AMERICAN UNIVERSITY OF BEIRUT

ATTITUDES TOWARD HELP-SEEKING BEHAVIOR IN A SAMPLE OF UNIVERSITY STUDENTS IN LEBANON

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A thesis submitted in partial fulfillment of the requirements for the degree of Master of Arts to the Department of Psychology of the Faculty of Arts and Sciences at the American University of Beirut

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On September 2009, I was an unhappy chemistry student who was scared of the radical change that a transfer to psychology would bring about. It took but one special afternoon in Jesup Hall to comfort me and set me on a completely new path that did not seem scary anymore. I went to the Psychology department that day after having prepared questions about the program, and walked into Dr. Nidal Najjar-Daou's office, where I got a welcoming smile and genuine care. I realized two things after that meeting. One, that psychology would be my calling. Two, that I will dedicate my time to try and become like this great professor who stood by me when I was lost. Dr. Najjar-Daou is today my thesis supervisor, and I want to thank her for occupying a much bigger role throughout my journey. You were patient, genuinely caring, and used a continuous schedule of positive reinforcement, shaping my life into what it is today, and what it can later become. I will never stop looking up to you.

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To my actual family, my beautiful sister and sweet brothers, I say thank you for everything. I love you more than words can explain. For working night and day for us, dad, thank you. And as tradition would have it, I leave the best for last.

To the greatest woman in my life and my first encounter with an angel. Mom, you embraced me since day one with unconditional love and taught me that the only road to happiness is forgiveness. For as long as I live, I will always remember that you always

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Grateful Forever,

Fahed Hassan.

AN ABSTRACT OF THE THESIS OF

<u>Fahed Youssef Hassan</u> for <u>Master of Arts</u> Major: Psychology

Title: Attitudes toward help-seeking behavior in a sample of university students in Lebanon

This study is concerned with an examination of the predictors of attitudes toward help-seeking behavior in a sample of university students. Attitudes toward help-seeking behavior are defined as the degree to which an individual has a favorable or unfavorable evaluation of the actual help-seeking behavior. There is an increased recognition in the literature of the predictors of attitudes toward help-seeking behavior. The literature has focused on the effect of self-stigma, social-stigma, family cohesion and gender on attitudes toward help-seeking behavior. There has been less focus on other factors, such as knowledge about psychotherapy and counseling, causes of mental illness, religiosity and awareness of resources. Furthermore, the relation between Westernization and attitudes toward help-seeking behavior does not seem to be present in the published literature. Also apparent is the absence of research on the topic of attitudes toward help-seeking behavior in the Lebanese context.

A total of 291 undergraduate students at the American University of Beirut completed an online questionnaire. *Self*-stigma, balanced cohesion, knowledge about counseling and psychotherapy, Westernization and non-disclosure of family issues were significant predictors of attitudes toward help-seeking behavior. *Social*-stigma, enmeshment, disengagement, beliefs in the causes of mental illness, awareness of resources, religiosity and gender were not significant predictors of attitudes toward helpseeking behavior. The interpretations of the findings and the limitations of the study were discussed.

Keywords: attitudes toward help-seeking behavior, *self*-stigma, social-stigma, family cohesion, beliefs in the causes of mental illness, knowledge about counseling and psychotherapy, westernization, religiosity, awareness of resources, non-disclosure of family issues, gender.

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CHAPTER I

Factors Associated with Attitudes toward Help-Seeking Behavior A. Attitudes toward Help-Seeking Behavior

The World Health Organization (WHO) defined health by integrating three aspects of wellbeing; "physical, mental and social wellbeing" (1958; p. 1). The inclusion of mental wellbeing as an integral part of health necessitates the understanding of people's attitudes toward mental health help-seeking behavior. This understanding fosters the development of strategies and policies that enhance people's adherence to mental-health services and as a consequence ensures the wellness of people in accordance with the WHO definition of mental health (Kerns, 2013). The WHO Survey Consortium (2004) estimated that only 15.3% of people with psychological disorders (who met criteria for DSM-IV-TR) received treatment in the previous year in the United States¹. Corrigan (2004) claimed that empirical studies had established that mental-health services were effective, yet most people who were in need of such services did not seek or access them or begin treatment without committing to it. Hinson and Swanson (1993; see also Vogel, Wester, & Larson, 2007) added that people often viewed mental-health services as the last resort in comforting their psychological distress. When people experienced psychological distress, they attempted to relieve this distress by referring to their own help or the help of a significant other; usually the help of their social support group. Andrews, Issakidis, and Carter (2001) added that whereas experiencing psychological distress was a universal phenomenon, only one-third of those who reported experiencing it sought professional mental-health services.

¹ It is noteworthy that the WHO Survey Consortium surveyed several other countries as well.

Rickwood, Deane, Wilson and Ciarrochi (2005) defined help-seeking as the behavior of seeking the support of others to cope with a problem or a distressful experience by obtaining general support or treatment. Husky (2011) added that help-seeking behavior indicates communicating with others to gain support, advice and solutions to a significant distress or impairment. Professional help-seeking behavior involves contacting formal sources of help such as psychologists, psychiatrists, social workers or any other mentalhealth personnel. Husky (2011) claimed that there were several prerequisites for professional help-seeking behavior. First, the individual must be aware that he or she is experiencing psychological distress or functional impairment. Second, the individual should recognize that he or she cannot alleviate his or her psychological distress alone and that the problem can be resolved through external interventions. Thus, Husky (2011) concluded that help-seeking behavior necessitates that the individual holds positive attitudes about help-seeking behavior and that the individual is aware of the availability of mentalhealth services.

Husky (2011) defined attitudes toward help-seeking behavior as the degree to which an individual has a favorable or unfavorable evaluation of the actual help-seeking behavior. Mackenzie, Knox, Gekoski, and Macaulay (2004) added that attitudes toward help-seeking behavior are defined as the person's rational evaluation about obtaining mental-health services in case of having an emotional or behavioral problem. Fisher and Turner (1970) claimed that attitudes toward help-seeking behavior vary from one individual to another. Some people view seeking mental-health services as a sign of personal weakness and interpersonal failure in comforting an unbearable psychological distress. Other people,

however, view it as a sign of strength and a will to alleviate psychological distress and restore the good functioning of the individual.

Research has shown that attitudes toward mental-health services were highly predictive of the actual help-seeking behavior (Albarracín, Johnson, Fishbein, & Muellerleile, 2001; Cash, Kehr, & Salzbach, 1978). Fisher and Turner (1970) indicated that determining the predictors of the attitudes toward help-seeking behavior fosters people's adherence to mental-health services. They added that social and interpersonal factors are among the components that underlie the formation of such attitudes. Those components include person's own beliefs and preconceptions about mental-health services, a person's perception of mental-health-related stigma, social support from family and friends, personal ability to introspect and express psychological distress, and beliefs about the importance of mental-health services.

The present study is concerned with an examination of attitudes toward helpseeking behavior. Specifically, this study takes a look at the effects of *self*-stigma, *social*stigma, family cohesion, causes of mental illness, knowledge about counseling and psychotherapy, awareness of resources, Westernization, religiosity, non-disclosure of family issues and gender in a sample of undergraduate students at the American University of Beirut.

B. Stigma: Definition and Overview

Goffman (1963) defined stigma as a situation in which an individual does not receive full social acceptance, mostly because he or she possesses attributes that are different from others and less desirable in society. Stafford and Scott (1986) defined stigma

as "a characteristic of persons that is contrary to a norm of a social unit" (p.80), where a "norm" was defined as a "shared belief that a person ought to behave in a certain way at a certain time" (p.81).

Link and Phelan (2001) claimed that stigma exists when five components converge; these components are distinguishing, stereotyping, total separation, social status loss, and discrimination. Stigma starts when people distinguish a difference in another person. The vast majority of differences in others are ignored and only some differences are socially selected as salient differences. Thus, Link and Phelan (2001) explained that the attributes that are distinguished vary dramatically by time and space. The attributes or differences are made salient when cultural beliefs provide a solid link between the distinguished person and a negative stereotype. A third feature of stigma occurs when the distinguished (stigmatized) person experiences separation from others in the society and two categories of "us and them" are created. Link and Phelan (2001) added that when stigmatized people are placed in a distinct category of "them", it becomes easier for the stigmatizer to further stereotype them. There is no harm in attributing all the bad qualities to a group distinct from "us". This leads the stigmatized individual to experience social status loss, social inequality and discrimination. When an individual is labeled, stereotyped and linked to a distinct category, he or she experiences devaluation in many aspects of life, such as education and income. Furthermore, the stigmatized individual is placed in a low status hierarchy, which results in the total exclusion and disapproval of his or her social status and discrimination against him or her (Link & Phelan, 2001).

Corrigan and Penn (1999) stated that stigma of mental illness occurs when an individual holds negative attitudes and stereotypes about patients with mental illnesses.

They explained that stigma is another word for erroneous stereotype and prejudice that is the result of poor knowledge about mental illnesses and that leads to discrimination. Corrigan and Watson (2002) added that people with mental illnesses endure two challenges; the challenge of having a mental illness, and the challenge of facing the stereotypes that emerge as a result of misconceptions about mental health.

Stigma comes in two forms; *social*-stigma pertains to other people's prejudice about mental illnesses, and *self*-stigma pertains to people with mental illnesses stigmatizing themselves. Whereas *social*-stigma is the result of misconceptions about mental health, *self*-stigma is due to internalizing the stigmatized ideas and regarding them as facts (Corrigan & Watson, 2002). Moreover, stigma pushes people with mental illness against obtaining mental-health services in an attempt to avoid the mental label associated with psychotherapy. According to Corrigan (2004), many people with mental illness do not pursue treatment, while others begin treatment and withdraw because of stigma. Regier et al. (1993) found that fewer than one-third of patients with serious mental illnesses sought treatment and that was partly due to stigma.

C. Stigma and Attitudes toward Help-Seeking Behavior²

The literature presented mostly negative associations between *self*-stigma and attitudes toward help-seeking behavior. Wang (2013) investigated the effect of *self*-stigma on attitudes toward help-seeking behavior among Chinese college students. *Self*-stigma had

² Shame is defined as a negative emotional state and a process of social control. Shame is directly related to person's awareness of the socially inappropriate and deviant nature of one's action (Turner, 2006). Rusch et al. (2006) claimed that shame is the emotional side of stigma; people who are aware of public stereotypes against them are more likely to feel ashamed. Rusch et al. (2014) found that high levels of shame were associated with negative attitudes toward help-seeking behavior.

a negative association with attitudes toward help-seeking behavior. The results implied that participants who had higher level of *self*-stigma tended to have negative attitudes toward help-seeking behavior. Wang (2013) explained the results by stating that psychological and psychiatric services were still at their infant stages in China. People did not have a good understanding of the purposes and successes of mental-health services, and hence viewed them negatively. Similarly, in a sample of college students in Turkey, Tobkaya (2014) found that *self*-stigma was a significant negative predictor of attitudes toward help-seeking behavior. Interestingly, however, Pattyn, Verhaeghe, Sercu, and Bracke (2014), found that participants who had higher levels of *self*-stigma tended to have negative attitudes toward seeking services from medical practitioners in general and psychiatrists in particular, but not from psychologists. Moreover, participants had higher levels of *self*-stigma associated with obtaining help from psychiatrists as compared to general practitioners. Pattyn et al. (2014) explained this finding by stating that people have negative attitudes regarding the effectiveness of psychiatric services in case of mental illnesses.

The literature presented contradictory findings regarding the relation between *social*-stigma and attitudes toward help-seeking behavior. Tobkaya (2014) found that *social*-stigma was negatively correlated with attitudes toward help-seeking behavior. *Social*-stigma, however, was not found to be a significant predictor of attitudes toward help-seeking behavior. Tobkaya (2014) explained this finding by stating that *self*-stigma was more important than *social*-stigma in determining the attitudes toward help-seeking behavior. Similarly, Pattyn et al. (2014) found that *social*-stigma was not significantly related to seeking formal services (general practitioners, psychiatrists and psychologists). They did find, however, that *social*-stigma was negatively associated with seeking informal

services (friends and family). Pattyn et al. (2014) explained the results by stating that participants who had higher levels of *social*-stigma tended to fear devaluation from others (being perceived as incompetent and inferior), and thus held negative attitudes toward informal help-seeking services.

Franz (2012), however, found that *social*-stigma was associated positively with attitudes toward help-seeking behavior in a sample of emerging adults. Participants who reported higher level of *social*-stigma tended to have higher intentions to seek professional help for emotional and behavioral conflicts. This finding was in contradiction with general findings in the literature on stigma and help-seeking behavior. For example, Belloch, del Valle, Morillo, Carrió, and Cabedo (2009) found that *social*-stigma prevented patients with Obsessive Compulsive Disorder from seeking professional help. Franz (2012) explained this finding by stating that individuals who had higher intentions to seek help were more aware of existing stigma and more likely to report this stigma. Moreover, individuals who had clear intention to seek mental-health services were more primed to notice stigma cues in their environment.

D. An Overview of Family Cohesion

Olson (1980) defined family cohesion in terms of the emotional bonding that exists among family members. Minuchin (1974) linked the construct of family cohesion to family boundaries. He described family boundaries as a continuum between enmeshment and disengagement among family members. Enmeshment refers to a state of unhealthy emotional fusion among family members, whereas disengagement refers to a state of unhealthy lack of attachment.

Minuchin (1974) added that families with high family cohesion tended to have enmeshed boundaries. Enmeshment refers to a state of extreme diffusion and undifferentiation among family members whereby the boundaries among the family members are blurred. Family members are overinvolved and overprotective; the consequences of any action taken by a family member spread among other family members. In such systems, the individual's sense of belonging to the family is derived by continuous personal sacrifices for the sake of keeping family unity (Minuchin, 1974). Moreover, family members use their family unit to develop their own identities. Olson (1980) added that high levels of family cohesion (enmeshment) lead to extreme overidentification and extreme emotional and intellectual closeness with the family. This enmeshment causes the family system to become overloaded and unable to adapt to stressful circumstances (Minuchin, 1974).

Families with low family cohesion, however, tended to have disengaged family boundaries (Minuchin, 1974). In such families, family members use their own individualistic achievements to develop their own identities. They have low concern about each other and low levels of communication. Minuchin (1974) asserted that families who have disengaged boundaries experience low levels of emotional interaction, low sense of belonging to the family and a state of emotional cut-off among family members. In such contexts, relationships among family members are almost nonexistent and a sense of autonomy exists among family members. Olson (1980) added that low levels of family cohesion (disengagement), lead to emotional and intellectual isolation among family members. Thus, an optimal level of family cohesion necessitates the presence of healthy boundaries between family members where every member feels connected and autonomous

at the same time. Olson (1980) added that a balanced level of family cohesion, lead to a balanced level of emotional and intellectual connectedness/ independence among family members.

E. Family Cohesion and Attitudes toward Help-Seeking Behavior

In this study, family cohesion was conceptualized based on Minuchin's (1974) definition, which links family cohesion to family boundaries. According to Minuchin (1974), family cohesion encompassed three concepts that describe family boundaries and dynamics: enmeshment, disengagement and balanced cohesion. As mentioned before, whereas enmeshment and disengagement describe a state of unhealthy boundaries between family members, balanced cohesion refers to a state of optimal level of connectedness and autonomy among family members.

