understanding, attitudes towards treatment, and healthcare choices among Arab Muslim expatriates in Australia.

One of the foremost contributions is the development and validation of the Religious Cultural Influence Model of Arab Muslims' Concept of Mental Disorders (RCIMA-CMD). This theoretical framework elucidates the interplay between religious beliefs, cultural norms, traditional healing practices, and mental health literacy, offering a comprehensive model for understanding the multifaceted impact of cultural and religious factors on mental health

perceptions. The RCIMA-CMD model serves as a foundational tool for future research, enabling a deeper exploration of these dynamics across different Muslim communities globally.

Additionally, the study contributes to the literature by highlighting the role of humility and modesty in expressions of faith and their influence on self-identification with religiosity among Arab Muslims. This insight into the cultural aversion to flaunting piety provides a unique perspective on the personal and communal practices of faith, challenging existing assumptions about the overt expression of religiosity and its implications for mental health.

The research also extends the discourse on the strategic navigation of mental health stigma through supernatural explanations, illustrating a culturally specific mechanism employed by Arab Muslims to preserve dignity in the face of societal judgment. This finding enriches the understanding of stigma and mental health in cultural contexts, suggesting new avenues for stigma reduction initiatives that respect and incorporate cultural and religious sensibilities.

Moreover, the study sheds light on the critical gap in mental health literacy within the Arab Muslim community, particularly regarding schizophrenia and other mental disorders. By identifying misconceptions and the influence of educational attainment on mental health perceptions, this research underscores the importance of culturally and linguistically tailored mental health education and awareness programs.

The findings from this study emphasise the necessity for culturally sensitive mental health interventions that honour the religious convictions and practices of Muslim patients. This contribution is particularly relevant for mental health practitioners, policymakers, and community leaders seeking to develop and implement mental health services that are

accessible, acceptable, and effective for diverse cultural and religious populations. The study not only enriches the academic understanding of cultural and religious influences on mental health but also provides practical insights for enhancing mental health care and policy, contributing to a more inclusive and culturally competent approach to mental health services for Arab Muslim communities.

The study findings have profound implications for Arab Muslim communities, particularly those residing in Australia, by illuminating the deeply ingrained cultural, religious, and traditional beliefs that shape their perceptions and approaches to mental health and treatment. The study's investigation into the complex manners in which these communities comprehend and tackle mental health issues provides valuable insights that can help create a more supportive and empathetic environment for addressing mental health within these populations.

The study's emphasis on the moderate to high levels of religiosity among participants, and the importance of religious teachings and practices in shaping mental health perceptions, underscores the pivotal role of faith in both the conceptualization of mental well-being and the coping mechanisms employed by individuals facing mental health challenges. This recognition of the integral role of religion in mental health provides a basis for community leaders and religious figures to actively engage in mental health discussions, promoting a holistic view of well-being that encompasses spiritual, mental, and physical health.

The identification of a cultural ethos that values modesty in expressions of faith, alongside the strategic navigation of stigma through supernatural explanations, offers a unique perspective on the community's approach to mental health stigma. By understanding these cultural subtleties, community leaders and mental health advocates can tailor stigma reduction efforts to be more effective and respectful of cultural sensitivities. Such efforts

could involve community dialogues that respect the blend of religious faith and cultural identity, creating safe spaces for open conversations about mental health that challenge existing misconceptions without alienating community members.

The study also highlights the significant impact of education on mental health literacy within the Arab Muslim community. The correlation between higher education levels and more accurate understandings of mental disorders, as well as a greater willingness to seek formal mental health services, points to the potential of educational initiatives in improving mental health perceptions and reducing stigma. Community-based educational programs that incorporate cultural and religious respect can play a crucial role in enhancing mental health literacy, providing clear, accurate information about mental health conditions and treatments in ways that resonate with community values.

Furthermore, the study's findings on the preference for integrating religious practices with mental health treatment signal a need for mental health services that are adaptable and respectful of religious practices. This could encourage greater utilization of mental health services among Arab Muslims by ensuring that these services are perceived as complementary to, rather than in conflict with, their religious and cultural beliefs.

The impact of this study on Arab Muslim communities lies in its ability to foster a deeper understanding of the complex interplay between culture, religion, and mental health. By highlighting the need for culturally sensitive approaches to mental health care and education, the research paves the way for more inclusive, effective, and respectful mental health support for Arab Muslims, ultimately contributing to the well-being and resilience of these communities in the face of mental health challenges.

The study, while providing valuable insights into the intersection of Islamic-Arabic cultural and traditional beliefs with mental health perceptions among Arab Muslim

expatriates in Australia, is not without its limitations. One significant constraint lies in the study's sample composition, which primarily consists of Arab Muslim expatriates. This specificity potentially limits the findings' applicability to broader Muslim populations or those within different cultural or socio-economic contexts, thereby constraining the generalizability of the research outcomes. Moreover, the cross-sectional design restricts the ability to draw causal inferences between religiosity, cultural beliefs, and mental health perceptions, a limitation that points to the need for future research designs that can more accurately capture these dynamics over time.

Additionally, the reliance on self-reported data introduces the possibility of social desirability bias, particularly concerning sensitive topics like mental health and religiosity. This methodological constraint underscores the need for future studies to incorporate objective measures or employ mixed methods to triangulate findings and mitigate potential biases. The complexity and personal significance of religious practices in shaping mental health perceptions also suggest a rich avenue for qualitative inquiries that could provide deeper insights into individual interpretations and lived experiences of religiosity than quantitative methods alone.

In light of these limitations, several recommendations for future research have emerged from the study. Future studies should aim to engage with a more diverse array of participants across various Muslim communities, including those in non-Western settings, to enhance the research outcomes' universality and applicability. Employing longitudinal designs could offer valuable insights into how societal attitudes towards mental health, shifts in acculturation levels, and changes in religiosity impact mental health perceptions over time.

Future research should also explore the subtle intra-community differences in mental health perceptions and practices, ensuring a more inclusive representation of Muslim

diversity. This approach could significantly contribute to developing more culturally sensitive, nuanced mental health interventions and policies that resonate with the diverse needs and beliefs of Muslim communities worldwide. By addressing these gaps, future research can not only advance academic understanding but also enhance practical approaches to supporting mental health within culturally and religiously diverse populations, ultimately paving the way for more inclusive and culturally competent mental health care practices.

This study has underscored the profound significance of integrating cultural and religious considerations into mental health care, particularly for Arab Muslim communities. It highlights the intricate ways in which cultural, religious, and traditional beliefs weave into the fabric of mental health perceptions and treatment approaches. The findings illuminate the necessity for mental health practitioners to not only acknowledge but actively incorporate these cultural and religious dimensions into their practices. This integration is paramount in creating mental health interventions that are not only effective but also respectful and meaningful to the individuals they aim to serve.

The importance of continued research, dialogue, and collaboration between mental health professionals and Arab Muslim communities cannot be overstated. This study acts as a bridge, facilitating a deeper understanding and fostering open conversations about mental health within the Arab Muslim context. It calls for an ongoing partnership aimed at developing and implementing mental health services that honour the complex interplay of cultural and religious identities. Through such collaborative efforts, we can aspire to address the mental health needs of Arab Muslims more effectively, ensuring that care is both accessible and resonant with their lived experiences.

As we look to the future, this research holds the potential to inform more inclusive and culturally competent mental health practices. It beckons a shift towards mental health care that fully embraces the diversity of human experience, recognising the unique ways in

which cultural and religious beliefs shape our understanding of mental well-being. The insights garnered from this study offer a hopeful path forward, one where mental health stigma is continuously challenged and where individuals feel seen, respected, and supported in their mental health journeys.

There is a profound hope that these findings will contribute significantly to reducing stigma and improving mental health outcomes among Arab Muslims. By shining a light on the need for cultural and religious sensitivity in mental health care, this research advocates for a world where mental health services are as diverse and multifaceted as the communities they serve. In this vision, Arab Muslims, alongside other culturally and religiously diverse groups, receive the compassionate, competent care they deserve, paving the way for a more inclusive and understanding approach to mental health across the globe.

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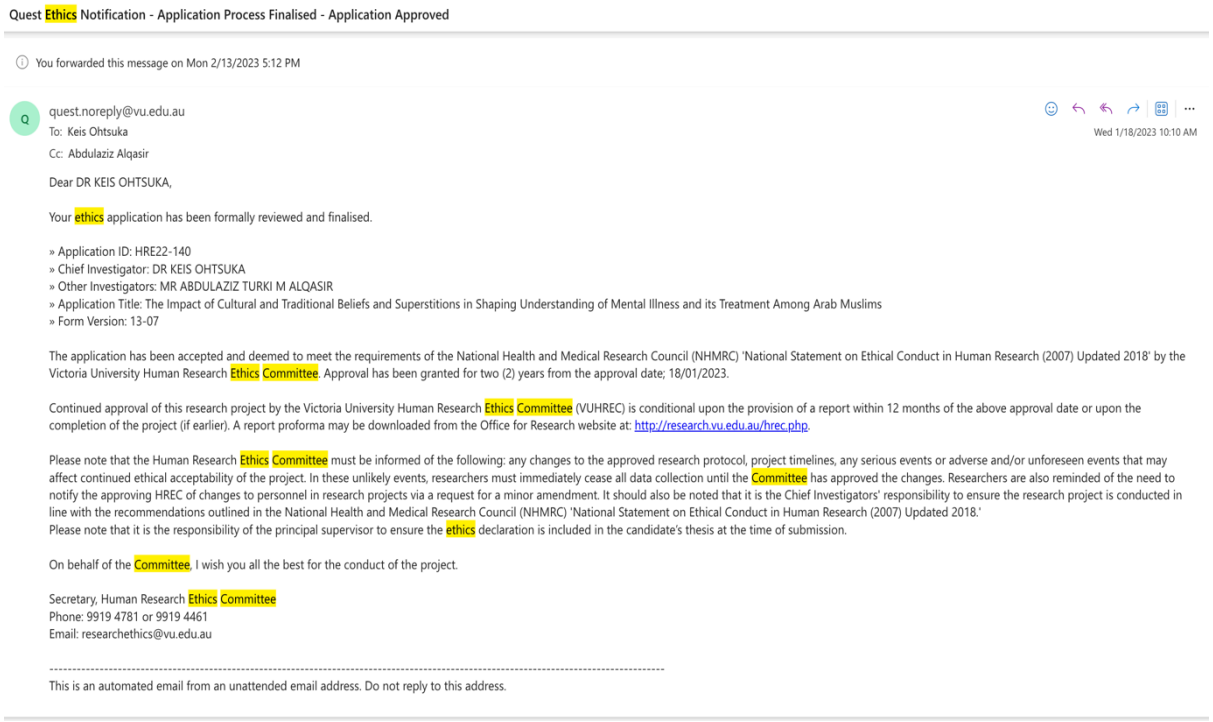
Appendices

Appendix A: Ethical Approval Documentation



Quest Ethics Notification - Application Process Finalised - Application Approved

You forwarded this message on Mon 2/13/2023 5:12 PM

quest.noreply@vu.edu.au
To: Keis Ohtsuka
Cc: Abdulaziz Alqasir
Wed 1/18/2023 10:10 AM

Dear DR KEIS OHTSUKA,

Your ethics application has been formally reviewed and finalised.

» Application ID: HRE22-140
» Chief Investigator: DR KEIS OHTSUKA
» Other Investigators: MR ABDULAZIZ TURKI M ALQASIR
» Application Title: The Impact of Cultural and Traditional Beliefs and Superstitions in Shaping Understanding of Mental Illness and its Treatment Among Arab Muslims
» Form Version: 13-07

The application has been accepted and deemed to meet the requirements of the National Health and Medical Research Council (NHMRC) 'National Statement on Ethical Conduct in Human Research (2007) Updated 2018' by the Victoria University Human Research Ethics Committee. Approval has been granted for two (2) years from the approval date; 18/01/2023.

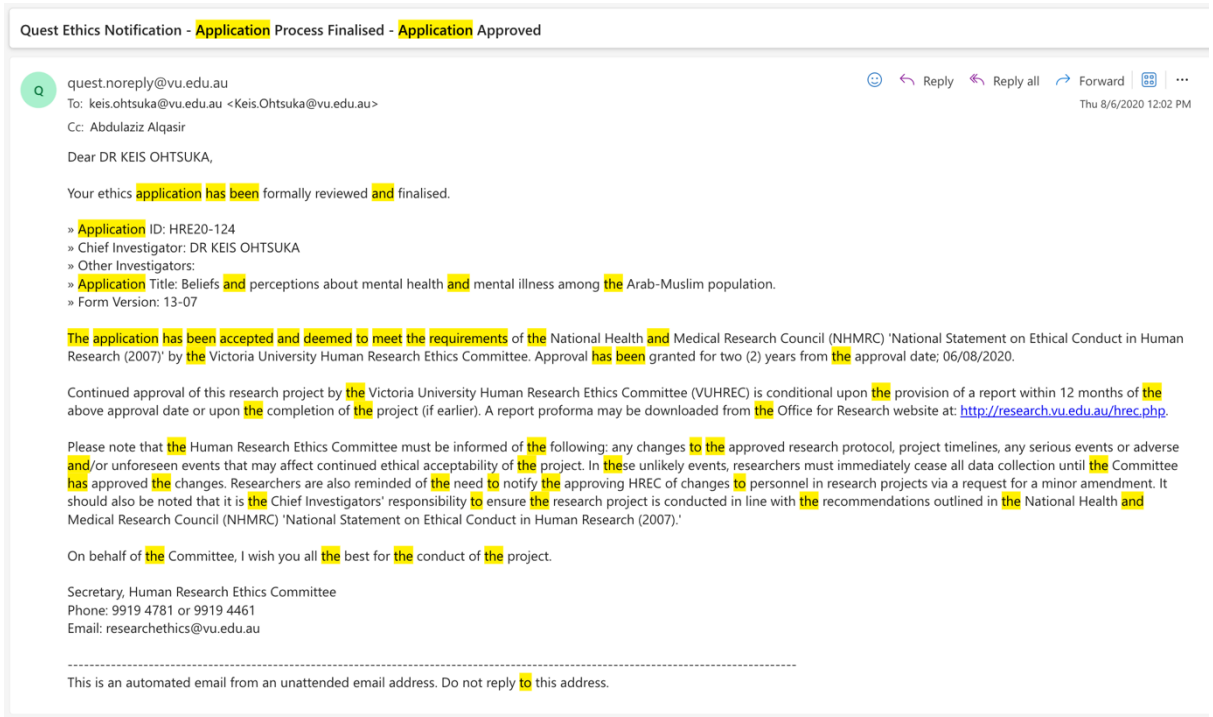
Continued approval of this research project by the Victoria University Human Research Ethics Committee (VUHREC) is conditional upon the provision of a report within 12 months of the above approval date or upon the completion of the project (if earlier). A report proforma may be downloaded from the Office for Research website at: http://research.vu.edu.au/hrec.php.

Please note that the Human Research Ethics Committee must be informed of the following: any changes to the approved research protocol, project timelines, any serious events or adverse and/or unforeseen events that may affect continued ethical acceptability of the project. In these unlikely events, researchers must immediately cease all data collection until the Committee has approved the changes. Researchers are also reminded of the need to notify the approving HREC of changes to personnel in research projects via a request for a minor amendment. It should also be noted that it is the Chief Investigators' responsibility to ensure the research project is conducted in line with the recommendations outlined in the National Health and Medical Research Council (NHMRC) 'National Statement on Ethical Conduct in Human Research (2007) Updated 2018.'
Please note that it is the responsibility of the principal supervisor to ensure the ethics declaration is included in the candidate's thesis at the time of submission.

On behalf of the Committee, I wish you all the best for the conduct of the project.

Secretary, Human Research Ethics Committee
Phone: 9919 4781 or 9919 4461
Email: researchethics@vu.edu.au

This is an automated email from an unattended email address. Do not reply to this address.



Quest Ethics Notification - Application Process Finalised - Application Approved

quest.noreply@vu.edu.au
To: keis.ohtsuka@vu.edu.au <Keis.Ohtsuka@vu.edu.au>
Cc: Abdulaziz Alqasir
Reply Reply all Forward
Thu 8/6/2020 12:02 PM

Dear DR KEIS OHTSUKA,

Your ethics application has been formally reviewed and finalised.

» Application ID: HRE20-124
» Chief Investigator: DR KEIS OHTSUKA
» Other Investigators:
» Application Title: Beliefs and perceptions about mental health and mental illness among the Arab-Muslim population.
» Form Version: 13-07

The application has been accepted and deemed to meet the requirements of the National Health and Medical Research Council (NHMRC) 'National Statement on Ethical Conduct in Human Research (2007)' by the Victoria University Human Research Ethics Committee. Approval has been granted for two (2) years from the approval date; 06/08/2020.

Continued approval of this research project by the Victoria University Human Research Ethics Committee (VUHREC) is conditional upon the provision of a report within 12 months of the above approval date or upon the completion of the project (if earlier). A report proforma may be downloaded from the Office for Research website at: http://research.vu.edu.au/hrec.php.

