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# AN EXAMINATION OF THE USE OF SOCIAL MEDIA TO IMPROVE THE PSYCHOLOGICAL WELL-BEING OF SAUDI ARABIA WOMEN

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### DISSERTATION

Presented to the Faculty of the Graduate School of

St. Mary's University in Partial Fulfillment of the Requirements for the Degree of

### DOCTOR OF PHILOSOPHY

in

Counselor Education and Supervision

By

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San Antonio, Texas

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# AN EXAMINATION OF THE USE OF SOCIAL MEDIA TO IMPROVE THE PSYCHOLOGICAL WELL-BEING OF SAUDI ARABIA WOMEN

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## Running head: SOCIAL MEDIA TO IMPROVE PWB OF SAUDI WOMEN

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#### Abstract

An Examination of the Use of Social Media to Improve the Psychological Well-Being of Saudi

Arabia Women

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Social media is used increasingly for different purposes, playing an important role in peoples' lives. It has been reported that social media is involved with the mental health profession as it offers a way to communicate with mental health providers and peers who share similar concerns. People with mental illnesses who have utilized social media to share and find mental health information have reported positive outcomes related to their mental health status. However, additional research is needed in regard to the mental health status of general populations. As such, this quantitative study was intended to examine the use of shared mental health information via social media to increase the psychological well-being of Saudi Arabian women. For this study, 725 Saudi Arabian women were surveyed. These participants completed both a demographic questionnaire and Ryff's Psychological Well-Being Scale (PWB). The results showed that Saudi Arabian women enjoy a reasonable level of psychological well-being (3.64) with an elevated level of positive relations with others (3.74). The study's findings indicated a considerable number of participants (45.4) are using social media for mental health purposes. The participants' employment status and educational level variables were significantly associated with this practice. YouTube was the common social media platform used by Saudi Arabian women for mental health information (53.8%). The most requested mental health information by the participants was learning and improving parenting skills

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(54.6%) and enhancing positive emotions toward life and self (54.1%). Regarding the relationship between seeking mental health information via social media and the psychological well-being of Saudi Arabian women, the findings rejected the researcher's hypothesis since no meaningful relationship existed with total psychological well-being; similarly, all of the dimensions of the psychological well-being excluded autonomy and positive relations with others. Finally, the study's findings demonstrated that significant differences existed in the psychological well-being dimensions related to several factors: purposes of using social media, frequency of seeking mental health information via social media and helpfulness of the shared mental information. The findings showed there are no significant differences within psychological well-being dimensions according to the number of social media platforms used by Saudi Arabian women for seeking mental health information.

#### **Chapter One: The Problem and Justification of the Study**

#### Introduction

The number of individuals using the Internet globally is considerable (Poushter et al., 2018). In particular, many users of the Internet are drawn to using social media, such as Facebook and YouTube (Poushter et al., 2018). Therefore, many researchers have focused on studying the various purposes of Internet-based technologies (Shaw et al., 2004). Some researchers have focused on why people use social media, finding that individuals are employing social media daily for purposes such as entertainment, social interactions, communication and shopping (Anderson et al., 2014; Fernández-Luque & Bau, 2015; Khan, 2017). Of these usage types, communication is considered to be the prime motivation as Internet-based technologies allow people to create relationships and become connected with others who share similar goals (Kraut et al., 1998; Moorhead et al., 2013).

In health contexts, Internet-based technologies, such as social media, have been used as a means of communication between and among the public, patients and health professionals (Bosslet et al., 2011; Moorhead et al., 2013). Through this type of communication, people can provide and receive support, feel as if they belong and are connected, feel as if they are not alone, seek advice plus share and access health information (Moorhead et al., 2013; Naslund et al., 2014; Naslund et al., 2016). Specifically, in the mental health context, social media has been widely used by individuals with mental illnesses to communicate and interact with peers who have similar symptoms, as well as with the public and practitioners (Naslund et al., 2016). However, few researchers have studied the benefits of social media in relation to individuals with mental illnesses. Researchers have discovered positive results for people with mental illnesses. As people with mental illnesses give and receive support, discuss mental health-related

information and use self-disclosure (Naslund et al., 2014; Naslund et al., 2016; Ospina-Pinillos et al., 2018), they find hope and feel as if they are understood through the use of social media (Naslund et al., 2014; Naslund et al., 2016).

#### **Statement of the Problem**

According to the World Health Organization (WHO, 2003), in developing countries such as Saudi Arabia, almost 90% of people with mental health illnesses and issues receive no treatment. The prevalence of mental health illnesses and issues in Saudi Arabia as a whole has not been estimated; however, the prevalence of mental illnesses in Saudi Arabia can be inferred from Saudi studies that have focused on specific populations or regions. For instance, Al-Sughayr and Ferwana (2012) indicated that 48% of high school students in Riyadh, (i.e., the capital city of Saudi Arabia), had some form of mental illnesses. Likewise, Al-Qadhi et al. (2014) conducted a study with primary health care patients in Riyadh, the results of which showed that 49.9% had depression.

Unsurprisingly, scholars have affirmed that women in Saudi Arabia are at risk of having mental illnesses and psychological problems (Abbas & Al-Buhairan, 2017; Al-Qadhi et al., 2014). Saudi Arabian women are considered to have higher rates of mental illnesses than Saudi Arabian men. For instance, they experience more depression and exhibit more depressive symptoms than Saudi Arabian men (Al-Qadhi et al., 2014). When partner violence was examined and related to obesity among Saudi Arabian women, Al-Halal (2018) found that these women experienced depressive symptoms that often lead to obesity. Jradi and Abou-Abbas (2017) found that 41.7% of their sample of 900 Saudi Arabian women had depression as a result of being victims of violence. Al-Muneef et al. (2017) completed a study in 13 regions of Saudi Arabia to determine the lingering consequences of adverse childhood experiences on health among adults.

They discovered that 4,850 Saudi Arabian females had an increase in the number of adverse childhood experiences which positively correlated with psychological and mental illnesses, including depression and anxiety (Al-Muneef et al., 2017).

Worldwide, stigmatization and marginalization are still directed toward people with mental illnesses (Johnstone, 2001). The attitudes of Saudi Arabians toward the mental health profession and its services in particular have been influenced by the kingdom's belief system and culture (Koenig et al., 2014). For example, most Saudi Arabians believe that mental illnesses are tests from God (Allah) (Algahtani et al., 2017; Al-Qahtani & Salmon, 2008; Ciftci et al., 2013; Koenig et al., 2014), while others consider mental illnesses to be God's way of punishing individuals who have strayed from their religious faith (Al-Qahtani & Salmon, 2008; Ciftci et al., 2013). Still others believe that some symptoms of mental illnesses are the result of having an evil eye, evil spirits or even magic invoked upon a person (Alajlan, 2016; Al-Habeeb, 2003; Al-Qahtani & Salmon, 2008; Aloud, 2004; Koenig et al., 2014). Due to these ancient beliefs, some individuals seek help from groups unrelated to the mental health profession (e.g., faith or religious healers) (Ciftci et al., 2013; Youssef & Deane, 2006).

Saudi Arabia's culture is similar to other Arabic cultures in regard to collectivism. Saudi Arabian families focus on bonding, interdependence and providing support to each other (Al-Krenawi & Graham, 2000). Whenever family members have dilemmas, they seek assistance from their parents, siblings and close relatives. As such, individuals avoid seeking professional mental health help because it would mean seeking assistance outside of their families (Al-Krenawi & Graham, 2000; Smith, 2011). In addition, individuals who do seek help outside of their families are considered weak and/or disloyal to their families (Algahtani et al., 2017; Al-Krenawi & Graham, 2000).

While the above challenges impede most Saudi Arabian women from getting appropriate mental health care, Internet-based technologies offer a way for them to cope with mental health issues with alternate resources related to therapy and mental health-related support (e.g., providing advice, providing mental health information). However, using Internet-based technologies, such as social media, to improve mental health in Arabic countries, especially in Saudi Arabia, is in its infancy. As such, no definitive, double-blind studies have been conducted to study whether or not social media assists Saudi Arabian women in improving their mental health.

Scientists have revealed that Internet-based technologies can be used to find health information (De Choudhury et al., 2014; Korda & Itani, 2013; Scanfeld et al., 2010). For example, in their study, Atkinson et al. (2009) determined that slightly more than half of the Internet users surveyed utilized it to seek health information. Antheunis et al. (2013) found that almost one quarter of the patients who participated in their study used Twitter to search for health information. Social media has been proven to be a functional tool to improve health outcomes (Korda & Itani, 2013). For instance, Sillence et al. (2007) showed that information shared via Internet-based technologies can enhance health decision making. In another study, Ayers and Kronenfeld (2007) indicated that people can be motivated to change their health behaviors as a result of seeking information shared via Internet-based technologies.

Unfortunately, no researchers have focused on the correlation of the practice of seeking mental health information through social media and mental-health status. In addition, no researchers have focused on determining specific patterns within these types of online communications, such as sharing and using mental health information among the public. Instead, scholars have attempted to assess the connection between this type of communication in general

and the social well-being of people both with and without mental illnesses. As such, in order to fill this gap, the researcher of the present study investigated the relationship between the use of mental-health information found via social media and the psychological well-being of Saudi Arabian women. The goal of this quantitative study was to determine to what extent the information that is shared via social media is applicable to the improvement of the psychological well-being of Saudi Arabian women.

#### The Purpose of the Study

Mental health plays a significant role in an individual's overall health. The WHO has defined health as a state of complete physical, mental and social well-being—not merely the absence of disease or infirmity (2001). According to the WHO, mental health is a state of well-being in which individuals realize their abilities, can cope with the normal stresses of life, can work productively and are able to contribute to their community (2001).

The term 'psychological well-being' is considered a substantial part of mental health. It is a positive conception in which individuals recognize their ability to function in different aspects of life (Ryff, 1989; Ryff, 2017). Social and genetic factors influence psychological well-being. Scientists have shown that psychological well-being is not a constant state; it can be enriched with a variety of techniques, strategies and practices (Friedman et al., 2017; Weiss et al., 2016).

In addition, as the use of Internet-based technologies has been increased, the desire of people using the Internet to connect with others and find new information related to mental health has been risen. It has become valuable, therefore, for researchers to explore this phenomenon among the public (Powell & Clarke, 2006). The extensive features of Internetbased technologies have brought welcome changes to the mental health profession that can be utilized to provide services and share information with patients, professionals and the public. To

this end, the purpose of this study was to examine how Saudi Arabian women use mental health information from social media to improve their psychological well-being.

#### **Research Questions**

In this study, the researcher attempted to answer the following research questions:

RQ1: What is the psychological well-being of Saudi Arabian women as a whole?

RQ2: How are the demographic variables of Saudi Arabian women related to seeking mental health information via social media?

RQ3: What is the relationship between seeking mental health information via social media and the overall psychological well-being of Saudi Arabian women?

RQ4: To what extent does seeking mental health information via social media relate to different dimensions of psychological well-being: autonomy, environmental mastery, personal growth, positive relationships, purpose in life and self-acceptance?

RQ5: Are there statistically significant differences between the diverse factors associated with the use of social media and the variables associated with psychological well-being for Saudi Arabian women?

#### **Rationale and Justification of the Study**

Although people in Saudi Arabia use the Internet profusely, no researchers have conducted studies to examine usage of Internet-based technologies within the mental health field in the kingdom. The lack of this type of research highlights the need for further exploration regarding Internet-based technologies, especially social media, among the Saudi Arabian population. As such, this research is useful for mental health professionals and researchers as they can consider whether Internet-based technologies, including social media, can deliver positive mental health consequences for Saudi Arabian women.

Generally speaking, when people have health issues, they seek advice from professionals; however, some people use alternative means, such as Internet-based technologies, to satisfy their health needs. This phenomenon has been investigated regarding general health in different countries; however, it has not been investigated within a Saudi Arabian population for mental health. As such, the researcher of the current study filled this gap and examined whether and to what extent Saudi Arabian individuals, especially women, use Internet-based technologies, particularly social media, to meet and satisfy their mental health needs rather than using traditional means, (i.e., seeking face-to-face therapy).

Furthermore, a recent review of the literature on the usage and benefits of Internet-based technologies within the mental health context found that researchers have only focused on people with mental illnesses. These researchers were interested in how and why people with mental illnesses used Internet-based technologies as well as effects of these technologies on mental health. In addition, studies focusing on general populations related to mental health appear to be lacking. To the researcher's knowledge, investigators need to understand how, when, why, and what the characteristics are of a general population who might utilize Internet-based technologies to meet their mental and psychological needs. Therefore, the researcher attempted to fill this gap by shedding light on a general population instead of just studying people with mental illnesses.

In the present study, researcher focused on psychological well-being as an aspect of mental health. The literature review related to the influence of Internet-based technologies, including social media, on people and their psychological well-being indicated that some disagreement exists among scholars about the effects of Internet-based technologies. In their literature reviews, Kim et al. (2009) and Valkenburg et al. (2006) stated that some studies have discovered that using Internet-based technologies has a negative influence on psychological

well-being. Conversely, other researchers have discovered a positive impact on the psychological well-being of individuals (Best et al., 2014; Bonetti et al., 2010; Laghi et al., 2013; Leist, 2013). As the focus of the present study was on psychological well-being as an aspect of mental health, researcher validated how different usage behaviors of Internet-based technologies can lead to different outcomes.

In anterior studies, researchers have narrowed their focus to study the impact of social media on psychological well-being of individuals. A majority of the researchers focused on inspecting the relationship between social media and one or multiple dimensions related to psychological well-being. For instance, Kraut et al. (1998) investigated the relationship between the use of social media and social involvement, while Ellison et al. (2007) studied the influence of social media on life satisfaction. No researcher has investigated the influence of social media on life satisfaction well-being as a whole.

The contemporary tendency of mental health research no longer centers on issues and diagnoses or interventions employed to help reduce people's suffering (Gable & Haidt, 2005; Seligman et al., 2005). This approach, known as the science of positive psychology, emphasizes understanding when, how, and what helps patients in order to enable them to thrive. Understanding what increases positive emotions, achieves optimal functions, and increases engagement with life is significant (Gable & Haidt, 2005; Seligman et al., 2005). In Saudi Arabian literature, it is extremely hard to find researchers that follow this approach because the majority of the mental health researchers focused on how to treat and decrease negative symptoms instead of how to increase well-being, positive functions, and preventative measures. Rather than focusing excessively on individuals' suffering, their disorders, their illnesses and the

negative effects that these things have on individuals, researchers in Saudi Arabia need to focus on the strength of the individuals and utilize positive psychology for healing.

#### **Limitations of the Study**

One limitation of this study is in the quality of its findings. As the study was conducted online, the researcher relied on one method of data collection, self-reporting. While self-reporting was appropriate for this study, participants' abilities to answer the research questions might have been hindered by factors related to the participants themselves, such as social desirability and mood (Podsakoff et al., 2003). Using self-reporting also combines factors that may impede individuals' desires to respond; for instance, scale formats, length of survey and item contexts (Podsakoff et al., 2003). In addition, relying on self-reporting can be misleading as the participants may misunderstand a question or need further explanation. Since the researcher is unavailable, their answers are based entirely on participants' perceptions (Creswell, 2002; Evans & Mathur, 2005).

Regardless of previously mentioned limitations, this method was the most appropriate for two reasons. First, the purpose of this study was to examine the phenomenon as it occurs in a natural setting. Second, the study was cross-sectional and was intended to focus on a large population at a particular point in time. As such, other collection methods, such as observations or interviews, would be impossible.

A second limitation of this study is that the results cannot be generalized to other populations (Wright, 2005). This is because the researcher relied on a non-probabilistic sampling method. Not having access to the target population made it complicated to use probabilistic sampling. Since it was up to the individuals to participate, the risk exists that the received responses might not represent the general population. Therefore, there is a possibility of

developing bias within the study (Fricker, 2016). Using the Internet also influences the sample, as relying on the Internet to send out the survey may reflect on only particular socio-economic groups. For instance, Andersson and Titov (2014) explained that a notable shortcoming in Internet trials is that research participants tend to be better educated than the general population.

Another issue related to using the Internet is the possibility of a low response rate (Evans & Mathur, 2005). Usually in online surveys, there are few responses. This issue can also reflect the lack of generalization since the results coming from few responses cannot represent the whole population of interest. In other words, individuals who did not take the survey may have different views from those who did submit responses.

### **Definition of the Key Terms**

The operational definitions for the principal terms in the study are as follows:

- A. Mental health information: involves a wide range of information related to mental health that is shared by mental health professionals, patients and others. This information includes, but is not limited to disorders, symptoms, mental health services, self-care skills, coping skills, self-development, maintaining healthy relationships, personal stories and experiences.
- B. Psychological well-being: how individuals experience and live their potential in different dimensions, including self-acceptance, relationships with others, autonomy, environmental mastery, purpose in life and personal growth.
- C. Autonomy: the ability to possess self-determination and independence while living authentically.
- D. Environmental mastery: the ability to control and manage one's surroundings, making them suitable to personal needs and values.

- E. Personal growth: having a sense of development and improvement over time.
- F. Positive relations with others: a positive quality of one's interpersonal realm.
- G. Purpose in life: the ability to have meanings and goals in the present and past.
- H. Self-acceptance: feeling positive about oneself and accepting both strengths and limitations.
- Social media: Internet-based technologies, (e.g., blogs, microblogs, wikis, podcasts, social networks, social platforms), through which individuals can communicate, collaborate and engage with others socially, sharing information.
- J. Saudi Arabian women: females who have Saudi Arabian nationality regardless of marital status, educational level, or current location.

### Summary

The overall paper is divided into five chapters. Chapter one focused on describing the research problem, rationale and purpose behind conducting the study as well as the limitations related to the study. In addition, this chapter offered operational definitions for the main terms in the study. The second chapter will examine existing research related to the study's variables and terms. The third chapter will present the proposed methodology that was used to answer the research questions. The fourth chapter will analyze and outline the data. Finally, the conclusions and recommendations will be presented in chapter five.

#### **Chapter Two: Literature Review**

#### Saudi Arabia Culture and Mental Health

As one's culture directly impacts one's social norms in regard to how one normally behaves (e.g., using the Internet and social media to seek professional mental health help) (Al-Draehim et al., 2012; Al-Krenawi & Graham, 2000), understanding the Saudi Arabian culture is necessary to appreciate the usage of the Internet and social media in Saudi Arabia (Al-Draehim et al., 2012; Al-Saggaf, 2004; Al-Saggaf & Williamson, 2004; Askool, 2012). It is important to consider this matter as the American Counseling Association emphasizes in its code of ethics that counselors should be held accountable in multicultural and diversity issues (ACA, 2014). Mental health professionals, including counselors, must develop multicultural awareness and competence when working with various groups of clients (Sue et al., 1992). Culturally competent counselors seek knowledge about diverse cultural and ethnic groups (Campinha-Bacote, 2002) and work to comprehend the culture(s) of their clients (Ibrahim, 1985).

Sewell (1999) stated that culture is an important aspect of one's social life and displays how people exist as they live their lives. Culture is defined as a set of beliefs, meanings, values, habits, practices and symbols common among a group of individuals (Hays, 1996; Schwartz, 2006; Sewell, 1999). This combination of the mentioned elements is passed from generation to generation, giving individuals a sense of belonging (Hays, 1996; Sewell, 1999).

Culture focuses on the interpersonal and social aspects of a group, not the physical aspects of the group's members (Hays, 1996). For example, it is easy to identify an Islamic culture because it relies considerably on Islam. Islam is one of the most widespread religions in the world; thus, Muslims can come from different ethnicities and countries, such as Middle Eastern countries (e.g., Saudi Arabia, Kuwait, Bahrain), North African countries (e.g., Egypt,

Libya, Morocco), Asian countries (e.g., Indonesia, India, Pakistan) and European countries (e.g., Germany, Sweden, United Kingdom). However, it is never wise to assume that all Muslims have the same culture, as particular Muslim groups are unique in their cultures (Hays, 1996).

