HAIGAZIAN UNIVERSITY

Causal Beliefs of Mental Illness and Psychiatric Skepticism as Predictors of Help Seeking Behavior and Mental Health Literacy in Lebanon

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A Thesis submitted to the Faculty of Social and Behavioral Sciences in partial fulfillment of the requirements for the Master of Art in Psychology – Emphasis: Counseling at Haigazian University.

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DEDICATION

I would like to dedicate this thesis to all the Lebanese suffering from mental health problems and not receiving the proper mental health care they need, hoping that professionals move forward towards better understanding the factors behind this gap between the high prevalence of mental disorders and low treatment seeking behavior in Lebanon, and accordingly, seek to help change this reality.

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Abstract

Previous research has shown that there is a high prevalence of mental disorders and low treatment seeking behavior prevailing globally and more noticeably in the Arab region including Lebanon, and Causal beliefs of mental illness were reported to influence help-seeking behavior. Also, research has shown that psychiatric skepticism is existing in Lebanon and it is associated with lower levels of mental health literacy and more negative attitudes towards professional help seeking behavior and a considerable number of patients suffering from a mental illness choose to seek treatment from the general health sector (i.e. physicians and general practitioners) instead of seeking help from the mental health sector. As such, the purpose of this study is to examine the psychosocial, biological and supernatural including religious causal beliefs of mental illness and their effect on the attitudes held towards professional help seeking behavior, to investigate the relationship between psychiatric skepticism and level of mental health literacy as well as attitudes held towards help seeking behavior among the Lebanese participants and to examine the level of health literacy prevalent among the Lebanese participants and compare it to their level of mental health literacy. This is a quantitative survey study design. Six hypothesis were tested using a sample of 206 participants with the majority of participants' age ranging between 20 and 30 years old; participants were recruited through convenience and snowball sampling. Data was collected through the administration of five questionnaires, The Mental Health Literacy Scale (MHLS)(2015), Attitudes Toward Seeking Psychological Help – Short Form (ATSPPH-SF) (1995), Mental Distress Explanatory Model Questionnaire (MDEMQ) (1990), Psychiatric Skepticism Scale (PSS) (2011) and All Aspects of Health Literacy Scale

(AAHLS)(2013). The results yielded no significant correlation between each of the causal beliefs of mental illness (biological, psychosocial and spiritual/religious causal beliefs) and attitudes towards psychological help. Also, no significant correlation was obtained between psychiatric skepticism and each of mental health literacy and attitudes towards psychological help. A statistically significant difference was obtained between mental health literacy and biological health literacy in the sample. Findings, limitations and implications were discussed at the end of the study.

Keywords: causal beliefs of mental illness, attitudes towards psychological help, psychiatric skepticism, mental health literacy, biological health literacy, Lebanon, stigma.

Causal Beliefs of Mental Illness and Psychiatric Skepticism as Predictors of Help Seeking Behavior and Mental Health Literacy in Lebanon

Chapter 1

Introduction

An increase in prevalence and burden of mental health disorders is being witnessed globally (Kessler, Aguilar-Gaxiola, Alonso, Chatterji, Lee, Ormel & Wang, 2009; Steel, Marnane, Iranpour, Chey, Jackson, Patel & Silove, 2014; World Health Organization, 2018). A systematic review and a meta-analysis conducted by Steel and colleagues (2014) on global commonness of mental disorders between 1980 and 2013 revealed that 29.2% of the participants reported as having experienced a common mental disorder at some point during their lifetimes and approximately one in five individuals experience a mental disorder within a 12-month period. Nevertheless, reports from the literature have pointed to the diminished treatment seeking behavior among individuals with mental illness (Mishra, Nagpal, Chadda & Sood, 2011; Eisenberg, Hunt, Speer, & Zivin, 2011; Mitchell, McMillan & Hagan, 2017; World Health Organization, 2018). For instance, epidemiological studies conducted across different nations such the United States, Ontario and Netherlands depicted that only about one third of people with mental disorders seek mental health services (Mishra et al., 2011), while reports from the World Health Organization (2018) indicated that approximately two-thirds of individuals suffering from a mental disorder never seek professional help. Professional mental health help seeking behavior is characterized by an individual's attempt to seek help as a result of his/her experience of a mental health problem by attending a mental health clinic or seeing a psychologist, counselor, psychiatrist or a general practitioner (Rose, 2010;

Altweck, Marshall, Ferenczi & Lefringhausen, 2015). It has also been documented that a significant underutilization of professional mental health care is prevalent among the Arabs specifically (Gearing, MacKenzie, Ibrahim, Brewer, Batayneh & Schwalbe, 2015). Only 11% of Arab families that suffer from mental disorders seek professional mental health practitioners (Dardas & Simmons, 2015). Such low levels of professional mental health help seeking behavior were also reported in Lebanon whereby only a minority of those who suffer from mental illness ever received help (Karam, Karam, Farhat, Itani, Fayyad, Karam, & Thornicroft, 2018).

Given this high prevalence of mental disorders and low treatment seeking behavior prevailing globally and more noticeably in the Arab region including Lebanon (Mishra et al., 2011; Eisenberg et al., 2011; Mitchell et al., 2017; World Health Organization, 2018; Gearing et al., 2014; Karam et al., 2018), it becomes imperative to understand the issues associated with the unmet need for treatment and the factors that might be affecting the treatment seeking behavior (Chen, Mond & Kumar, 2010).

Stigma is believed to be one of the significant contributors to low or inappropriate treatment seeking behavior (Corrigan & Watson, 2002). It is an element related to low levels of mental health literacy (MHL) whereby MHL is a factor incorporating the knowledge and beliefs one holds with regard to the recognition, prevention and management of mental disorders (Jorm, Korten, Jacomb, Christensen, Rodgers, & Pollitt, 1997). One instrumental aspect of stigma and mental health literacy that has been reported to influence help seeking behavior is the belief formed about the causes of mental illness (Pang, Subramaniam, Lee, Lau, Abdin, Chua & Chong, 2018). Literature has shown that the most prominent explanatory models of mental illness are divided into

three main causal attributions: (1) psychosocial causal beliefs of mental illness (life stresses, alcohol/substance misuse and personal deficit) (2) supernatural causal beliefs of mental illness (divine sanctions, evil forces and fate) and (3) biological causal beliefs of mental illness (heredity, brain injury, infection/childbirth) (Ikwuka, Galbraith & Nyatanga, 2013; Boysen & Gabreski, 2012). With causal beliefs being considered as significant contributors of attitudes held towards seeking professional psychological help (Larkings & Brown,2012), numerous studies have reported how misconceptions about the causes of mental disorders can increase stigma towards mental illness and in return might lead to the avoidance of treatment seeking behavior, prolongation of seeking professional help or the seeking of inappropriate treatment resources (Corrigan & Watson, 2002; Reavley & Jorm, 2014; Prang et al., 2018). In fact, cultural differences in the causal beliefs of mental illness were also emphasized throughout the literature rendering culture as an integral force to the determination of the explanatory model of mental illness and its effect on the professional help seeking behavior (Furnham, Akande, & Baguma, 1999; Klienman, 1980; Jorm et al., 1997). For instance, European Americans and Chinese Americans more likely seek help from mental health professionals compared with Hong Kong Chinese and Mainland Chinese due to different lay beliefs about the causes of mental illness (Chen & Mak, 2008). Consequently, the study will aim to examine the psychosocial, biological and supernatural including religious causal beliefs of mental illness and their effect on the attitudes held towards professional help seeking behavior in the Lebanese culture.

Besides causal beliefs of mental illness, research has also shown that psychiatric skepticism which is a concept reflecting one’s cynicism towards psychiatry and

psychiatric conceptualization (Swami, Persaud & Furnham, 2011) is associated with lower levels of mental health literacy and more negative attitudes towards professional help seeking behavior (Schnittker, 2003; Swami et al., 2011). Given that Stigma and misconceptions about mental illness as well as deficiency in trust with regard to the qualifications and expertise of mental health professionals are existent in Lebanon (Rayan & Fawaz, 2018), it becomes imperative to further investigate the association of psychiatric skepticism with mental health literacy and attitude towards professional help seeking among the Lebanese sample. Hence, the proposed study will aim to investigate the relationship between psychiatric skepticism and level of mental health literacy as well as attitudes held towards help seeking behavior among the Lebanese participants.

Throughout the literature, it has been reported that a considerable number of patients suffering from a mental illness choose to seek treatment from the general health sector (i.e. physicians and general practitioners) instead of seeking help from the mental health sector (Mishra, Nagpal, Chadda & Sood, 2016). In the same vein, it was also reported that in Lebanon specifically about 91% of those who suffer from a mental illness primarily seek treatment within the health sector (Karam et al., 2018). Hence, one of the purposes of the study was to examine the level of health literacy prevalent among the Lebanese participants, whereby health literacy is defined as the degree to which individuals possess the ability to obtain, process, and comprehend basic health information and services that will allow the individual to make appropriate health decisions (Ratzan and Parker, 2000). The purpose also incorporated the comparison between prevalence of individual's level of health literacy and their level of mental health literacy in order to investigate whether this heightened tendency towards seeking medical

help for mental illness is related to the differences existing between the levels of the mental health literacy and biological health literacy held by the individuals. In other words, does the increased health literacy level of the individuals and decreased levels of mental health literacy allow the individuals to understand and communicate biological health information and concerns in comparison to the psychological influences; thus, impacting their tendency to seek medical services rather than psychological services when facing a psychological problem?

Purpose

The purpose of the study is to examine the psychosocial, biological and supernatural including religious causal beliefs of mental illness and their effect on the attitudes held towards professional help seeking behavior in Lebanon. The study aims to investigate how psychiatric skepticism relates to the level of mental health literacy as well as attitudes held towards help seeking behavior among the Lebanese participants with a specific focus on comparing the levels of mental health literacy and levels of biological health literacy prevalent among the sample.

Background of the Study

Professional Help Seeking Behavior

Professional help seeking behavior is characterized by an individual's attempt to seek help as a result of his/her experience of a mental health problem by attending a mental health clinic or seeing a psychologist, counselor, psychiatrist or a general practitioner (Rose, 2010; Altweck, Marshall, Ferenczi & Lefringhausen, 2015). In the present study, the aim is to investigate attitudes towards professional help seeking behavior which reflects one's propensity in either seeking or resisting professional psychological help in

response to a mental health problem (Fischer & Turner, 1970). The investigation of attitudes in the present study is based on the underpinnings of the theory of planned behavior (Ajzen, 1991) which proposes that a person's behavior can be determined by his/her intention to perform the behavior, which in turn, is influenced by the individual's attitude toward that behavior, subjective norms, and perceived behavioral control. Hence, attitudes held towards mental health services possess the ability to affect one's decision in seeking professional psychological help when experiencing psychological discomfort (Ajzen, 1991; Greenley, Mechanic, & Clearly, 1987). To that effect, a study conducted by Sheikh and Furnham (2000) revealed the significant prediction of attitudes towards professional help seeking behavior from the causal beliefs about mental illness across British Asian and Pakistani groups.

Causal Beliefs and Attitudes towards Help Seeking Behavior

Causal beliefs of mental illness are considered to play a vital role in contributing to the attitudes held towards seeking professional psychological help (Larkings & Brown, 2012; Stolzenburg, Freitag, Evans-Lacko, Speerforck, Schmidt and Schomerus, 2018). The way an individual conceptualizes the cause of a mental health problem bears an impact on the subsequent perception and behavior of that individual with regard to treatment behavior (Carter, Read, Pyle, Law & Morrison, 2017). Hence, it follows that the beliefs about the causes of their mental illness is relevant to their propensities in initiating professional treatment (Stolzenburg, Freitag, Evans-Lacko, Speerforck, Schmidt and Schomerus, 2018). This is supported by the Health Belief Model (Rosenstock, Strecher & Becker, 1988) which documents the influence of beliefs on health behavior. The basic components of the Health Belief Model theory are "perceived

severity" and "perceived barriers" i.e. patients can initiate treatment or not based on their individual beliefs, attitudes, and expectations of their illness and its treatment (Sher, McGinn, Sirey & Meyers, 2005); hence, these components are considered to reflect significant aspects of perceptions of mental health, perception of help-seeking behavior and the association between them (Rosenstock et al., 1988). In accordance, beliefs about mental illness were shown to influence health care help seeking behavior (Jones & Barlette, 2010; Rawlett, 2011).

Early research into cross-cultural causal beliefs of mental illness illustrated the presence of multiple separate explanatory causations of mental illness (Larkings & Brown, 2012; Pang et al., 2018). In consequence, four models of causal beliefs emerged compromising the 'Western physiological' (i.e. chemical imbalance in the brain), 'non-Western physiological' (i.e. movements of wind, drafts, gas, milk or air flowing through a person's body), 'stress' (i.e. general life stress or trauma, grief) and 'supernatural' (i.e. dangerous unprovoked spirit) causes (Maurice, 1990; Eisenbruch, 1990). Nevertheless, the most prominent explanatory models in the literature include the psychosocial (life stresses, alcohol/substance misuse and personal deficit), supernatural (divine sanctions, evil forces and fate) and biological (heredity, brain injury, infection/childbirth) causal beliefs of mental illness (Ikwuka, Galbraith & Nyatanga, 2013; Boysen & Gabreski, 2012); each of these causal beliefs bears a different implication on the help seeking processes (Stolzenburg et al., 2018).

Psychosocial causal beliefs and attitudes towards help seeking behavior. With regard to the psychological/psychosocial causal explanation of mental illness, it is contended to incorporate personality-based characteristics such as weakness of character,

past experiences, relationships, environmental stressors, and individual's thoughts, feelings, and behaviors as the causal attributions of mental disorders (Niuewsma & Pepper, 2010; Larkings & Brown, 2012; Ando, Yamaguchi, Aoki & Thornicroft, 2013). The literature has documented the inverse relationship between psychosocial causal beliefs of mental illness and professional help seeking behavior (Stolzenburg et al., 2018; Altweck et al., 2015). This inverse relationship is attributed to the fact that person-related causes of mental illness reflect the person's responsibility for the mental health changes (Chen & Mak, 2008). More specifically, these person-related causal attributions might also be associated with self-stigma and self-blame; hence, allowing the individual to feel that he/she does not deserve the professional help (Mak & Wu, 2006). It is also contended that attributing the psychosocial causes to mental illness generates the belief that the symptoms are temporary and there is no need to seek professional treatment (Stolzenburg et al., 2018).

Empirical research in the literature supported the inverse relationship. For instance, a research study conducted by Alahmed, Anjum and Masuadi (2018) aimed to investigate the causal perceptions of mental illness and help-seeking behavior among a sample of 400 healthcare students in Saudi Arabia, Riyadh. The results indicated that those who were more likely to choose social causes for psychosis were seven times more likely to choose social causes for help rather than professional interventions. Similarly, a study conducted by Altweck and colleagues (2015) revealed that the participants who reported a greater endorsement of social causal beliefs of mental illness were more likely to report positive lay help-seeking beliefs; that is, those who believed that the causes behind mental illness are attributed to social factors were more likely to reach out to the social

environment in an attempt to find a solution for their psychological symptoms (Altweck et al., 2015). Correspondingly, social personal causes of mental illness were found to be associated with lower likelihood in seeking professional help (Gangi, Yuen, Levine, and McNally, 2016).