Please note that the Human Research Ethics Committee must be informed of the following: any changes to the approved research protocol, project timelines, any serious events or adverse and/or unforeseen events that may affect continued ethical acceptability of the project. In these unlikely events, researchers must immediately cease all data collection until the Committee has approved the changes. Researchers are also reminded of the need to notify the approving HREC of changes to personnel in research projects via a request for a minor amendment. It should also be noted that it is the Chief Investigators' responsibility to ensure the research project is conducted in line with the recommendations outlined in the National Health and Medical Research Council (NHMRC) 'National Statement on Ethical Conduct in Human Research (2007).'

On behalf of the Committee, I wish you all the best for the conduct of the project.

Secretary, Human Research Ethics Committee
Phone: 9919 4781 or 9919 4461
Email: researchethics@vu.edu.au

This is an automated email from an unattended email address. Do not reply to this address.

Appendix B: Informed Consent Forms for Quantitative Survey

Dear participants,

Greetings! My name is Abdulaziz Alqasir, a PhD candidate at Victoria University in Melbourne, Australia. I am researching Arab-Muslim beliefs and perceptions of mental illness, treatment options, and wellbeing.

Participation in this research will involve answering an anonymous questionnaire. The questionnaire will include questions on general mental health, preference for treatment options, social and language practice, and your everyday experience of negative cross-cultural interactions.

To ensure anonymity, no personally identifying information will be asked. Only basic demographics, such as your age, gender, marital status, work, education, and your cultural background will be included in the questionnaire. Your responses will be combined with other participants' answers into the group data, which will be analysed for general trends.

Your participation is voluntary, and you can withdraw without penalty or disadvantage. The study should take about 35-45 minutes to complete.

I understand that you are a very busy person, but I would be most grateful if you could take the time to share your views by completing the questionnaire. Your views are important as the research findings may be useful in improving mental health services for Arab and Muslim communities in Australia.

This research is low-risk and is not likely to cause any distress. Victoria University Human Research Ethics Committee has approved this project. If any of the survey's content causes distress, please ensure you seek appropriate support. The following hotline numbers may provide advice and support for issues regarding mental health.

Lifeline - Crisis Support and Suicide Prevention **13 11 14**
Beyond Blue - Depression and Anxiety Hotline **1300 22 46 36**

If you have any questions, please do not hesitate to contact me via email (Abdulaziz.Alqasir@live.vu.edu.au) or my PhD thesis research supervisor (Keis.Ohtsuka@vu.edu.au).

Finally, I thank you for your time for reading my invitation email.
If you agree to proceed, please answer the question below.
Sincerely,
Abdulaziz Alqasir

Abdulaziz.Alqasir@live.vu.edu.au

Appendix C: INFORMATION TO PARTICIPANTS INVOLVED IN RESEARCH FOR INTERVIEW

You are invited to participate

You are invited to participate in a research project entitled **Beliefs and Perceptions About Mental Illness Among Arab- Muslim Population**

This project is being conducted by a student researcher **Abdulaziz Alqasir** as part of a PhD study at Victoria University under the supervision of **Dr Keis Ohtsuka** from **Institute for Health and Sport, Victoria University.**

Project explanation

Nowadays, while most of the countries have developed facilities to deal with mentally ill patients and offered treatment services, the Arab world is ineffective in regard to the treatment of mental illness. What seems to have hindered such efforts are the myths, beliefs, and perceptions about mental disorders , which has resulted in a stigma (Dardas & Simmons, 2015). In the Arab nation, discussion of mental health issues is regarded as a taboo. Irrespective of its prevalence across the region, there is a stigma that is attached to the mental illness, in addition to the misconception, myths, and social restriction. Such factors have played a part in discouraging those who are affected from seeking necessary treatment (Dardas et al., 2018). Hence, this research will explore how Arabs view and understand mental illness. The research will rely on a qualitative design using a semi-structured interview and thematic analysis to study the beliefs, superstitions, and perceptions about mental disorders among Arab-Muslims. "Thematic analysis" will be used for analysis. Moreover, the research will employ constructivism grounded theory to help in exploring more details about the situation being studied.

What will I be asked to do?

The participants will be approached for their consent by signing a consent form. Then a set of semi-structure interview questions will be asked to explore more about their perceptions and beliefs about mental illness; From where do their perceptions and beliefs about mental illness emanate; and To what extent do they believe in psychotherapy and assistance provided by mental health professionals?

What will I gain from participating?

This study will provide a deeper insight into the impact of religion on the Arab-Muslim understanding of mental illness. The findings from the proposed research will be significant in improving the mental health services as it will help comprehend the influence that the perceptions and beliefs have in the accessibility of health care services. The research will also investigate and analyse the impact of these misconceptions on individuals with mental disorders. In addition, the findings from the research will assist in identifying how perceptions and beliefs

are practiced and intertwined within the Arab-Muslim culture. Another benefit of this research would be establishing the extent to which Arab-Muslims communities are aware of available treatments and facilities for mental illness (Choudhry et al., 2016).

How will the information I give be used?

The data gathered through interviews will be analysed manually by the researcher. Then, the conceptual framework and research questions proposed by current literature will be assessed and modified according to thematic analysis. The findings from the research will assist in identifying how perceptions and beliefs are practiced and intertwined within the Arab-Muslim culture. Another benefit of this research would be establishing the extent to which Arab-Muslims communities are aware of available treatments and facilities for mental illness.

What are the potential risks of participating in this project?

Informed consent is required when the study involves patients, children, special needs, healthy volunteers, immigrants or others or when the study uses or collects human genetic material or personal information (Nijhawan et al., 2013). Since this research will investigate Arabs beliefs about a sensitive issue in their culture which is mental illness, informed consent will be an important part in this project. Informed consent will be used to provide the interviewees with sufficient information about the aim of the study and their role in the study so that they can decide whether they want to participate or not.

Regarding the confidentiality, in this study, the participants will be not named in order to ensure that some information cannot be traced back to people. However, their nationality and age will be revealed after obtaining their permissions. Their nationality, religion, and age are needed to be revealed in this study in order to make comparison between groups in regard their age, religiosity, and country.

To ensure participants' confidentiality, the interviews data and records will be stored securely on a password protected computer, accessible only to the researcher. Also, copies of the data will be stored on Microsoft One Drive to ensure the data of the participants will be not lost.

Moreover, the participants have the right not to participate or withdraw from the research at any points without providing any reason or justification; however, if provided, this will be recorded. The information will be retained for all interviewees up to the date of withdrawal, except an interviewee requests their data be removed.

How will this project be conducted?

Since the Arab nation is full of rich and diverse cultures and beliefs, the researcher is looking to have open-conversations with them to develop a good understanding of their belief and perceptions about mental illness. Therefore, in the year one thesis, constructivist grounded theory, qualitative approach, a semi- structured interview, and thematic analysis will be adopted in order to develop the best results.

In the year one thesis, six semi- structured interviews will be conducted via online due to COVID 19. The purposive sample will be Arab- Muslims who live in Melbourne; aged from 18 to 75 years old. The researcher will

use his social networks to have participants from Muslim communities. The interviews are estimated to be conducted and analysed by Aug 2020. The semi- structured interview is the most appropriate data collection to use in the year one thesis since it can help the researcher asks the interviewees open- ended questions to develop a deep understanding of their beliefs and perceptions about mental illness, and its data will be used to build quantitative survey for the overall PhD thesis.

Who is conducting the study?

Abdulaziz Alqasir - Email: Abdulaziz.alqasir@live.edu.vu.au
Dr Keis Ohtsuka – Email: Keis.Ohtsuka@vu.edu.au

Any queries about your participation in this project may be directed to the Chief Investigator listed above.

If you have any queries or complaints about the way you have been treated, you may contact the Ethics Secretary, Victoria University Human Research Ethics Committee, Office for Research, Victoria University, PO Box 14428, Melbourne, VIC, 8001, email researchethics@vu.edu.au or phone (03) 9919 4781 or 4461.

Appendix D: Consent Form for Participants Involved in Research for the Interview

INFORMATION TO PARTICIPANTS:

We would like to invite you to be a part of a study on "Beliefs and Perceptions About Mental Illness Among Arab- Muslim Population". This research seeks to investigate how Arabs understand and view mental illness. Also, this research will investigate why some Arab individuals do not find mental health treatment helpful. A semi-structured interview will be used in this research because it is the most suitable approach for getting a better understanding of how Arab- Muslims view and understand mental disorders . Thematic analysis will be used for the analysis, which can provide flexibility to gain fresh insights into Arab- Muslims' perspectives about mental disorder. The interviews do not pose any potential risks for the participants.

CERTIFICATION BY PARTICIPANT

I,

of

Certify that I am at least 18 years old* and that I am voluntarily giving my consent to participate in the study: "Beliefs and Perceptions About Mental Illness Among Arab- Muslim Population" being conducted at Victoria University.

I certify that the objectives of the study, together with any risks and safeguards associated with the procedures listed here under to be carried out in the research, have been fully explained to me by:

Abdulaziz Alqasir

and that I freely consent to participation involving the below mentioned procedures:

- Interview

I certify that I have had the opportunity to have any questions answered and that I understand that I can withdraw from this study at any time and that this withdrawal will not jeopardise me in any way.

I have been informed that the information I provide will be kept confidential.

Signed:

Date:

Any queries about your participation in this project may be directed to the researcher

Abdulaziz Alqasir - Email: Abdulaziz.alqasir@live.edu.vu.au

If you have any queries or complaints about the way you have been treated, you may contact the Ethics Secretary, Victoria University Human Research Ethics Committee, Office for Research, Victoria University, PO Box 14428, Melbourne, VIC, 8001, email Researchethics@vu.edu.au or phone (03) 9919 4781 or 4461.

Appendix E:Survey Questionnaire

Question 1:

I have read and understood the information provided about this study. I am happy to volunteer as a participant in this study.

- ○ Yes (1)
- ○ No (2)

Skip To: End of Survey If Cultural Beliefs and Mental Health among Arab Muslims in Australia Dear participants, Greetings!... = No

End of Block: Section1 Introduction

Start of Block: Section2 General Demographics

Q2.1 In this section, we ask basic demographic questions (eg., gender, age, cultural background) about you.

Q2.2 What is your gender?

- ○ Male (1)
- ○ Female (2)
- ○ Non-binary sex (3)

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*

Q2.3 How old are you? (years)

_____

Page Break

Q2.4 Were you born in Australia?

- Yes (1)
- No (please specify which country) (2) _____

Skip To: Q2.6 If Were you born in Australia? = Yes

Page Break

Q2.5 How many years do you live in Australia?

_____

Page Break

Q2.6 What is the birth country of your parents?

- Father (2) _____
- Mother (3) _____

Page Break

Q2.7 How do you describe your original nationality (if born in Australia, select your parent's nationality)?

- ○ Algeria (1)
- ○ Bahrain (2)
- ○ UAE (3)
- ○ Saudi Arabia (4)
- ○ Morocco (5)
- ○ Oman (6)
- ○ Palestine (7)
- ○ Kuwait (8)
- ○ Libya (9)
- ○ Djibouti (10)
- ○ Yemen (11)
- ○ Somalia (12)
- ○ Sudan (13)
- ○ Syria (14)
- ○ Tunisia (15)
- ○ Lebanon (16)
- ○ Mauritania (17)
- ○ Egypt (18)
- ○ Iraq (19)
- ○ Jordan (20)
- ○ Other (Specify) (21) _____

Page Break

Q2.8 What is your marital status?

- Single (1)
- De facto (2)
- Married (8)
- Separated (9)
- Divorced (12)
- Widowed (13)

Page Break

Q2.9 What is the highest level of education achieved?

- Primary School (1)
- Secondary School Year 10 or equivalent (14)
- High School Certificate (15)
- Voccational education, TAFE, or Community College (16)
- Some university undergraduate education (17)
- University undergraduate degree (18)
- Postgraduate diploma (19)
- University postgraduate degree (20)

Page Break

Q2.10 Which category best describes your income (in Australian dollars AUD)? (including scholarships, allowances, and government support)

- ○ $3,000 or more per week ($156,000 or more per year) (1)
- ○ $2,000 - $2,999 per week ($104,000 to $155,999 per year) (30)
- ○ $1,500 - $1,999 per week ($78,000 to $103,999 per year) (32)
- ○ $1,000 - $1,499 per week ($52,000 to $77,999 per year) (34)
- ○ $400-$999 per week ($20,800 to $51,999 per year) (36)
- ○ $150- $399 per week ($7,800 to $20,799 per year) (42)
- ○ $1 to $149 per week ($1 to $7,799 per year) (43)
- ○ No income (44)

Page Break

Q2.11 In the past 12 months, how often did you see a medical doctor (GP) for a consultation?

- ○ Never (1)
- ○ 1 or 2 times (2)
- ○ 3 to 6 times (3)
- ○ more than 6 times (4)

Carry Forward All Choices - Displayed & Hidden from "In the past 12 months, how often did you see a medical doctor (GP) for a consultation?"

Q2.12 In the past 12 months, have you sought help from a psychologist or a counsellor?

- ○ Never (1)
- ○ 1 or 2 times (2)
- ○ 3 to 6 times (3)
- ○ more than 6 times (4)

Page Break

Q2.13 What is your employment status?

- ○ full-time worker (1)
- ○ part-time worker (6)
- ○ between jobs/unemployed (7)
- ○ retired (11)
- ○ full-time student (12)
- ○ I do not work and not looking for a job (8)

Skip To: Q2.15 If What is your employment status? = retired

Skip To: Q2.15 If What is your employment status? = full-time student

Skip To: Q2.15 If What is your employment status? = I do not work and not looking for a job

Page Break

Q2.14 Which of the following best describes your occupation?

- ○ Unemployed or between jobs (3)
- ○ Student (2)
- ○ Retail, hospitality or service worker (5)
- ○ Office employee / support staff (4)
- ○ Professional / administrator (1)
- ○ Business owner (6)
- ○ House maker (7)
- ○ Other(specify) (8) _____

Page Break

Q2.15 How likely are you to consult with a General Practitioner (medical doctor) if you have mental health issues?

- ○ Very unlikely (1)
- ○ unlikely (2)
- ○ likely (3)
- ○ Very likely (4)

Page Break

Q2.16 How likely are you to seek help from a pharmacist if you have mental health issues?

- ○ Very unlikely (6)
- ○ unlikely (7)
- ○ likely (8)
- ○ Very likely (9)

Page Break

Carry Forward All Choices - Displayed & Hidden from "How likely are you to seek help from a pharmacist if you have mental health issues?"

Q2.17 How likely are you to speak to a psychologist if you have mental health issues?

- ○ Very unlikely (1)
- ○ unlikely (2)
- ○ likely (3)
- ○ Very likely (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "How likely are you to speak to a psychologist if you have mental health issues?"

Q2.18 How likely are you to seek help from a social worker if you have mental health issues?

- Very unlikely (1)
- unlikely (2)
- likely (3)
- Very likely (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "How likely are you to seek help from a social worker if you have mental health issues?"

Q2.19 How likely are you to seek help from a Sheik (to obtain a Ruqia) if you have mental health issues?

- Very unlikely (1)
- unlikely (2)
- likely (3)
- Very likely (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "How likely are you to seek help from a Sheik (to obtain a Ruqia) if you have mental health issues?"

Q2.20 How likely are you to seek help from a family member if you have mental health issues?

- Very unlikely (1)
- unlikely (2)
- likely (3)
- Very likely (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "How likely are you to seek help from a family member if you have mental health issues?"

Q2.21 How likely are you to seek help from a close friend if you have mental health issues?

- Very unlikely (1)
- unlikely (2)
- likely (3)
- Very likely (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "How likely are you to seek help from a close friend if you have mental health issues?"

Q2.22 How likely will you pray to Allah for help if you have mental health issues?

- Very unlikely (1)
- unlikely (2)
- likely (3)
- Very likely (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "How likely will you pray to Allah for help if you have mental health issues?"

Q2.23 If you have mental health issues, how likely are you NOT to speak to anyone and to deal with them yourself?

- ○ Very unlikely (1)
- ○ unlikely (2)
- ○ likely (3)
- ○ Very likely (4)

Page Break

Q2.24 Who would you consider speaking to if you need help with mental health/psychological counselling? Indicate your top 3 preferences using 1 to 3.

_____ GP (1)
_____ Pharmacist (2)
_____ Psychologist (3)
_____ Social Worker (4)
_____ Pray to Allah (5)
_____ Shiek (6)
_____ Family member (7)

End of Block: Section2 General Demographics

Start of Block: Section3 Stephenson Multigroup Acculturation Scale (SMAS)

Q3.1 Please select one answer that describes you best regarding your language use and your social interaction.

Q3.2 I know how to speak my native language.

- Definitely false (1)
- Probably false (2)
- Probably true (3)
- Definitely true (4)

Page Break

Q3.3 I like to speak my native language.

- Definitely false (1)
- Probably false (2)
- Probably true (3)
- Definitely true (4)

Page Break

Q3.4 I speak my native language with my friends and acquaintances from my country of origin.

- Definitely false (1)
- Probably false (2)
- Probably true (3)
- Definitely true (4)

Page Break

Q3.5 I know how to read and write in my native language.

- Definitely false (1)
- Probably false (2)
- Probably true (3)
- Definitely true (4)

Page Break

Q3.6 I feel comfortable speaking my native language.

- Definitely false (1)
- Probably false (2)
- Probably true (3)
- Definitely true (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "I feel comfortable speaking my native language."

Q3.7 I speak my native language at home.