However, it should be noted that almost all Saudi Arabian individuals are members of Islam (Alajlan, 2016; Askool, 2012; Guta & Karolak, 2015; Pharaon, 2004). These individuals are similar to other Muslims in that they follow Islamic core beliefs. In general terms, Islam relies on five key pillars. First, Muslims have to declare and be faithful to their only God (Allah) and state that Muhammad is God's messenger. The second pillar is daily prayer practices. Through performing prayers five times a day, Muslims can be connected with God (Allah). Charity is the third pillar in Islam; it is obligatory for healthy Muslims to give some of their money to beneficiaries (qualified persons). Charity aims to remind Muslims to be grateful for the blessings that Allah awards to them and help empower those who have less. The five key pillars also include fasting during the month of Ramadan. Muslims who are physically fit and mature must fast every day from dawn to dusk. Fasting is not limited to food and drink—Muslims also are prohibited from other activities, such as smoking and sexual activity. Ramadan is an annual event, in which Muslims strengthen their souls and spirits, worship Allah and have control over their desires and souls. The final pillar is pilgrimage. It is a lifetime obligation for people who can afford it, both financially and physically. Muslims all over the word travel to Mecca during a particular time to practice physical and spiritual exercises.

The Saudi Arabian culture and society differ somewhat from those cultures and societies in Western and other Islamic and Arabic countries for several reasons. First, as mentioned previously, Islam is widespread and prevalent in Saudi Arabia (Alajlan, 2016; Askool, 2012; Guta & Karolak, 2015; Pharaon, 2004). Due to the prevalence of Islam within the country, it

strongly impacts the members of society in regard to their behaviors and attitudes (Al-Draehim et al., 2012). Muslims, including Saudi Arabians, behave so as to meet the obligations and principles of Islam. The Saudi Arabian nation relies on two significant sources: Quran (the holy book) and the Sunna (the words and behaviors of the prophet Mohammed) (Al-Draehim et al., 2012). However, a significant distinction lies between the Islamic religion and Islamic culture (Alajlan, 2016). Saudi Arabians behave according to their cultural beliefs and norms (Alajlan, 2016). Al-Draehim et al., 2012 indicated that kinship and tribal systems have influenced the lives of the Saudi Arabian people.

Family is a significant component in all Muslims, particularly in Saudi Arabian, cultures (Al-Draehim et al., 2012; Barakat, 2005), as Islam is a strong proponent of maintaining the extended family system. As Islam emphasizes family, Saudi Arabian culture is considered a family-based, conservative culture. As such, emphasis is on family at all socioeconomic levels (Al-Draehim et al., 2012). The family system is a hierarchical structure in which children must respect and obey their parents and elderly relatives (Barakat, 2005). Moreover, males are the heads of families and responsible for those who live in the household, including their children, wives and relatives (e.g., parents, grandparents, sisters). Males are the protectors who maintain the families and women financially, while the women are responsible for the household chores and rearing the children. Women are expected to be extremely dependent as they devote their lives to their families.

This orientation reflects how important and valuable the family relationship is and carries out norms that emphasize the significance of collectivism over individualism. The Saudi Arabian culture is collectivist (i.e., individuals are supposed to consider their relatedness to their families and tribes and fulfill the family's desires over their own desires) (Elanbari, 2015).

The attitude of the Saudi Arabian people toward mental health is affected by their cultural and religious beliefs, which place prevalent stigmas on individuals who either experience mental illnesses or pursue professional services (Aloud & Rathur, 2009). Since Saudi Arabia's culture is regarded as collectivistic, it emphasizes bonding, interdependence and support (Al-Krenawi & Graham, 2000). Therefore, family in Saudi Arabia becomes one's source for coping with life's difficulties (Al-Draehim et al., 2012; Elanbari, 2015). Family is expected to be the single source of support to meet one's emotional, social, psychological, spiritual and monetary needs (Elanbari, 2015). As Saudi Arabians expect their families to assist and support all their needs during crises (Algahtani et al., 2017), no one would seek mental health assistance outside the family. This would be considered not only unacceptable but weak or disloyal (Algahtani et al., 2017; Al-Krenawi & Graham, 2000; Smith, 2011).

In addition, due to the collectivistic basis in Saudi Arabian society, people act in such a way as to favorably reflect upon their families at all times. This situation further reduces their desires and abilities to seek mental health help, as this would appear to place shame on their families (Algahtani et al., 2017; Aloud & Rathur, 2009; Rudy & Grusec, 2001; Shibre et al., 2001). Individuals therefore avoid seeking help for mental health issues because they are afraid of the stigma placed on them personally and on their families (Al-Krenawi & Graham, 2000).

In their study, Abolfotouh et al. (2019) found that more than half (59%) of their 642 Saudi Arabian participants showed negative perceptions about and attitudes toward people (i.e., a stigma) who had mental illnesses. In a study conducted by Al-Ateeq et al. (2018), the researchers aimed to understand how this stigma influenced people who suffer from mental illnesses, such as bipolar disorder and clinical depression. The researchers showed that people with mental illnesses kept their illnesses a secret in order to prevent being stigmatized. People with mental

illnesses were afraid of losing their social reputation and status within their communities (Smith, 2011). In order to avoid this dishonor, some individuals exercised self-help approaches, while others chose to suffer in silence (Algahtani et al., 2017).

Due to the hierarchical society in Saudi Arabia, it is difficult for women to get health care without the permission of the heads of their families (Abu-Aisha, 1985). In addition, the attitudes of women toward health care are negatively impacted because of the Saudi Arabian culture and belief system (Mobaraki & Soderfeldt, 2010) which states that women cannot be treated by male physicians (Abu-Aisha, 1985).

When it comes to mental health, Saudi Arabian women can be stigmatized for seeking services (Al-Krenawi & Graham, 2000). In Saudi Arabia, women feel as if they are bound by social norms, which state that Saudi Arabian women cannot engage in conversations related to certain topics that might bring dishonor to themselves and their families (Guta & Karolak, 2015). This matter might also apply to conversations related to mental health illnesses and problems. As Corrigan et al. (2014) mentioned, stigmas are a significant factor that prevent people from seeking mental health services. To avoid this stigma, some women either never try to seek mental health services or withdraw from the treatment that they have begun.

In cases where women attempt to overcome this stigma, they might experience other obstacles, such as a lack of access to medical providers and treatment (Mobaraki & Soderfeldt, 2010), the inability to meet with or find the services of female professionals since women are not allowed to meet privately with male professionals (Koenig et al., 2014), the need to maintain minimal eye contact with the provider and the need to integrate a family member into the sessions (Al-Krenawi & Graham, 2000). These factors lead Saudi Arabian women to develop negative attitudes toward seeking professional help and services. Instead, they search for other

ways to cope with their poor mental health and other difficulties, such as seeking mental health information through social media.

#### Seeking Mental Health Information via Social Media

Social media has been utilized for increasingly different purposes (Jankauskaite, 2015; Moreno & Whitehill, 2104; Vogel et al., 2014). This medium has allowed individuals to connect and interact with each other easily and rapidly. The concept of social media appeared at the beginning of the 1990s when the first social networking site (i.e., Open Diary) was established (Kaplan & Haenlein, 2010). Today, social media relies on Web 2.0 (Ventola, 2014) to function. Web 2.0 is the second generation of the World Wide Web in which all individuals can be either creators or users (Kaplan & Haenlein, 2010). In other words, social media consists of online services in which people can interact, engage, share common interests and information as well as build relationships (Boyd & Ellison, 2007; Jankauskaite, 2015; Moreno & Whitehill, 2104; Ventola, 2014).

The different forms of social media allow people to create and produce content. People no longer just receive content; instead, they can either upload or post content. Newly developed forms of social media include social networking sites, platforms, video sharing sites and online communities that differ from traditional media in that they allow people to be active members. This advanced feature of social media is what motivates people to use it continuously, making the influence and application of social media noteworthy.

Social media involves a variety of applications that can be sorted into different categories based on two main dimensions (Kaplan & Haenlein, 2010; Ventola, 2014). The first dimension involves social presence and media richness. Social presence is defined as how individuals approach each other on the platforms, while media richness refers to the amount of information

transmitted. Social presence can be divided into three levels: low, medium and high. Social presence is considered low when the communication is asynchronous (e.g., sending messages or emails) and is high in platforms that allow for synchronous communication (e.g., live chat) (Kaplan & Haenlein, 2010). The second dimension involves self-disclosure and self-presentation, which are related to presenting oneself by disclosing information (e.g., thoughts, feelings, likes, dislikes) (Kaplan & Haenlein, 2010).

Based on these two dimensions, six types of social media can be categorized. First, in collaborative projects, one discloses little personal information and instead reviews general information or knowledge. Blogs are the second type of social media in which a person shares personal information and has synchronous communications. Third, content communities allow individuals to share different types of content, including photos, videos and PowerPoint presentations. These communities consist of the medium level of social presence and media richness along with a low amount of self-disclosure and self-presentation. Social networking sites are the fourth type of social media as they allow for more self-disclosure and selfpresentation but do not allow for interpersonal connections. However, users can share any type of content, such as photos, videos, audio files and blogs. Virtual game worlds are another type that promotes elevated levels of social presence and media richness but still limit the degree of self-presentation and self-disclosure. The final type of social media is virtual social worlds. Within this type, no restrictions exist in regard to interactions except for real physical interactions. Users are given the ability to disclose an unlimited amount of data about themselves. In the current study, the term 'social media' incorporates any platform that allows for various types of content and social networking (e.g., Snapchat, Instagram, Facebook, Twitter, YouTube).

Recently, Internet-based technologies (e.g., social media platforms) have become a significant part of daily life in Saudi Arabia (Sait & Al-Tawi, 2007; Simsim, 2011). As of 2009, about 7.7 million Internet users were in Saudi Arabia (Simsim, 2011). By 2017, according to the Saudi Communications and Information Technology Commission, that number had grown to more than 26 million. One of the rationales behind this increase was peoples' desire to use social media. The majority of Saudi Arabians on social media utilize these platforms for social communication and to stay in touch with people, including their families, relatives and friends (Askool, 2012; to Simsim, 2011).

In addition, according to Askool (2012), almost half of the study's participants (46%) used social media as a source by which to gain and transfer knowledge. Al-Haddad (2018) and Bahkali et al. (2016) have found that Saudi Arabian individuals have a tendency to seek health information through social media platforms, such as Twitter and Facebook. Searching online information for medical issues and services are the most common topics within the Saudi Arabian population (Sait & Al-Tawi, 2007). Bahkali et al. (2016) focused their study on estimating the possibility that a Saudi Arabian individual would use social media to locate medical information. The results showed that more than half of the sample (68.3%) utilized social media to locate this information. In another study, Al-Haddad (2018) indicated that high numbers of the Saudi Arabian public utilized social media to search for information related to medications. Al-Qahtani et al. (2018) stated that 82% of their study participants reported using social media to search for general health information. Almaiman et al. (2016) stated that 74.9% of their study participants used social media to find health information specifically related to oral health.

Using social media to increase one's health knowledge has shown positive outcomes among the Saudi Arabian public. Bahkali et al. (2015) examined the impact of social media related to educating women about breastfeeding. Their findings showed that more than half of the participants (57.4%) increased their awareness about breastfeeding, while 52.7% showed a desire to begin or continue breastfeeding (Bahkali et al., 2015). Almaiman et al. (2016) found that seeking information via social media had positive outcomes on their participants, including increasing awareness (44.6%) and promoting positive health behaviors and attitudes (35.3%). In their study, Al-Qahtani et al. (2018) examined the participants' perceptions regarding the use of social media as a source of health information. Their results showed that more than half of their participants (72%) found using social media helpful in promoting health, while 49% mentioned that they found social media to be a profitable vehicle by which to increase health knowledge.

In the research field, scientists attempt to inspect the effects of this technology on human beings. Pendry and Salvatore (2015) have indicated that Internet-based technologies have positive and negative outcomes on humans. Ellison et al. (2007) studied the impact of using social media on psychological well-being, in particular the social aspect. They reported that individuals were able to increase their life satisfaction. Researchers who conducted a systematic review of this topic found that people can improve their social capital and self-esteem plus obtain social support when using social media (Best et al., 2014). In another review, Leist (2013) showed positive outcomes of using social media, including the ability to overcome loneliness and stress while expanding feelings of control and self-efficacy. Social media enhances peoples' feeling of well-being by helping them feel as if they belong and are connected, which is of particular importance to those who may lack this in their lives outside of the virtual world (Bonetti et al., 2010; Laghi et al., 2013). In addition, social media improves communication

among shy individuals, allowing them to discuss their experiences with anonymity (Laghi et al., 2013).

Hampton et al. (2011) examined the social impact of social media and found that social media users are capable of providing and receiving emotional support. Moorhead et al. (2013) conducted a literature review that showed individuals who use social media for the purpose of health gain peer, social and emotional support. Through social media, people with similar situations, such as related health conditions, can be linked together and support each other (Liang & Scammon, 2011; O'Dea & Campbell, 2011). Frost and Massagli (2008) found that people who shared their health information with others felt less isolated and often created support groups based on non-medical similarities (e.g., employment history, astrological signs, shared interests).

On the other hand, several researchers have discussed the shortcoming of social media (Campbell et al., 2016; Ceyhan & Ceyhan, 2008; Jankauskaite, 2015; Kalpidou et al., 2011; Vogel et al., 2014). For example, social media offers a place where individuals compare themselves to each other. To this end, Vogel et al. (2014) found that people who use social media suffer from low self-esteem. Kalpidou et al. (2011) also found that spending a lot of time on social media, particularly on Facebook, decreased a person's self-esteem. Feinstein et al. (2013) showed that social media users who passively compared themselves to others developed damaged mental health (e.g., depressive symptoms). Kalpidou et al. (2011) proposed that using social media can harmfully impact individuals' abilities to manage stress and enhance their wellbeing. In addition, the more time people spend on social media, the less time they spend with their families, which can lead to increased loneliness (Nie & Hillygus, 2002). Other scientists have shown that using social media can cause emotional loneliness and emotional disconnection (Ceyhan & Ceyhan, 2008; Moody, 2006). Akin and Iskender (2011) revealed that increased time

on Internet-based technologies correlated positively with increased mental health illnesses (e.g., depression, anxiety).

Researchers interested in the implications of social media on mental health have attempted to understand how and why people with mental health illnesses use social media. Researchers have shown that such individuals use social media to communicate and interact with peers (Naslund et al., 2014) and health providers (Horgan & Sweeney, 2010). Through this type of communication, people share mental health information (Fergie et al., 2016; Haker et al., 2005; Naslund et al., 2104; Naslund et al., 2016; Zhao & Zhang, 2017) with a broad range of people and through different media (e.g., video, images, audio, text, images, two-way communication) (Jankauskaite, 2015; Naslund et al., 2014; Moreno & Whitehill, 2104). De Choudhury and De (2014) and Zhao and Zhang (2017) mentioned that the number of people seeking information related to health on Internet-based technologies is increasing. Horgan and Sweeney (2010) showed that 30% of their sample of 867 university students searched for online mental health information. In another study, Best et al. (2014) targeted 218 individuals aged 14 to 16 found that slightly more than one quarter (29%) of the participants sought online mental health information, while almost half (48.9%) of the group used social networking sites to find such information. Individuals with specific illnesses, their families, their friends and the public also have faith in social media as a source of mental health information (Haker et al., 2005; Naslund et al., 2014; Naslund et al., 2016; Zhao & Zhang, 2017). For example, when Powell and Clarke (2006) asked their participants to identify the central resources of mental health information, about a quarter (24%) selected the Internet as one of these sources.

Health providers are able to share sensitive and complex information and educate people about health-related topics through Internet-based technologies, including social media (Liang &

Scammon, 2011; Moorhead et al., 2013; Myers et al., 2012; Nordqvist et al., 2009; O'Dea & Campbell, 2011; Scanfeld et al., 2010; Ventola, 2014). According to Zhao and Zhang (2017), social media is useful in helping people find effective scientific information from health professionals as well as personal information from peers with the same conditions. In their qualitative studies, Fergie et al. (2016) and Aref-Adib et al. (2016) showed that people like to seek health information via social media in order to gain facts and support. Using social media is not limited to providers, as people suffering from or experiencing illnesses share their information, stories, recommendations and opinions with other individuals on social media (De Choudhury & De, 2014).

Scanfeld et al. (2010) conducted a study to analyze the content of 971 Twitter posts that contained health information. Their results showed that accessible health information on Twitter was classified into different groups, including general, advice, effects of and reactions to medications, diagnoses and misunderstanding or misuse of medication (Scanfeld et al., 2010). Aref-Adib et al. (2016) indicated that the majority of their participants sought information related to their psychotic experiences and diagnoses, medication and medication side-effects.

By analyzing comments on YouTube videos, Naslund et al. (2014) concluded that people with mental illnesses use the information available on social media to feel as if they are not alone, to develop connections with other people who share the same experiences, to receive and provide support, learn how to cope with daily challenges as well as to find and use medications and mental health services. Similarly, Naslund et al. (2016) showed that people, especially with mental illnesses, approached social media for the purpose of disclosing their experiences and looking for advice. As a result of sharing this information, they feel as if they belong, acquire

coping strategies for daily challenges, gain a sense of hope and empowerment plus gain positive attitudes toward seeking services.

When studying motivations for using Internet-based technologies, people use and share information on social media as a means to get help without identifying themselves (Berger et al., 2005; Birnbaum et al., 2017; Guinta & John, 2018; Haker et al., 2005; Horgan & Sweeney, 2010). Kummervold et al. (2002) and Shaw et al. (2000) also found that people use Internetbased technologies for sensitive health information because they can find and share intimate information that can be hard to discuss face-to-face. When seeking mental health information via social media, they are less likely to be threatened and stigmatized (Birnbaum et al., 2017). Powell and Clarke (2006) proposed that people seek mental health information at specific times, usually when they experience problems or develop an illness.

Although Internet-based technologies, including social media, have become sources of mental health information (Grohol, 2010; Moorhead et al., 2013; Powell & Clarke, 2006), Moorhead et al. (2013) found that using information shared via Internet-based technologies produced more disadvantages than advantages. The disadvantages of this information are most often related to concerns about its quality and credibility (Horgan & Sweeney, 2010). For example, in their review study, Eysenbach et al. (2002) concluded that the majority of the research studies (70%) emphasized the poor quality of online health information. In addition to false, incomplete and misleading information posted due to a lack of oversight on the Internet related to credentials and qualifications (Fritch & Cromwell, 2001; Tate & Alexander, 1996), information can be out-of-date, translated improperly, unauthorized or be derived from studies that were conducted inappropriately (Fitzgerald, 1997; Ventola 2014).

Aref-Adib et al. (2016) emphasized that seeking mental health information through Internet-based technologies could provide negative outcomes. In their qualitative study, having anxiety or fear as the result of reading or seeking information online was common among the participants. Additional negative outcomes included stopping medications without physician approval, losing faith in mental health providers, the chance of relapse, the use of illegal drugs (e.g., cocaine) (Aref-Adib et al., 2016) and an increased risk of self-harm-related behaviors due to shared information that normalizes these behaviors (Lewis et al., 2011).

On the other hand, when people with mental health illnesses acquire information related to their illnesses or symptoms, they can show improvement with the severity of their symptoms being reduced (Griffiths & Christensen, 2007). Naslund et al. (2016) indicated that getting mental health information assists in smashing the obstacles that prevent people from getting professional services. For instance, gaining mental health information increases an individual's awareness and engagement in treatments and promotes information-seeking behaviors (Naslund et al., 2016). Aref-Adib et al. (2016) found that seeking mental health information that has been shared on Internet-based technologies enhanced the patient-clinician relationship as patients were able to use the information in their sessions to ask directed questions. Aref-Adib et al. (2016) also found that some patients developed a sense of power as they began to consider themselves knowledgeable in their diagnoses with the hope of recovering. People also began to practice healthy behaviors or habits as a result of using this shared information (De Choudhury et al., 2013; Fjeldsoe et al., 2009; Meyerowitz & Chaike, 1987; Moorhead et al., 2013; Rodgers & Chen, 2005; Ventola, 2014).

## **Psychological Well-Being**

Researchers interested in the field of mental health do not focus solely on illnesses; instead, there has been a trend toward well-being. According to the WHO (2001), well-being is a positive state in which individuals recognize and use their own potential and develop skills to cope with normal life stressors and difficulties. Through this concept, one can learn to diminish stress, dysfunctional symptoms and even some mental illnesses (Bolier et al., 2013; Carmody & Baer, 2008; Seligman et al., 2006; Shahar & Davidson, 2003; Sin & Lyubomirsky, 2009; Steptoe et al., 2008; Telles et al., 2018). The above definition of mental health suggests that having and maintaining a positive status concerning mental health is a critical part of life.