In consequence, based on the aforementioned studies, it can be hypothesized that psychosocial causal beliefs of mental illness are associated with more restrictive attitudes towards seeking professional mental help.

Biological causal beliefs and attitudes towards help seeking behavior. The biological causal explanation of mental disorders is referred to as the medical model as it stresses on the genetic and neurotransmitter anomalies as the causes behind mental illness (Niuewsma & Pepper, 2010; Rüsch, Todd, Bodenhausen, & Corrigan, 2010; Larkings & Brown, 2012). The biological model of mental illness considers mental illness as a condition no different than any other chronic or physical illness i.e. mental illness can be treated with effective medical treatments and mentally sick people should not be blamed for their condition and their responsibility for controlling it (Goldstein & Rosselli, 2003; Schomerus, Schwahn, Holzinger, Corrigan, Grabe, Carta & Angermeyer, 2012). It has been reported that a stronger acceptance of psychiatric help was related to attributing biological concepts to mental illness (Angermeyer, van der Auwera, Carta, & Schomerus, 2017).

To that effect, a number of studies have supported the association between attributing biological causes to mental illness and the willingness to seek professional mental health. For instance, in one study, which aimed to investigate the preferences of the lay public

regarding sources of help and treatment options in case of mental disorder in a sample of 5015 participants in Germany, the consideration of brain disease as the causal attribution of mental illness was associated with a stronger recommendation of psychotherapy for the treatment of mental disorders (Riedel-Heller, Matschinger & Angermeyer, 2005). Another study conducted by Reavley, Cvetkovski and Jorm (2013) revealed that attributing biogenetic causes to mental illness was related to more favorable attitudes with regard to psychiatric treatment. Similarly, a study conducted by Garcia, Franks, Jerant, Bell & Kravitz (2011) documented the association between the endorsement of the biomedical illness representation model of mental illness and more approving attitudes toward psychiatric treatment i.e. seeking of professional mental health. Similarly, Speerfock and colleagues (2017) reported in their study that endorsing biological illness beliefs among the general public was associated with help seeking recommendations incorporating psychotherapy and medication. As such, it can be hypothesized that the biological causal beliefs of mental illness are associated with more permissive attitudes towards seeking professional mental help.

Spiritual causal beliefs and attitudes towards help seeking behavior. Research has supported the existence of a relationship between religious (supernatural) causal beliefs of mental illness and professional help seeking behavior (Trice & Bjork, 2006; Rose, 2010; Alahmed et al., 2018). It has been reported that possessing superstitious casual beliefs of mental illness may hinder one to seek help from professional mental health practitioners (Kauye, Udedi & Mafuta, 2015; Alahmed et al., 2018). It follows that those with religiously oriented causal beliefs are more likely to seek out faith healers or religious advisors rather than mental health professionals (Rose, 2010; Alahmed et al.,

2018) because they attribute the causes of mental illness to spiritual and religious components instead to psychological causal components (Abe-kim et al., 2004). To that effect, they will seek a solution to their problem from religious interventions (Hartog & Gow, 2005). For instance, if one contends that his/her experience of emotional distress is a punishment resulting from a wrongdoing in confrontation with religious teachings, one may seek treatment by praying to God and seeking guidance from religious personals (Rose, 2010).

Consequently, numerous studies have pointed to the inverse relationship existing between religious causal beliefs of mental illness and the decreased tendency of seeking professional mental health treatment. A meta-analysis conducted by Choudhry, Mani, Ming, and Khan (2016) revealed that choosing the modes of treatment that incorporate consulting faith healers, religious scholars, and/or spiritual healers reflects one's belief in the supernatural and spiritual causes of mental disorders. In the same vein, a study conducted by Hailemariam (2015) revealed that the treatment seeking preference of the participants which incorporated spiritual practices like holy water sprinkling, praying and other traditional healing techniques was based on the endorsement of spiritual causal beliefs of mental illness such as different social evil practices, traditional beliefs and the punishing hands of God. More specifically, negative attitudes towards the efficacy of the professional help for mental illness were prevalent among the participants (Hailemariam, 2015). Similarly, a study aiming to investigate the cultural misconceptions about mental illness among a sample of 203 Lebanese university students revealed that the most prevalent causes of mental illness in the Lebanese culture are the Seher, evil eye (Hasad), Jinn and God's punishment with going to the Sheikh,

praying and using Rukia considered as the most common treatment methods accordingly (Rayan & Fawaz, 2018). Consequently, it can be hypothesized that religious (spiritual) causal beliefs of mental illness are associated with more restrictive attitudes towards seeking professional mental help.

Culture and the Relationship between Causal Beliefs and Help Seeking Behavior

The importance of culture in understanding psychological processes is perceived to be based on the notion that individuals living in different societal cultures are presumed to have differing experiences (Oyserman & Lee, 2008). As such, cultural context seems to be a variable that factors into the prediction of behavior and cognition (Gibson, Thompson & O‟Sullivan, 2016). Originating from that, the cultural context is an important factor that influences beliefs related to mental health illness allowing those beliefs to vary from culture to culture (Choudhry, Mani, Ming & Khan, 2016). More specifically, cultural differences in the causal beliefs of mental illness were significantly emphasized throughout the literature rendering culture as an integral force to the determination of the explanatory model of mental illness (Furnham, Akande, & Baguma, 1999; Klienman, 1980). To that effect, the influence of culture on the beliefs about the causes of mental illness is contended to be the principal force in dictating the delay in seeking professional treatment as well as deciding the treatment modalities to pursue (Jorm et al., 1997).

The cross-cultural differences of causal beliefs of mental illness as well as the corresponding treatment modalities were documented throughout the literature. For

example, it has been shown that the westerners endorse more biological and psychological causal beliefs of mental disorders while non-westerners endorse more theological explanations of mental illness (Nakane et al., 2005; Furnham & Telford, 2011; Hamid & Furnham, 2013). More specifically, those who endorse the dominant western culture were more likely to seek psychiatric and psychological interventions on the basis of their stress-related and western psychological causal explanations of mental illness (Rose, 2010), compared to those who endorse subcultural supernatural and religious beliefs of mental illness and the pursue of culture–specific treatment modalities such as visiting religious or spiritual healers (Savannan et al., 2005; McClelland, Khanam & Furnham, 2014). In correspondence, a study conducted by Hamid and Furnham (2013) revealed that UK Arabs held stronger supernatural and non-western psychosocial causal beliefs of mental illness than Caucasians; and thus, they were less likely to incorporate professional types of help seeking behavior. Similarly, in a study conducted by McClelland et al., (2014), the results indicated that British Bangladesh participants were more likely to attribute psychological stress and less likely to attribute biological factors to depression compared to British whites. They also attributed a supernatural etiology to depression and reported that they believed in faith healing as well as the role of family and friends in curing depression; thus, focusing more on lay referral system rather than seeking professional help as opposed to the British whites (McClelland et al., 2014). In the same vein, it was found that European Americans and Chinese Americans are more likely to seek help from mental health professionals compared with Hong Kong Chinese and Mainland Chinese given that they attributed environmental/hereditary causes to

mental illness compared to the social–personal causes of mental illness that were reported by the Hong Kong and Mainland Chinese participants (Chen & Mak, 2008).

Hence, investigating the impact of culture on the relationship between causal beliefs and attitudes towards help seeking behavior will give more insight into the underpinnings of the treatment seeking behavior. More importantly, the importance of investigating this relationship in the present study lies in the notion that Lebanon is a country high on collectivism (Hofstede, 1987). It is documented that developing and collectivistic cultures are more likely to attribute the supernatural causes to mental illness, while developed and western countries are more likely to attribute biological and psychological causes to mental illness (Altweck et al., 2015; Caqueo-Urízar, 2015). However, Lebanon is also considered a more liberal and western-oriented country (Dwairi et al., 2006; Saleh, 2014); hence in a cultural context that deems to be propagating a mix of cultural values, it would be imperative to investigate the emerged causal beliefs of mental illness and their subsequent influence on treatment modalities in a cultural milieu like Lebanon.

Psychiatric Skepticism, Help Seeking Behavior and Mental Health Literacy

Besides the existent relationship between causal beliefs of mental illness and attitudes towards professional help seeking behavior, the literature has also pointed to the significant relationship between psychiatric skepticism and mental health literacy as well as attitudes held towards seeking professional help (Chen & Mak, 2008; Alweck et al., 2015). More specifically, it has been reported that psychiatric skepticism is related to lower levels of mental health literacy and more negative attitudes towards professional help seeking behavior (Schnittker, 2003; Swami et al., 2011). This is attributed to the fact

that individuals who possess a cynical view with regard to psychiatric and psychological treatments of mental illness are more likely to take minimal considerations with regard to issues related to mental illness; thus, allowing them to maintain poorer abilities in recognizing real from foil mental disorders (Swami, Persaud & Furnham, 2011). In fact, numerous studies have pointed to the existing association between psychiatric skepticism and mental health literacy. For instance, in a study conducted by Angermeyer, Holzinger and Matschinger (2009) as well as in a study conducted by Pattyn, Verhaeghe, Sercu and Bracke (2013), the results indicated that an accurate recognition or identification of a mental disorder was associated with an increased inclination in recommending a visit to a psychiatrist. Similarly, Sawamura and colleagues (2012) revealed in their study that a correct identification and recognition of mental disorder induced higher expectations with regard to the effectiveness of a psychiatric treatment. More specifically, in a study conducted by Reavley and Jorm (2012), it was reported that a correct recognition of mental disorders like depression and schizophrenia were accompanied with a well-built belief about the helpfulness of the psychiatric treatment like the usage of antidepressants or antipsychotics; hence, the results of the aforementioned studies show that mental health literacy is associated with less psychiatric skepticism.

Psychiatric skepticism is also considered a barrier to seeking professional treatment for mental illness since the mistrust in the qualifications of psychiatric treatment hinders one's acceptability of seeking such type of treatment (Swami, Persaud & Furnham, 2011; Eisenberg et al., 2011). Correspondingly, a study conducted by Mowbray et al. (2006) indicated that mistrust of providers hindered seeking professional help. Similarly, a study conducted by Vorhees and colleagues (2006) revealed that lack of confidence in

psychiatric treatment was associated with more restrictive attitudes towards professional help-seeking. In a study conducted by Rayan and Fawaz (2018) in Lebanon revealed that lack of trust in qualifications and expertise of professional mental health practitioners was subsequently reported to be a barrier of professional mental health seeking behavior. In fact, this skepticism was even found to be one of the most important barriers towards seeking mental health treatment in Lebanon (Rayan & Fawaz, 2018).

In consequence, it can be hypothesized that higher levels of psychiatric skepticism will be associated with lower levels of mental health literacy and more restrictive attitudes towards professional help seeking behavior.

Mental Health Literacy versus Health Literacy

In the Arab culture the contrast between physical and psychological health is not common (El-Islam, 1994); in fact, the majority of the Arabs engage in the somatization of their mental illnesses (Hamid & Furnham, 2013). To that effect, medication becomes perceived as the sole treatment method leading to the underutilization of the mental health services (Hamid & Furnham, 2013). Research has shown that a considerable number of patients instead of seeking help from the mental health sector primarily choose to seek treatment from the general health sector which incorporates physicians and general practitioners (Mishra, Nagpal, Chadda & Sood, 2016). More specifically, it has been reported that in Lebanon about 91% of those who suffer from a mental illness primarily seek treatment within the health sector (Karam et al., 2018). The principal reason behind the avoidance of pursuing professional treatments is related to the stigma and cultural blame that is associated with emotional problems and mental illness at large (Fawaz & Rayan, 2018). However, it can also be fathomed that this avoidance of seeking

professional help is related to the difference in the levels of mental health literacy and biological health literacy prevalent among the population. In particular, it has been reported that Lebanon is characterized by an abundance of health-related information and services as well as a great deal of awareness campaigns with regard to health (National Health Statistical Report in Lebanon, 2012), while many mental health services were reported to be inadequately available (Rayan & Fawaz, 2018); hence, allowing the population to be more exposed to physical health services and information in comparison to mental health services and information.

Consequently, it can be hypothesized that the Lebanese population will have higher levels of biological health Literacy compared to their levels of mental health literacy level.

Statement of Problem

There is a widespread prevalence of mental disorders worldwide including the Arab region (Wang et al., 2009; Yahia et al., 2012; Steel et al., 2014; World Health Organization, 2018). The thread of this widespread prevalence is existent in Lebanon whereby a study conducted on a Lebanese national representative sample of 2,857 adults revealed that about one-fourth of the sample (714 out of n= 2,857) met at least one criteria of the DSM-IV psychiatric disorders at some point in their lives (Karam et al., 2008). In conjunction with this prevalence, Lebanon has also witnessed a significant underutilization of professional mental health help (Karam et al., 2008; Chahine & Chemali, 2009; El-Jardali & Yehia, 2014; Karam et al., 2018). In fact, statistical reports in Lebanon depicted that out of the 91% of those who seek care for their mental illness,

80% seek help in the health sector, while the other majority seeks help by consulting religion professionals (Karam et al., 2018). With this low level of professional help seeking behavior for mental illness, it becomes essential to investigate the causes that underlie the huge treatment gap that exists between the prevalence of disorders and the help seeking behavior. To that effect, previous research has shown that causal attributions of mental health illness influence professional help seeking behavior with inaccurate causal attributions of mental disorders being associated with the usage of non-evidence based interventions instead of professional psychological help and thus hindering recovery (Coles & Coleman, 2010; Alahmed, Anjum & Masuadi, 2018). Therefore, examining the relationship between the causal beliefs of mental illness and attitudes held towards professional help seeking behavior will help in investigating the reason behind the underlying treatment gap that exists between the prevalence of disorders and the professional help seeking behavior in Lebanon.

To that effect, given that in Lebanon there is a prevalence of low levels of mental health literacy and low levels of treatment seeking behavior (Rayan & Fawaz, 2018; Karam et al., 2018) as well as the prevalence of stigma and misconceptions about mental illness that is affecting the perception held towards the effectiveness of mental health services (Rayan & Fawaz, 2018), it becomes essential to further examine the contribution of psychiatric skepticism to the aforementioned factors. The high percentage of individuals in Lebanon who suffer from mental illness but seek health care instead of seeking professional mental health (Rayan & Fawaz, 2018; Karam et al., 2018) renders examining their health literacy in comparison to their mental health literacy important.

Research Questions & Hypotheses

The aim of the present study is to answer the following questions and support the following hypotheses:

1. Do psychosocial, biological and supernatural including religious causal beliefs of mental illness predict attitudes towards professional help seeking behavior in Lebanon?

Hypothesis (1). Individuals who more strongly endorse psychosocial causal beliefs would hold more restrictive attitudes towards professional help-seeking.

Hypothesis (2). Individuals who more strongly endorse biological causal beliefs would hold more permissive attitudes towards professional help-seeking.

Hypothesis (3). Individuals who more strongly endorse supernatural causal beliefs would hold more restrictive attitudes towards professional help-seeking.

