AMERICAN UNIVERSITY OF BEIRUT

VARIABLES ASSOCIATED WITH PARENTAL ATTITUDES TOWARDS MENTAL HEALTH SERVICES FOR THEIR CHILDREN

by
ELISSA JOHN HANNA

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

Beirut, Lebanon
July 2023

AMERICAN UNIVERSITY OF BEIRUT

VARIABLES ASSOCIATED WITH PARENTAL ATTITUDES TOWARDS MENTAL HEALTH SERVICES FOR THEIR CHILDREN

by

ELISSA JOHN HANNA

Approved by:

Signature

_____

Dr. Sabine Saade, Assistant Professor
Department of Psychology — Advisor

Signature

_____

Dr. Mona Ayoub, Assistant Professor
Department of Psychology — Member of Committee

Signature

_____

Dr. Vivienne Badaan, Assistant Professor
Department of Psychology — Member of Committee

Date of thesis defense: July 25, 2023

AMERICAN UNIVERSITY OF BEIRUT

THESIS RELEASE FORM

Student Name: ____Hanna_____Elissa_____John_____
Last First Middle

I authorize the American University of Beirut, to: (a) reproduce hard or electronic copies of my thesis; (b) include such copies in the archives and digital repositories of the University; and (c) make freely available such copies to third parties for research or educational purposes:

☒ As of the date of submission

☐ One year from the date of submission of my thesis.

☐ Two years from the date of submission of my thesis.

☐ Three years from the date of submission of my thesis.

_____8/23/2023_____

Signature Date

ACKNOWLEDGEMENTS

My thesis journey has been both difficult and rewarding. There were several people along my journey who were helpful in guiding me on my project, as well as empowering me to do my best during these challenging and uncertain times. First and foremost, I would like to thank Dr. Sabine Saade, my thesis advisor, for her time, guidance and feedback.

I would also like to thank Dr. Vivienne Badaan, and Dr. Mona Ayoub for their time, insightful feedback and comments.

Finally, I would like to thank my parents, and my friends, especially my friend and my dear colleague Jana Hamam, for their continuous support and encouragement.

ABSTRACT
OF THE THESIS OF

Elissa John Hanna for Master of Arts
Major: Clinical Psychology

Title: Variables Associated with Parental Attitudes towards Mental Health Services for their Children

A number of studies have investigated the barriers that could hinder children and adolescents from accessing and benefiting from mental health services. Only a few studies have been conducted in the Arab world and in Lebanon specifically. Most studies did not evaluate the contribution of openness to experience with attitudes towards mental help seeking, nor did they distinguish between the different types of stigma. Based on the perceived gaps in the scientific literature, this thesis aims to identify the possible variables that might be associated with parents' attitudes towards seeking mental health services for their children. To pursue these objectives, we recruited 243 parents of children and adolescents between the ages of 1.5 and 18 years in Lebanon. Participants were asked to complete several questionnaires online. These questionnaires allowed us to evaluate the association between sociodemographic factors, parental recognition of mental health problems, stigma, openness to experience and confidence in mental health professionals and parental help-seeking attitudes. To pursue the stated objectives, we ran descriptive, correlation and regression analyses on the collected dataset.

Results showed that public stigma, parents' internalized stigma, treatment stigma, openness to experience, health insurance availability, parental income and confidence in mental health professionals were significantly associated with parental attitudes towards mental health services. These results of the study point to various ways of reducing the treatment gap in Lebanon.

Keywords: parental income, health insurance, health-seeking attitude, stigma, openness to experience, confidence in mental health professionals, recognition of problem

TABLE OF CONTENTS

TABLES

Table

CHAPTER I

VARIABLES ASSOCIATED WITH PARENTAL ATTITUDES TOWARDS MENTAL HEALTH SERVICES

A. Mental Disorders and Their Prevalence Rates

According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-5; American Psychiatric Association, 2013), mental disorders are dysfunctional patterns of thoughts, emotions, and behaviors that usually cause significant distress and impairments in various areas of functioning. Those dysfunctional patterns could represent an underlying disturbance in psychological, developmental, and biological processes that govern mental health (Thyer, 2015). The biopsychosocial model stipulates that those mental disorders usually result from the dynamic interplay between biological, psychological, developmental, and environmental factors (Bolton & Gillett 2019). This model has lent its explanatory powers to many disorders, mood disorders (e.g., depression) being one of them. Mood disorders could result from the interaction between genetic risk factors and environmental ones, such as parental mood (Kwong et al., 2019). This multi-factorial perspective has also been used to shed light on other disorders, such as Autism Spectrum Disorder (ASD; Kim et al., 2019). ASD is believed to result from the interaction between genetic, environmental, and developmental risk factors (Kim et al., 2019). Other childhood and adolescent mental disorders include but are not limited to Conduct Disorder (CD), Oppositional Defiant Disorder (ODD), Attention Deficit Hyperactivity Disorder (ADHD), Learning Disorders (LD), anxiety disorders, and eating disorders (APA, 2013). The worldwide prevalence rate of mental disorders in children and adolescents has been estimated at 13.4% (Polanczyk et al.,

2015), with some evidence pointing to an increase in incidence rates over the past decade (Kyu et al., 2016). As for specific prevalence rates, about 2.47% of American children and adolescents are believed to have ASD (Xu et al., 2018), while 6.2% of children are believed to suffer from disruptive behavior disorders, including CD and ODD, 2.7% from ADHD, 8.1% from anxiety, 4% from major depressive disorder, and 1-2% of adolescents from eating disorders (Carr, 2015). As for Lebanon, only a few studies have assessed the prevalence rates for developmental disabilities locally. ASD prevalence rate is 1.5% (Chaaya et al., 2016), and ADHD's prevalence rate is 3.2% (Obeid & Saade, 2022).

B. The Importance of Seeking Mental Help Early

Childhood and adolescence are critical periods in an individual's life. During these developmental periods, an individual is faced with many challenges and milestones they will need to meet to successfully transition into the next period of their life (Bonnie & Backes, 2019). In addition to representing critical periods of growth, those developmental periods could also represent fertile grounds for the inception or worsening of mental disorders (Scott, 2016). Indeed, several disorders have their first onset during childhood and adolescence, such as CD, ADHD, and anxiety (Mclaughlin et al., 2012). In fact, half of all lifetime mental health disorders have been found to emerge before the age of fourteen (Kessler et al., 2005). The presence of a mental health disorder during childhood and adolescence could have negative consequences (Mclaughlin et al., 2012). Among those consequences are poor academic performance, troubled parent/child relationships, aggressive behaviors such as anger outbursts (Mclaughlin et al., 2012), lower academic achievement, substance abuse, violence, and

poor reproductive and sexual health (Patel et al., 2007). If left untreated, mental health difficulties could worsen, potentially resulting in more severe impairments (e.g., substance use, suicide; Boulter & Rickwood, 2013), possibly impeding a successful transition into adulthood (Pine et al., 1998). Beyond its repercussions, childhood and adolescent mental health problems could lead to societal and economic burdens (Fineberg et al., 2013).

Given the high prevalence rates of childhood and adolescent mental health disorders (Bronsard et al., 2016), coupled with the negative consequences they could incur (Mclaughlin et al., 2012; Patel et al., 2007), the need to access mental health services is heightened. Despite this critical need, several studies have shown that many children and adolescents suffering from mental disorders are not accessing the help they need (Sadler et al., 2018). In 2016, almost half of the 7.7 million children in the United States who have a mental disorder such as ADHD, anxiety, and depression did not receive psychological treatment (Whitney & Peterson, 2019).

C. The Case of Lebanon

In Lebanon, an alarmingly high percentage of adolescents are not seeking mental health services. According to Maalouf et al. (2020), 94% of adolescents in need of mental health services in Lebanon are not receiving psychiatric or psychological help. In the same vein, Karam et al. (2019) found that only 19.7% of the Lebanese people with mental health problems received mental health treatment. The most common barrier to seeking mental help in Lebanon was a lack of recognition of mental health treatment needed (Karam et al., 2019) and a lack of insurance coverage for mental health services (Karam et al., 2019). In Lebanon, the treatment gap for adults and children with mental

health problems was estimated at 90% (Obeid & Saade, 2022). Accessible and affordable mental health services in Lebanon are limited (Harper Shehadeh et al., 2020). The limited access to mental health services in Lebanon could worsen due to the dire socio-economic crisis the country is currently facing coupled with the COVID-19 pandemic (Obeid & Saade, 2022). This delay in receiving services is worrisome since childhood and adolescence are essential phases for brain and cognitive development (Bonnie & Backes, 2019). Considering the high prevalence rates of psychological disorders in childhood and adolescence coupled with their negative impact (Karam et al., 2019; Maalouf et al., 2020; Obeid & Saade, 2022; Polanczyk et al., 2015), why are some children and adolescents not receiving the help they need? Alternatively, for those receiving appropriate services, why are they not receiving them in time? The answers to these two questions will unfold in the upcoming sections of this thesis, but for now we will provide a brief outline to the possible answers that will be explored in depth in the sections that follow.

Many studies showed that certain parental factors were associated with whether children were to receive mental health services and even the timing to receiving mental health services (Boulter & Rickwood, 2013, Reardon et al., 2017). For instance, having a high parental income, health insurance could be one of those factors (Alonso & Little, 2019). Parents being unable to recognize the presence of a mental health problem in their children could be another factor (Radez et al., 2010). Also, parents' fear of stigma could be another factor (Rüsch et al., 2005). In addition, parents' trust in mental health services could possibly be another factor (Hansen et al., 2021). Lastly, another possible factor would be whether parents are open to the experience of taking their children to mental health professionals (Ferrah, 2019). Therefore, parents seem to play an important

role in seeking mental help for their children and this role will be elaborated on in the next section.

D. The Role Parents Play in Mental Health Seeking

Parents play a prominent role in their children's mental health care (Boulter & Rickwood, 2013). Parents are often the first to detect their children and adolescents' early signs of mental illness, and they play a prominent role in the recovery process of their children's mental health problems (Mahsoon et al., 2020). Additionally, children and adolescents depend on their parents for mental health-seeking, as they usually lack the means to do so on their own (Boulter & Rickwood, 2013). Parents or any caregivers serve a crucial role in attaining and easing their children's attendance of mental health services and treatment (Haine-Schlagel & Walsh, 2015). In other words, parents are often the gatekeepers to their children and adolescents' mental help-seeking. Most importantly, parents' help-seeking behaviors also seem to be affected by their attitudes toward mental health services (Ebrahimi et al., 2019). For instance, parents with negative attitudes towards mental health services are less likely to take their children to mental health professionals (Reardon et al., 2017). This negative attitude could prevent children from seeking mental health services (Reardon et al., 2017).

E. Attitudes toward Mental Health

Over the past few years, there has been a growing interest in attitudes toward mental help-seeking (Picco et al., 2016). Attitudes toward mental health-seeking refer to an individual's tendency to seek or avoid help from mental health professionals (Yee et al., 2020). Ebrahimi et al. (2019) showed that parents who held positive attitudes toward

mental health services were more likely to seek such services for their children and adolescents than parents who did not. Help-seeking behavior and attitudes have been found to be correlated in some studies (Alonso & Little, 2019; Ebrahimi et al., 2019; Yee et al., 2020) but they do not always overlap. While some research has shown an increase in the number of people seeking mental health services, a significant number still choose not to (Picco et al., 2016). As such, we decided to focus on attitudes toward help-seeking since parental help-seeking attitudes usually precede help-seeking behavior (Wamser-Nanney & Campbell, 2020). Understanding contributors to mental help-seeking attitudes could be the first step in changing how and why people access mental health services. This is especially pertinent in a country like Lebanon, which has historically witnessed significant adversity, especially in the last few years (Obeid & Saade, 2022).

In the current thesis proposal, we will start by presenting studies on help-seeking attitudes, followed by studies on help-seeking behavior since help-seeking attitudes usually precede help-seeking behaviors. It is important to note here that most scientific studies focused on help-seeking behavior instead of help-seeking attitudes (Bornheimer et al., 2018; Iskra et al., 2018; O'Brien et al., 2016). Because help-seeking attitudes usually precede the behavior of seeking out help (Wamser-Nanney & Campbell, 2020), we found it pertinent to present the results of studies on both attitudes and behaviors. Even though we will focus in this thesis on mental health-seeking attitudes (dependent variable), our conceptual model will still be informed by findings on mental health-seeking behavior. In the upcoming section, we will present Fischer and Turner's (1970) model that will guide most of our literature review. After presenting this theoretical model, we will present each independent variable separately.

F. Conceptual Model: Fischer and Turner Model

Various theoretical models have been proposed to better understand attitudes toward help-seeking and mental health-seeking behavior (Andersen, 1995, Picco et al., 2016). Among those models, Fischer and Turner (1970) suggest that a person's attitude toward receiving help usually precedes their help-seeking behavior (Picco et al., 2016). Fischer and Turner's (1970) theoretical framework has since been primarily used in the scientific literature (Fischer & Turner, 1970; Picco et al., 2016). Fischer and Turner (1970) identified the following variables that seem to be associated with positive attitudes toward mental help-seeking: Recognition of the need for psychological assistance, stigma tolerance, interpersonal openness, and trust in mental health practitioners. This model has since been validated in multiple countries and with various populations (Masuda et al., 2012; Picco et al., 2016), and will inform our conceptual model. In other words, this model will help us know what independent variables we should be focusing on for our study. In addition to the variables included in Fischer and Turner (1970), we will also include some variables that have been shown to play a role in attitudes towards mental health-seeking and help-seeking behaviors. Those newly added variables are mainly sociodemographic ones. In the following sections, we will present some studies that validated the Fischer and Turner (1970) model.

G. Fischer and Turner Model Validation

This theoretical framework has been primarily used in the scientific literature (Fischer & Turner, 1970; Fischer & Farina, 1995, Masuda et al., 2012; Picco et al.,

2016; Rayan et al., 2016). Based on the variables identified by the model, Fischer and Turner (1970) developed the following scale: Attitudes toward Seeking Professional Psychological Help (ATSPPH). The dimensions of this scale are recognition of the need for psychological assistance, stigma tolerance, interpersonal openness, and trust in mental health practitioners. A shorter version of the ATSPPH has been developed and has since become known as the Attitudes toward Seeking Professional Psychological Help Scale-Short Form (ATSPPH-SF; Fischer & Farina, 1995). Both the ATSPPH and ATSPPH-SF have been used and validated in multiple countries and with various populations. In this thesis, we will present some of these studies (Masuda et al., 2012; Picco et al., 2016; Rayan et al., 2020). Rayan et al. (2020) examined the psychometric properties of the Arabic version of the ATSPPH-SF with 519 Jordanian students between the ages of 19 and 35 years old. Rayan et al.'s (2020) results showed that the ATSPPH-SF had adequate internal consistency with a single-factor structure. Their confirmatory factor analysis showed that the goodness-of-fit index of the model was .94 (GFI = .94; Rayan et al., 2020). Similarly to Rayan et al. (2020), Picco et al. (2016) also examined the psychometric properties of the ATSPPH-SF with 3006 adults aged between 18 and 34 years old in Singapore. Picco et al.'s (2016) results showed that the model had good internal consistency and a three-factor structure. The confirmatory factor analysis results showed that the model's goodness-of-fit was .978 (CFI = .978; Picco et al., 2016). Picco et al. (2016) also examined the correlation between sociodemographic (age, gender, income, education, ethnicity, employment, and marital status) factors and ATSPPH-SF scores. One of the most important results of their analyses showed that the higher the income, the more favorable attitudes toward mental health services people held (Picco et al., 2016). It is worth mentioning, that R^2 was not

reported for Picco et al.'s (2016) model. In Masuda et al. (2012), the researchers wanted to examine the association between mental health stigma and self-concealment with attitudes toward mental health seeking while controlling for previous mental health services, gender, and age. To pursue their objective, Masuda et al. (2012) recruited 700 psychology undergraduate students from a university in Georgia (US). Among the used questionnaires students completed the ATSPPH. The multiple regression results of the study showed that Masuda et al.'s (2012) model explained 28% of the variance in their outcome variable (R^2 = .28). Also, the results showed that mental health stigma was found to be negatively associated with attitudes towards mental health services (Masuda et al., 2012). In addition, previous mental health services were found to be associated with more favorable views toward mental help-seeking (Masuda et al., 2012). Unlike Picco et al. (2016) and Rayan et al. (2020), Masuda et al. (2012) did not investigate the psychometric properties of the ATSPPH but they were interested in identifying variables that could be associated with attitudes towards mental health services.