For many years, scholars interested in mental health have emphasized its negative aspects (e.g., human suffering, pathology) (Ryan & Deci, 2000; Seligman & Csikszentmihalyi, 2000). Researchers have made an effort to understand mental illnesses and their leading factors. Scholars who were interested in mental health focused on healing and recovery for damaged patients (Seligman & Csikszentmihalyi, 2000). However, in the middle of the twentieth century, scholars noted a problematic tendency existed in research and practice related to mental health that the fulfilled and thriving part of the human being and positive human functions had entirely disregarded. Along with the emergence of positive psychology, which focused on improving human experiences, positive traits and positive functions, the study of well-being developed and became an attractive subject for researchers (Diener et al., 1984; Ryff, 1989).

The study of well-being has been grown as various researchers have attempted to understand what it means to be well and what influences an individual's well-being. As a result of having no collective agreement on the definition of this concept, researchers have been divided into different groups based on different philosophical foundations: Hedonic and

Eudaimonia (Deci & Ryan, 2008; Lambert et al., 2015; McMahan & Estes, 2011; McMahan & Estes, 2011; Ryan et al., 2008; Vázquez et al., 2009). According to Sirgy (2012), the Hedonic definition is based on the philosophical works of Bentham, who considered happiness and pleasure to be the greatest good to which people could strive. Researchers following this perspective also concentrate on studying the factors that lead to or affect happiness.

Steger et al. (2008) stated that the Hedonic perspective of well-being concentrates on having good feelings regardless of one's psychological needs because it assumes that people always desire increased pleasure and decreased pain. According to this perspective, also known as subjective (Diener et al., 2009) or emotional well-being (Sirgy, 2012), happiness is the ultimate goal. People continue to rely on their own judgment and their general life satisfaction, satisfaction with specific domains as well as positive and negative affections (Diener et al., 2009; McMahan & Estes, 2011; Vázquez et al., 2009).

When evaluating well-being, this perspective leans on two distinct cornerstones: affection and cognition. Affection includes feelings of happiness in current situations and mode, which is long lasting and not related to specific situations (Diener et al., 2009; Sirgy, 2012). Another group of researchers from this perspective concentrated on the individual's cognitive evaluations in terms of to what extent they are satisfied with their general lives (Diener et al., 2009; Sirgy, 2012). Other scholars have focused on individuals' cognitive judgments about specific domains in their lives (e.g., job satisfaction, marriage satisfaction, health satisfaction) (Diener et al., 2009; Sirgy, 2012). Diener et al. (2009) stated that subjective well-being is complex and multifaceted, as each of the dominions postulates a distinct way by which to assess subjective well-being (i.e., happiness).

The Eudemonic definition of psychological well-being reflects the idea that people live their lives well by endeavoring to develop themselves, using their talents and potentials (McMahan & Estes, 2011; Ryan et al., 2008). This perspective differs from the Hedonic perspective in that the former is concerned with how people live, while the latter is focused on the outcome of how people live (Ryan et al., 2008). The efforts of living life fully are what lead people to be happy and have greater satisfaction and meaning in their lives (Lambert et al., 2015; Ryan et al., 2008).

Eudemonic researchers have built their understanding of psychological well-being on the ideas presented in Aristotle's book *Nicomachean Ethics* (Ryan et al., 2008; Ryff & Singer, 2008; Sirgy, 2012). In this book, Aristotle proposed that an individual's life goal is to recognize his own integrity by living a good life within reason and moderation, free from excesses and deficits. Aristotle's words have been interpreted widely (Ryan et al., 2008). For instance, Ryff and Singer (2008) argued that well-being is not a state; instead, it is a way of life related to how people function. Steger et al. (2008) stated that well-being is focused on having a meaningful life in which people use their potential. According to Huppert (2009), well-being is living well, including knowing how to increase one's positive emotions and decrease one's negative emotions. Ryan et al. (2008) declared that individuals with well-being strive toward the highest human nature and potential. Several models have been developed to help interpret Aristotle's words, including psychological well-being, self-determination and Seligma's theory.

Eudemonic researchers have criticized the work of the Hedonic perspective. For example, Ryan et al. (2008) assumed that living a life for one purpose (happiness) leads people to have insignificant values and shallow meanings, become selfish and exploit or destroy other people because of greed. They have also stated that Hedonic well-being is individualistic, while

Eudemonic well-being is broader, focusing on both individual and societal wellness (Ryan et al., 2008). Ryff and Singer (2008) and Steger et al. (2008) argued that Hedonic scholars study the indictors of well-being, such as life satisfaction, affection and optimism; they give no credence to the structure of well-being. Ryff (1995) criticized the Hedonic perspective for failing to answer the principal question of what well-being is. In addition, the Hedonic perspective does not identify the construction of human well-being, as it fails to provide a theoretical framework (Ryff, 1989; Ryff, 1995).

In order to remedy these deficits, Ryff proposed a model that has a strong conceptual foundation and includes theories related to human growth and development, existential and humanistic psychology and clinical psychology (Ryff, 1989; Ryff & Singer, 2008). Specifically, her model was based on the work of several theorists and their theories: Jung's conception of individuation (1933), Buhler's basic life tendencies (1935), Jahoda's understanding of well-being (1958), Erikson's psychosocial stages (1959), Allport's formulation of maturity (1961), Rogers' depiction of the fully functioning person (1961), Maslow's conception of self-actualization (1968) plus Neugarten's personality change (1973) (Ryff, 1989; Ryff, 1995). Ryff assumed that well-being is multidimensional and reflects the six components of positive psychological functioning: autonomy, environmental mastery, personal growth, positive relationships with others, purpose in life and self-acceptance (Ryff, 1989; Ryff, 1995). Therefore, well-being is related to how individuals see and consider themselves in relation to the above areas.

As mentioned by Ryff (1989; 2017), a fully functional person demonstrates autonomy and resistance to enculturation and convention. They have a sense of an internal locus of evaluation in which they utilize their personal standards and values. Regarding environmental mastery, a fully functional person participates in outside activities, taking advantage of

opportunities in the environment to change and manipulate difficulties in their surroundings in order to make them fit with and meet their psychological needs and conditions (Ryff, 1989; Ryff, 2017). Moreover, the term 'personal growth' refers to a person who evolves and expands over time by using their true self and potential, confronting new challenges and performing tasks at different periods in their life (Ryff, 1989; Ryff, 2017). Related to having positive relationships with others, a fully functional person is able to have warm, trusting relationships; experience love, empathy and positive affection for people, developing intimacy with others (Ryff, 1989; Ryff, 2017). Ryff (1989; 2017) considered a fully functional person to be someone who has a clear purpose, sense of direction, goals and the intention to develop a meaningful life (i.e., purpose in life). Related to self-acceptance, a person has self-acceptance when they develop positive self-regard and accept their current self as well as their past selves. These people develop self-awareness and also admit to limitations and strengths (Ryff, 1989; Ryff, 2017).

Autonomy. An individual's autonomy is influenced by internal and external factors (Aldawsari et al., 2018; Ryff, 1989). According to Malhotra and Suri (2017), the environment as well as the self can impact autonomy, particularly when one develops a sense of an internal locus of control. In their study, Jain and Singh (2015) supported the significant role that having a sense of an internal locus of control has on an individual's well-being. They also found that female university students who had active internal loci of control had greater abilities to adjust and, thus, better mental health. These students were more successful as they were interested in their educational activities. Aldawsari et al. (2018) conducted a study on university students and found that students who had a sense of autonomy were able to manipulate their surroundings and environment. Students with low levels of autonomy had no desire to modify their environment.

Autonomy has a significant function in an individual's well-being. Kalantarkousheh (2012) examined the relationship between autonomy and self-acceptance among university students and found that a positive correlation existed between the two variables, as individuals with low levels of autonomy demonstrated low self-acceptance. In addition, autonomy was found to have a correlation with one's self (Weinstein et al., 2012). In their study, Weinstein et al. (2012) supported the correlation among autonomy, self-acceptance, self-awareness, self-esteem and life satisfaction. People who have high autonomy develop meaningful lives and experience more positive (e.g., enjoyment) and less negative effects (e.g., shame, guilt) (Weinstein et al., 2012). In addition, autonomy was found to be related to developing prosocial behaviors, feeling close to other people (Weinstein et al., 2012).

**Environmental mastery.** Montpetit and Tiberio (2016) defined environmental mastery as having a sense of control. Those who feel in control believe in themselves and their ability to manage their lives. People with poor mental health have been shown to have difficulties in managing and controlling their surroundings. Edmondson and MacLeod (2015) compared the psychological well-being of people with and without depression. Their results showed that people with depression have serious difficulties related to environmental mastery. In another study, Strauss et al. (2012) examined the relationship between psychological well-being and mental illnesses among individuals with and without schizophrenia. They discovered that schizophrenia was strongly linked to poor psychological well-being, including an inability to manage complexities in one's environment.

On the other hand, environmental mastery boosts the mental health of people who participate and maintain active roles in their lives, particularly their social lives, as they are less likely to establish unhealthy behaviors, such as consuming alcohol (Umberson et al., 1996).

Garcia et al. (2014) studied variations among the four affective profiles (self-fulfilling, high affective, low affective reflects and self-destructive) related to psychological well-being and harmony. They concluded that the self-fulfilling group (i.e., people who demonstrate a high positive affection and low negative affection) showed a high level of psychological well-being and harmony. The researchers determined that environmental mastery can be a sufficient index for the individual's harmony in life; this, in turn, is significantly related to psychological well-being being (Garcia et al., 2014).

A sense of environmental mastery can be a sign of a strong mental health state. Montpetit and Tiberio (2016) proposed and examined a theory of stress and resilience. They stated that environmental mastery is a resilience source when confronting stress as it plays a role in the stress appraisal process (i.e., to what extent a person evaluates the life event as a stressor and to what extent the person can cope with it). Results of the study indicated that a significant negative relationship exists between the stress appraisal and environmental mastery. Those with elevated levels of stress reported a slight sense of control (Montpetit & Tiberio, 2016).

According to Karraker (2014), socioeconomic status is related to environmental mastery in that a positive correlation exists between one's perception of economic status and environmental mastery. Therefore, when one's perceived economic status increases, so does one's environmental mastery and vice versa (Karraker, 2014).

Another influential factor in regard to controlling one's environment is age. Ryff and Keyes (1995) remarked that age development manipulates an individual's level of environmental mastery. When individuals grow, their sense of having control related to their surroundings increases (Ryff & Keyes, 1995). The social supports people receive from family, friends and colleagues are critical in increasing their ability to manage and cope with life's difficulties

(Aldawsari et al., 2018). Self-acceptance has also been found to be related to environmental mastery and leads an individual to be in coordination with life (Garcia et al., 2014).

**Personal growth.** The idea of having one stable personality over the years has been debated over the years (Staudinger & Kunzmann, 2005). Researchers have theorized that one's personality can be changed, even in adulthood, but no consensus exists as to the essence of this change (Staudinger & Kunzmann, 2005). Staudinger & Kunzmann (2005) have defined the changes that occur in an individual's personality as personality growth. Personality growth refers to an increase in personal qualities (e.g., openness, insight, integrity, self-transcendence, wisdom) (Staudinger & Kunzmann, 2005). In their study, Ferrand et al. (2014) assessed the relation between psychological needs (i.e., autonomy, competence, relatedness) and well-being of elderly individuals. They found that people whose psychological needs were satisfied had high levels of personal growth and purpose in life.

To grow, people need to have certain psychological characteristics, including optimism, being open to new experiences and having a sense of control over their lives and environment (Schmutte & Ryff, 1997). Kashdan et al. (2004) also stated that curiosity is a motivational factor in personal growth. People who are curious seek novelty and change whenever they experience complexity, uncertainty or conflict (Kashdan et al., 2004). Therefore, people can grow as they integrate or accommodate new experiences into their lives. According to Kashdan et al. (2004), people with high levels of curiosity fully engage with and take advantage of the experiences around them in attempting to make their environment suitable for them. As such, their efforts to satisfy curiosity can lead to newly found experiences (Kashdan et al., 2004).

Additional to the listed psychological characteristics, in their study, Harrington and Loffredo (2010) aimed to determine what self-focused attention variables were related to

psychological and subjective well-being. Their results indicated that self-awareness, selfreflections, insight and rumination had strong positive associations with personal growth (Harrington & Loffredo, 2010).

The desire to grow is a significant element leading people to flourish and facilitates the development of certain concepts, such as self-worth and self-esteem (Bauer et al., 2015). People who desire to grow have high levels of self-actualization and psychosocial maturity (Bauer et al., 2015) as well as a great sense of autonomy, relatedness and meaning in life (Robitschek & Keyes, 2009). On the other hand, people who purposefully fail to change or have limited personal growth initiatives have been shown to have mental health illnesses, such as depression and anxiety (Robitschek & Keyes, 2009).

**Positive relations with others.** Social relationships have been linked to health and wellbeing as negative or poor social relationships indicative of having risks and poor mental health (e.g., depression). Whitton and Whisman (2010) designed a study to determine whether the instability of relationship satisfaction is related to depression. The findings of the study indicated that women who were unsatisfied in their relationships displayed symptoms of depression to a greater degree. Women who were satisfied with their relationships were less likely to suffer from depression (Whitton & Whisman, 2010). Hammen and Brennan (2002) compared women both with and without depression and revealed that poor interpersonal relationships were common in women with depression.

In their study, Towler and Stuhlmacher (2013) proposed and tested a model that assumed that a person's attachment style (e.g., avoidance, anxiety attachment) influenced the quality of their social relationship. Their findings showed that people with negative attachment styles were less satisfied, engaged and confident than people with positive attachment styles (e.g., secured

attachment style) (Towler & Stuhlmacher, 2013). On the other hand, having positive interpersonal relationships in which one feels connected reduces mental health problems among people (Pietromonaco & Collins, 2017). Being connected also enriches well-being, as such people can regulate their emotions, increase their self-esteem and self-efficacy, be motivated to face new challenges and cope with challenges in healthy ways (Pietromonaco & Collins, 2017).

In positive relationships with others, people receive emotional support that helps them overcome stresses; enhances positive feelings, such as love and belonging; increases their sense of security and satisfaction (Pietromonaco & Collins, 2017). Good relationships in which people feel as if they are accepted influence individuals' psychological well-being. For example, individuals who reported that they felt accepted by their parents in their childhood showed self-acceptance (Kuyumcu & Rohner, 2018). Umberson et al. (1996) conducted a study to determine whether relationships influence individuals' psychological functions; he discovered that people who have supportive relationships from friends and relatives were less likely to have psychological stresses, feeling more confident than individuals who had others' support (Umberson et al., 1996). Dush and Amato (2005) stated that the commitment in couples' relationships is connected to subjective well-being.

Developing love in a relationship was discovered to be associated with well-being. In their study, Kim and Hatfield (2004) examined the association between subjective well-being, happiness and the love types as proposed by Hatfield and Rapson (1993). Their findings indicated that two types of love (i.e., passionate and companionate love) were related to life satisfaction and positive emotions, such as being connected, glad and pleased (Kim & Hatfield, 2004). On the other hand, violence was linked to poor mental health. Pico-Alfonso et al. (2006) assessed the influence of intimate partner violence on women's mental health and found that

women who experienced physical or psychological violence had serious mental health problems, such as depression, anxiety, post-traumatic stress disorder and suicidal ideation.

**Purpose in life.** As several definitions exist for 'meaning in life' (e.g., coherence in one's life, goal directedness, purposefulness), several scholars have provided explanations as to how one can achieve meaning in life. For instance, Steger (2013) referred to meaning in life as comprehending and understanding one's life experiences and the self, including who we are, what the world is like, how we fit in with and relate to the grand scheme of things, how we relate to others and how we respond under certain circumstances. Steger et al. (2008) proposed that the term (meaning in life) involves a search process in which an individual has desire and makes efforts to identify and understand their meaning and purpose in life. When people have less autonomy and a great level of relatedness, they would have no or little meaning in their lives. Thus, they become more likely to engage in a search process. People who have a greater autonomy and less relatedness probably do not look for meaning because they develop a sense of meaning in their lives since they rely on themselves and internal resources (Steger et al., 2008).

The process of having meaning in one's life consists of cognitive elements such as understanding and interpreting the events that fill people's lives with a sense of purpose and mission (Steger, 2013). Although the purpose is a result of the process, it has a significant motivational function (Steger, 2013). McKnight and Kashdan (2009) defined 'purpose in life' as a self-organization mechanism that regulates one's daily behaviors, leads to life goals and develops a sense of meaning across various aspects (e.g., social, cognitive, behavioral aspects). However, Steger (2013) stated that life goals are more beneficial if they stem from and support life's meanings as well as if those people are engaging in goal-supporting activities.

Having meaning is also influenced by the individual's cognitive ability. In their study, Triplett et al. (2012) showed that traumatic events lead to a reexamining of a person's core beliefs, which, in turn, cause the person to experience posttraumatic growth. Steger (2013) also stated that the ability to make sense of one's life, discern the pattern of one's experiences and expand one's awareness beyond the current time, linking it to both the past and future are what enable people to find meaning in life.

Having meaning in life is a significant factor for both mental and physical health as it can reduce risks including mortality (Boyle et al., 2009). Boyle et al. (2009) intended to assess the relationship between one's purpose in life and mortality among the senior population. They found that people with a greater purpose in life had less risk of mortality. McKnight and Kashdan (2009) stated that people with purposeful lives had healthier lives, as having a purpose in life strengthens the immune system, enhances beneficial lifestyles and increases one's energy level.

Researchers have found that having a meaning in life can positively associate with several elements such as self-esteem, self-acceptance and autonomy (Ryff, 1989; Triplett et al., 2012; Steger, 2013; Steger et al., 2008). Having meaning in life correlates with having a positive personality (McKnight & Kashdan; 2009). For instance, having an extraversion personality and certain characteristics, such as openness to experience and conscientiousness, are related to having meaning in life (Steger, 2013; Steger et al., 2008). In her study, Ryff (1989) found that a correlation exists between meaning and a positive affect. People who have meaning in life also show a positive orientation toward the future (Steger, 2013; Steger et al., 2008). As such, meaning in life can be beneficial for those with mental illnesses and certain problems, such as

stressors, post-traumatic stress disorder and depression (Robatmili et al., 2015; Triplett et al., 2012; Steger, 2013; Owens et al., 2009).

**Self -acceptance.** Self-acceptance is a fundamental element of mental health (Vasile, 2013) and can function as a predicting factor for having well-being. People with self-acceptance are in harmony with life as they accept all parts of themselves and their former lives (Garcia et al., 2014). Xu et al. (2016) also stated that self-acceptance is related to social ability, specifically the ability to accept other people. Song et al. (2019) stated that people with self-acceptance engage in prosocial behaviors, specifically charitable behaviors, which, in turn, have a secondary influence on life satisfaction. Self-acceptance is documented as having a strong positive relationship with life satisfaction (Abbasi et al., 2017; Ryff, 1989; Song et al, 2019) and is associated with having meaning in life; this, in turn, facilitates an individual's psychological adjustment and growth (Cho et al., 2014). People with self-acceptance develop a positive attitude toward themselves, such as self-forgiveness and mindfulness (Xu et al., 2016).

Having difficulty accepting one's self correlates with psychological problems and mental illnesses, such as emotional difficulties and depression (Carson & Lange, 2006; Flett et al., 2003; Vasile, 2013). In their study, Flett et al. (2003) assessed the connection between self-acceptance and depression and found that a negative relationship existed between self-acceptance and depression among a sample of university students. This result was supported by Edmondson and MacLeod (2015) who found that people with depression have low self-acceptance. In another study, Paloş and Vîşcu (2014) assessed the relationship among anxiety, negative thoughts and self-acceptance. They found that a negative correlation existed between self-acceptance and both anxiety and negative thoughts.