2. Does psychiatric skepticism predict mental health literacy and attitudes towards professional mental health help seeking behavior in Lebanon?

Hypothesis (4). Higher levels of psychiatric skepticism would be associated with greater endorsement of more restrictive attitudes towards professional help-seeking.

Hypothesis (5). Higher levels of psychiatric skepticism would be associated with lower levels of mental health literacy

3. Is there a difference in the level of biological health literacy and mental health literacy held by the Lebanese participants?

Hypothesis (6). Participants will report higher levels of biological health literacy than mental health literacy.

Rationale

Despite the prevalence of mental illness and restricted professional help seeking behavior (Al-Krenawi, 2002; Yahia et al., 2012; Gearing et al., 2014; Gilat et al., 2010), the Arab mental health literature possesses a remarkable gap (Tobin, 2000) and data related to the treatment of mental disorders in the Arab region is scarce (Nasser & Salamoun, 2011; Karam et al., 2018). While assessing the pattern of the help seeking behavior did take place in Lebanon (Karam et al., 2008; Chahine & Chemali, 2009; El-Jardali & Yehia, 2014; Karam et al., 2018), to the best of my knowledge no previous studies in Lebanon investigated the relationship between the biological, psychosocial and spiritual (religious) causal explanations of mental disorders and attitudes towards professional help seeking behavior all together. It is also vital to note that a study aiming to investigate how cultural misconceptions about mental illness impact public stigma among University students in Lebanon, pointed to the existence of a relationship between attributing causal beliefs of mental illness to spiritual and religious factors and the undertaking of treatment modalities that incorporate religious tenants (Rayan & Fawaz, 2018). Nevertheless, the primary aim of this study did not include investigating the causal beliefs of mental illness and attitudes towards seeking professional help, and it did not include any aims or analyses with regard to the association between the other causal beliefs of mental illness and their relationship to help seeking behavior in Lebanon. With regard to psychiatric skepticism, to the best of my knowledge, no previous studies

investigated the relationship between psychiatric skepticism and attitudes held towards professional help seeking behavior and levels of mental health literacy in Lebanon.

Literature has supported the notion that cultural factors influence beliefs about the causes and treatment of mental illness (Shefer, Rose, Nellums , Thornicroft,Henderson & Evans-Lacko, 2013). There is a significant difference between westerners and Arabs with regard to the beliefs, values and traditions related to mental illness (Dardas & Simmons, 2015). Research in the Middle East showed that Arabs hold more negative attitudes towards seeking professional psychological help than Westerners (Savaya, 1998; Al Adawi et al., 2002; Yousseff & Deane, 2006) with these negative attitudes impeding professional help seeking (Hamid & Furnham, 2013). To that effect, many people diagnosed with mental illness in the Arab world do not seek professional psychological help due to cultural stigma (Rayan & Jaradat, 2016; Rayan & Obiedate, 2017). Along the same line, diminished professional help seeking behavior in Lebanon was found to be associated with the stigma and cultural shame (Rayan & Fawaz, 2018). Given that the causal beliefs of mental illness are related to stigma (Pang et al., 2018) and given that there exists a limited literature investigating how cultural beliefs and practices relate to the perception of mental illness in the Arab culture (Gearing, MacKenzie, Ibrahim, Brewer, Batayneh & Schwalbe, 2015) as well as in Lebanon; it becomes imperative to understand the causal beliefs of mental illness so as to clarify the impact of the cultural nuances on the treatment gap present in Lebanon.

Significance of the Study

Theoretically, the study helps in shedding light over the role of the three causal beliefs of mental illness i.e. psychosocial, biological and spiritual-religious in influencing attitudes held towards professional help seeking behavior as well as the role of psychiatric skepticism in influencing help seeking behavior and levels of mental health literacy among the Lebanese participants. The study also provides information over the mental health literacy and biological health literacy levels that are prevalent in the Lebanese sample with the aim of comparing them. The investigation of the aforementioned association among the variables will provide eminent understanding of the factors that influence mental health literacy as well as the factors that influence the treatment seeking behavior such as why one seeks or refrains from seeking professional mental help with a specific focus on how the relationships among the variables will emerge in a specified cultural milieu like Lebanon. This provides a basis for future research to advance the knowledge on the predictability of attitudes towards professional help seeking behavior and mental health literacy from the aforementioned variables i.e. Psychosocial, biological, spiritual-religious beliefs and psychiatric skepticism.

In addition to the theoretical and the research benefits, this study provides practical benefit as well. Primary, given that some causal beliefs advocate stigmatizing views towards mental illness and impede treatment, identifying those causal beliefs in the Lebanese population might aid in shedding light over the factors that influences one's readiness to seek professional help for their mental health conflicts. Additionally, understanding these beliefs might also help in advocating proper communication between therapists and their clients; and this in turn might provide positive treatment outcomes.

More specifically, because cultural beliefs were observed to influence causal attributions of mental illness as well as mental health literacy and in turn impact the treatment seeking behavior, it becomes imperative to acknowledge the level of mental health literacy and the type of causal beliefs prevalent in the sample especially that is has been reported that stigma, mental illness misconceptions as well as skepticism of the qualifications and expertise of mental health professionals are existent in Lebanon. The comparison between mental health literacy and biological health literacy further provides evidence for the level of mental health literacy prevalent among the Lebanese participants and in turn justify the high rate of the seeking of medical help instead of mental health professional help. Consequently, the obtained information helps in advocating the implementation of culturally tailored and anti-stigma treatment interventions applicable to the Lebanese context. Furthermore, the obtained data can also aid the policy makers in devising policies for awareness-raising campaigns among the general population as well as in educational and health settings that enhances mental health literacy at large and propagates the endorsement of the medical view of mental illness and treatment which is incorporates lower stigma levels than the other causal beliefs.

Chapter 2

Literature Review

Causal Beliefs and Attitudes towards Help Seeking Behavior

The Literature review has strongly documented the relationship between Causal beliefs of mental illness and attitudes towards help seeking behavior, with studies mainly illustrating how the causal beliefs of mental illness contribute to the attitudes held towards seeking professional psychological help (Larkings & Brown, 2012; Stolzenburg, Freitag, Evans-Lacko, Speerforck, Schmidt and Schomerus, 2018). This relationship between causal beliefs of mental illness and attitudes towards help seeking behavior is mainly based on how the conceptualization of the cause that leads to the mental health problem impacts the way the individual perceives and behaves with regard to the professional treatment procedure (Carter, Read, Pyle, Law & Morrison, 2017). Hence, the beliefs held with regard to the causes of mental illness become relevant to one's propensities in initiating professional treatment (Stolzenburg, Freitag, Evans-Lacko, Speerforck, Schmidt and Schomerus, 2018).

Health Belief Model. The relationship between causal beliefs of mental illness and attitudes towards help seeking behavior is supported by the Health Belief Model (Rosenstock, Strecher & Becker, 1988) which documents the influence of beliefs on health behavior. The basic components of the Health Belief Model theory are "perceived severity" and "perceived barriers" i.e the individual's perception of the severity of illness and barriers to dealing with it; thus, this indicates that patients can initiate treatment or not based on their individual beliefs, attitudes, and expectations of their illness and its

treatment (Sher, McGinn, Sirey & Meyers, 2005). Consequently, these components are considered to reflect significant aspects of perceptions of mental health, perception of help-seeking behavior and the association among them (Rosenstock et al., 1988). In accordance to this model, a strong support to the existing relationship between causal beliefs of mental illness and attitudes towards help seeking behavior was maintained which illustrates how beliefs about mental illness were shown to influence health care help seeking behavior (Jones & Barlette, 2010; Rawlett, 2011).

Models of the Causal beliefs of mental illness. Early research into cross-cultural causal beliefs of mental illness illustrated the presence of multiple separate explanatory causations of mental illness (Larkings & Brown, 2012; Pang et al., 2018). The literature strongly focused on the four major models of causal beliefs which compromise the 'Western physiological' (i.e. chemical imbalance in the brain), 'non-Western physiological' (i.e. movements of wind, drafts, gas, milk or air flowing through a person's body), 'stress' (i.e. general life stress or trauma, grief) and 'supernatural' (i.e. dangerous unprovoked spirit) causes (Maurice, 1990; Eisenbruch, 1990). However, the most prominent explanatory models in the literature include the psychosocial (life stresses, alcohol/substance misuse and personal deficit), supernatural (divine sanctions, evil forces and fate) and biological (heredity, brain injury, infection/childbirth) causal beliefs of mental illness (Ikwuka, Galbraith & Nyatanga, 2013; Boysen & Gabreski, 2012). It is vital to note that the non-western physiological beliefs incorporate physiological causes of mental illness from a traditional perspective and they are not found in the western medical language (Haugum, 2011). Nevertheless, an equity can be found between the non-western and western physiological causes of mental illness; for

instance, the item “body out of balance or harmony” of the non-western physiological causal belief equates to and is related to the “chemical imbalance in the brain” of the western physiological causal belief of mental illness (Eisenbruch, 1990; Haugum, 2011). Hence, these two physiological causal beliefs include common biological underpinnings that are expressed differently according to cultural background as well as interaction among individuals with diverse causal beliefs as well as through media in general (Haugum, 2011).

Each of these causal beliefs bears a different implication on the help seeking processes (Stolzenburg et al., 2018). For instance, in a study conducted among college students, the results revealed that biological causal beliefs of mental illness were related to stronger, while social-personal causes of mental illness were related to lower self-assessed likelihood to seek professional help (Chen & Mak, 2008; Gangi, Yuen, Levine, & McNally, 2016); hence, indicating that different causal beliefs of mental illness have different implications for the process of professional help-seeking. Consequently, the increased understanding of the causal beliefs of mental illness causes an increased understanding of the help seeking behavior of the individual with the possibility of even improving it (Mojtabai, Olfson & Mechanic, 2002).

Psychosocial causal beliefs and attitudes towards help seeking behavior. With regard to the psychological/psychosocial causal explanation of mental illness, it is contended to incorporate personality-based characteristics such as weakness of character, past experiences, relationships, environmental stressors, and individual’s thoughts, feelings, and behaviors as the causal attributions of mental disorders (Niuewsma & Pepper, 2010; Larkings & Brown, 2012; Ando, Yamaguchi, Aoki & Thornicroft, 2013).

The literature has documented the inverse relationship between psychosocial causal beliefs of mental illness and professional help seeking behavior (Stolzenburg et al., 2018; Altweck et al., 2015). This inverse relationship is attributed to the fact that person-related causes of mental illness reflect the person's responsibility for the mental health changes (Chen & Mak, 2008). More specifically, these person-related causal attributions might also be associated with self-stigma and self-blame; hence, allowing the individual to feel that he/she does not deserve the professional help (Mak & Wu, 2006). It is also contended that attributing the psychosocial causes to mental illness generates the belief that the symptoms are temporary and there is no need to seek professional treatment (Stolzenburg et al., 2018).

Empirical research in the literature supported the inverse relationship. For instance, a research study conducted by Alahmed, Anjum and Masuadi (2018) aimed to investigate the causal perceptions of mental illness and help-seeking behavior among a sample of 400 healthcare students in Saudi Arabia, Riyadh. The results indicated that those who were more likely to choose social causes for psychosis were seven times more likely to choose social causes for help rather than professional interventions. Similarly, a study conducted by Altweck and colleagues (2015) revealed that the participants who reported a greater endorsement of social causal beliefs of mental illness were more likely to report positive lay help-seeking beliefs; that is, those who believed that the causes behind mental illness are attributed to social factors were more likely to reach out to the social environment in an attempt to find a solution for their psychological symptoms (Altweck et al., 2015). Correspondingly, social personal causes of mental illness were found to be

associated with lower likelihood in seeking professional help (Gangi, Yuen, Levine, and McNally, 2016).

In consequence, based on the aforementioned studies, it was hypothesized that psychosocial causal beliefs of mental illness are associated with more restrictive attitudes towards seeking professional mental help.

Biological causal beliefs and attitudes towards help seeking behavior. The biological causal explanation of mental disorders stresses on the genetic and neurotransmitter anomalies as the cause behind mental illness, and it is also referred to the medical model (Niuewsma & Pepper, 2010; Rüsch, Todd, Bodenhausen, & Corrigan, 2010; Larkings & Brown, 2012). According to the biological model of mental illness, mental illness is considered a condition no different than any other chronic or physical illness i.e. mental illness can be treated with effective medical treatments and mentally sick people should not be blamed for their condition and their responsibility for controlling it (Goldstein & Rosselli, 2003; Schomerus, Schwahn, Holzinger, Corrigan, Grabe, Carta & Angermeyer, 2012). It has been reported that a stronger acceptance of psychiatric help was related to attributing biological concepts to mental illness (Angermeyer, van der Auwera, Carta, & Schomerus, 2017). For instance, those endorsing the biological illness models possessed a stronger recommendation of using psychotherapy and medication as help-seeking strategies in schizophrenia among the general population (Speerforck et al., 2016), with a preference for pharmacotherapy in among psychotherapy clients suffering from depression (Tompkins et al., 2016).

A number of studies in the literature have documented how the attribution of the biological causal beliefs promotes the willingness to seek professional mental health. For instance, in one study, which aimed to investigate the preferences of the lay public regarding sources of help and treatment options in case of mental disorder in a sample of 5015 participants in Germany, the consideration of brain disease as the causal attribution of mental illness was associated with a stronger recommendation of psychotherapy for the treatment of mental disorders (Riedel- Heller, Matschinger & Angermeyer, 2005). Another study conducted by Reavley, Cvetkovski and Jorm (2013) revealed that attributing biogenetic causes to mental illness was related to more favorable attitudes with regard to psychiatric treatment. Similarly, a study conducted by Garcia, Franks, Jerant, Bell & Kravitz (2011) documented the association between the endorsement of the biomedical illness representation model of mental illness and more approving attitudes toward psychiatric treatment i.e. seeking of professional mental health. Similarly, Speerfock and colleagues (2017) reported in their study that endorsing biological illness beliefs among the general public was associated with help seeking recommendations incorporating psychotherapy and medication. As such, it was hypothesized that the biological causal beliefs of mental illness are associated with more permissive attitudes towards seeking professional mental help.

Spiritual causal beliefs and attitudes towards help seeking behavior. Research has supported the existence of a relationship between religious (supernatural) causal beliefs of mental illness and professional help seeking behavior (Trice & Bjork, 2006; Rose, 2010; Alahmed et al., 2018). Possessing superstitious casual beliefs of mental illness was shown to hinder the seeking of help from professional mental health practitioners (Kauye,

Udedi & Mafuta, 2015; Alahmed et al., 2018). Specifically, those with religiously oriented causal beliefs are more likely to seek out faith healers or religious advisors rather than mental health professionals (Rose, 2010; Alahmed et al., 2018) because they attribute the causes of mental illness to spiritual and religious components instead to psychological causal components (Abe-kim et al., 2004). They will seek a solution to their problem from religious interventions (Hartog & Gow, 2005). For instance, if one contends that his/her experience of emotional distress is a punishment resulting from a wrongdoing in confrontation with religious teachings, one may seek treatment by praying to God and seeking guidance from religious personals (Rose, 2010). Also, those who attribute supernatural or religious beliefs may ignore mental health professionals for psychological help as they might feel that mental professionals disregard religious values; hence, making them prefer traditional healers for their treatment (Al-Krenawi & Graham, 2000; Bhikha et al. 2015).