A literature search was conducted using PsycInfo, Academic Search Complete, PubMed, MedLine, and Google Scholar, for the years 1950-2015. The following keywords were entered in the search, family cohesion and help-seeking, enmeshment and helpseeking, disengagement and help-seeking, balanced cohesion and help-seeking. The results revealed that the relation between family cohesion, as conceptualized in this study, and attitudes toward help-seeking behavior was not examined in the literature. The relation was rather studied using a different conceptualization of family cohesion (Roldan-Bau, 2013). Family cohesion was conceptualized along with loyalty as being part of familism. Familism (family cohesion and loyalty) is a concept that describes family dynamics and has been researched mainly with Latino Americans (Roldan-Bau, 2013). Familism describes a state of strong attachment between family members that involves subjugation of self to the

family³, familial interconnectedness⁴, honor⁵ and support⁶ (Steidel & Contreras, 2003; as cited in Roldan-Bau, 2013).

The relation between familism (family cohesion and loyalty) and attitudes toward help-seeking behavior has been examined extensively among Latino Americans (Miville & Constantine, 2006; Roldan-Bau, 2013). A consistent negative association between familism and attitudes toward help-seeking behavior has been observed across studies. Roldan-Bäu (2013) investigated the effect of familism (family cohesion and loyalty) on the attitudes toward help-seeking behavior among Latin-American adults living in Canada. The results revealed that participants who had higher levels of family cohesion and loyalty tended to have negative attitudes toward help-seeking behavior. The results implied that Latin-American adults who reported higher levels of family cohesion viewed their families as more supportive and thus perceived mental-health services as unhelpful or unnecessary. Moreover, Latino Americans who had higher levels of family cohesion and loyalty, placed greater importance on family privacy and thus viewed the mental-health services negatively. The results implied that high familism might serve as an impediment for helpseeking behavior among Latino Americans. Similarly, Miville and Constantine (2006), in a sample of Mexican American college students, found that participants who reported lower levels of social support from their families tended to have positive attitudes toward helpseeking behavior and were more likely to seek psychological help.

³ Subjugation of self to the family is a cultural value, which necessitates that family members sacrifice their own needs for maintaining the unity and fulfilling the needs of the family.

⁴ Familial interconnectedness describes a state of strong emotional bond among family members.

⁵ Honor means that family members should thrive to protect the honor of the family.

⁶ Support means that family members expect that their family would reciprocate their sacrifices and support them in times of need.

It is conceivable that although the concept of familism is highly linked to family cohesion as conceptualized in this study, there is a kind of merge between the concepts of enmeshment and balanced cohesion. For example, family support and family interconnectedness describe a state of balanced cohesion among family members where family members have strong emotional bond and are supportive of one another during difficult times. Subjugation of self to the family and familial honor describe a state of enmeshment among family members whereby family members sacrifice their own needs and aspirations for the sake of the family. Thus, it is important to study family cohesion as a concept that describes the dynamics among family members; being healthy dynamics (balanced cohesion) or unhealthy dynamics (enmeshment and disengagement).

Chang, Natsuaki and Chen (2013) investigated the effect of family cohesion on professional help-seeking behavior in Asian Americans and Latino Americans. Chang et al. (2013) conceptualized family cohesion as family closeness and togetherness; connectedness among family members. In this study, family cohesion resembled the balanced cohesion among family members. The results revealed that approximately one-third of Latino Americans and one-fifth of Asian Americans sought professional mental-health services. The results also revealed that family cohesion was highest among the first generation of Latino Americans followed by the second and third generations. Among Asian Americans, the level of family cohesion was also highest among the first generation, but it was followed by the third and then the second generations. In addition, among Latino Americans, individuals who had higher levels of family cohesion tended to use mentalhealth services less than those who had lower levels of family cohesion. This finding was consistent among the three generations of Latino Americans. The results indicated that

among Latino Americans, those who had high level of family cohesion tended to place greater importance on the integrity of their families (e.g., keeping family secrets) than on their needs for psychological services. For Asian Americans, however, there was no relation between family cohesion and help-seeking behavior. Among Asian Americans, the level of family conflict, and not family cohesion, was negatively associated with actual help-seeking behavior.

One concept related to family cohesion and dynamics is the non-disclosure of family issues. In this study, non-disclosure of family issues was conceptualized as the degree to which participants agree with the notion that it is best not to spread one's "dirty laundry" [private, intimate details concerning members of one's household] outside the family. The process of counseling and psychotherapy requires the clients to disclose some aspects of family issues and dynamics. Thus, people who prefer not to disclose family issues are likely to have negative attitudes toward help-seeking behavior.

F. Causes of Mental Illness

Jaremo and Arman (2011) claimed that the general public thinks differently about the causes of illness compared to the professional personnel. People tend to conceptualize their own explanations of illnesses and these explanations influence their help-seeking behavior. Trotter and Chavira (1997) claimed that the Western bio-medical model emphasized a clear distinction between mental disorders and physical-health diseases. The bio-medical system tackles physiological diseases, whereas the mental-health system tackles psychological disorders. Elliot, Maitoza, and Schwinger (2011) added that although the biomedical model explains mental illness in terms of malfunctioning in the brain, people are skeptical about this model. People have different attribution of mental illnesses,

such as lifestyle habits, loss of significant relationships, substance misuse, devil possession, supernatural factors and others (Baker & Procter, 2013).

G. Causes of Mental Illness and Attitudes toward Help-Seeking Behavior

Garcia (2008) investigated the effect of various beliefs in the causes of illness on the attitudes toward help-seeking behavior among Latino-American college students. Garcia (2008) distinguished between healthy habits – such as healthy eating, good hygiene and exercise – and unhealthy lifestyle factors – such as drinking, smoking and lack of rest. The results revealed that participants who believed that lack of a healthy habits – healthy eating, good hygiene, and exercise -caused illness tended to have more positive attitudes toward help-seeking behavior. Garcia (2008) claimed that individuals who valued healthy habits were more open to psychological services because they placed high importance on their wellbeing. Moreover, individuals who attributed illness to their own actions rather than external or spiritual causes tended to seek mental-health services. The results also revealed that participants, who believed that unhealthy lifestyle factors such as lack of rest, anxiety and exhaustion, drinking, and smoking were the causes of illness, were more likely to have negative attitudes toward help-seeking behavior. Garcia (2008) claimed that individuals who viewed unhealthy lifestyle factors as causes of illness tended to seek another form of treatment, such as medical treatment, and tended to underestimate the psychological causes of illness. The results also revealed that participants who believed that spiritual fate – thin blood, bad luck, and payback – was the cause of illness were more likely to have negative attitudes toward help-seeking behavior. Garcia (2008) claimed that individuals who believed that spiritual fate was the cause of illness were externally driven and thus did not believe in the effectiveness of mental-health services as a source of

resolving psychological problems. Garcia (2008) concluded that psycho-education about the causes of illnesses fosters positive attitudes toward help-seeking behavior.

Chakraborty, Das, Dan, Bandyopadhyay, and Chatterjee (2013) investigated the perceptions of the causes of psychiatric disorders among outpatients in India. Perceptions of causes of mental illness fell into four categories: bodily pathology, habits and practices, psychological causes, and supernatural causes. The results also revealed that, at the beginning of the illness, more than half of the patients' families sought medical help, whereas less than one-fifth sought religious remedies and a quarter sought non-professional medical help. Moreover, patients with schizophrenia who perceived habits and practices as causes of their illness tended to prefer seeking religious help. Patients with depression who perceived habits and practices as causes for their illness, however, tended to seek non-professional medical help. The results implied that the people's attribution of mental illnesses influenced their help-seeking behavior.

Zafar et al. (2008) investigated the effect of participants' beliefs of the causes of schizophrenia on the attitudes toward help-seeking behavior in an outpatient sample in Pakistan. The participants were given a vignette about a patient with schizophrenia. Approximately one-quarter of participants reported that the cause of the symptoms presented in the vignette was mental illness (22.3%), followed by weak mental constitution (13.6%) and God's will (10.1%). Participants were asked a hypothetical question: in case one of your relatives suffered from the same illness, what kind of help would you seek? The results revealed that participants who attributed schizophrenia to biological causes were 13 times more likely to seek medical help, whereas those who believed that the cause of schizophrenia was religious tended to seek religious help. In addition, participants who

reported that they would not seek professional help tended to attribute schizophrenia to non-biological causes. The results implied that beliefs about the cause of schizophrenia influenced the type of help-seeking behavior.

H. Knowledge about Counseling and Psychotherapy

Smith (2001) claimed that there is no single definition of counseling that is common among researchers. Hindi (1971) defined counseling as a collaborative relationship between a client and a counselor that aims for better life decisions for the clients. Howard (1999) added that counseling gives the client an opportunity to live in a more satisfying way. Rogers (1942) defined counseling as a structured relationship between the counselor and the client that allows the client to discover him- or herself. Self-discovery gives the client a better understanding of his or her life which assists him/her in the process of change. Warner (1950) broke down the counseling process into three parts: end, function, and value. The end (goal) of counseling is to facilitate the client's personal growth. The function of counseling includes techniques that release emotion, provide new emotional understanding and resolve the client's problem. The value of counseling is attained when the client is aware that he or she is responsible for his or her problems.

Osagu and Benjamin (2013) defined psychotherapy as a process that helps a client to learn constructive ways to deal with his or her problems. Osagu and Benjamin (2013) added that psychotherapy is a general term that conveys treating psychological and mental disorders. Psychotherapy is essential when an individual is struggling with a psychological disorder, relationship or work-related issues, or family and social problems. Psychotherapy also requires therapeutic alliance and constructive communication between the client and the trained professional. Ofovwe (2011) defined psychotherapy as a process of therapeutic

interaction between a client, patient, family or group and a trained professional. This process aims to address the client's problems and is highly dependent on the specialty of the trained professional. Ofovwe (2011) added that psychotherapy refers to a set of therapeutic techniques implemented to improve the psychological functioning and the overall wellbeing of the client.

Osagu and Benjamin (2013) claimed that there are various differences between counseling and psychotherapy. Counseling is recommended for clients with less-serious problems, whereas psychotherapy is recommended for clients with chronic emotional and psychological problems. In addition, counseling is a process of giving advice, whereas psychotherapy is a process of implementing therapeutic techniques. Osagu and Benjamin (2013) added that while counseling is usually administered in social and educational settings, psychotherapy is usually administered in clinical and psychiatric settings. Moreover, counseling tends to be a short-term process, whereas psychotherapy tends to be a long-term process. Finally, psychotherapists receive more intensive and lengthy training than counselors. It is conceivable, however, that the distinguishing features between psychotherapy and counseling are not extremely relevant to those outside the profession. Therefore, these two terms will be used interchangeably from this point onwards, consistent with Garcia (2008). Garcia (2008) defined knowledge about counseling and psychotherapy as individual's ideas about the value, process and function of psychotherapy as well as the role and responsibilities of the counselor.

I. Knowledge about Counseling and Psychotherapy and Attitudes toward Help-Seeking Behavior

A literature search was conducted using PsycInfo, Academic Search Complete, PubMed, MedLine, and Google Scholar, for the years 1950-2014. The following keywords were entered in the search, knowledge about counseling and help-seeking, knowing about psychotherapy and help-seeking. The result revealed that the relationship between knowledge about counseling and attitudes toward help-seeking behavior was examined twice (Garcia, 2008; Smith, 2002) in the literature, both times in the form of unpublished doctoral dissertations.

Garcia (2008) investigated the effect of knowledge about psychotherapy on attitudes toward help-seeking behavior among Latino American students. The results revealed that knowledge about psychotherapy positively predicted the stigma-tolerance domain of attitudes toward help-seeking behavior. Participants who had better knowledge of psychotherapy tended to be more tolerant to the stigma associated with seeking mentalhealth services. Those participants were also more likely to have positive attitudes toward help-seeking behavior. Garcia (2008) concluded that mental-health services should implement psycho-education during counseling process to facilitate the client's tolerance to stigma.

Smith (2001) investigated the effect of knowledge about counseling on help-seeking behavior among rural participants in Scotland. The results revealed that knowledge about counseling was not associated with past use or future anticipated use of counseling services. The results implied that there were no significant differences between individuals who had high level of knowledge about counseling and those who had low level of knowledge on the reported (or anticipated) help-seeking behavior in the past (and the future). Given the specific context of the study (rural area), it is conceivable that the

findings cannot be generalized to other contexts (such as university undergraduate students).

J. Westernization

Berry (2001) defined acculturation as the process of change that the individual experiences upon contacting two or more cultures. Rao (2004) defined Westernization as a type of acculturation that takes place when an individual from a non-Western culture is exposed to Western culture by means of globalization. Precisely, Westernization can be conceptualized as the degree to which an individual from a non-Western culture is immersed in Western values. Rao (2004) added that the level of Westernization depends on the amount of contact with Western values.

Abushouk (2006) linked the concept of globalization to westernization and defined it as "a dynamic factor that motivates the transcontinental spread of the social structure of modernity (capitalism, rationalism, industrialism, and bureaucracy) and destroys the preexistent cultures of non-Western nations" (p. 488). Alrefai (2013) reviewed the literature on Westernization in the Arab world and added that Westernization is a term that conveys being influenced by the Western culture. This influence may range from the imitation of Western values and behaviors to deep immersion in the Western ideologies. Khan and Bashar (2010) claimed that the Arab world lacks independent local technology and scientific research and is mostly reliant on the West for technological infrastructure and goods. Abdulrahim, Al-Kandari, and Hasanen (2009) added that Westernization in the Arab World is directly linked to the high exposure of Western media by Arab citizens, specifically the American Media. The penetration of the American media in our societies led to the spread of Western values, which encouraged Arabs to adopt those values

(Abdulrahim et al., 2009). Moreover, Mahgoub (2011) asserted that Westernization in the Arab world could be seen in everything, from the import of Western technology to the spread of fast-food restaurants and shopping centers.

K. Westernization and Attitudes toward Help-Seeking Behavior

A literature search was conducted using PsycInfo, Academic Search Complete, PubMed, MedLine, and Google Scholar, for the years 1950-2014, and using keywords relating to Westernization (Westernization and help-seeking attitudes, Westernization and help-seeking behavior, culture and help-seeking behavior). The result revealed that the relationship between Westernization and attitudes toward help-seeking behavior has not been studied in the published literature. The result also revealed that westernization was studied in the context of its effect on the adoption of Western values by non-Western individuals, including the presentation of psychological distress (Rao, Young, & Raguram, 2007), and tobacco use (Stigler et al., 2011).

Rao et al. (2007) investigated the effect of Westernization on somatization symptom presentation among psychiatric outpatients in India. Patients who had higher levels of Westernization were more likely to present psychological symptoms, whereas patients who had lower level of Westernization were more likely to present somatic symptoms. The results implied that Indian patients who had higher contact with the Western culture tended to learn the "language of Western medicine" such as the psychological idioms of symptom expression and the Western illness models. Thus, the exposure to Western culture influenced the patients' conceptualization and expression of their psychiatric symptoms.