Certain elements shape the concept of self-acceptance. For instance, Flett et al. (2003) found that people who strive for perfectionism have trouble accepting themselves. Similarly, Flett et al. (2003) found that people who are concerned with achieving perfect standards demonstrate low levels of self-acceptance. A deficiency in self-acceptance correlates with irrational beliefs, such as the need for approval and achievement. In their study, Dixon et al. (2014) examined the relationships among self-evaluative perfectionism, self-forgiveness and self-acceptance; they found that self-forgiveness was positively related to self-acceptance (Dixon et al., 2014). They also discovered a negative correlation between self-evaluative perfectionism and self-forgiveness as self-acceptance influenced this correlation. As such, when self-acceptance increases, self-forgiveness also increases, causing the individual's perfectionism to decrease (Dixon et al., 2014).

Mindfulness also plays a significant role in shaping self-acceptance and is a state in which people accept and are not judgmental toward themselves. In their study, Xu et al. (2016) discovered that mindfulness led to great self-acceptance and psychological well-being. Xu et al. (2016) found the correlation between self-acceptance and psychological well-being was indirectly supported by mindfulness state.

### Women's Psychological Well-Being

Gender, in conjunction with other factors (e.g., psychological stressors, personality, age, socioeconomic status, social support, discrimination), is influential in regard to who experiences mental illnesses, as females are more likely to experience mental illnesses than males (WHO, 2000). Offer and Schneider (2011) examined gender differences among parents who performed multiple tasks related to career, housework and childcare simultaneously. The findings indicated that women were more likely to be involved in multitasking and experienced negative emotions,

psychological stressors, guilty feelings and family-work conflicts. These findings were supported by a review study conducted by Umberson et al. (2010).

Another important variable in regard to mental health issues is one's personality. For example, Zambianchi (2016) found that individuals with proactive personalities (i.e., having a desire to intercede in the environment and persevere until making meaningful changes) were more willing to engage with and contribute to their surroundings (e.g., civic and political environments). Similarly, Anglim and Grant (2016) revealed that one's personality can be an indicator of psychological well-being. For instance, extravert, neurotic and conscientious personalities were predicted to have a high level of environmental mastery. In their study, Sales et al. (2013) found that personality traits of adolescent women can manipulate their self-beliefs related to conscientiousness and neuroticism traits that typically impacted their self-esteem.

Socioeconomic status, such as income and education, play a significant role in manipulating psychological well-being. In their longitudinal study, Mulia et al. (2008) collected data from 392 women who experienced poverty in order to examine whether stressors related to poverty led to developing unhealthy behaviors, specifically drinking. Their findings indicated that women with low incomes had a higher chance of suffering stressful events and economic hardships; this, in turn, increased their risk of developing drinking and psychological problems over time (Mulia et al., 2008). In addition, education has been documented as being connected to psychological well-being (Ahrens & Ryff, 2012). When the education level increases, women who played multiple roles in their lives showed greater autonomy, personal growth and a sense of control (Ahrens & Ryff, 2012).

Ageing is another factor manipulating an individual's psychological well-being. Evidence has shown that as people get older, their psychological well-being diminishes (Ryff, 1989), likely

due to chronic illnesses (Wikman et al., 2011). In their review article, Dueñas et al. (2016) showed that chronic pain affected individuals' social lives negatively, which led to relationship conflicts, increased stressors in families along with decreased social interactions and contacts. Steptoe et al. (2015) did another review study and found that people who suffered from illnesses (e.g., heart disease, arthritis, chronic lung disease) tended to be depressed with decreased wellbeing.

Social environments play a critical role in supporting and meeting individuals' psychological needs, especially when it comes to autonomy. People need to feel that their needs and wants are considered and accepted, that they have volition and ownership in regard to their lives. Social environments that support autonomy in various contexts (e.g., home, school, work) have been recognized as facilitating well-being. Nelson et al. (2015) conducted a study that focused on the influence of feeling autonomous and making choices related to prosocial behaviors on individuals' well-being in an educational setting. They found that giving students the autonomy to be kind instead of forcing them to be kind improved their well-being and increased kindness among the students who received autonomy support (Nelson et al., 2015). Work environments that support autonomy improve job performance, which, in turn, enhances well-being (Slemp et al., 2015). Having autonomy in close relationships has a prominent influence on individuals' well-being. People with parents who supported their autonomy during life transitions, such as educational transitions, demonstrated more self-esteem and life satisfaction and less depression and burnout; thus, the individuals' well-being was safeguarded and enhanced (Duineveld et al., 2017).

Barry and Jenkins (2007) and Andermann (2010) indicated that certain factors, such as social and cultural discrimination, abuse, violence, social isolation, separation, rejection and a

lack of support, increased one's risk of having poor mental health. Kucharska (2018) found that gender discrimination was tied to low self-esteem and symptoms of psychiatric disorders. Hadley et al. (2010) found that women who had low or restricted autonomy related to freedom of movement and body were more likely to experience mental health problems, such as depression. In their study, Eek and Axmon (2015) focused on the effects of the unequal distribution of responsibilities for household duties on women's health. They found that women who stuck to this type of inequality had psychosomatic symptoms, including elevated stress and fatigue. Stockman et al. (2015) examined the effects of intimate partner violence among victims of various ethnic minority groups. In their systematic review, they found that intimate partner violence was connected to poor mental health, especially related to depression, post-traumatic stress disorder and mood disorders.

## Factors Influencing the Psychological Well-Being of Saudi Arabian Women

Aldawsari et al. (2018) pointed out that collectivism impedes an individual's autonomy. Saudi Arabia is known for having a conservative and patriarchal society (Al-Saggaf & Williamson, 2004). As such, individuals in this country, especially women, are more concerned with fulfilling their expected roles within society than gaining autonomy (Al-Alhareth et al., 2015). In their study, Yakaboski et al. (2016) stated that the decision to study abroad for international Saudi Arabian students was related to their abilities to serve others, organizations as well as their country, not necessarily to improve their own lives.

Women in developing countries have limited autonomy and limited control over their lives, especially related to their health care (Osamor & Grady, 2016). In their study, Alquaiz et al. (2017) supported this statement with results showing that about 36.8% (693) of their female participants suffered from controlling behaviors. In fact, the majority of these women (80%)

were not allowed to manage their own health care and 70% of these women experienced rigorous control over their lives (Alquaiz et al., 2017).

In addition to a lack of social support, women are more apt to be exposed to violence and oppression (United Nations, 2014). Domestic violence is a serious issue (Alzamil et al., 2015; Fageeh, 2014; Tashkandi & Rasheed, 2009), and Saudi Arabian women are just as susceptible as are other women. Domestic violence includes psychological, physical and emotional violence. Fageeh (2014) conducted a study with 2,301 women in Jeddah and showed that roughly 34% had experienced domestic violence. Among these abused Saudi Arabian women, the dissemination of each pattern included: 29% emotional abuse, 11.6% physical abuse and 4.8% sexual abuse. Tashkandi and Rasheed (2009) also showed that more than half of their sample of 689 Saudi Arabian women had experienced either emotional or physical domestic violence, while less than half of these women had reported their abuse to their primary care physician. In Al-Tawian's (2016) study, half of the university student sample experienced daily physical, verbal or deprivation domestic violence. It was hypothesized that this led to further conflicts in the women's lives, especially in their academic lives. Alzamil et al. (2015) confirmed the damage of domestic violence by showing that university students who experienced domestic violence had a difficult time making friends, succeeding academically and increasing or retaining their selfesteem.

Loneliness is another factor that affects mental health. According to Alzamil et al. (2015), loneliness and isolation behaviors, such as severing current relationships and refusing to create new relationships, were common among the members of their sample who had experienced domestic violence. Abu-Alaish (2016) mentioned that social isolation was one of the shared coping mechanisms used by their participants to cope with academic stress and difficulties.

Aboalshamat et al. (2018) conducted a study to determine the relationship between the prevalence of suicidal ideation, suicide attempts and loneliness for a sample of 607 dental and medical college students. The results showed that the women in the study were more likely to experience suicidal ideation and suicide attempts than the men; loneliness was a predictor of being at a risk for suicide attempts (Aboalshamat et al., 2018).

According to Mobaraki and Soderfeldt (2010), polygamy also influences the psychological well-being of Saudi Arabian women. Women in polygamous marriages were likely to develop a preeminent level of stress, have dysfunctional families and marital relationships plus have a reduced amount of life satisfaction. These results were supported by Al-Krenawi and Graham (2006) and Al-Gahtani et al. (2017).

Stressors are common in Saudi Arabian females. In a qualitative study, Al-Yaemni et al. (2013) found that unhealthy marital relationships and conflicts, coupled with women's gender roles related to the family, including raising and teaching children and doing housework, were significant factors for the unhealthy psychological symptoms of stress and worry. Al-Saleh et al. (2010) examined the rate and level of stress among dental students in Saudi Arabian universities and found that most of the 548 dental students had stress with the female students exhibiting higher levels of stress than the male students. Al-Mulhim et al. (2018) compared 176 medical and 119 non-medical Saudi Arabian students from both genders in relation to the prevalence of bullying or victimization. Al-Mulhim et al. (2018) revealed that female students were exposed to at least one form of bullying in the educational setting while male students were less likely to encounter either bullying or victimization.

# Summary

This chapter began with a brief introduction of the Saudi Arabian culture and how it impacts the seeking of professional help by Saudi Arabian citizens, as this study focused on women in Saudi Arabia and their use of mental health information as shared on social media. This chapter then summarized the previous research related to the study's variables: seeking mental health information via social media and psychological well-being.

### **Chapter Three: Methodology**

### The Purpose of the Study

The purpose of this study was to determine if the use of mental health information shared via social media can improve the psychological well-being of Saudi Arabian women. Specifically, the researcher intended to explore the use of scientific information on mental health shared through social media by Saudi Arabian women to assist them in maintaining their psychological well-being. The researcher also aimed to inspect the health information-seeking behavioral patterns of Saudi Arabian women through social media. In addition, the researcher examined different demographic factors (e.g., marital status, employment status, age, educational levels) as predictors of the use of the mental health information available on social media to improve psychological well-being.

# **Research Questions**

In this study, the researcher attempted to answer the following research questions:

RQ1: What is the psychological well-being of Saudi Arabian women as a whole?

RQ2: How are the demographic variables of Saudi Arabian women related to seeking mental health information via social media?

RQ3: What is the relationship between seeking mental health information via social media and the overall psychological well-being of Saudi Arabian women?

RQ4: To what extent does seeking mental health information via social media relate to different dimensions of psychological well-being: autonomy, environmental mastery, personal growth, positive relationships, purpose in life and self-acceptance?

RQ5: Are there statistically significant differences between the diverse factors associated with the use of social media and the variables associated with psychological well-being for Saudi Arabian women?

#### **Methodological Perspective**

According to Coghlan and Brannick (2014) and Daly (2007), the researcher's adaptive methodology is determined by the researcher's theoretical and epistemological views. Shannon-Baker (2016) mentioned the importance of discussing this matter in the research. Consider that this matter assists the researcher in creating a more logical, consistent and integrated study (Daly, 2007). This matter's influence on the research can be substantial as it shows a connection between the researcher's theoretical framework and the methods used (Coghlan & Brannick, 2014). Therefore, the goal of the remainder of this section is to provide a description of how and why the researcher selected the prescribed method.

In the fields of research and social science, epistemology refers to the nature of knowledge and how one creates that knowledge (Babbie, 2016; Daly, 2007). The design of a study begins by considering the process used to create knowledge (Daly, 2007). Before determining the researcher's epistemology, one should clarify the ontology (what constitutes reality). Two dominate perspectives of ontology exist: objectivism (i.e., a concrete reality exists in the external world) and subjectivism (i.e., reality is something constructed by individuals and there is no certainty) (Daly, 2007). The ontology behind the present study is objectivism, as the researcher believes that only one reality exists independently from the mind with individuals being unable to influence it.

Objectivism involves an epistemological perspective called positivism. In this perspective, reality can be examined and measured, allowing one to make a prediction about it in

an empirical and a scientific manner. Therefore, the role of the researcher is to discover reality by collecting and interpreting the data. This perspective holds the belief that a separation exists between reality and the researcher. In other words, the researcher has limited influence on the construct of reality. In addition, the positivism perspective reflects deductive thinking that requires the researcher to move from general to more specific ideas, making hypotheses based on general ideas (Babbie, 2016).

## **Research Design**

This study utilized survey research (i.e., a cross sectional survey design) in order to answer the research questions. Many disciplines, including the social sciences, have utilized the survey approach in research studies (Marsden & Wright, 2010). This approach can be utilized in order to learn about a variety of subjects, including understanding the perceptions of individuals and societies (Marsden & Wright, 2010).

When dealing with factors that are not observable (e.g., traits, beliefs, preferences), the survey approach is the most appropriate and preferable approach by which to collect data from different units of analyses (e.g., individuals, groups); it is helpful when attempting to understand a phenomenon related to a large population (Babbie, 2016; Bhattacherjee, 2012). The survey approach assists in investigating a phenomenon in a natural setting without control or manipulation of the variables by the researcher (Pinsonneault & Kraemer, 1993).

This approach is a scientific method that uses statistics to generalize data from the sample to the target population (Marsden & Wright, 2010). As the survey approach involves statistics, it assists in exploring and estimating the correlations among variables (Marsden & Wright, 2010). Pinsonneault and Kraemer (1993) stated that one of the features of the survey approach is its ability to provide quantitative data about the relationships among variables. In addition, Babbie

(2016) stated that what makes a survey approach useful is its use of questionnaires to extract data for statistical analyzation.

Two ways exist by which to conduct and deliver surveys: self-administered and face-toface. This study relied on self-administered surveys in which the respondents read and answered questions by themselves. This type of survey was chosen because it required less time related to collecting the data than other strategies (Babbie, 2016) and was more appropriate for the purpose of the study.

Since this survey was self-administered and required a method of distribution, several strategies to collect the data were considered (e.g., mail, home delivery), but an online method was chosen. The online method has steadily increased in popularity and use since its first appearance in 1995 (Babbie, 2016). For online surveys, two methods of distribution can be utilized: electronic mail (i.e., email) and web-based distribution (Fricker & Schonlau, 2002). Due to the design of this study, web-based distribution was employed (Bhattacherjee, 2012).

**Strengths and limitations of the design.** In general, when comparing the survey approach with other research approaches, it has been recognized for its strengths (Bhattacherjee, 2012) since it is the perfect way by which to study phenomenon as it is in the real and natural world (i.e., no need exists to control or manipulate the variables) (Pinsonneault & Kraemer, 1993). The survey approach can access and collect data about a large population (Babbie, 2016; Bhattacherjee, 2012) as well as collect authentic data that can be generalized to a target population (Barlett et al., 2001). Compared to other approaches, the survey approach is both less time consuming and less costly (Babbie, 2016; Bhattacherjee, 2012).

Using the Internet as a collection mode has been shown to be superior to other inveterate modes, such as face-to-face interviews, mail and phone surveys (Fricker & Schonlau, 2002;

Wright, 2005), because it allows for the collection of sensitive data that can be shared confidentially (Babbie, 2016). Another strength of using the Internet is that the researcher is able to control the measurement error (Fricker & Schonlau, 2002) by utilizing the web survey's program to maximize the quality of the data. Through this program, the answers are screened to make sure that no answers were skipped or missed. Using this program allowed the researcher to save time when attempting to organize the data for the analysis process (Fan & Yan, 2010). Using the Internet also allowed the researcher to connect to populations difficult to reach as well as populations that are physically spread out but have shared interests (Wright, 2005). In particular, by using the Internet, the researcher was able to connect with female users of social media inside and outside Saudi Arabia.

The survey approach in this study has limitations, however, in that it may present biases within the representation of the sample. Online surveys are known for sampling bias as they utilize a non-random and non-probabilistic sampling method—it is complicated to know the characteristics of the population in a study (Wright, 2005). The paramount matter one must consider when using a non-probabilistic sampling method is that one cannot generalize or infer from the collected data (Fan & Yan, 2010).

Additionally, many scholars have argued that using the Internet as the means by which to collect data restricts the data gathered to only those groups with access to the Internet (e.g., educated individuals, young individuals, those in the middle to high socioeconomic classes) (Babbie, 2016; Bhattacherjee, 2012; Coomber, 1997; Fan & Yan, 2010). This can be an issue when the use of the Internet is restricted; however, it is likely false today, as the Internet is global and well-accessed by all societal levels and classes (Babbie, 2016).

Another limitation is that, when using the Internet as a mode of collection, the response rate achieves inadequate levels compared with other survey modes of collection (Fan & Yan, 2010; Fricker & Schonlau, 2002). This limitation reflects what is known as a non-response bias, which is a researcher's inability to acquire an appropriate sample size or minimize the rate of non-responses within the sample (Yu & Cooper, 1983). Other limitations related to responses are that the survey approach may record invalid responses while the participants may either not understand or may misinterpret the questions. In order to overcome the above limitations, a reliable and valid instrument was utilized.

### **Research Method**

**Sampling.** A population is a group of individuals in whom the researcher has an interest and from which a sample can be selected (Babbie, 2016). Since this study concentrated on Saudi Arabian women, the target population of this study was women who hold Saudi Arabian nationality and live either in Saudi Arabia or temporarily in other countries. According to the General Authority for Statistics of Saudi Arabia, the last census, completed in 2018, showed that the Saudi Arabian female population was 10,192,732 individuals.

Sampling is a process of selecting the units from the population that the researcher is interested in studying (Babbie, 2016). The fundamental intention of sampling is to make inferences about the whole target population (Babbie, 2016; Yu & Cooper, 1983). Two primary ideologies of sampling are utilized in social science research: probability and non-probability sampling. What distinguishes probability from non-probability sampling is its ability to collect inferential data (Babbie, 2016; Fricker, 2016). Although probability sampling is more accurate in regard to generalizing from the sample to the target population, some exceptions exist in which it might be better to use non-probability sampling (Fricker, 2016), including that in which no

chance exists to make a population frame that includes all of the individuals, and using a random sample is neither a practical nor suitable method for study purposes (Babbie, 2016).

One of the impediments to bringing probability sampling into play in the present study was that it was difficult to get a list of all Saudi Arabian women who use social media and the Internet, then select samples randomly. Probability sampling requires randomly selecting individuals from a sampling frame (Fricker, 2016). This study utilized a non-probabilistic sampling method, which was applied through posts that publicized the survey through social media platforms, such as Facebook, Instagram, Twitter and Snapchat, while inviting female Saudi Arabian social media users to participate. The survey participants were required to identify themselves as being in the above categories before they could proceed with the survey. Convenience sampling was more suitable for the present study because the intent was to achieve full understanding about the phenomenon from the entire Saudi Arabian female population (Etikan et al., 2016).

Using the above-mentioned method of sampling boosts self-selection as the individuals have autonomy regarding their participation. This self-selection involves non-response bias in which not all possible opinions and beliefs can be detected. Not every individual who received the survey would have the same tendency to respond (Wright, 2005). Fan and Yan (2010) identified various factors that related to society, respondent and research design. Examples of society-related factors include the level of relatedness and cohesion in both societal and public attitudes. Regarding the current study, the cultural backgrounds and belief systems of the target population are related to this issue. Individuals might refuse to participate because of being stigmatized related to their mental health. In order to overcome this issue, the researcher

emphasized the study's anonymity (Yu & Cooper, 1983). The participants were under no obligation to provide personal information (e.g., name, address, phone number).

Respondent-related factors reference the participants' skills and knowledge related to using the Internet as well as their ages and personalities (Fan & Yan, 2010). These factors did not matter for the present study because this study targets the users of Internet-based technologies, including social media users. In the present study, the individuals' interests and curiosity were significant factors in order to minimize non-response bias (Coomber, 1997; Yu & Cooper, 1983). To this end, a cover letter containing a brief description of the study was provided in each survey.

The most important design-related factor is that survey software may be unable to be utilized on different browsers or technological devices (Fan & Yan, 2010). This issue increases the risk of the survey shutting down while it is being worked on or possibly fail to record responses. A secondary design-related factor was the length of the survey, as long surveys are less likely to be completed than short surveys (Fan & Yan, 2010).