Numerous studies in the literature have pointed to the inverse relationship existing between religious causal beliefs of mental illness and the decreased tendency of seeking professional mental health treatment. For instance, a meta-analysis conducted by Choudhry, Mani, Ming, and Khan (2016) revealed that choosing the modes of treatment that incorporate consulting faith healers, religious scholars, and/or spiritual healers reflects one's belief in the supernatural and spiritual causes of mental disorders. Another study, conducted by Hailemariam (2015) revealed that the treatment seeking preference of the participants which incorporated spiritual practices like holy water sprinkling, praying and other traditional healing techniques was based on the endorsement of spiritual causal beliefs of mental illness such as different social evil practices, traditional

beliefs and the punishing hands of the God. More specifically, negative attitudes towards the efficacy of the professional help for mental illness were prevalent among the participants (Hailemariam, 2015). Similarly, a study aiming to investigate the cultural misconceptions about mental illness among a sample of 203 Lebanese university students revealed that the most prevalent causes of mental illness in the Lebanese culture are the Seher, evil eye (Hasad), Jinn and God's punishment with going to the Sheikh, praying and using Rukia considered as the most common treatment methods accordingly (Rayan & Fawaz, 2018). Consequently, it was hypothesized that religious (spiritual) causal beliefs of mental illness are associated with more restrictive attitudes towards seeking professional mental help.

Culture and the Relationship between Causal Beliefs and Help Seeking Behavior

Given that individuals living in different societal cultures are presumed to have differing experiences, it becomes important to focus on the implications of culture when understanding psychological processes (Oyserman & Lee, 2008); especially that it has been shown that cultural context plays a crucial role in predicting behavior and cognition (Gibson, Thompson & O"Sullivan, 2016). In fact, it has also been reported that cultural context influences beliefs that are related to mental health illness; thus, allowing those beliefs to vary from culture to culture (Choudhry, Mani, Ming & Khan, 2016).

The literature has significantly emphasized the existence of cultural differences across the causal beliefs of mental illness rendering culture as an integral force to the determination of the explanatory model of mental illness (Furnham, Akande, & Baguma, 1999; Klienman, 1980). To that effect, culture becomes a factor that can dictate the delay

in seeking professional treatment as well as dictate the type of treatment modality to be pursued (Jorm et al., 1997).

A number of studies in the literature review have focused on presence of the cross-cultural differences of causal beliefs of mental illness as well as the corresponding treatment modalities. For example, research has particularly shown that the westerners endorse more biological and psychological causal beliefs of mental disorders while non-westerners endorse more theological explanations of mental illness (Nakane et al., 2005; Furnham & Telford, 2011; Hamid & Furnham, 2013). In other words, individuals endorsing the dominant western culture were more likely to seek psychiatric and psychological interventions given that they maintained stress-related and western psychological causal explanations of mental illness (Rose, 2010); however, individuals who endorse subcultural supernatural and religious beliefs of mental illness tend to pursue culture –specific treatment modalities such as visiting religious or spiritual healers (Savannan et al., 2005; McClelland, Khanam & Furnham, 2014). More specifically, a study conducted by Hamid and Furnham (2013) revealed that UK Arabs held stronger supernatural and non-western psychosocial causal beliefs of mental illness than Caucasians; and thus, they were less likely to incorporate professional types of help seeking behavior. This was also supported among a Saudi Arabian sample whereby only a small number of participants reported that they will seek professional psychological help if a serious emotional problem arose. Nearly all respondents of the sample reported that they attributed the causes of mental illness to something bad happening to the person, or due to God's punishment (Abolfotouh, Almutairi, Almutairi, Salam, Alhashem, Adlan & Modayfer, 2019); hence, these obtained results of the studies have accentuated the link

between the spiritual causes of mental illness and attitudes towards seeking professional help. In the same vein, another study conducted by McClelland and colleagues (2014) revealed the relationship between causal beliefs of mental illness and attitudes towards professional help from a cross-cultural implication. The results mainly indicated that British Bangladesh participants were more likely to attribute psychological stress and less likely to attribute biological factors to depression compared to British whites. They also attributed a supernatural etiology to depression and reported that they believed in faith healing as well as the role of family and friends when it comes to curing depression; thus, this shows how the British Bangladesh focus more on lay referral system rather than seeking professional help as opposed to the British whites (McClelland et al., 2014). Similarly, cross-cultural difference in the relationship between the causal beliefs of mental illness and attitudes towards psychological help was also reported in study that found how European Americans and Chinese Americans are more likely seek help from mental health professionals compared with Hong Kong Chinese and Mainland Chinese given that they attributed environmental/hereditary causes to mental illness compared to the social– personal causes of mental illness that were reported by the Hong Kong and Mainland Chinese participants (Chen & Mak, 2008).

These aforementioned studies and their obtained results illustrate the importance of investigating the impact of culture on the relationship between causal beliefs and attitudes towards help seeking behavior as they give more insight into the underpinnings of the treatment seeking behavior.

Collectivistic culture and causal beliefs of mental illness. More importantly, the importance of investigating this relationship in the present study lies in the notion that

Lebanon is a country high on collectivism (Hofstede, 1987). In a collectivistic culture, social identity is the main focus and priority is primarily given to the group's goals and needs (Imad & Yussen, 2012). More specifically, in-group harmony and cohesion are highly cherished and individuals view themselves as highly interdependent with the members of their group; this allows those individuals to be assured that they will be looked after by their group (Hofstede, 2001). Hence, such a collectivistic culture promotes one to value in-group relationships and seek advice from the in-group (Shulruf et al., 2007). For instance, in a study conducted by Atweck and colleagues (2015) greater collectivism was associated with greater endorsement of social causal beliefs in the European American sample. This finding can be explained by the fact that collectivists are more likely to attribute causes of mental illness to the community (Speller, 2005) and they rely on social explanations for mental illness (Penny et al., 2009). In addition to the that, the collectivistic nature of Lebanon (Hofstede, 1983) accentuates the significance placed on the family role with regard to shaping one's fundamental values and beliefs as well as influencing one's health related behaviors (Kreuter et al., 2003; Youssef & Deane, 2006). In this case, family functions as a barrier to one's engagement in help seeking behavior when one's mental illness is perceived as a private family matter and the help seeking behavior that follows is considered a collaborative family effort (Heath, Vogel, & Al-Darmaki, 2016); hence, any help seeking behavior that is done outside the realms of the collective involvement of the family would be considered as a family dishonor (Youssef & Deane, 2006). As such, in such a context, individuals will be expected to avoid the help-seeking behavior given that any professional intervention

would be considered as a family boundary violation which can harm the individual's and the family's reputation (Hamdan, 2009); hence, they will only seek help from their circle.

In addition to that, research also documented that developing and collectivistic cultures also attribute the supernatural causes to mental illness (Altweck et al., 2015; Caqueo-Urízar, 2015). As a matter of fact, in a study conducted by Bhikha et al. (2015) showed that 55.5% of British South Asians endorsed supernatural causes of psychosis; however, the majority of them (77.7%) maintained a dual explanatory model i.e. they endorsed both supernatural and biological causal beliefs of mental illness simultaneously as their help-seeking behavior incorporated a combination of prescribed medication and traditional healing. Hence, this indicated that lay causal beliefs of mental illness can be multidimensional and dictate the help-seeking choices (Bhkiha et al., 2015).

Nevertheless, Lebanon is also considered a more liberal and western-oriented country (Dwairi et al., 2006; Saleh, 2014); hence in a cultural context that deems to be propagating a mix of cultural values and the changing cultural perspectives resulting from globalization, which might impact individuals' views towards mental illness and its causes (Bhkiha et al., 2015), it was imperative to investigate the emerged causal beliefs of mental illness and their subsequent influence on treatment modalities in a cultural milieu like Lebanon.

Psychiatric Skepticism, Help Seeking Behavior and Mental Health Literacy

The literature has also pointed to the significant relationship existing between psychiatric skepticism and mental health literacy as well as between psychiatric skepticism and attitudes held towards seeking professional help (Chen & Mak, 2008; Alweck et al., 2015). Previous research mainly illustrated that psychiatric skepticism is

related to lower levels of mental health literacy and more negative attitudes towards professional help seeking behavior (Schnittker, 2003; Swami et al., 2011). This is attributed to the fact that individuals who possess a cynical view with regard to psychiatric and psychological treatments of mental illness will be more likely to take minimal considerations with regard to issues related to mental illness which allows them to maintain poorer abilities in recognizing real from foil mental disorders (Swami, Persaud & Furnham, 2011). The association between psychiatric skepticism and mental health literacy was illustrated in numerous studies in the literature. For instance, one study conducted by Sawamura and colleagues (2012) revealed that a correct identification and recognition of mental disorder induced higher expectations with regard to the effectiveness of a psychiatric treatment. Similarly, in a study conducted by Angermeyer, Holzinger and Matschinger (2009) as well as in a study conducted by Pattyn, Verhaeghe, Sercu and Bracke (2013), both study's results indicated that an accurate recognition or identification of a mental disorder was associated with an increased inclination in recommending a visit to a psychiatrist. More specifically, in a study conducted by Reavley and Jorm (2012), it was the correct recognition of mental disorders like depression and schizophrenia was accompanied with a well-built belief about the helpfulness of the psychiatric treatment with the treatment type mainly incorporating the usage of antidepressants or antipsychotics. All in all, these aforementioned studies show that mental health literacy is associated with less psychiatric skepticism.

Psychiatric skepticism is also considered a barrier to seeking professional treatment for mental illness since the mistrust in the qualifications of psychiatric treatment hinders

one's acceptability of seeking such type of treatment (Swami, Persaud & Furnham, 2011; Eisenberg et al., 2011). For instance, in a study conducted by Philips et al. (2009) in China which aimed to investigate the prevalence of help seeking behavior, a vast disparity was revealed between the responses and the actual help seeking behavior. This finding was explained to be related to people's lack of confidence in the mental health services available (Phillips et al., 2009), which advocates their reluctance in seeking professional help although they might be presuming it as the best option. In fact, it has been strongly that individuals will not seek out mental health services and will not adhere to any treatments if those individuals do not primarily believe in what the professionals will offer them (Jorm, 2012). Correspondingly, a study conducted by Mowbray et al. (2006) indicated that mistrust of providers hindered seeking professional help. Similarly, a study conducted by Vorhees and colleagues (2006) revealed that lack of confidence in psychiatric treatment was associated with more restrictive attitudes towards professional help-seeking. More specifically, in a study conducted by Rayan and Fawaz (2018) in Lebanon, the results revealed that lack of trust in qualifications and expertise of professional mental health practitioners was subsequently reported to be a barrier of professional mental health seeking behavior. In fact, this skepticism was even found to be one of the most important barriers towards seeking mental health treatment in Lebanon (Rayan & Fawaz, 2018).

Consequently, based on the aforementioned studies it was hypothesized that higher levels of psychiatric skepticism were associated with lower levels of mental health literacy and more restrictive attitudes towards professional help seeking behavior.

Mental Health Literacy versus Health Literacy

In the Arab culture, physical and the psychological health are interwined (El-Islam, 1994). In fact, the majority of the Arabs somatize their mental illnesses (Hamid & Furnham, 2013). Hence, medication becomes perceived as the sole treatment method which leads to the underutilization of the mental health services (Hamid & Furnham, 2013). Research has shown that a considerable number of patients instead of seeking help from the mental health sector primarily choose to seek treatment from the general health sector which incorporates physicians and general practitioners (Mishra, Nagpal, Chadda & Sood, 2016). More specifically, it has been reported that in Lebanon about 91% of those who suffer from a mental illness primarily seek treatment within the health sector (Karam et al., 2018). The main reason behind the avoidance of pursuing professional mental health treatments Lebanon is mainly related to the stigma and cultural blame that is associated with emotional problems and mental illnesses (Fawaz & Rayan, 2018). However, it is vital to note as well that heightened tendency in pursuing the health care services and not mental health services when suffering from a mental illness could be attributed to the fact that Lebanon is characterized with an abundance of health-related information and services (National Health Statistical Report in Lebanon, 2012) as well as an in adequacy in the availability of the mental health services (Rayan & Fawaz, 2018). Consequently, it was hypothesized that the Lebanese population will have higher levels of biological health Literacy compared to their levels of mental health literacy level given that the increased medical health services in Lebanon will allow individuals to understand and communicate biological health information and concerns more than the mental health concerns.

Chapter 3

Method

General perspective

The study is an empirical quantitative survey design used with Lebanese participants for data collection and the examination of the relationship between each of the psychosocial, biological and religious causal beliefs of mental illness and attitudes towards help seeking behavior. Also, the examination of the relationship between psychiatric skepticism and mental health literacy as well as between psychiatric skepticism and attitudes towards professional treatment seeking took place. The levels of biological health literacy and mental health literacy were compared among the sample of Lebanese participants.

Sample Size

Given that the design of the study is a quantitative survey, sample size was calculated using Andy Field's calculation (Field, 2014). Since the number of predictors in the study is four, expecting a small effect size would yield a sample size of 590. However, due to time constrains, the number was considered too high to achieve. Thus, assuming a medium effect size, the sample size would become 85. However, this number was considered somewhat small. Consequently, to balance between the time available and having an adequate number of participants, the target sample size was set to 200.

Participants

A total of 206 participants participated in this study and they were recruited using snowball and convenient sampling. The sample consisted of approximately 104 females

(54.9%) and 91 males (44.2%). The majority of the participants were between that age range 20-30 (N=118, 57.4%), and the majority were students (N=147, 71.5%). Also, the participants were mainly recruited from Beirut district and areas surrounding it.

Ethical considerations

Participation in the present research was voluntary. When the participants accepted to take part in the study, they were informed about their right to withdraw from the study whenever they want. Additionally, they were assured that all information obtained from them (filling out the questionnaires) will remain private, confidential and anonymous. In other words, no names or means to identify participants were used and they were told that the researcher is the only person allowed to access the data. All this information was presented to the participants face to face and in writing format as part of the informed consent.

Materials

In the present study, the materials included a survey consisting of five scales in English, a demographics sheet and a consent form. The five scales were the following:

The Mental Health Literacy Scale (MHLS)(2015). This scale was completed to assess the level of mental health literacy of the population. The MHLS is a 35-item self-report questionnaire which uses a 4-point scale which is rated as 1- very unlikely/unhelpful, 4- very likely/helpful and a 5-point scale which is rated as 1- strongly disagree/definitely unwilling, 5- strongly agree/definitely willing. Sample items include "To what extent do you think it is likely that the diagnosis of Bipolar Disorder includes experiencing periods of elevated (i.e. high) and periods of depressed (i.e. low) mood" and

"I am that I know where to seek information about mental illness". Total score is produced by summing all items with maximum score – 160 and minimum score – 35, with higher scores indicating higher mental health literacy (O'Connor & Casey, 2015). The MHLS has been displayed to have adequate internal and test-retest reliability and good validity (O'Connor & Casey, 2015). The Cronbach alpha coefficient of MHLS was reported to be 0.89 and test-retest reliability for a two-week period was 0.86 (Vazifehkhorani, Karimzadeh, Poursadeghian & Rahmati- Najarkolaei, 2018) (Check Appendix A).