- Definitely false (1)
- Probably false (2)
- Probably true (3)
- Definitely true (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "I speak my native language at home."

Q3.8 I like to listen to music of my ethnic group.

- Definitely false (1)
- Probably false (2)
- Probably true (3)
- Definitely true (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "I like to listen to music of my ethnic group."

Q3.9 I speak my native language with my spouse or partner.

- Definitely false (1)
- Probably false (2)
- Probably true (3)
- Definitely true (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "I speak my native language with my spouse or partner."

Q3.10 When I pray, I use my native language.

- Definitely false (1)
- Probably false (2)
- Probably true (3)
- Definitely true (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "When I pray, I use my native language."

Q3.11 I have never learned to speak the language of my native country.

- Definitely false (1)
- Probably false (2)
- Probably true (3)
- Definitely true (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "I have never learned to speak the language of my native country."

Q3.12 I am informed about current affairs in my native country.

- Definitely false (1)
- Probably false (2)
- Probably true (3)
- Definitely true (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "I am informed about current affairs in my native country."

Q3.13 I attend social functions with people from my native country.

- Definitely false (1)
- Probably false (2)
- Probably true (3)
- Definitely true (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "I attend social functions with people from my native country."

Q3.14 I am familiar with the history of my native country.

- Definitely false (1)
- Probably false (2)
- Probably true (3)
- Definitely true (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "I am familiar with the history of my native country."

Q3.15 I think in my native language.

- Definitely false (1)
- Probably false (2)
- Probably true (3)
- Definitely true (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "I think in my native language."

Q3.16 I stay in close contact with family members and relatives in my native country.

- Definitely false (1)
- Probably false (2)
- Probably true (3)
- Definitely true (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "I eat traditional foods from my native culture."

Q3.17 I regularly read magazines of my ethnic group.

- Definitely false (1)
- Probably false (2)
- Probably true (3)
- Definitely true (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "I stay in close contact with family members and relatives in my native country."

Q3.18 I eat traditional foods from my native culture.

- Definitely false (1)
- Probably false (2)
- Probably true (3)
- Definitely true (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "I eat traditional foods from my native culture."

Q3.19 I attend social functions with Australian people.

- Definitely false (1)
- Probably false (2)
- Probably true (3)
- Definitely true (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "I attend social functions with Australian people."

Q3.20 I have many Australian acquaintances.

- Definitely false (1)
- Probably false (2)
- Probably true (3)
- Definitely true (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "I have many Australian acquaintances."

Q3.21 I speak English at home.

- Definitely false (1)
- Probably false (2)
- Probably true (3)
- Definitely true (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "I speak English at home."

Q3.22 I know how to prepare Australian foods.

- Definitely false (1)
- Probably false (2)
- Probably true (3)
- Definitely true (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "I know how to prepare Australian foods."

Q3.23 I am familiar with important people in Australian history.

- Definitely false (1)
- Probably false (2)
- Probably true (3)
- Definitely true (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "I am familiar with important people in Australian history."

Q3.24 I think in English.

- Definitely false (1)
- Probably false (2)
- Probably true (3)
- Definitely true (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "I think in English."

Q3.25 I speak English with my spouse or partner.

- Definitely false (1)
- Probably false (2)
- Probably true (3)
- Definitely true (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "I feel accepted by Australians."

Q3.26 I feel totally comfortable with Australian people.

- Definitely false (1)
- Probably false (2)
- Probably true (3)
- Definitely true (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "I speak English with my spouse or partner."

Q3.27 I understand English, but I'm not fluent in English.

- Definitely false (1)
- Probably false (2)
- Probably true (3)
- Definitely true (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "I understand English, but I'm not fluent in English."

Q3.28 I am informed about current affairs in Australia.

- Definitely false (1)
- Probably false (2)
- Probably true (3)
- Definitely true (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "I am informed about current affairs in Australia."

Q3.29 I like to eat Australian foods.

- Definitely false (1)
- Probably false (2)
- Probably true (3)
- Definitely true (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "I like to eat Australian foods."

Q3.30 I regularly read a western newspaper.

- Definitely false (1)
- Probably false (2)
- Probably true (3)
- Definitely true (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "I regularly read a western newspaper."

Q3.31 I feel comfortable speaking English.

- Definitely false (1)
- Probably false (2)
- Probably true (3)
- Definitely true (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "I feel comfortable speaking English."

Q3.32 I feel at home in Australia.

- Definitely false (1)
- Probably false (2)
- Probably true (3)
- Definitely true (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "I feel at home in Australia."

Q3.33 I feel accepted by Australians.

- Definitely false (1)
- Probably false (2)
- Probably true (3)
- Definitely true (4)

End of Block: Section3 Stephenson Multigroup Acculturation Scale (SMAS)

Start of Block: Section4 Muslim Religiosity Scale

Q4.1 Please read each statement and choose the answer that best describes you.

Q4.2 How often do you attend group religious services for worship and prayer at Mosque or in small group at work or in your home (obligatory prayers) (Fard)?

- Never (1)
- Several times/month (2)
- Several times/week (3)
- 1-4 times a day (4)
- Five times a day (5)

Page Break

Q4.3 How often do you pray alone in private (Nawafl)?

- Never (1)
- Rarely (2)
- Occasionally (3)
- Often (4)
- Very often (5)

Page Break

Q4.4 Are you regular in prayer or do you sometimes sum 2 or more of your obligatory prayers (Fard) with each other or skip?

- Always skip prayers (1)
- Often skip (2)
- Sometimes skip (3)
- Occasionally skip (4)
- Never skip (Regular) (5)

Page Break

Q4.5 How often do you read or recite the Qur'an or other religious literature (magazines, papers, books) in your home?

- Not at all or rarely (1)
- During Ramadan only (2)
- Occasionally, besides Ramadan, but less than several times per week (3)
- Occasionally, besides Ramadan, but less than several times per week (4)
- Once a day or more (5)

Page Break

Q4.6 How often do you listen to or watch religious programs on radio or TV?

- Not at all or rarely (1)
- During Ramadan only (2)
- Occasionally, besides Ramadan, but less than several times per week (3)
- Several times/wk (4)
- Once a day or more (5)

Page Break

Q4.7 Do you give Zakat to poor each year?

- Never (1)
- Rarely (2)
- Occasionally (3)
- Often (4)
- Very often (5)

Page Break

Carry Forward All Choices - Displayed & Hidden from "Do you give Zakat to poor each year?"

Q4.8 Do you give money to poor as a free gift (not obligatory like Zakat)?

- Never (1)
- Rarely (2)
- Occasionally (3)
- Often (4)
- Very often (5)

Page Break

Q4.9 How often do you fast from food/water (Sawm)?

- Never (1)
- During Ramadan (part of month) (2)
- During Ramadan (all of month) (3)
- During Ramadan (all of month) ? occasionally other times (Nawafl) (4)
- During Ramadan (all of month) ? many other times (Nawafl) (5)

Page Break

Q4.10 How often do you make Hajj?

- Never (1)
- Once (2)
- Twice (3)
- Several times, but not yearly (4)
- Yearly (5)

Page Break

Q4.11 How often do you make Umrah?

- Never (1)
- Once (2)
- Several times (3)
- Every year (4)
- Several times per year (5)

Page Break

Q4.12 In my life, I experience the presence of Allah/God

- Definitely not true (1)
- Tends not to be true (2)
- Unsure (3)
- Tends to be true (4)
- Definitely true of me (5)

Page Break

Carry Forward All Choices - Displayed & Hidden from "In my life, I experience the presence of Allah/God"

Q4.13 My religious beliefs are what really lie behind my whole approach to life

- Definitely not true (1)
- Tends not to be true (2)
- Unsure (3)
- Tends to be true (4)
- Definitely true of me (5)

Page Break

Carry Forward All Choices - Displayed & Hidden from "My religious beliefs are what really lie behind my whole approach to life"

Q4.14 I try hard to carry my religion over into all my other dealings in life

- Definitely not true (1)
- Tends not to be true (2)
- Unsure (3)
- Tends to be true (4)
- Definitely true of me (5)

End of Block: Section4 Muslim Religiosity Scale

Start of Block: Section5 Attitudes Toward Seeking Formal Mental Health Services (ATSFMHS)

Q5.1 Below are some statements concerning your perception toward seeking formal mental health or psychological services. Please carefully read each statement and indicate whether you Strongly Agree, Agree, Disagree, or Strongly Disagree with each one. I am interested in your honest perceptions, beliefs, and opinions regarding mental health and counselling services.

Please select one response for each statement.

For Example: if you tend to *agree* with such a statement, mark your answer as: 1. __Strongly Agree 2. _**X**_Agree 3. __Disagree 4. __Strongly Disagree

Q5.2 If I believed I was having a psychological or mental health problem, the first thing I would do would be to seek psychological or mental health counselling.

- Strongly Agree (1)
- Agree (2)
- Disagree (3)
- Strongly Disagree (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "If I believed I was having a psychological or mental health problem, the first thing I would do would be to seek psychological or mental health counselling."

Q5.3 A person with strong faith (IMAN) an get rid of a mental health or psychological problem without the need of professional help.

- Strongly Agree (1)
- Agree (2)
- Disagree (3)
- Strongly Disagree (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "A person with strong faith (IMAN) an get rid of a mental health or psychological problem without the need of professional help."

Q5.4 A person would feel uncomfortable seeking mental health or psychological services because of others' negative opinions about mental health treatment

- Strongly Agree (1)
- Agree (2)
- Disagree (3)
- Strongly Disagree (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "A person would feel uncomfortable seeking mental health or psychological services because of others' negative opinions about mental health treatment"

Q5.5 Discussing mental health or psychological concerns with a mental health professional is a poor way to solve mental health or psychological difficulties.

- Strongly Agree (1)
- Agree (2)
- Disagree (3)
- Strongly Disagree (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "Discussing mental health or psychological concerns with a mental health professional is a poor way to solve mental health or psychological difficulties."

Q5.6 If I believed I need professional mental health or psychological counselling, I would get it no matter what people say or think.

- Strongly Agree (1)
- Agree (2)
- Disagree (3)
- Strongly Disagree (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "If I believed I need professional mental health or psychological counselling, I would get it no matter what people say or think."

Q5.7 I would feel embarrassed to tell others that I used psychological or mental health services.

- Strongly Agree (1)
- Agree (2)
- Disagree (3)
- Strongly Disagree (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "I would feel embarrassed to tell others that I used psychological or mental health services."

Q5.8 I would seek professional counselling services only if I experienced psychological problem for a long period of time.

- ○ Strongly Agree (1)
- ○ Agree (2)
- ○ Disagree (3)
- ○ Strongly Disagree (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "I would seek professional counselling services only if I experienced psychological problem for a long period of time."

Q5.9 If I decide to seek psychological or mental health services, I am confident they would be helpful.

- ○ Strongly Agree (1)
- ○ Agree (2)
- ○ Disagree (3)
- ○ Strongly Disagree (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "If I decide to seek psychological or mental health services, I am confident they would be helpful."

Q5.10 I might need to contact professional mental health or psychological services in the future.

- Strongly Agree (1)
- Agree (2)
- Disagree (3)
- Strongly Disagree (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "I might need to contact professional mental health or psychological services in the future."

Q5.11 Most mental health and psychological problem can be solved by individual himself/herself without the assistance of professionals.

- Strongly Agree (1)
- Agree (2)
- Disagree (3)
- Strongly Disagree (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "Most mental health and psychological problem can be solved by individual himself/herself without the assistance of professionals."

Q5.12 Using mental health or psychological services is more difficult than using general medical service because of the shame (societal stigma).

- Strongly Agree (1)
- Agree (2)
- Disagree (3)
- Strongly Disagree (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "Using mental health or psychological services is more difficult than using general medical service because of the shame (societal stigma)."

Q5.13 Considering the high cost of service, I would NOT seek professional help even if I needed it.

- Strongly Agree (1)
- Agree (2)
- Disagree (3)
- Strongly Disagree (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "Considering the high cost of service, I would NOT seek professional help even if I needed it."

Q5.14 Seeking psychological and mental health services should be the last resort after trying all other options (e.g. self-help, family or friend counselling).

- ○ Strongly Agree (1)
- ○ Agree (2)
- ○ Disagree (3)
- ○ Strongly Disagree (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "Seeking psychological and mental health services should be the last resort after trying all other options (e.g. self-help, family or friend counselling)."

Q5.15 I would be concerned about what others might think or say if I use professional mental health services.

- ○ Strongly Agree (1)
- ○ Agree (2)
- ○ Disagree (3)
- ○ Strongly Disagree (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "I would be concerned about what others might think or say if I use professional mental health services."

Q5.16 I would rather be advised by a close relative or friend than by a mental health professional, even for serious psychological problems.

- Strongly Agree (1)
- Agree (2)
- Disagree (3)
- Strongly Disagree (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "I would rather be advised by a close relative or friend than by a mental health professional, even for serious psychological problems."

Q5.17 I would rather live with certain mental health or psychological problems than going through the process of seeking professional help.

- Strongly Agree (1)
- Agree (2)
- Disagree (3)
- Strongly Disagree (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "I would rather live with certain mental health or psychological problems than going through the process of seeking professional help."

Q5.18 Mental health and psychological difficulties, like many things, tend to go away over time.

- Strongly Agree (1)
- Agree (2)
- Disagree (3)
- Strongly Disagree (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "Mental health and psychological difficulties, like many things, tend to go away over time."

Q5.19 To avoid social stigma, I prefer referring to my family member with a mental illness or myself as being demonically possessed, rather than acknowledging them as someone with a mental health condition

- Strongly Agree (1)
- Agree (2)
- Disagree (3)
- Strongly Disagree (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "Mental health and psychological difficulties, like many things, tend to go away over time."

Q5.20 People would think negatively about individual who uses mental health or psychological services.

- Strongly Agree (1)
- Agree (2)
- Disagree (3)
- Strongly Disagree (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "People would think negatively about individual who uses mental health or psychological services."

Q5.21 If I decide to seek mental health or psychological help, I would rather contact Arab or Muslim professionals than professionals from other cultures or groups.

- Strongly Agree (1)
- Agree (2)
- Disagree (3)
- Strongly Disagree (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "If I decide to seek mental health or psychological help, I would rather contact Arab or Muslim professionals than professionals from other cultures or groups."

Q5.22 Family members should have the final say (decision) whether or not individual seeks professional help for psychological or mental health problem.

- ○ Strongly Agree (1)
- ○ Agree (2)
- ○ Disagree (3)
- ○ Strongly Disagree (4)

End of Block: Section5 Attitudes Toward Seeking Formal Mental Health Services (ATSFMHS)

Start of Block: Section6 (CBMHP)

Q6.1 Below are statements regarding your belief about mental illness or psychological problems, their causative factors and treatments.

Please carefully read each statement and select the response that best describes **how true each statement is for you**. It is important that you provide a response to each item. Please select only one response for each statement.

For Example: if you tend to believe that such a statement may be true, mark your answer as:

1. __ False 2. __ Probably false 3. _X_Probably true 4. __ True

---

Q6.2 Mental health or psychological problems can be caused by biological factors (e.g. genetic illness inherited from parents or grandparents).

- ○ False (1)
- ○ Probably false (2)
- ○ Probably true (3)
- ○ True (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "Mental health or psychological problems can be caused by biological factors (e.g. genetic illness inherited from parents or grandparents)."

Q6.3 Mental health or psychological problems can be caused by environmental factors (e.g. social stress, war experience, etc).

- False (1)
- Probably false (2)
- Probably true (3)
- True (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "Mental health or psychological problems can be caused by environmental factors (e.g. social stress, war experience, etc)."

Q6.4 Mental health or psychological problems can be caused by “Aieen” (evil eye).

- False (1)
- Probably false (2)
- Probably true (3)
- True (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "Mental health or psychological problems can be caused by “Aieen” (evil eye)."

Q6.5 Mental health or psychological problems can be caused by “Seher” (magic).

- False (1)
- Probably false (2)
- Probably true (3)
- True (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "Mental health or psychological problems can be caused by “Seher” (magic)."

Q6.6 Mental health or psychological problems can be caused by “Jinn” (demons).

- False (1)
- Probably false (2)
- Probably true (3)
- True (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "Mental health or psychological problems can be caused by “Jinn” (demons)."

Q6.7 Jinn (demons) can possess a person's body, control it, and speak through the mouth of a human being

- False (1)
- Probably false (2)
- Probably true (3)
- True (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "Jinn (demons) can possess a person's body, control it, and speak through the mouth of a human being"

Q6.8 Mental health or psychological problems can be treated using professional mental health or psychological counselling services.

- False (1)
- Probably false (2)
- Probably true (3)
- True (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "Mental health or psychological problems can be treated using professional mental health or psychological counselling services."

Q6.9 Mental health or psychological problems can be treated using traditional prescribed medicines (e.g. black seed)

- False (1)
- Probably false (2)
- Probably true (3)
- True (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "Mental health or psychological problems can be treated using traditional prescribed medicines (e.g. black seed)"

Q6.10 Mental health or psychological problems can be treated using “Ruqia” (Quranic Recitation).

- False (1)
- Probably false (2)
- Probably true (3)
- True (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "Mental health or psychological problems can be treated using "Ruqia" (Quranic Recitation)."

Q6.11 There are certain mental health or psychological problems that might NOT be treated using mental health or psychological treatment; rather they require "Ruqia" (Quranic Recitation).