**Data collection.** This study utilized a self-administered, validated questionnaire. The first part of the questionnaire focused on demographic information and asked each respondent to identify their gender, nationality, age, educational level, marital status and occupational status. The demographic section also included several questions related to the use of social media, types of social media apps that the participant uses, how often they use them to seek mental health information, to what extent this information is helpful and for exactly what purpose this information is used. Individuals who either identified themselves as male with a nationality other than Saudi Arabian were excluded from the survey automatically. In order to measure the psychological well-being of the participants, the Ryff's Psychological Well-Being Scale (PWB)

was employed. This scale measures respondents' scores in six dimensions: self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life and personal growth. Ryff (1995) defined the dimensions as follows:

- Autonomy: to what extent one has a sense of self-determination, including being able to withstand social pressure.
- Environmental mastery: to what extent one has the ability to manage and control their life, make effective use of opportunities and develop contexts that meet their needs and values.
- Personal growth: to what extent one has a sense of growth and development as an individual as well as the extent to which one is open to experiencing new things and seeing positive changes in themselves or their behaviors.
- Positive relationships: to what extent one has positive relationships with and trusts others, has empathy and is capable of developing satisfying and intimate relationships.
- Purpose in life: to what extent one considers themselves as having a purposeful and meaningful life in both the past and present.
- Self-acceptance: to what extent one considers themselves positive and accepting of their good and bad qualities in two timeframes (i.e., past, present).

The PWB is based on various theories and has been revised three times. The first version included 20 items per subscale, the second version included 14 items per subscale and the third version included seven items per subscale. The participants responded using a 6-point Likert scale that ranged from 1 (strongly disagree) to 6 (strongly agree). Individuals' scores identified their psychological functional level. The higher the score, the higher the functional level; while the lower the score, the lower the functional level.

The PWB was indicated as having a good reliability in that the Cronbach's alpha coefficient for the subscales ranged from 0.85 to 0.91 (Ryff et al., 2006). In a study conducted by Akin (2008), internal consistencies, test-retest reliability and item-total correlations for the scale were computed. The internal consistencies varied from 0.87 to 0.96, while the test-retest reliability ranged from 0.78 to 0.97 and finally the item-total correlations ranged from 0.32 to 0.90 (Akin, 2008).

When using the Arabic version of this scale with Arabic samples, the total scale was suitable and valid to be used with Arabic cultures. For instance, the long version of the scale showed a suitable internal consistency of 0.84 (Abu-Hashim & Kadour, 2012; Hamdan-Mansour & Marmash, 2007). The short version of the scale was also used in two different studies; within these studies, the researchers used Cronbach's alpha to measure the internal consistency and found it to be reliable at 0.84 and 0.82 (Al-Jundy & Talahmeh, 2017; Kharnub, 2016). In the present study, the version that consisted of seven items per subscale, 42 items in total, was used. This Arabic version was validated by Al-Jundy and Talahmeh in 2017 and was consistent with the original version. This version had an internal consistency of 0.82 and showed valid evidence based on the test content.

**Study procedures.** According to Fan and Yan (2010), surveys that use the Internet to collect data involve four stages: survey development, survey delivery, survey completion and survey return. The current study adopted this model to explain the process of conducting the study. In the survey's development stage, the researcher began probing for reliable and valid scales that could be used to extract the data. This process was completed by conducting a literature review. The Arabic version of the PWB was selected. The demographic questionnaire was constructed by the researcher.

After determining the scale to be used in the study, the researcher worked on the design and constructed the web survey. According to Fan and Yan (2010), this task demands that the researcher conduct a variety of tasks, including choosing the color of the webpage, deciding whether any images should be included, creating a welcome page and writing the questions for the selected scales. For this step, the researcher employed Qualtrics, software used to collect and analyze data. Through Qualtrics, the researcher was able to perform a web-based survey. Qualtrics was selected because of its features as the data can be stored and protected. The participants were able to access the survey with Internet Explorer, Firefox, Safari and Chrome. The distribution merit of Qualtrics served the intention of the study. The researcher was able to post the survey on a web page (e.g., Twitter, Facebook) and platforms (e.g. Instagram, WhatsApp).

In the second stage, survey delivery, the researcher posted the survey to different social media applications and invited potential respondents to participate (Appendix A) and sign the informed consent agreement (Appendix B). This stage lasted approximately two weeks. The survey was available to be completed during that time period.

The third stage, survey completion, happens during the same timeframe as the second stage. In survey completion, after receiving the invitation from the researcher, the participants were able to open the link and finish the survey that consisted of the demographic questionnaire (Appendix C) and Ryff's Psychological Well-Being Scale (Appendix D). Submitting the survey ended this stage for each participant. This stage reflected accountability and the duty of the respondents in the study. The final stage, survey return, occurred when the researcher began transferring the collected data from the website to the format necessary to be analyzed.

**Data analysis.** After the data were transferred from the website to the Statistical Package for the Social Science (SPSS) version 24.0, the researcher performed descriptive and inferential statistics. The descriptive statistics assisted the researcher in providing a full numerical report related to the collected data by computing the variability and the central tendency (Pagano, 2012). In this study, the scores of each of the six dimensions of the PWB (i.e., autonomy, environmental control, personal growth, positive relationships with others, purpose in life and self-acceptance) plus the total PWB score were considered as quantitative variables and reported through measures of descriptive statistics: central tendency and variability. The qualitative variables were analyzed and presented through frequency distribution tables.

According to Pagano (2012), correlation examines the existence of a relationship between variables. A Pearson Chi-square Independence Test was used to determine the possible association between the qualitative variables (age, marital status, employment status and educational level) and active seeking of mental health information via social media. The Pearson Chi-square Independence Test was helpful as it allowed the researcher to examine the probability of independence.

An analysis of variance is a statistical technique that was considered to estimate the difference between the groups of means. In order to evaluate the presence of statistically significant differences, a one-way ANOVA was applied, considering each of the dimensions of the psychological well-being and the total score of Psychological Well-being as independent variables with the different qualitative variables as factors.

**Axiology.** According to Kivunja and Kuyini (2017), axiology deals with ethical issues that the researcher needs to take into account when conducting a study. It is a process in which an individual cogitates the "right" thing to do. For this study, approval from the Institutional

Review Board (IRB) of St. Mary's University in San Antonio, Texas, was required prior to the collection process. Legal and ethical principles and practices were considered industriously in all stages of this study. For instance, the researcher considered a proper manner by which to perform the study as well as the values and benefits that the participants could gain from participating in the study. The researcher also valued human rights (e.g., the participants had autonomy related to the involvement in the study). The researcher took precautions to minimize probable risks to the participants.

# Summary

This chapter focused on the methodology that was used in the current study. It discussed the purpose and research questions of the study and the theoretical assumptions behind the study. The chapter depicted the research design and presented details about the central decisions related to conducting the study (e.g., sampling procedure, means of data collection, analysis). The next chapter will focus on analyzing the data.

#### **Chapter Four: Results**

## Introduction

The purpose of this study was to examine how Saudi Arabian women used mental health information shared via social media to improve their psychological well-being. The data were gathered via an online survey in order to answer the research questions. Most of the study participants were based in Saudi Arabia, while the remaining participants were of Saudi Arabian origin living in Australia, the United Arab Emirates, the United States or the United Kingdom. This chapter endeavors to display the participant demographics and quantitative data analysis as well as depict the data, answer each research question statistically and provide a full report on and interpretation of the information collected by the researcher. To this end, statistical tables are presented in this chapter. The quantitative data analysis begins with a descriptive statistical analysis, which is then followed by an inferential statistical analysis.

#### **Demographic Characteristics of the Study Sample**

The current study included Saudi Arabian women regardless of their geographic locations. Of the 1,025 surveys started for this study, only 725 were utilized once participants who did not meet the conditions (e.g., were male, were other than Saudi Arabian nationality, were younger than 18 years old) were removed. The participants' demographic variables included age, marital status, occupational status and education level.

As shown in Table 1, 24.5% of the participants were between 18 and 25 years old, 38.13% of the participants were between 26 and 35 years old, while 25.1% of the participants were 36 to 45 years old. A small sample of the participants were older than 45 years (i.e., 8.2% of the participants were 46 to 55 years old, 3.4% were 56 to 65 years old and 0.5% were at least 66 years old).

Of the participants, 66.9% were married while 25.2% had never been married. The rest of the participants were classified as follows: 5.8% were divorced, 0.7% were widows and 1.4% were classified as "other" (e.g., engaged).

Only 28.6% of the participants worked full-time and 4.4% had part-time jobs. On the other hand, more than a quarter (34.2%) were unemployed. In addition, 26.2% were students, while 6.6% were retired.

The majority (75.7%) had completed a college degree. Specifically, 51.9% of the participants had an undergraduate degree and 23.8 % held a graduate degree. A slight number of the participants (1.9%) lacked formal education, but 22.3% of participants had a high school diploma.

Table 1

| Variable          | Levels                | Frequency | Percent |
|-------------------|-----------------------|-----------|---------|
| Age               | 18-25 years           | 178       | 24.5    |
| C                 | 26-35 years           | 276       | 38.1    |
|                   | 36-45 years           | 182       | 25.1    |
|                   | 46-55 years           | 60        | 8.2     |
|                   | 56-65 years           | 25        | 3.4     |
|                   | 66+ years             | 4         | 0.5     |
| Marital Status    | Married               | 485       | 66.9    |
|                   | Never Married         | 183       | 25.2    |
|                   | Divorced              | 42        | 5.8     |
|                   | Widowed               | 5         | 0.7     |
|                   | Other                 | 10        | 1.4     |
| Employment Status | Working full time     | 207       | 28.6    |
|                   | Working part time     | 32        | 4.4     |
|                   | Unemployed            | 248       | 34.2    |
|                   | Student               | 190       | 26.2    |
|                   | Retired               | 48        | 6.6     |
| Education Level   | Less than high school | 14        | 1.9     |
|                   | High school           | 124       | 17.1    |
|                   | Diploma               | 38        | 5.2     |
|                   | Undergraduate         | 376       | 51.9    |
|                   | Graduate              | 173       | 23.8    |

Sociodemographic Profile of the Sample

In regard to the use of social media to seek information related to mental health, Table 2 shows the preferred social media platforms as well as the categories of mental health information sought. YouTube was used most often by the participants (53%), followed by Instagram (45.8%), Snapchat (41.5%) and Twitter (38.3%). WhatsApp was used by approximately 30.2% of the participants. A few of the participants reported that they used Telegram (10.3%) and Facebook (7.2%), while 17% reported using "other" (e.g., Google). A significant proportion (54%) of the participants used social media to learn about and improve their parenting skills or enhance their positive emotions toward life and themselves. Another significant use, as reported by approximately 50% of the respondents, was related to creating a meaningful and positive life and developing effective problem-solving and coping skills.

Table 2

|                |  | F   | Percent |
|----------------|--|-----|---------|
| Social Media   | Facebook   | 52  | 7.2     |
| Platforms      | Instagram  | 332 | 45.8    |
|                | Telegram   | 75  | 10.3    |
|                | Twitter  | 278 | 38.3    |
|                | Snapchat   | 301 | 41.5    |
|                | WhatsApp   | 219 | 30.2    |
|                | YouTube  | 390 | 53.8    |
|                | Other  | 123 | 17.0    |
|                | Total  | 725 | 100.0   |
| Categories of  | Managing life conflicts and symptoms related to  | 67  | 9.2     |
| Mental Health  | mental illnesses                                 |     |         |
| Information    | Supporting recovery process                      | 108 | 14.9    |
| Explored       | Improving and maintaining healthy relationships  | 278 | 38.3    |
| Through Social | Learning and improving parenting skills          | 396 | 54.6    |
| Media          | Promoting social interactions                    | 289 | 39.9    |
|                | Finding balance in life                          | 299 | 41.2    |
|                | Creating a meaningful and positive life          | 357 | 49.2    |
|                | Enhancing positive emotions toward life and self | 392 | 54.1    |
|                | Developing effective problem-solving and coping  | 362 | 49.9    |
|                | skills   |     |         |
|                | Total  | 725 | 100.0   |

#### Social Media Platforms and Categories of Mental Health Information

Table 3 shows the number of social media platforms used by the participants. The results reflect that 41% used at least one social media platform and 59.8% used either one or two social media platforms. Only 5.1% were rated as high users, utilizing six or more platforms.

Table 3

|          |                      | F   | Percent |
|----------|----------------------|-----|---------|
| NSM Used | One                  | 297 | 41.0    |
|          | Two                  | 136 | 18.8    |
|          | Three                | 111 | 15.3    |
|          | Four                 | 91  | 12.6    |
|          | Five                 | 53  | 7.3     |
|          | Six                  | 21  | 2.9     |
|          | Seven                | 15  | 2.1     |
|          | Eight                | 1   | 0.1     |
|          | Total                | 725 | 100.0   |
| NSM Used | 1 or 2 Apps          | 433 | 59.7    |
|          | Between 3 and 5 Apps | 255 | 35.2    |
|          | 6 or More Apps       | 37  | 5.1     |
|          | Total                | 725 | 100.0   |

#### Number of Social Media (NSM) Used for Mental Health Information

Table 4 shows the different purposes related to mental health that caused Saudi Arabian women to use social media. Their main purposes were to communicate with peers who shared the same concerns (20.8%), to seek general information related to mental health (13.8%) plus to give and receive social and emotional support (11.3%). It is interesting to note that 24.1% admitted that they used social media for all of the mentioned purposes while about 28.8% stated that they utilized it for additional purposes, such as enjoyment and entertainment.

# Table 4

# The Purposes of Using Social Media

| The Purposes of Using Social Media                   | F   | Percent |
|--|-----|---------|
| Communicating with peers who share the same concerns | 151 | 20.8    |
| Communicating with mental health professionals       | 8   | 1.1     |
| Giving and receiving social and emotional supports   | 82  | 11.3    |
| Seeking information related to mental health         | 100 | 13.8    |
| All of the above                                     | 175 | 24.1    |
| Other  | 209 | 28.8    |
| Total  | 725 | 100.0   |

In reference to the use of social media, Table 5 shows that 45.4% of women participated in the use social media for mental health purposes. Only 10.2% of the group who use social media for mental health purposes confessed to seeking information related to mental health and about 17.8% of the group indicated they use social media for all mentioned purposes.

Table 5

# Social Media: Uses and Purposes

| For what purposes do you use social media?           | Do you use social media for mental health purposes? |      |     |      |       |       |  |  |  |  |
|--|---|------|-----|------|-------|-------|--|--|--|--|
| -  | Yes   |      |     |      | Total |       |  |  |  |  |
| -  | F   | %    | F   | %    | F     | %     |  |  |  |  |
| Communicating with peers who share the same concerns | 61  | 8.4  | 90  | 12.4 | 151   | 20.8  |  |  |  |  |
| Communicating with mental health professionals       | 5   | 0.7  | 3   | 0.4  | 8     | 1.1   |  |  |  |  |
| Giving and receiving social and emotional supports   | 31  | 4.3  | 51  | 7.0  | 82    | 11.3  |  |  |  |  |
| Seeking information related to mental health         | 74  | 10.2 | 26  | 3.6  | 100   | 13.8  |  |  |  |  |
| All of the above                                     | 129   | 17.8 | 46  | 6.3  | 175   | 24.1  |  |  |  |  |
| Other  | 29  | 4.0  | 180 | 24.8 | 209   | 28.8  |  |  |  |  |
| Total  | 329   | 45.4 | 396 | 54.6 | 725   | 100.0 |  |  |  |  |

To determine whether relationships exists between the variables of the sociodemographic profile (i.e., age, education level, marital status, occupational status) and the use of social media to seek mental health information, the Pearson chi-square independence test was used with results shown in Table 6.

When assessing a possible dependency relationship between the use of social media to seek mental health information and user age, the researcher found a chi-square value of 5.628 with an associated p-value of 0.34; this allowed the researcher to reject the hypothesis and conclude that there is no clear association between these variables. Similarly, with marital status (Chi = 2,536; df = 4; p = 0.67> 0.05), the association did not exist. On the other hand, p-values for the employment status and educational level variables were significant, showing a clear relationship between these variables and the use of social media to seek mental health information (Chi = 13.117; df = 4; p = 0.01< 0.05 and Chi = 12.987; df = 4; p = 0.01< 0.05, respectively).

Table 6

Pearson Chi-Square Tests for the Use of Social Media for Seeking Mental Health Information

| Do you use socia  | Do you use social media for mental health purposes |    |      |  |  |  |  |
|---|--|----|------|--|--|--|--|
|   | Chi-square   | df | sig. |  |  |  |  |
| What is your age?   | 5.628  | 5  | .344 |  |  |  |  |
| What is your marital status?                              | 2.356  | 4  | .671 |  |  |  |  |
| What is your employment status?                           | 13.117   | 4  | .011 |  |  |  |  |
| What is the highest educational level you have completed? | 12.987   | 4  | .011 |  |  |  |  |

## Results Regarding the Psychological Well-being of Saudi Arabian Women

In order to measure the psychological well-being of the participants, the Ryff Scales of Psychological Well-Being (PWB) were employed. This scale measures the respondents' scores in six dimensions: autonomy, environmental mastery, personal growth, positive relation and purpose in life and self-acceptance. The results explain the entire psychological well-being and six dimensions independently.

Table 7 shows that the average value of the PWB is 152.68 points with a confidence interval ranging from 151.32 to 154.03. The standard deviation was approximately 18 points; in

general, an important variability existed that was represented by a distance of almost 100 points

between the highest and lowest values.

# Table 7

# Descriptive Statistics for Psychological Well-Being Total Scores

| Total Score                      |             | Statistic | Std. Error |
|----------------------------------|-------------|-----------|------------|
| Mean                             |             | 152.688   | .690       |
| 95% Confidence Interval for Mean | Lower Bound | 151.322   |            |
|                                  | Upper Bound | 154.033   |            |
| 5% Trimmed Mean                  |             | 152.945   |            |
| Median                           |             | 154.000   |            |
| Variance                         |             | 332.216   |            |
| Std. Deviation                   |             | 18.227    |            |
| Minimum                          |             | 94.000    |            |
| Maximum                          |             | 193.000   |            |
| Range                            |             | 99.000    |            |
| Interquartile Range              |             | 26.000    |            |
| Skewness                         |             | 249       | .093       |
| Kurtosis                         |             | 303       | .185       |

On the other hand, the total score of the scale ranged from 210 to 42; a high degree indicates that the individual has a high degree of psychological well-being. It was observed that half of the Saudi Arabian women had a welfare value of less than 154 points. Likewise, 50% of the analyzed group presented PSW values between 140 and 166 points. Figure 1 shows that the distribution of scores is within normal limits.

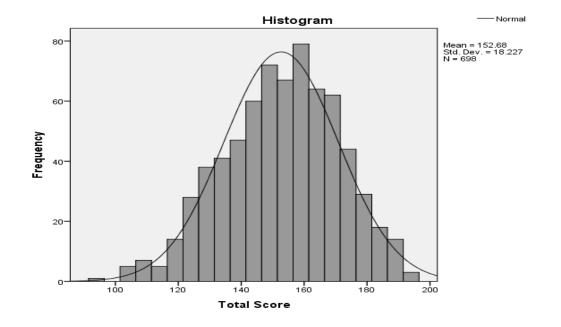


Figure 1. Histogram Total Score PWB.

Additionally, Ryff (1995) defined autonomy as "to what extent one has a sense of selfdetermination and [is] able to resist social pressure" (101). Table 8 shows that approximately 84% of the respondents agreed with the statement: "I judge myself by what I think is important, not by the values of what others think is important." Similarly, about 80.2% had faith in their opinions, even though they might not be identical with the general consensus, while 77.6% believed that they were not afraid to express their opinions.