Attitudes Toward Seeking Psychological Help – Short Form (ATSPPH-SF) (1995). Participants' attitudes toward seeking psychological help were assessed using the Attitudes Toward Seeking Professional Psychological Help Scale–Short Form (ATSPPH-SF; Fischer & Farina, 1995). The ATSPPH-SF is a 10-item measure adapted from the original ATSPPH (Fischer & Turner, 1970). Items are rated on a 4-point Likert-type scale ranging from 0 "disagree" to 3 "agree" with higher scores indicating more positive attitudes toward seeking psychological help. Sample items include "I would want to get psychological help if I were worried or upset for a long period of time" and "I might want to have a psychological counseling in the future". Fischer and Farina (1995) reported that ATSPPH-SF highly correlated with the full-scale scores from the original measure as well as produced a good internal consistency coefficient ($\alpha = .84$). The ATSPPH-SF also illustrated good internal consistency in samples of racially/ethnically diverse community adults (Gloria, Castellanos, Segura-Herrera, & Mayorga, 2010). Also, an adequate internal consistency coefficient ($\alpha = .83$) of the ATSPPH-SF was reported in a study conducted by Cheng, Wang, McDermott, Kridel, and Rislin (2017).

Mental Distress Explanatory Model Questionnaire (MDEMQ) (Eisenbruch, 1990). The Mental Distress Explanatory Model Questionnaire (MDEMQ) is a 45-item questionnaire that measures explanatory beliefs about the causes of mental distress (Eisenbruch, 1990). The participant is asked to rate how likely each of the listed causes could contribute to mental distress on 5-point Likert scale ranging from 'Not at all likely' to 'Highly likely'. The possible minimal score is 45 and the maximum score is 225 (Eisenbruch, 1990). The causes are categorized into four clusters including 'Western physiological' (e.g. chemical imbalance in the brain), 'non-Western physiological' (e.g. movements of wind, drafts, gas, milk or air flowing through a person's body), 'stress' (e.g. general life stress or trauma, grief) and 'supernatural' (e.g. dangerous unprovoked spirit) causes. The score ranges are: Western Physiology (9-45), Non-Western Physiology (4-20), Supernatural (19-95) and Stress (13-65). Sample items include: "genetic or inherited defect" for the western physiological subscale, "Movement wind/drafts/gas/milk/air flowing through the person's body" for non-western physiological, "bad experience during childhood" for stress scale and "Someone unwittingly casting a spell e.g. the evil eye "for the supernatural subscale. A satisfactory internal reliability of MDEMQ was obtained in a study conducted by Sheikh and Furnham (2000) with Cronbach's alpha of the causal categories ranging between 0.71 to 0.95 in each of their three ethnic groups (including British Asians, English and European participants, and Pakistani participants). (Check Appendix C).

Psychiatric Skepticism Scale (2011). The scale was constructed for the purpose of a study aiming to examine the general public's mental health literacy and its association with psychiatric skepticism (Swami, Persaud & Furnham, 2011). The scale was constructed by collecting a list of statements about psychiatry that varied in their degree of skepticism towards psychiatry as a legitimate science (Swami et al., 2011). This initial list of statements was then revised by the authors to maximize and ensure clarity. The final obtained list consisted of 16 items relating to psychiatric skepticism. The participants had to rate their agreement on a 7-point scale (1 = strongly disagree, 7 = Strongly agree). Sample items include: "The attitude psychiatrists toward patients is often experienced as demeaning and controlling". Factor structure of the scale demonstrated a good validity, and its internal consistency Cronbach's alpha was high 0.92. (Check Appendix D).

All Aspects of Health Literacy Scale (AAHLS)(2013). This questionnaire is a 14-item self-report scale which measures health literacy. This scale was developed by Chinn and McCarthy (2013). The scale items load on to 4 factors related to skills in reading or understanding health documents (functional literacy questions 1-4), communicating with health professionals (communicative literacy questions 1-3), managing health information (critical literacy questions 1-4) and the capacity to take civic or community action for one's health (empowerment questions 1- 3). Scoring procedure includes the total sum up of the scale, with higher scores indicating higher health literacy (Chin & McCarthy, 2013). The Scale was reported to have an adequate reliability (Cronbach's alpha = 0.74) and good validity (Chinn & McCarthy, 2012). (Check Appendix E).

Demographics. Participants were asked to provide information concerning their (1) age, (2) gender, (3) socio-economic information (occupation/education), (4) religion sect (5) previous experience of psychotherapy or no (6) House income (See Appendix I).

Procedure

This is a survey study. The usage of the survey for data collection serves as a way to investigate attitudes on more than one variable and how they may relate to one another. Participants were sampled through a non-probability sampling method which is the Convenience sampling. Participants were approached on the streets, in public places, in shopping centers, outer gates of universities as well as medical centers mainly from the Beirut region and its surroundings. First, the participants were asked about their nationality, age and whether they know English Language and if they feel that they are able to fill out a survey in the English Language. If the participant met the recommended characteristics (Lebanese nationality, Lebanese resident, aged above 18 and reported ability to fill an English survey) he/she were asked to participate in the study. Also, all the surveys were administered in a paper and pencil format. During data collection, two important notes were noted from the participants. It was reported that they prefer to answer on many items on the mental health literacy as "I don't know". In fact, they used Google to answer the items due to their non-acquaintance with the psychological terms Also, some reported that they are well aware of mental health conditions due to presence of a family member suffering with a mental condition.

Chapter 4

Results

This section will demonstrate the obtained results of the study. Primarily, the section starts with presenting the descriptive sample characteristics, reliability analyses of the study's instruments and the scale descriptives. Following that, the hypotheses testing will be presented by testing a series of correlational analyses that were conducted in order to test each of the causal beliefs of mental illness and attitudes towards psychological help as well as between psychiatric skepticism and each of mental health literacy and attitudes towards psychological help. Also, the hypothesis related to the mean difference between the levels of biological health literacy and mental health literacy was tested by conducting a one sample t-test. This section will also present the additional statistical analyses that were conducted to further examine the relationship and differences among the variables of the study.

Descriptive Characteristics of the Sample

Demographics. The number of participants who participated in the study was 206; none of the participants were excluded from the analysis. Table 1 provides a summary of the demographic characteristics of the sample. With regard to the sample size, there were slightly more females compared to males; 91 (44.2%) were males and 104 (54.9%) were females. The majority of participants were between the ages of 20 and 30 (N=118, 57.4%) and the majority (N= 147, 71.5%) were students; indicating that the sample consisted of mostly of young adults and students. The majority of the participants

N= 133 (64.6%) were Christians, while 26.7% (N=55) were Muslims and 3% (N= 6) were Atheist.

With regard to previous psychotherapy experience, the majority of the participants N= 170 (82.5%) reported that they did not attend previous psychotherapy sessions, while only 33 (16.1%) reported that they did. As for house income, the percentages of those with a house income of 1500-2000, those with a house income of 2000-3000 and those with a house income of 3000-5000 were approximately equal, N= 37 (18%), N= 37 (18%) and N= 40 (19%) respectively. While a very small percentage of participants had a house income less than 1500$, N= 5 (2.5%); indicating that the majority of the sample were of high house income. Check Table 1 for the demographics characteristics.

Table 1

Individual demographic characteristics as a percentage of the sample (N =206)

Characteristics	*N* (percentage)
Sex	
Male	91 (44.2%)
Female	113 (54.9%)
Age	
Majority range (20-30)	118 (57.4%)
University Student	
Yes	147 (71.5%)
No	56 (27.2%)
Education Level	
No schooling	2(1%)
School Primary	2 (1%)
School Secondary	40 (19.4%)
Bachelor Degree	106 (51.5%)

Master's Degree	45 (21.8%)
PhD	6 (2.9%)
Religion	
Muslims	55 (26.7%)
Christians	133 (64.6%)
Atheists	6 (3%)
Previous Psychotherapy Exp	
Yes	33(16.1%)
No	170 (82.5%)
Total House Income	
Less than 500$	2 (1%)
500$- 1000$	3 (1.5%)
1000-1500	27 (13%)
1500$ - 2000$	37 (18%)
2000$ - 3000$	37 (18%)
3000$ - 5000$	40 (19%)
More than 5000$	27 (13%)

Reliability analysis. Internal consistency for the Mental Health Literacy Scale (MHLS), Attitudes towards Seeking Psychological help (ATSPHH), Mental Distress Explanatory Model (MDEMQ), Psychiatric Skepticism Scale (PSS) and All Aspects of Health Literacy Scale (AAHLS) were assessed through Cronbach's alpha and are presented in Table (2). Reliability of MHLS (Mental Health Literacy Scale), PSS (Psychiatric Skepticism scale) and AAHLS (All Aspects of Health Literacy Scale) were considerably lower than the reliabilities obtained in previous studies. Reliability of Attitudes towards Seeking Psychological help (ATSPHH) was very low (α=.44). Given

that attitudes towards professional help is a main dependent variable and given that the ATSPHH scale is very low on reliability, items 2,4,8, 9 and 10 were deleted which caused the reliability to increase to α=.75 (moderate reliability) which is slightly lower than the reliabilities obtained in previous studies. Also, NW (non-western physiological causal belief subscale) was slightly lower than the reliabilities obtained in previous studies. The internal consistencies and the comparisons with the range of reliabilities obtained for the scales previous studies are found in Table 2.

Table 2

Reliability coefficients of the Scales (α)

Scales	Present Study	Previous studies [Range]
MHLS	.69	[.79- .89]
ATSPH	.75	[.77- .90]
MDEMQ	.94	[.71- .95]
WP	.80	[.78- .85]
NW	.69	[.71- .80]
S	.91	[.77- .92]
SN	.91	[.91- .95]
PSS	.78	[.91- .94]
AAHLS	.56	[.74- .75]

MHL=Mental Health Literacy; ATSPH=Attitudes towards Seeking Psychological Help; MDEMQ= Mental Distress Explanatory Model; WP= Western Physiological Causal Beliefs Subscale; NW= Non-western Physiological Causal Beliefs Subscale; S= Psychosocial Causal Beliefs Subscale; SN= Supernatural Causal Beliefs Subscale; PSS= Psychiatric Skepticism Subscale; AAHLS= All Aspects of Health Literacy Scale

Descriptive statistics

The mean of mental health literacy scale- MHL (*M* = 2.92, *SD* = .29) is slightly higher than the scale mean midpoint 2; indicating that participants endorsed above average mental health literacy. The mean of the attitudes towards psychological help seeking behavior- ATSPPH (*M* = 2.00, *SD* = .66) is lower than the scale mean midpoint 3; indicating that participants endorsed below average levels of attitudes towards seeking psychological help. The mean of the western physiological causal belief of mental illness – WP (*M* = 3.30, *SD* = .70) is slightly lower than the mean midpoint 4; indicating that participants endorsed below average physiological causal beliefs of mental illness. The mean of the non-western causal belief of mental illness- NW (*M* = 2.44, *SD* = .78) is lower than the scale mean midpoint 4; indicating that participants endorsed below average levels of non-western causal belief of mental illness. The mean of the psychosocial causal beliefs of mental illness- S (*M* = 3.67, *SD* = .76) is slightly lower than the mean midpoint 4; indicating that participants endorsed below average levels of psychosocial causal beliefs of mental illness. The mean of the supernatural causal beliefs of mental illness- S (*M* = 2.46, *SD* = .74) is lower than the mean midpoint 4; indicating that participants endorsed below average levels of supernatural causal beliefs of mental illness. Among the causal beliefs of mental illness, western physiological and psychosocial causal beliefs of mental illness were the most prevalent among the sample with psychosocial causal beliefs being the highest. The mean of the psychiatric skepticism- PSS (*M* = 2.34, *SD* = .35) is lower than the scale mean midpoint 3; indicating that participants endorsed below average levels of psychiatric skepticism. The mean of the All Aspects of Health Literacy scale- AAHLS (*M* = 1.68, *SD* = .26) is lower than the

mean midpoint 3; indicating that participants endorsed below average levels of health literacy.

Main Analysis

Hypothesis Testing. A series of Pearson correlation coefficients were computed to test the set of predicted relationships between Causal beliefs of mental illness and attitudes towards help seeking behavior. Results show that none of the expected relationships were supported. Check table 3 for correlation coefficients.

a. A non-significant negative correlation was obtained between psychosocial causal beliefs of mental illness and attitudes towards psychological help (r= -.064, *p* =.361); hence, **Hypothesis (1)** which predicted a negative relationship was not supported.

b. No significant correlation was obtained between the western physiological causal belief of mental illness and attitudes towards psychological help (r= -.024, *p* =.728). Also, no significant correlation was obtained between non-western physiological causal beliefs of mental illness and attitudes towards psychological help (r= .106, *p* =.130). Thus, this finding did not support **Hypothesis (2)** which predicted a positive correlation between biological causal beliefs (western and non-western physiological causal beliefs) and permissive attitudes towards professional help-seeking.

c. A non-significant correlation was also obtained between the supernatural causal beliefs of mental illness and attitudes towards psychological help (r= .035, *p* =.620). This did not support **Hypothesis (3)** which predicted a negative

relationship between supernatural causal beliefs of mental illness and attitudes towards psychological help.

Table 3

Pearson Correlations between each of the causal beliefs of mental illness (psychosocial, biological and supernatural causal beliefs) with attitudes towards professional help.

	Western Physiological	Non-western Physiological	Psychosocial	Supernatural
Attitudes towards Psychological Help	-.024 *p*=.278	.106 *p*=.130	-.064 *p*=.361	.035 *p*=.620

A series of Pearson correlation coefficients were also computed to test the set of predicted relationships between psychiatric skepticism with each of mental health literacy and attitudes towards help seeking behavior. Results showed that none of the expected relationships were supported. See table 4 for correlation coefficients.

a. **Hypothesis (4)** which predicted a negative association between psychiatric skepticism and attitudes towards professional help-seeking was not supported.

b. **Hypothesis (5)** which predicted a negative association between psychiatric skepticism mental health literacy was not supported.

Table 4

Pearson Correlations between psychiatric skepticism and each of mental health literacy and attitudes towards psychological help

	Mental health literacy	Attitudes towards psychological help
Psychiatric skepticism	-.002	.042
	p=.964	*p*=.989

Multiple regression analysis. A multiple regression was conducted to see if causal beliefs of mental illness (Western physiological, Non-western physiological, Psychosocial and supernatural causal beliefs of mental illness) predicted attitudes towards psychological help. When all variables of the study were entered as in to the multiple linear regression using the enter method, the linear regression equation was not found to be significant (F (2,201) = 1.331, p =.26, R2 = .006, R2Adjusted = .026); hence, indicating that causal beliefs of mental illness did not predict attitudes towards professional help seeking behavior.