- False (1)
- Probably false (2)
- Probably true (3)
- True (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "There are certain mental health or psychological problems that might NOT be treated using mental health or psychological treatment; rather they require "Ruqia" (Quranic Recitation)."

Q6.12 Many physical illnesses are likely to be a result of experiencing psychological distress.

- False (1)
- Probably false (2)
- Probably true (3)
- True (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "Many physical illnesses are likely to be a result of experiencing psychological distress."

Q6.13 Mental health professionals often experience more psychological problems than their patients.

- ○ False (1)
- ○ Probably false (2)
- ○ Probably true (3)
- ○ True (4)

End of Block: Section6 (CBMHP)

Start of Block: Section7 Knowledge and Familiarity with Formal Mental Health Services (KFFMHS)

Q7.1 Below are statements about your knowledge and familiarity with mental health and psychological disorders, types of formal services, and mental health professional providers. Could you tell us how much you know about these topics?

Q7.2 How much are you familiar with:

The type of problems that might require professional mental health or psychological intervention (e.g. mental instability, an abnormal fear or feeling, a depressed mood, etc)?

- ○ Not at all (1)
- ○ Very little (2)
- ○ Somewhat (3)
- ○ Very familiar (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "How much are you familiar with:The type of problems that might require professional mental health or psychological intervention (e.g. mental instability, an abnormal fear or feeling, a depressed mood, etc)? "

Q7.3 How much are you familiar with:

The availability of mental health and psychological services in your community (e.g. location, phone #, type of care)?

- Not at all (1)
- Very little (2)
- Somewhat (3)
- Very familiar (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "How much are you familiar with:The availability of mental health and psychological services in your community (e.g. location, phone #, type of care)?"

Q7.4 How much are you familiar with:

The psychiatrist's role in mental health and psychological counselling settings?

- Not at all (1)
- Very little (2)
- Somewhat (3)
- Very familiar (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "How much are you familiar with:The psychiatrist's role in mental health and psychological counselling settings?"

Q7.5 The psychologist's role in mental health and psychological counselling settings?

- Not at all (1)
- Very little (2)
- Somewhat (3)
- Very familiar (4)

Page Break

Q7.6 How much are you familiar with:

The clinical social worker's role in mental health and psychological counselling settings?

- Nothing (1)
- Very little (2)
- Somewhat (3)
- A great deal (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "How much are you familiar with:The clinical social worker's role in mental health and psychological counselling settings?"

Q7.7 How much do you **know** about:

Classified medical/behavioural mental health or psychological disorders (e.g. depression, anxiety, schizophrenia, etc.)?

- Nothing (1)
- Very little (2)
- Somewhat (3)
- A great deal (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "Mental health professionals often experience more psychological problems than their patients."

Q7.8 What is your view about the following statement?

A person with schizophrenia (Fosam) has two or more separate personalities. These identities control a person's behaviour at different times.

- False (1)
- Probably false (2)
- Probably true (3)
- True (4)

Page Break

Q7.9 How much do you **know** about:

The type of treatment models/clinical interventions (e.g. psychotherapy) used in professional mental health clinics?

- ○ Nothing (1)
- ○ Very little (2)
- ○ Somewhat (3)
- ○ A great deal (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "How much do you know about: The type of treatment models/clinical interventions (e.g. psychotherapy) used in professional mental health clinics?"

Q7.10 How much do you **know** about:

How to get professional mental health or psychological counselling services when needed (e.g. procedures and requirements)?

- ○ Nothing (1)
- ○ Very little (2)
- ○ Somewhat (3)
- ○ A great deal (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "How much do you know about: How to get professional mental health or psychological counselling services when needed (e.g. procedures and requirements)?"

Q7.11 How much do you **know** about:

Common drug treatments prescribed to individuals with mental health or psychological problem?

- ○ Nothing (1)
- ○ Very little (2)
- ○ Somewhat (3)
- ○ A great deal (4)

Page Break

Carry Forward All Choices - Displayed & Hidden from "How much do you know about: Common drug treatments prescribed to individuals with mental health or psychological problem?"

Q7.12 How much do you **know** about:

The Arab and Muslim professionals who practice mental health or psychological counselling within your local community?

- ○ Nothing (1)
- ○ Very little (2)
- ○ Somewhat (3)
- ○ A great deal (4)

Page Break

Q7.13 How much do you **know** about:

Your eligibility for mental health care under medicare and your health insurance plan?

- ○ Nothing (5)
- ○ Very Little (6)
- ○ Some (7)
- ○ A great deal (8)

End of Block: Section7 Knowledge and Familiarity with Formal Mental Health Services (KFFMHS)

Start of Block: Section 8 Ethnic Microagression (EMA) Scale

Q8.1 This section will describe the events or situations of subtle discrimination you may encounter in everyday life. Please select the answer that describes your personal experience most accurately.

First, we will ask how frequently you experienced these events or situations. We would like you to report how often you have experienced the described event using a 6-point scale ranging from 0=Never, 1=Once a year (rarely), 2= 3-4 times a year (Sometimes), 3= Once a month (Somewhat frequently), 4=Once a week (Frequently), and 5=Almost every day (All the time).

Then, the same events will be presented to ask you about your reactions.

Q8.2 The following statements describe personal experiences of subtle discrimination you may encounter. How frequently do you experience events described bellow?

	Never (1)	Once a year (rarely) (2)	3–4 time a year (sometimes) (3)	Once a month (Somewhat frequently) (4)	Once a week (frequently) (10)	Almost everyday (all the time) (6)
1. Someone tells me racism does not exist any more. (1)	○	○	○	○	○	○
2. Someone tells you that no one discriminates against your ethnic/racial group. (13)	○	○	○	○	○	○
3. Someone tells you that you are being overly sensitive about ethnic/racial matters. (14)	○	○	○	○	○	○
4. You are asked ‘‘where you are really from?" (15)	○	○	○	○	○	○

5. Someone asked you if all your friends are of your same ethnical/racial group. (16)	○	○	○	○	○	○
6. You are asked ‘‘what you are’’ (17)	○	○	○	○	○	○
7. You are asked ‘‘where were you born?’’ (18)	○	○	○	○	○	○
8. Someone you do not know assumes you are a bad student. (19)	○	○	○	○	○	○
9. You are mistaken as a service worker (cleaner, domestic worker, delivery person, etc.) (20)	○	○	○	○	○	○

10. Someone tells you that you are too loud and should talk less. (21)	○	○	○	○	○	○
11. You are ignored at a shop counter as attention is given to a customer (of a different ethnic group from you) behind you. (22)	○	○	○	○	○	○
12. At a restaurant, you notice that a group of people (of a different ethnic group from you) who came after you were served before you. (25)	○	○	○	○	○	○

Q8.3 Please tell us how upsetting the events described were.

	This event made me feel good (1)	It did not bother me. (2)	It bothered me slightly. (3)	It upset me. (4)	This event upset me extremely. (5)
1. Someone tells me racism does not exists any more. (1)	○	○	○	○	○
2. Someone tells you that no one discriminates against your ethnic/racial group. (2)	○	○	○	○	○
3. Someone tells you that you are being overly sensitive about ethnic/racial matters. (3)	○	○	○	○	○
4. You are asked ‘‘where you are really from?" (4)	○	○	○	○	○
5. Someone asked you if all your friends are of your same ethnical/racial group. (5)	○	○	○	○	○
6. You are asked ‘‘what you are'' (6)	○	○	○	○	○

7. You are asked ‘‘where were you born?’’ (7)	○	○	○	○	○
8. Someone you do not know assumes you are a bad student. (8)	○	○	○	○	○
9. You are mistaken as a service worker (cleaner, domestic worker, delivery person, etc.) (9)	○	○	○	○	○
10. Someone tells you that you are too loud and should talk less. (10)	○	○	○	○	○
11. You are ignored at a shop counter as attention is given to a customer (of a different ethnic group from you) behind you. (11)	○	○	○	○	○

12. At a restaurant, you notice that a group of people (of a different ethnic group from you) who came after you were served before you. (12)	○	○	○	○	○

End of Block: Section 8 Ethnic Microagression (EMA) Scale

Start of Block: Section9 DASS21 Depression, Anxiety and Stress Scale

Q9.1 Please read each statement and circle a number 0, 1, 2 or 3, which indicates how much the statement applied to you over the past week. There are no right or wrong answers. Do not spend too much time on any statement.

The rating scale is as follows: **Never (0)** - Did not apply to me at all; **Sometimes (1)** - Applied to me to

some degree, or some of the time; **Often (2) -** Applied to me to a considerable degree, or a good part of the time; **Almost always (3)** = Applied to me very much, or most of the time.

	Never (1)	Sometimes (2)	Often (3)	Almost always (4)
I found it hard to wind down (1)	○	○	○	○
I was aware of dryness of my mouth. (2)	○	○	○	○
I couldn't seem to experience any positive feeling at all (3)	○	○	○	○
I experienced breathing difficulty (eg, excessively rapid breathing, breathlessness in the absence of physical exertion) (4)	○	○	○	○
I found it difficult to work up the initiative to do things (5)	○	○	○	○
I tended to over-react to situations (6)	○	○	○	○
I experienced trembling (eg, in the hands) (7)	○	○	○	○

I felt that I was using a lot of nervous energy (8)	○	○	○	○
I was worried about situations in which I might panic and make a fool of myself (9)	○	○	○	○
I felt that I had nothing to look forward to (10)	○	○	○	○
I found myself getting agitated (11)	○	○	○	○
I found it difficult to relax (12)	○	○	○	○
I felt down-hearted and blue (13)	○	○	○	○
I was intolerant of anything that kept me from getting on with what I was doing (14)	○	○	○	○
I felt I was close to panic (15)	○	○	○	○
I was unable to become enthusiastic about anything (16)	○	○	○	○

I felt I wasn't worth much as a person (17)	○	○	○	○
I felt that I was rather touchy (18)	○	○	○	○
I was aware of the action of my heart in the absence of physicalexertion (eg, sense of heart rate increase, heart missing a beat) (19)	○	○	○	○
I felt scared without any good reason (20)	○	○	○	○
I felt that life was meaningless (21)	○	○	○	○

End of Block: Section9 DASS21 Depression, Anxiety and Stress Scale

Appendix F:Interview Guide

Below are the semi-structured interview questions that were asked of all 12 participants, along with explanations of how each question addresses one or more of the research questions.

1. "I want to ask you about mental health and mental disorders. I need to understand your personal views about these issues. In your opinion, what is mental health? What does it mean by good mental health? Could you elaborate on it? What does it mean by having a mental health issue? Could you give me an example?"

   This question aims to explore the participants' personal views on mental health and mental disorders. By asking for their definition of mental health and what it means to have good mental health, the researchers hope to gain insight into the participants' attitudes towards mental health. Additionally, by asking for an example of a mental health issue, the researcher can better understand the participants' understanding of mental disorders.

2. "In your opinion, what is a mental disorder? What do you think are the major causes of mental disorders? What types of mental disorders have you heard about?" (RQ1)

   This question aims to explore the participants' understanding of mental disorders. By asking for their definition of mental disorders and what they believe are the major causes, the researcher can gain insight into the participants' beliefs about the origins and nature of mental disorders. Additionally, by asking what types of mental disorders the participants have heard about, the researcher can identify which mental disorders are most prevalent in the participants' cultural context.

3. "What do you feel when you hear the word “mental disorders”? Is it positive or negative? If the answer is negative: Why is it negative? Could you give me an example?"

   This question aims to explore the participants' attitudes towards mental disorders. By asking how they feel when they hear the term "mental disorders," the researchers hope to gain insight into the participants' emotional responses to the topic. Additionally, by asking why their response is positive or negative, the researcher can identify the sources of stigma and negative attitudes towards mental disorders.

4. "Do you know of someone close to you who experienced a mental health issue? If yes, could you tell me about what it was? What did you feel when you discovered that the person was experiencing mental health problems? If no, what do you think is the probability of adults developing a mental health issue in their lifetime?"

   This question aims to explore the participants' personal experiences with mental health issues. By asking if they know someone who has experienced a mental health issue, the researcher can gain insight into how mental health issues are viewed and experienced within the participants' social networks. Additionally, by asking about their emotional response to learning about someone's mental health issue, the researcher can gain insight into the emotional impact of mental health issues on individuals and communities. Finally, by asking about the probability of adults developing a mental health issue, the researcher can gain insight into the participants' perceptions of mental health prevalence and their knowledge about mental health epidemiology.

5. “Have you seen a person with a mental disorder? If yes, what happened? What did you observe? What did you feel when you were looking at them? What were your thoughts about them?”

   This question aims to understand the participants' personal experiences with mental disorders. By asking whether they have seen someone with a mental disorder and what their observations, feelings, and thoughts were during that encounter, the researchers hope to gain insight into how the participants perceive and react to individuals with mental disorders. Additionally, by exploring the participants' personal experiences, the researcher can identify potential cultural factors that may influence their understanding and attitudes towards mental disorders.

6. “What is the best treatment for people with mental disorders, in your opinion?”

   This question aims to explore the participants' opinions on the most effective treatment for mental disorders. By asking for their personal views, the researchers hope to gain insight into the participants' beliefs about different types of treatments and their perceived effectiveness. Additionally, by understanding the participants' opinions on the best treatment, the researcher can identify potential cultural factors that may influence treatment preferences and access.

7. “Who should give treatments to people with a mental health condition?”

   This question aims to explore the participants' beliefs about who should provide treatment for mental disorders. By asking for their opinions on this topic, the researchers hope to gain insight into the participants' attitudes towards different types of mental health professionals and their perceived effectiveness. Additionally, by understanding the participants' views on who should provide treatment, the researcher

can identify potential cultural factors that may influence access to mental health services.

8. “In your view, what are the major causes of mental disorders? In traditional Arab Muslim culture?”

   This question aims to explore the participants' beliefs about the causes of mental disorders. By asking for their opinions on this topic, the researchers hope to gain insight into the participants' understanding of the origins and nature of mental disorders. Additionally, by exploring the participants' beliefs about the causes of mental disorders in traditional Arab Muslim culture, the researcher can identify potential cultural factors that may influence perceptions and attitudes towards mental health.

9. “Do you believe that treatment works for people with mental disorders? What types of treatments do you believe are useful to treat people with mental disorders? How should we give treatment to people with mental disorders? Could you name types of treatments of mental disorders you heard before? Which one do you think would be effective in treating patients? What is the best treatment for mental disorders in your view? Would you explain why you think this treatment would be the best?”

   This question aims to explore the participants' beliefs about the effectiveness of different types of treatments for mental disorders. By asking for their opinions on this topic, the researchers hope to gain insight into the participants' understanding of different treatment options and their perceived effectiveness. Additionally, by exploring the participants' beliefs about the best treatment for mental disorders, the

researcher can identify potential cultural factors that may influence treatment preferences and access.

10. “What does depression mean to you? What do you think is the best treatment for depression? What is an anxiety disorders? What’s the best way to treat people with anxiety? What is Schizophrenia? What do you think is the best way to treat people with schizophrenia? Have you heard about a bipolar disorder? Would you be able to tell me what your understanding of bipolar disorders? Have you heard about post-traumatic stress disorders (PTSD)? Could you please explain its symptoms?”
    The purpose of asking these questions is to understand the participants' knowledge and beliefs about various mental health disorders, including depression, anxiety disorders, schizophrenia, bipolar disorders, and post-traumatic stress disorders. Additionally, it seeks to explore the participants' opinions on the best ways to treat these disorders.

11. “Now I would like to think about the traditional Arab culture. In our Arab culture, we have a rich tradition of folk beliefs and of course, Islam which is the guiding principle for many. Do you think traditional healers may help treat mental disorders? Could you elaborate more why you think that way? If the answer is NO, OK, you don’t think it works because you don’t believe in it. But what about cultural practices that everyone does regardless. For example, many Arabs have an ornament in their home of the black eye to guard against evil eyes?”
    The purpose of this question is to explore the participants' beliefs about traditional healing practices in Arab culture and their effectiveness in treating mental disorders.

It also aims to investigate the participants' views on cultural practices and their potential impact on mental health.

12. “Now, I would like to discuss your view of the religious Do you think religious treatment work for Arab Muslims? Could you elaborate on why you think it works? Could you elaborate on why you think it won’t work? If the answer is YES, do you believe Islamic treatments are better suited for devout traditional Arab Muslims? If the answer is NO, do you believe religious treatment is better than no treatment for some very traditional Arab Muslims? If the answer is NO, can religious leaders play a role to encourage people to seek medical treatment for mental disorders? Should people with other faiths such as Armenians, Catholic Christians, and Jews use traditional treatment methods based on their religious practices? In your opinion, what role can Islamic religious leaders play to improve the mental health of Arab Muslims?”

    The purpose of this question is to examine the participants' opinions on the effectiveness of religious treatments for mental disorders, specifically among Arab Muslims. It seeks to explore the role of Islamic religious leaders in improving the mental health of Arab Muslims and the participants' views on the use of religious treatments versus medical treatments.

13. “I would like to ask you about your view on psychotherapy or psychological help provided by psychologists and counsellors. To what extent, do you think, psychotherapy would be helpful to treat mental health issues? Do you think this type of treatment approach works to treat Arab Muslim patients with mental disorders? Would you explain how psychotherapy can help or not help people with mental

disorders? What types of mental issues can be treated with psychotherapy in your opinion? What is your view on using psychotherapy with traditional or religious treatment? What role can religious leaders and traditional healers can play to promote mental health?"