Stigler et al. (2011) investigated the effect of Westernization on tobacco use among adolescents living in India. They implemented a cross-sectional design by recruiting

participants from private schools (high socio-economic status) and governmental schools (low socio-economic status). The results revealed that participants who had higher levels of Westernization tended to have higher levels of tobacco use whereas participants who had higher levels of identification with traditional Indian culture tended to have low levels of tobacco use. In addition, the positive association between Westernization and tobacco use was consistent across gender, socio-economic status and grade level. The results implied that adolescents who had higher contact with Western culture tended to adopt the Western habit of tobacco use. An interesting side note here is that Western countries (e.g., the United States) have adopted special measures that discourage tobacco use (e.g., raising taxes on tobacco products), but such health-promotion measures do not easily transfer to non-Western/developing countries, but this discussion exceeds the scope of this paper.

L. Awareness of Resources and Attitudes toward Help-Seeking Behavior

Franz (2012) conceptualized awareness of resources as an individual's ideas about mental-health services available to the general public in the community (e.g., University Counseling Center for a student population), as well as mental-health services that are only available to some people (e.g., private health insurance). Franz (2012) claimed that a potential barrier to seeking mental health services is the lack of awareness of the availability of such services. When people are unaware of mental-health services, they are neither in a position to appreciate the effectiveness of such services, nor are they in a position to make good use of them. Franz (2012) added that increasing awareness of mental-health treatments might foster the public's positive attitudes toward those treatments. For example, Loo, Tong, and True (1989) found that limited awareness of mental-health services was related to low use of such services in China. Thompson, Hunt,

and Issakidis (2004) added that for people facing distress, lack of knowledge about treatment options is considered a barrier for help-seeking behavior.

Wang (2013) also investigated the level of awareness of mental-health resources among Chinese students. The results revealed that although most were aware of the mentalhealth services available on campus, the majority of participants did not seek help. In a study involving Turkish students, however, Bilican (2013) found that one out of four students reported that they were not aware that psychotherapy services were available in the college.

Franz (2012) also investigated the effect of awareness of resources on attitudes toward help-seeking behavior among emerging adults. The results revealed that there was no significant relationship between awareness of resources and attitudes toward helpseeking behavior. The results implied that evaluation of mental-health services and intention to seek mental-health services were not related to the level of awareness of available resources in the community. This study was seemingly the first and only publication to investigate the relation between awareness of resources and attitudes toward help-seeking behavior, based on an extensive search of the literature.

M. Religiosity and Attitudes toward Help-Seeking Behavior

Stolz (2009) defined religiosity as "individual preferences, emotions, beliefs, and actions that refer to an existing (or self-made) religion" (p. 347). Bonewell (2008) added that religiosity is the degree to which an individual is committed to his or her own belief system. The commitment to a belief system may include reading a religious or faith text, such as the Bible, and participating in a faith community. Allport and Ross (1967) differentiated between two religious orientations; extrinsic and intrinsic religiosity.

Extrinsic religiosity is defined as utilitarian use of religion to gain status, support and comfort. For example, a person might be participating in a faith community such as a church to gain a better social status among his/her community (a self-serving behavior). Intrinsic religiosity, however, is a form of integrated faith that is driven by the values of one's own religion. A person who exercises intrinsic religiosity approaches religion in an open-minded and dynamic way and aims for a life that is wholly oriented by religion. The measurement of religiosity in this study was based on the *intrinsic* definition of the construct.

The literature presented a consistent negative association between religiosity and attitudes toward help-seeking behavior (Crosby & Bossley, 2012; McGowan & Midlarsky, 2011). McGowan and Midlarsky (2011), in a sample of elderly community-residing adults in the United States, found that intrinsic religiosity was negatively associated with attitudes toward help-seeking behavior. Participants who had higher levels of intrinsic religiosity tended to have less favorable attitudes toward help-seeking behavior, including lower interpersonal openness and lower stigma tolerance. McGowan and Midlarsky (2011) explained this finding by stating that people who have higher levels of intrinsic religiosity turn to their faith in religion and the divine to relieve their psychological distress. Similarly, Crosby and Bossley (2012), in a sample of college students in Texas, found that there was a negative association between religiosity and attitudes toward help-seeking behavior. Moreover, religiosity was positively associated with preferences for religious help-seeking behavior. Participants who had higher levels of religiosity tended to prefer religious help and to have negative attitudes toward help-seeking behavior. Crosby and Bossley (2012) explained that participants who were high in religiosity tended to conceptualize

psychological distress using spiritual etiology. Thus, those participants preferred to obtain religious help, which is congruent to their conceptualization of psychological distress.

N. Attitudes toward Help-Seeking Behavior in Lebanon

A literature review was conducted using the following databases (PsycInfo, Academic Search Complete, PubMed, MedLine and GoogleScholar) for the years 1950-2014, using the following keywords (Lebanon and help-seeking behavior, Lebanon and help-seeking attitudes, Lebanon and psychotherapy). The result revealed no publications concerned with attitudes toward help-seeking behavior in the Lebanese context. There were two studies with some relevance to the present proposal, however. Karam et al. (2006) conducted the first national survey on the 12-month prevalence of psychiatric disorders in the Lebanese population. The epidemiological study recruited 2857 adults between September 2002 and September 2003. The results revealed that 17% of the participants met the criteria for at least one DSM-IV disorder in the previous 12 months. In addition, out of those who met criteria for at least one DSM-IV disorder, 27% were classified as having a serious course of illness and 36% were classified as having moderate course of illness. Despite the high prevalence of psychiatric disorders, only 10.9% of those who met criteria for a 12-month psychiatric disorder sought help. Out of those who obtained treatment, only 18% sought mental-health services, whereas 52% were treated in the general medical sector. The rest sought religious and spiritual help, and consulted with fortune-tellers and alternative non-medical treatments. In addition, women sought treatment significantly more than men, and family income and education were positively related to help-seeking behavior. Karam et al. (2006) claimed that although Lebanon had the highest ratio of doctors to the population in the Arab World and a ratio that is similar to that in Western

countries (274 doctors per 100,000 population), the proportion of people who sought treatment for mental disorders in Lebanon was much lower than that in industrialized countries. Karam et al. (2006) added that financial constraints and taboos associated with obtaining mental-health services prevented Lebanese people from seeking such services.

Karam et al. (2008) investigated the lifetime prevalence of psychiatric disorders in a national representative sample in Lebanon. The results revealed that one-quarter of the sample met the criteria for at least one DSM-IV disorder at some time in their lives. In addition, 10.5% of the sample met the criteria for more than one psychiatric disorder. The results also revealed that approximately half of those who met criteria for mood disorder had obtained treatment. Moreover, the proportions of those who sought treatment for other disorders were lower (substance disorder 35.4%, anxiety disorders 37.2%, and impulse control disorders 15.1%). The median delay between age of onset of the disorder and age of first seeking treatment varied between 3 years for impulse disorder and 28 years for anxiety disorders. The results implied that although mental disorders were quite common among Lebanese population (1 in 4), many people with mental disorders did not seek mental-health services. Moreover, those who considered seeking mental-health services delayed their use of such services.

O. Gender and Attitudes toward Help-Seeking Behavior

The literature presented consistent gender differences on attitudes toward helpseeking behavior (e.g. Tata & Leong, 1994, Tobkaya, 2014, Yousaf, Popat & Hunter, 2015), where it has been established that women were more likely to have more favorable attitudes toward help-seeking behavior compared to men. Yousaf et al. (2015) found that men's attitudes toward help-seeking behavior were highly predicted by their attitudes

towards masculinity. The authors explained that men viewed help-seeking behavior in a less favorable way because they thought that mental-health professionals necessitated emotional openness, a trait that is contradictory to masculinity norms. Tata and Leong (1994) added that it was socially more appropriate for women to be emotionally expressive and to seek mental-health services. Men, however, were taught at an early age that emotional expression was both socially inappropriate and a sign of weakness.

CHAPTER II

Aims and Hypotheses

A. Aims

There is an increased recognition in the literature of the predictors that impact people's attitudes toward help-seeking behavior. The literature has focused on the effect of *self*-stigma, *social*-stigma, family cohesion, religiosity, and gender. Some attention has been placed on other predictors of attitudes toward help-seeking behavior, such as knowledge about psychotherapy and counseling, causes of mental illness and awareness of resources. Furthermore, the relation between Westernization and attitudes toward helpseeking behavior does not seem to be present in the published literature. In addition, the predictors of attitudes toward help-seeking behavior were never studied in the Lebanese context.

The present study aimed to examine the effect of *self*-stigma, *social*-stigma, family cohesion, causes of mental illness, knowledge about counseling and psychotherapy, awareness of resources, Westernization, religiosity, non-disclosure of family issues and gender on attitudes toward help-seeking behavior among a sample of undergraduate students at the American University of Beirut.

B. Hypotheses

Given that *self*-stigma was found to negatively predict attitudes toward help-seeking behavior (Boafo-Arthur, 2014; Tobkaya, 2014; Wang, 2013), the following hypothesis was tested:

Hypothesis 1. *Self*-stigma will be a negative predictor of attitudes toward helpseeking behavior.

The literature presented contradictory findings regarding the relation between *social*-stigma and attitudes toward help-seeking behavior (Boafo-Arthur, 2014; Franz, 2012; Pattyn et al., 2014; & Tobkaya, 2014). Therefore, the following hypothesis was explored:

Hypothesis 2. (exploratory) *Social*-stigma will be a significant predictor of attitudes toward help-seeking behavior.

Because familism was found to be negatively associated with attitudes toward helpseeking behavior (Miville & Constantine, 2006; Roldan-Bau, 2013), and family cohesion (balanced cohesion) was found to be negatively related to attitudes toward help-seeking behavior (Chang et al., 2013), the following hypotheses were tested:

Hypothesis 3. Balanced Cohesion will be a negative predictor of attitudes toward help-seeking behavior.

Hypothesis 4. Enmeshment will be a negative predictor of attitudes toward helpseeking behavior.

Hypothesis 5. Disengagement will be a positive predictor of attitudes toward helpseeking behavior.

Garcia (2008) found that participants who believed that healthy lifestyle factors caused mental illness had positive attitudes toward help-seeking behavior. Participants who believed that spiritual factors were the causes of mental illness, however, had negative attitudes toward help-seeking behavior. Therefore, the following hypothesis was tested:

Hypothesis 6. Healthy Lifestyle causes will be a positive predictor of attitudes toward help-seeking behavior, while supernatural causes will be a negative predictor of attitudes toward help-seeking behavior.

Given that Garcia (2008) found that participants who had better knowledge of psychotherapy tended to have positive attitudes toward help-seeking behavior. Therefore, the following hypothesis was tested:

Hypothesis 7. Knowledge of counseling and psychotherapy will be a positive predictor of attitudes toward help-seeking behavior.

Because the relationship between Westernization and attitudes toward help-seeking behavior has not been studied in the published literature, the following hypothesis was explored:

Hypothesis 8. (exploratory) Westernization will be a significant predictor of attitudes toward help-seeking behavior.

Given that Franz (2012) study was the first and only study in the literature to investigate the relation between awareness of resources and attitudes toward help-seeking behavior. Therefore, the following hypothesis was explored:

Hypothesis 9. (exploratory) Awareness of resources will be a significant predictor of attitudes toward help-seeking behavior.

Because the literature presented consistent negative association between religiosity and attitudes toward help seeking behavior (Crosby & Bossley, 2012; McGowan & Midlarsky, 2011), the following hypothesis was tested:

Hypothesis 10. Religiosity will be a negative predictor of attitudes toward helpseeking behavior.

Hypothesis 11. (exploratory) Non-disclosure of family issues will be a significant predictor of attitudes toward help-seeking behavior.

Given that the literature presented consistent gender differences on attitudes toward help-seeking behavior (e.g. Tata & Leong, 1994, Tobkaya, 2014, Yousaf, Popat & Hunter, 2015), where it has been established that women were more likely to have more favorable attitudes toward help-seeking behavior compared to men.

Hypothesis 12. Women will be more likely to have more favorable attitudes toward help-seeking behavior compared to men.

In terms of the contributions of the present study, the relationship between westernization and attitudes toward help-seeking behavior was never studied in the literature. Additionally, a unique contribution of the present research is the examination of the predictors of attitudes toward help-seeking behavior for the first time in the Lebanese context.

CHAPTER III

METHODOLOGY

A. Research Design

This is a quantitative non-experimental research study, in which a Lime Survey (online survey) compromising a demographics form and eight scales was used for data collection. The demographics form consisted of questions related to gender, age, nationality, major, year at university, monthly income, awareness of resources, help seeking behavior and other questions related to disclosure of family secrets. The eight scales measured the outcome variable (attitudes toward help seeking behavior) and the predictor variables (*self*-stigma, *social*-stigma, family cohesion, beliefs of causes of mental illness, knowledge about counseling and psychotherapy, religiosity and westernization). Reliability analyses were conducted to examine the psychometric properties of the scales prior to the use of multiple regression analyses to examine this study's aims and hypotheses.

B. Format of the Survey

The online questionnaire consisted of an informed consent form that informed the potential participants about the study, including its purpose, risks and benefits associated with it, and confidentiality of participant information, among other details that would help potential participants make an informed decision about whether or not to participate. The informed consent form also included the contact information of the principal investigator and the co-investigator; in case the participants had any questions regarding the study (see Appendix A). The online questionnaire also contained the demographics form and the eight

different scales mentioned above and described in detail next.

C. Scales and Reliability⁷

1. A Questionnaire of Demographic and Other Information. The demographics questionnaire consisted of four sets of items that measured demographic covariates, help-seeking behavior, awareness of resources and non-disclosure of family issues (see Appendix B).

- *a- Demographic Covariates.* Six items measured the demographic covariates; a student's gender, age, nationality, major, year at university, and his or her family's monthly income.
- *Help-Seeking Behavior*. Two items addressed whether participants or any significant person for them had ever obtained mental health-services in the past. One item assessed the type of help (medical help, mental help services, religious help, and help from family...) that participants would seek if they experienced any symptoms of depression, anxiety or any psychological distress in the future.
- c- Awareness of Resources. Awareness of mental-health services available for AUB students was assessed by three yes-no questions. The participants were asked whether they were aware of the presence of the Counseling Center at AUB, psychiatric services at AUBMC, and psychotherapy services at AUBMC before they completed this questionnaire. The items of this scale had high levels of missing values; item 1 (8.1%), item 2 (21%) and item 3 (33.6%). Therefore, Awareness of Resources was assessed by relying on the first item (counseling

⁷ Principal Axis Factoring was conducted to explore the factor analysis of the scales. The results revealed that the factor loadings of the scales were not confirmed in this study.

center) because it had the least amount of missing values and students who are in need of professional help are usually referred to the Counseling Center.

d- Non-Disclosure of Family Issues. The non-disclosure of family issues was measured using a three-item scale devised by the author. Participants were presented with three items to measure how much they agree with the notion that it is best not to spread one's "dirty laundry" [private, intimate details concerning members of one's household] outside the family. An example of a sample item is "I always control what I say about myself and about members of my family". Participants were asked to rate the three items on a 5-point Likert scale with "1" indicating "strongly disagree" and "5" indicating "strongly agree". The total score of the scale was calculated by summing the scores of the three items, with higher scores indicating higher levels of non-disclosure of family issues.