In summary, Rayan et al. (2020) and Picco et al. (2016) validated the ATSPPH-SF with a large sample of Jordanian and Singaporean adults respectively. These studies, alongside Masuda et al.'s (2012) study identified many variables that seem to be associated with mental help-seeking attitudes. In the following sections, we will first start by presenting these sociodemographic variables.

CHAPTER II

SOCIODEMOGRAPHIC VARIABLES

Previous studies identified several variables that have been found to be associated with help-seeking behavior. Amongst these variables are: 1. sociodemographics ones such as a) parental income, and b) health insurance; 2. parental recognition of the problem and the need for help; 3. stigma: a) public, b) internalized, and c) treatment stigma; 4. openness to experience; and lastly, 5. value and trust in professionals. Apart from the sociodemographic variables, most of the previously mentioned variables were drawn from Fischer and Turner's Model (Fischer & Turner, 1970). The inclusion of sociodemographic variables in our conceptual model was informed by the scientific literature on help-seeking attitudes and behaviors. Several sociodemographic variables have been identified in the scientific literature as potentially playing a role in help-seeking behavior and attitudes. Amongst these variables are: 1. Parental income; and 2. access/availability of health insurance (Alonso & Little, 2019; Al-Shannaq & Aldalaykeh, 2021; Bornheimer, Acri, Gopalan, & McKay, 2018; Boulter & Rickwood, 2013; Daeem et al., 2019; Eapen & Ghubash, 2004; Ebrahimi et al., 2019; Game, 2019; Godoy et al. 2015; Hal, 2021; Ibrahim et al., 2019; Imran, Ashraf, Shoukat, & Pervez, 2016; Iskra et al., 2018; Keizer et al., 2019; Keller & McDade, 2000; Kronfol, 2019; Mahsoon et al., 2020; O'Brien et al., 2016; Rashek et al., 2016; Reardon et al., 2017; Thurston & Phares, 2008; Turner, 2011; Walker et al., 2015). In the following sections, we will start by presenting sociodemographic variables that have been shown to be associated with help-seeking attitudes in the Global North, followed by help-seeking behaviors. After presenting studies on help-seeking attitudes and help-

seeking behaviors in the Global North, we will shift to a presentation of these same variables in the Global South.

A. Global North Studies

Since this thesis's structure will follow Fischer and Turner's (1970) model, we will start by discussing the possible association between parental income and parental help-seeking attitudes in Global North studies. Then, we will discuss its association with help-seeking behaviors. After, we will discuss the association between health insurance and parental help-seeking attitudes, followed by its association with help-seeking behaviors.

1. Parental Income and Parental Help-Seeking Attitudes

Compared to low-income parents, those with high income have been found to have more positive attitudes toward mental help-seeking for their children (Alonso & Little, 2019). Alonso and Little's (2019) study included a sample of Australian parents of children between the ages of 4 and 14 years old with emotional and behavioral mental health problems. These parents completed the following four questionnaires: Sociodemographic questionnaire (SDQ), Parents' Attributions for Child's Behaviour Measure (PACBM; Sanders et al., 2004), and Barriers to Adolescents Seeking Help (BASH; Kuhl et al., 1997). Alonso and Little (2019) found parents with high income to have a positive attitude towards mental help-seeking for their children. In the same vein, Keller and McDade (2000) investigated the relationship between parental income and their help-seeking attitudes. The researchers recruited 52 low-income parents in the US who had children aged below 18 years old. Parents included in the study completed

semi-structured interviews on their attitudes toward mental health-seeking for their children (Keller & McDade, 2000). Results of the study indicated that parents with low income seem to have negative attitudes towards mental help-seeking (they were less likely to consider seeking mental help for their children). Parents with high incomes are more likely to be able afford therapy.

In summary, both studies presented above show that parental income influences parental help-seeking attitudes. To the best of our knowledge, studies on the association between parental income and parental help-seeking attitudes toward their children are scant. Despite this noted scarcity, we decided to account for parental income in our conceptual model. In our view, a lack of sufficient funds could impede a parent's ability to seek mental health services for their child. This is especially true in a country such as Lebanon, where parents will often need to pay for mental health services out of pocket (Al-Shannaq & Aldalaykeh, 2021). Next, we will tackle the association between parental income and help-seeking behaviors.

2. Parental Income and Parental Help-Seeking Behaviors

Parental income seems to affect parents' ability to seek mental help for their children or adolescents. Parents with low income are less likely to consider seeking mental help for their children, especially if the cost of these mental health services exceeds their income (O'Brien et al., 2016). Low-income parents of children with ODD were less likely to seek mental health services for their children due to high service costs (Bornheimer et al., 2018). Iskra et al. (2018) investigated the relationship between parental income and their help-seeking behavior. The study was based on a sample of 134 Australian parents of adolescents between the ages of 14 and 18 years old with

moderate or severe mental health disorders. These parents completed several questionnaires, such as the Parent Questionnaire (PQ; Iskra et al., 2018, p.7). Results obtained from this study showed that expensive mental health services were a common barrier to parental help-seeking behaviors (Iskra et al., 2018). Similarly, 80 Australian parents of children aged between 4 to 10 years old with Intellectual Disability (ID) pointed to the costs of mental health services as the main barrier to mental health service utilization (Osborn et al., 2020).

Based on the previously presented studies, parents with a low income are less likely to seek mental help for their children. This is especially true if mental health services are costly and exceed parental financial ability. In the following section, we will discuss the association between health insurance and mental health-seeking attitudes.

3. Health Insurance and Parental Help-Seeking Attitudes

Few studies investigated the association between health insurance and mental help-seeking attitudes. Among those few studies is the study conducted by Jagdeo et al. (2009). Jagdeo et al. (2009) surveyed American and Canadian adolescents and adults between the ages of 15 and 54 years old (Jagdeo et al., 2009) with mental health problems such as Posttraumatic Stress Disorder (PTSD; Jagdeo et al., 2009). The results obtained from this study showed that participants who did not have health insurance were more likely to have negative attitudes towards mental help-seeking compared to those who did (Jagdeo et al., 2009). To the best of our knowledge, few studies examined the association between help-seeking attitudes and health insurance in both the Global North and the Global South. The dearth of such studies is probably attributed to the

small availability of health insurance covering children's mental health services in the Global North and Global South. Some researchers controlled for parental health insurance but did not evaluate it as a predictor variable. In a country like Lebanon, income levels and health insurance coverage are likely to play an essential role in help-seeking attitudes, hence our decision to include these variables.

In summary, the availability of health insurance for mental health services seems to play an important role in parents' attitudes towards these services (Jagdeo et al., 2009). Next, we will discuss the association between health insurance and parental help-seeking behaviors.

4. Health Insurance and Parental Help-Seeking Behaviors

To the best of our knowledge, only a few studies examined the association between health insurance and help-seeking behaviors. Among those studies, Reardon et al.'s (2017) systematic review is worth mentioning. Reardon et al.'s (2017) review included qualitative and quantitative studies in the United States pertaining to parents of children and adolescents below 18 years old. These children and adolescents had emotional (e.g., depression) and/or behavioral problems (e.g., ADHD) (Reardon et al., 2017). The results of the studies indicated that a lack of financial coverage for mental help services in the United States constituted a mental health barrier. In the same vein, Walker et al. (2015) conducted a study with participants suffering from mental health problems (e.g., depression) whose ages varied between 18 and 64 years old. The study results showed that health insurance was significantly associated with mental health treatment use (Walker et al., 2015). In other words, participants with health insurance coverage were more likely to seek mental help.

In summary, both studies produced similar results with different participants. Reardon et al. (2017) showed that a lack of health insurance was a barrier to parental help-seeking behaviors. Walker et al. (2015) showed that health insurance coverage increased mental help-seeking behavior among adolescents and adults. After focusing on the Global North, we will shift our focus to the Global South.

B. Global South Studies

Compared to the Global North, only a few studies investigated the association between both parental income and health insurance with parental mental help-seeking for their children. We will first discuss the association between each of the previously mentioned variables with parental attitudes towards mental health services followed by parental help-seeking behaviors.

Studies pertaining to attitudes towards help-seeking have pointed to the role parental income and health insurance play in help-seeking attitudes and behaviors. We will start by discussing the possible association between parental income and parental help-seeking attitudes in Global South studies, followed by its association with help-seeking behaviors. Lastly, we will discuss the association between health insurance and parental help-seeking attitudes, followed by health insurance's association with parental help-seeking behaviors.

1. Parental Income and Parental Help-Seeking Attitudes

Parental income appears to affect their help-seeking attitudes in Global South countries (Eapen & Ghubash, 2004; Ibrahim et al., 2019). Few studies investigated the association between parental income and help-seeking attitudes. Among those studies is

the work by Eapen and Ghubash (2004). In their study, 325 parents of children between the ages of 5 and 16 years old in the United Arab Emirates completed semi-structured interviews to identify barriers to their mental help-seeking. These children and adolescents had mental health problems (e.g., depression and/or CD; Eapen & Ghubash, 2004). Results from this study highlighted an association between parents' occupation, income level, and help-seeking attitudes. The researchers found lower income to be associated with a negative attitude toward mental health-seeking (Eapen & Ghubash, 2004). Similarly, Ibrahim et al.'s (2019) study will be presented next. Ibrahim et al. (2019) included 127 Malaysian adolescents between the ages of 13 and 17 years old and 75 Malaysian college students between the ages of 18 and 25 years old. Participants had no mental health diagnoses and were from low-income families (Ibrahim et al., 2019). These low-income participants reported family incomes between 1000 Malaysian Ringgit (RM) and 3860 Malaysian Ringgit (RM) (Ibrahim et al., 2019). Some participants had a family income of less than 1000RM and many had an income between 1000RM and 3000RM (Ibrahim et al., 2019). Participants completed several questionnaires. Among those are: The Mental Health-Seeking Attitude Scale (MHSAS; Wilson et al., 2005) and Beliefs towards Mental Illness (BMI; Pheko et al., 2013). Researchers found that participants with lower-income levels (e.g., <1000RM) held more negative attitudes towards mental help-seeking compared with higher-income levels (e.g., 3000RM and 3860RM; Ibrahim et al., 2019).

In summary, parental income seems to be associated with negative attitudes towards mental help-seeking (Eapen & Ghubash, 2004; Ibrahim et al., 2019). As such, we decided to include parental income in our conceptual model to investigate its

association with parental help-seeking attitudes. Next, we will discuss the association between parental income and mental help-seeking behaviors.

2. Parental Income and Parental Help-Seeking Behaviors

Few studies examined the association between parental income and help-seeking in Global South countries. Among those few studies are Eapen and Ghubash (2004). Results obtained from this study showed an association between parents' occupation, their income level, and their help-seeking behavior. More specifically, parents with high-income levels were more willing to seek help for their children (Eapen & Ghubash, 2004). Inversely, having a low-income level or being unemployed were identified as two barriers to mental help-seeking for their children (Eapen & Ghubash, 2004). Likewise, Kronfol (2019) conducted a review of mental health barriers in the Arab world. Kronfol (2019) identified low income as a possible barrier to seeking mental health services for anxiety and depression. However, Kronfol's (2019) study focused on adults and not parents of children with mental health problems.

In sum, parental income was found to be associated with mental help-seeking behaviors in adults (Kronfol, 2019) and with parental mental help-seeking behaviors for their children (Eapen & Ghubash, 2004). We now move to a presentation of studies evaluating the association between health insurance and parental help-seeking attitudes.

3. Health Insurance and Parental Help-Seeking Attitudes

To the best of our knowledge, few studies investigated the association between mental health insurance coverage and help-seeking attitudes in Global South countries. Al-Shannaq and Aldalaykeh's (2021) study previously mentioned is worth presenting

again. The researchers focused on a population of Arab youth between the ages of 16 and 25 years old. Al-Shannaq and Aldalaykeh (2021) found that, compared to participants with no mental health insurance coverage, those with mental health insurance coverage did not have more positive attitudes toward mental health-seeking. Even though our thesis' main focus is on parental attitudes towards mental health seeking services for their children, we decided to include Al-Shannaq and Aldalaykeh's (2021) study to highlight the gap in the literature.

In sum, having health insurance coverage does not seem to improve attitudes towards seeking mental help (Al-Shannaq & Aldalaykeh, 2021). To the best of our knowledge, whether having health insurance could impact parental attitudes-our variable of interest-toward help-seeking remains unclear. Based on this perceived gap, we will evaluate the possible association between health insurance and parental attitudes towards seeking mental help. In the following sections, we will discuss the association between health insurance and help-seeking behaviors.

4. Health Insurance and Parental Help-Seeking Behaviors

Only a few studies investigated the association between health insurance and help-seeking behaviors. Among those few studies is the research conducted by Martinez et al. (2020). However, it is worth noting that Martinez et al. (2020) is a systemic review of 15 studies pertaining to Filipino individuals with no mental health diagnoses and aged between 16 and 70 years old. The sample included was, therefore, a general one rather than parents of children with mental health disorders. Their results remain pertinent due to the scarcity of studies pertaining to parents. Martinez et al. (2020) showed that a lack of financial coverage for mental health services constituted a

significant barrier to service utilization (Martinez et al., 2020). Even though our thesis' main focus is on parental attitudes towards mental health seeking services for their children, we decided to include Martinez et al.'s (2021) study to further underline the gap in the literature.

In sum, the lack of health insurance did seem to act as a barrier for help-seeking behavior (Martinez et al., 2021).With this finding; we conclude our discussion of the association between sociodemographic variables and parental help-seeking attitudes and behaviors in both Global North and Global South countries. Next, we will move to the association between recognizing a mental health problem, parental help-seeking attitudes, and mental help-seeking behaviors in Global North and Global South countries.

CHAPTER III

RECOGNIZING THE PROBLEM AND THE NEED FOR PSYCHOLOGICAL HELP

Another variable often cited in help-seeking attitudes and behaviors is parental recognition of a problem. Parental recognition of the need for psychological help first requires that parents be able to identify that their child has mental health problems (Johnston & Burke, 2020). In other words, difficulty in recognizing mental health problems seems to make parents less likely to seek mental health services for their children (Johnston & Burke, 2020). Therefore, a lack of parental recognition could negatively affect their help-seeking attitudes and behaviors.

A. Global North Studies

1. Parental Recognition and Parental Help-Seeking Attitudes

Many studies on the association between parental recognition of their children's mental health problems and the need for help, and parental attitudes towards mental health services have been conducted in Global North countries (Alonso & Little, 2019; Thurston et al., 2015). Parental recognition or knowledge of mental health problems appears to influence their attitudes toward mental help-seeking for their children (Thurston et al., 2015). Thurston et al.'s (2015) study showed that US parents of children between the ages of 2 and 21 years old were more likely to seek mental help for their children's mental health problems if they recognized them as such (Thurston et al., 2015). In Alonso and Little's (2019) study, Australian parents of children between the ages of 4 and 14 years old reported that their child's emotional and behavioral mental health problems would not necessarily change if they received therapy. According to

these parents, mental health problems are stable, and therapy will not necessarily help their children (Alonso & Little, 2019). In our view, a lack of parental recognition of their children's mental health problems could negatively impact their attitudes towards mental help-seeking. Based on those findings, the inclusion of parental mental-health recognition of their children's problems seems essential.

In summary, parents not recognizing their children's mental health problems seem to be attributed with negative attitudes towards mental health services (Alonso & Little, 2019; Thurston et al., 2015). Next, we will discuss the association between parental recognition and mental help-seeking behaviors.