A linear regression analysis was conducted to see if psychiatric skepticism predicted mental health literacy. When variables were entered into the linear regression using the enter method, the linear regression equation was not found to be significant (F (1,204) = .001, p =.974, R2 = .000, R2Adjusted = -.005); hence, indicating that psychiatric skepticism did not predict mental health literacy. Another linear regression was conducted to see if psychiatric skepticism predicted attitudes towards psychological help. When variables were entered in to the linear regression using the enter method, the

linear regression equation was not found to be significant (F (1,204) = 2.843, p =.09, R2 = .014, R2Adjusted = .009).

It can be concluded the predicted relationship between causal beliefs of mental illness (Western physiological, Non-western physiological, Psychosocial and supernatural causal beliefs of mental illness) and attitudes towards help seeking behavior was not supported. In the same vein, the predicted relationship between psychiatric skepticism and each of mental health literacy and attitudes towards help seeking behavior was not supported as well.

One sample t-test. A single sample t-test was conducted to determine if a statistically significant difference existed between mental health literacy and biological health literacy in the sample. Participants in the sample reported higher mental health literacy levels (*M* =2.92, *SD* =.29) than biological health literacy (*M* =1.68, *SD* =.26) compared to people in the Lebanese population, *t* (205) = 143.883, *p* = .000 and *t* (205) = 92.843, *p* = .000, respectively. This finding did not support **Hypothesis (6)** which stated that participants will report higher levels of biological health literacy than mental health literacy.

Additional Correlational Analyses. Additional correlational analyses were conducted to further explore the associations that might be obtained among the variables of the study's sample especially that previous research in the literature has pointed to the existence of such relationships; it would important to explore these relationships in the

current study's sample. The literature has pointed to the existence of relationships among the study variables such as a relationship between mental health literacy and causal beliefs of mental illness was previously reported (Zhuang, Wong, Cheng & Pan, 2017) and between causal beliefs of mental illness and psychiatric skepticism. In addition to that, previous research in the literature also pointed to the existence of a relationship between mental health literacy and attitudes towards seeking psychological help (Cheng, Wang, McDermott, Kridel & Rislin, 2018).

A number of significant results were obtained. A significant positive correlation was obtained between western physiological causal beliefs of mental illness and mental health literacy (r= .481, *p* =.000), between psychosocial causal beliefs of mental illness and mental health literacy (r= .537, *p* =.000), between western physiological causal beliefs of mental illness and psychiatric skepticism (r= .243, *p* =.01), between non-western physiological causal beliefs of mental illness and psychiatric skepticism (r= .374, *p* =.001) and between the supernatural causal beliefs of mental illness and psychiatric skepticism (r= .339, *p* =.000).

Table 5

Significant Pearson Correlations among study variables

	Mental Health Literacy	Psychiatric Skepticism
Western Physiological	.481 *p*=.000	.243 *p*=.01
Non-western Physiological	-	.374 *p*=.001
Psychosocial	.537 *p*=.000	-
Supernatural	-	.339 *p*=.001

Analysis of variance. Analyses of Variance were conducted to explore the difference of the variables of the study across sociodemographic variables like education level, religion and house income. In fact, previous research has pointed to the existence of differences of each of causal beliefs of mental illness, mental health literacy, attitudes towards psychological help, psychiatric skepticism and biological health literacy across socidemographic variabes like education level, religion and socioeconomic status (i.e. house income) (Pang et al., 2018; Behere, 2013; Christy, 2017).

Primarily, separate analyses of variance (ANOVA) were conducted to examine the mean differences of the causal beliefs of mental illness (dependent variable) as a function of participants' religious sect (Christian, Mulsim and Druzes), education level and house income. Results revealed no significant differences between the religious sects and causal beliefs of mental illness. With regard to education level, significant

differences were obtained for psychosocial causal beliefs of mental illness across education level (F (5,195) = 2.884, p = .016) such as those with a master's degree scored higher on psychosocial causal beliefs of mental illness (M = 3.91, SD = .51) compared to those with a school degree (M= 3.36, SD = .75). No significant differences were obtained for western physiological, non-western physiological and supernatural causal beliefs of mental illness across education levels. With regard to house income, results revealed significant differences were obtained for non-western physiological causal beliefs of mental illness across total house income (F (6, 194) = 2.519, p = .023) such as those with a house income between 2000 and 3000$ scored higher on non-western causal beliefs of mental illness (M = 2.84, SD = 1) compared to those with a house income between 1500$ and 2000$ (M= 2.20, SD = .59). Significant differences were also obtained for supernatural causal beliefs of mental illness across total house income (F (6, 194) = 2.125, p = .043) such as those with a house income between 2000 and 3000$ scored higher on supernatural causal beliefs of mental illness (M = 2.79, SD = .85) compared to those with a house income more than 5000$ (M= 2.21, SD = .58). No significant differences were obtained for western physiological and psychosocial causal beliefs of mental illness across total house income.

Another series of Analyses of variance (ANOVA) were conducted to examine the differences of each of mental health literacy, attitudes towards psychological help, psychiatric skepticism and biological health literacy as a function of participants' religious sect (Christan, Mulims and Druzes), education level and house income. Results revealed that no significant differences were obtained for mental health literacy, attitudes towards psychological help, psychiatric skepticism and biological health literacy across

religious sects. With regard to educational level, no significant differences were obtained for psychiatric skepticism across education levels (F (5,195) = 1.100, p = .361), but significant differences were obtained for mental health literacy across education level (F (5,195) = .884, p = .014) such as those with a master's degree scored higher on mental health literacy (M = 3.17, SD = .43) compared to those with a school degree (M= 2.36, SD = .35). Also, significant differences were obtained for biological health literacy across education level (F (5,195) = 2.505, p = .032) such as those with a school secondary scored higher on biological health literacy (M = 1.75, SD = .30) compared to those with a primary school degree (M= 1.42, SD = .05). Similarly, significant differences were obtained for attitudes towards psychological help across education level (F (5,195) = 3.220, p = .008) such as those with a master's degree scored higher on attitudes towards psychological help (M = 3.05, SD = .490) compared to those with a primary school degree (M= 2.02, SD = .533). With regard to house income, results revealed no significant differences for mental health literacy, attitudes towards psychological help, and biological health literacy across total house income, a marginal significant difference was obtained for psychiatric skepticism across house income (F (6,194) = 2.043, p = .062 such as those with a home income between 1500$ and 2000$ scored lower on psychiatric skepticism compared to those with a house income between 2000$ and 3000$.

Independent sample t-tests. An independent samples t-test was also applied to assess whether the means of males and females were significantly different on attitudes towards psychological help, on mental health literacy, on western physiological, non-western physiological, psychosocial and supernatural beliefs of mental illness, psychiatric skepticism and biological health literacy. On average males experienced significantly

more positive attitudes towards psychological help (*M* = 2.310, *SD* =.531) compared to females (*M* =2.143, *SD* =.484) (*t* (202) = -2.355, *p* = .019). Virtually significant difference between males and females was obtained for mental health literacy such that females had higher mental health literacy (*M* = 2.95, *SD* =.28) compared to males (*M* =2.87, *SD* =.29) (*t* (202) = 1.956, *p* = .052). Marginal significant difference between males and females was also obtained for psychosocial causal beliefs such that females had higher psychosocial causal beliefs (*M* = 3.76, *SD* =.75) compared to males (*M* =3.57, *SD* =.76) (*t* (202) = 1.838, *p* = .068). No significant differences were found between males and females on western physiological, non-western physiological, supernatural beliefs of mental illness, biological health literacy and psychiatric skepticism. It can be concluded that mental health literacy, attitudes towards psychological help and psychosocial causal beliefs of mental illness differed across gender. See table 6.

Table 6

Independent sample t-tests assessing the difference of variables between males and females

	Males		Females			
	Mean	*SD*	*Mean*	*SD*	*t*	*p*
Attitude towards psychological help	2.31	.53	2.143	.484	-2.355	.01
Mental health literacy	2.87	.29	2.95	.28	1.956	.05
Western physiological beliefs	3.26	.70	3.34	.73	2.78	.46
Non-western	2.50	.52	2.39	.74	1.838	.06
Psychosocial	3.57	.75	3.76	.75	-.231	.89
Supernatural beliefs	2.47	.78	2.45	.72	-.716	.47
Psychiatric skepticism	2.36	.38	2.33	.32	.808	.42
Biological healthy literacy	1.67	.25	1.70	.27	.977	.33

Significant at $p<0.05$ (2-tailed).

Given that previous research revealed that previous psychotherapy experience influences mental health literacy, attitudes towards seeking psychological help, psychiatric skepticism and causal beliefs of mental illness (Gang et al., 2016; Stolzenburg et al., 2018), another series of independent samples t-test were also applied to assess whether the means of those with previous psychotherapy experience or no were significantly different on attitudes towards psychological help, on mental health literacy, on western physiological, non-western physiological, psychosocial and supernatural beliefs of mental illness and psychiatric skepticism. On average those with previous psychotherapy experience had more positive attitudes towards psychological help (M = 2.05, SD =.64) compared to those with no previous psychological help (M =1.75, SD =.70) (t (201) = -2.386, p = .018). On average those with previous psychotherapy experience reported less psychosocial causal beliefs of mental illness (M = 3.63, SD =.77) compared to those with no previous psychological help (M =3.93 SD =.72) (t (201) = 2.608, p = .04). With regard to mental health literacy, on average those with previous psychotherapy experience reported less mental health literacy (M = 2.90, SD =.29) compared to those with no previous psychological help (M =3.01 SD =.28) (t (201) = 1.994, p = .04). No significant differences were found between those with previous psychotherapy experience or no based on biological health literacy, psychiatric skepticism, supernatural causal beliefs of mental illness, non-western physiological and western physiological causal beliefs. It can be concluded that attitudes towards psychological help, psychosocial causal beliefs and mental health literacy differ across one exposure to previous psychotherapy or no. See table 7.

Table 7

Independent sample t-tests assessing the difference of variables between those with and without previous psychotherapy experience (Yes/No)

	Yes		No			
	Mean	*SD*	*Mean*	*SD*	*t*	*p*
Attitude towards psychological help	2.05	.64	1.75	.70	-2.38	.01
Mental health literacy	2.90	.29	3.01	.28	1.99	.04
Western physiological beliefs	3.26	.72	3.42	.71	1.16	.24
Non-western	2.45	.77	3.40	.83	-.319	.756
Psychosocial	3.57	.75	3.76	.75	-.231	.89
Supernatural beliefs	2.45	.73	2.40	.81	.209	.73
Psychiatric skepticism	2.34	.34	2.30	.36	.356	.57
Biological healthy literacy	1.71	.25	1.59	.29	-2.48	.55

Chapter 5

Discussion

This section presents discussion and the explanation of the obtained results vis-à-vis the hypothesized relationships in light with other studies in the field. Finally, the conclusion and further suggested research and the limitations of the study will follow.

Primarily, the purpose of the study was to examine the psychosocial, biological and supernatural including religious causal beliefs of mental illness and their effect on the attitudes held towards professional help seeking behavior in Lebanon. The study also aimed to investigate how psychiatric skepticism relates to the level of mental health literacy as well as attitudes held towards help seeking behavior among the Lebanese participants with a specific focus on comparing the levels of mental health literacy and levels of biological health literacy prevalent among the sample.

The hypothesized relationships between causal beliefs of mental illness (biological, psychosocial and supernatural/religious causal beliefs of mental illness) and attitudes towards psychological professional help were tested by correlational analyses. However, no significant results for the hypothesized correlations among the variables was obtained in the present study. This is in contrary to previous studies which found significant correlations between each of biological, psychosocial and supernatural causal beliefs of mental illness and attitudes towards help seeking behavior (Carter et al., 2017; Stolzenburg et al., 2018; Larkings & Brown, 2012; Reavley, Cvetkovski & Jorm, 2013; Kauye, Udedi & Mafuta, 2015; Alahmed et al., 2018). For instance, in a study conducted by Altweck and colleagues (2015), participants who reported a greater endorsement of

social causal beliefs of mental illness were more likely to report positive lay help-seeking beliefs, or a study conducted by Reavley, Cvetkovski and Jorm (2013) revealed that attributing biogenetic causes to mental illness was related to more favorable attitudes with regard to psychiatric treatment. As a matter of fact, a study conducted by Hailemariam (2015) revealed that the treatment seeking preference of the participants which incorporated spiritual practices like holy water sprinkling, praying and other traditional healing techniques was based on the endorsement of spiritual causal beliefs of mental illness such as different social evil practices, traditional beliefs and the punishing hands of the God with negative attitudes towards the efficacy of the professional help for mental illness were prevalent among the participants (Hailemariam, 2015).

Also, in examining the hypothesized relationship between psychiatric skepticism and each of mental health literacy and attitudes towards psychological professional help, no significant correlations were yielded. This is also in contrary to previous research findings were significant correlations were obtained between psychiatric skepticism and each of attitudes towards help seeking and mental health literacy (Swami et al., 2011; Pattyn et al., 2013). Like for example in a study done by Pattyn, Verhaeghe, Sercu and Bracke (2013), the study's results indicated that an accurate recognition or identification of a mental disorder was associated with an increased inclination in recommending a visit to a psychiatrist; also, a study conducted by Mowbray et al. (2006) indicated that mistrust of providers hindered seeking professional help.

Speculating as to why no significant results were obtained among the variables of the current study, it could be attributed to the fact that previous examinations of the relation among the aforementioned variables have used different measures and

populations; as such, it is perhaps not surprising that the results of the current study differed from theirs. In fact, the current study is conducted in Lebanon and it incorporated a community sample, while most of the previous studies in the literature where conducted in the west and there was a variety of sample populations such as those ranging between university students solely or people already suffering from a specified mental disorder. More specifically, the stigma with regard mental illness and help seeking behavior that is prevalent in Lebanon might have also impacted the significance of the result (Rayan & Fawaz, 2018). Stigma is believed to be one of the significant contributors to low or inappropriate treatment seeking behavior (Corrigan & Watson, 2002) and it is an element contributing to low levels of mental health literacy (MHL) (Jorm, Korten, Jacomb, Christensen, Rodgers, & Pollitt, 1997). Also, it was reported how causal beliefs of mental illness are also tend to be influenced by stigma and impact mental health literacy and attitudes towards psychological help (Pang, Subramaniam, Lee, Lau, Abdin, Chua & Chong, 2018). In this case, in the light of the stigma and cultural milieu, the relationships among the study variables were not obtained to be significant. Another reason for the obtainment of insignificant results could be due to the fact that the sample is too homogeneous to show significant differences. For instance, the sample of participants is restricted to the Beirut region, about 75% of the sample are students and more than half of the individual's age ranged between 20 and 30 years old.

In examining the hypothesis which stated that participants will report higher levels of biological health literacy compared to mental health literacy in Lebanon, the one sample t-test results yielded a significant difference in the mean level between mental

health literacy and biological health literacy with higher mental health literacy mean levels were obtained in comparison to the biological health literacy means; hence, failing to support the aforementioned hypothesis. The significant difference between mental health literacy and biological health literacy in the sample can be attributed to the increased globalization of the media, the "psychologisation" of numerous aspects of life and health and the spread of knowledge about mental disorders which was documented in the recent years (Sheikh & Furnham, 2000; Clement et al., 2013); and thus, leading to an increase in global mental health literacy among the Lebanese people including the study's sample. In accordance to the study conducted in Lebanon by Abi Doumet and colleagues (2019), it was reported that those who live in North Lebanon reported higher knowledge scores of mental illness, whereas those living in Bekaa reported lower knowledge of mental illness; hence, it can be argued that knowledge of mental illness i.e. mental health literacy differs across the Lebanese regions (Abi Doumit et al., 2019), and the obtained level of mental health literacy among the current sample is restricted to Beirut region were data was collected from.