2. Attitudes toward Seeking Professional Psychological Help- Short Form

(ATSPP-SH). The Attitudes toward Seeking Professional Psychological Help-Short Form (Fischer & Farina, 1995) was used to measure the outcome variable (attitudes toward helpseeking behavior) (see Appendix C). ATSPP-SH is an abbreviated version of the Attitudes toward Seeking Professional Psychological Help Scale (Fisher & Turner, 1970). The ATSPP-SH included 10 items such as "If I believed I was having a mental breakdown, my first inclination would be to get Professional attention" and "I would want to get psychological help if I were worried or upset for a long period of time". The answers were given along a 4-point Likert scale with "0" indicating disagree and "3" indicating agree. The total score of the scale, which was calculated by summing the responses of the 10 items, reflects a participant's overall attitude toward help-seeking behavior. Higher scores

indicate positive attitudes toward help-seeking behavior and lower scores indicate negative attitudes toward help-seeking behavior. The validity of the short form of the scale was established by significant correlations (.87) with the original scale, indicating that both scales were measuring the same construct (Fisher & Farina, 1995). In addition, this scale had a high internal consistency .84 and high test-retest reliability .80 (Fisher & Farina, 1995). Moreover, Rojas-Vilches, Negy, and Reig-Ferrer, (2011) found that this scale had high reliability, with Cronbach alpha of .83, among a Latino student sample. In this study, the reliability analysis indicated that this scale had moderate reliability ($\alpha = .78$) (see Table 1).

3. *Self*-Stigma of Seeking Help (SSOSH). The *Self*-Stigma of Seeking Help (Vogel, Wade, & Haake, 2006) was used to measure "concerns about the loss in self-esteem a person would feel if they decided to seek help from a psychologist or other mental health professional" (Vogel et al., 2006, p.137; see Appendix D). The *self*-stigma scale consisted of 10 items, including "I would feel inadequate if I went to a therapist for psychological help" and "Seeking psychological help would make me feel less intelligent". The answers were given along a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The total score of the scale was obtained by calculating the sum of the 10 items with higher scores indicating greater level of *self*-stigma. The discriminant validity of the scale was demonstrated by the non-significant correlations of this scale with measures of social desirability, general level of psychological distress, and self-esteem (Vogel et al.). The Cronbach's alpha reliability of the scale ranged from .86 to .90, indicating high reliability. In addition, test-retest reliability was .72 (Vogel et al.). In this study, the

4. Perceptions of Stigmatization by Others for Seeking Help (PSOSH). The Perceptions of Stigmatization by Others for Seeking Help (PSOSH; Vogel, Wade, & Ascheman, 2009) was used to measure *social*-stigma – a person's perceived stigma in his or her social network (see Appendix E). The scale included five items such as "If you sought mental health services, to what degree do you think that people you interact with would think bad things of you". The answers were given along a 5-point Likert scale ranging from 1 (not at all) to 5 (a great deal). Higher scores indicate greater level of perceived social-stigma. In terms of construct validity, the PSOSH scale was found to be related to, but distinct from, other measures of stigma and help-seeking attitudes (Vogel et al. 2009). The scale had moderate associations with three different stigma measures (public stigma toward counseling, r = .31; public stigma toward mental illness, r = .20; and *self*stigma, r = .37). Vogel et al. found that the scale had good internal consistencies across various ethnic groups; .90 for African Americans, .90 for Latin Americans, .88 for Asians Americans and .89 for Native Americans. In addition, Roldan-Bäu (2013) found that the scale had good internal consistency among their English subsample ($\alpha = .91$), Spanish subsample ($\alpha = .93$), and the overall combined sample ($\alpha = .92$) and a good test-retest reliability of .77. In this study the reliability analysis indicated that this scale had high reliability ($\alpha = .88$; see Table 1).

5. The Family Adaptability and Cohesion Evaluation Scale (FACES IV; Olson, Gorall, & Tiesel, 2006). The enmeshed, disengaged, and cohesion subscales of the Family Adaptability and Cohesion Evaluation Scale were used to measure the level of family cohesion (see Appendix F). The enmeshed, disengaged and balanced cohesion Subscales of the FACES-IV consisted of a 21-item questionnaire that measures a person's perspectives

about their family relationships through attitudes and behaviors. The enmeshment subscale had 7 items such as "Family members feel pressured to spend most free time together". The disengagement subscale had 7 items such as "We get along better with people outside our family than inside". The balanced cohesion had 7 items such as "Family members are supportive of each other during difficult times". The three subscales were rated on a 5-point Likert scale with "1" indicating "strongly disagree" and "5" indicating "strongly agree". The total score of enmeshment, disengagement and balanced cohesion subscales were calculated by summing the items of each subscale. Higher scores on the enmeshment subscale indicate higher level of enmeshment, while higher scores on the disengagement subscale indicate higher level of disengagement among family members. Moreover, higher scores on the balanced cohesion indicate higher level of balanced cohesion among family members. These scales have very good levels of reliability; Disengaged=.87, Enmeshed=.77, and Balanced Cohesion=.89 (Olson, Gorall, & Tiesel, 2006). In this study the reliability analysis indicated that the balanced cohesion subscale had moderate reliability ($\alpha = .77$) and the enmeshment subscale and disengagement subscale had acceptable reliabilities ($\alpha = .63$, $\alpha = .68$ respectively; see Table 1).

6- Beliefs about Causes of Mental Illness. The Beliefs about Causes of Mental Illness scale (Landrine & Klonoff, 1994) was used to measure the causes of mental illness. Participants were presented with 29 items (covering a variety of factors: the supernatural, interpersonal stress, lifestyles, healthy habits and personality) (see Appendix G). Participants were asked to rate the extent to which they personally believe a given item to be a cause of mental illness on a 7-point Likert scale ranging from 1 "not at all" to 7 "extremely". The scale consisted of 5 subscales; supernatural causes, interpersonal stress,

lifestyle, healthy habits and personality. Supernatural causes included items about sinful thoughts, punishment from God, bad luck, and sinful act. Interpersonal-stress causes included items about relationships, lack of harmony with others, and sexual relations. Lifestyle causes included items concerned with lack of rest, exhaustion, drinking and smoking. Healthy-habits included items concerned with diet, hygiene and exercise. Finally, personality causes included items about emotions, worry, and anger. The total scores of the 5 subscales were calculated by adding the scores on the items of each subscale. Higher scores on the scales indicate higher belief that mental illnesses are caused by supernatural causes, interpersonal stress, healthy habits, lifestyle and personality. The scale was adapted by adding the word "curses" next to the item 6 "Hexes". Moreover, for item 28 "sex" was replaced with "sexual relations". The authors of the scale did not provide psychometric properties of the scale. In this study, the reliability analysis indicated that the interpersonal stress subscale ($\alpha = .74$) and personality subscale ($\alpha = .77$) and lifestyle subscale ($\alpha = .79$) had moderate reliabilities. The reliability analysis also indicated that the supernatural subscale ($\alpha = .87$) and the healthy habits subscale ($\alpha = .81$) had high reliabilities (see Table 1).

7. Knowledge about Counseling and Psychotherapy (Smith, Peck, &

McGroven, 2002). This scale was used to measure the knowledge about counseling and psychotherapy (see Appendix H). Participants were presented with 10 statements about counseling and were asked to indicate whether the statement is true, false or unknown (Smith et al. 2002). Smith et al. included the unknown category to deter participants from random guessing with an assumption that unknown responses are equal to incorrect responses. A correct response was scored "2 points" and incorrect or unknown responses

were sored "1 point". The total score of the scale, which ranged between 10 and 20, was calculated by adding the number of points scored on the 10 items. Higher scores indicate greater knowledge of counseling and psychotherapy.

8. Dominant Society Immersion Subscale (DSI) of the Stephenson Multigroup Acculturation Scale (SMAS) (Stephenson, 2000). The DSI subscale was used to measure Westernization (see Appendix I). Participants were presented with 15 items that assess the level of Westernization. Participants were asked to rate those items on a 4-point Likert scale: false (1), partly false (2), partly true (3), and true (4). The total score of the subscale was calculated by summing the scores of the 15 items, with higher scores indicating higher levels of Westernization. Stephenson (2000) established the validity of the DSI factor of the scale by comparing it with the Anglo Orientation Subscale (AOS subscale) of the Acculturation Rating Scale (r= .49) among a sample of diverse ethnic groups in New York City. Stephenson (2000) also demonstrated that the DSI subscale had a good reliability (.75). The scale was adapted by adding the word "European" next to United States, and French next to English language to cover most Western countries that are relevant in the Lebanese context. Moreover, item 14 "I feel at home in the United States" was replaced with "If I visited or will ever visit the United States/Europe I will feel at home." In this study the reliability analysis indicated that the DSI subscale had high reliability ($\alpha = .85$; see Table 1).

9. Religiosity Scale. The religiosity scale was used to measure the level of religiosity of participants (Rebeiz & Harb, 2010) (see Appendix J). The religiosity scale contained 8 items such as "I believe that God exists" and "Prayer to God is one of my usual practices". The answers were given along a 7-point Likert scale ranging from 1 (strongly

agree) to 7 (strongly disagree)⁸. Item number 6 was reverse coded. The total score of the scale was calculated by averaging the scores obtained on the 8 items, with lower scores indicating higher level of religiosity. This scale had been validated on a sample of Iraqi students (Fisher, Harb, Al-Sarrafe & Nashabe, 2008) and a representative sample of Lebanese nationals (Harb, 2010). Moreover, the religiosity scale had high internal consistency ($\alpha = .93$). In this study, the reliability analysis indicated that the religiosity scale had very high reliability ($\alpha = .94$; see Table 1)

D. Pilot Study

The questionnaires were pilot tested with 10 students/staff from the American University of Beirut. The average time needed to complete the questionnaire ranged between 10 to 25 minutes. The participants reported that the measures were clear. Therefore, no changes were necessary to any of the measures or procedures.

E. Main Study

1. Procedure and Data Collection. Data collection for the main study started after receiving the Institutional Review Board (IRB)'s approval on March 20, 2015 and ended on April 30, 2015. Participants were recruited from the AUB Psychology 101/201 pool using non-random convenience sampling. The students of the Psychology 101/201 research pool had a choice to earn up to 3 percentage points to their final course grade (research credit) by either participating in research studies or writing a brief report on an article from a psychological journal. This study was among other studies the students of the psychology 101/201 research pool had the choice to participate in.

⁸ The rating of the religiosity scale, from 1 (strongly agree) to 7 (strongly disagree), was inconsistent with the rating of the original scale. The rating of the original scale was from 1 (strongly disagree) to 7 (strongly agree).

The psychology 101/201 students received an announcement of this research study on Moodle (see Appendix K), which included some information about the purpose of the study and information on how to participate. Interested students were asked to click on the link at the end of the announcement, which directed them to the Lime Survey. Participants were presented with an informed consent form (described above). Upon consent, participants were asked to complete the questionnaire. Upon completion, each participant received a code. Participants emailed the generated codes to their PSYC 101/201 professor and received 1% point on their final course grade.

a. Order effects and counterbalancing. Online counterbalanced versions of the questionnaire were generated online to control for order and sequence effects. Participants, who consented to participate in this study, filled the demographics questionnaire first, and then, every participant filled a random sequence of scales generated by the Lime Survey.

2. Sample Characteristics and Demographics. The inclusion criteria were first to be enrolled in Psychology 101/201, and to be between the ages of 18 and 22 years. A total of 291 students completed the online questionnaire. Of those, the data from five students were excluded because of failure to meet the inclusion criterion for age. In the Recruitment Ad (Appendix K) and the Informed Consent Form (Appendix A), it was mentioned that only students who are between 18 and 22 were eligible to participate in this study. Moreover, the data from 15 students were excluded because they omitted two to three full scales. Finally, one case was deleted it was found to be both univariate and multivariate outlier, and one case was deleted because it was found to be both univariate Outliers" and "Outliers in the solution". Therefore, the final sample had 269 participants.

The final sample included 44.8% (117) males and 55.2% (144) females, the mean age of the participants was 18.69 years (SD = .89) with a range from 18 to 22 years of age (see Table 2). The majority of participants were Lebanese (82%). Moreover, most of the participants were not majoring in psychology (97.2%). Furthermore, most of the participants were enrolled in the sophomore year (66.7%), followed by junior year (18%) and freshman year (10.1%). The minority of participants, however, were enrolled in the senior year (5.2%).

In this sample, 11.5% of participants had a monthly income less than 1,500,000 LBP (\$1,000), whereas 15% of participants had a monthly income between 1,500,000 LBP and 4,500,000 LBP (\$1,000 and \$3,000). Furthermore, 9.7% of participants had a monthly income between 4,500,000 LBP and 7,500,000 LBP (\$3,000 and \$5,000), while 5.7% of participants had a monthly income between 7,500,000 LBP and 10,500,000 LBP (\$5,000 and \$7,000). In addition, 3.1% of participants had a monthly income between 10,500,000 LBP (\$7,000 and \$9.000), while 11.5% of participants had a monthly income of 13,500,000 LBP (\$7,000 and \$9.000), while 11.5% of participants had a monthly income of 13,500,000 LBP and above (\$9,000 and above). Finally, the majority of participants did not know their family monthly income (29.5%) or preferred not to say (14.1%)⁹.

Concerning obtaining mental health services, the majority of participants (85.4%) did not obtain mental-health services, whereas 11.6% of participants obtained mental-health services in the past. Moreover, 3 % of participants were not sure whether they obtained mental-health services in the past.

⁹ It is noteworthy that students were asked to indicate either their own monthly income if they were independent students or their parents' approximate monthly income if they were not financially independent.

When participants were asked whether they know any significant person for them (family member, relative, and friend) who obtained mental-health services, 45.8% were familiar with a significant other of theirs who obtained mental-health services. In addition, 42. % of participants were not familiar with significant others who obtained mental-health services. Finally, 12.1% of participants did not know whether they knew of significant others who obtained mental-health services. Finally, 12.1% of participants did not know whether they knew of significant others who obtained mental-health services. The majority of participants (63.7%) declared that, in case they experienced symptoms of depression, anxiety or any psychological distress, they would obtain religious help (9.4%), help from family (17%), help from friends or partners (18.1%) or would rely on themselves (19.2%). Moreover, 36.2% of participants declared that, in case they experienced symptoms of depression, anxiety or any psychological distress, they would obtain mental-health services (27.5%) or medical help (8.7%; see Table 3).

Finally, the majority of participants (96%) were aware of the availability of free of charge services at the Counseling Center at the American University of Beirut, while 4% of participants were not aware of such services

CHAPTER V

RESULTS

A. Preliminary Analysis

Preliminary analyses were conducted prior to examining the main analyses. The preliminary analyses involved missing values analysis, analysis of univariate and multivariate outliers, and normality analysis.