The purpose of this question is to investigate the participants' views on psychotherapy and its potential effectiveness in treating mental health issues among Arab Muslims. It also aims to explore the participants' opinions on the use of psychotherapy in conjunction with traditional or religious treatments, as well as the potential role of religious leaders and traditional healers in promoting mental health.

14. "What should psychologists or counsellors do if their clients also want to access traditional healers/religious treatments?"

    The purpose of this question is to explore the participants' opinions on how psychologists and counsellors should handle clients who also seek traditional or religious treatments for mental health issues.

15. "Now I would like to ask your opinion about the best ways to provide mental health services to Arab Muslims. What is the best way to ensure Arab Muslim people who need help in mental health issues to get the best possible services?"

    The purpose of this question is to understand the participants' beliefs about the best ways to provide mental health services to Arab Muslims. It seeks to explore potential barriers to accessing mental health services and ways to ensure that those who need help can receive the best possible services.

Appendix G: Data Analysis Codes of the Qualitative Themes

Quotations	Codes	Sub-themes	Theme
Ahmed (35, Egypt): I believe that when a person has no ssues in his life and can live his life without any problems, that means he has good mental health."	- No issues in life - Live life without problems - Good mental health	Religious Practices and Mental Well-being	Good mental health
Dbean (30, Saudi Arabia): "You know if you have a good relationship with Allah, that would make you have good mental health and be satisfied with your life."	- Good relationship with Allah - Satisfied with life - Good mental health	Spiritual Relationship and Life Satisfaction	Good mental health
Najd (28, Saudi Arabia): "Actually, I never seen anyone who has a good relationship with God, and he is unhappy, even me when I feel depressed, I pray or read the Quran and that makes me calm and happier."	- Good relationship with God - Pray or read the Quran - Calm and happier	Religious Practices and Mental Well-being	Good mental health
Shema (40, F, Egypt): "A good attachment to Allah provides you good mental health. First thing that comes to my mind when I feel I am struggling with my life is praying and reading Quran, you do not know how it could help a person. Once I start praying and reading Quran, I found myself falling asleep safely and peacefully."	- Attachment to Allah - Praying and reading Quran - Safely and peacefully	Religious Practices and Mental Well-being	Good mental health
Ahmed (35, M, Egypt): "Allah Says in Quran 'whosoever not worship me properly and not listen to my orders, I will make him depressed and I will make his life hard'. So, it's obvious that sometimes people get depressed because of Allah is mad at them."	- Worship me properly - Depressed because Allah is mad - Life hard	Divine Retribution and Mental Health	Good mental health

Quotations	Codes	Sub-themes	Theme
Bader (32, M, Egypt): "I can recognise the person with mental disorders when he cannot control his action, has irrational thoughts, or cannot interact properly with others."	- Cannot control actions - Irrational thoughts - Cannot interact properly	Behavioural, Cognitive, and Social Indicators of Mental Health Issues	Mental Health Issue as a Problem in Behaviour, Thinking, and Interpersonal Interactions
Fahmy (53, M, Sudan): "I think mental disorders is when you have issues in emotions, thinking, and behaviour. Also, I think when you cannot maintain a good relationship with people that means you have a mental health issue."	Issues in emotions - Issues in thinking - Issues in behaviour - Cannot maintain good relationships	Emotional, Cognitive, Behavioural, and Social Indicators of Mental Health Issues	Mental Health Issue as a Problem in Behaviour, Thinking, and Interpersonal Interactions
Shema (40, M, Egypt): "Also, I think that non-believers such as atheists may have mental disorders. It is dangerous to be surrounded by like these people because they are not fear of God."	Non-believers may have mental disorders - Dangerous to be surrounded by non-believers - Not fear of God	Perception of Mental Health Issues Among Non-believers	Mental Health Issue as a Problem in Behaviour, Thinking, and Interpersonal Interactions

Quotations	Codes	Sub-themes	Theme
Aleaa (22, F, Sudan): "First, I think environmental factor is the most important factor that can cause mental disorders because when you lose one of your loved ones that would make you depressed, and when you have a tough time in your life that makes you stressed and anxious."	- Environmental factors - Loss of loved ones - Tough time in life	Environmental Influences on Mental Health	Natural and Supernatural Causes of Mental Disorders
Amal (23, F, Sudan): "I do not know if I am right, but I think almost all mental disorders come from the environment that you live in like your family, school, or neighbourhood."	- Influence of family, school, neighbourhood	Environmental Influences on Mental Health	Natural and Supernatural Causes of Mental Disorders
Ahmed (35, M, Egypt): "You know, I think environment and genes are the most important factors that may cause mental disorders for people."	- Environment and genes	Combined Environmental and Genetic Factors	Natural and Supernatural Causes of Mental Disorders
Asma (29, F, Saudi Arabia): "I think genes can make you have a mental disorder; I have seen some families where all the members are depressed or obsessive."	- Genetic factors - Family history of mental disorders	Genetic Influences on Mental Health	Natural and Supernatural Causes of Mental Disorders

Appendix H: Expanding the Analysis of the Selected Research Paradigm with Comparisons to Other Paradigms

The quest for new knowledge in the scientific field is facilitated by research paradigms, which enable researchers to make foundational assumptions about how the world operates (Creswell & Creswell, 2017). These paradigms, also referred to as worldviews, provide a philosophical orientation about the world and the nature of research that guides the researcher in a study (Creswell & Creswell, 2017, p. 35). In conducting a study like this one, the research paradigm plays a crucial role. It shapes the four integral aspects of the study - epistemology, ontology, methodology, and axiology. Appreciating these aspects of the research paradigm is essential, as they elucidate the underlying assumptions, beliefs, norms, and values embedded within each paradigm. This understanding aids in making informed decisions about the research approach, thereby ensuring that this study is embedded within a coherent philosophical framework (Kivunja & Kuyini, 2017).

Exploring mental disorders within the Arab Muslim culture necessitates a grasp of epistemology. Originating from the Greek words for 'knowledge' and 'study', epistemology guides researchers in understanding the realities they're investigating (Abdul Rehman & Alharthi, 2016) It sheds light on the essence of knowledge and its origin. For this study, epistemology directs focus towards how cultural influences bear upon mental disorders. It advocates for objective inquiries to decipher the relationship between religious culture, traditional beliefs, and Arab Muslims' perceptions of mental disorders (Kivunja & Kuyini, 2017).

Key questions include: "How is mental disorder knowledge constructed within Arab Muslim culture?" and "What is the relationship between the researcher and the community's understanding?" Addressing these aids in navigating the research terrain and uncovering areas yet unexplored. A central query is understanding the foundation of knowledge

regarding mental disorders within this cultural context, ensuring data authenticity and credible conclusions (Bernecker & Dretske, 2000; Kivunja & Kuyini, 2017). Researchers must also assess their relationship with their subject, considering personal biases and their influence on interpretations. Chosen methodologies and their implications on research outcomes must be evaluated (Creswell & Creswell, 2017).

Epistemology seeks the truth, prompting researchers to reflect on its objectivity, especially within the Arab Muslim framework. Addressing this helps reduce biases and enhances research precision (Creswell & Creswell, 2017). For this thesis, epistemology serves as a guiding force in exploring mental disorders within the Arab Muslim context.

Ontology, operates as an essential philosophical branch in research, explores the nature of existence, reality, and truth. In examining mental disorders within Arab Muslim culture, ontology helps decipher core world beliefs (Kivunja & Kuyini, 2017). It frames researchers' perspectives on reality and the type of knowledge that can stem from it. Grasping ontology is essential in pinpointing the research problem, significance, and design concerning mental health views in Arab Muslim culture. It aids in attributing meaning to data, influencing the interpretation of cultural and religious effects on mental disorder perceptions (Smith, 2012).

While some equate ontology with metaphysics, which explores reality's ultimate nature, ontology in this context answers vital questions about reality's nature. Questions like, "Is reality independent or shaped by personal cognition?" guide the research direction. Such inquiries lead to insights, for example, the influence of cultural and religious norms on Arab Muslim mental health perceptions (Kivunja & Kuyini, 2017).

Ontology also unravels the dynamics between entities and their environment, aiding researchers in understanding variable interconnections and their relationship with the world.

In the context of Arab Muslims' mental disorder perceptions, questions might include, "How do cultural and religious factors correlate with the broader societal context?" Answering these deepens understanding of studied phenomena, offering a richer world view (Kivunja & Kuyini, 2017).

Ontology isn't a fixed truth but a subjective world interpretation. Various researchers might have different ontological stances, influencing their data interpretation. However, recognizing one's ontological position can guide research design, data collection, and interpretation, minimizing potential misinterpretations (Park et al., 2020). Ontology's role in research is pivotal. It provides a lens for understanding existence and formulating study-centric philosophical propositions. Being aware of one's ontological stance ensures research is grounded, enhancing its reliability and validity.

Methodology outlines the approaches, strategies, and procedures guiding research, encompassing everything from framing research questions to making recommendations. It's the research's structural core, creating a blueprint to tackle the research problem. In the study of religious culture and traditional beliefs influencing Arab Muslims' mental disorder understanding, the methodology defines the journey through this intricate issue (Creswell & Creswell, 2017).

Choosing the right methodology hinges on determining the best strategy for data collection and understanding to enhance current knowledge (Kivunja & Kuyini, 2017). This choice can steer the research towards qualitative methods like interviews or quantitative approaches like surveys. The methodology influences study design, participant selection, and data analysis methods. In this thesis context, it determines the exploration of religious and cultural impacts on Arab Muslims' mental disorder perceptions. Keeves (1997) sees methodology as encompassing research design, tools, participants, and data analysis, serving

as the research's guide. Meanwhile, Craig (1996) emphasises structured methodologies for effective problem-solving. For this thesis, a clear methodology is essential to systematically and rigorously analyse the influence of religious culture and traditional beliefs on Arab Muslims' understanding of mental disorders.

Axiology, a philosophical branch, delves into human values and their relevance. In research, axiology ensures ethical considerations, guiding what is deemed right or wrong (Kivunja & Kuyini, 2017; NHMRC, 2007). For this thesis on religious culture and traditional beliefs impacting Arab Muslims' mental disorder perception, axiology ensures ethical adherence. A researcher's ethical stance is essential. They must honour participants' values and rights, asking: What values drive the research? How are participants' rights upheld? What moral and cultural issues need addressing, and how? How can participant trust be earned? How can potential risks be mitigated? (Kivunja & Kuyini, 2017).

A deep axiological understanding is vital to ensure research integrity. Participant rights, like privacy and informed consent, are paramount. Culturally sensitive issues must be addressed respectful (Biedenbach & Jacobsson, 2016). Reducing harm to participants is a key axiological tenet. Risks must be minimized, potentially by tweaking the research design or choosing less vulnerable participants. Long-term impacts on participants must also be considered, ensuring they face no harm post-study (Carter & Killam, 2013).

Ethical ramifications of research findings must be pondered. Results should be reported transparently, considering potential societal implications and ensuring ethical application (Carter & Killam, 2013). Given this thesis's delicate nature, findings should be carefully communicated, respecting cultural subtleties.

The use of mixed methods in research has the potential to blur the philosophical differences between quantitative and qualitative approaches and the underlying assumptions

behind them. Often, researchers fail to acknowledge the fundamental philosophical distinctions between qualitative and quantitative methods, leading to a belief that the differences between them are only technical in nature (Sale et al., 2002; Smith & Heshusius, 1986).

According to Johnson and Onwuegbuzie (2004), there are two main schools of thought when it comes to the use of qualitative and quantitative methods in research: the qualitative purists (also known as constructivists or interpretivists) and the quantitative purists (also known as positivists). Qualitative purists advocate for the use of qualitative methods only, as they believe that the constructivist worldview of qualitative methods is incompatible with the positivist worldview of quantitative methods. On the other hand, quantitative purists advocate for the use of quantitative methods only, as they believe that the positivist worldview is the only scientific approach to research.

These philosophical differences between qualitative and quantitative methods can result in conflicting results when using mixed methods, as the underlying assumptions and worldviews of the two approaches are incompatible. For example, constructivists may argue that the use of quantitative methods in a study is inappropriate, as it does not allow for the interpretation of the results in the context of the participant's experiences. Similarly, positivists may argue that qualitative methods are not scientific, as they are based on subjective interpretation and cannot be replicated (Creswell & Creswell, 2017).

Therefore, it is crucial for researchers to be aware of the philosophical differences between qualitative and quantitative methods when using mixed methods in their research. The researcher must consider the underlying assumptions and worldviews of each approach and how they may influence the results of the study. In addition, the researcher must

determine how to integrate the two approaches in a way that maximizes the strengths of each method and minimizes the limitations (Creswell & Creswell, 2017).

The constructivist paradigm is a research approach that emphasises the importance of the context of the phenomena being studied and acknowledges the existence of multiple realities. According to constructivists, generalisation is impossible without a thorough understanding of the specific details of the situation. This paradigm is based on several key principles, including idealism, humanism, superiority of constructivism, relativism, and hermeneutics. (Willig, 2013).

Idealism refers to the belief that reality is constructed through human thought and interpretation. Constructivists argue that reality is not objective and external, but rather subjective and created through social interactions and cultural practices. Humanism, on the other hand, emphasises the importance of the human experience and the individual's unique perspective. Constructivists view the individual as an active participant in constructing their own reality (Creswell & Creswell, 2017).

Constructivists consider their approach superior to other paradigms, such as positivism and post-positivism, because it emphasises the importance of understanding the context and complexity of the situation being studied. Relativism is also a key principle of constructivism, as it acknowledges that there is no universal truth or objective reality. Rather, knowledge is context-dependent and subject to change based on the individual's experiences and perceptions (Guba & Lincoln, 1994).

Hermeneutics is another important principle of the constructivist paradigm, which refers to the process of interpretation and understanding. In this approach, the researcher seeks to understand the subjective meanings that individuals have about the situation being

studied. This involves reconstructing the participants' subjective experiences and interpretations of events (Creswell & Creswell, 2017)

The constructivist paradigm is particularly suited to investigating complex phenomena within a wider context. Researchers aiming to comprehend the world around them frequently utilize constructivism-interpretivism, as it facilitates a deeper, more contextually rich insight into the situation under investigation (Creswell & Creswell, 2017).

In the constructivist paradigm, knowledge is constructed through interaction between the researcher and participants. The researcher engages in a dialogue with the participants, seeking to understand their beliefs, feelings, and experiences. The researcher also integrates the participants' knowledge with their own, in order to create a more complete and detailed comprehension of the phenomenon being studied (Lee, 2012).

Positivism is a philosophical movement that emphasises the scientific method as the only way to acquire knowledge. This paradigm assumes that there is only one reality that can be observed and measured objectively. Positivists believe that knowledge can only be gained through empirical observation and scientific testing. They assume that the world can be divided into objective and observable elements, and that these elements can be studied using quantitative methods to discover universal laws and theories (Sale et al., 2002).

The main focus of positivism is to discover causal relationships between variables. Positivists argue that the cause-and-effect relationship between variables can be determined through hypothesis testing. This process involves formulating a hypothesis based on existing theories and empirical evidence and testing the hypothesis using quantitative data (Kivunja & Kuyini, 2017; Park et al., 2020).

Positivists emphasise the importance of objectivity and impartiality in research. They believe that the personal biases and values of the researcher should not influence the research

findings. Therefore, positivists aim to remove the subjective element from research by using quantitative methods, which are considered more objective than qualitative methods. Quantitative research methods involve collecting numerical data, which can be analysed statistically to produce objective results (Sale et al., 2002).

Positivists also favour large sample sizes in research. They believe that a large sample size provides a more accurate representation of the population being studied, which makes the research more reliable and generalizable. Positivists also believe that using a large sample size enhances the consistency of data and reduces the possibility of random errors (Creswell & Creswell, 2017).

The hypothetico-deductive method is a popular method used by positivists to conduct research. This method involves formulating a hypothesis and testing it using empirical data. The process involves several steps: formulating a research question, developing a hypothesis, designing an experiment, collecting data, analysing the data, and drawing conclusions (Kivunja & Kuyini, 2017).

Positivism has been criticized for its focus on objectivity and the exclusion of subjective elements from research. Critics argue that positivists tend to ignore the complex social and cultural contexts in which human behaviour occurs. They also argue that positivists tend to oversimplify complex social phenomena and ignore the role of human agency in shaping social behaviour (Park et al., 2020).