Further Analysis

When examining differences, the results yielded that those with lower education reported more endorsement of supernatural causal beliefs of mental illness. Previous research supported this finding by emphasizing how causal beliefs of mental illness vary according to the individual's level of education (Girma & Tesfaye, 2011). For instance, it has been reported that supernatural causal beliefs of mental illness like possession by spirit, black magic, or astrological misalignment are mostly prevalent in the less educated parts of the countryside (Gater et al., 2005). In a study investigating the causal beliefs of

mental illness among a Turkish community in Melbourne, the results indicated that level of education was negatively correlated with supernatural beliefs i.e. the more educated the individual was the less likely he/she will endorse supernatural causal beliefs like magical causation and ominous sensation.

With regard to mental health literacy, those with higher education level, reported higher mental health literacy. Results obtained by Abi Doumet and colleagues (2019) from a Lebanese sample, also revealed that those with higher education possessed higher knowledge with regard to mental illness given that through education one will have a probability to be exposed to information about mental illness. Additionally, the obtained finding that a higher level of education predicted more positive attitudes towards psychological help was also supported by previous research. This finding is in line what was reported by Hamid and Furnham (2013) that individuals with lower education levels held more negative attitudes towards professional psychological help. Also, the finding that those with higher education levels reported a higher endorsement of psychosocial causal beliefs of mental illness was supported in the literature. For instance, Minas and colleagues (2007) reported that women who are more educated were more likely to incorporate the psychosocial causal beliefs of mental illness.

With regard to socioeconomic status – monthly house income, the results indicated that those with a higher income reported more endorsement of the non-western physiological causal beliefs of mental illness. It was reported that causal beliefs of mental illness vary according to the individual's socioeconomic class (Girma & Tesfaye, 2011). In a study conducted in Turkey, those who originated from Urban settings where people have access to higher income, were more likely to report endorsing natural and

metaphysical i.e. western physiological and non-western physiological causal beliefs of mental illness (Minas et al., 2007). It is also vital to note, that the ANOVA analyses revealed that those with higher income reported higher psychiatric skepticism. This finding is in contrary to what was found in the literature. For instance, in study conducted by ten Have and colleagues (2010) the results revealed that individuals with higher income groups believed that professional help is more effective in dealing with emotional problems. In the same vein, negative attitudes toward psychological help seeking were highest among socioeconomically challenged individual in a study conducted by Jagdeo, Cox, Stein and Sareen (2009). However, the contradicting result in the current study could be due to the cultural impact as well as due to the fact that the majority of the sample were of high income (68%).

Sample t-tests were also conducted to investigate the difference of variables of the study across males and females. Significant results were obtained for attitudes towards psychological help with male participants reporting more positive attitudes towards professional psychological help compared to female participants. This finding is in line with what was found in Qatar, whereby females demonstrated a greater tendency in visiting traditional healers (Bener & Ghuloum, 2011). It is argued that confidentiality is one of the most key themes that are linked to the impact of shame-focused attitudes on accessing professional psychological help (Hamid and Furnham, 2013) given that confidentiality and shame of presenting oneself to general practitioners of the community is one primary reasons for the underutilization of professional psychological help among the Arabic-speaking communities (Youssef & Deane, 2006). Also, the difference in the attitudes towards psychological help between males and females can be based on males'

realistic view towards mental illness and the sole focus on the diagnosis, while the females' view towards mental illness is more subjective and is more dependent on how the individual with a distressed mental state is perceived by the society (Elkington et al., 2012). More specifically, the explanation that females' view towards mental illness is more subjective and is more dependent on how the individual with a distressed mental state is perceived by the society (Elkington et al., 2012) might also explain the obtained marginal significant difference between males and females on the endorsement of the psychosocial causal beliefs of mental illness in the sample whereby females reported higher endorsement of psychosocial causal beliefs of mental illness compared to males. This finding was also reported by a study conducted Holzinger, Floris, Schomerus, Carta and Angermeyer (2012) which aimed to investigate gender differences in public beliefs and attitudes about mental disorder in western countries. This higher endorsement of psychosocial causal beliefs of mental illness by females can be explained by the fact that given mental disorders such as mood or anxiety disorders are more prevalent among women (Alonso et al. 2004a), this provides women with a stronger tendency to conceive problems in psychological terms which was suggested by the theory of psychological mindedness whereby women are reported to be more psychologically minded than men (Shill & Lumley, 2002).

In addition to that, the t-test results also revealed a marginal significant difference between males and females on mental health literacy with females reporting higher mental health literacy compared to males. This finding can be explained by the prevalence of mood or anxiety disorders particularly among females (Alonso et al. 2004a) which renders them to be better informed about mental illness (Holzinger, Floris,

Schomerus, Carta & Angermeyer, 2012). In fact, higher mental health literacy reported by females compared to males was also reported by a study conducted by Cotton, Wright, Harris, Jorm and McGorry, 2006).

In investigating the difference of attitudes towards seeking professional help among those with previous psychotherapy experience and those with no psychotherapy experiences, the independent sample t-tests revealed that those with previous psychotherapy experience reported more permissive attitudes towards professional psychological help in comparison with those who did not attend psychotherapy sessions previously. This finding was supported by a study which revealed that those who had previously used care for their mental health problems (compared to ones without previous service use) held more beliefs regarding their intentions that they would seek help if confronted with a serious emotional problem and that they would feel comfortable talking about their personal problems with a professional (ten Have, de Graaf, Ormel, Vilagut, Kovess & Alonso, 2010). This finding could be due to the tendency that prior psychotherapy experience might have put the individual at ease and aided him/her in combatting the cultural expectations (Addis & Mahalik, 2003).

The independent sample t-test analyses yielded another result stating that those with previous psychotherapy reported less psychosocial causal beliefs of mental illness compared to those with no previous experience. This finding was also supported by another study which revealed that those previous treatment experience predicted endorsement of biological causal beliefs of mental illness (Khalsa, McCarthy, Sharpless, Barrett & Barber, 2011). This can be explained by the fact that with the undergoing of previous treatment experience, etiology beliefs of mental illness have been shown to

change after receiving treatment (Leykin, DeRubeis, Shelton & Amsterdam, 2007). It is also possible to note that individuals are susceptible to change their beliefs as to what caused their mental illness to be more consistent with the treatment that they have received (Leykin et al., 2007) or even with the beliefs of their counselors (Atkinson et al., 1991).

Another t-test finding in the current study indicated that those with previous psychotherapy experience reported less mental health literacy compared to those with no previous psychotherapy experience. This finding is in contrast with what was shown previously with regard to individuals engaging in previous psychotherapy experience reporting more knowledge and recognition of mental disorders (Khalsa et al, 2011; Leytkin et al., 2007). Nevertheless, the obtained contrary finding might be explained by the fact that previous seeking professional psychological help might have resulted with a negative treatment experiences which might have led to a reduction in believing in treatment effectiveness and further reduction in acquaintance with mental illness issues; hence, leading to a limited mental health literacy (Stolzenburg et al., 2018).

Additional Findings

Additional correlational analyses were conducted among the variables of the study. Among the significant correlations obtained, the results yielded a positive significant correlation between western physiological causal beliefs of mental illness and mental health literacy as well as between psychosocial causal beliefs of mental illness and mental health literacy. Previous research has also documented a positive relationship between biological and social causes of mental illness and mental health literacy. For instance, Chen and Mak (2008) reported that greater endorsement of both biological and

social causes of mental illness reflects better knowledge of mental illness. It was also reported that individuals who endorse biological causal beliefs of mental illness would seek professional psychological help due to their heightened possession of relevant sources of knowledge about mental illness (Altweck et al., 2015). More specifically, based on the MHL model, schema theory implies that knowledge and information about mental illness – including causality, symptoms, course, treatments, recovery outlook, etc. – would be stored in a manner that is interconnected. Indeed, research has shown that better knowledge about mental disorders in general is a good indicator of knowledge about treatment options and beliefs about causes of mental disorders (Jorm et al., 1997b; Lauber, Falcato et al., 2003; Lauber, Nordt et al., 2003; Wright et al., 2007). In conclusion, it can be asserted that those with higher levels of mental health literacy are more likely to report biological and psychosocial causal beliefs of mental illness.

Positive significant correlations were also obtained between western physiological causes of mental illness and psychiatric skepticism as well as between the non-western physiological causal beliefs of mental illness and psychiatric skepticism. This finding is in contrary to the previously reported association between western physiological causes of mental illness and mental health literacy and positive attitudes towards professional help seeking behavior (Reavley, Cvetkovski and Jorm, 2013; Garcia, Franks, Jerant, Bell & Kravitz, 2011) whereby mental health literacy and positive attitudes towards professional help seeking behavior were related to lower levels of psychiatric skepticism (Schnittker, 2003; Swami et al., 2011). However, the obtained finding can be attributed to the effect of stigma on the usage of psychotropic medication as well as one's anxiety with regard to the harmful and addictive side effects of the psychiatric medication such as

antidepressants (Cabassa, Hansen, Palinkas and Ell, 2008). It can be explained that biological attributions to mental illness can increase the endorsement of stereotype, prejudice and a set of beliefs annotated as essentialism which allows one to perceive the individual with mental illness as possessing an unchangeable essence or origin (Kemp, Lickel, & Deacon, 2014; Hamilton, 2007). As such, leading to a discouraged belief about the efficacy and effectiveness of psychotherapy treatment (Deacon & Baird, 2009; Gangi et al., 2016). It can therefore be concluded that the obtainment of biological causal beliefs of mental illness might contribute to psychiatric skepticism.

Besides to the results obtained for the relationship between biological causal beliefs of mental illness and psychiatric skepticism, the results also revealed a positive significant correlation between supernatural causal beliefs and psychiatric skepticism. This can be explained by the notion that those who endorse the spiritual causal beliefs of mental illness attribute the causes of mental illness to spiritual and religious components instead to psychological causal components (Abe-kim et al., 2004), they become more likely to seek out faith healers or religious advisors rather than mental health professionals as the sole solution to their mental distress (Rose, 2010; Alahmed et al., 2018). In consequence, the obtained negative relationship between spiritual causal beliefs of mental illness and psychiatric criticism was consolidated.

Conclusion

The hypothesized relationships between causal beliefs of mental illness and attitudes towards psychological professional help yielded no significant results for. This is in contrary to previous studies which found significant correlations between each of

biological, psychosocial and supernatural causal beliefs of mental illness and attitudes towards help seeking behavior (Carter et al., 2017; Stolzenburg et al., 2018; Larkings & Brown, 2012; Reavley, Cvetkovski & Jorm, 2013; Kauye, Udedi & Mafuta, 2015; Alahmed et al., 2018). Also, no significant results were obtained for the hypothesized relationship between psychiatric skepticism and each of mental health literacy and attitudes towards psychological professional help. This is also in contrary to previous research findings were significant correlations were obtained between psychiatric skepticism and each of attitudes towards help seeking and mental health literacy (Swami et al., 2011; Pattyn et al., 2013). In addition to that, no significant differences were obtained for attitudes towards psychological help across religion and house income. The lack of the significant results in opposition to what was found in the west, could be due to the Lebanese cultural context like stigma that might have contributed to the obtained results. This accentuates the possibility of other factors that might be impacting one's seeking professional help in Lebanon like lack of insurance, or accessibility to mental health services. One such important factor is family history of mental disorders i.e. if someone has a family member who suffers of a mental disorder, this allows one to become thoroughly experienced with the disorder; thus, increasing one's mental health literacy and allows one to maintain permissive attitudes towards seeking professional psychological help.

Clinical Implications

Given that the aforementioned significant variables found in studies conducted in the west and the western population, and the insignificant results in the current Lebanese population in Lebanon, it can be concluded that the cultural context might have

contributed to the obtained results. Hence, the study underlines the significance of understanding beliefs of mental illness that are specified to a culture so as to develop more effective, approachable, and culturally sensitive mental health care systems (Altweck et al., 2015). Future encouragement of health educators to acknowledge the cultural factors impacting the causal beliefs of mental illness and incorporate them into the interventions that aim at changing health related behaviors, such as seeking professional mental health (Kreuter et al., 2003). Hence, by understanding the causal beliefs of mental illness may elucidate the sociodemographic and cultural nuances that may have played a role in the significant treatment gap observed in Lebanon.

Also, given that mental health literacy and attitudes towards psychological help differed across sociodemographic variables like education and socioeconomic status in the present study as well as gender, it becomes imperative that awareness campaigns target different groups of people who come from different socioeconomic backgrounds and different education levels as well as tailor gender differences when educating the public about the mental illness and its causes; with the topic being breached with all groups on the different causes of mental illness that can be held by individuals and how this affects their treatment behavior (Pang et al., 2018). More importantly, public education for mental health literacy should also be delivered in a format that is easily understandable so that even those with less education may be able to understand the causes of mental illness and treatment options. (Pang et al., 2018). That said, it would be vital for future research to concentrate on the way causal beliefs and help-seeking associate with different mental health problems such as posttraumatic stress disorder, eating disorders or psychotic

disorders, in order to be able to provide individualized treatments for different mental health problems.

Limitations

A number of limitations emerged in this study. Primarily, the study made use of instruments to assess variables in the Lebanese culture that were developed originally in the west. The scales were also not translated into Arabic and the exclusion of the Lebanese participants who lack the knowledge in speaking English took place; hence, this might have created a restriction of scores and threated the internal validity especially that the study aimed to investigate the associations among the variables in the Lebanese cultural setting where Arabic is the official Language (Ayyash-Abdo, 2001). Also, the Attitudes towards Seeking Psychological help (ATSPHH) scale used in the study maintained a very low reliability which could be due to the impact of culture on how certain factors of help seeking are conceptualized in Lebanese context especially that the scale was originated in the west; hence, in future research either translating the scale into Arabic and adapting it or using another scale needs to be implemented when investigating attitudes towards professional psychological help. Also, during data collection, participants excessively reported that they filled out the mental health literacy scale with the help of Google. In fact, it is also important to note that the Mental Health Literacy scale did not include the "I don't know option" which further prompted the participants to check for the answers from google when choosing an option from the likert scale. Hence, this might have affected the reliability of the scores and affected the results. For this purpose, in future research either another scale needs to be used, or if the same scale needs to be used, then participants will need to be assured that they should not

check in google the answers that they do not, but rather answer with what knowledge they already got. Also, it would have been vital to add to the demographics a question about whether individuals have a family member with mental illness and to control it in the analyses given that in such cases mental health literacy of those individuals is likely to increase as they become closely acquainted with the mental condition of their family member as well as the treatment process. Also, the participants were recruited through a convenience method; this is a threat to external validity and might have affected the generalizability of the results since the participants' involvement in the study were not randomly selected. Moreover, the generalizability of the results might have also been affected by the collection of data only from the Beirut region. Also, the Beirut region is considered to be mainly representative of a higher degree of westernization and urbanization in comparison to the Lebanon at large (Saleh, 2014; Dwairy et al., 2006a). Hence, restriction of the area affects the generalizability of the results to Lebanon at large and its whole Lebanese population.