2. Parental Recognition and Parental Help-Seeking Behaviors

Parents' lack of recognition of their children's mental health problems seems to affect their help-seeking attitudes and behaviors. Parents with a sufficient understanding of mental illness were more likely to seek mental health services for their children (Mendenhall & Frauenholtz, 2013). Sayal et al. (2010) recruited parents residing in England with children between the ages of 2 and 17 years old, and engaged them in focus group discussions. In Sayal et al.'s (2010) study, the children did not necessarily have a mental illness diagnosis (Sayal et al., 2010). The researchers found that parents who did not recognize their children's emotional and/or behavioral symptoms were less likely to seek mental help for their children. In the same vein, Girio-Herrera et al. (2013) administered many questionnaires, such as the Barriers to Participation Scale (BTPS; Kazdin et al., 1997) to US parents of children in kindergarten. The study results showed that a relatively small percentage, about 30%, of parents recognized their children's mental health problems. The same findings were also supported in Radez et

al.'s (2010) study. In their study, Radez et al. (2020) reviewed 53 qualitative and quantitative studies conducted primarily in the US and Australia. Parents of children (18 years old and younger) with the following mental health problems were sampled: ASD, depression, anxiety, suicidal ideation etc. (Radez et al., 2020). The results of the studies indicated that parents' lack of or limited knowledge of their children and adolescents' mental health problems was the most common barrier to mental health services (Radez et al., 2020). Lack of knowledge and understanding of mental disorders have been highlighted in multiple studies as barriers to parental mental help-seeking for their children. According to Reardon et al. (2017), a lack of understanding can lead parents to disregard their children's need for mental help services (Reardon et al., 2017).

In summary, the studies mentioned above showed how a lack of parental recognition or knowledge of mental health disorders could be associated with reduced mental health-seeking behavior. In the following section, we will conclude our discussion on the association between parental mental health recognition and their help-seeking attitudes/behaviors in Global South studies.

B. Global South Studies

Compared to the numerous studies conducted in Global North countries on the association between parental recognition of their child's mental health problem and parental help-seeking attitudes and behaviors, few studies have investigated this association in Global South countries. In the following sections, we will delve into the Global South literature.

1. Parental Recognition and Parental Help-Seeking Attitudes

Parents not recognizing their children's emotional and/or behavioral symptoms as problematic also seem to be associated with negative attitudes towards mental help-seeking in Global South countries. Al-Mohsin et al. (2020) conducted a study with Saudi Arabian mothers of children with ADHD who were younger than nine years old. These mothers were more likely to report that their lack of knowledge of their child's ADHD symptoms affected how they perceived mental health services (Al-Mohsin et al., 2020). In other words, Al-Mohsin et al. (2020) showed that mothers' lack of knowledge of their children's ADHD stood in the way of them recognizing their child's need for mental help. Similarly, Bordin et al. (2018) investigated the relationship between maternal recognition of mental health problems and their attitudes towards mental help-seeking for their children. Brazilian mothers of children between the ages of 11 and 16 years old with emotional and/or behavioral problems completed the Strengths and Difficulties Questionnaire (SDQ) (Bordin et al., 2018). The researchers found that mothers who did not view their children's conduct and/or emotional problems as problematic held negative attitudes towards mental help-seeking. In the same vein, Morawska and Sultan (2016) recruited 204 parents of children between the ages of 4 and 14 years old in Jordan. Parents completed several questionnaires. Among these questionnaires is the: Orientations for Seeking Professional Help Questionnaire (OSPH; Fischer & Turner 1970). The results demonstrated that help-seeking attitudes could be associated by parental knowledge of mental health problems (Morawska & Sultan, 2016). For instance, parents who were not aware of their children's mental health problems held negative attitudes towards mental help-seeking services (Morawska & Sultan, 2016).

In summary, parents not recognizing their child's behaviors or symptoms as problematic might be associated with negative attitudes towards mental health-seeking. Based on those findings, we decided to include parental recognition in our conceptual model. In the following section, we will discuss the association between parental recognition of their children's mental health problems and their help-seeking behaviors.

2. Parental Recognition and Parental Help-Seeking Behaviors

Few studies examined the association between parental mental health recognition and help-seeking behaviors in Global South countries. Among those few studies, Sun et al. (2019) recruited Chinese parents of adolescents with anorexia nervosa and engaged them in focus group discussions (Sun et al., 2019). These researchers found that a lack of psycho-educational information on their adolescents' anorexia nervosa and possible treatment avenues reduced their help-seeking behaviors (Sun et al., 2019).

In summary, a lack of parental recognition of their children's mental health problems seems to make them less likely to seek mental help for their children. After discussing the association between parental recognition of mental health problems and their mental health attitudes and behaviors, we will now shift to stigma. In the following sections, we will start by presenting studies on the association between stigma and parental help-seeking attitudes followed by parental help-seeking behaviors in Global North and Global South countries.

CHAPTER IV

STIGMA

Stigma is a complex construct with many definitions and sub-types. Bharadwaj et al. (2017) defined stigma as a negative perception of the individual with a mental health problems (Bharadwaj et al., 2017; Rüsch et al., 2005). This negative perception is attributed to a distinct manner of behaving, feeling, or thinking that is viewed as a weakness, a disadvantage, and an inconvenience (Bharadwaj et al., 2017). In parallel to Bharadwaj et al.'s (2017) definition, Corrigan (2004) defined stigma as signals or cues that create stereotypes towards a targeted social group. Stigma has traditionally been categorized into public stigma or social stigma and personal or self-stigma (Corrigan, 2004; Subu et al., 2021). Another type of stigma worth mentioning and that we will be focusing on in our conceptual model is treatment stigma (Clement et al., 2015). The different sub-types of stigma will be defined next.

Public stigma refers to society's negative attitudes and stereotypes towards people with mental health problems (Corrigon, 2004; Rüsch et al., 2005; Subu et al., 2021). *Personal, internalized, or self-stigma* occurs when a person with a mental health problem internalizes the negative attitudes that others have of them (Corrigon, 2004; Rüsch et al., 2005; Subu et al., 2021). In our thesis we will focus on parents' self-stigma because their children are considered part of their self-definition (Partridge, 1988). Individuals who self-stigmatize are likely to view themselves as abnormal or different (Subu et al., 2021). More specifically, internalized stigma could arise when people develop negative feelings about themselves as a result of the public discrimination associated with having a mental health problem (Latlova et al., 2014). *Treatment*

stigma is defined as negative attitudes and stereotypes associated with the process of mental help-seeking (Clement et al., 2015). One of the possible reasons as to why treatment stigma could arise is because people can have a lack of understanding of mental health problem, and also because some people are misinformed about what mental health services are (Shectman et al., 2016). Some people think mental health services (e.g., medications: antidepressants, etc.) could cause addiction (Shectman et al., 2016). Also, some people think that other mental health services (e.g., psychotherapy) are a waste of time (Shectman et al., 2016). This can lead to discrimination against people with mental health problem who receive treatment from mental health services. In other words, treatment stigma could arise because of a lack of knowledge about what mental health problems are and about the actual benefit of mental health services truly have.

As previously mentioned, stigma is a multi-faceted and complex construct. For the purpose of this study, we will be focusing on three types of stigma: a) public, b) internalized, and c) treatment stigma. Our decision to include the different types of stigma is attributed to the fact that these three types of stigma are the most relevant to parental-help seeking attitudes and behaviors (Chavira et al., 2017; Dempster et al., 2013; Doumit et al., 2017, Farhood & Hamady, 2017; Eapen & Ghubash, 2004; Hansen et al., 2019; Mohr-Jensen & Lauritsen, 2021; Ohan et al., 2015; Radovic et al., 2016; Sayal et al., 2010; Turner et al., 2015). Even though treatment stigma was not as frequently evaluated as internalized and public stigma, we still decided to include it in our conceptual model. This decision is attributed to the fact that the study will be conducted in Lebanon, where seeking treatment could be particularly stigmatized (Doumit et al., 2017). Additionally, since we are interested in parents' attitudes, the

internalized stigma will be related to parents' internalization of stigma for seeking mental health for their children. We decided to focus on parents' self-stigmatization because children are part of their parents' self-definition (Partridge, 1988). In the following sections, we will be discussing the association between public, personal, and treatment stigma with parental help-seeking attitudes and behaviors in Global North and Global South countries.

A. Global North Studies

Many Global North studies focused on the association between stigma and parental help-seeking attitudes and behaviors. The following sections will examine the association between a) public, b) internalized, and c) treatment stigma with parental mental health attitudes and behaviors.

Studies on attitudes towards mental help-seeking have highlighted the importance of stigma with regard to help-seeking attitudes and help-seeking behaviors. We will start by discussing the possible association between public stigma and parental help-seeking attitudes in Global North studies, followed by its association with help-seeking behaviors. Secondly, we will discuss the association between internalized stigma and parental help-seeking attitudes, followed by its association with help-seeking behaviors. Finally, we will tap into the association between treatment stigma and parental help-seeking attitudes and its association with help-seeking behaviors.

1. Public Stigma and Parental Help-Seeking Attitudes

Numerous studies conducted in the Global North found public stigma to be negatively associated with parents' positive attitudes towards mental help-seeking. For

instance, Radovic et al. (2016) sampled 15 US primary care providers. The researchers were interested in physicians' perceptions of the variables that might affect parents' attitudes towards seeking help for their children. More specially, researchers were interested in what impeded parents from seeking mental health services for their children suffering from depression (Radovic et al., 2016). After filling out the Modified Barriers to Care Scale (MBCS; Radovic et al., 2016), most physicians believed that parents were worried about what others would think of their children. In other words, parents were worried about public stigma (Radovic et al., 2016). Although informative and instrumental in shedding light on the association between public stigma and parental attitudes, the researchers did not draw information from the parents. This was not the case for Turner et al. (2015). In Turner et al. (2015), 238 US primary caregivers of children with no diagnosis and whose mean age was five years old completed the Parental Attitudes towards Psychological Services Inventory (PATSPI; Turner, 2012). Public stigma was associated with less favorable attitudes toward mental help-seeking attitudes among caregivers (Turner et al., 2015). Lastly, and in line with Turner et al. (2015), Hansen et al. (2021) sampled 244 US parents of children and adolescents between the ages of 2 and 17 years old, with no diagnosis. The researchers who interviewed the parents highlighted the role public stigma played in their mental health-seeking attitudes.

In sum, both studies showed that parents' fear of public stigma is negatively associated with positive mental health-seeking attitudes. Based on those findings and the critical role public stigma could play in mental health-seeking attitudes, we will include public stigma in our model. Next, we will discuss public stigma's association with parental help-seeking behaviors.

2. Public Stigma and Parental Help-Seeking Behaviors

Many studies have shed light on the association between public stigma and parental help-seeking behaviors (Chavira et al., 2017; Dempster et al., 2013; Ohan et al., 2015; Sayal et al., 2010). Sayal et al. (2010) aimed to study the relationship between public stigma and parental help-seeking behaviors. To pursue this aim, Sayal et al. (2010) conducted a study in London in which group discussions were conducted with 34 parents of children and adolescents aged between 2 and 17 years old and suffering from behavioral or emotional problems. After the focus groups, the researchers conducted semi-structured interviews. Sayal et al. (2010) highlighted several mental health barriers that could possibly hinder parents from accessing mental health services. Amongst those barriers is fear of having their child labeled (Sayal et al., 2010). These findings point to public stigma's role as a barrier to parental mental help-seeking behavior.

Similar to Sayal et al. (2010), Chavira et al. (2017) examined the association between parental help-seeking behaviors and public stigma in a sample of 29 parents. These US parents had children between the ages of 8 to 12 years old presenting with anxiety. Chavira et al. (2017) conducted semi-structured interviews with the parents, and found that parents were concerned about public stigma. More specifically, these parents were worried about the discrimination their children might face if they were to seek mental health services (Cahvira et al., 2017).

Along the same lines, Dempster et al. (2013) examined public stigma's role in parental help-seeking behavior among 115 low-income African American parents of children between the ages of 4 and 8 years old presenting with behavioral problems.

After interviewing the parents, the results obtained highlighted the role public stigma could play in parental mental help-seeking behavior. Public stigma was also identified as a barrier to parental help-seeking behavior in Australia (Ohan et al., 2015). Ohan et al. (2015) examined barriers to parental mental help-seeking for their children in Australia. They recruited a sample of 100 parents who were concerned about their children's behavioral and emotional well-being and 154 parents who were not concerned about their children's mental well-being. Children were between the ages of 3 and 16 years old (Ohan et al., 2015). Parents first completed the Strength and Difficulties Questionnaire (SDQ; Goodman, 1997), followed by a few questions on barriers to mental help-seeking services offered at school (Ohan et al., 2015). The results highlighted parents' unwillingness to seek mental health services for their children because they were concerned about society negatively labeling their children (Ohan et al., 2015).

In summary, many studies focused on the association between public stigma and parental help-seeking behaviors in the Global North (Chavira et al., 2017; Dempster et al., 2013; Ohan et al., 2015; Sayal et al., 2010). Next, we will discuss the association between internalized stigma and parental help-seeking attitudes.

3. Internalized Stigma and Parental Help-Seeking Attitudes

Few studies examined the association between internalized stigma and help-seeking attitudes in Global North countries. Smith (2018) investigated the association between self-stigma and help-seeking attitudes among 111 US parents of children. The children's age was not indicated in the study (Smith, 2018). Also, no information was provided about whether these children had any specific mental health diagnosis. The

participants were asked to complete the Self-Stigma Measure (SM; Williams & Polaha, 2014). The scale included items such as “It would make me feel like a bad parent” (SM; Williams & Polaha, 2014). The results from this study indicated that self-stigma was associated with parents' attitudes towards mental help-seeking for their children. For instance, the more the self-stigma among parents the less likely the positive attitudes towards mental health services (Smith, 2018).

In sum, internalized stigma appeared to be associated with parental help-seeking attitudes (Smith, 2018). As such, we decided to include internalized stigma in our conceptual model. Next, we will examine the association between internalized stigma and parental help-seeking behaviors.

4. Internalized Stigma and Parental Help-Seeking Behaviors

Internalized stigma seems to be hindering parents from seeking mental health services for their children and/or adolescents. Chavira et al. (2017), Dempster et al. (2015), Ohan et al. (2015), and Sayal et al. (2010) identified public and internalized stigma as common mental health barriers. In Sayal et al. (2010), parents internalized the idea of being bad parents because of their child's mental health problem. They reported stigmatizing themselves due to the public stigma or the negative attitudes others might have towards their children (Sayal et al., 2010). Likewise, Chavira et al. (2017) found that parental internalized stigma was a barrier to parental help-seeking behavior alongside public stigma (Chavira et al. 2017). Lastly, Dempster et al. (2013) showed that parental internalized stigma acted as a main barrier preventing sampled parents from seeking mental health services for their children and adolescents.

In summary, internalized stigma was found to be significantly associated with parental mental help-seeking behaviors. More specifically, self-stigma was a barrier hindering parents from seeking mental health services for their children's mental health problems (e.g., depression, ADHD) (Chavira et al., 2017; Dempster et al., 2013; Ohan et al., 2015; Sayal et al., 2010). In the next sections, we will transition to studies pertaining to treatment stigma and parental help-seeking attitudes and behaviors.