Table 8

#### Autonomy

|   | Strongly<br>Disagree |     | Disag | gree | Neu | ıtral | Ag  | ree  | Strongly<br>Agree |      |
|---|----------------------|-----|-------|------|-----|-------|-----|------|-------------------|------|
|   | F                    | %   | F     | %    | F   | %     | F   | %    | F                 | %    |
| 1. I am not afraid to<br>voice my opinions, even<br>when they are in<br>opposition to the<br>opinions of most people. | 8                    | 1.1 | 69    | 9.5  | 85  | 11.7  | 396 | 54.6 | 167               | 23.0 |

| 7. My decisions are not<br>usually influenced by<br>what everyone else is<br>doing.                         | 23  | 3.2  | 167 | 23.1 | 98  | 13.6 | 294 | 40.7 | 141 | 19.5 |
|---|-----|------|-----|------|-----|------|-----|------|-----|------|
| 13. I tend to worry about<br>what other people think<br>of me.  | 48  | 6.6  | 193 | 26.6 | 110 | 15.2 | 258 | 35.6 | 116 | 16.0 |
| 19. I tend to be  | 151 | 20.8 | 342 | 47.2 | 106 | 14.6 | 101 | 13.9 | 25  | 3.4  |
| influenced by people<br>with strong opinions.<br>25. I have confidence in                                   | 6   | 0.8  | 76  | 10.5 | 61  | 8.4  | 383 | 52.8 | 199 | 27.4 |
| my opinions, even if<br>they are contrary to the<br>general consensus.                                      |     |      |     |      |     |      |     |      |     |      |
| 31. It's difficult for me to voice my own   | 50  | 6.9  | 205 | 28.3 | 129 | 17.8 | 264 | 36.4 | 77  | 10.6 |
| opinions on controversial matters.  |     |      |     |      |     |      |     |      |     |      |
| 37. I judge myself by<br>what I think is important,<br>not the values of what<br>others think is important. | 6   | 0.8  | 47  | 6.5  | 62  | 8.6  | 373 | 51.7 | 233 | 32.3 |

Regarding environmental mastery, Ryff (1995) defined it as "to what extent one has the ability to manage and control his/her life, make effective use of opportunities and develop contexts that meet his/her needs and values" (101). Table 9 shows that the majority (90.6%) of the participants felt comfortable managing the many responsibilities of their lives. Similarly, more than 87.7% of the respondents felt in charge of the situations in their lives. Additionally, 71.7% of the women surveyed affirmed that they did not often feel overwhelmed by their responsibilities. However, 42.5% of the participants indicated that they had difficulty arranging the details of their lives.

# Table 9

# Environmental Mastery

|   |     | ngly<br>gree | Disa | gree | Neutral |      | Agree |      | Strongly<br>Agree |      |
|---|-----|--------------|------|------|---------|------|-------|------|-------------------|------|
|   | F   | %            | F    | %    | F       | %    | F     | %    | F                 | %    |
| 2. In general, I feel I am<br>in charge of the situation<br>in which I live.                        | 15  | 2.1          | 40   | 5.5  | 34      | 4.7  | 350   | 48.3 | 285               | 39.4 |
| 8. The demands of<br>everyday life often get<br>me down.  | 45  | 6.2          | 265  | 36.6 | 131     | 18.1 | 240   | 33.1 | 44                | 6.1  |
| 14. I do not fit very well with the people and the community around me.                             | 30  | 4.1          | 136  | 18.8 | 113     | 15.6 | 280   | 38.6 | 166               | 22.9 |
| 20. I am quite good at<br>managing the many<br>responsibilities of my<br>daily life.                | 4   | 0.6          | 30   | 4.1  | 34      | 4.7  | 373   | 51.4 | 284               | 39.2 |
| 26. I often feel<br>overwhelmed by my<br>responsibilities.  | 191 | 26.3         | 329  | 45.4 | 74      | 10.2 | 110   | 15.2 | 21                | 2.9  |
| 32. I have difficulty<br>arranging my life in a<br>way that is satisfying to<br>me.                 | 65  | 9.0          | 272  | 37.5 | 80      | 11.0 | 230   | 31.7 | 78                | 10.8 |
| 38. I have been able to<br>build a home and a<br>lifestyle for myself that is<br>much to my liking. | 6   | 0.8          | 54   | 7.5  | 63      | 8.8  | 368   | 51.2 | 228               | 31.7 |

Personal growth is understood as "to what extent one has a sense of growth and development as an individual as well as the extent to which one is open to experiencing new things and seeing positive changes in him/herself or his/her behaviors, has empathy and is capable of developing satisfying and intimate relationships" (101). With reference to this factor, the majority (92.7%) of the participants agreed that life has been a continuous process of learning, changing and developing. A considerable number of the participants (91.4%) also

agreed to have new experiences that let them reflect on themselves and their lives as important (Table 10). As for the item related to enjoying being in new situations that drive them to change, approximately 53.8% of the participants felt good about these situations, while about 24.3% said that they were not comfortable with these situations.

# Table 10

# Personal Growth

|   | Stro<br>Disa |      | Disa | gree | Neu | ıtral | Agree |      | Strongly<br>Agree |      |
|---|--------------|------|------|------|-----|-------|-------|------|-------------------|------|
|   | F            | %    | F    | %    | F   | %     | F     | %    | F                 | %    |
| 3. I am not interested in activities that will expand my horizons.  | 21           | 2.9  | 92   | 12.7 | 65  | 9.0   | 313   | 43.3 | 232               | 32.1 |
| 9. I think it is important to<br>have new experiences<br>that challenge how you<br>think about yourself and<br>the world. | 3            | 0.4  | 15   | 2.1  | 44  | 6.1   | 317   | 43.7 | 346               | 47.7 |
| 15. When I think about it,<br>I haven't really improved<br>much as a person over the<br>years.                            | 80           | 11.0 | 220  | 30.3 | 76  | 10.5  | 248   | 34.2 | 101               | 13.9 |
| 21. I have a sense that I have developed a lot as a person over time.   | 10           | 1.4  | 42   | 5.8  | 65  | 9.0   | 331   | 45.7 | 277               | 38.2 |
| 27. I do not enjoy being<br>in new situations that<br>require me to change my<br>old familiar ways of<br>doing things.    | 87           | 12.0 | 303  | 41.8 | 159 | 21.9  | 150   | 20.7 | 26                | 3.6  |
| 33. For me, life has been<br>a continuous process of<br>learning, changing, and<br>growth.                                | 4            | 0.6  | 14   | 1.9  | 35  | 4.8   | 300   | 41.4 | 372               | 51.3 |
| 39. I gave up trying to make big improvements or changes in my life a long time ago.                                      | 36           | 5.0  | 165  | 23.0 | 105 | 14.6  | 301   | 41.9 | 111               | 15.5 |

Ryff (1995) defined positive relations with others as "to what extent one has positive relationships with others and trusts others, has empathy and is capable of developing satisfying and intimate relationships" (101). Table 11 shows that more than 90% of the participants agreed that they enjoyed personal and close relations with other people. Moreover, roughly 84.8% of the participants thought that people considered them as giving and having a desire to share their time with others. In addition, 83.5% agreed that most people saw them as loving and affectionate. Almost half (49.6%) of the participants did not feel lonely but felt as they had a satisfactory number of close friendships.

Table 11

#### Positive Relations with Others

|   | Strongly<br>Disagree |      | Disa | gree | Neu | Neutral Ag |     | ree  |     | ongly<br>gree |  |
|---|----------------------|------|------|------|-----|------------|-----|------|-----|---------------|--|
|   | F                    | %    | F    | %    | F   | %          | F   | %    | F   | %             |  |
| 4. Most people see me as loving and affectionate.   | 5                    | 0.7  | 21   | 2.9  | 93  | 12.9       | 314 | 43.5 | 289 | 40.0          |  |
| 10. Maintaining close<br>relationships has been<br>difficult and frustrating<br>for me.           | 34                   | 4.7  | 103  | 14.2 | 85  | 11.7       | 300 | 41.4 | 203 | 28.0          |  |
| 16. I often feel lonely<br>because I have few close<br>friends with whom to<br>share my concerns. | 128                  | 17.7 | 231  | 31.9 | 74  | 10.2       | 186 | 25.7 | 106 | 14.6          |  |
| 22. I enjoy personal and<br>mutual conversations<br>with family members or<br>friends.            | 7                    | 1.0  | 25   | 3.4  | 27  | 3.7        | 297 | 41.0 | 369 | 50.9          |  |
| 28. People would<br>describe me as a giving<br>person, willing to share<br>my time with others.   | 8                    | 1.1  | 20   | 2.8  | 82  | 11.3       | 329 | 45.4 | 286 | 39.4          |  |
| 34. I have not<br>experienced many warm<br>and trusting relationships<br>with others.             | 107                  | 14.8 | 216  | 29.8 | 92  | 12.7       | 201 | 27.7 | 109 | 15.0          |  |

| 40. I know that I can    | 13 | 1.8 | 73 | 10.2 | 131 | 18.3 | 341 | 47.6 | 159 | 22.2 |
|--------------------------|----|-----|----|------|-----|------|-----|------|-----|------|
| trust my friends, and    |    |     |    |      |     |      |     |      |     |      |
| they know they can trust |    |     |    |      |     |      |     |      |     |      |
| me.                      |    |     |    |      |     |      |     |      |     |      |

Ryff (1995) considered purpose in life as the individual's ability to have a purposeful and meaningful life in both the present and past (101). With reference to this dimension, Table 12 indicates that roughly three quarters of the respondents (78.6%) expressed that they had a sense of direction and purpose in life. However, 72% were unconcerned about their future and 56.2% did not have a sense about what they are trying to achieve in life. Furthermore, 43.6% revealed that they sometimes felt as if they had not done all there is to do in life.

# Table 12

## Purpose in Life

|  | Stror<br>Disaş |     | Disa | gree | Neu | ıtral | Ag  | ree  | Stro<br>Ag | ngly<br>ree |
|--|----------------|-----|------|------|-----|-------|-----|------|------------|-------------|
|  | F              | %   | F    | %    | F   | %     | F   | %    | F          | %           |
| 5. I live life one day at a time and don't really think about the future.              | 29             | 4.0 | 98   | 13.6 | 75  | 10.4  | 304 | 42.2 | 215        | 29.8        |
| 11. I have a sense of direction and purpose in life.                                   | 13             | 1.8 | 48   | 6.6  | 94  | 13.0  | 312 | 43.0 | 258        | 35.6        |
| 17. My daily activities often seem trivial and unimportant to me.                      | 51             | 7.0 | 147  | 20.3 | 99  | 13.7  | 284 | 39.2 | 144        | 19.9        |
| 23. I don't have a good<br>sense of what it is I'm<br>trying to accomplish in<br>life. | 40             | 5.5 | 142  | 19.6 | 135 | 18.6  | 278 | 38.3 | 130        | 17.9        |
| 29. I enjoy making plans<br>for the future and<br>working to make them a<br>reality.   | 10             | 1.4 | 42   | 5.8  | 99  | 13.7  | 317 | 43.7 | 257        | 35.4        |
| 35. Some people wander<br>aimlessly through life,<br>but I am not one of them.         | 24             | 3.3 | 50   | 6.9  | 61  | 8.4   | 291 | 40.1 | 299        | 41.2        |

41. I sometimes feel as if 93 13.0 220 30.6 97 13.5 240 33.4 68 9.5 I've done all there is to do in life.

Finally, Ryff (1995) indicated that self-acceptance is "to what extent one considers him/herself as positive and accepts his/her qualities in two timeframes (i.e., present, past)" (101). Table 13 shows that the vast majority of women (83.5%) in the study disclosed that they liked most aspects of their personalities and 84.4% felt confident and positive about themselves. However, about 61.2% admitted they felt dissatisfied with their achievements in life and 70.8% did not feel positive about themselves when they compared themselves to other people.

#### Table 13

## Self-acceptance

|   | Stro:<br>Disa |      | Disa | Disagree |     | Neutral |     | Agree |     | Strongly<br>Agree |  |
|---|---------------|------|------|----------|-----|---------|-----|-------|-----|-------------------|--|
|   | F             | %    | F    | %        | F   | %       | F   | %     | F   | %                 |  |
| 6. When I look at the<br>story of my life, I am<br>pleased with how things<br>have turned out.          | 31            | 4.3  | 70   | 9.7      | 107 | 14.8    | 322 | 44.6  | 192 | 26.6              |  |
| 12. In general, I feel confident and positive about myself.   | 14            | 1.9  | 38   | 5.2      | 61  | 8.4     | 359 | 49.5  | 253 | 34.9              |  |
| 18. I feel like many of<br>the people I know have<br>gotten more out of life<br>than I have.            | 76            | 10.5 | 198  | 27.3     | 114 | 15.7    | 234 | 32.3  | 103 | 14.2              |  |
| 24. I like most aspects of my personality.  | 8             | 1.1  | 55   | 7.6      | 57  | 7.9     | 382 | 52.7  | 223 | 30.8              |  |
| 30. In many ways, I feel disappointed about my achievements in life.                                    | 42            | 5.8  | 143  | 19.7     | 96  | 13.2    | 290 | 40.0  | 154 | 21.2              |  |
| 36. My attitude about<br>myself is probably not as<br>positive as most people<br>feel about themselves. | 47            | 6.5  | 144  | 19.9     | 71  | 9.8     | 275 | 38.1  | 185 | 25.6              |  |

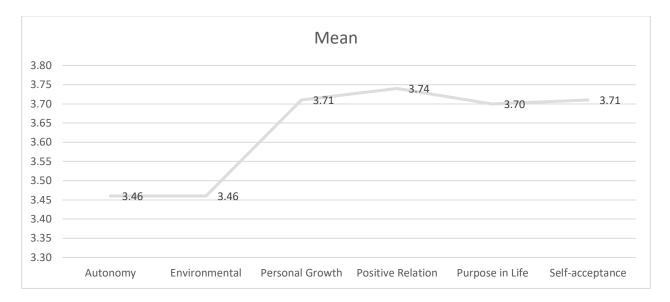
| 42. When I compare      | 33 | 4.6 | 70 | 9.7 | 108 | 15.0 | 309 | 42.8 | 202 | 28.0 |
|-------------------------|----|-----|----|-----|-----|------|-----|------|-----|------|
| myself to friends and   |    |     |    |     |     |      |     |      |     |      |
| acquaintances, it makes |    |     |    |     |     |      |     |      |     |      |
| me feel good about who  |    |     |    |     |     |      |     |      |     |      |
| I am.                   |    |     |    |     |     |      |     |      |     |      |

Table 14 summarizes the descriptive statistics for each of the dimensions analyzed. In general, the participants maintained a high level in positive relationships (3.74), personal growth (3.71), self-acceptance (3.71) and purpose in life (3.70). The lowest average values were found in autonomy and environmental mastery (3.46). Figure 2 highlights how the dimensions of autonomy and environmental mastery remained at the bottom in relation to the other dimensions of psychological well-being.

Table 14

Descriptive Statistics of the Dimensions of the Ryff Scale of Psychological Well-Being (PWB)

|                           | Mean | Standard Deviation | Median | Min  | Max  | Percentile 25 | Percentile<br>75s |
|---------------------------|------|--------------------|--------|------|------|---------------|-------------------|
| Autonomy                  | 3.46 | .57                | 3.43   | 1.43 | 5.00 | 3.14          | 3.86              |
| Environmental             | 3.46 | .44                | 3.43   | 1.86 | 4.86 | 3.14          | 3.71              |
| Mastery                   |      |                    |        |      |      |               |                   |
| Personal Growth           | 3.71 | .57                | 3.71   | 1.86 | 5.00 | 3.29          | 4.14              |
| <b>Positive Relations</b> | 3.74 | .60                | 3.71   | 1.86 | 5.00 | 3.43          | 4.14              |
| Purpose in Life           | 3.70 | .57                | 3.71   | 1.86 | 5.00 | 3.29          | 4.14              |
| Self-Acceptance           | 3.71 | .76                | 3.86   | 1.29 | 5.00 | 3.29          | 4.29              |
| Total Mean                | 3.64 | .43                | 3.67   | 2.24 | 4.60 | 3.33          | 3.95              |





# **Results Regarding the Relation Between Using Social Media for Mental Health**

## Information and Psychological Well-being of Saudi Arabian Women

A one-way ANOVA was applied to detect the relationship between seeking mental health information via social media and the total psychological well-being of Saudi Arabian women. The purpose of this test was to assess whether statistically significant differences existed in the mean values for psychological well-being (total score) among those individuals who use social media versus those individuals who do not use social media. The results are shown in Table 15. Table 15

One-Way ANOVA for Psychological Well- Being (Total Score) and Seeking Mental Health Information Via Social Media

| Source         | Sum of<br>Squares | df  | Mean<br>Square | F     | Sig. |
|----------------|-------------------|-----|----------------|-------|------|
| Between Groups | 365.146           | 1   | 365.146        | 1.099 | .295 |
| Within Groups  | 231189.679        | 696 | 332.169        |       |      |
| Total          | 231554.825        | 697 |                |       |      |

Table 15 confirms that, in reference to the total score of the Psychological Well-being Scale, the differences were insignificant ( $F_{1,696} = 1.099$ ; p = 0.295) when considering whether or not someone used social media to gather mental health information.

Furthermore, a one-way ANOVA was used to determine whether seeking mental health information via social media (dependent variable) was associated with each dimension of the PSW (independent variable).

The autonomy and positive relation dimensions had p-values of less than or equal to 0.05 (p = 0.04; p = 0.05); this meant that significant differences existed in the mean values of these dimensions between those individuals who used social media for mental health information and those individuals who did not. For the rest of the dimensions (i.e., environmental mastery, personal growth, purpose in life and self-acceptance), the differences were insignificant. The results are shown in Table 16.

#### Table 16

One-Way ANOVA for Score Dimensions of PWB and Seeking Mental Health Information Via the Social media

|                 |                | Sum of<br>Squares | df  | Mean<br>Square | F     | Sig. |
|-----------------|----------------|-------------------|-----|----------------|-------|------|
| Autonomy        | Between Groups | 62.783            | 1   | 62.783         | 3.914 | .048 |
|                 | Within Groups  | 11518.278         | 718 | 16.042         |       |      |
|                 | Total          | 11581.061         | 719 |                |       |      |
| Environmental   | Between Groups | 16.034            | 1   | 16.034         | 1.664 | .197 |
| Mastery         | Within Groups  | 6907.465          | 717 | 9.634          |       |      |
| •               | Total          | 6923.499          | 718 |                |       |      |
| Personal        | Between Groups | 29.980            | 1   | 29.980         | 1.868 | .172 |
| Growth          | Within Groups  | 11475.319         | 715 | 16.049         |       |      |
|                 | Total          | 11505.300         | 716 |                |       |      |
| Positive        | Between Groups | 63.416            | 1   | 63.416         | 3.634 | .057 |
| Relation        | Within Groups  | 12461.478         | 714 | 17.453         |       |      |
|                 | Total          | 12524.894         | 715 |                |       |      |
|                 | Between Groups | 15.869            | 1   | 15.869         | .999  | .318 |
| Purpose in Life | Within Groups  | 11327.242         | 713 | 15.887         |       |      |

|            | Total          | 11343.110 | 714 |        |       |      |
|------------|----------------|-----------|-----|--------|-------|------|
| Self-      | Between Groups | 98.588    | 1   | 98.588 | 3.538 | .060 |
| Acceptance | Within Groups  | 19951.798 | 716 | 27.866 |       |      |
|            | Total          | 20050.386 | 717 |        |       |      |

# Results Regarding the Statistically Significant Differences Between Factors Associated to the Use of Social Media and the Psychological Well-being Dimensions

In order to analyze the presence of statistically significant differences between the social media usage factors and the different dimensions of the psychological well-being of Saudi Arabian women, a one-way ANOVA was used in which the following factors were considered: purposes for using social media, frequency of using social media for pursuing mental health information, helpfulness of the shared mental health information and the number of social media (NSM) platforms utilized.

In Table 17, the purpose of using social media was considered as a factor while the scores of each dimension of psychological well-being were utilized as an independent variable. The results show that in reference to positive relation (F5,710 = 0.855; p = .511) and purpose in life (F5,709 = 1,649; p < .145) the differences were insignificant. However, significant differences existed for autonomy (F5,714 = 2.86; p < .014), environmental mastery (F5,713 = 3.290; p = .006), personal growth (F5,711 = 2.543; p = .027) and self-acceptance (F5,712 = 4.19, p = .001).