1. Missing value analysis.

First, as stated above, the data from five students were excluded because of failure to meet the inclusion criterion for age; and the data from 15 students were excluded because they omitted two to three full scales. Second, prior to the deletion of the two outliers (also mentioned above and further detailed next) missing value analysis was conducted on the 271 participants. The missing value analysis revealed that all the variables had less than 5% missing values except for the major of participants (6.3%), university level (15.5%), awareness of resources item 1 (8.1%), awareness of resources item 2 (21%) awareness of resources item 3 (33.6%), attitudes toward help-seeking behavior item 8 (7.7%), causes of mental illness item 3 (5.2%), causes of mental illness item 8 (14.4%), and westernization item 7 (10.3%). To test whether the data were missing completely at random Little's MCAR test was run. The statistically significant result indicated that MCAR (missing completely at random) may not be inferred. The data were not missing at random and could cause potential distortions in the analysis. Therefore, eight t-tests were run. The variables (major, university level, awareness of resources item 1, awareness of resources item 2, awareness of resources item 3, causes of mental illness item 3, causes of mental

illness item 8, and westernization item 7) that had missing values above 5% were recoded. The ranges of acceptable values were coded into 1 and the missing values were coded into 2. These two groups were compared on the outcome variable (attitudes toward help-seeking behavior) using eight independent samples t-test. The results revealed that there were no significant differences on the outcome variable (attitudes toward help seeking behavior) between participants who had left missing data and those who had not left missing data. Therefore, participants who left questions unanswered where not significantly different on the outcome variable from those who answered the questionnaire in its entirety.

2. Univariate and multivariate outliers. Univariate outliers were inspected through Z-scores and 7 univariate outliers were found with Z-scores above ± 3.29 standard deviations. Four univariate outliers were found on the variable age with case numbers 66, 176, 227, 268. One univariate outlier was found on the outcome variable (attitudes toward help-seeking behavior) with case number 64, one univariate outlier was found on enmeshment subscale with case number 190 and one univariate outlier was found on balanced cohesion subscale with case number 126. Multivariate outliers were inspected through Mahalanobis distance using SPSS syntax. Eleven cases were found to be multivariate outliers, $\chi 2$ (16) = 54.18, *p* < .01, with case numbers 61, 69, 87, 122, 149, 190, 194, 200, 244, 257, and 266. It was notable that case number 190 was deleted because it was both a univariate and multivariate outlier.

3. Outliers in the Solution. Outliers in the solution are cases that are not well predicted by the regression model and that exert undue bias on the parameters of the regression model. The presence of outliers in the solution was assessed through standardized residuals (Field, 2013). Cases with standardized residuals above the ± 3.29

significance level are considered outliers in the solution. An examination of the standardized residuals in the current analysis revealed that the standardized residuals ranged between -3.32 and 2.37 with one case above ± 3.29 . This case, number 64, was also found to be univariate outlier and thus was excluded from final analysis.

4. Normality. Normality of the variables was tested by examining the z-scores of skewness and kurtosis. Given that in large samples the Kolmogorov-Smirnov test reports significant results from small deviations, the z-scores of skewness and kurtosis was the best method to inspect normality. The z-skewness was obtained by dividing skewness by the standard error of skewness and the z-kurtosis was calculated by dividing kurtosis by the standard error of kurtosis.

The variables: attitudes toward help-seeking behavior, *self*-stigma, *social*-stigma, enmeshment, disengagement, westernization, supernatural causes, lifestyle causes, healthy habits, and interpersonal stress had z-skewness scores and z-kurtosis scores below the ± 3.29 significance level, indicating that these variables were normally distributed. The variable religiosity was positively skewed and the variables balanced cohesion, knowledge about counseling and psychotherapy and personality causes were negatively skewed with z-skewness scores above the ± 3.29 significance level.

The variable religiosity was transformed using a square root transformation. The variables balanced cohesion, knowledge about counseling and psychotherapy and personality causes were transformed using reflect and square root transformation. The z-skewness and z-kurtosis of transformed variables were less than the ± 3.29 significance level, indicating that these variables were normally distributed. However, using the transformed variables biased the regression coefficients and changed the direction of

relation between balanced cohesion and attitudes toward help-seeking behavior. Therefore, the variables religiosity, balanced cohesion and personality were used without transformations to preserve the integrity of the data. For the regression analysis, the normality of residuals (errors) and homoscedasticity are more important than the normality of predictors¹⁰. In this study, both assumptions, normality of errors and homoscedasticity were met (see Section on Assumptions of Regression).

B. Scales Descriptives

The means and standard deviations of the scales are provided in table 4. Concerning the outcome variable (attitudes toward help-seeking behavior), it seems that on average participants reported positive attitudes toward help seeking behavior (M = 26.01, SD = 5.71). Concerning the two stigma scales, it seems that on average participants had low levels of *self*-stigma (M = 23.41, SD = 6.41) and *social*-stigma (M = 11.46, SD = 4.71). Concerning the family cohesion scales, on average participants had high levels of balanced cohesion (M = 27.97, SD = 4.40), and low levels of enmeshment (M = 18.13, SD = 4.49) and disengagement (M = 17.63, SD = 4.45) among their families.

Concerning the beliefs in the causes of mental illnesses, it seems that on average participants had low levels of belief that supernatural factors (M = 3.05, SD = 1.18) and healthy habits (M = 3.31, SD = 1.56) were the causes of mental illnesses. Participants, however, had high levels of belief that interpersonal stress (M = 4.47, SD = 1.29), lifestyle

¹⁰http://www.researchgate.net/post/Is_linear_regression_valid_when_the_outcome_dependant_variable_not_ normally_distributed

(M = 4.46, SD = 1.31) and personality factors (M = 4.71, SD = 1.28) were the causes of the mental illnesses.

Concerning the knowledge about counseling and psychotherapy, it seems that on average participants had high levels of knowledge about counseling and psychotherapy (M = 16.58, SD = 1.88). In addition, on average participants had high levels of westernization (M = 44.12, SD = 8.66). Concerning the religiosity, on average participants had high levels of religiosity (M = 3.03, SD = 1.66). Finally, concerning the non-disclosure of family issues, it seems that on average participants reported that they prefer not to disclose family issues outside the family (M = 3.19, SD = .73).

C. Correlation between Predictor Variables and Attitudes toward Help-Seeking Behavior

1. Assumptions of the Pearson Correlation Test.

a. Variable Type. All the variables were scale variables except for gender and awareness of resources which were entered as nominal dichotomous.

b. Normality of Predictors and Outcome Variable. The variables attitudes toward help-seeking behavior, *self*-stigma, *social*-stigma, enmeshment, disengagement, supernatural causes, interpersonal causes, lifestyle causes, healthy habits, westernization and non-disclosure of family issues were normally distributed. The variables balanced cohesion, personality causes, knowledge about counseling and psychotherapy and religiosity, however, were not normally distributed.

A Pearson Correlation (one-tailed) test was conducted to investigate the correlation between the predictors: self-stigma, disengagement, enmeshment, supernatural causes, interpersonal causes, lifestyle causes, healthy habits, gender and the outcome variable attitudes toward help-seeking behavior. Pearson Correlation (one-tailed) test was used because these variables were normally distributed and they entitled confirmatory hypotheses. The correlation matrix is presented in table 5.

A Pearson Correlation (two tailed) test was conducted to investigate the correlation between the predictors: social-stigma, westernization, awareness of resources, nondisclosure of family issues and the outcome variable attitudes toward help-seeking behavior. Pearson Correlation (two tailed) test was used because these variables were normally distributed and they entitled exploratory hypotheses. The correlation matrix is presented in table 6.

Finally, a Spearman's Rho (one tailed) test was conducted to investigate the correlation between the predictors: balanced cohesion, personality causes, knowledge about counseling and psychotherapy, religiosity and the outcome variable attitudes toward help-seeking behavior. Spearman Rho's (one tailed) test was used because normality of these predictor variables were not normally distributed and they entitled confirmatory hypotheses. The correlation matrix is presented in table 7.

2. Main Analysis.

The Pearson correlation test revealed that there was a significant negative and large correlation between *self*-stigma and attitudes toward help-seeking behavior; r = -.56, p < .001 (*one-tailed*); indicating that participants who had higher levels of *self*-stigma tended to have negative attitudes toward help-seeking behavior. The Pearson correlation test also revealed that there was a significant negative and small to medium correlation between *social*-stigma and attitudes toward help-seeking behavior; r = -.16, p = .010; indicating that

participants who had higher levels of *social*-stigma tended to have negative attitudes toward help-seeking behavior.

The Spearman's rho correlation test revealed that there was non-significant correlation between balanced cohesion and attitudes toward help-seeking behavior; $r_s = -.00$, p = .491, ns (*one-tailed*). The Pearson correlation test revealed that there was a non-significant correlation between disengagement and attitudes toward help-seeking behavior; r = -.01, p = .458, ns (*one-tailed*). The Pearson correlation test, however, revealed that there was a significant negative and small to medium correlation between enmeshment and attitudes toward help-seeking behavior; r = -.12, p = .030 (*one-tailed*); indicating that participants who had higher levels of enmeshment in their families tended to have negative attitudes toward help seeking behavior.

The Pearson correlation test also revealed that there were non-significant correlations between beliefs in the causes of mental illness (supernatural causes, interpersonal stress, lifestyle healthy habits) and attitudes toward help-seeking behavior; r = -.08, p = .107, ns (*one-tailed*); r = .05, p = .200, ns (*one-tailed*); r = .08, p = .098, ns (*one-tailed*); r = .05, p = .228, ns (*one-tailed*) respectively. The Spearman's rho correlation test, however, revealed that there was a significant positive and small correlation between personality causes and attitudes toward help-seeking behavior; $r_s = .11$, p = .036 (*one-tailed*), indicating that participants who had higher levels of belief that personality factors are the causes of mental illnesses were more likely to have positive attitudes toward help-seeking behavior.

The Spearman's rho correlation test also revealed that there was a significant, positive, small to medium correlation between knowledge about counseling and

psychotherapy and attitudes toward help-seeking behavior; $r_s = .24$, p < .001 (*one-tailed*); indicating that participants who had higher knowledge about counseling and psychotherapy tended to have positive attitudes toward help-seeking behavior.

The Pearson correlation test also revealed that there was a significant, positive, and small to medium correlation between Westernization and attitudes toward help-seeking behavior, ; r = .18, p = .002; indicating that participants who had higher levels of westernization tended to have positive attitudes toward help-seeking behavior. The Pearson correlation test revealed, however, that there was a non-significant correlation between awareness of resources and attitudes toward help-seeking behavior; r = .04, p = .507, *ns*.

The Spearman's rho correlation test revealed that there was a non-significant correlation between religiosity and attitudes toward help-seeking behavior; $r_s = .04$, p = .248, *ns* (*one-tailed*).

The Pearson correlation test revealed that there was a significant, negative, and small to medium correlation between non-disclosure of family issues and attitudes toward help-seeking behavior, ; r = -.17, p = .007; indicating that participants who had higher levels of non-disclosure of family issues tended to have negative attitudes toward help-seeking behavior. Finally, the Pearson correlation test revealed that there was a significant, positive, and small to medium correlation between gender and attitudes toward help-seeking behavior, ; r = .17, p = .003 (*one-tailed*); indicating that on average, males (M = 24.83, SD = 6.14) were more likely to have negative attitudes towards help-seeking behavior while females (M = 27.00, SD = 5.22) were more likely to have positive attitudes toward help-seeking behavior.

D. Regression Analysis: Predictors of Attitudes toward Help-Seeking Behavior

To test for hypotheses 1 through 12; the predictors of attitudes toward helpseeking behavior, a multiple regression analysis was conducted using the forced entry method. The outcome variable was attitudes toward help-seeking behavior and the predictor variables were *self*-stigma, *social*-stigma, balanced cohesion, enmeshment, disengagement, supernatural causes, interpersonal distress, lifestyle, healthy habits, personality, knowledge about counseling and psychotherapy, Westernization, awareness of resources, religiosity, non-disclosure of family issues and gender.

1. Hypothesis Testing

The results of the multiple regression revealed that *self*-stigma was a significant negative predictor of attitudes toward help-seeking behavior (hypothesis 1 was supported). *Social*-stigma and enmeshment, however, was not found to be significant predictors of attitudes toward help-seeking behavior (Hypotheses 2 and 4 respectively were not supported). Moreover, balanced cohesion was found to be a significant negative predictor of attitudes toward help-seeking behavior (hypothesis 3 was supported). The results also revealed that disengagement and beliefs in the causes of mental illnesses were not found to be significant predictors of attitudes toward help-seeking behavior (hypotheses 5 and 6 were not supported). Furthermore, knowledge about counseling and psychotherapy and Westernization were found to be significant positive predictors of attitudes toward helpseeking behavior (hypotheses 7 and 8 respectively were supported). The results also revealed that awareness of resources, religiosity and gender were not found to be significant predictors of attitudes toward help-seeking behavior (hypotheses 9, 10 and 12 respectively

were not supported). Finally, non-disclosure of family issues was found to be a significant negative predictor of attitudes toward help-seeking behavior (hypothesis 11 was supported).

2. Influential cases. Influential cases are cases that exert large and undue influence on the parameters of the regression model. The presence of influential cases was assessed through Cook's Distances. Cook's distance is the difference between a parameter estimated using all cases and estimated when one case is excluded (Field, 2013). Cases with Cook's distance above 1 are considered influential cases. An examination of the Cook's distance in the current analysis revealed that the Cook's distances ranged between .00 and .06 with no cases above 1. This indicates that there were no influential cases in the data.

3. Outliers in the Solution. Outliers in the solution are cases that are not well predicted by the regression model and that exert undue bias on the parameters of the regression model. The presence of outliers in the solution was assessed through standardized residuals (Field, 2013). Cases with standardized residuals above the ± 3.29 significance level are considered outliers in the solution. An examination of the standardized residuals in the current analysis revealed that the standardized residuals ranged between -2.59 and 2.43 with no cases above ± 3.29 . This indicates that there were no outliers in the solution in the data.

4. Assumptions of regression. Prior to performing the main regression analysis the assumptions of regression was assessed.

a. Variable type. All the variables were scale variables except the two predictors awareness of resources and gender were entered as nominal dichotomous.

b. Ratio of cases to IV's. One of the important assumptions of regression is the sample size. A "rule of thumb" proposed by Tabachnick and Fidell (2013) states that: for a

medium size relationship between IVs (predictors) and the DV (outcome): the sample size N must be larger than (50+8m) if we are interested in multiple correlation and regression, where m is the number of IVs (predictors).

On the other hand, the sample size must be larger than (104+m), if we are testing for individual predictors, where m is the number of IVs (predictors).