5. Treatment Stigma and Parental Help-Seeking Attitudes

Few studies that we know of have investigated the association between treatment stigma and help-seeking attitudes in Global North countries. Among those studies, Pescosolido et al. (2007) is worth mentioning. Pescosolido et al. (2007) conducted a study on the stigmatizing attitudes of children seeking psychological mental help. The researchers interviewed 1393 US adults (Pescosolido et al., 2007) some of whom were parents to children aged between 10 to 15 years old. The children included in the study suffered from mental health problems (e.g., depression, anxiety) (Pescosolido et al., 2007). Pescosolido et al. (2007) were interested in parents' perception of mental health services. The results of the study showed that parents held negative attitudes towards children receiving mental health services. Sampled parents believed that some aspects of mental health services (e.g., psychotropic medication) might negatively impact their children's development (Pescosolido et al., 2007). Similarly, Paloha et al. (2015) highlighted the association between treatment stigma and parental help-seeking attitudes. Their findings were based on a sample of parents in the US who had adolescents between the ages of 14 and 16 years old with an unspecified behavioral problem. Parents completed numerous questionnaires, including the

Perceived Stigma of Service Seeking (PPSSS; Williams & Paloha, 2014), and the Caregiver Strain Questionnaire (CGSQ; Brannan et al., 1997). The results of the study showed that parents with higher treatment stigma held more negative mental health attitudes (Paloha et al., 2015). Based on the previously presented findings, treatment stigma will be accounted for in our model. In the section that follows, we will move to a discussion on the association between treatment stigma and parental help-seeking behaviors.

6. Treatment Stigma and Parental Help-Seeking Behaviors

While some studies found treatment stigma to be associated with help-seeking behaviors, only a few studies were conducted in the Global North. Among the few studies that examined this association, Aguirre et al.'s (2020) review is worth mentioning. The researchers conducted a systemic review of 90 studies in the US and in Australia. Some studies included parents of children between the ages of 10 and 19 years with mental health problems (e.g., depression, ADHD), while others focused on children and adolescents between the ages of 10 and 19 years. Parents of children with mental health problems reported not seeking mental help services due to the stigma associated with psychological services (Aguirre et al., 2020). Similarly, Shahwan et al. (2020) evaluated the impact treatment stigma could have on mental health-seeking behavior. It is worth mentioning that the researchers recruited US college students with no known diagnosis (not a parent sample). Shahwan et al. (2020) asked the participants to fill out several questionnaires, such as the Inventory of Attitudes toward Seeking Mental Health Services (IASMHS; Lubman et al., 2016). Participants in this study identified treatment stigma as the main reason for not seeking mental health services.

In summary, Shahwan et al. (2020) and Aguirre et al. (2020) pointed to treatment stigma as a barrier to mental help-seeking behavior. Despite the dearth of studies on parental treatment stigma, the results obtained in non-parental samples (e.g., Aguirre et al., 2020; Shahwan et al., 2020) are important to consider. This is especially true in a country such as Lebanon. We conclude our discussion of Global North studies examining the association between public, internalized treatment stigma, and parental help-seeking attitudes and behaviors. We will now move to Global South studies.

B. Global South Studies

After presenting studies evaluating the possible role different types of stigma could play in help-seeking attitudes and behaviors, we now turn our attention to the Global South studies. Several studies highlighted the association between public, internalized, and treatment stigma with parental help-seeking attitudes and behaviors in the Global South. These studies will be presented next. Similar to other variables, we will start by presenting studies on help-seeking attitudes followed by help-seeking behaviors.

1. Public Stigma and Parental Help-Seeking Attitudes

Public stigma seems to affect parents' attitudes towards mental help-seeking for their children in the Global South. Public stigma seems to negatively affect parents' perception towards mental help-seeking, making them less likely to take their children to a mental health professional (Eapen & Ghubash, 2004). Tekola et al. (2020) recruited 18 Ethiopian parents of children with developmental disabilities (e.g. ID, autism). These parents were undergoing a training program in order to gain skills that help them

support and communicate with their children (Tekola et al., 2020). After the training was complete, the parents underwent interviews (Tekola et al., 2020). The researchers asked the participants questions concerning the parents' experiences of living with a child with a developmental disability. As a result, parents mainly complained from public stigma; they explained that their community excludes children with developmental disabilities (Tekola et al., 2020). Their children are regarded as outcasts and other children would avoid playing with them (Tekola et al., 2020). Parents emphasized their fear of going out or mentioning that their child has a developmental disability (Tekola et al., 2020). Participants went on to explain how their community lacks awareness about what developmental disability is, and how others view it as possession (Tekola et al., 2020). As a result people in such communities have positive attitudes towards seeking help from traditional healers and not mental health professionals (Tekola et al., 2020). In Lebanon, the public stigma of mental health problems seems common in many Lebanese villages, with the mental health problem perceived as an act of evil or dysfunction in the family (Doumit et al., 2017). Doumit et al. (2017) used focus group discussions to explore the beliefs and attitudes of 12 teachers and 18 parents regarding child/adolescent mental health in South Lebanon. The sampled parents and teachers reported that mental health problem was perceived as taboo in their culture (Doumit et al., 2017). People seem to treat individuals with mental health problems as outcasts. In other words, parents reported negative attitudes towards mental help-seeking because of the public's view of mental health problem in children and adolescents as a demonic possession (Doumit et al., 2017). To the best of our knowledge, little to no studies has evaluated the association between public stigma and parental help-seeking attitudes in the Arab world and specifically in Lebanon. That said,

a few studies investigated this association in adults (not parents of children with mental health disorders). Among those studies, Zolezzi et al.'s (2018) study is worth noting. Zolezzi et al. (2018) conducted a systematic literature review on studies in Arab countries to examine the association between public stigma and mental help-seeking attitudes. The literature review included 33 qualitative and quantitative studies with Arab adults with mental health problems as participants (e.g., depression). The review results indicated that Arab Qataris reported more negative attitudes towards mental health problems than non-Qatari Arabs due to fear of public stigma.

In summary, public stigma seems to impact both parents and non-parents' attitudes toward mental health-seeking. As such, we decide to include public stigma in our conceptual model. Next, we will discuss the association between public stigma and parental help-seeking behaviors.

2. Public Stigma and Parental Help-Seeking Behaviors

Public stigma appears to negatively influence parental help-seeking behaviors in Global South countries. In their study, Gearing et al. (2015) interviewed Jordanian female adolescents aged 18 years old and suffering from mental health problems (e.g., depression). These teenagers reported being at an increased risk of public stigmatization. Likewise, Daeem et al. (2019) highlighted the critical role public stigma could play in parental mental health-seeking for their children. In Daeem et al. (2019), 704 mothers and their ninth-grade adolescents were recruited from Druze and Muslim villages in Occupied Palestine. Some adolescents had mental health problems (e.g., anxiety, ADHD), while some did not. The mothers and the adolescents completed several questionnaires, such as the Composite Barriers to Help-Seeking Questionnaire

(CoBaQ; Ascher et al., 1996). The mothers were also asked to evaluate the following statement on a scale from 1 to 4: "If my child had emotional or behavioral problems, I would seek help or treatment for him/her" (Daeem et al., 2019). Similar to previous studies, mothers' fear of public stigma came out as a barrier to mental help-seeking behavior for their children (Daeem et al., 2019).

In summary, public stigma's association with parental help-seeking behaviors in the Global South has been highlighted more than once in the scientific literature. In the following section, we will examine the association between internalized stigma and parental help-seeking attitudes in Global South countries.

3. Internalized Stigma and Parental Help-Seeking Attitudes

Internalized stigma seems to impact parental help-seeking attitudes negatively. Only a few studies examining this association were conducted in Global South countries. Among the few studies, Martinez et al.'s (2020) study is worth mentioning. The study focused on Chilean and Colombian adolescents from grade 6 until grade 11, some of whom were suffering from depression. The sample was not constituted of parents. The sampled adolescents filled out several questionnaires, such as the Depression Stigma Scale (DSS; Griffiths et al., 2004). The DSS is a scale pertaining to internalized stigma and attitudes towards depression (Martinez et al., 2020). The participants also completed three unidentified self-reports on mental health service utilization for their depression (Martinez et al., 2020). The results showed that adolescents with higher internalized stigma towards depression were more likely to have negative attitudes towards depression and mental health services (Martinez et al., 2020). Similarly, in Iran, Mohamadi et al. (2019) sampled 141 caregivers of children with

autism (with unspecified ages) who completed the Attitude toward Seeking Professional Psychological Help (ATSPPH; Fischer & Furina, 1995). The sampled parents reported that internalized stigma negatively colored their attitudes towards mental help-seeking for their children. In the same vein, Jeong and Park's (2020) study examined the association between internalized stigma and parental help-seeking attitudes among 103 parents in South Korea. The sampled participants suffered from depression (Jeong & Park, 2020). Parents and children completed many questionnaires among those were the Attitudes toward Seeking Psychiatric Help Survey (ASPH; Jang et al., 2007) and the Depression Stigma Scale (DSS; Griffiths et al., 2008; Jeong et al., 2017). Jeong et al. (2020) found that parents who reported high levels of internalized stigma were more likely to have negative attitudes towards mental health services. In addition, in Tekola et al.'s (2020) study mentioned earlier, some Ethiopian parents whose children were publicly stigmatized developed a sense of self-blame and isolated themselves from their societies. As a result, these parents became too critical of themselves and to mental health services (Tekola et al., 2020).

In summary, these studies showed an association between internalized stigma and attitudes toward mental health-seeking; hence we decided to include internalized stigma in our conceptual model. In the following section, we will discuss the association between internalized stigma and parental help-seeking behaviors.

4. Internalized Stigma and Parental Help-Seeking Behaviors

Compared to public stigma, internalized stigma is a relatively under-studied concept in Global South studies. Among the few studies on the association between internalized stigma and help-seeking behaviors in the Global South, the majority

focused on adults instead of parents seeking mental health services for their children. Among the few studies on parents, Mohamadi et al. (2019) is worth mentioning. In Mohamadi et al.'s (2019) study (previously introduced in the internalized stigma and parental help-seeking attitudes section), the researchers found internalized stigma to negatively affect parents' attitudes and their behaviors toward mental health services for their children. In other words, internalized stigma appeared to hinder Iranian parents from seeking mental help for their children's autism (Mohamadi et al., 2019). Nohr et al. (2021) also investigated the association between internalized stigma and help-seeking behaviors. The sampled participants were not parents of children suffering from mental disorders but were 160 adults recruited from a hospital in Cuba. Participants completed several questionnaires, including the Self-Stigma of Seeking Help Scale (SSOSH; Vogel et al., 2006). Nohr et al. (2021) found self-stigma to be a common barrier to mental help-seeking behaviors (Nohr et al., 2021).

In summary, internalized stigma seems to hinder mental health-seeking. Next, we will examine the association between treatment stigma and parental help-seeking attitudes in Global South countries.

5. Treatment Stigma and Parental Help-Seeking Attitudes

Few studies investigated the association between treatment stigma and help-seeking attitudes in Global South countries. Among these studies, we mention Shectman et al.'s (2016) study. Shectman et al. (2016) sampled Palestinian adolescents between the ages of 14 and 18 years old. No mention of mental health problem was made in the study. Participants completed many questionnaires, such as the Attitudes toward Seeking Professional Psychological Help Scale-short version (ATSPPHS-S; Fischer &

Farina, 1995) and the Intention to Seek Counseling Inventory (ISCI; Cash et al., 1975). The study results showed that most adolescents reported negative attitudes toward mental health-seeking services due to their fear of discrimination (Shectman et al., 2016). Likewise, Zolezzi et al. (2018) conducted a systematic literature review on studies in Arab countries to examine the association between treatment stigma and mental help-seeking attitudes. The literature review included 33 qualitative and quantitative studies on Arab adult participants with mental health problems (e.g., depression). The results of the review found Qatari Arabs to report higher levels of treatment and higher levels of negative attitudes towards mental help-seeking for their mental health problems compared to non-Qatari Arabs. Based on the previously presented findings, we can hypothesize that the greater the treatment stigma, the more negative the attitudes towards mental health-seeking. In addition, both Shectman et al. (2016) and Zolezzi et al.'s (2018) studies included adolescents and adults, respectively, rather than parents of children or adolescents. To the best of our knowledge, no study to date has examined the association between treatment stigma and parental help-seeking attitudes in Global South countries (Shectman et al. 2016; Zolezzi et al. 2018). Based on those findings, treatment stigma will be evaluated in our study. Next, we will shift our discussion to the association between treatment stigma and parental mental help-seeking behaviors in Global South countries.

6. Treatment Stigma and Parental Help-Seeking Behaviors

Few studies examined the association between treatment stigma and help-seeking behavior in Global South countries. In Mahsoon et al. (2019) (previously introduced in the sociodemographic variables section), Saudi Arabian adults reported

fear of treatment stigma as a common barrier to mental help-seeking. In the same vein, Alhomaizi et al. (2018) conducted a qualitative study with Arab Muslims living in the US aged between 26 and 49 years old. No mention was made in this study if the participants had a mental health problem diagnosis. The results were based on semi-structured interviews and pointed to the critical role treatment stigma played in mental health-seeking behavior (Alhomaizi et al., 2018). For instance, compared to medical services, there were more distorted views towards mental health services (Alhomaizi et al., 2018). These negative views were more likely to act as barriers to mental help-seeking behaviors (Alhomaizi et al., 2018).

In summary, people's fears of the negative beliefs associated with mental help services seem to hinder mental health-seeking behaviors. Even though Mahsoon et al. (2019) and Alhomaizi et al. (2018) focused on adults rather than parents of children or adolescents, this gap in the literature does not mean that treatment stigma could not play a significant role in parental mental health-seeking attitudes. Hence, we will include it in our study. We conclude our discussion of stigma and parental help-seeking attitudes and behaviors in Global North and Global South countries and move to our following predictor variable: Interpersonal openness.

CHAPTER V

INTERPERSONAL OPENNESS OR OPENNESS TO EXPERIENCE

Openness to experience is one of the Big Five personality traits (Boyd, 2020). This personality trait is linked to a desire to engage with new stimuli such as people and other environmental experiences (Boyd, 2020). Seeking mental health services could be viewed as a novel experience hence the importance of evaluating openness to experience in our study. Openness to experience seems to be associated with positive attitudes toward mental health services in the Global North (Fino et al., 2019) and in the Global South (Chen et al., 2020; Ferah, 2019). As for help-seeking behaviors, very few studies investigated the association between openness to experience and mental help-seeking behaviors in the Global North (Fino et al., 2019) and the Global South (Alexi et al., 2017; Ferah, 2019). To the best of our knowledge, little to no studies has examined the association between openness to experience and parents' help-seeking attitudes and behaviors. In the following section, we will begin discussing the association between openness to experience and attitudes towards help-seeking in the Global North.

A. Global North Studies

As aforementioned, a few studies conducted in the Global North examined the association between openness to experience and help-seeking attitudes in Global North countries (Fino et al., 2019). As for help-seeking behavior, very few studies examined the relationship between openness to experience and help-seeking behaviors (Fino et al., 2019). The studies that will be presented next include participants who are not parents.

This is attributed to a gap in scientific studies on parents. We will now discuss the relationship between openness to experience and help-seeking attitudes.

1. Openness to Experience and Parental Help-Seeking Attitudes

Openness to experience seems to be linked to positive attitudes towards mental health-seeking (Fino et al., 2019). In order to examine this association, Fino et al. (2019) recruited 284 second-year medical students in Italy. These medical students were first presented with vignettes in which they had to imagine themselves as psychiatrists that had to intervene to help people with psychological distress (Fino et al., 2019). The purpose of these vignettes was to raise awareness about mental health services and in return decrease students' fear from these services (Fino et al., 2019). Then, participants completed the Big Five Questionnaire (BFQ; Caprara et al., 1993) and the Mental Illness Clinicians' Attitude scale (MICA-2; Kassam et al., 2010). Results of this study highlighted a slight correlation between openness to experience and participants' attitudes towards mental health services (Fino et al., 2019). Despite the small correlation coefficient, participants with high levels of openness to experience had more positive attitudes towards mental health services (Fino et al., 2019). More specifically, these students had more knowledge about mental health services, and thus were more open to seeking help from mental health services (Fino et al., 2019). In other words, people's knowledge of mental health services might have mediated the relationship between openness to experience and attitudes towards mental health services. To the best of our knowledge, a dearth of studies in the Global North examined the association between openness to experience and mental health-seeking attitudes. Despite this perceived gap, we still decided to incorporate this variable in our conceptual model partly due to Fino

et al. s' (2019) study. Our decision was also fueled by our hope to contribute to the body of literature. Next, we will move to a discussion of the association between openness to experience and help-seeking behaviors.