Table 17

One-Way ANOVA for Score Autonomy, Environmental Mastery, Personal Growth, Positive Relationships, Purpose in Life, and Self-Acceptance by Purposes

|          |                | Sum of<br>Squares | df  | Mean<br>Square | F     | Sig. |
|----------|----------------|-------------------|-----|----------------|-------|------|
| Autonomy | Between Groups | 227.580           | 5   | 45.516         | 2.862 | .014 |
|          | Within Groups  | 11353.481         | 714 | 15.901         |       |      |
|          | Total          | 11581.061         | 719 |                |       |      |
|          | Between Groups | 156.111           | 5   | 31.222         | 3.290 | .006 |

| Environmental   | Within Groups  | 6767.388  | 713 | 9.491   |       |      |
|-----------------|----------------|-----------|-----|---------|-------|------|
| Mastery         | Total          | 6923.499  | 718 |         |       |      |
|                 | Between Groups | 202.140   | 5   | 40.428  | 2.543 | .027 |
| Personal        | Within Groups  | 11303.159 | 711 | 15.898  |       |      |
| Growth          | Total          | 11505.300 | 716 |         |       |      |
|                 | Between Groups | 74.957    | 5   | 14.991  | .855  | .511 |
| Positive        | Within Groups  | 12449.369 | 710 | 17.535  |       |      |
| Relation        | Total          | 12524.894 | 715 |         |       |      |
|                 | Between Groups | 130.405   | 5   | 26.081  | 1.649 | .145 |
| Purpose in Life | Within Groups  | 11212.706 | 709 | 15.815  |       |      |
|                 | Total          | 11343.110 | 714 |         |       |      |
|                 | Between Groups | 574.246   | 5   | 114.849 | 4.199 | .001 |
| Self-           | Within Groups  | 19476.140 | 712 | 27.354  |       |      |
| Acceptance      | Total          | 20050.386 | 717 |         |       |      |
|                 |                |           |     |         |       |      |

A Duncan post hoc analysis (at the 5% level ) indicated that women who used social media to communicate with mental health professionals and communicate with peers who share the same concerns had a significantly lower average score in purpose in life and personal growth than those women who used social networks for other purposes. On the other hand, the average score of those participants who used social media to communicate with mental health professionals scored significantly higher in positive relations with others compared to those participants who used social media for other purposes.

When assessing the frequency of using social media for seeking mental health information, the environmental mastery dimension was significant (p = 0.04 < 0.05). A Duncan post hoc analysis showed significant differences in the mean values of this dimension between those participants who used social media rarely or never and those participants who used it frequently (Table 18).

# Table 18

# One-Way ANOVA for Score Environmental Mastery, Personal Growth, Positive Relationships,

|                 |                | Sum of<br>Squares | df  | Mean<br>Square | F     | Sig. |
|-----------------|----------------|-------------------|-----|----------------|-------|------|
| Autonomy        | Between Groups | 164.384           | 5   | 33.477         | 2.094 | .064 |
|                 | Within Groups  | 11413.678         | 714 | 15.986         |       |      |
|                 | Total          | 11581.061         | 719 |                |       |      |
| Environmental   | Between Groups | 109.668           | 5   | 21.934         | 2.295 | .044 |
| Mastery         | Within Groups  | 6813.831          | 713 | 9.557          |       |      |
| •               | Total          | 6923.499          | 718 |                |       |      |
| Personal        | Between Groups | 70.943            | 5   | 14.189         | .882  | .492 |
| Growth          | Within Groups  | 11434.357         | 711 | 16.082         |       |      |
|                 | Total          | 11505.300         | 716 |                |       |      |
| Positive        | Between Groups | 98.960            | 5   | 19.792         | 1.131 | .342 |
| Relation        | Within Groups  | 12425.934         | 710 | 17.501         |       |      |
|                 | Total          | 12524.894         | 715 |                |       |      |
| Purpose in Life | Between Groups | 28.795            | 5   | 5.759          | .361  | .875 |
| Ĩ               | Within Groups  | 11314.316         | 709 | 15.958         |       |      |
|                 | Total          | 11343.110         | 714 |                |       |      |
| Self-           | Between Groups | 117.562           | 5   | 35.512         | 1.272 | .274 |
| Acceptance      | Within Groups  | 19872.823         | 712 | 27.911         |       |      |
| -               | Total          | 20050.386         | 717 |                |       |      |

# Purpose in Life, and Self-Acceptance by Frequency in Use

Considering helpfulness of the shared mental health information, the results indicated significant differences in all factors except for autonomy and environmental mastery. In general, these two dimensions had lower average values among the participants who answered not helpful, moderately unhelpful, or slightly helpful compared to those participants who answered moderately helpful or very helpful (Table 19).

# Table 19

# One-Way ANOVA for Score Environmental Mastery, Personal Growth, Positive Relationships,

|                 |                | Sum of    | 46  | Mean    | F     | C:~  |
|-----------------|----------------|-----------|-----|---------|-------|------|
|                 |                | Squares   | df  | Square  | Г     | Sig. |
| Autonomy        | Between Groups | 55.708    | 5   | 11.142  | 2.094 | .631 |
|                 | Within Groups  | 11525.353 | 714 | 16.142  |       |      |
|                 | Total          | 11581.061 | 719 |         |       |      |
| Environmental   | Between Groups | 56.833    | 5   | 11.367  | 2.295 | .317 |
| Mastery         | Within Groups  | 6866.666  | 713 | 9.631   |       |      |
| -               | Total          | 6923.499  | 718 |         |       |      |
| Personal        | Between Groups | 386.873   | 5   | 77.375  | .882  | .000 |
| Growth          | Within Groups  | 11118.426 | 711 | 15.638  |       |      |
| Positive        | Total          | 11505.300 | 716 |         |       |      |
| Relation        | Between Groups | 340.727   | 5   | 68.145  | 1.131 | .001 |
|                 | Within Groups  | 12184.167 | 710 | 17.161  |       |      |
| Purpose in Life | Total          | 12524.894 | 715 |         |       |      |
| -               | Between Groups | 351.001   | 5   | 70.200  | .361  | .000 |
|                 | Within Groups  | 10992.109 | 709 | 15.504  |       |      |
| Self-           | Total          | 11343.110 | 714 |         |       |      |
| Acceptance      | Between Groups | 731.847   | 5   | 146.369 | 1.272 | .000 |
| _               | Within Groups  | 19318.538 | 712 | 27.133  |       |      |
|                 | Total          | 20050.386 | 717 |         |       |      |

Purpose in Life, and Self-Acceptance by Helpfulness

Finally, the number of social networks used (NSM) was not a significant factor in the

different dimensions of psychological well-being. Table 20 shows values of p > 0.05 in all

dimensions.

Table 20

One-Way ANOVA for Score Environmental Mastery, Personal Growth, Positive Relationships,

Purpose in Life, and Self-Acceptance by NSM

|          |                | Sum of<br>Squares | df  | Mean<br>Square | F    | Sig. |
|----------|----------------|-------------------|-----|----------------|------|------|
| Autonomy | Between Groups | 20.154            | 2   | 10.077         | .625 | .536 |
|          | Within Groups  | 11560.907         | 717 | 16.142         |      |      |

|                 | Total          | 11581.061 | 719 |        |       |      |
|-----------------|----------------|-----------|-----|--------|-------|------|
| Environmental   | Between Groups | 37.339    | 2   | 18.669 | 1.941 | .144 |
| Mastery         | Within Groups  | 6886.161  | 716 | 9.618  |       |      |
|                 | Total          | 6923.499  | 718 |        |       |      |
| Personal        | Between Groups | 4.518     | 2   | 2.259  | .140  | .869 |
| Growth          | Within Groups  | 11500.782 | 714 | 16.108 |       |      |
|                 | Total          | 11505.300 | 716 |        |       |      |
| Positive        | Between Groups | 13.341    | 2   | 6.671  | .380  | .684 |
| Relation        | Within Groups  | 12511.553 | 713 | 17.548 |       |      |
|                 | Total          | 12524.894 | 715 |        |       |      |
| Purpose in Life | Between Groups | 19.304    | 2   | 9.652  | .607  | .545 |
| _               | Within Groups  | 11323.807 | 712 | 15.604 |       |      |
|                 | Total          | 11343.110 | 714 |        |       |      |
| Self-           | Between Groups | 48.307    | 2   | 24.154 | .863  | .422 |
| Acceptance      | Within Groups  | 20002.079 | 715 | 27.975 |       |      |
| -               | Total          | 20050.386 | 717 |        |       |      |
|                 |                |           |     |        |       |      |

## Discussion

This section will address the research questions, examine the key findings of the study and provide interpretations of the results within the perspective of previous research. Data were collected to explore the use of the shared mental information through social media by Saudi Arabian women to assist themselves in maintaining their psychological well-being. The researcher also analyzed the patterns of behavior related to seeking mental health information through social media among Saudi Arabian women and estimated how different demographic factors (e.g., marital status, employment status, age, educational level) impacted the use of the mental health information available on social media to improve psychological well-being.

This study was designed to answer the following research questions:

RQ1: What is the psychological well-being of Saudi Arabian women as a whole?

RQ2: How are the demographic variables of Saudi Arabian women related to seeking mental health information via social media?

RQ3: What is the relationship between seeking mental health information via social media and the overall psychological well-being of Saudi Arabian women?

RQ4: To what extent does seeking mental health information via social media relate to different dimensions of psychological well-being: autonomy, environmental mastery, personal growth, positive relationships, purpose in life and self-acceptance?

RQ5: Are there statistically significant differences between the diverse factors associated with the use of social media and the variables associated with psychological well-being for Saudi Arabian women?

**Research question one.** The global mean of the psychological well-being scale was 3.63 with results for the total psychological well-being of Saudi Arabian women being 3.64. Therefore, findings indicated that participants had a moderate level of psychological well-being. However, the six dimensions of psychological well-being had values that ranged from 3.46 to 3.74. As such, Saudi Arabian women appeared to have good levels of positive relations with others, personal growth, self-acceptance and purpose in life. However, Saudi Arabian women demonstrated debilitating levels in autonomy and environmental mastery (3.46). In regard to previous studies with other population groups, Saudi Arabian women had similar results to women in American and Japanese populations as relate to autonomy and environmental mastery (Ahrens & Ryff, 2006; Frazier et al., 2005; Karasawa et al., 2011). It should be noted, however, that Saudi Arabian women were shown to have higher positive relations with others and selfacceptance than American women (Ahrens & Ryff, 2006; Lapa, 2015). In addition, Saudi Arabian women were on par with American and Japanese women in regard to high levels of personal growth (Karasawa et al., 2011) and with Filipino women in relation to high levels of positive relations with others, purpose in life and low levels of autonomy (Perez, 2012).

Ryff (1995) mentioned that psychological well-being can vary, being influenced by different factors, including one's culture. Cultural context has been documented as having a role in shaping the concepts of self and relations (Karasawa et al., 2011). In the present study, culture (i.e., collectivism) can explain why Saudi Arabian women scored low in autonomy and high in positive relations (Al-Draehim et al., 2012; Barakat, 2005). Saudi Arabia is family orientated and Saudi Arabian individuals consider their families and tribes more important than themselves. Feeling connected and maintaining social relationships are emphasized within all ages and socioeconomic groups in Saudi Arabia (Al-Draehim et al., 2012). In addition, being female may have influenced the findings because Saudi Arabian culture, much like other Arabic and Muslin cultures, highlight the roles of men in their society in regard to power. Women are expected to be more dependent on men and more restricted than men. Obedience to parents and husbands is expected of Saudi Arabian women.

Barry and Jenkins (2007) and Andermann (2010) indicated that, in general, factors such as social and cultural discrimination, abuse, violence, social isolation and separation, rejection and lack of support cause women to be less likely to have good mental health. The findings of this study did not support these previous findings.

**Research question two.** The current findings supported the literature review as researchers concluded that the number of people using Internet-based technologies, including social media, to seek general health information is plentiful (Zhao & Zhang, 2017). The results of the current study showed that almost half of the study sample (45.4%) used social media for mental health purposes. Among this group, only 10.2% looked for mental health information via social media, while 17.8% of this group used social media for a number of purposes, including finding mental health information. Alhaddad (2018) and Bahkali et al. (2016) showed that

looking for health information online is a common practice. The discrepancy between these studies and the current study may be due to the stigma in Saudi Arabia related to the mental health profession and mental illnesses.

De Choudhury et al. (2014) reported that 94% of their 273 survey participants reported using the Internet and social media to review health information. Atallah et al. (2018) had similar results as 63.3% of their 376 Saudi Arabian participants with mental illnesses and problems (e.g., depression, anxiety, stresses) admitted using Internet-based technologies, specifically phones, to explore mental health information. This disagreement between the above-mentioned findings and the current study's finding emerged from the dissimilarity in the target groups and study procedures. De Choudhury et al. (2014) utilized a non-representative sample that only targeted Twitter users, while Atallah et al. (2018) applied specific Twitter and Facebook accounts and online support groups related to mental health illnesses to reach out to the participants.

The study's findings showed that demographic factors, such as age and marital status, were unrelated to seeking mental health information via social media. As such, the results did not support findings of former studies. Atallah et al. (2018), Lee et al. (2014) and Jacobs et al. (2017) found that age was significantly associated with seeking mental health information through phone applications and the Internet. Bahkali et al. (2016) reported that a significant association exists between age and using social media to explore health information related to medications. The current findings were also confirmed by Powell and Clarke (2006). They revealed that age was not related to seeking mental health information through the Internet. Being married was considerably correlated with seeking health information on the Internet (Al-Maiman, 2016; Lee et al., 2014).

The present study was consistent with previous findings in regard to associations between employment status, educational level and seeking information via the social media. Gallagher et al. (2008) revealed that an individual's employment status is linked with seeking online health information. For example, employed females are more likely to seek health information through the Internet. Researchers have reported that a higher education level is connected to checking out online information related to health (Al-Maiman, 2016, Lee et al., 2014; Jacobs et al., 2017). However, Powell and Clarke (2006) showed that using the Internet as a source of mental health information has nothing to do with the educational level.

**Research question three.** By using a one-way ANOVA analysis, the results of the study indicated that no correlation exists between seeking mental health information through social media and the total psychological well-being of Saudi Arabian women. In a prior study, Heo et al. (2015) assessed the association among the Internet, social support, loneliness, life satisfaction and psychological well-being and found that using the Internet had an indirect correlation to psychological well-being as it offered a way to gain social support; this, in turn, enhanced individuals' psychological well-being. However, the Heo et al. study (2015) was general in regard to Internet use and mentioned no specific online practices (e.g., seeking information). The consequences of Internet-based technologies vary according to how people use them; diverse practices have diverse correlations with well-being (Kraut & Burke, 2015).

In a similar study, however, Jiang and Street (2017) did not support the current findings. Their study was conducted with 423 participants in order to determine the correlation between seeking online health information and individuals' health, including general, physical and emotional health (Jiang & Street, 2017). The results supported the idea that seeking online information supports emotional health. On the other hand, Gallagher et al. (2008) examined the

relationship between looking for online health information and mental health among 767 individuals who considered the Internet to be a source of health information. They found that mental health status was linked to seeking online information and that a significant number of seekers had mental health problems (Gallagher et al., 2008). Powell and Clarke (2006) also supported the above findings, as they showed a correlation between seeking online mental health information and mental health status as people with current or previous mental health illnesses were more likely to seek information online.

**Research question four.** The study results indicated that significant associations exist between seeking mental health information via social media and autonomy and positive relations with others. Environmental mastery, personal growth, purpose in life and self-acceptance were not related to this seeking behavior. The correlation between this seeking behavior and positive relations with others was confirmed in the literature review. Internet-based technologies, including social media, offer an environment in which people can provide and receive emotional and social support, be connected, feel as if they belong and develop relationships (Frost & Massagli, 2008; Hampton et al., 2011; Liang & Scammon, 2011; Moorhead et al., 2013; Naslund et al., 2014). The study's findings were also supported by Aref-Adib et al. (2016). In their qualitative study, they studied the phenomenon of seeking online mental health information among 18 individuals with psychosis disorders. Their findings showed that seeking online mental health information was linked to positive outcomes (Aref-Adib et al., 2016) in regard to increasing participants' abilities to act independently, make healthcare-related decisions and have a sense of self-reliance (i.e., autonomy). It also helped participants to feel as if they are not alone and strengthened their relationships with their health providers as they became collaborators in their therapy (i.e., positive relations) (Aref-Adib et al., 2016).

On the other hand, the findings of the present study were in disagreement with Aref-Adib et al. (2016). They concluded that people with mental illnesses have control and empowerment (i.e., environmental mastery) (Aref-Adib et al, 2016). Hu et al. (2012) studied the phenomenon of looking at online health information right before medical appointments and found that individuals' perceptions related to self-efficacy and personal control over their illnesses (i.e., environmental mastery) were associated with the practice of seeking health information. Similarly, people with mental illnesses can grow when they are able to learn about different coping strategies (i.e., personal growth) (Aref-Adib et al., 2016).

**Research question five.** A one-way ANOVA was utilized in order to determine whether significant differences existed between the social media usage factors (i.e., purpose for using social media, frequency of using social media for pursuing mental health information, helpfulness, number social media (NSM) platforms and the different dimensions of the psychological well-being of Saudi Arabian women. The study findings showed that significant differences existed for the psychological well-being dimensions as a consequence of the different factors associated with using social media for mental health information. The findings indicated that Saudi Arabian women used social media for different mental health purposes, but that these purposes did not always lead to significant differences related to two dimensions: positive relations with others and purpose in life. Autonomy, environmental mastery, personal growth and self-acceptance appeared to be significantly different.

These results coincided with previous research done on the topic. For example, Weiser (2001) found that different purposes drove significant differences in individuals' social wellbeing. Specifically, using Internet-based technologies for social purposes (e.g., communication) reduced social integration and connectivity (Weiser, 2001). The current findings contradicted

previous studies. For instance, Moorhead et al. (2013) and Naslund et al. (2016) found that people both with and without mental illnesses who used Internet-based technologies to communicate with peers cultivated positive relations as they increased their social connections, belonging and companionship as well as feeling supported by and engaged more with their mental health providers. According to Naslund et al. (2016), using Internet-based technologies can increase individuals' autonomy as they feel empowered, confident and capable of making health care decisions.

When analyzing the significant differences, according to the frequency factor, environmental mastery was the only dimension that represented significant variances. Only two studies were found regarding this factor. Cotten et al. (2013) and Nie and Hillygus (2002) did not bolster the current findings, as the current results showed no significant differences in the positive relations with others. Cotten et al. (2013) found that increasing the rate of using the Internet in general was positively associated with feeling more connected and negatively associated with loneliness. On the other hand, Nie and Hillygus (2002) stated that increased amounts of time on social media related to loneliness.

However, considering the helpfulness of the shared mental health information on social media, the findings indicated that personal growth, positive relations with others, purpose in life and self-acceptance significantly varied. The number of social media platforms that were used for searching for mental health information had no significant difference on the psychological well-being dimensions. To the researcher's knowledge, the present study is the first research study to investigate the helpfulness of the shared mental health information and number of social media platforms in relation to the use of social media for mental health in order to discover the differences among the participants' psychological well-being dimensions.

# Summary

The researcher attempted to answer several research questions via a statistical analysis where specifically different statistical techniques were applied (i.e., descriptive analysis, analysis of variance (ANOVA), Pearson Chi-square Independence Test). The findings displayed descriptive statistics in regard to the study sample and the use of social media for mental health purposes. Two demographic factors (i.e., employment status, educational level) were related to the practice of seeking mental health information. The study findings indicated Saudi Arabian women had moderate levels of psychological well-being. Although Saudi Arabian women used social media to find mental health information, no correlation existed between this practice and their total psychological well-being. The use of collective mental health information on social media had significant associations with only two dimensions: autonomy and positive relation. Purposes and frequency of using social media had significant differences in regard to psychological well-being dimensions. Helpfulness of the shared mental health information also demonstrated statistically significant differences in group means of personal growth, positive relations with others, purpose in life and self-acceptance.

#### **Chapter Five: Summary, Implications, and Recommendations**

## **Summary**

In regard to general health, Internet-based technologies have been used by health providers for communication purposes. Through this type of communication, health providers can provide health information and education, answer questions and connect with patients. Health providers can also promote health and prevent disease through Internet-based technologies by providing health information and knowledge, shaping attitudes and changing behaviors. Sharing information is not limited to health providers, however, as many patients use the Internet to share their personal stories and opinions. Due to these practices, many researchers have become interested in studying the use, benefits and limitations of employing these technologies in regard to health improvement.

The literature review represented the great advantages and assistance that people with mental illnesses have when seeking, sharing and using mental health information found on Internet-based technologies, including social media (Aref-Adib et al., 2016; Birnbaum et al., 2017; De Choudhury et al., 2013; Fjeldsoe et al., 2009; Griffiths & Christensen, 2007; Meyerowitz & Chaike, 1987; Moorhead et al., 2013; Powell & Clarke, 2006; Rodgers et al., 2005; Ventola, 2014). As no scientist was interested in understanding how a public population uses Internet-based technologies for mental health purposes, the need for this information becomes apparent. Consequently, the present study fills this gap. This study has focused on how using mental health information shared on social media has improved the psychological wellbeing of Saudi Arabian women.