Appendix I: SPSS Outputs from SPSS

Paragraph

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Correlations

Notes

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Descriptive Statistics

	Mean	Std. Deviation	N
Freq of Ethnic Microaggression	16.6855	10.02141	124
EMA emotional response	9.4113	7.46375	124
Muslim Religiosity Scale	39.6738	9.60245	141
Ethnic Society Immersion	56.5101	9.43729	149
Dominant Society Immersion	39.4178	8.67955	146
Cultural Misbeliefs in Mental Health	30.5349	4.84130	129
Dass21 Total	43.3710	25.47547	124
Gender_M1	.5538	.49844	186
Education (ordinal)	5.6331	1.96283	169

Correlations

		Freq of Ethnic Microaggression	EMA emotional response	Muslim Religiosity Scale
Freq of Ethnic Microaggression	Pearson Correlation	1	.364**	.220*
	Sig. (2-tailed)		<.001	.014
	N	124	124	124
EMA emotional response	Pearson Correlation	.364**	1	.081
	Sig. (2-tailed)	<.001		.369
	N	124	124	124
Muslim Religiosity Scale	Pearson Correlation	.220*	.081	1
	Sig. (2-tailed)	.014	.369	
	N	124	124	141
Ethnic Society Immersion	Pearson Correlation	-.169	-.137	.304**
	Sig. (2-tailed)	.061	.131	<.001
	N	124	124	141
Dominant Society Immersion	Pearson Correlation	.099	.036	-.187*
	Sig. (2-tailed)	.276	.690	.027
	N	124	124	141

Cultural Misbeliefs in Mental Health	Pearson Correlation	.235**	-.134	.280**
	Sig. (2-tailed)	.009	.138	.001
	N	124	124	129
Dass21 Total	Pearson Correlation	.351**	.241**	.014
	Sig. (2-tailed)	<.001	.007	.879
	N	124	124	124
Gender_M1	Pearson Correlation	.113	-.022	-.091
	Sig. (2-tailed)	.210	.809	.284
	N	124	124	141
Education (ordinal)	Pearson Correlation	-.060	.110	.187*
	Sig. (2-tailed)	.507	.222	.027
	N	124	124	141

Correlations

		Ethnic Society Immersion	Dominant Society Immersion	Cultural Misbeliefs in Mental Health
Freq of Ethnic Microaggression	Pearson Correlation	-.169	.099	.235**
	Sig. (2-tailed)	.061	.276	.009

	N	124	124	124
EMA emotional response	Pearson Correlation	-.137	.036	-.134
	Sig. (2-tailed)	.131	.690	.138
	N	124	124	124
Muslim Religiosity Scale	Pearson Correlation	.304**	-.187*	.280**
	Sig. (2-tailed)	<.001	.027	.001
	N	141	141	129
Ethnic Society Immersion	Pearson Correlation	1	-.152	.129
	Sig. (2-tailed)		.068	.145
	N	149	146	129
Dominant Society Immersion	Pearson Correlation	-.152	1	.023
	Sig. (2-tailed)	.068		.800
	N	146	146	129
Cultural Misbeliefs in Mental Health	Pearson Correlation	.129	.023	1
	Sig. (2-tailed)	.145	.800	
	N	129	129	129
Dass21 Total	Pearson Correlation	-.265**	.104	.138

	Sig. (2-tailed)	.003	.249	.125
	N	124	124	124
Gender_M1	Pearson Correlation	-.068	-.129	.150
	Sig. (2-tailed)	.413	.121	.089
	N	149	146	129
Education (ordinal)	Pearson Correlation	.150	-.110	-.234**
	Sig. (2-tailed)	.069	.185	.008
	N	149	146	129

Correlations

		Dass21 Total	Gender_M 1	Education (ordinal)
Freq of Ethnic Microaggression	Pearson Correlation	.351**	.113	-.060
	Sig. (2-tailed)	<.001	.210	.507
	N	124	124	124
EMA emotional response	Pearson Correlation	.241**	-.022	.110
	Sig. (2-tailed)	.007	.809	.222
	N	124	124	124

Muslim Religiosity Scale	Pearson Correlation	.014	-.091	.187*
	Sig. (2-tailed)	.879	.284	.027
	N	124	141	141
Ethnic Society Immersion	Pearson Correlation	-.265**	-.068	.150
	Sig. (2-tailed)	.003	.413	.069
	N	124	149	149
Dominant Society Immersion	Pearson Correlation	.104	-.129	-.110
	Sig. (2-tailed)	.249	.121	.185
	N	124	146	146
Cultural Misbeliefs in Mental Health	Pearson Correlation	.138	.150	-.234**
	Sig. (2-tailed)	.125	.089	.008
	N	124	129	129
Dass21 Total	Pearson Correlation	1	-.193*	.035
	Sig. (2-tailed)		.032	.703
	N	124	124	124
Gender_M1	Pearson Correlation	-.193*	1	.071
	Sig. (2-tailed)	.032		.357

	N	124	186	169
Education (ordinal)	Pearson Correlation	.035	.071	1
	Sig. (2-tailed)	.703	.357	
	N	124	169	169

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

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

Nonparametric Correlations

Notes

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a. Based on availability of workspace memory

Correlations

			Freq of Ethnic Microaggression
Spearman's rho	Freq of Ethnic Microaggression	Correlation Coefficient	1.000
		Sig. (2-tailed)	.
		N	124
	EMA emotional response	Correlation Coefficient	.324**
		Sig. (2-tailed)	<.001
		N	124

	Muslim Religiosity Scale	Correlation Coefficient	.191*
		Sig. (2-tailed)	.033
		N	124
	Ethnic Society Immersion	Correlation Coefficient	-.134
		Sig. (2-tailed)	.138
		N	124
	Dominant Society Immersion	Correlation Coefficient	.128
		Sig. (2-tailed)	.155
		N	124
	Cultural Misbeliefs in Mental Health	Correlation Coefficient	.301**
		Sig. (2-tailed)	<.001
		N	124
	Dass21 Total	Correlation Coefficient	.376**
		Sig. (2-tailed)	<.001
		N	124
	Gender_M1	Correlation Coefficient	.103
		Sig. (2-tailed)	.255
		N	124

	Education (ordinal)	Correlation Coefficient	-.092
		Sig. (2-tailed)	.307
		N	124

Correlations

			EMA emotional response
Spearman's rho	Freq of Ethnic Microaggression	Correlation Coefficient	.324**
		Sig. (2-tailed)	<.001
		N	124
	EMA emotional response	Correlation Coefficient	1.000
		Sig. (2-tailed)	.
		N	124
	Muslim Religiosity Scale	Correlation Coefficient	.087
		Sig. (2-tailed)	.335
		N	124
	Ethnic Society Immersion	Correlation Coefficient	-.144
		Sig. (2-tailed)	.111

		N	124
	Dominant Society Immersion	Correlation Coefficient	.058
		Sig. (2-tailed)	.521
		N	124
	Cultural Misbeliefs in Mental Health	Correlation Coefficient	-.032
		Sig. (2-tailed)	.725
		N	124
	Dass21 Total	Correlation Coefficient	.305**
		Sig. (2-tailed)	<.001
		N	124
	Gender_M1	Correlation Coefficient	.014
		Sig. (2-tailed)	.877
		N	124
	Education (ordinal)	Correlation Coefficient	.097
		Sig. (2-tailed)	.282
		N	124

Correlations

			Muslim Religiosity Scale
Spearman's rho	Freq of Ethnic Microaggression	Correlation Coefficient	.191*
		Sig. (2-tailed)	.033
		N	124
	EMA emotional response	Correlation Coefficient	.087
		Sig. (2-tailed)	.335
		N	124
	Muslim Religiosity Scale	Correlation Coefficient	1.000
		Sig. (2-tailed)	.
		N	141
	Ethnic Society Immersion	Correlation Coefficient	.158
		Sig. (2-tailed)	.062
		N	141
	Dominant Society Immersion	Correlation Coefficient	-.162
		Sig. (2-tailed)	.056
		N	141

	Cultural Misbeliefs in Mental Health	Correlation Coefficient	.219*
		Sig. (2-tailed)	.013
		N	129
	Dass21 Total	Correlation Coefficient	.016
		Sig. (2-tailed)	.864
		N	124
	Gender_M1	Correlation Coefficient	-.103
		Sig. (2-tailed)	.223
		N	141
	Education (ordinal)	Correlation Coefficient	.229**
		Sig. (2-tailed)	.006
		N	141

Correlations

			Ethnic Society Immersion
Spearman's rho	Freq of Ethnic Microaggression	Correlation Coefficient	-.134
		Sig. (2-tailed)	.138

		N	124
	EMA emotional response	Correlation Coefficient	-.144
		Sig. (2-tailed)	.111
		N	124
	Muslim Religiosity Scale	Correlation Coefficient	.158
		Sig. (2-tailed)	.062
		N	141
	Ethnic Society Immersion	Correlation Coefficient	1.000
		Sig. (2-tailed)	.
		N	149
	Dominant Society Immersion	Correlation Coefficient	-.132
		Sig. (2-tailed)	.111
		N	146
	Cultural Misbeliefs in Mental Health	Correlation Coefficient	.121
		Sig. (2-tailed)	.173
		N	129
	Dass21 Total	Correlation Coefficient	-.244**
		Sig. (2-tailed)	.006

		N	124
	Gender_M1	Correlation Coefficient	-.073
		Sig. (2-tailed)	.378
		N	149
	Education (ordinal)	Correlation Coefficient	.139
		Sig. (2-tailed)	.090
		N	149

Correlations

			Dominant Society Immersion
Spearman's rho	Freq of Ethnic Microaggression	Correlation Coefficient	.128
		Sig. (2-tailed)	.155
		N	124
	EMA emotional response	Correlation Coefficient	.058
		Sig. (2-tailed)	.521
		N	124
	Muslim Religiosity Scale	Correlation Coefficient	-.162

		Sig. (2-tailed)	.056
		N	141
	Ethnic Society Immersion	Correlation Coefficient	-.132
		Sig. (2-tailed)	.111
		N	146
	Dominant Society Immersion	Correlation Coefficient	1.000
		Sig. (2-tailed)	.
		N	146
	Cultural Misbeliefs in Mental Health	Correlation Coefficient	.029
		Sig. (2-tailed)	.746
		N	129
	Dass21 Total	Correlation Coefficient	.114
		Sig. (2-tailed)	.207
		N	124
	Gender_M1	Correlation Coefficient	-.165*
		Sig. (2-tailed)	.046
		N	146
	Education (ordinal)	Correlation Coefficient	-.102

		Sig. (2-tailed)	.221
		N	146

Correlations

			Cultural Misbeliefs in Mental Health	Dass21 Total
Spearman's rho	Freq of Ethnic Microaggression	Correlation Coefficient	.301**	.376**
		Sig. (2-tailed)	<.001	<.001
		N	124	124
	EMA emotional response	Correlation Coefficient	-.032	.305**
		Sig. (2-tailed)	.725	<.001
		N	124	124
	Muslim Religiosity Scale	Correlation Coefficient	.219*	.016
		Sig. (2-tailed)	.013	.864
		N	129	124
	Ethnic Society Immersion	Correlation Coefficient	.121	-.244**
		Sig. (2-tailed)	.173	.006
		N	129	124

	Dominant Society Immersion	Correlation Coefficient	.029	.114
		Sig. (2-tailed)	.746	.207
		N	129	124
	Cultural Misbeliefs in Mental Health	Correlation Coefficient	1.000	.176
		Sig. (2-tailed)	.	.051
		N	129	124
	Dass21 Total	Correlation Coefficient	.176	1.000
		Sig. (2-tailed)	.051	.
		N	124	124
	Gender_M1	Correlation Coefficient	.179*	-.187*
		Sig. (2-tailed)	.043	.037
		N	129	124
	Education (ordinal)	Correlation Coefficient	-.193*	.027
		Sig. (2-tailed)	.028	.765
		N	129	124

Correlations

			Gender_M 1	Education (ordinal)
Spearman's rho	Freq of Ethnic Microaggression	Correlation Coefficient	.103	-.092
		Sig. (2-tailed)	.255	.307
		N	124	124
	EMA emotional response	Correlation Coefficient	.014	.097
		Sig. (2-tailed)	.877	.282
		N	124	124
	Muslim Religiosity Scale	Correlation Coefficient	-.103	.229**
		Sig. (2-tailed)	.223	.006
		N	141	141
	Ethnic Society Immersion	Correlation Coefficient	-.073	.139
		Sig. (2-tailed)	.378	.090
		N	149	149
	Dominant Society Immersion	Correlation Coefficient	-.165*	-.102
		Sig. (2-tailed)	.046	.221
		N	146	146
	Cultural Misbeliefs in Mental Health	Correlation Coefficient	.179*	-.193*

		Sig. (2-tailed)	.043	.028
		N	129	129
	Dass21 Total	Correlation Coefficient	-.187*	.027
		Sig. (2-tailed)	.037	.765
		N	124	124
	Gender_M1	Correlation Coefficient	1.000	.084
		Sig. (2-tailed)	.	.277
		N	186	169
	Education (ordinal)	Correlation Coefficient	.084	1.000
		Sig. (2-tailed)	.277	.
		N	169	169

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

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

Paragraph

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PAIRWISE /STATISTICS COEFF OUTS CI (95) R ANOVA CHANGE
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Regression

Notes

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	Cases Used	Correlation coefficients for each pair of variables are based on all the cases with valid data for

		that pair. Regression statistics are based on these correlations.
Syntax		REGRESSION /DESCRIPTIVES MEAN STDDEV CORR SIG N /MISSING PAIRWISE /STATISTICS COEFF OUTS CI(95) R ANOVA CHANGE /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT KFFMHS /METHOD=ENTER MRS_Total DSI CBMHP EMA_EMOTION /SCATTERPLOT=(*ZRE SID ,*ZPRED) /RESIDUALS NORMPROB(ZRESID).
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Descriptive Statistics

	Mean	Std. Deviation	N
Knowledge of mental health services	33.8583	6.78786	127
Muslim Religiosity Scale	39.6738	9.60245	141
Dominant Society Immersion	39.4178	8.67955	146
Cultural Misbeliefs in Mental Health	30.5349	4.84130	129
EMA emotional response	9.4113	7.46375	124

Correlations

		Knowledge of mental health services	Muslim Religiosity Scale	Dominant Society Immersion
Pearson Correlation	Knowledge of mental health services	1.000	.056	.307
	Muslim Religiosity Scale	.056	1.000	-.187

	Dominant Society Immersion	.307	-.187	1.000
	Cultural Misbeliefs in Mental Health	-.204	.280	.023
	EMA emotional response	.236	.081	.036
Sig. (1-tailed)	Knowledge of mental health services	.	.267	<.001
	Muslim Religiosity Scale	.267	.	.013
	Dominant Society Immersion	.000	.013	.
	Cultural Misbeliefs in Mental Health	.011	.001	.400
	EMA emotional response	.004	.185	.345
N	Knowledge of mental health services	127	127	127
	Muslim Religiosity Scale	127	141	141
	Dominant Society Immersion	127	141	146
	Cultural Misbeliefs in Mental Health	127	129	129
	EMA emotional response	124	124	124

Correlations

		Cultural Misbeliefs in Mental Health	EMA emotional response
Pearson Correlation	Knowledge of mental health services	-.204	.236
	Muslim Religiosity Scale	.280	.081
	Dominant Society Immersion	.023	.036
	Cultural Misbeliefs in Mental Health	1.000	-.134
	EMA emotional response	-.134	1.000
Sig. (1-tailed)	Knowledge of mental health services	.011	.004
	Muslim Religiosity Scale	.001	.185
	Dominant Society Immersion	.400	.345
	Cultural Misbeliefs in Mental Health	.	.069
	EMA emotional response	.069	.
N	Knowledge of mental health services	127	124
	Muslim Religiosity Scale	129	124
	Dominant Society Immersion	129	124

	Cultural Misbeliefs in Mental Health	129	124
	EMA emotional response	124	124

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	EMA emotional response, Dominant Society Immersion, Cultural Misbeliefs in Mental Health, Muslim Religiosity Scale[b]	.	Enter

a. Dependent Variable: Knowledge of mental health services

b. All requested variables entered.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics	
					R Square Change	F Change
1	.451[a]	.204	.177	6.15772	.204	7.616

Model Summary[b]

Model	Change Statistics		
	df1	df2	Sig. F Change
1	4	119	<.001

a. Predictors: (Constant), EMA emotional response, Dominant Society Immersion, Cultural Misbeliefs in Mental Health, Muslim Religiosity Scale

b. Dependent Variable: Knowledge of mental health services

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1155.046	4	288.761	7.616	<.001[b]
	Residual	4512.178	119	37.917		
	Total	5667.224	123			

a. Dependent Variable: Knowledge of mental health services

b. Predictors: (Constant), EMA emotional response, Dominant Society Immersion, Cultural Misbeliefs in Mental Health, Muslim Religiosity Scale

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	
		B	Std. Error	Beta	t
1	(Constant)	27.226	4.779		5.697
	Muslim Religiosity Scale	.120	.062	.170	1.940
	Dominant Society Immersion	.264	.065	.338	4.038
	Cultural Misbeliefs in Mental Health	-.331	.122	-.236	-2.719
	EMA emotional response	.163	.076	.179	2.143

Coefficients[a]

Model		Sig.	95.0% Confidence Interval for B	
			Lower Bound	Upper Bound
1	(Constant)	<.001	17.762	36.689
	Muslim Religiosity Scale	.055	-.002	.243
	Dominant Society Immersion	<.001	.135	.394
	Cultural Misbeliefs in Mental Health	.008	-.571	-.090
	EMA emotional response	.034	.012	.313

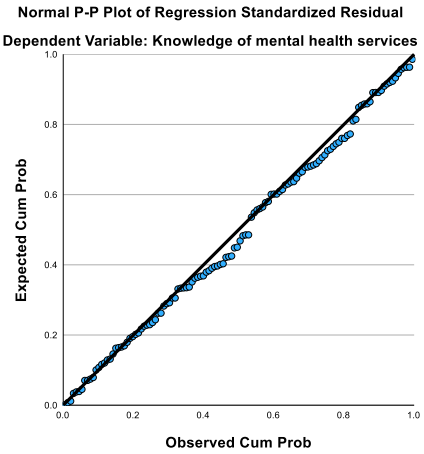
a. Dependent Variable: Knowledge of mental health services