The current data analysis had a sample size of N = 269 and 16 independent predictors, thus both sample size assumptions are met $(50+8\times16=178, \text{ or } 104+16=120)$.

c. Normality of predictors and outcome variable. The variables attitudes toward help-seeking behavior, self-stigma, social-stigma, enmeshment, disengagement, supernatural causes, interpersonal causes, lifestyle, healthy habits, westernization, and non-disclosure of family issues were normally distributed. The predictor variables: balanced cohesion, personality, knowledge about counseling and psychotherapy and religiosity were not normally distributed (see section on Normality).

d. Assumption of no Multicollinearity. The problem of Multicollinearity indicates that there is a high correlation between two or more predictors that affect the regression analyses (Field, 2013). There are two ways to check for multicolinearity; correlation matrix between predictors and Variance Inflation Factor (VIF) scores. Any correlation between two predictors above .8 would indicate a potential problem of multicollinearity. By inspecting the correlation matrix between predictors, there were no predictors that were highly correlated with each other (no significant correlation between two predictors with r > |.80|). This indicates that there is no potential problem of multicolinearity. In addition, Variance Inflation Factor (VIF) coefficients were examined in the final model of regression. VIF values above 10 would indicate that there is a problem of multicolinearity.

In the current analysis, VIF values were below 10 indicating that the assumption of no multicollinearity is met.

e. Normality of residuals. The assumption of normality of the residuals of the outcome variable attitudes toward help-seeking behavior was assessed through the histogram. The histogram revealed that the distribution of residuals is not significantly different from that of a normal distribution (the distribution displayed a bell shaped curve). Hence, the normality of residuals was met (see Figure 1).

f. Independence of errors. The independence of errors assumption states that the errors of prediction are independent of one another. The assumption of independence of errors is tested using the Durbin Watson statistic which varies usually between 0 and 4 (Field, 2013). A good value for this statistic is 2, however values between 1 and 3 are considered acceptable. In this analysis, the Durbin Watson value was 1.99 which is close to 2 and thus the assumption of independent errors was met.

g. Homoscedasticity of regression slopes. The assumption of homoscedasticity was tested by examining the following residuals scatter plot (ZRESID vs ZPRED). ZPRED is the standardized predicted values of the dependent variable based on the model while ZRESID is the standardized residuals or errors (Field, 2013). In this study, the plot revealed that the residuals scatter plot does show an even scatter around all scores, the points are therefore not funneling out. Therefore, the assumption of homoscedasticity was met (see Figure 2).

5. Hierarchical Multiple Regression Main Analysis. The F-test revealed that the regression model which contained the predictors (*self*-stigma, *social*-stigma, balanced cohesion, enmeshment, disengagement, supernatural causes, interpersonal distress,

lifestyle, healthy habits, personality, knowledge about counseling and psychotherapy, Westernization, awareness of resources, religiosity, non-disclosure of family issues and gender), and which was forced into the regression equation, was significantly better than the mean in explaining the variance in the outcome variable (attitudes toward help-seeking behavior), F(16, 222) = 8.63, p < .001.

The regression model which contained the predictors (*self*-stigma, *social*-stigma, balanced cohesion, enmeshment, disengagement, supernatural causes, interpersonal distress, lifestyle, healthy habits, personality, knowledge about counseling and psychotherapy, Westernization, awareness of resources, religiosity, non-disclosure of family issues and gender) explained 38.4% (R^2 =.384) of the variance of the outcome variable (attitudes toward help-seeking behavior).

The adjusted R square for the second model was $R^2 = .339$, indicating that the final regression model explained 33.9% of the variance of the outcome variable (attitudes toward help-seeking behavior) at the level of the population. In addition, when moving from the sample to the population, the shrinkage $\Delta R^2 = 4.5\%$; indicating that the regression model would generalize well to the population (see Table 8).

By inspecting the table of coefficients; the t-tests revealed that among the 16 predictors, only the predictors (*self*-stigma, balanced cohesion, knowledge about counseling and psychotherapy, westernization and non-disclosure of family issues) were significant predictors of the outcome variable (attitudes toward help-seeking behavior; see Table 9). Among the five significant predictors, *self*-stigma was the highest predictor of attitudes toward help-seeking behavior, followed by knowledge about counseling and psychotherapy, balanced cohesion, westernization and non-disclosure of family issues.

The t-test revealed that *self*-stigma was a significant negative and large predictor of the attitudes toward help seeking behavior; b = -.46, $\beta = -.51$, t (222) = -8.83, p < .001. This indicates that participants who had higher levels of *self*-stigma tended to have negative attitudes toward help seeking behavior. As such hypothesis 1 was supported.

The t-test also revealed that knowledge about counseling and psychotherapy was a significant, positive and small to medium predictor of the attitudes toward help seeking behavior; b = .61, $\beta = .20$, t (222) = 3.51, p = .001. This indicates that participants who had higher levels of knowledge about counseling and psychotherapy tended to have positive attitudes toward help seeking behavior. As such hypothesis 7 was supported.

The t-test also revealed that balanced cohesion was a significant, negative and small to medium predictor of the attitudes toward help seeking behavior; b = -.17, $\beta = -.13$, t(222) = -2.17, p = .031. This indicates that participants who had higher levels of balanced cohesion tended to have negative attitudes toward help-seeking behavior. Therefore, hypothesis 3 was supported.

The t-test also revealed that westernization was a significant, positive and small to medium predictor of the attitudes toward help seeking behavior; b = .08, $\beta = .12$, t (222) = 1.98, p = .049. This indicates that participants who had higher levels of westernization tended to have positive attitudes toward help seeking behavior. Therefore, hypothesis 8 was supported.

The t-test also revealed that non-disclosure of family issues was a significant, negative and small to medium predictor of the attitudes toward help seeking behavior; b = -.91, $\beta = -.12$, t (222) = -2.07, p = .040. This indicates that participants who had higher levels of non-disclosure of family issues tended to have negative attitudes toward helpseeking behavior. Therefore, hypothesis 11 was supported.

Finally, the t-tests revealed that the variables (*social*-stigma, enmeshment, disengagement, supernatural causes, interpersonal stress, lifestyle, healthy habits, personality, awareness of resources, religiosity, and gender) were not significant predictors of the outcome variable (attitudes toward help-seeking variable) with b = -.00, B = -.00, t (222) = -.05, p = .962, ns; b = .15, B = .12, t (222) = 1.79, p = .076, ns; b = -.02, B = -.01, t (222) = -.22, p = .830, ns; b = .01, B = .00, t (222) = .02, p = .987, ns; b = .19, B = .04, t (222) = .48, p = .630, ns; b = .28, B = .06, t (222) = .72, p = .474, ns; b = .09, B = .02, t (222) = .33, p = .746, ns, b = -.39, B = -.09, t (222) = -.92, p = .360, ns; b = 1.16, B = .04, t (222) = .76, p = .451, ns; b = .02, B = .01, t (222) = .11, p = .912, ns, b = 1.21, B = .11, t (222) = 1.92, p = .056, ns, respectively. Therefore, hypotheses 2, 4, 5, 6, 9, 10, 12 were not supported.

Chapter VI

Discussion

The aim of this research study was to determine the predictors of attitudes toward help-seeking behavior in a sample of undergraduate students in Lebanon. This aim was viewed as important because there was no published literature on this topic. Moreover, the lifetime prevalence of mental disorders in Lebanon (1 out of 4) was quite high, while many people who were suffering from mental disorders did not seek professional help (Karam et al., 2008). Thus, this study attempted to investigate the effect of *self*-stigma, *social*-stigma, family cohesion, beliefs in the causes of mental illnesses, knowledge about counseling and psychotherapy, Westernization, awareness of resources, religiosity, non-disclosure of family issues and gender on attitudes toward help-seeking behavior.

A. Interpretations of the Findings

The main findings of this study were that *self*-stigma, balanced cohesion, knowledge about counseling and psychotherapy, westernization and non-disclosure of family issues were found to be significant predictors of attitudes toward help-seeking behavior.

The results of this study revealed that *self*-stigma was a significant negative predictor of attitudes toward help-seeking behavior; indicating that participants who had higher levels of *self*-stigma tended to have negative attitudes toward help-seeking behavior. *Social*-stigma, however, was not found to be a significant predictor of attitudes towards help-seeking behavior. This finding implied that, in this study, *self*-stigma is likely a more important proximal predictor than *social*-stigma in determining attitudes toward help-

seeking behavior. This finding is in congruence with Tobkaya (2014) who found that *self*-stigma was a significant predictor of attitudes toward help-seeking behavior, while *social*-stigma was only significantly correlated with attitudes toward help-seeking behavior.

In terms of family cohesion and dynamics, balanced cohesion was found to be a significant negative predictor of attitudes toward help-seeking behavior; indicating that participants who had higher levels of balanced cohesion tended to have negative attitudes toward help-seeking behavior. This finding is consistent with Chang et al. (2013) who found that family cohesion (balanced cohesion) was negatively associated with help-seeking behavior. It is conceivable that participants who had balanced cohesion with their families (balanced togetherness and separateness) tended to revert to their families for psychological support and to place greater importance on preserving the integrity of the family. In addition, enmeshment and disengagement was not found to be significant predictors of attitudes toward help-seeking behavior.

Knowledge about counseling and psychotherapy was found to be a significant positive predictor of attitudes toward help-seeking behavior. On average, participants in this sample had high levels of knowledge about counseling and psychotherapy. Participants who had higher levels of knowledge about counseling and psychotherapy were more likely to have positive attitudes toward help-seeking behavior. It is conceivable that participants who had higher knowledge about counseling and psychotherapy were more likely to know about the effectiveness of psychotherapy on alleviating psychological distress; and thus held more favorable attitudes toward help-seeking behavior. This finding is in congruence with Garcia (2008) who found that participants who had higher knowledge about

psychotherapy were more likely to have positive attitudes toward help-seeking behavior among Latino American's students.

Westernization was found to be a significant positive predictor of attitudes toward help-seeking behavior. Participants who had higher levels of westernization were more likely to have positive attitudes toward help-seeking behavior. This finding is in congruence with the consistent positive association between acculturation and attitudes toward help-seeking behavior in the literature. For example, Zhang and Dixon (2003), among a sample of Asian international students in the United States, found that high level of acculturation was associated with positive attitudes toward help-seeking behavior. Similarly, Tata and Leong (1994), among a sample of Chinese American students, found that acculturation was positively associated with attitudes toward help-seeking behavior.

Non-disclosure of family issues was found to be a significant negative predictor with attitudes toward help-seeking behavior; indicating that participants who preferred not to disclose family issues tended to have negative attitudes toward help-seeking behavior. Stiles (1995; as cited in Farber, Berano, & Capobianco, 2004) claimed that "disclosure is the heart of psychotherapy" (p. 71). It is conceivable that the process of counseling and psychotherapy requires the clients to disclose some aspects of family issues and dynamics. Thus, participants who preferred not to disclose family issues tended to view help-seeking behavior in a less favorable way.

The results also revealed that beliefs about the causes of mental illnesses were not related to attitudes toward help-seeking behavior. This finding was not consistent with Garcia (2008) who found that spiritual causes were negatively associated with attitudes toward help-seeking behavior while healthy habits were positively associated with attitudes

toward help-seeking behavior. This sample showed us that their attitudes toward services were not impacted by the causes of mental illnesses. It is conceivable that those factors that relate more to the services (*self*-stigma, disclosure, etc.) and less to the illness impact attitude toward help-seeking behavior. This interpretation is bolstered by the fact that awareness of resources was not related either as the next result shows.

Awareness of resources was not found to be related to attitudes toward help-seeking behavior. Awareness of resources was assessed by relying on the first item (Counseling Center) because it had the least amount of missing values and students who are in need of professional help are usually referred to the counseling center. One could argue that this finding could be attributed to the level of missing values (8%). Thus, a clear relation between awareness of resources and attitudes toward help-seeking behavior could not be deduced from this study. Furthermore, this finding is consistent with Franz (2012) who also found that awareness of resources was not related to attitudes toward help-seeking behavior.

Similarly, religiosity was not found to be related to attitudes toward help-seeking behavior. This finding is inconsistent with Crosby and Bossley's (2012) and McGowan and Midlarsky's (2011) studies that found religiosity to be negatively associated with attitudes toward help-seeking behavior. One might argue that religiosity could be more relevant to seeking religious help than to seeking professional help. For instance, Abe-Kim, Gong, and Takeuchi (2004), in a sample of Filipino Americans, found that religiosity was positively associated with seeking religious help, but that it was not related to seeking mental-health services.

Although gender was not found to be a significant predictor of attitudes toward help-seeking behavior, on average, females tended to have positive attitudes toward helpseeking behavior while males tended to have negative attitudes. This finding is consistent with studies in the literature (e.g., Tata & Leong, 1995; Tobakaya, 2014, Yousaf et al., 2015), where it has been established that females were more likely to have more favorable attitudes toward help-seeking behavior compared to males. Yousaf et al. (2015) related these gender differences to masculinity; males who have higher levels of masculinity tended to be less emotionally expressive and thus hold negative attitudes toward helpseeking behavior.

B. Limitations

The main limitation of this study is that it measured attitudes toward help-seeking behavior rather than actual help-seeking behavior. Attitudes are not equal to actual behaviors; thus a better measurement of the outcome variable should have incorporated the measurement of actual help-seeking behavior. Another limitation is that the findings of the study cannot be generalized to all college students in Lebanon. The sample was recruited from the American University of Beirut; students at this institution might have different characteristics compared to other college students in Lebanon or the general public. For instance, participants in this study, on average, had higher levels of knowledge about counseling and psychotherapy and westernization. Thus, the results of this study can only be generalized to college students of similar socioeconomic status, similar westernization levels and other sample characteristics.

One of the limitations of this study is related to filling out questionnaires. It is conceivable that participants, who were recruited from the Psyc 101/201 pool, might have

engaged in social desirability while filling the Attitudes toward Seeking Professional Psychological Help or other scales. On average, participants reported positive attitudes toward help-seeking behavior that could be attributed to social desirability. Social desirability might also apply to the beliefs of the causes of mental illnesses scale. Social desirability occurs when participants respond to a questionnaire by selecting answers that reflect their will to look the best rather than their actual beliefs (Christensen, Johnson, & Turner, 2011). On average, participants had lower levels of belief that supernatural factors are the causes of mental illnesses. Participants, however, had higher levels of belief that lifestyle, personality and interpersonal stress are the causes of mental illnesses. This might be explained by the fact that participants were currently enrolled in a psychology class, and thus it is socially desirable to have lower levels of belief that supernatural factors are the causes of mental illness.

Another limitation of this study is that it employed a non-experimental research design. The non-experimental nature of the study allowed the researcher to infer correlation and prediction relationships between the variables. Correlation and regression analyses can only generate a predictive relationship between variables; while causation cannot be inferred from such relationships (Christensen et al., 2011).

Another limitation was the high levels of missing values on some of the variables such as major, university level and awareness of resources. This limitation might be linked to the format of the questionnaire; participants filled the questionnaire online with credit incentive only. It is conceivable that some students might have been rushing to complete the study and earn their credit, without being genuinely interested in the study or caring to put time and effort into their answers. Moreover, participants were not fully motivated to

complete the questionnaire or might have experienced fatigue due to the long battery of questionnaires.

C. Future Directions

A recommendation for future research on studying this topic would be to measure the actual help-seeking behavior instead of attitudes toward help-seeking behavior. It is important to study the effect of the predictors; *self*-stigma, knowledge about counseling and psychotherapy, westernization and balanced cohesion on actual help-seeking behavior. Moreover, future research might also study the relationship between the predictors- beliefs in the causes of mental illness and religiosity- and other forms of help-seeking behavior such as seeking religious help.