Since Internet-based technologies have become an essential part of Saudi Arabian society, researchers and mental health providers are encouraged to pay more attention to the use

of these technologies in the field. Unfortunately, the literature review indicated that a shortage occurs in regard to partnering these technologies with the mental health profession in Saudi Arabia. As Internet-based technologies can be tools for exploring health information in Saudi Arabian society, however, and the mental health profession in the country is connected to misinformation and stigmas, employing social media platforms can offer effective ways for mental health professionals to dispose of the stigma and increase awareness regarding mental health.

Even if Saudi Arabian women are at risk of having mental illnesses (Al-Halal, 2018; Al-Muneef et al., 2017; Al-Qadhi et al., 2014; Jradi & Abou-Abbas, 2017), the culture and belief system in Saudi Arabia prevent them from seeking traditional services (Al-Krenawi & Graham, 2000). Therefore, Internet-based technologies can offer other possibilities to meet their psychological needs. The current study is one of the first to provide a perspective related to integrating Internet-based technologies into mental health practices as an information-sharing medium.

In the present study, researcher utilized a cross-sectional survey methodology with an online survey that was posted on various social media platforms. The data were collected through a demographic questionnaire and Ryff's psychological well-being scale. The participants consisted of 725 Saudi Arabian women 18 years old or older who either lived in or outside of Saudi Arabia.

The study findings indicated that almost half of the participants (45.4%) used social media for mental health purposes. Almost a quarter (24.1%) of the participants used social media for different mental health purposes, including searching for information. When analyzing the demographic factors, the findings confirmed the involvement of educational levels and

employment status with this practice. The researcher also found that among the participants, 59.7% used one or two of social media platforms a day. Of these platforms, YouTube was the most common (53%). Participants used social media to obtain various mental health information. Learning and improving parenting skills and enhancing positive emotions toward life and self were information most often searched for by the participants (54%).

The current findings revealed that Saudi Arabian women had modest levels of psychological well-being (3.64). However, the relationship between seeking mental health information through social media and psychological well-being was not supported. Nevertheless, the findings discovered that autonomy and positive relationships were significantly associated with this habit. In addition, the findings demonstrated variances among the psychological wellbeing dimensions in relation to the different factors associated with seeking mental health information via social media. For example, positive relationships and purpose in life dimensions had significant differences according to the purposes of using social media. Environmental mastery was the single dimension that varied among the frequency of seeking shared mental health information on social media. Four dimensions showed significant differences in regard to the helpfulness of shared mental health information: personal growth, positive relationships, purpose in life and self-acceptance. In addition, the number of social media platforms that the participants used to search for mental health information demonstrated no significant differences in psychological well-being dimensions.

#### Limitations

The researcher employed an online survey that was publicized on social media. Due to this method of distribution, the results are likely to contain self-selection bias. In any online community, some people will be willing to answer a survey, while others will not. This issue

inhibits the researcher's ability to generalize the results to other populations since the study counted on people who answered the survey. The data did not represent the entire target population.

In the present study, the researcher collected quantitative data using only closed-ended questions. These types of question are useful when assessing a numeric value and statistically analyzing the data. However, open-ended questions provide unique ways by which to understand and explore actual behavior. As such, future studies that include mixed data will allow the research community to develop a complete understanding of the phenomenon from different perspectives.

This study was a cross-sectional design that did not collect data over the time. Instead, the researcher focused on the studied behavior at one point in time. Studying the target behavior (seeking mental health information) and associations among the behavior, total psychological well-being and its dimensions might require a longer period of study. To this end, a longitudinal survey could be utilized in order to clearly study the nature of the behavior and determine the actual changes in individuals' psychological well-being. A longitudinal survey also can help to make appropriate inferences regarding the target behavior and the associations between the target behavior and psychological well-being over time.

The data collected in a cross-sectional design is capable of being influenced by other factors that affect the participants while answering the survey. As such, it is difficult to determine whether the study findings are representative of reality or influenced by outside forces at the time that the survey is taken. A cross-sectional design is also incapable of producing a casual inference; instead, it can only detect associations among variables.

#### Implications

Despite the limitations, the present study was helpful in examining the use of these technologies with the public in relation to mental health promotion. The results of this study showed that the Saudi Arabian nation, especially the women from it, have a tendency to employ these technologies, specifically social media, for mental health purposes (e.g., accessing mental health information). In addition, the results showed that these technologies should not be limited to healing processes. Mental health providers should extend their work to the public and assist people to achieve their potentials and live their lives fully. Even though this study did not find an association between seeking mental health information via social media and psychological wellbeing, further research should be conducted to determine what individuals do with the mental health information once they find it as well as how the Internet meets their needs related to this information.

The current study was also beneficial as it was the first scientific research study to examine the psychological well-being of Saudi Arabian women. Previous investigators showing interest in the mental health of the Saudi Arabian population, especially women, exclusively assessed the prevalence of mental illnesses. As such, the study presented valuable insights into the overall psychological well-being of Saudi Arabian women with implications for clinical practices, as mental health providers can now more fully know psychological well-being of Saudi Arabian women, allowing for the design of appropriate interventions to maintain and foster it in a healthier way.

#### Recommendations

People live in a digital age in which the implications of Internet-based technologies in their lives and professions steadily increases. In general, Internet-based technologies have

opened new avenues by which to provide alternate resources related to therapy and other mental health-related services (e.g., providing support, providing advice, providing psychoeducation). Although Internet-based technologies have been used to provide services and discuss and disseminate mental health-related information (Ospina-Pinillos et al., 2018), numerous studies in this area of focus groups have been limited to the healing process. The literature review was filled with studies that focused on using Internet-based technologies as a modality by which to provide therapy (e.g., online counseling, e-therapy, e-counseling, cyber therapy) (Barak et al., 2008). Within this trend, studies have examined the effectiveness, limitations and strengths of practicing counseling and therapy through the Internet plus attitudes of clients toward this service along with ethical practices involved in such services. For instance, Leibert and Archer (2005) and King et al. (2009) studied to what extent clients were satisfied with online therapy. Other studies have focused on the characteristics of online counseling clients (Chester & Glass, 2006; Leibert & Archer, 2005) as well as the features of online counseling, including the duration of the therapeutic process, client issues and the nature of having an online counselling practice (Chester & Glass, 2006). Barak et al. (2008) conducted a meta-analysis study to examine the effectiveness of therapeutic interventions provided via the Internet. As a result of poor information concerning mental health promotion through Internet-based technologies, the researcher recommends future studies address understanding and discovering the use of these technologies to improve individuals' and society's well-being.

In addition, the quality of the health information shared on Internet-based technologies has been shown to be consistently of poor quality (Ventola, 2014); people often assume it is valid and credible. Using such information can be risky because it can be influenced by the values, priorities, experiences and stories of the providers. It is difficult to validate information

on the Internet because important factors, such as author qualifications and credentials, are often absent (Fritch & Cromwell, 2001; Tate & Alexander, 1996). To this end, Fritch and Cromwell (2001) and Rockman (2005) have pointed to the importance of the process of evaluating information. Therefore, a committee should be established to assess the quality of mental health information sites and social media accounts—one that that focuses on mental health information in order to regulate rules and sanctions regarding the distribution of this information. Mental health professionals in Saudi Arabia should play a role on this committee by removing misinformation from the Internet and informing the public about the significance of evaluating information and seeking help from qualified online sources.

Mental health professionals, particularly in Saudi Arabia, need to use available tools to buffer the stigma related to mental health illnesses and services in their country. The movement of Saudi Arabian people to get mental health treatment is still limited, as old beliefs dominate society, including the thoughts that mental illnesses result from demons, the evil eye or a lack of faith (Al-Qahtani & Salmon, 2008; Ciftci et al., 2013; Youssef & Deane, 2006). Using Internetbased technologies as an intervention to minimize and alleviate stigmas regarding mental health illnesses and the profession is needed in Saudi Arabia and elsewhere. Researchers have documented the positive outcomes of increasing peoples' awareness regarding mental health illnesses (Alvidrez et al., 2009; Stanley et al., 2018; Stafford & Colom, 2013; Mittal et al., 2012). According to Corrigan and Penn (1990) and Couture and Penn (2003), when mental health professionals have interactions and are connected with people, they can help modify the perceptions and beliefs of individuals regarding mental health and related services.

Recommendations include educating people about mental health, which has a positive influence on reducing the stigmas related to mental health issues and increasing the utilization of

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professional help (Corrigan & Penn, 1990). Using Internet-based technologies allow mental health practitioners to be in touch with the public, especially in regard to proper education. In general, psychoeducation assists the help-seeking process as some remain unaware that mental health professionals exist and/or that seekers of help can be suffering from or experiencing symptoms of mental health issues (Wessely et al., 2008). Demaso and colleagues (2006) mentioned that psychoeducational interventions assist participants in becoming familiar with individuals from whom they can seek help. Psychoeducation helps people to feel they are not alone, as they understand that those who share a particular illness might be experiencing similar symptoms (Wessely et al., 2008).

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#### Appendix A

#### **Invitation Letter for Participation: Dissertation Project**

To whom it may concern:

Please accept this letter as a request to participate in a dissertation project entitled "An examination of the use of social media to improve the psychological well-being of Saudi Arabian women." The investigator of this research study is Shoaa Dardoum, a doctoral student in the Counselor Education and Supervision program at St. Mary's University in the United States. The purpose of this research study is to examine the relationship between seeking mental health information via social media and the psychological well-being of Saudi Arabian females. Therefore, you are eligible to participate in this study if you are a Saudi Arabian female who is at least 18-years-old.

Before you agree to be part of the study, please carefully read the following information. If you find any part of this document confusing or would like additional information, please reach out to the investigator at <u>sdardoum@stmarytx.edu</u> or +1 210-685-5094. You may also contact the chairperson of this dissertation, Dr. Esteban Montilla at <u>rmontilla@stmarytx.edu</u> or + 1 210-438-6406.

Please be aware that your participation is entirely voluntary. You do not need to take a part in this study if you do not wish to.

If you agree to participate, you will be asked to complete a survey consisting of several multiple-choice questions. The survey should take 10 minutes to complete. You may complete the survey at your own time in a location of your choosing as it can be accessed electronically. The investigator only asks that you complete the survey in one sitting as your answers cannot be

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saved until the end. Starting and stopping the survey will require you to begin the survey again from the beginning.

If you decide to participate in the study, you have the right to withdraw at any time without explanation or penalty.

Some of the potential risks that you might experience as a result of participating in this study include feeling uncomfortable and stressful. No social, economic, legal, or physical risks are associated with participation in this study.

No personal benefits exist related to participating in this study, but your participation is valuable as it will benefit the Saudi Arabian mental health community, in general, and the researcher, specifically, as it will allow both to learn more about the research topic.

To help protect your confidentiality, the survey is anonymous, and you will not be asked to provide any personal or contact information that will identify you. All of your responses are stored confidentially. No one has access to the responses except for the researcher and the study's faculty advisors. After analyzing the data, all of the responses will be securely stored for a minimum of five years, for research purposes. Your responses will only be used for the purpose of this study.

THIS STUDY HAS BEEN APPROVED BY THE INSTITUTIONAL REVIEW BOARD (IRB) FOR THE PROTECTION OF HUMAN SUBJECTS AT ST. MARY'S UNIVERSITY, SAN ANTONIO, TEXAS, UNITED STATES. ALL RESEARCH PROJECTS CARRIED OUT BY INVESTIGATORS AT THE UNIVERSITY ARE GOVERNED BY THE REQUIREMENTS OF THE UNIVERSITY AND THE FEDERAL GOVERNMENT. IF YOU HAVE ANY QUESTIONS ABOUT YOUR RIGHTS AS A RESERACH PARTICIPANT OR ANY CONCERNS ABOUT THIS RESEARCH STUDY, PLEASE CONTACT THE CHAIR,

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# INSITIUTIONAL REVIEW BOARD, ST MARY'S UNIVERSITY AT 210-436-3736 OR

EMAIL AT IRBCommitteeChair@stmarytx.edu.

Your participation in this project is highly appreciated.

Sincerely,

Shoaa Dardoum, MA

Principal Investigator

### **Appendix B**

### **Informed Consent Agreement**

I was invited to take part in a dissertation project titled "An examination of the use of social media to improve the psychological well-being of Saudi Arabian women." I have read the above information. I feel that I understand it well enough to make a decision about my involvement. By clicking on the agree statement below, I agree to the terms described above and to be part of the study.

Please indicate your consent by clicking on a choice below.

- o I disagree
- o I agree

## Appendix C

## **Demographic Form**

What is your gender?

- a) Female
- b) Male

What is your nationality?

- a) Saudi
- b) Other than Saudi

Are you 18 years old or over?

- a) Yes
- b) No

What is your age?

- a) 18-25
- b) 26-35
- c) 36-45
- d) 46-55
- e) 56-65
- f) 66 and older

What is your marital status?

- a) Married
- b) Never married
- c) Divorced
- d) Widow
- e) Other

What is your employment status?

- a) Working full time
- b) Working part time
- c) Unemployed
- d) Student
- e) Retired

What is the highest educational level you have completed?

- a) Less than high school
- b) High school
- c) Diploma
- d) Undergraduate
- e) Graduate

Do you use the social media for mental health purposes?

- a) Yes
- b) No

For what purposes do you use the social media?

- a) Communicating with peers who share the same concerns
- b) Communicating with mental health professionals
- c) Giving and receiving social and emotional supports
- d) Seeking information related to mental health
- e) All of the above
- f) Other

What types of social media do you use for seeking information related to mental health?

Please choose as many as you consider applies to you

- a) Facebook
- b) Instagram
- c) Telegram
- d) Twitter
- e) Snapchat
- f) WhatsApp
- g) YouTube
- h) Other

How often do you use social media for seeking mental health information?

- a) Never
- b) Very Rarely
- c) Rarely
- d) Occasionally

- e) Frequently
- f) Very often

To what extent, do you find mental health information through the social media helpful?

- a) Not Helpful
- b) Slightly Unhelpful
- c) Moderately Unhelpful
- d) Slightly Helpful
- e) Moderately Helpful
- f) Very Helpful

In which ways mental health information through the social media is helpful?

Please choose as many as you consider applies to you

- a) Managing life conflicts and symptoms related to mental illnesses
- b) Supporting recovery process.
- c) Improving and maintaining healthy relationships
- d) Learning and improving parenting skills
- e) Promoting social interactions
- f) Finding balance in life
- g) Creating a meaningful and positive life
- h) Enhancing positive emotions toward life and self
- i) Developing effective problem-solving and coping skills

# Appendix D

## Ryff's Psychological Well-Being Scale (PWB)

Please indicate your degree of agreement (using a score ranging from 1 - 5) to the following

sentences:

| Γ  |  | Strongly<br>disagree<br>1 | 2 | 3 | 4   | Strongly<br>agree<br>5 |
|----|--|---------------------------|---|---|-----|------------------------|
| 1  | I am not afraid to voice my opinions, even     | 1                         | 2 | 5 | - T | 5                      |
| 1  | • •  |                           |   |   |     |                        |
|    | when they are in opposition to the opinions    |                           |   |   |     |                        |
|    | of most people.                                |                           |   |   |     |                        |
| 2  | In general, I feel I am in charge of the       |                           |   |   |     |                        |
|    | situation in which I live.                     |                           |   |   |     |                        |
| 3  | I am not interested in activities that will    |                           |   |   |     |                        |
|    | expand by horizons.                            |                           |   |   |     |                        |
| 4  | Most people see me as loving and               |                           |   |   |     |                        |
|    | affectionate.                                  |                           |   |   |     |                        |
| 5  | I live life one day at a time and don't really |                           |   |   |     |                        |
|    | think about the future.                        |                           |   |   |     |                        |
| 6  | When I look at the story of my life, I am      |                           |   |   |     |                        |
|    | pleased with how things have turned out.       |                           |   |   |     |                        |
| 7  | My decisions are not usually influenced by     |                           |   |   |     |                        |
|    | what everyone else is doing.                   |                           |   |   |     |                        |
| 8  | The demands of everyday life often get me      |                           |   |   |     |                        |
|    | down.  |                           |   |   |     |                        |
| 9  | I think it is important to have new            |                           |   |   |     |                        |
|    | experiences that challenge how you think       |                           |   |   |     |                        |
|    | about yourself and the world.                  |                           |   |   |     |                        |
| 10 | Maintaining close relationships has been       |                           |   |   |     |                        |
|    | difficult and frustrating for me.              |                           |   |   |     |                        |

| 11 | I have a sense of direction and purpose in     |  |  |
|----|--|--|--|
|    | life.  |  |  |
| 12 | In general, I feel confident and positive      |  |  |
|    | about myself.                                  |  |  |
| 13 | I tend to worry about what other people        |  |  |
|    | think of me.                                   |  |  |
| 14 | I do not fit very well with the people and the |  |  |
|    | community around me.                           |  |  |
| 15 | When I think about it, I haven't really        |  |  |
|    | improved much as a person over the years.      |  |  |
| 16 | I often feel lonely because I have few close   |  |  |
|    | friends with whom to share my concerns         |  |  |
| 17 | My daily activities often seem trivial and     |  |  |
|    | unimportant to me.                             |  |  |
| 18 | I feel like many of the people I know have     |  |  |
|    | gotten more out of life than I have.           |  |  |
| 19 | I tend to be influenced by people with strong  |  |  |
|    | opinions.                                      |  |  |
| 20 | I am quite good at managing the many           |  |  |
|    | responsibilities of my daily life.             |  |  |
| 21 | I have a sense that I have developed a lot as  |  |  |
|    | a person over time.                            |  |  |
| 22 | I enjoy personal and mutual conversations      |  |  |
|    | with family members or friends.                |  |  |
| 23 | I don't have a good sense of what it is I'm    |  |  |
|    | trying to accomplish in life.                  |  |  |
| 24 | I like most aspects of my personality.         |  |  |
| 25 | I have confidence in my opinions, even if      |  |  |
|    | they are contrary to the general consensus.    |  |  |

| 26 | I often feel overwhelmed by my responsibilities. |  |  |
|----|--|--|--|
| 27 | I do not enjoy being in new situations that      |  |  |
|    | require me to change my old familiar ways        |  |  |
|    | of doing things.                                 |  |  |
| 28 | People would describe me as a giving             |  |  |
|    | person, willing to share my time with others.    |  |  |
| 29 | I enjoy making plans for the future and          |  |  |
|    | working to make them a reality.                  |  |  |
| 30 | In many ways, I feel disappointed about my       |  |  |
|    | achievements in life.                            |  |  |
| 31 | It's difficult for me to voice my own            |  |  |
|    | opinions on controversial matters.               |  |  |
| 32 | I have difficulty arranging my life in a way     |  |  |
|    | that is satisfying to me.                        |  |  |
| 33 | For me, life has been a continuous process       |  |  |
|    | of learning, changing and growth.                |  |  |
| 34 | I have not experienced many warm and             |  |  |
|    | trusting relationships with others.              |  |  |
| 35 | Some people wander aimlessly through life,       |  |  |
|    | but I am not one of them.                        |  |  |
| 36 | My attitude about myself is probably not as      |  |  |
|    | positive as most people feel about               |  |  |
|    | themselves.                                      |  |  |
| 37 | I judge myself by what I think is important,     |  |  |
|    | not by the values of what others think is        |  |  |
|    | important.                                       |  |  |
| 38 | I have been able to build a home and a           |  |  |
|    | lifestyle for myself that is much to my          |  |  |
|    | liking.  |  |  |

| 39 | I gave up trying to make big improvements     |  |  |
|----|---|--|--|
|    | or changes in my life a long time ago.        |  |  |
| 40 | I know that I can trust my friends, and they  |  |  |
|    | know they can trust me.                       |  |  |
| 41 | I sometimes feel as if I've done all there is |  |  |
|    | to do in life.                                |  |  |
| 42 | When I compare myself to friends and          |  |  |
|    | acquaintances, it makes me feel good about    |  |  |
|    | who I am.                                     |  |  |