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	27.5420	41.6442	34.1015	3.00674	124
Residual	-18.58062	13.46195	-.35953	5.98874	124
Std. Predicted Value	-2.061	2.541	.079	.981	124
Std. Residual	-3.017	2.186	-.058	.973	124

a. Dependent Variable: Knowledge of mental health services

Charts


Normal P-P Plot of Regression Standardized Residual
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Expected Cum Prob
Observed Cum Prob
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0.4
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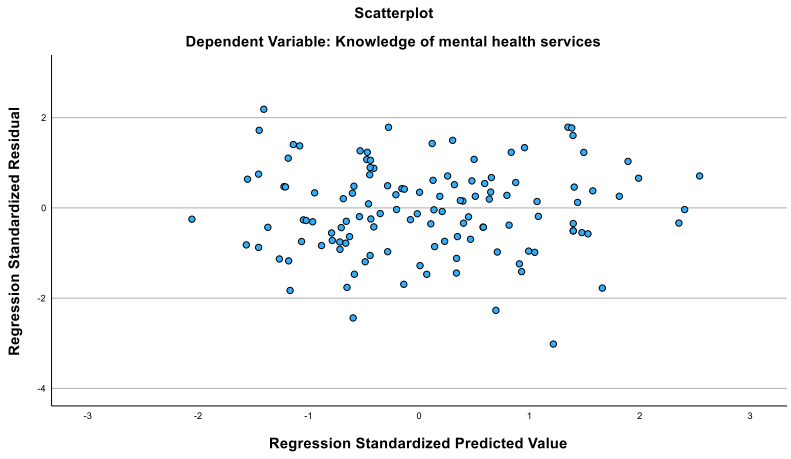
Scatterplot
Dependent Variable: Knowledge of mental health services
Regression Standardized Residual
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Paragraph

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PAIRWISE /STATISTICS COEFF OUTS CI (95) R ANOVA CHANGE
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Regression

Notes

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	Cases Used	Correlation coefficients for each pair of variables are based on all the cases with valid data for that pair. Regression statistics are based on these correlations.
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Descriptive Statistics

	Mean	Std. Deviation	N
Knowledge of mental health services	33.8583	6.78786	127
Muslim Religiosity Scale	39.6738	9.60245	141
Dominant Society Immersion	39.4178	8.67955	146

Cultural Misbeliefs in Mental Health	30.5349	4.84130	129
Ethnic Society Immersion	56.5101	9.43729	149
EMA emotional response	9.4113	7.46375	124

Correlations

		Knowledge of mental health services	Muslim Religiosity Scale	Dominant Society Immersion
Pearson Correlation	Knowledge of mental health services	1.000	.056	.307
	Muslim Religiosity Scale	.056	1.000	-.187
	Dominant Society Immersion	.307	-.187	1.000
	Cultural Misbeliefs in Mental Health	-.204	.280	.023
	Ethnic Society Immersion	-.187	.304	-.152
	EMA emotional response	.236	.081	.036
Sig. (1-tailed)	Knowledge of mental health services	.	.267	<.001
	Muslim Religiosity Scale	.267	.	.013

	Dominant Society Immersion	.000	.013	.
	Cultural Misbeliefs in Mental Health	.011	.001	.400
	Ethnic Society Immersion	.018	.000	.034
	EMA emotional response	.004	.185	.345
N	Knowledge of mental health services	127	127	127
	Muslim Religiosity Scale	127	141	141
	Dominant Society Immersion	127	141	146
	Cultural Misbeliefs in Mental Health	127	129	129
	Ethnic Society Immersion	127	141	146
	EMA emotional response	124	124	124

Correlations

		Cultural Misbeliefs in Mental Health	Ethnic Society Immersion	EMA emotional response
Pearson Correlation	Knowledge of mental health services	-.204	-.187	.236

	Muslim Religiosity Scale	.280	.304	.081
	Dominant Society Immersion	.023	-.152	.036
	Cultural Misbeliefs in Mental Health	1.000	.129	-.134
	Ethnic Society Immersion	.129	1.000	-.137
	EMA emotional response	-.134	-.137	1.000
Sig. (1-tailed)	Knowledge of mental health services	.011	.018	.004
	Muslim Religiosity Scale	.001	.000	.185
	Dominant Society Immersion	.400	.034	.345
	Cultural Misbeliefs in Mental Health	.	.073	.069
	Ethnic Society Immersion	.073	.	.065
	EMA emotional response	.069	.065	.
N	Knowledge of mental health services	127	127	124
	Muslim Religiosity Scale	129	141	124
	Dominant Society Immersion	129	146	124

	Cultural Misbeliefs in Mental Health	129	129	124
	Ethnic Society Immersion	129	149	124
	EMA emotional response	124	124	124

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	EMA emotional response, Dominant Society Immersion, Cultural Misbeliefs in Mental Health, Ethnic Society Immersion, Muslim Religiosity Scale[b]	.	Enter

a. Dependent Variable: Knowledge of mental health services

b. All requested variables entered.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics	
					R Square Change	F Change
1	.473[a]	.224	.191	6.10532	.224	6.808

Model Summary[b]

Model	Change Statistics		
	df1	df2	Sig. F Change
1	5	118	<.001

a. Predictors: (Constant), EMA emotional response, Dominant Society Immersion, Cultural Misbeliefs in Mental Health, Ethnic

Society Immersion, Muslim Religiosity Scale

b. Dependent Variable: Knowledge of mental health services

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1268.785	5	253.757	6.808	<.001[b]
	Residual	4398.438	118	37.275		
	Total	5667.224	123			

a. Dependent Variable: Knowledge of mental health services

b. Predictors: (Constant), EMA emotional response, Dominant Society Immersion, Cultural Misbeliefs in Mental Health, Ethnic Society Immersion, Muslim Religiosity Scale

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	
		B	Std. Error	Beta	t
1	(Constant)	32.592	5.647		5.771

	Muslim Religiosity Scale	.152	.064	.215	2.367
	Dominant Society Immersion	.253	.065	.324	3.886
	Cultural Misbeliefs in Mental Health	-.324	.121	-.231	-2.690
	Ethnic Society Immersion	-.109	.062	-.152	-1.747
	EMA emotional response	.141	.076	.156	1.857

Coefficients[a]

Model		Sig.	95.0% Confidence Interval for B	
			Lower Bound	Upper Bound
1	(Constant)	<.001	21.409	43.775
	Muslim Religiosity Scale	.020	.025	.279
	Dominant Society Immersion	<.001	.124	.383
	Cultural Misbeliefs in Mental Health	.008	-.563	-.086
	Ethnic Society Immersion	.083	-.233	.015
	EMA emotional response	.066	-.009	.292

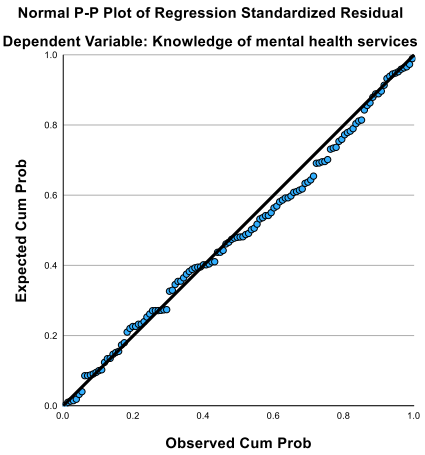
a. Dependent Variable: Knowledge of mental health services

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	26.3954	41.2940	34.0563	3.20897	124
Residual	-18.11597	14.00016	-.31433	5.92573	124
Std. Predicted Value	-2.324	2.315	.062	.999	124
Std. Residual	-2.967	2.293	-.051	.971	124

a. Dependent Variable: Knowledge of mental health services

Charts


Normal P-P Plot of Regression Standardized Residual
Dependent Variable: Knowledge of mental health services
Expected Cum Prob
Observed Cum Prob
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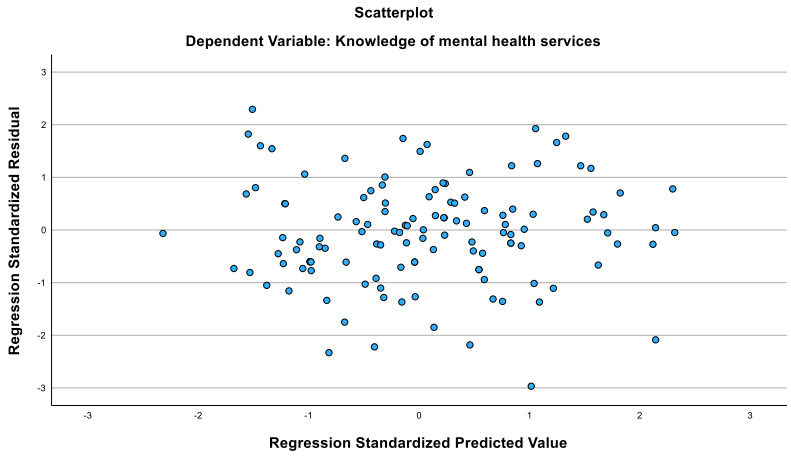
Scatterplot
Dependent Variable: Knowledge of mental health services
Regression Standardized Residual
Regression Standardized Predicted Value
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Paragraph

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REGRESSION /DESCRIPTIVES MEAN STDDEV CORR SIG N /MISSING
PAIRWISE /STATISTICS COEFF OUTS CI (95) R ANOVA CHANGE
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Regression

Notes

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Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Correlation coefficients for each pair of variables are based on all the cases with valid data for that pair. Regression statistics are based on these correlations.
Syntax		REGRESSION /DESCRIPTIVES MEAN STDDEV CORR SIG N /MISSING PAIRWISE /STATISTICS COEFF OUTS CI(95) R ANOVA CHANGE /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT ATSFMHS /METHOD=ENTER

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	Elapsed Time	00:00:00.25
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	Additional Memory Required for Residual Plots	472 bytes

Descriptive Statistics

	Mean	Std. Deviation	N
Help seeking attitude from mental health services	51.9774	9.45521	133
Muslim Religiosity Scale	39.6738	9.60245	141
Dominant Society Immersion	39.4178	8.67955	146

Cultural Misbeliefs in Mental Health	30.5349	4.84130	129
Ethnic Society Immersion	56.5101	9.43729	149
EMA emotional response	9.4113	7.46375	124
Knowledge of mental health services	33.8583	6.78786	127

Correlations

		Help seeking attitude from mental health services	Muslim Religiosity Scale	Dominant Society Immersion
Pearson Correlation	Help seeking attitude from mental health services	1.000	.026	.054
	Muslim Religiosity Scale	.026	1.000	-.187
	Dominant Society Immersion	.054	-.187	1.000
	Cultural Misbeliefs in Mental Health	-.581	.280	.023
	Ethnic Society Immersion	-.156	.304	-.152
	EMA emotional response	.203	.081	.036

	Knowledge of mental health services	.330	.056	.307
Sig. (1-tailed)	Help seeking attitude from mental health services	.	.383	.270
	Muslim Religiosity Scale	.383	.	.013
	Dominant Society Immersion	.270	.013	.
	Cultural Misbeliefs in Mental Health	.000	.001	.400
	Ethnic Society Immersion	.036	.000	.034
	EMA emotional response	.012	.185	.345
	Knowledge of mental health services	.000	.267	.000
N	Help seeking attitude from mental health services	133	133	133
	Muslim Religiosity Scale	133	141	141
	Dominant Society Immersion	133	141	146
	Cultural Misbeliefs in Mental Health	129	129	129

	Ethnic Society Immersion	133	141	146
	EMA emotional response	124	124	124
	Knowledge of mental health services	127	127	127

Correlations

		Cultural Misbeliefs in Mental Health	Ethnic Society Immersion	EMA emotional response
Pearson Correlation	Help seeking attitude from mental health services	-.581	-.156	.203
	Muslim Religiosity Scale	.280	.304	.081
	Dominant Society Immersion	.023	-.152	.036
	Cultural Misbeliefs in Mental Health	1.000	.129	-.134
	Ethnic Society Immersion	.129	1.000	-.137
	EMA emotional response	-.134	-.137	1.000
	Knowledge of mental health services	-.204	-.187	.236

Sig. (1-tailed)	Help seeking attitude from mental health services	<.001	.036	.012
	Muslim Religiosity Scale	.001	.000	.185
	Dominant Society Immersion	.400	.034	.345
	Cultural Misbeliefs in Mental Health	.	.073	.069
	Ethnic Society Immersion	.073	.	.065
	EMA emotional response	.069	.065	.
	Knowledge of mental health services	.011	.018	.004
N	Help seeking attitude from mental health services	129	133	124
	Muslim Religiosity Scale	129	141	124
	Dominant Society Immersion	129	146	124
	Cultural Misbeliefs in Mental Health	129	129	124
	Ethnic Society Immersion	129	149	124
	EMA emotional response	124	124	124

	Knowledge of mental health services	127	127	124

Correlations

		Knowledge of mental health services
Pearson Correlation	Help seeking attitude from mental health services	.330
	Muslim Religiosity Scale	.056
	Dominant Society Immersion	.307
	Cultural Misbeliefs in Mental Health	-.204
	Ethnic Society Immersion	-.187
	EMA emotional response	.236
	Knowledge of mental health services	1.000
Sig. (1-tailed)	Help seeking attitude from mental health services	<.001
	Muslim Religiosity Scale	.267

	Dominant Society Immersion	.000
	Cultural Misbeliefs in Mental Health	.011
	Ethnic Society Immersion	.018
	EMA emotional response	.004
	Knowledge of mental health services	.
N	Help seeking attitude from mental health services	127
	Muslim Religiosity Scale	127
	Dominant Society Immersion	127
	Cultural Misbeliefs in Mental Health	127
	Ethnic Society Immersion	127
	EMA emotional response	124
	Knowledge of mental health services	127

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	Knowledge of mental health services, Muslim Religiosity Scale, EMA emotional response, Dominant Society Immersion, Ethnic Society Immersion, Cultural Misbeliefs in Mental Health[b]	.	Enter

a. Dependent Variable: Help seeking attitude from mental health services

b. All requested variables entered.

Model Summary[b]

Model	R	R Square			Change Statistics

			Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change
1	.655[a]	.429	.400	7.32510	.429	14.656

Model Summary[b]

	Change Statistics		
Model	df1	df2	Sig. F Change
1	6	117	<.001

a. Predictors: (Constant), Knowledge of mental health services, Muslim Religiosity Scale, EMA emotional response, Dominant Society Immersion, Ethnic Society Immersion, Cultural Misbeliefs in Mental Health

b. Dependent Variable: Help seeking attitude from mental health services

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4718.442	6	786.407	14.656	<.001[b]
	Residual	6277.881	117	53.657		
	Total	10996.323	123			

a. Dependent Variable: Help seeking attitude from mental health services

b. Predictors: (Constant), Knowledge of mental health services, Muslim Religiosity Scale, EMA emotional response, Dominant Society Immersion, Ethnic Society Immersion, Cultural Misbeliefs in Mental Health

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	
		B	Std. Error	Beta	t
1	(Constant)	74.979	7.672		9.773
	Muslim Religiosity Scale	.215	.079	.219	2.736
	Dominant Society Immersion	.048	.083	.044	.572
	Cultural Misbeliefs in Mental Health	-1.156	.149	-.592	-7.754
	Ethnic Society Immersion	-.104	.076	-.104	-1.374

	EMA emotional response	.069	.093	.055	.749
	Knowledge of mental health services	.210	.110	.151	1.902

Coefficients[a]

Model		Sig.	95.0% Confidence Interval for B	
			Lower Bound	Upper Bound
1	(Constant)	<.001	59.784	90.174
	Muslim Religiosity Scale	.007	.059	.371
	Dominant Society Immersion	.568	-.117	.212
	Cultural Misbeliefs in Mental Health	<.001	-1.451	-.861
	Ethnic Society Immersion	.172	-.255	.046
	EMA emotional response	.456	-.114	.253
	Knowledge of mental health services	.060	-.009	.429

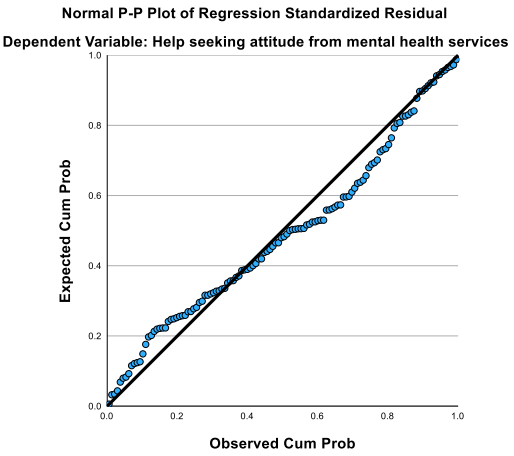
a. Dependent Variable: Help seeking attitude from mental health services

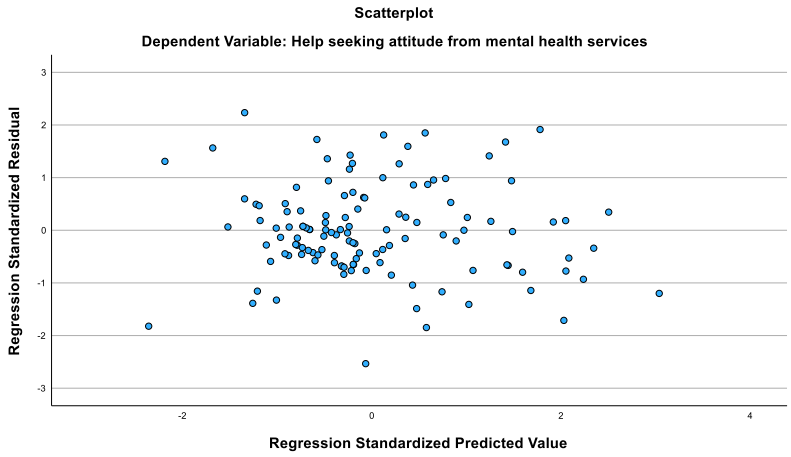
Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	37.3485	70.7863	52.0388	6.29442	124
Residual	-18.56136	16.36586	-.10328	6.37151	124
Std. Predicted Value	-2.362	3.037	.010	1.016	124
Std. Residual	-2.534	2.234	-.014	.870	124

a. Dependent Variable: Help seeking attitude from mental health services

Charts





Paragraph

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REGRESSION /DESCRIPTIVES MEAN STDDEV CORR SIG N /MISSING
PAIRWISE /STATISTICS COEFF OUTS CI (95) R ANOVA CHANGE
/CRITERIA = PIN (.05) POUT (.10) /NOORIGIN /DEPENDENT CBMHP
/METHOD = ENTER MRS_Total DSI ESI EMA_EMOTION /SCATTERPLOT
=(*ZRESID ,*ZPRED) /RESIDUALS NORMPROB ( ZRESID ).
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Regression

Notes

Output Created	11-JUN-2024 18:02:54
Comments	

Input	Data	C:\Users\KeisO\Downloads\2023+Impact+of+Cultural+and+Traditional+Beliefs+and+Understanding+of+Mental+Health._15+November+2023_edit.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	200
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Correlation coefficients for each pair of variables are based on all the cases with valid data for that pair. Regression statistics are based on these correlations.