2. Openness to Experience and Parental Help-Seeking Behaviors

As mentioned above, there is a dearth of studies on the association between openness to experience and help-seeking behaviors in Global North countries. One of the few studies that examined help-seeking behaviors in the Global North is Fino et al. (2019). The previously mentioned study examined mental help-seeking behaviors alongside mental health-seeking attitudes. Participants completed the Reported and Intended Behavior Scale (RIBS; Evans-Lacko et al., 2011) in addition to the previously mentioned questionnaires. Results of the study showed that participants with high levels of openness to experience expressed more willingness to seek mental health treatment should they need it (Fino et al., 2019). In the same vein, Alexis et al. (2017) investigated this association with Greek-Cypriot adults residing in Cyprus. Participants included in the study had mental health problems (e.g., anxiety, depression). Participants completed many questionnaires; among those was the Practical Barriers in Seeking Mental Health Services (PBMHS; Kung, 2004). Results of this study highlighted a positive association between openness to experience and willingness to seek help from mental health professionals (Alexis et al., 2017). In the upcoming section, we will examine openness to experience in Global South countries.

B. Global South Studies

A few studies examined the association between openness to experience and help-seeking attitudes (Chen et al., 2020; Ferah, 2019) and behaviors (Alexi et al., 2017; Ferah, 2019) in Global South countries. To the best of our knowledge, no studies pertained to parents. We will start our discussion with help-seeking attitudes.

1. Openness to Experience and Parental Help-Seeking Attitudes

Openness to experience seems to be associated with more positive attitudes towards mental health-seeking (Chen et al., 2020). In order to investigate this association, Chen et al. (2020) recruited adult and adolescent participants in China (15 and older). While some participants had anxiety, others showed symptoms of depression, and the rest did not have any known diagnosis. The sampled participants completed the Attitudes toward Seeking Professional Psychological Help Scale—Short Form (ATSPPH-SF; Fischer & Farina, 1995) and a sociodemographic questionnaire. Results obtained from this study revealed that openness to experience was positively associated with attitudes towards mental health services (Chen et al., 2020). In other words, the higher an individual's openness to experience the more positive their attitudes toward mental health-seeking were. Likewise, Ferah (2019) examined the association between openness to experience and help-seeking attitudes in University students in Turkey. These students completed several questionnaires such as the Big Five Inventory (BFI; Benet-Martinez, & John, 1998) and the Attitudes toward Seeking Professional Psychological Help Scale (ATSPPH; Fischer & Farina, 1995). Participants with higher scores on the openness to experience trait were more likely to express positive attitudes towards mental health services.

In summary, the results obtained from these two studies seem to indicate a positive relationship between openness to experience and mental help-seeking attitudes. That said, no study examining the association between openness to experience and help-seeking attitude seems to have been conducted in Lebanon. Based on this perceived gap and considering the critical role openness to experience could play in being open to new experiences, mental health-seeking being one of those experiences, we decided to include this variable in our conceptual model. Next, we will discuss the association between openness to experience and help-seeking behaviors in the Global South.

2. Openness to Experience and Parental Help-Seeking Behaviors

Only a few studies have examined the association between openness to experience and help-seeking behaviors in Global South countries (Alexi et al., 2017; Ferah, 2019). To the best of our knowledge, none have examined this relationship with a sample of parents in Global South countries. In Ferah's (2019) previously presented study, openness to experience was found to be associated with increased willingness to seek help from mental health professionals. In sum, openness to experience could possibly be associated with an increased willingness to seek mental help services (Ferah, 2019).

This concludes our discussion on the relationship between openness to experience and help-seeking attitudes and behaviors in Global South countries. We now switch gears and discuss our following predictor variable: Confidence in mental health professionals. Similar to the other variables, we will begin by presenting studies examining the association between confidence in mental health professionals with parental help-seeking attitudes and behaviors in the Global North and Global South.

CHAPTER VI

CONFIDENCE IN MENTAL HEALTH PROFESSIONALS

Parents' confidence in mental health professionals is multilayered. This confidence could generally encompass their trust and value in services offered and the belief that therapy is beneficial for their children (Bonanno & Veselak, 2020). Several studies have demonstrated how a lack of confidence in mental health services could impede parental help-seeking behaviors and attitudes in Global North and Global South countries (Bonanno, & Veselak, 2020; Hansen et al., 2021; Eapen & Ghubash, 2004). Next, we will present the results obtained from these studies, starting with the Global North (help-seeking attitudes followed by help-seeking behaviors) followed by the Global South (help-seeking attitudes followed by help-seeking behaviors).

A. Global North Studies

1. Confidence in Mental Health Professionals and Parental Help-Seeking Attitudes

A lack of confidence in mental health professionals could negatively impact parents' attitudes toward seeking mental help for their children and/or adolescents (Hansen et al., 2021). Hansen et al. (2021) conducted a study in Denmark with parents of children between 7 and 12 years old. The researchers interviewed the parents of children with neurodevelopmental disorders (e.g., ADHD, ID; Hansen et al., 2021). The results of the study identified several variables that could negatively impact parental mental health attitudes. Amongst those variables are a lack of cooperation among mental health professionals, parents feeling undervalued by mental health professionals,

and the belief that mental health professionals are not knowledgeable enough to help their children (Hansen et al., 2021). Likewise, Bonanno and Veselak (2020) conducted a qualitative study with seven parents of children between 4 and 18 years old with behavioral, mental, health, or emotional problems. Parents were interviewed to evaluate their attitudes toward mental health services for their children's neurodevelopmental disorders (Bonanno & Veselak, 2020). Among the possible barriers to mental help-seeking, parents reported being concerned about their child's privacy (Bonanno & Veselak, 2020). In other words, parents who believed that their child's privacy might be invaded were less likely to hold positive attitudes towards seeking psychological help for their children. Therefore, parents who lack the confidence in mental health professionals to maintain their child's confidentiality seem to have less positive attitudes towards mental health services (Bonanno & Veselak, 2020).

In summary, all the studies mentioned above highlighted the important role confidence in mental health professionals could play in attitude toward help-seeking. Thus, we decide to include confidence in mental health professionals in our conceptual model. Next, we will discuss the role confidence in mental health professionals could play in parental help-seeking behaviors.

2. Confidence in Mental Health Professionals and Parental Help-Seeking Behaviors

Parental doubts in mental health professionals appear to impact their help-seeking behaviors for their children. In Sayal et al.'s (2010) study, parental doubts in mental health professionals' ability to help their children were significant. The sampled parents of children between 2 and 17 years old believed that school psychologists did

not have the requirements to help their children (Sayal et al., 2010). Those same parents reported having confidentiality concerns (Sayal et al., 2010). In the same vein, Radez et al.'s (2020) meta-analysis previously mentioned highlighted the barriers to help-seeking behaviors among parents of children and adolescents with behavioral and emotional problems. The results of this meta-analysis point to parental lack of trust in mental health professionals (Radez et al., 2020). Parents' inability to trust a mental health professional was also cited as a barrier to their mental help-seeking for their children (Radez et al., 2020).

In summary, Sayal et al. (2010) and Radez et al.'s (2020) studies highlight the negative impact a lack of trust in mental health professionals could have on parental help-seeking behaviors. We conclude our discussion on the potential role lack of trust or value in mental health professionals could play in parental help-seeking attitudes and behaviors in Global North countries. Next, we will present studies on the association between confidence in mental health professionals and help-seeking behaviors in Global South studies.

B. Global South Studies

Parental help-seeking attitudes and behaviors seem to be influenced by parental lack of confidence in mental health professionals or a lack of trust in the value of mental health services in Global South countries. We begin with studies examining the association between parental confidence in mental health professionals and their help-seeking attitudes toward their children.

1. Confidence in Mental Health Professionals and Parental Help-Seeking Attitudes

Several studies indicate that a lack of trust in mental health professionals' ability to help one's child could be negatively associated with parental attitudes towards mental help-seeking. In Eapen and Ghubash's (2004) study previously mentioned, sampled parents in the UAE had doubts in mental health professionals' ability to help their children. Consequently, the sampled parents' lack of trust in psychologists' ability to help their children was negatively associated with attitudes towards mental help-seeking for their children. In the same vein, Daeem et al. (2019) study showed that mothers' perception of psychotherapy as harmful negatively affected their attitudes towards seeking mental help for their adolescents. Furthermore, in Liu et al. (2020), 18 Chinese parents of children between 13 and 21 years with no mental health diagnosis were presented with vignettes. These vignettes portrayed several mental disorders such as schizophrenia and depression. After viewing the vignettes, parents were asked about their mental health-seeking attitudes (Liu et al., 2020). Interestingly, Liu et al. (2020) study showed that parents seemed to trust non-mental health professionals more than mental health professionals. Those alternative trust sources include primary care physicians or medical doctors, family, and friends (Liu et al., 2020). Parents sampled in Liu et al. (2020) believed that alternative sources of support could help their children more than a mental health professional could. Along the same line, Al-Mohsin et al. (2020) investigated the association between parental confidence in mental health professionals and parental help-seeking attitudes. The sampled 132 Saudi Arabian mothers had children aged nine years old and younger with a diagnosis of ADHD (Al-Mohsin et al., 2020). The sampled mothers' attitudes towards mental help-seeking were

evaluated using a questionnaire the researchers developed for their study (Al-Mohsin et al., 2020). The results obtained from this study indicated that the sampled mothers did not trust mental health professionals' ability to help their children with ADHD.

In summary, studies presented so far indicate that parental lack of trust in mental health professionals seems to be negatively associated with parental help-seeking attitudes in Global South countries. Based on this body of literature, our conceptual model will account for confidence in mental health professionals. In Lebanon, the mental health profession is relatively new (Obeid & Saade, 2022), so we can assume that Lebanese people's confidence in mental health professionals would be less than optimal. This lack of confidence could, in turn, be associated with a negative attitude towards mental health professionals. In the following section, we will discuss the association between parental confidence in mental health professionals and their help-seeking behaviors.

2. Confidence in Mental Health Professionals and Parental Help-Seeking Behaviors

Similar to mental health attitudes, parental confidence in mental health professionals also seems to play a role in parental health-seeking behavior for their children. In a Global South study, Sun et al. (2019) found Chinese parents of female adolescents with anorexia nervosa to be dissatisfied with the treatment received. Parents expressed dissatisfaction with the mental health professionals working with their children. In addition to viewing therapy as overly focused on weight gain, they perceived monitoring their child's eating habits as too rigid (Sun et al., 2019). In the same vein, in Daeem et al.'s (2019) study previously mentioned, mothers expressed

negative attitudes toward mental health-seeking due to a lack of trust in mental health professionals. Unfortunately, not enough studies examining the association between confidence in mental health professionals and help-seeking behaviors were conducted in Global South countries.

This concludes our literature review on the variables that have been shown to play a role in parental help-seeking attitudes and parental help-seeking behaviors in both Global North and Global South countries. It is noteworthy to mention that we will be controlling for two variables that have been shown to affect parental help-seeking attitudes and parental help-seeking behaviors distally. Thus, our two control variables will be: social desirability (Mahsoon et al., 2020), and having received mental health services for the parent and the child (Thurston et al., 2015). Our decision is attributed to the fact that we are not primarily interested in the variables presented next.

CHAPTER VII

THE CURRENT STUDY

A. Summary of the Literature Review

Based on the previously presented literature, several variables have been shown to be associated with attitudes towards help-seeking attitudes and behaviors. These variables include: 1) sociodemographics variables such as a) parental income and b) health insurance; 2) recognizing the problem and the need for help; 3) openness to experience; 4) stigma: a) public b) internalized, and c) treatment; and 5) confidence in mental health professionals.

B. Perceived Gap in the Scientific Literature-The Current Study

A review of the previously presented literature reveals several gaps. The first one pertains to a lack of knowledge as to what variables could be associated with parents' attitudes towards mental help-seeking in Lebanon. A second gap pertains to the insufficient number of studies conducted with parents, specifically in the Arab world (Doumit et al., 2017). Most of the studies conducted in Global North, and Global South studies were conducted with adults (Chen et al., 2020; Ferah, 2019; Fino et al., 2019). In the same vein, few studies evaluated the association between openness to experience and attitudes toward mental help-seeking in parents, and none did so in Lebanon. Stigma is also worth mentioning. Most studies on attitudes towards help-seeking in parents favored one type of stigma. Distinguishing between the types of stigma is important to individualize prevention and intervention efforts in the future. To the best

of our knowledge, no studies investigating the association between openness to experience and parental help-seeking attitudes involved parents in Arab countries. Based on the perceived gaps in the scientific literature, this study seeks to determine what variables could be associated with attitudes towards mental health-seeking in parents in Lebanon. Given the essential role, parents play in recognizing their children's difficulties and getting them the help they need (Boulter & Rickwood, 2013), examining their attitudes towards mental help-seeking is important. By studying the aforementioned variables with parental attitudes towards mental health services in Lebanon, we aim to draw attention on the variables that might be associated with parental attitudes toward mental health services. By doing so, we seek to create a positive outlook for parents on mental health services. We hope to decrease the treatment gap in Lebanon and resultantly hinder the current and future negative impact of psychological disorders in childhood and adolescence (Karam et al., 2019; Maalouf et al., 2020; Obeid & Saade, 2022; Polanczyk et al., 2015).

C. Hypotheses

This thesis will therefore attempt to evaluate the following hypotheses:

- ***Hypothesis 1 (H1):*** Higher income levels will be associated with more positive parental attitudes towards seeking mental health services.
- ***Hypothesis 2 (H2):*** Having health insurance that covers mental health services will be associated with positive parental attitudes towards mental health services.
- ***Hypothesis 3 (H3):*** Higher parental recognition of their children's mental health problems and the need for help will be associated with more positive parental attitudes towards mental health services.

- ***Hypothesis 4 (H4)*:** Higher levels of public stigma will be associated with lower positive parental attitudes towards mental health services.
- ***Hypothesis 5 (H5):*** Higher levels of internalized stigma will be associated with lower positive parental attitudes towards mental health services.
- ***Hypothesis 6 (H6):*** Higher levels of treatment stigma will be associated with lower positive parental attitudes towards mental health services.
- ***Hypothesis 7 (H7):*** Higher levels of openness to experience will be associated with more positive parental attitudes towards mental health services.
- ***Hypothesis 8 (H8):*** Higher confidence in mental health professionals will be associated with more positive parental attitudes towards mental health services.

CHAPTER VIII

METHODS

A. Participants

In the present study, we recruited parents of children[1] and adolescents whose ages vary between 1.5 and 18 years old in Lebanon (across the country). We used a power analysis G*Power 3.1.9.7 (Faul et al., 2009). Our chosen sample size was calculated to obtain a power of 95% with α = .05 and a small to medium effect size. Results of the power analyses revealed that we needed around N = 240 participants. To account for missing data or data entry errors, we aimed to recruit 300 parents of children in Lebanon. For the purposes of this study, we ended up recruiting 309 parents. Then we removed 66 participants out of the 309 parents we recruited because of missing responses. We ended up with 243 parents with no missing data, we elaborate on this in the Results Chapter under the Missing Value Analysis section. Mothers comprised the majority of our sample (females 69.5%, males 30.5%). All participants were Lebanese. Additionally, around 40.7% of the participants had a child with a mental health problem. These children's ages ranged between 2 and 18 years old (M = 9.2, SD = 5.06). 59.5% of these children were males and 40.5% were females. We elaborate on our sampled parents' descriptives later in the Results Chapter under the Sample Descriptives section.

[1] For the purpose of this thesis, particularly in the methods section, children will be used to refer to individuals below the age of 18 years old.