Another recommendation for future research would be to recruit participants from different universities or the general public to explore help-seeking behavior on a larger scale. Additionally, based on the levels of missing values on some of the items of the scales, it is recommended that in future research participants be provided with incentives aside from the credit, such as monetary incentives. It is also recommended that researchers include prompts/reminders throughout the survey for participants to take their time while completing the online questionnaire. Also, researchers might shorten the survey by eliminating assessments of variables that proved to be non-salient in this study, such as beliefs in the causes of mental illnesses and religiosity, to avoid fatigue. A final recommendation for future research would be to study attitudes toward help-seeking behavior using an experimental design. For example, researchers might measure participants' attitudes toward help-seeking behavior at baseline, and then provide an intervention that aims to diminish the levels of *self*-stigma and increase knowledge about

counseling and psychotherapy. Finally, researchers can measure how such interventions alter participants' attitudes toward help-seeking behavior.

D. Implications

Given the modest findings of this study, it might be a good idea for mental-health campaigns in Lebanon to target the domains *self*-stigma, knowledge about counseling and psychotherapy, and family dynamics. If interventions that promote mental-health services aim to decrease *self*-stigma associated with seeking professional help, this would help to inform the public that having psychological distress should not be viewed as a personal weakness (Tobkaya, 2014). In addition, it might be helpful that interventions aim to increase the public's knowledge about counseling and psychotherapy. General education could inform the public about the prevalence of psychological disorders, importance of psychotherapy in alleviating psychological distress, client-therapist relationship and the necessity of seeking professional help in case of distress. In addition, it might be a good idea that interventions address the relationship between family dynamics and seeking mental health services; thus informing the public that therapy is a safe environment where clients can express any kind of family distress without feeling shame or guilt.

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Table 1

Reliability of the Scales and Subscales: Chronbach's alpha

Scales and Subscales	Chronbach's alpha	N of items
Attitudes toward Seeking Professional Psychological Help- Short Form (ATSPP-SH)	.78	10
Self-stigma of Seeking Help (SSOSH)	.82	10
Perceptions of Stigmatization by Others for Seeking Help (PSOSH)	.88	5
The Family Adaptability and Cohesion Evaluation Scale (FACES IV)		21
Balanced Cohesion Subscale	.77	7
Disengagement Subscale	.68	7
Enmeshment Subscale	.63	7
Beliefs about Causes of Mental Illness		29
Supernatural Causes	.87	12
Interpersonal stress	.74	4
Lifestyle	.79	5
Healthy Habits	.81	3
Personality Causes	.77	5
Dominant Society Immersion Subscale (DSI) of the Stephenson Multigroup Acculturation Scale (SMAS)	.85	15
Religiosity Scale	.94	8

Table 2Descriptive of the Sample Characteristics

Demographics	Ν	Minimum	Maximum	Mean	Standard Deviation
Age	268	18.00	22.00	18.69	.89
Valid N (listwise)	268				

Table 3	
Descriptive of the Sample G	Characteristics

		Ν	%
Gender	Male	117	44.8%
	Female	144	55.2%
Nationality	Lebanese	218	82. %
	Non-Lebanese	48	18%
Major	Psychology	7	2.8%
	Others (non- psychology)	245	97.2%
Year at University	Freshman	27	10.1%
	Sophomore	178	66.7%
	Junior	48	18%
	Senior	14	5.2%
Monthly Income	Less than \$1000	26	11.5%
	\$1000- \$2,999	34	15%
	\$3,000- \$4,999	22	9.7%
	\$5,000- \$6,999	13	5.7%
	\$7,000- \$8,999	7	3.1%
	\$9,000 or more	26	11.5%
	Prefer not to say	32	14.1%
	Don't Know	67	29.5%
Have you ever obtained mental-health services (psychiatrists, psychologists, social workers)	yes	31	11.6%
	No	228	85.4%
	I am not sure	8	3%

Table 3- Continued

Descriptive	of the	Sample	<i>Characteristics</i>
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		N	%
Do you know any significant person for you (family member, friend, relative) who obtained mental-health services (psychiatrists, psychologists, social workers)	Yes	121	45.8%
workers)	No	111	42%
	I am not sure	32	12.1%
Do you know any significant person for you (family member, friend, relative) who obtained mental-health services (psychiatrists, psychologists, social workers)	Yes	121	45.8%
workers)	No	111	42%
	I am not sure	32	12.1%
If (in the future) you experience any symptoms of depression, anxiety or any psychological distress, you would seek	Medical Help	23	8.7%
	Mental-health services	73	27.5%
	Religious help	25	9.4%
	Help from family	45	17%
	Help from friends or partner	48	18.1%
	Rely on yourself	51	19.2%
Awareness of Resources-Counseling Center	Yes	237	96%
	No	10	4%

Table 4Scale Descriptives

	Ν	N Minimum	Maximum	Mean	Std.
	1N	winningin	wiaxiiiiuiii	Wiean	Deviation
Attitudes	269	11.00	40.00	26.01	5.71
Self-Stigma	269	10.00	42.00	23.41	6.41
<i>Social</i> -Stigma	269	2.00	25.00	11.46	4.71
Balanced Cohesion	269	13.00	35.00	27.97	4.40
Enmeshment	269	7.00	29.00	18.13	4.49
Disengagement	269	6.00	28.00	17.63	4.45
Supernatural causes	269	1.00	6.36	3.05	1.18
Interpersonal causes	269	1.00	7.00	4.47	1.29
Lifestyle causes	269	1.00	7.00	4.46	1.31
Healthy Habits	269	1.00	7.00	3.31	1.56
Personality	269	1.00	7.00	4.71	1.28
Knowledge about	269	11.00	20.00	16.58	1.88
Counseling and					
Psychotherapy					
Westernization	269	21.00	60.00	44.12	8.66
Religiosity	268	1.00	7.00	3.03	1.66
Non-disclosure of Family	268	1.33	5.00	3.19	.73
Issues					
Valid N (listwise)	269				

Table 5

Pearson Zero Order Correlation Matrix

	Attitudes toward help- seeking behavior
Self-Stigma	56**
Disengagement	01
Enmeshment	12*
Supernatural Causes	08
Interpersonal Stress	.05
Lifestyle	.08
Healthy Habits	.05

*. Correlation is significant at the 0.05 level (one-tailed). **. Correlation is significant at the 0.001 level (one-tailed).

Table 6

Pearson Zero Order Correlation Matrix

	Attitudes toward help- seeking behavior
Social-Stigma	16*
Westernization	.18*
Awareness of Resources	.04
Non-disclosure of Family issues	17*

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

Table 7

Spearman's Rho Zero Order Correlation Matrix

	Attitudes toward help- seeking behavior
Balanced Cohesion	00
Personality Causes	.11*
Knowledge about Counseling and Psychotherapy	.24**
Religiosity	.04

*. Correlation is significant at the 0.05 level (one-tailed). **. Correlation is significant at the 0.001 level (one-tailed).

n, n byiu	c, mujus	icu K Squu	i c						
Model R	R	Adjusted	Std. Error	Change St	atistics				Durbin-
	Square	R Square	of the	R Square	F	df1	df2	Sig. F	Watson
			Estimate	Change	Change			Change	
1 .62	.38	.34	4.68	.38	8.63	16	222	.00	1.99

Table 8R, R Square, Adjusted R Square

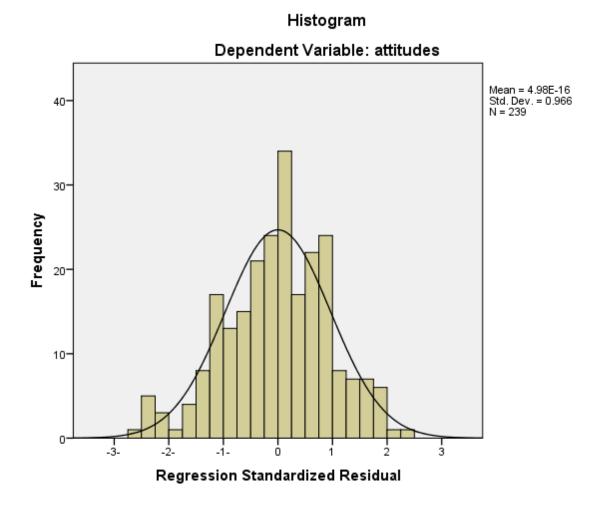
Table 9Regression Parameters

Mode	el	В	SE B	β
1	(Constant)	24.90	5.44	
	Self-Stigma	46	.05	51***
	Social-Stigma	.00	.07	.00
	Balanced cohesion	17	.08	13*
	Enmeshment scale	.14	.08	.12
	Disengagement scale	02	.08	01
	Supernatural causes	.01	.32	.00
	Interpersonal stress causes	.19	.39	.04
	Lifestyle causes	.28	.39	.06
	Healthy habits	.09	.26	.02
	Personality	39	.43	09
	Knowledge about counseling and psychotherapy	.61	.17	.20**
	Westernization	.08	.04	.12*
	Awareness of Resources	1.16	1.54	.04
	Religiosity	.02	.22	.01
	Non-disclosure of Family Issues	91	.44	12*
	Gender	1.21	.63	.10

Note: For model 1; $R^2 = .38$, $\Delta R^2 = .04$, * p < .05, ** p < .01, *** p < .001

Figure 1

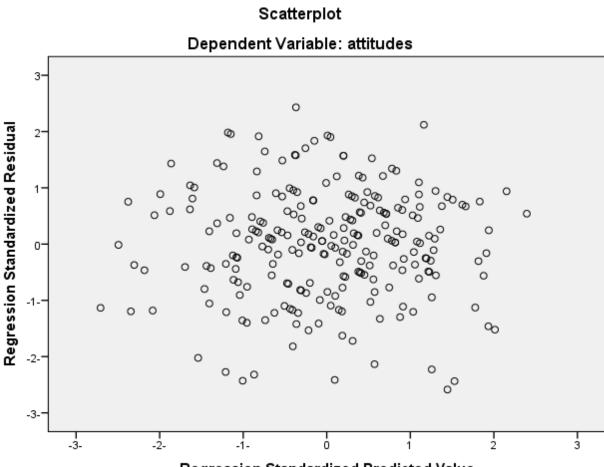
Histogram of Standardized Residuals



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Figure 2

Scatterplot



Regression Standardized Predicted Value

Appendix A Informed Consent American University of Beirut P.O. Box 11-0236, Riad El Solh, 1107 2020, Beirut, Lebanon CONSENT TO SERVE AS A PARTICIPANT IN A RESEARCH PROJECT

Principal Investigator: Nidal Daou, Ph.D., Assistant Professor of Psychology Department of Psychology, AUB nn07@aub.edu.lb + 01-350000 Ext. 4376/4360

Research Collaborator:	Fahed Hassan, Graduate Student of Psychology,
	Department of Psychology, AUB
	fyh06@aub.edu.lb

Nature and Purpose of the Project: This study involves research that aims to examine the predictors of attitudes toward help-seeking behavior in a sample of University students in Lebanon. 450 participants between 18 and 22 years old will be recruited in this study.

Methodology of Recruitment: The psychology department encourages students to make use of the extra credits that are given in exchange of their participation in research. Participating in research is one way for students to make extra credit. Students enrolled in Psyc101/201 who are interested in making extra credit could serve as research participants in research studies or can choose to write a brief report on articles in psychological journals.

Explanation of Procedures: As a research participant, you will be asked to read this informed consent form and consider carefully your participation. If you decided to participate (by clicking the yes button), the link will take you to the survey. The questions asked will help determine the effect of the predictors (*self*-stigma, *social*-stigma, family cohesion, causes of mental illness, knowledge about counseling and psychotherapy, awareness of resources, religiosity and westernization) on attitudes toward help-seeking behavior. The questions in the survey will also address your own help-seeking behavior. You are only urged to answer in a <u>truthful</u> and <u>honest</u> manner.

Your name and contact information will <u>not be asked</u> and it can be assured that there are <u>no identifiers</u>. <u>Anonymity</u> is secured and hence no one could link a certain response to a particular participant.

Only the project director and the co-investigator will have access to the data. **Data sets (i.e. soft copies) that are present on the computer will be protected via a secure password** for a period of seven years after which the data will be **permanently deleted**. It is expected that your participation in this survey will last between 30-45 minutes. Participants can skip some questions if they do not want to answer them.

Potential Discomfort and Risks: There are no more than minimal risks (similar to those encountered in routine physical and psychological exams) associated with participation in this survey.

Potential Benefits: The potential benefit is that your participation will contribute to the research concerned with understanding of the predictors of attitudes toward help-seeking behavior in Lebanon, where there is no research on this topic. By your participation you will earn one extra percentage point on your final grade on the Introductory Psychology Course.

Costs/Reimbursements: Your participation in this survey incurs no costs. By your participation you will earn one extra percentage point on your final grade on the Introductory Psychology Course.

Alternatives to Participation: If students decide not to participate in this or other research studies, they can choose to write a brief report on articles published in psychological journals in exchange for credit (one extra point added to the course average for each brief report – please ask your Psyc 101/201 instructor for further details).

Termination of Participation: Should you decide to give consent to participate in this survey, the project director might disregard your answers if the results show that you have not abided by the instructions given at the top of each set of questions. You may also choose to terminate your participation at any point by exiting the survey.

Confidentiality: The results of your participation will be kept fully confidential. This means that only the project director and co-investigator will have access to the data, which will be anonymous, as no identifying information would be linked to the data you provided. Only information that cannot be traced to you will be used in reports published or presented by the director or investigator. Raw data on the computer **will be protected via a secure password** for a period of 7 years following the termination of the study. After the 7 years have elapsed, the raw data will be **permanently** deleted.

Withdrawal from the Project: Your participation in this survey is <u>completely voluntary</u>. You may withdraw your consent to participate in this research at any point without any explanation and without any penalty. You're free to stop answering this survey at any point in time without any explanation.

Who to Call if You Have Any Questions: The approval stamp on this consent form indicates that this project has been reviewed and approved for the period indicated by the American University of Beirut (AUB) Institutional Review Board for the Protection of Human Participants in Research and Research Related Activities. If you have any questions about your rights as a research participant, or to report a research related injury, you may call: IRB, AUB: 01-350000 Ext. 5445 or 5455

If you have any concerns or questions about the conduct of this research project, you may contact:

Nidal Daou: <u>nn07@aub.edu.lb</u>, 01-350000 Ext. 4376/4360 Fahed Hassan: <u>fyh06@aub.edu.lb</u>, 71-229702

Debriefing: Two debriefing sessions will be held during the last week of the spring semester. Please contact us by May 4, 2015, at one of the emails above if you wish to attend either session, during which we will describe the study outcomes, providing a summary of the overall findings obtained and answering any questions you might have about the findings or your participation.