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Appendix A

Mental Health Literacy Scale

The purpose of these questions is to gain an understanding of your knowledge of various aspects to do with mental health. When responding, we are interested in your degree of knowledge. Therefore when choosing your response, consider that:

Very unlikely = I am certain that it is NOT likely

Unlikely = I think it is unlikely but am not certain

Likely = I think it is likely but am not certain

Very Likely = I am certain that it IS very likely

1
If someone became extremely nervous or anxious in one or more situations with other people (e.g., a party) or performance situations (e.g., presenting at a meeting) in which they were afraid of being evaluated by others and that they would act in a way that was humiliating or feel embarrassed, then to what extent do you think it is likely they have **Social Phobia**

Very unlikely Unlikely Likely Very Likely

2
If someone experienced excessive worry about a number of events or activities where this level of concern was not warranted, had difficulty controlling this worry and had physical symptoms such as having tense muscles and feeling fatigued then to what extent do you think it is likely they have **Generalised Anxiety Disorder**

Very unlikely Unlikely Likely Very Likely

3
If someone experienced a low mood for two or more weeks, had a loss of pleasure or interest in their normal activities and experienced changes in their appetite and sleep then to what extent do you think it is likely they have **Major Depressive Disorder**

Very unlikely Unlikely Likely Very Likely

4
To what extent do you think it is likely that **Personality Disorders** are a category of mental illness

Very unlikely Unlikely Likely Very Likely

5
To what extent do you think it is likely that **Dysthymia** is a disorder

Very unlikely Unlikely Likely Very Likely

6
To what extent do you think it is likely that the diagnosis of **Agoraphobia** includes anxiety about situations where escape may be difficult or embarrassing

Very unlikely Unlikely Likely Very Likely

7
To what extent do you think it is likely that the diagnosis of **Bipolar Disorder** includes experiencing periods of elevated (i.e., high) and periods of depressed (i.e., low) mood

Very unlikely Unlikely Likely Very Likely

8
To what extent do you think it is likely that the diagnosis of **Drug Dependence** includes physical and psychological tolerance of the drug (i.e., require more of the drug to get the same effect)

Very unlikely Unlikely Likely Very Likely

9
To what extent do you think it is likely that in general in Australia, **women are MORE likely to experience a mental illness of any kind compared to men**

Very unlikely Unlikely Likely Very Likely

10
To what extent do you think it is likely that in general, in Australia, **men are MORE likely to experience an anxiety disorder compared to women**

Very unlikely Unlikely Likely Very Likely

When choosing your response, consider that:

- Very Unhelpful = I am certain that it is NOT helpful
- Unhelpful = I think it is unhelpful but am not certain
- Helpful = I think it is helpful but am not certain
- Very Helpful = I am certain that it IS very helpful

11
To what extent do you think it would be helpful for someone to **improve their quality of sleep** if they were having difficulties managing their emotions (e.g., becoming very anxious or depressed)

Very unhelpful Unhelpful Helpful Very helpful

12
To what extent do you think it would be helpful for someone to **avoid all activities or situations that made them feel anxious** if they were having difficulties managing their emotions

Very unhelpful Unhelpful Helpful Very helpful

When choosing your response, consider that:

- Very unlikely = I am certain that it is NOT likely
- Unlikely = I think it is unlikely but am not certain
- Likely = I think it is likely but am not certain
- Very Likely = I am certain that it IS very likely

13
To what extent do you think it is likely that **Cognitive Behaviour Therapy (CBT)** is a therapy based on challenging negative thoughts and increasing helpful behaviours

Very unlikely Unlikely Likely Very Likely

14
Mental health professionals are bound by confidentiality; however there are certain conditions under which this does not apply.

To what extent do you think it is likely that the following is a condition that would allow a mental health professional to **break confidentiality**:

If you are at immediate risk of harm to yourself or others

Very unlikely Unlikely Likely Very Likely

15
Mental health professionals are bound by confidentiality; however there are certain conditions under which this does not apply.

To what extent do you think it is likely that the following is a condition that would allow a mental health professional to **break confidentiality**:

if your problem is not life-threatening and they want to assist others to better support you

Very unlikely Unlikely Likely Very Likely

Please indicate to what extent you agree with the following statements:

	Strongly Disagree	Disagree	Neither agree or disagree	Agree	Strongly agree
16. I am confident that I know where to seek information about mental illness					
17. I am confident using the computer or telephone to seek information about mental illness					
18. I am confident attending face to face appointments to seek information about mental illness (e.g., seeing the GP)					
19. I am confident I have access to resources (e.g., GP, internet, friends) that I can use to seek information about mental illness					

Please indicate to what extent you agree with the following statements:

	Strongly Disagree	Disagree	Neither agree or disagree	Agree	Strongly agree
20. People with a mental illness could snap out if it if they wanted					
21. A mental illness is a sign of personal weakness					
22. A mental illness is not a real medical illness					
23. People with a mental illness are dangerous					
24. It is best to avoid people with a mental illness so that you don't develop this problem					
25. If I had a mental illness I would not tell anyone					
26. Seeing a mental health professional means you are not strong enough to manage your own difficulties					
27. If I had a mental illness, I would not seek help from a mental health professional					
28. I believe treatment for a mental illness, provided by a mental health professional, would not be effective					

Please indicate to what extent you agree with the following statements:

	Definitely unwilling	Probably unwilling	Neither unwilling or willing	Probably willing	Definitely willing
29. How willing would you be to move next door to someone with a mental illness?					
30. How willing would you be to spend an evening socialising with someone with a mental illness?					
31. How willing would you be to make friends with someone with a mental illness?					

	Definitely unwilling	Probably unwilling	Neither unwilling or willing	Probably willing	Definitely willing
32. How willing would you be to have someone with a mental illness start working closely with you on a job?					
33. How willing would you be to have someone with a mental illness marry into your family?					
34. How willing would you be to vote for a politician if you knew they had suffered a mental illness?					
35. How willing would you be to employ someone if you knew they had a mental illness?					

Appendix B

In this section you will be asked about your attitudes and intentions toward seeking psychotherapy for psychological problems (as before, the term *"psychological problems"* is term for what many people describe a *mental health concerns, emotional problems, mental troubles, and personal difficulties).*

There are no right or wrong answers; for each item, please tick the box which corresponds to the extent to which you agree or disagree with each statement.

	Agree	Partly agree	Partly disagree	Disagree
1. If I believed I was having a mental breakdown, my first inclination would be to get professional attention.				
2. The idea of talking about problems with a psychologist strikes me as a poor way to get rid of emotional conflicts.				
3. If I were experiencing a serious emotional crisis at this point in my life, I would be confident that I could find relief in psychotherapy.				
4. There is something admirable in the attitude of a person who is willing to cope with his or her conflicts and fears *without* resorting to professional help				
5. I would want to get psychological help if I were worried or upset for a long period of time				
6. I might want to have psychological counselling in the future				
7. A person with an emotional problem is not likely to solve it alone; he or she *is* likely to solve it with professional help				
8. Considering the time and expense involve in psychotherapy, it would have doubtful value for a person like me				
9. A person should work out his or her own problems; getting psychological counselling would be a last resort				
10. Personal and emotional troubles, like many things, tend to work out by themselves				

Appendix C

Many people suffer mental distress at some time in their lives. Such distress can be mild or severe. People can experience and manifest mental distress in many ways. Sometimes they feel sad or anxious. Sometimes they are unable to cope. Or sometimes they are out of touch with what is going on around them. They may have experiences of strange beliefs. Sometimes their behaviour becomes disorganised. They may become destructive towards themselves or others.

Please think about how, any person, including yourself, might suffer mental distress and imagine what you might regard as the causes. There are no right or wrong answers; for each item, please tick how likely it is that each of the listed causes could contribute to mental distress:

	Not at all likely	*Unlikely*	*Neither likely or unlikely*	*Likely*	*Highly likely*
1. Bad experiences during childhood					
2. Exposure to a fright or shock					
3. Doing the wrong thing during pregnancy					
4. Contact with something or someone taboo					
5. Movement wind/drafts/gas/milk/air flowing through the person's body					
6. Bad luck or chance					
7. Conflict with family or friends					
8. Physical illness					
9. Someone unwittingly casting a spell e.g. the evil eye					
10. Genetic or inherited defect					
11. Bad or ominous dream					
12. Doing the wrong thing when menstruating					
13. Dangerous unprovoked spirit					
14. Effects of old age					
15. Eating food that is wrong for the person (not socially forbidden food)					
16. Person's karma (what happened to him/her in previous lives)					
17. Vital organ disrupted e.g. liver/blood/bone					
18. Pace of "modern life"					
19. Contact with something or someone unclean, contagious or polluted					
20. Body out of balance or harmony (e.g. yin/yang, hot/cold)					

	Not at all likely	*Unlikely*	*Neither likely or unlikely*	*Likely*	*Highly likely*
21. Seeing, hearing or feeling something ominous					
22. Person's soul leaving the body temporarily or becoming scattered					
23. Brain damage or head injury					
24. Unemployment					
25. Astrological destiny					
26. Break up of family or a failed relationship					
27. Someone wanting to hurt a person, engaging a witch/shaman to cast a spell					
28. Failure to properly observe rituals after giving birth					
29. Not having enough money					
30. Chemical imbalance in the brain					
31. Someone wanting to hurt a person by casting a spell					
32. Doing something forbidden by social or cultural rules					
33. Bad nerves in the body					
34. Spirit who was angry because someone did wrong					
35. Being harmed intentionally by another person					
36. Birth control against the religion or culture					
37. General life stress or trauma (e.g. grief)					
38. Too much work or study					
39. Having had an accident					
40. Migration to a new country					
41. Being born this way, e.g. inheriting bad/weak/low/cold blood					
42. Death of a relation or close friend					
43. Infection					
44. Bad or ominous sensations					
45. Being hot (but not from fever or weather)					

Appendix D

1 = Strongly disagree	2 = Disagree	3 = Slightly disagree	4 = Neither agree nor disagree	5 = Slightly agree	6 = Agree	7 = Strongl agree

Psychiatric diagnoses are often based on the individual or cultural prejudices of psychiatrists	1	2	3	4	5	6
Psychiatric diagnoses serve to pathologise individuals simply for being different	1	2	3	4	5	6
Psychiatrists often misdiagnose or misunderstand those from ethnic, gender, or cultural groups other than their own	1	2	3	4	5	6
Psychiatrists often exaggerate evidence of psychiatric symptoms	1	2	3	4	5	6
Many psychiatric diagnoses or disorders do not meet basic scientific standards	1	2	3	4	5	6
Psychiatric diagnoses serve only to stigmatize patients	1	2	3	4	5	6
Current psychiatric treatments are ultimately far more damaging than helpful to patients	1	2	3	4	5	6
The attitude psychiatrists toward patients is often experienced as demeaning and controlling	1	2	3	4	5	6
The ethical integrity of psychiatry is compromised by financial and professional links with pharmaceutical and insurance companies	1	2	3	4	5	6
The specific definitions of, or criteria for, many current psychiatric diagnoses are vague and arbitrary	1	2	3	4	5	6
Most medications prescribed by psychiatrists have been proven to improve or manage mental health disorders	1	2	3	4	5	6
Psychiatry uses a system of diagnoses that is scientifically reliable and valid	1	2	3	4	5	6
Psychiatry inappropriately applies medical concepts to the mind and society	1	2	3	4	5	6
The definitions, or criteria for, many current psychiatric disorders leave too much room for opinions and interpretations	1	2	3	4	5	6
Psychiatry inappropriately excludes other approaches (e.g. alternative medicine) to mental distress	1	2	3	4	5	6
Psychiatrists never treat patients against their will	1	2	3	4	5	6

Appendix E

Please tick one response only for each question by placing a tick in the box

If you prefer, a member of staff or the research team can read out questions to you

FQ1	**How often do you need someone to help you when you are given information to read by your doctor, nurse or pharmacist?**	☐ often	☐ sometimes	☐ rarely	
FQ2	**When you need help, can you easily get hold of someone to assist you?**	☐ often	☐ sometimes	☐ rarely	☐ not applicable
FQ3	**Do you need help to fill in official documents?**	☐ often	☐ sometimes	☐ rarely	
ComQ1	**When you talk to a doctor or nurse, do you give them all the information they need to help you?**	☐ often	☐ sometimes	☐ rarely	
ComQ2	**When you talk to a doctor or nurse, do you ask the questions you need to ask?**	☐ often	☐ sometimes	☐ rarely	
ComQ3	**When you talk to a doctor or nurse, do you make sure they explain anything that you do not understand?**	☐ often	☐ sometimes	☐ rarely	

Cr1	**Are you someone who likes to find out lots of different information about your health?**	☐ often	☐ sometimes	☐ rarely
Cr2	**How often do you think carefully about whether health information makes sense in your particular situation?**	☐ often	☐ sometimes	☐ rarely
Cr3	**How often do you try to work out whether information about your health can be trusted?**	☐ often	☐ sometimes	☐ rarely
Cr4	**Are you the sort of person who might question your doctor or nurse's advice based on your own research?**	☐ yes, definitely	☐ maybe/ sometimes	☐ not really
Emp1	**Do you think that there plenty of ways to have a say in what the government does about health?**	☐ yes, definitely	☐ maybe/ sometimes	☐ not really

Emp2	**Within the last 12 months have you taken action to do something about a health issue that affects your family or community?**	yes	no
Emp3	**What do you think matters most for everyone's health? (tick one answer only)**	a) Information and encouragement to lead healthy lifestyles	b) Good housing, education, decent job and good local facilities

Appendix F

Demographic Sheet

1. **Gender:** [ ]Male [ ] Female

2. **Age: _____**

3. **Are you a university student?** [ ] Yes (if yes is selected skip to Q6)
   [ ] No

4. **What is your occupation? _____**

5. **What is the highest education level you have achieved?**

   [ ] No schooling completed
   [ ] Nursery school to 8th grade
   [ ] 9th, 10th or 11th grade
   [ ] 12th grade, no diploma
   [ ] High school graduate - high school diploma or the equivalent
   [ ] Some university, but less than 1 year
   [ ] 1 or more years of university, no degree
   [ ] Bachelor's degree (for example: BA, BS)
   [ ] Master's degree (for example: MA, MS, MEng, MBA)
   [ ] Professional degree (for example: MD)
   [ ] Doctorate degree (for example: PhD)

6. **You are (If not a student skip this question):** [ ]Freshman [ ] Sophomore [ ] Junior [ ] Senior [ ] Masters student

7. **What is your religious sect?**
   [ ] Sunni
   [ ] Shia
   [ ] Duze
   [ ] Maronites
   [ ] Armenian Catholic
   [ ] Christian Catholic
   [ ]Christian Orthodox
   [ ] Protestant
   [ ] Armenian Orthodox