B. Procedure

Following the American University of Beirut's Institutional Review Board's (IRB) approval, we circulated our flyer on various social media platforms including Facebook, Instagram, and WhatsApp groups. Participants were therefore recruited through convenience sampling using a snowball approach. We also shared our study flyer with members of our networks and asked them to share it with parents who might be interested in participating in the study. The flyer included an invitation for parents of children residing in Lebanon to take part in our study. The flyer included a link that guided study participants to our questionnaires. It is worth mentioning here that all the study materials were only available in English. Participating in our study was expected to take around 30-45 minutes. Lastly, even though participants had the option of getting financially compensated in exchange for their participation in our study (40,000 LBP) none ended up receiving that money. In other words, none of the sampled parents ended up contacting us in order to receive their compensation. We elaborate on this in the discussion section.

After having clicked on the LimeSurvey link, participants reviewed the informed consent. The consent form stated the objectives of the study and made sure that participation was completely voluntary and did not incur more than minimal risk. Participants who accepted to participate in our study filled out a questionnaire developed by the research team in collaboration with Dr. Badaan on public stigma (Please see Appendix I-A). After having filled out the public stigma scale, they completed the Parents Internalized Stigma of Mental Illness Inventory (PISMI; Zisman-Ilani et al., 2014; Please see Appendix I-B) for internalized stigma, and the Stigma Scale for Receiving Psychological Help (SSRPH; Komiya, Good, & Sherrod, 2000; Please see

Appendix I-C) for treatment stigma. Parents were then asked to fill out one of two questionnaires, pertaining to their child's mental health symptoms. These questionnaires were: the Child Behavior Checklist for children between the ages of 1 and a half and 5 years old (CBCL Parent Version; Achenbach & Rescoral, 2001; Please see Appendix I-D), or b) the Child Behavior Checklist (CBCL) for children between the ages of 6 and 18 years old (Parent Version; Achenbach & Rescoral, 2001; Please see Appendix I-E). Before being redirected to the age appropriate CBCL, parents were asked if they had a child between the ages of 1.5 and 5 years old, or between the ages of 6 and 18 years old. Participants who chose the 1.5 and 5 years old option were directed to the CBCL for children between the ages of 1.5 and 5 years old, and those who chose the 6 and 18 years old option were directed to the CBCL for children between the ages of 6 and 18 years old option. After having completed the age appropriate CBCL, participants completed a section of the Extra Short Form of the Big Five Inventory-2XS on openness to experience (BFI-2XS; Soto & John, 2017; Please see Appendix I-G). Parents were then asked to complete the Parental Attitudes towards Psychological Services Inventory (PATPSI; Turner, 2012; Please see Appendix I-H) evaluating our outcome variable as well as the short version of the Balanced Inventory of Desirable Responding (BIDR; Hart et al., 2015; Please see Appendix I-I). Lastly, participants were asked to fill out a sociodemographic questionnaire. This socio-demographic questionnaire evaluated a number of variables such as, parental education level, parental income, health insurance coverage for mental health services, parental recognition of a mental health problem in their child and the need to seek help for these difficulties, as well as their perceived value and trust in mental health professionals in Lebanon (Please see Appendix I-J). After having completed all the study questionnaires, participants were thanked for

taking the time to participate in our study and were provided with a sheet of mental health services in Lebanon (Please see Appendix I-K).

C. Measures

Next, we will go over the measures used in this study. As mentioned earlier, all study materials were available in English. We will start with the scales used for our predictor variables.

1. Stigma Scales

Our first predictor variable was stigma. More specifically, we measured: 1. public stigma, 2. parents' internalized stigma, and 3. treatment stigma. Public stigma was evaluated with a questionnaire we developed in collaboration with Dr. Badaan (Please see Appendix I-A), internalized stigma was evaluated using the Parents' Internalized Stigma of Mental Illness Inventory (PISMI; Please see Appendix I-B), and treatment stigma was evaluated using the Stigma Scale for Receiving Psychological Help (SSRPH; Please see Appendix I-C). In the next section, we will present PSS scale below.

a. Public Stigma Scale (Appendix I-A)

To measure public stigma, we created a 10-item scale. The items were informed by the literature review (Daeem et al. 2019; Gearing et al. 2015) and adapted for parents. These items are rated on a 5 point-Likert scale: 1 (Strongly Disagree) to 5 (Strongly Agree). Examples of items used are: "If my child had a mental health problem and other people knew of it, they would think my child is dangerous", "If my

child had a mental health problem and other people knew of it, they would be terrified of my child" and "If my child had a mental health problem and other people knew of it, they would keep their children away from my child" (Appendix I-A). Items 7, 8, 9 and 10 were reverse coded. A total score was obtained by summing the scores obtained on each item. Higher scores indicated greater public stigma. In our study, the scale was strongly internally consistent, with Cronbach's $\alpha = .984$ (Please see Table 1 in Results Section). In the upcoming section, we will present PISMI scale below.

b. Parents' Internalized Stigma of Mental Illness Inventory (PISMI; Zisman-Ilani et al., 2013; Appendix I-B)

To assess parents' internalized stigma, we used the PISMI. The PISMI includes 29 items pertaining to the following subscales: Stigma resistance, social withdrawal, perceived discrimination, alienation, and stereotype endorsement. Parents were asked to indicate to what extent they agree with a number of statements evaluated on a 4-point Likert scale: 1 (Strongly disagree), 4 (Strongly agree). The following are examples of items included in the scale: "People often patronize me, just because I have a son or daughter with mental illness", "I am embarrassed or ashamed that I have a son or daughter with mental illness", and "I avoid telling people that I have a son or daughter with mental illness" (Zisman-Ilani et al., 2013). It is worth mentioning here, that we modified the items of the scale so that all parents (those whose child had a mental health problem and those who did not) could fill out the scale. For example, the item "People often patronize me, just because I have a son or daughter with mental illness" would become the following "If I have a son or daughter with a mental illness, people would often patronize me", item ""I am embarrassed or ashamed that I have a son or daughter

with mental illness" would become “If I have a son or daughter with mental illness, I would be embarrassed or ashamed", and item "I avoid telling people that I have a son or daughter with mental illness" would become “If I have a son or daughter with mental illness, I would avoid telling people" (Zisman-Ilani et al., 2013; Appendix I-B). Items 7, 14, 24, 26 and 27 were reverse-coded (Zisman-Ilani et al., 2013). Similarly to the other scales, we computed a total score. Higher scores obtained indicated higher levels of parental internalized stigma. In terms of psychometric properties, the PISMI has been shown in the literature to have strong internal consistency with a Cronbach’s α= .91 (Boyd et al., 2014). In our study, the scale had strong internal consistency, with Cronbach’s α = .983 (Please see Table 1 in Results Section). Next, we will present SSRPH scale below.

c. Stigma Scale for Receiving Psychological Help (SSRPH; Komiya et al., 2000; Appendix I-C)

The SSRPH was used to measure treatment stigma. The scale included 5 items pertaining to parents' experience of treatment stigma (Komiya et al., 2000). The items were rated on a 4-point Likert scale ranging between 0 and 3. The items were tweaked to apply to parents of children and adolescents. The following are example of items included in the scale: "People will see a child in a less favorable way if they come to know that this child has seen a psychologist", "It is advisable for a parent to hide from people the fact that their child has seen a psychologist", and "People tend to like less children who are receiving professional psychological help" (Appendix I-C). A total score was computed by summing the individual scores obtained on the 5 items. Higher scores indicated greater treatment stigma. As for its psychometric properties, the

SSRPH has been shown to have adequate internal consistency with a Cronbach's α = .69 (Komiya et al., 2000). In our study, the scale alpha was α = .971 (Please see Table 1 in Results Section). In the following section, we will present the scales we used to measure our second variable: parental recognition of the problem and the need for psychological help.

2. *Parental Recognition of the Child's Mental Health Problem and the Need for Psychological Help Scales*

Our second predictor variable pertained to parental recognition of their child's mental health problem and the need for psychological help. We measured this variable in two different ways (subjectively and objectively). The subjective measure of parental recognition of the child's mental health problem and the need for help was based on 4 items included in the sociodemographic questionnaire (Appendix I-J). These items are: "On a scale from 1 to 10, how problematic would you say your child's behaviors are?", "On a scale from 1 to 10, how disturbing would you say your child's symptoms are to their general functioning (e.g., performance at school, relationships with friends)?", "On a scale from 1 to 10 how disturbing would you say your child's difficulties are to family functioning?", and "On a scale from 1 to 10, how likely are you to consider taking your child to a psychologist or psychiatrist if they had a mental health problem?" (Appendix I-J). A total score was computed based on individual ratings on each item included in the scale. Higher scores indicated a greater recognition of the child's mental health problem and the need for psychological help. In our study, the alpha of these questions was α = .877 (Please see Table 1 in Results Section). It is worth mentioning that parents filled out the objective measure for parental recognition before

the subjective one, since the sociodemographic questionnaire was the final questionnaire in our survey. After parents completed the SSRPH scale and before proceeding to fill out one of the CBCLs, parents were first asked the following question: “Please think of one of your children while answering the following questions. If more than one child suffers from mental health problems, think of one child while answering the questions below. Is this child’s age between 1.5 and 5 years old?” Parents who responded by “yes” to this question were directed to the CBCL for children between the ages of 1.5 and 5 years old scale. Parents who answered by “no” to this question were directed to the CBCL for children between the ages of 6 and 18 years old scale. Next, we will present the CBCL for children between the ages of 1.5 and 5 years old scale.

a. Child Behavior Checklist (CBCL 1.5-5; Parent Form; for children between the ages of 1.5 and 5 years old; Achenbach & Rescoral, 2001; Appendix I-D)

The CBCL for children between the ages of 1.5 and 5 years old was used as an objective measure of parental recognition of their child's mental health problem. This CBCL is a 100-item scale used to evaluate emotional and behavioral problems in children under the age of 6 years old. The items are scored on a 3-point Likert scale ranging between 0 (Not True) and 2 (Very True) (Appendix I-D). Examples of items included in the scale are: "Easily Frustrated," "Lying or cheating", and "Bragging, boasting" (Appendix I-D). To compute a total CBCL score, we summed the scores obtained on each item. This CBCL has been shown in the literature to have strong internal consistency with a Cronbach’s $\alpha = .91$ (Achenbach & Rescorla, 2001). In our study, the scale alpha was $\alpha = .916$ (Please see Table 1 in Results Section). In the

upcoming section, we will present the CBCL for children between the ages of 6 and 18 years old scale.

b. Child Behavior Checklist (CBCL 6-18; Parent Form; for children between the ages of 6 and 18 years old; Achenbach & Rescoral, 2001; Appendix I-E)

The CBCL for children between the ages of 6 and 18 years old was also used as an objective measure of parental recognition of their child's mental health problem. The CBCL for children between the ages of 6 and 18 years old is a 113-item measure designed to evaluate emotional and behavioral problems in children between the ages of 6 and 18 years old. The items are scored on a 3-point Likert scale ranging between 0 (Not True) and 2 (Very True) (Appendix I-E). Examples of items included in the scale are: "Acts too young for his/her age," "Argues a lot", and "Bragging, boasting" (Appendix I-E). To compute a total score, we summed the scores obtained on each item. The literature has shown that this CBCL has strong internal consistency with a Cronbach's $\alpha = .91$ (Achenbach & Rescorla, 2001). In our study, the scale alpha was $\alpha = .939$ (Please see Table 1 in Results Section). In the following section, we will present the newly developed CBCL with the overlapping items.

c. Child Behavioral Checklist with Overlapping Items (CBCL-O; Appendix I-F)

We had intended to use two separate CBCLs as part of our analyses plan. However, we faced problems with our regression analysis due to a high multicollinearity issue between some items of both CBCLs. Accordingly, we decided to include only overlapping items between the two CBCLs. By only including overlapping items between the two scales, we ended up with a new CBCL scale composed of 50

overlapping items (Appendix I-F). We combined the responses obtained on these overlapping items to end up with 50 full responses on these items. An example of overlapping items between both CBCLs: item 2 in CBCL for children between the ages of 1.5 and 5 years old "Acts too young for age" with item 1 in CBCL for children between the ages of 6 and 18 years old "Acts too young for his/her age", item 5 in CBCL for children between the ages of 1.5 and 5 years old "Can't concentrate, can't pay attention for too long" with item 8 in CBCL for children between the ages of 6 and 18 years old "Can't concentrate, can't pay attention for too long, and item 6 in CBCL for children between the ages of 1.5 and 5 years old "Can't sit still, restless, or hyperactive" with item 10 in CBCL for children between the ages of 6 and 18 years old "Can't sit still, restless, or hyperactive". Similarly to other scales, we computed a total score based on responses obtained on these overlapping items. Higher scores indicated greater parental recognition of child mental health problems. In our study, the scale alpha was $\alpha = .841$ (Please see Table 1 in Results Section). In the next section, we will present the scale we used to measure our third variable: Openness to experience.

3. Openness to Experience Scale

Our third predictor variable pertained to openness to experience. We measured this variable using the Extra Short Form of the Big Five Inventory (BFT-2XS**;** Soto & John, 2017; Appendix I-G). We present the scale below.

a. Extra Short Form of the Big Five Inventory (BFI-2XS; Soto & John, 2017; Appendix I-G)

For this predictor variable, we only retained the 3 items pertaining to openness to experience in the BFI-2XS (Soto & John, 2017; Appendix I-G). The Big Five Inventory includes 15 items pertaining to the following personality traits: Openness to experience, Extroversion, Agreeableness, Conscientiousness and Neuroticism (Soto & John, 2017). Items on the BFI-2XS are scored on a scale from 1 to 5 with 1 (Disagree) and 5 (Slightly agree). The three items pertinent to openness of experience that are included in the scale are: "Is fascinated by art, music, or literature", "Has little interest in abstract ideas", and "Is original, comes up with new ideas" (Appendix I-G). Item 10 was reverse coded, and then a total score was calculated by summing individual scores on items: 5, 10, and 15. Higher scores indicated greater openness to experience. Lastly, the literature has shown that the Short Form BFI-2XS has strong internal consistency with a Cronbach's $\alpha = .80$ (Soto & John, 2017). In our study, the scale alpha was $\alpha = .86$ (Please see Table 1 in Results Section). In the following section, we will present the scale we used to measure our fourth variable: Confidence in mental health professionals.

4. Confidence in Mental Health Professionals Measure

To assess our fourth predictor variable, we included 5 items in our sociodemographic questionnaire under the "Value and trust in mental health professionals" subheading (Appendix I-J). These items are: "On a scale from 1 to 10 how well trained do you think mental health professionals in Lebanon are in terms of children's mental health problems?", "On a scale from 1 to 10 how comfortable are you discussing your child's difficulties with a mental health professional in Lebanon?", "On a scale from 1 to 10 how helpful would you say mental health professional in Lebanon are in answering questions pertaining to your child's mental health problems?", and "On

a scale from 1 to 10 how much do you trust mental health professionals in Lebanon to help your child with their mental health problem?"(Appendix I-J). These items were scored on a scale from 1 to 10. A total score was computed by summing individual scores. Higher scores indicated greater confidence in mental health professionals in Lebanon. In our study, the scale alpha was α = .971 (Please see Table 1 in Results Section). Next, we will present the questions used to measure our sociodemographic variables: parental income and health insurance availability.

5. Sociodemographic Factors: Parental Income and Health Insurance

The sociodemographic independent variables investigated in this study are parental income and the availability of health insurance coverage.

a. Sociodemographic Questionnaire (Appendix I-J)

The sociodemographic questionnaire included a number of variables. However, the two variables that were the focus of this thesis are a) parental income and b) health insurance availability that covers mental health services. To assess parental income, participants were asked the following question: " Which of the below best describes your household income? (Appendix I-J) with 5 answer options: "Our household income covers our needs well, and we can save from it", "Our household income covers our needs, but we cannot save from it", "Our household income does not cover our needs, and we face difficulties meeting those needs", "I refuse to answer", and "I don't know". Parental income was evaluated as a continuous variable. In other words, we were interested in examining whether an increase in family income would be associated with a more positive attitude towards mental help-seeking. "Our household income covers

our needs well, and we can save from it" was coded as a 3. "Our household income covers our needs, but we cannot save from it" and "Our household income does not cover our needs, and we face difficulties meeting those needs were coded as a 2 and 1 respectively. Finally, the following options: "I refuse to answer", and "I don't know", were not coded because our sampled parents did not select them as their options. Our second independent socio-demographic variable, health insurance availability, was evaluated based on the following two questions: "1. Do you have health insurance?" and "2. Does your health insurance cover mental health services?" Participants' responses to the questions were coded in a binary manner (Yes = 1, No = 0). It is worth noting that if parents responded yes to the first question, they would be presented with the second question. As such, a small number of parents responded to the mental health insurance coverage question (N = 127; Please see Table 3) compared to the number of parents who responded to the health insurance availability question (N = 243; Please see Table 3). Due to the high number of missing responses to the mental health insurance coverage question, we decided to exclude it from our main analyses. In the upcoming section, we will present the scale used to measure our outcome variable: Parental attitudes towards mental health services.