Participant's Consent: By clicking the yes button, you agree that <u>you have had the time to</u> <u>read and understand the information</u> contained in this document, and <u>to consider your</u> <u>participation</u> in this research study. You also <u>provide consent to participate in this research</u> <u>study</u>. The purpose, procedures to be used, as well as, the potential risks and benefits of your participation have been explained to you in detail. You can refuse to participate or withdraw your participation in this study at any time without penalty.

I agree to participate in this research YES NO

Appendix B

A	Questionnaire of De	mographic and C	Other Information	
1. Gender □ Male	□ Female			
2. Age:				
3. Nationality:				
4. Major:				
5. Year at University	7			
□ Freshman	□ Sophomore	Junior	□ Senior	Graduate
6. Monthly Income (If you are a depende	ent student, pleas	e mark your pare	nt's approximate
monthly income). Ple	ease use the scale pr	ovided:		
Less than \$1,000				

- ____Less than \$1,000 ___\$1,000-2,999 ___\$3,000-4,999 ___\$5,000-\$6,999 ___\$9,000 or more ___Prefer not to say
- Don't know

7. Have you ever obtained mental-health services (psychiatrists, psychologists, social workers...)

 \Box Yes \Box No \Box I am not sure

8. Do you know any significant person for you (family member, friend, relative...) who

obtained mental-health services (psychiatrists, psychologists, social workers...)

 \Box Yes \Box No \Box Don't know

9. If (in the future) you experience any symptoms of depression, anxiety or any

psychological distress, you would seek: (Note: You may select only one option, please

select the one that you believe would be <u>most helpful</u>, even if there were other options that you would seek):

□Medical help

- □ Mental-health services
- □Religious help
- □ Help from family
- □ Help from friends or partner
- \Box Rely on yourself

To the best of your knowledge, which of the following resources are available for AUB students who are seeking mental healthcare? Please check those resources that you are aware of, where you could seek treatment if necessary.

 Free-of-charge services at the Counseling Center at American University of Beirut, Student Section.

 $\Box \ Yes \ \ \Box \ \ No$

2. Free-of-charge psychiatric services at AUB Medical Center, Department of Psychiatry, for students and staff with HIP coverage.

 $\ \ \square \ Yes \quad \square \quad No$

 Free-of-charge12-session psychotherapy at AUB Medical Center, Department of Psychiatry, for students and staff with HIP coverage.

 $\ \ \square \ Yes \quad \square \quad No$

	Strongly Disagree	Slightly Disagre e	Neutral	Slightl y Agree	Strongl y Agree
1. It is best not to spread our dirty laundry outside the family (not to share family secrets with people outside the family).	1	2	3	4	5
2. I always control what I say about myself and about members of my family.	1	2	3	4	5
3. Talking about family issues with psychologists/psychiatrists/social workers is appropriate ¹¹ .	1	2	3	4	5

To what extent are you likely to agree with the following statements?

¹¹ Item 3 was reverse coded.

Appendix C Attitudes toward Seeking Professional Psychological Help- Short Form (ATSPP-SH) (Fischer & Farina, 1995)¹²

Below are a number of statements pertaining to psychology and mental health issues. Use the rating scale below to **select the number that best describes your opinion**. There are **no wrong answers** and the only right ones are whatever you honestly feel or believe.

	Disagre e	Partly Disagre e	Partly Agree	Agree
1. If I believed I was having a mental breakdown, my first inclination would be to get Professional attention.	0	1	2	3
2. The idea of talking about problems with a psychologist strikes me as a poor way to get rid of emotional conflicts.	0	1	2	3
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.	0	1	2	3
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.	0	1	2	3
5. I would want to get psychological help if I were worried or upset for a long period of time.	0	1	2	3
6. I might want to have psychological counseling in the future.	0	1	2	3
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.	0	1	2	3
8. Considering the time and expense involved in psychotherapy, it would have doubtful value for a person like me	0	1	2	3
9. A person should work out his or her own problems; getting psychological counseling would be a last resort.	0	1	2	3
10. Personal and emotional troubles, like many things, tend to work out by themselves.	0	1	2	3

¹² Items 2, 4, 8, 9 and 10 were reverse coded.

Appendix D

Self-stigma of Seeking Help (SSOSH) (Vogel, Wade, &Haake, 2006)¹³

Please select from the following answer choices:

	Strongl yDisagr ee	Disagre e	Agree and Disagre e Equally	Agree	Strongl y Agree
1. I would feel inadequate if I went to a therapist for psychological help.	1	2	3	4	5
2. My self-confidence would NOT be threatened if I sought professional help.	1	2	3	4	5
3. Seeking psychological help would make me feel less intelligent.	1	2	3	4	5
4. My self-esteem would increase if I talked to a therapist.	1	2	3	4	5
5. My view of myself would not change just because I made the choice to see atherapist.	1	2	3	4	5
6. It would make me feel inferior to ask a therapist for help.	1	2	3	4	5
7. I would feel okay about myself if I made the choice to seek professional help.	1	2	3	4	5
8. If I went to a therapist, I would be less satisfied with myself.	1	2	3	4	5
9. My self-confidence would remain the same if I sought help for a problem I could not solve.	1	2	3	4	5
10. I would feel worse about myself if I could not solve my own problems.	1	2	3	4	5

¹³ Items number 2, 4, 5, 7, and 9 were reverse scored.

Appendix E

Perceptions of Stigmatization by Others for Seeking Help (PSOSH) (Vogel, Wade, and

Ascheman, 2009)

Please **imagine** that you had a problem that needed to be treated by a mental health

professional. Use the following scale to respond to the following question:

If you sought mental health services, to what degree do you think that people you interact

with would

	Not at all	A little	Somewh at	A lot	A Great Deal
1. Think of you in a less favorable way	1	2	3	4	5
2. Think bad things of you	1	2	3	4	5
3. React negatively to you	1	2	3	4	5
4. See you as seriously disturbed	1	2	3	4	5
5. Think you posed a threat to others	1	2	3	4	5

Appendix F¹⁴

The Family Adaptability and Cohesion Evaluation Scale (FACES IV; Olson, Gorall, &Tiesel, 2006)

The following statements address the relationship among your family members (including you). Statements that include the word "We" refers to your family members (including you). There are no wrong or right answers and the only right ones are whatever you honestly feel or believe.

	Strongl y Disagre e	Generall y Disagree	Undecide d	Generall y Agree	Strongl y Agree
1.Family members are involved in each other's lives.	1	2	3	4	5
2.We get along better with people outside our family than inside.	1	2	3	4	5
3.We spend too much time together.	1	2	3	4	5
4.Family members feel very close to each other.	1	2	3	4	5
5.Family members seem to avoid contact with each other when at home.	1	2	3	4	5
6.Family members feel pressured to spend most free time together.	1	2	3	4	5
7.Family members are supportive of each other during difficult times.	1	2	3	4	5
8.Family members know very little about the friends of other family members.	1	2	3	4	5
9.Family members are too	1	2	3	4	5

¹⁴ Permission to use the scale was obtained from www.facesiv.com

dependent on each other.					
10.Family members consult other family members on important decisions.	1	2	3	4	5
11.Family members are on their own when there is a problem to be solved.	1	2	3	4	5
12.Family members have little need for friends outside the family.	1	2	3	4	5
13.Family members like to spend some of their free time with each other.	1	2	3	4	5
14.Our family seldom does things together.	1	2	3	4	5
15.We feel too connected to each other.	1	2	3	4	5
16.Although family members have individual interests, they still participate in family activities	1	2	3	4	5
17.Family members seldom depend on each other.	1	2	3	4	5
18.We resent family members doing things outside the family.	1	2	3	4	5
19.Our family has a good balance of separateness and closeness.	1	2	3	4	5
20.Family members mainly operate independently.	1	2	3	4	5
21.Family members feel guilty if they want to spend time away from the family.	1	2	3	4	5

Appendix G

Beliefs about Causes of Mental Illness (Landrine & Klonoff, 1994)

In the next section, select the following items in terms of how important you personally

believe them to be causes of mental illness.

1 2 3		4		5		6	7
Not at							
Extremely							
All		1	1	1	1	1	D
	Not						Extreme
	at all						ly
1. Sinful thoughts	1	2	3	4	5	6	7
2. Punishment from God	1	2	3	4	5	6	7
	1		_	+		0	
3. The Evil Eye	1	2	3	4	5	6	7
4. Sinful acts	1	2	3	4	5	6	7
5. Lack of faith	1	2	3	4	5	6	7
6. Hexes (Curses)	1	2	3	4	5	6	7
7. Payback	1	2	3	4	5	6	7
8. Thin blood	1	2	3	4	5	6	7
9. Emotions	1	2	3	4	5	6	7
10. Relationships	1	2	3	4	5	6	7
11. Worry	1	2	3	4	5	6	7
12. Lack of harmony with	1	2	3	4	5	6	7
nature	1	2	5	4	5	0	1
13. Lack of harmony with	1	2	3	4	5	6	7
others							
14. Envy	1	2	3	4	5	6	7
15. Diet	1	2	3	4	5	6	7
16. Hygiene	1	2	3	4	5	6	7
17. Exercise	1	2	3	4	5	6	7
18. Lack of rest	1	2	3	4	5	6	7
19. Exhaustion	1	2	3	4	5	6	7
20. Ambition	1	2	3	4	5	6	7
21. Anger	1	2	3	4	5	6	7
22. Anxiety	1	2	3	4	5	6	7
23. Bad luck	1	2	3	4	5	6	7
24. Fate	1	2	3	4	5	6	7

25. Drinking	1	2	3	4	5	6	7
26. Smoking	1	2	3	4	5	6	7
27. Genes	1	2	3	4	5	6	7
28. Sexual relations	1	2	3	4	5	6	7
29. Weather	1	2	3	4	5	6	7

Please if you have any comment; write it in the box below:

Appendix H

Knowledge about Counseling and Psychotherapy (Smith, Peck and McGroven, 2002) Please respond to the following statements about counseling by selecting T if the statement is true, F is the statement is false, and U if you are not sure or do not know. Please do NOT guess.

	True	False	Not Sure
1. Sexual relations between counselor and client are allowed under certain circumstances.	Т	F	U
2. Ideally, the direction and focus of counseling sessions are determined jointly between counselor and client.	Т	F	U
3. Counselors are required to follow an ethical code.	Т	F	U
4. Many counselors may prescribe medication for mentally ill clients.	Т	F	U
5. Counselors have an ethical and legal responsibility to report suspected child abuse to the appropriate authorities	Т	F	U
6. Counseling usually requires several years of intensive therapy.	Т	F	U
7. One of the primary responsibilities of a counselor is to give legal advice.	Т	F	U
8. One of the counselor's primary responsibilities is to encourage a client's personal responsibility and individual autonomy.	Т	F	U
9. Almost all licensed counselors must have a master's degree in counseling or a closely related field from an accredited university.	Т	F	U
10. One of the primary goals of counseling is to change the client's personality.	Т	F	U

Appendix I

Dominant Society Immersion Subscale (DSI) of the Stephenson Multigroup Acculturation

Scale (SMAS) (Stephenson, 2000)¹⁵

Below are a number of statements that evaluate changes that occur when people interact

with others of different cultures or ethnic groups. The West refers to America, Australia,

Canada and Western Europe (Britain, France, Germany, Italy, Spain, and Portugal)

Select the answer that best matches your response to each statement

	False	Partly False	Partly True	True
1. I attend social functions with people from the				
West.	1	2	3	4
2. I have many acquaintances from the West.	1	2	3	4
3. I speak English (or French/Spanish) at home.	1	2	3	4
4. I know how to prepare Western foods.	1	2	3	4
5. I am familiar with important people in				
Western history.	1	2	3	4
6. I think in English (or French/Spanish).	1	2	3	4
7. I speak English (or French/Spanish) with my spouse or partner.	1	2	3	4
8. I feel totally comfortable with Western people.	1	2	3	4
9. I understand one of these languages English (or French/Spanish) but I'm not fluent in any of those languages.	1	2	3	4
10. I am informed about current affairs in the	1	2	3	4

¹⁵ Item nine was reverse coded.

West.				
11. I like to eat Western foods.	1	2	3	4
12. I regularly read a Western-based newspaper.	1	2	3	4
13. I feel comfortable speaking English (or				
French/Spanish).	1	2	3	4
14. If I visited or will ever visit a Western				
country, I would feel at home.	1	2	3	4
15. I feel accepted by Western people	1	2	3	4

Appendix J

Religiosity Scale (Rebeiz & Harb, 2010)¹⁶

Instructions: For the following set of questions, please select the answer that best describes

your religious views

1	2	3	4	5	6	7
Strongly						Strongly
Agree						Disagree

1. I	believe that God exists.	1	2	3	4	5	6	7
2. P	rayer to God is one of my usual practices.	1	2	3	4	5	6	7
3. R	eligion gives me a great amount of security in life.	1	2	3	4	5	6	7
4. I e	consider myself a religious person.	1	2	3	4	5	6	7
	Iy religion influences the way I choose to act in my putine life.	1	2	3	4	5	6	7
	feel there are many more important things in life nan religion.	1	2	3	4	5	6	7
7. I a	am interested in religion.	1	2	3	4	5	6	7
	eligious considerations influence my every day ffairs.	1	2	3	4	5	6	7

¹⁶ Item six was reverse coded.

Appendix K Recruitment Ad

INTERESTED IN BEING PART OF A RESEARCH PROJECT?

You are invited to participate in a research study which will examine the predictors of attitudes toward help-seeking behavior. The results of this study may help in the development of public campaigns and policies that advocate for mental-health services. Participants must be between 18 and 22 years old to be eligible to participate)

You will be asked to participate in an online survey. The time commitment of each participant is expected to last 30-45 minutes.

<u>Risks</u>: There are no foreseeable physical or psychological risks involved with participating in this study that exceed minimal risks ordinarily encountered in daily life or during performance of routine physical or psychological evaluation, although the possibility of some unforeseeable risks exists.

Benefits: By taking part in this study you may develop a new understanding about attitudes toward help-seeking behavior. By participating in this study, you may help in the development of public policies and campaigns that advocate for mental-health services. You will receive 1 course credit (added to your Psyc 101/201 course grade) for your participation in this study.

<u>Alternatives:</u> If you are not interested in participating in this study and would still like the opportunity to earn an extra credit, you could participate in another advertised study or write a summary of a research article. Please speak with your course instructor regarding alternatives to participation.

Your participation in this study is **voluntary**, and you may decide not to participate without prejudice, penalty, or loss of benefits to which you are otherwise entitled.

To earn your extra credit: You receive a <u>completion code at the end of the survey</u>. Please give this completion code to your Psychology instructor who will then provide you with the extra credit.

If you have any questions about participation, please contact:

Principal Investigator:

Nidal Daou, Ph.D. Assistant Professor of Psychology American University of Beirut Email: <u>nn07@aub.edu.lb</u> Ext: 4376/4360, Jesup 108 **Co-Investigator:** Fahed Hassan Graduate Student in Psychology, American University of Beirut Email: <u>fyh06@aub.edu.lb</u> Mobile: 71/229702

Interested in Participation?

Please visit the link below <u>https://survey.aub.edu.lb/index.php/511352/lang-en</u> If the webpage seems broken and the link doesn't work please clear your browser history.