Syntax		REGRESSION /DESCRIPTIVES MEAN STDDEV CORR SIG N /MISSING PAIRWISE /STATISTICS COEFF OUTS CI(95) R ANOVA CHANGE /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT CBMHP /METHOD=ENTER MRS_Total DSI ESI EMA_EMOTION /SCATTERPLOT=(*ZRESID ,*ZPRED) /RESIDUALS NORMPROB(ZRESID).
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Descriptive Statistics

	Mean	Std. Deviation	N
Cultural Misbeliefs in Mental Health	30.5349	4.84130	129
Muslim Religiosity Scale	39.6738	9.60245	141
Dominant Society Immersion	39.4178	8.67955	146
Ethnic Society Immersion	56.5101	9.43729	149
EMA emotional response	9.4113	7.46375	124

Correlations

		Cultural Misbeliefs in Mental Health	Muslim Religiosity Scale	Dominant Society Immersion
Pearson Correlation	Cultural Misbeliefs in Mental Health	1.000	.280	.023
	Muslim Religiosity Scale	.280	1.000	-.187
	Dominant Society Immersion	.023	-.187	1.000

	Ethnic Society Immersion	.129	.304	-.152
	EMA emotional response	-.134	.081	.036
Sig. (1-tailed)	Cultural Misbeliefs in Mental Health	.	<.001	.400
	Muslim Religiosity Scale	.001	.	.013
	Dominant Society Immersion	.400	.013	.
	Ethnic Society Immersion	.073	.000	.034
	EMA emotional response	.069	.185	.345
N	Cultural Misbeliefs in Mental Health	129	129	129
	Muslim Religiosity Scale	129	141	141
	Dominant Society Immersion	129	141	146
	Ethnic Society Immersion	129	141	146
	EMA emotional response	124	124	124

Correlations

		Ethnic Society Immersion	EMA emotional response

Pearson Correlation	Cultural Misbeliefs in Mental Health	.129	-.134
	Muslim Religiosity Scale	.304	.081
	Dominant Society Immersion	-.152	.036
	Ethnic Society Immersion	1.000	-.137
	EMA emotional response	-.137	1.000
Sig. (1-tailed)	Cultural Misbeliefs in Mental Health	.073	.069
	Muslim Religiosity Scale	.000	.185
	Dominant Society Immersion	.034	.345
	Ethnic Society Immersion	.	.065
	EMA emotional response	.065	.
N	Cultural Misbeliefs in Mental Health	129	124
	Muslim Religiosity Scale	141	124
	Dominant Society Immersion	146	124
	Ethnic Society Immersion	149	124
	EMA emotional response	124	124

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	EMA emotional response, Dominant Society Immersion, Ethnic Society Immersion, Muslim Religiosity Scale[b]	.	Enter

a. Dependent Variable: Cultural Misbeliefs in Mental Health

b. All requested variables entered.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics	
					R Square Change	F Change
1	.333[a]	.111	.081	4.64108	.111	3.710

Model Summary[b]

Model	Change Statistics		
	df1	df2	Sig. F Change
1	4	119	.007

a. Predictors: (Constant), EMA emotional response, Dominant Society Immersion, Ethnic Society Immersion, Muslim Religiosity Scale

b. Dependent Variable: Cultural Misbeliefs in Mental Health

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	319.686	4	79.922	3.710	.007[b]
	Residual	2563.216	119	21.540		
	Total	2882.902	123			

a. Dependent Variable: Cultural Misbeliefs in Mental Health

b. Predictors: (Constant), EMA emotional response, Dominant Society Immersion, Ethnic Society Immersion, Muslim Religiosity Scale

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	
		B	Std. Error	Beta	t
1	(Constant)	22.680	3.756		6.039
	Muslim Religiosity Scale	.151	.047	.300	3.241
	Dominant Society Immersion	.050	.049	.089	1.004
	Ethnic Society Immersion	.015	.047	.030	.321
	EMA emotional response	-.102	.057	-.157	-1.789

Coefficients[a]

Model		Sig.	95.0% Confidence Interval for B	
			Lower Bound	Upper Bound
1	(Constant)	<.001	15.243	30.117
	Muslim Religiosity Scale	.002	.059	.244

	Dominant Society Immersion	.317	-.048	.147
	Ethnic Society Immersion	.749	-.079	.109
	EMA emotional response	.076	-.215	.011

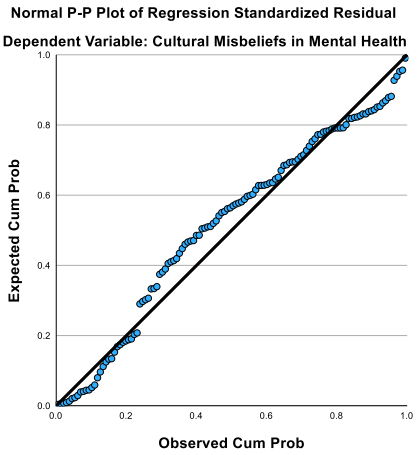
a. Dependent Variable: Cultural Misbeliefs in Mental Health

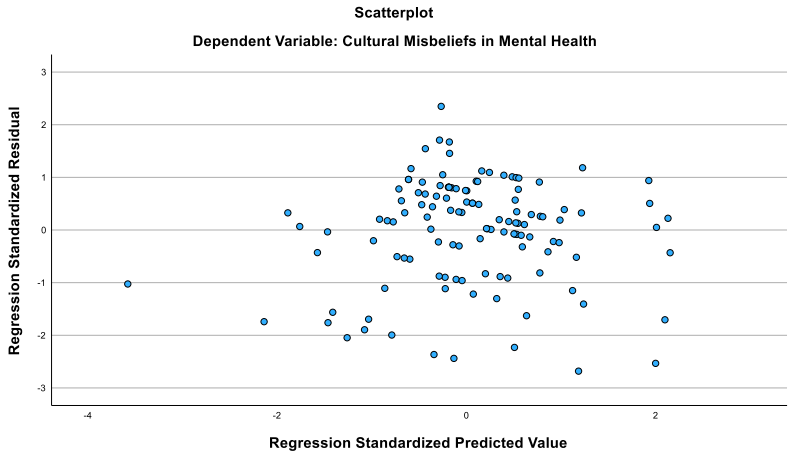
Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	24.7588	34.0045	30.6070	1.44774	124
Residual	-12.44311	10.89850	-.11505	4.62471	124
Std. Predicted Value	-3.583	2.152	.045	.898	124
Std. Residual	-2.681	2.348	-.025	.996	124

a. Dependent Variable: Cultural Misbeliefs in Mental Health

Charts


Normal P-P Plot of Regression Standardized Residual
Dependent Variable: Cultural Misbeliefs in Mental Health
Expected Cum Prob
Observed Cum Prob
0.0
0.2
0.4
0.6
0.8
1.0


Scatterplot
Dependent Variable: Cultural Misbeliefs in Mental Health
Regression Standardized Residual
Regression Standardized Predicted Value
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2
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-1
-2
-3
-4
-2
0
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Paragraph

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REGRESSION /DESCRIPTIVES MEAN STDDEV CORR SIG N /MISSING
PAIRWISE /STATISTICS COEFF OUTS CI (95) R ANOVA CHANGE
/CRITERIA = PIN (.05) POUT (.10) /NOORIGIN /DEPENDENT CBMHP
/METHOD = ENTER MRS_Total DSI ESI EMA_EMOTION GENDER1
/SCATTERPLOT =(*ZRESID ,*ZPRED) /RESIDUALS NORMPROB ( ZRESID
).
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Regression

Notes

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Comments		
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	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>

	N of Rows in Working Data File	200
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Correlation coefficients for each pair of variables are based on all the cases with valid data for that pair. Regression statistics are based on these correlations.
Syntax		REGRESSION /DESCRIPTIVES MEAN STDDEV CORR SIG N /MISSING PAIRWISE /STATISTICS COEFF OUTS CI(95) R ANOVA CHANGE /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT CBMHP /METHOD=ENTER MRS_Total DSI ESI

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	Memory Required	95200 bytes
	Additional Memory Required for Residual Plots	488 bytes

Descriptive Statistics

	Mean	Std. Deviation	N
Cultural Misbeliefs in Mental Health	30.5349	4.84130	129
Muslim Religiosity Scale	39.6738	9.60245	141
Dominant Society Immersion	39.4178	8.67955	146
Ethnic Society Immersion	56.5101	9.43729	149

EMA emotional response	9.4113	7.46375	124
Gender_M1	.5538	.49844	186

Correlations

		Cultural Misbeliefs in Mental Health	Muslim Religiosity Scale	Dominant Society Immersion
Pearson Correlation	Cultural Misbeliefs in Mental Health	1.000	.280	.023
	Muslim Religiosity Scale	.280	1.000	-.187
	Dominant Society Immersion	.023	-.187	1.000
	Ethnic Society Immersion	.129	.304	-.152
	EMA emotional response	-.134	.081	.036
	Gender_M1	.150	-.091	-.129
Sig. (1-tailed)	Cultural Misbeliefs in Mental Health	.	<.001	.400
	Muslim Religiosity Scale	.001	.	.013
	Dominant Society Immersion	.400	.013	.
	Ethnic Society Immersion	.073	.000	.034
	EMA emotional response	.069	.185	.345

	Gender_M1	.044	.142	.061
N	Cultural Misbeliefs in Mental Health	129	129	129
	Muslim Religiosity Scale	129	141	141
	Dominant Society Immersion	129	141	146
	Ethnic Society Immersion	129	141	146
	EMA emotional response	124	124	124
	Gender_M1	129	141	146

Correlations

		Ethnic Society Immersion	EMA emotional response	Gender_M1
Pearson Correlation	Cultural Misbeliefs in Mental Health	.129	-.134	.150
	Muslim Religiosity Scale	.304	.081	-.091
	Dominant Society Immersion	-.152	.036	-.129
	Ethnic Society Immersion	1.000	-.137	-.068
	EMA emotional response	-.137	1.000	-.022
	Gender_M1	-.068	-.022	1.000

Sig. (1-tailed)	Cultural Misbeliefs in Mental Health	.073	.069	.044
	Muslim Religiosity Scale	.000	.185	.142
	Dominant Society Immersion	.034	.345	.061
	Ethnic Society Immersion	.	.065	.207
	EMA emotional response	.065	.	.405
	Gender_M1	.207	.405	.
N	Cultural Misbeliefs in Mental Health	129	124	129
	Muslim Religiosity Scale	141	124	141
	Dominant Society Immersion	146	124	146
	Ethnic Society Immersion	149	124	149
	EMA emotional response	124	124	124
	Gender_M1	149	124	186

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	Gender_M1, EMA	.	Enter

	emotional response, Muslim Religiosity Scale, Dominant Society Immersion, Ethnic Society Immersion[b]		

a. Dependent Variable: Cultural Misbeliefs in Mental Health

b. All requested variables entered.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics	
					R Square Change	F Change
1	.384[a]	.147	.111	4.56425	.147	4.077

Model Summary[b]

Model	Change Statistics

	df1	df2	Sig. F Change
1	5	118	.002

a. Predictors: (Constant), Gender_M1, EMA emotional response, Muslim Religiosity Scale, Dominant Society Immersion, Ethnic Society Immersion

b. Dependent Variable: Cultural Misbeliefs in Mental Health

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	424.682	5	84.936	4.077	.002[b]
	Residual	2458.220	118	20.832		
	Total	2882.902	123			

a. Dependent Variable: Cultural Misbeliefs in Mental Health

b. Predictors: (Constant), Gender_M1, EMA emotional response, Muslim Religiosity Scale, Dominant Society Immersion, Ethnic Society Immersion

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	
		B	Std. Error	Beta	t
1	(Constant)	20.206	3.854		5.242
	Muslim Religiosity Scale	.161	.046	.319	3.492
	Dominant Society Immersion	.066	.049	.119	1.353
	Ethnic Society Immersion	.022	.047	.042	.460
	EMA emotional response	-.100	.056	-.154	-1.781
	Gender_M1	1.886	.840	.194	2.245

Coefficients[a]

Model		Sig.	95.0% Confidence Interval for B	
			Lower Bound	Upper Bound
1	(Constant)	<.001	12.574	27.839
	Muslim Religiosity Scale	<.001	.070	.252

	Dominant Society Immersion	.179	-.031	.164
	Ethnic Society Immersion	.646	-.071	.114
	EMA emotional response	.078	-.211	.011
	Gender_M1	.027	.222	3.549

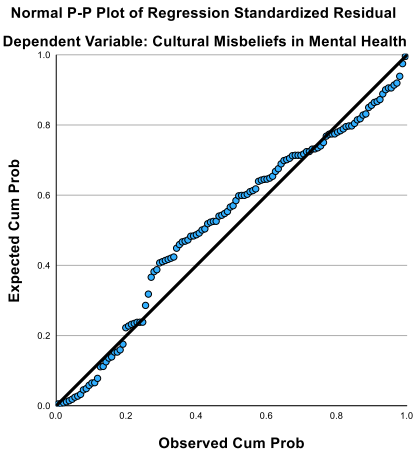
a. Dependent Variable: Cultural Misbeliefs in Mental Health

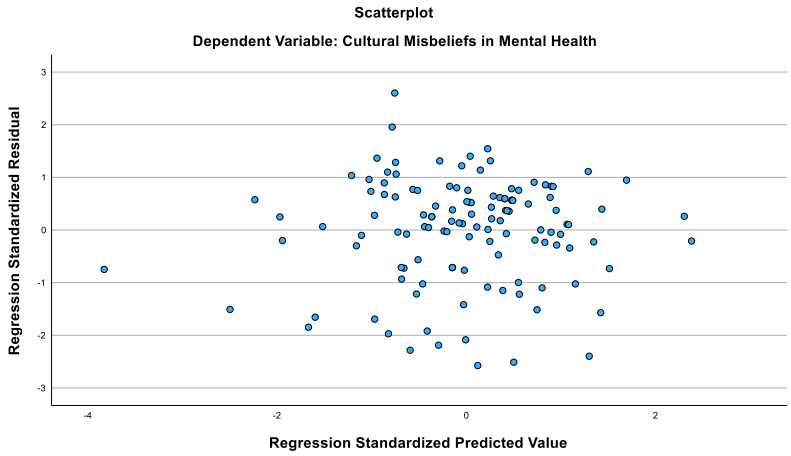
Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	23.4147	34.9551	30.5079	1.73134	124
Residual	-11.75387	11.87708	-.01592	4.53077	124
Std. Predicted Value	-3.832	2.379	-.015	.932	124
Std. Residual	-2.575	2.602	-.003	.993	124

a. Dependent Variable: Cultural Misbeliefs in Mental Health

Charts


Normal P-P Plot of Regression Standardized Residual
Dependent Variable: Cultural Misbeliefs in Mental Health
Expected Cum Prob
Observed Cum Prob
0.0
0.2
0.4
0.6
0.8
1.0


Scatterplot
Dependent Variable: Cultural Misbeliefs in Mental Health
Regression Standardized Residual
Regression Standardized Predicted Value
3
2
1
0
-1
-2
-3
-4
-2
0
2