As previously mentioned, our outcome variable was parents' attitudes towards seeking mental health services for their children.

6. Parental Attitudes towards Psychological Services Inventory (PATSPI)

To measure parental attitudes towards psychological help, we used the PATPSI (Turner, 2012; Appendix I-H). The PATPSI includes 21-items pertaining to parental attitudes towards child and adolescent mental health services. Each item was rated on a

6-point Likert scale ranging from 0 (Strongly Agree) to 5 (Strongly Agree). Examples of items included in this scale are: "Strong willed parents can handle problems without professional help", "If I believed my child was having a mental breakdown, my first decision would be to get professional help" and "I would not want to take my child to a professional because of what people might think". In our study we reverse-coded the following item numbers: 1, 2, 3, 6, 7, 10, 11, 12, 14, 15, 16, 17, 18, 19, 20 and 21. A total score obtained in this scale would indicate a more positive attitude toward help-seeking. Similarly to other scales, we calculated a total score based on each items' individual score. The PATSPI has been shown in the literature to have good internal consistency with a Cronbach's $\alpha = .80$ (Turner, 2012). In our study, the scale alpha was $\alpha = .993$ (Please see Table 1 in Results Section). In the following section, we will present the scale and questions we used to measure our control variables: Social desirability and previous mental health services sought for child and/or parent.

As previously mentioned, we planned on controlling for the following variables: 1) Social desirability and 2) Previous use of mental health services for child and/or parents. To measure social desirability, we used the Short Version of the Balanced Inventory of Desirable Responding (BIDR; Hart et al., 2015; Appendix I-I). As for previous use of mental health services for the child and/or parents, we included a number of items in the sociodemographic questionnaire.

7. Social Desirability Scale

a. Short Version of the Balanced Inventory of Desirable Responding (BIDR; Hart et al., 2015; Appendix I-I)

Social desirability bias refers to respondents' tendency to answer in a desirable fashion, characterized by over-reporting desirable behaviors while underreporting undesirable behaviors (Latkin et al., 2017). Since we are measuring stigma in our study, controlling for social desirability is important. The BIDR short version includes 4 items evaluating social desirability bias. The responses to the items are: Not true (1), somewhat true (4) or false (7). Examples of items included in the scale are: "I have not always been honest with myself", "I always know why I like things", and "I sometimes tell lies if I have to" (Appendix I-I). Items 1 and 3 were reverse-coded (Hart et al., 2015). All individual scores were summed to obtain a total social desirability score. Higher scores indicated more social desirability biases. The BIDR aggregate in the literature had excellent internal consistency with a Cronbach's $\alpha = .976$ (Hart et al., 2015). In our study, the scale alpha was $\alpha = .821$ (Please see Table 1 in Results Section). In the next section, we will present the questions we used to measure our second control variable: Previous mental health services sought for child and/or parent.

8. Previous Use of Mental Health Services for Child and/or Parent

The second variable we controlled for in our study is parents and/or children's previous use of mental health services. We controlled for this variable since Mendenhall and Frauenholtz (2013) found that parents and children's previous experience with mental health services could affect their attitudes towards seeking mental health services for their children. To assess parents and children's previous use of mental health services, we used the following items in the sociodemographic questionnaire: "During the past three years, have you ever consulted a nonmedical/mental health professional (e.g., a counselor, psychologist) for any psychological, emotional or academic/work

problem your child is experiencing (e.g., feeling worried, feeling sad, physical symptoms that have no medical explanation such as tension, insomnia, pounding heart, or fatigue?", and "During the past three years, have you ever consulted a mental health professional (e.g., a psychologist) for any psychological, emotional or academic/work problem you are experiencing (e.g., feeling worried, feeling sad, physical symptoms that have no medical explanation such as tension, insomnia, pounding heart, or fatigue?". Responses to these questions were coded as binary (Yes = 1, No = 0) (Appendix I-J). In the following section, we will present our pilot study.

D. Pilot Study

Before rolling out our study, we started with a pilot study. Six parents took part in our study and provided comments. As expected, the time needed to complete our study was found to be around 30-45 minutes. Based on participants' feedback, we provided non-technical definitions for some items included in our study. For instance, in the PISMI scale, item 12 "Negative stereotypes about mental illness keep me isolated from the normal world" was supplemented with a non-technical definition of stereotypes: [Stereotypes are ideas, beliefs society holds about a person or group with a psychological disorder, such as "People with depression are weak"]. We also corrected some spelling mistakes and changed some fonts based on participants' feedback. In the upcoming section, we will present our research's results.

CHAPTER IX

RESULTS

For our data analyses we used the IBM SPSS version 26 software. In the current section, we start by presenting the results of our missing value analysis. Then, we inspect the psychometric properties of each scale (e.g., PSS, PISMI, SSRPH, CBCL-O, PATPSI, BFT-2XS, BIDR, subjective parental recognition of their children's mental health problem and the need for help measure, and confidence in mental health professionals' measure). Lastly, we present additional preliminary analyses including normality assumptions, univariate outliers and multivariate outliers. Finally, we present the results of the reliability analyses, scale descriptives, sample descriptives, assumptions of regression analyses, correlations, and regression analyses.

A. Missing Value Analyses

We conducted a missing value analysis on our raw data. The analysis conducted showed that there were no items in any of the used scales with missing values greater than 5%. However, the CBCL for children between the ages of 1.5 and 5 years old, the CBCL for children between the ages of 6 and 18 years old, and some sociodemographic questions (e.g., child diagnosis, type of medical help for child, type of mental help for child, type of medical help for parent, diagnosis of parent and health insurance coverage) showed missing values greater than 5% (47.2%, 56.2%, 58.9%, 68.9%, 61.2%, 83.5% and 49.2% respectively). Such missing values are not too surprising as some of these questions and scales were conditional. More specifically, participants were only asked to fill them out based on their responses to previous questions.

Little's MCAR test did not turn out to be significant, $p > .05$. This means that the pattern of missing values was completely random. Despite this finding, we still decided to remove participants with missing responses from our dataset to avoid bias. As such, we ended up removing 66 participants from the 309 participants, leaving us with a total of 243 participants with no missing data on any item/question. Missing data were visually detected by manually scrolling through the responses and marking participants' IDs with missing answers on items/questions. After having removed participants with missing data, we ran descriptive analyses to make sure we did not have any missing data left. Next, we will present the results of our factor analyses.

B. Psychometric Properties

This subsection displays the factor analyses of the Public Stigma Scale, PISMI, SSRPH, CBCL-O, BFT-2XS, PATPSI, BIDR, parental recognition of mental health problem and the need for help subjective measure, and finally confidence in mental health professionals in Lebanon measure. The pattern matrices are presented in Appendix II. In the following section, we will present the statistical assumptions required to run factor analyses.

1. Statistical Assumptions

The assumptions required for running Exploratory Factor Analysis are a Kaiser-Meyer-Olkin value above .7, a significant Bartlett's test of sphericity, a determinant greater than .00001 in the correlation matrix, a correlation below .8 between the items of each scale and finally the measures of sampling adequacy (MSA) observed on the anti-image correlation matrices must exceed .50 (Pallant, 2016). That said, not all the factor

analysis assumptions were met for our scales. This may be due to the relatively small sample size, linguistic and cultural differences between our sample and the samples used by the developers of the scales (Achenbach & Rescoral, 2001; Hart et al., 2015; Komiya et al., 2000; Turner, 2012; Zisman-Ilani et al., 2014) . As such, the results of our EFA must be interpreted with caution. The EFA results are not sufficient to inform decisions about removing weakly loading or cross-loaded items. In fact, the EFA results must be paired with reliability analyses. Even though our scales did not meet all the factor analysis assumptions; we still decided to present our findings for transparency's sake.

Bartlett's test of sphericity was found to be significant for the PSS, PISMI, SSRPH, CBCL-O, BFT-2XS, PATPSI, BIDR, parental recognition of their children's mental health problem and the need for help subjective measure, and confidence in mental health professionals in Lebanon's measure ($X^2(45) = 5035.386$, $p < .001$; $X^2(406) = 12749.500$, $p < .001$; $X^2(10) = 1757.298$, $p < .001$; $X^2(3) = 347.313$, $p < .001$; $X^2(190) = 10005.423$, $p < .001$; $X^2(6) = 353.163$, $p < .001$; $X^2(6) = 1503.572$, $p < .001$; $X^2(6) = 1375.172$, $p < .001$ respectively). Furthermore, Kaiser-Meyer-Olkin values for the PSS, PISMI, SSRPH, CBCL-O, BFT-2XS, PATPSI, BIDR, parental recognition of their children's mental health problems and the need for help, and confidence in mental health professionals in Lebanon were all above .70 (KMO = .934; KMO = .970; KMO = .909; KMO = .706, KMO = .718, KMO = .979, KMO = .723, KMO = .802; and KMO = .871 respectively). The results obtained indicate that the dataset is factorable. Even though our scales met the Bartlett and Kaiser-Meyer-Olkin assumption, the other assumptions (e.g., determinant above .00001, correlations below .8, and anti-image correlations above .5) were not met for all our scales.

All our scales violated the determinant assumption, as they had determinant values less than .00001. The only two scales that met the determinant assumption were the BFT-2XS and BIDR scales (BFT-2XS determinant= .235 and BIDR determinant = .229). Additionally, the third assumption on the necessity of having inter-item correlation coefficients below .8, was not met by most of our scales. For instance, most scales (e.g., PSS, PISMI, PATPSI, SSRPH, subjective measure for parental recognition and confidence in mental health professionals' measure) had items with correlation coefficients above .8. As for the fourth assumption regarding the anti-image correlations, all scales violated it as all scale items had correlation measures that did not exceed .5. Despite these assumption violations, none of the items were excluded from the analysis. The reason for keeping all items in our scales is attributed to the fact that Cronbach's coefficients' values did not change after having removed problematic items from the scales. In fact, our alpha values remained between .8 and .9 for all the scales. Next, we will present the results of our EFA with the public stigma scale.

a. Public Stigma Scale

We conducted a factor analysis with Maximum-Likelihood extraction and Direct Oblimin rotation on the 10 items of the public stigma scale. One factor was extracted based on eigenvalues greater than one. This factor explained a total of 85.025 % of the variance. This factor represents *public stigma*. All items loaded highly onto this factor. Public stigma scale had a strong reliability coefficient, with a Cronbach's $\alpha = .984$. In the next section, we will present the results of our EFA with the parents' internalized stigma scale.

b. Parents' Internalized Stigma of Mental Illness Inventory (PISMI)

We conducted a factor analysis with Maximum-Likelihood extraction and Direct Oblimin rotation on the 29 items included in the PISMI. A one-factor analysis was forced, and this factor explained a total of 79.271% of the variance. This factor is *parental internalized stigma*. All items loaded strongly onto this factor. The scale also had a strong reliability, with a Cronbach's α = .983. That said the factor structure obtained in our study did not align with the factor structure In Zisman-Ilani et al. (2014). In their study, the PISMI was factored into five dimensions: *alienation, stereotype endorsement, discrimination experience, social withdrawal and stigma resistance*. In the upcoming section, we will present the results of our EFA with regard to the treatment stigma scale.

c. Stigma Scale for Receiving Psychological Help (SSRPH)

We conducted a factor analysis with Maximum-Likelihood extraction and Direct Oblimin rotation on the 5 items included in the SSRPH. One factor was extracted based on eigenvalues greater than one, and this factor explained a total of 86.870% of the variance. This factor represents *treatment stigma*. All items loaded strongly onto this factor. The scale had a strong reliability, with a Cronbach's α = .970. Also, the factor structure obtained in our study was consisted with the one by Komiya et al. (2000). Next, we will present the results of our EFA with the CBCL-O scale.

d. CBCL with Overlapping items (CBCL-O)

We conducted a factor analysis with Maximum-Likelihood extraction and Direct Oblimin rotation on the 50 items constituting the CBCL-O. A six-factor analysis was

forced. The 6 factors combined explained a total of 36.814% of the variance. Not all items loaded strongly onto these 6 factors. In our data, some items cross loaded or had loadings below .4 for the 6 factors. Despite this finding, we did not remove any of the problematic items from our scale. The reason for this is because the alpha value of the CBCL-O did not vary whether we included or excluded these problematic items. The factors obtained in our data were *conduct problems, oppositional with conduct problems, anxious with somatic complaints, attention deficit with intellectual disability, depressive problems, and mood problems with behavioral problems*. Items 27 and 46 loaded strongly onto factor 1. Factor 1 (conduct problems) had a strong reliability, with a Cronbach's α = .83. Items 8, 9, 10, 11, 13, 14, 17, 18 and 43 loaded strongly onto factor 2. Factor 2 (oppositional with conduct problems) had a strong reliability, with a Cronbach's α = .910. Item 13 "Doesn't get along with other kids" loaded strongly onto factors 2 and 4, but its loading was stronger for factor 2. Items 16, 20, 21, 22, 34, 35, 38 and 50 loaded strongly onto factor 3. Factor 3 (anxious with somatic complaints) had a moderate reliability, with a Cronbach's α = .769. Item 34 "Self-conscious or easily embarrassed" loaded strongly onto factor 3 and 5, but its loading was stronger for factor 3. Items 2, 3, 5, 7, 13 and 36 loaded strongly onto factor 4. Factor 4 (attention deficit with intellectual disability) had a moderate reliability, with a Cronbach's α = .638. Item 7 "Cries a lot" loaded onto factor 4 and 5, but its loading was stronger for factor 4. Items 7, 12, 41, 44, 45 and 49 loaded strongly onto factor 5. Factor 5 (depressive problems) had a moderate reliability, with a Cronbach's α = .722. Item 41 "Sudden changes in mood or feelings" loaded strongly onto both factors 5 and 6, but its loading was stronger for factor 6. Items 28, 33, 39, 40 and 41 loaded strongly onto factor 6. Factor 6 (mood problems with behavioral problems) had a moderate reliability, with a

Cronbach's α =.682. The factor structure obtained in our study was not consistent with Achenbach and Rescorla (2001). In Achenbach & Rescorla (2001), the CBCL scale could be factored into 6 different dimensions: *depressive problems, anxious problems, somatic complaints, attention deficit, oppositional problems and conduct problems.* In the following section, we will present the results of our EFA with the openness to experience scale.

e. Extra Short Form of Big Five Test-2XS: Openness to Experience Items (BFT-2XS)

We conducted a factor analysis with Maximum-Likelihood extraction and Direct Oblimin rotation on the 3 items included in the BFT-2XS scale. One factor was extracted based on eigenvalues greater than one, and this factor explained 68.016% of the variance. This factor is *openness to experience*. All items loaded strongly onto this factor. The BFT-2XS had a strong reliability, with a Cronbach's α = .860. Lastly, the factor structure obtained in our study is consistent with Soto and John (2017). Next, we will present the results of our EFA with the parental attitudes scale.

f. Parental Attitudes towards Psychological Services Inventory (PATPSI)

We conducted a factor analysis with Maximum-Likelihood extraction and Direct Oblimin rotation on the 21 items included in the PATPSI scale. One factor was extracted based on eigenvalues greater than one, and this factor explained a total of 86.558% of the variance. This factor represents *parental attitudes towards mental health services for children*. All items included in this scale loaded strongly onto this factor. The factor had a strong reliability, with a Cronbach's α = .993. It is worth mentioning that the factor structure obtained in our study differed from Turner (2012).

In Turner (2012), three factors were obtained: *help-seeking intentions, help-seeking attitudes and stigmatization*. In the upcoming section, we will present the results of our EFA with the social desirability scale.

g. Balanced Inventory of Desirable Responding (BIDR)

We conducted a factor analysis with Maximum-Likelihood extraction and Direct Oblimin rotation on the 4 items compromising the BIDR. One factor was extracted based on eigenvalues greater than one, and this factor explained a total of 52.731% of the variance. This factor represents *social desirability*. All items loaded strongly onto this factor. The scale had a strong reliability, with a Cronbach's α = .816. Similarly to other scales, the factor structure obtained in our study was not consistent with Hart et al. (2015) who identified two factors: *self-deceptive enhancement and impression management*. In the upcoming section, we will present the results of our EFA with the parental recognition of mental health problem and the need for help subjective measure.

h. Parental Recognition of the Child's Mental Health Problem and the Need for Help (Subjective Measure)

We conducted a factor analysis with Maximum-Likelihood extraction and Direct Oblimin rotation on the 4 questions measuring parental recognition. One factor was extracted based on eigenvalues greater than one, and this factor explained a total of 75.781% of the variance. This factor represents *parental recognition of mental health problem and the need for help*. All items loaded strongly onto this factor. The scale also had a strong reliability, with a Cronbach's α = .874. The factor structure obtained in our

study was consistent with the way we originally designed it to be. In the next section, we will present the results pertaining to confidence in mental health professionals.

i. Confidence in Mental Health Professionals in Lebanon

We conducted a factor analysis with Maximum-Likelihood extraction and Direct Oblimin rotation on the 4 items measuring confidence in mental health professionals in Lebanon. One factor was extracted based on eigenvalues greater than one, and this factor explained a total of 89.377% of the variance. This factor represents *confidence in mental health professionals in Lebanon.* All items loaded strongly onto this factor. The scale had a strong reliability, with a Cronbach's α = .971. The factor structure obtained in our study was consistent with the way it was originally hypothesized. After having presented the results of our factor analyses, we move to a presentation of univariate and multivariate analyses. In the following section, we will present our univariate and multivariate outlier results.

C. Univariate and Multivariate Outliers

To identify univariate outliers, we relied on z-scores computations, Cook's distance and boxplots. We were able to identify univariate outliers for our CBCL-O scale (e.g., case numbers 21, 84, 96, 101, 110, 129, 131, 133, 140, 148, 149, 153, 155, 156, 157, 158, 159, 165, 169, 170, 174, 175, 178, 180, 182, 189, 190, 192, 193, 195, 196, 199, 201, 203, 207, 210, 215, 217, 218, 219, 230, 231, 235, 241). We also found four outliers for the openness to experience scale (BFT-2XS; e.g., case numbers 228, 233, 236, 238), and four for the previous mental health services sought by the parent question (e.g., case numbers 211, 218, 222, and 223).

As for multivariate outliers, we relied on the Mahalanobis distance in SPSS, applying the less than .001 rule of probability. Case numbers 55 and 181 were identified as multivariate outliers All these cases, whether identified as univariate or multivariate outliers, were kept in our final analysis, since the sample size was large (N = 243), the data was normally distributed, and Cook's distance was less than 1 (Pallant, 2016). Moreover, the 5% trimmed mean in the descriptive table was approximately the same as the means for all the scales, meaning the outliers were not influential points (Pallant, 2016). In addition, normality, kurtosis and skewness were all tested with and without the outliers and no change was observed. Based on these findings, we determined that the outliers were not influencing our data. Next, we will present the results of reliability analyses.

D. Reliability Analyses

Reliability analyses showed that the following scales: PSS, PISMI, SSRPH, CBCL-O, BFT-2XS, PASTPSI and BIDR had excellent internal consistency. As mentioned earlier in the methods section, we drafted four questions to subjectively measure parental recognition of mental health problems. The subjective parental recognition scale also had excellent internal consistency with a Cronbach's α = .874. Likewise, we created four questions to measure confidence in mental health professionals. Similarly to parental recognition, confidence in mental health professionals' measure was found to have strong internal consistency. All of the aforementioned scales had a Cronbach's α above .80 (Please see Table 1 for further details). After having presented the results of our reliability analyses, we will present the results of the normality analyses next.

Table 1

Reliability Analyses

Scale	Cronbach α
Parents Attitudes towards Psychological Services Inventory (PATPSI)	.993
Public Stigma Scale (PSS)	.984
Parents Internalized Stigma of Mental Illness Scale (PISMI)	.983
Stigma Scale for Receiving Psychological Help (SSRPH)	.971
Child Behavior Checklist for Children between 1.5 and 5 years old (CBCL 1.5-5)	.916
Child Behavior Checklist for Children between 6 and 18 years old (CBCL 6-18)	.939
Child Behavior Checklist with Overlapping items (CBCL-O)	.841
Extra Short Form of Big Five Test-2XS (BFT-2XS)	.860
Balanced Inventory of Desirable Responding-Short (BIDR)	.821
Parental Recognition of Mental Health Problem and Need for Help (Subjective)	.874
Confidence in Mental Health Professionals Measure	.971

E. Normality

An inspection of the histograms, as well as the *z*-scores of skewness and kurtosis, allowed us to evaluate the normality of our scale distributions. The skewness and kurtosis of the *z*-scores were not found to range between -2 and +2 for some of our scales (Please see Table 2). The normality distribution for the individual scales could be verified based on the visual representations in the histograms (Please see Appendix III). Regardless of these findings, we still decided to run parametric analyses given that our residuals were normally distributed (Please see Appendix IV). In order to run regression analyses, the residuals need to be normally distributed (Tabachnick & Fidell, 2013). This was the case in our data. In the following section, we will move to a discussion of our scale descriptives.

Table 2

Z-scores of Skewness and Kurtosis

Scale	Z-score of Skewness	Z-score of Kurtosis
Parental Attitudes Scale(PATPSI)	.97	5.38
Public Stigma Scale (PSS)	-1.04	-4.45
Parents' Internalized Stigma (PISMI)	.55	3.74
Treatment Stigma (SSRPH)	-1.07	-0.52
Child Behavior Checklist-Overlapping (CBCL-O)	8.18	4.94
Openness to Experience (BFT-2XS)	-.53	2.45
Social Desirability Scale (BIDR)	1.37	3.19
Confidence in Mental Health Professionals Measure	-.76	4.65
Parental Recognition of the Problem-Subjective Measure	3.48	3.57
Previous Mental Health Services Sought for Parent	13.07	7.01
Previous Mental Health Services Sought for Child	3.58	5.47
Parental Income	-5.67	1.01
Health Insurance	-.58	6.45

F. Scale Descriptives

The means, medians, range, and standard deviations (SDs) of all our scales (e.g., PSS, PISMI, SSRPH, CBCL-O, BFT-2XS, BIDR, PATPSI, parental recognition subjective measure, confidence in mental health professionals' measure) are presented in Table 3.

We start our section with the mean of our dependent variable: parental attitudes towards mental health services for their children. Parental attitudes were measured using PATPSI. In our study, the mean for parental attitudes (M = 75.74, SD = 35.61), was well above the midpoint. The result obtained shows that on average, parents of children in Lebanon tend to have positive attitudes towards mental health services.

Next, we will present the means of our independent variables: public stigma, parents' internalized stigma, treatment stigma, objective and subjective parental recognition of the child's mental health problem and the need for help, openness to experience, and confidence in mental health professionals in Lebanon. These variables were measured using the following scales: PSS, PISMI, SSRPH, CBCL-O, subjective parental recognition measure, BFT-2XS, and confidence in mental health professionals in Lebanon's measure respectively. Means for public stigma and treatment stigma (M = 30.43, SD =12.43; M = 12.83; SD = 5.07 respectively) were below the midpoint, revealing that on average, participants were less likely to have high levels of public stigma and treatment stigma respectively. The mean for parents' internalized stigma (M = 67.94, SD = 24.28), was above the midpoint. The result obtained indicates that on average, participants tend to internalize stigma associated with having a child with a mental health problem. The mean for openness to experience (M = 9.75, SD = 3.18), was above the midpoint, indicating that on average, parents tend to express an openness

to experience. The mean for the objective parental recognition of their child's mental health problem (M = 55.57, SD = 6.34) and the mean for the subjective parental recognition of their child's mental health problem and the need for help (M = 14.98, SD = 10.40), were above the midpoint. On average, parents included in this study were more likely to recognize their children's mental health challenges. The mean for confidence in mental health professionals in Lebanon (M = 21.98, SD = 12.05) was below the midpoint. The result obtained showed that on average, parents included in this study were less likely to have confidence in mental health professionals (Please see Table 3 for more details).

Finally, we end this section with the mean of our control variable: social desirability. We used the BIDR to measure our control variable. The mean for social desirability (M = 9.44, SD = 1.73) was above the midpoint. The result obtained indicates that on average, parents responded in a socially desirable manner. In the upcoming section, we will present our sample descriptives.

Table 3

Scale Descriptives

	Mean	SD	Median	Range
Parental Attitudes towards Psychological Services (PATPSI)	75.74	35.61	61.00	21.00-126.00
Public Stigma (PSS)	30.43	12.43	33.00	10.00-50.00
Parents' Internalized Stigma of Mental Illness Inventory (PISMI)	67.94	24.28	62.00	31.00-113.00
Stigma Scale for Receiving Psychological Help (SSRPH)	12.83	5.07	15.00	5.00-20.00
Child Behavioral Checklist Overlapping Items (CBCL-O)	55.57	6.34	54.00	50.00-81.00
Big Five Traits Extra Short Version (BFT-2XS)	9.75	3.18	9.00	3.00-15.00
Parental Recognition of Mental Health Problem- Subjective	14.98	10.40	13.00	4.00-37.00
Confidence in Mental Health Professionals in Lebanon	21.98	12.05	24.00	4.00-40.00
Balanced Inventory of Desirable Responding (BIDR)	9.44	1.73	9.00	5.00-12.00

G. Sample Descriptives

As mentioned previously, our final sample included 243 participants. Mothers comprised the majority of the sample (females 69.5%, males 30.5%). All participants were Lebanese. 10.6% of the 243 participants had a second nationality alongside their Lebanese nationality. All participants resided in Lebanon, 33.3% of them resided in Beirut, 20.2% resided in Jounieh and 46.5% resided in regions other than Beirut and Jounieh (e.g., Mount Lebanon regions: Broumana, etc.). In terms of languages spoken, all participants spoke English (100%). In addition to speaking English, 99.6% spoke Arabic, 42.7% spoke French and 7.8% of the participants spoke other languages. In terms of highest educational level achieved, the majority of the participants had a Bachelor's degree (29.2%) followed by a Master's degree (17.3%). 9.1% of the participants had a doctoral degree (e.g., PhD, MD, EdD…), 16.9% had a Baccalaureate or Grade 12 Diploma, 12.8% had a vocational degree or skill-based training and 14.8% of the participants had some college education but no university degree. While 56.8% of the participants reported having a good household income they could save from, 34.6% reported that their income covers their needs but does not offer them the chance to save from it, and 8.6% reported facing difficulties given that their household income does not cover their needs. As for health insurance, 52.3% of the participating parents reported having health insurance. 3.9% out the 52.3% reported having insurance that covers mental health services.

Additionally, around 40.7% of the participants had a child with a mental health problem. These children's ages ranged between 2 and 18 years old (M = 9.2, SD = 5.06). 59.5% of these children were males and 40.5% were females. Around 4% of these children had eating problems, 7% had communication problems, 21.1% had hyperactivity/inattention problems, 3% had bedwetting/soiling problems, 9% had developmental delays, 13.1% had bedtime/sleep problems, 17.1% had separation problems, 8.1% experienced tantrums, 12.1%

had learning difficulties, 26.2% had anxiety symptoms 22.2% had depression symptoms, 11.1% had conduct problems, 16.1% had oppositional defiant symptoms, and 44.4% had other mental health problems. As for parents, 17.7% reported having a mental health problem. More specifically, 34.9% had depression symptoms, 27.6% had anxiety symptoms, 6.9% had obsessions, 20.9% experienced panic attacks, 4.6% experienced phobias, 23.2% experienced sleeping difficulties, 2.32% had concentration problems, 6.9% experienced physical symptoms, and 2.32% experienced worrying about a number of things.

Faced with these difficulties, 36.6% of the sampled parents had previously sought mental health services for their children. It is worth mentioning, that parents who sought previous mental health services for their children, were asked to select all the services they sought. More specifically, 32.5% sought help from a counselor, 88.7% from clinical psychologist, 32.5% from a Priest/Sheikh, and 22.5% sought other non-medical services (e.g., Speech therapist). As for their own mental health difficulties, 14.4% of parents had sought previous mental health services for their own psychological, emotional or work problems.

In terms of medical services, 30.5% of the participants included in our sample sought medical help for their children's psychological, emotional, or academic problems. 71.4% sought help from a family doctor, 4.1% sought medical help from a neurologist, 33.8% from a psychiatrist, and 2.7% sought other medical services. As for their own difficulties, 13.2% of the parents sought medical help for their own psychological, emotional, or work problems. 40.6% sought help from their family doctor, 12.5% from a neurologist, and 50% from a psychiatrist.

Interestingly, 65% of the participants reported having knowledge of non-governmental organizations (IDRAAC, Embrace…) that provided mental health services free of charge. On one hand, more than half of the parents (64.6%) reported being willing to seek out help from these NGOs in case their child ever needed them. On the other hand, nearly

half (50.6%) of these parents preferred seeking help from non-mental health services (e.g., Priest, Sheikh…). More information pertaining to our sample descriptives are displayed in Table 4. Also, for more information about the questions used in the sociodemographic questionnaire to obtain such descriptives, please see Appendix I-J. In the following section, we will present the statistical assumptions necessary to run multiple regression analysis.

Table 4

Sample Descriptives

		M	SD	N	%
Child with Mental Health Problem: Age in Years		9.1	5.06		
Parent's Sex	Male			74	30.5%
	Female			169	69.5%
	Intersex			0	.0%
	Prefer not to say			0	.0%
Parent's Nationality	Lebanese			243	100%
	Other			26	10.6%
Parent's Country of Residence	Lebanon			243	100.0%
	Other			0	.0%
Parent's Place of Residence in Lebanon	Beirut			81	33.3%
	Tripoli			0	.0%
	Jounieh			49	20.2%
	Other			113	46.5%
Parent's Spoken Language(s)	Arabic			242	99.6%
	English			243	100%
	French			105	43.2%
	Other			19	7.8%
Parent's Highest Educational Level	Grade 12 or Baccalaureate II			41	16.9%
	Vocational degree or skill-based training			31	12.8%
	Some college education but no degree			36	14.8%
	Bachelor's degree (e.g., BA, BS…)			71	29.2%
	Master's degree (e.g., MA, MSc…)			42	17.3%
	Doctorate (e.g., PhD, MD…)			22	9.1%
	No Education			0	.0%

Parent's Household Income	Our household income does not cover our needs, and we face difficulties meeting those needs	21	8.6%
	Our household income covers our needs, but we cannot save from it	84	34.6%
	Our household income covers our needs well, and we can save from it	138	56.8%
Child with a Mental Health Problem/Diagnosis	Yes	99	40.7%
	No	144	59.3%
Sex of the Child with a Mental Health Problem/Diagnosis	Male	59	59.5%
	Female	40	40.5%
	Intersex	0	.0%
	Prefer not to say	0	.0%
Child Diagnosis	Opposition	16	16.1%
	Conduct problem	11	11.1%
	Depression	22	22.2%
	Anxiety	26	26.2%
	Learning Difficulty	12	12.1%
	Tantrums, whining	8	8.1%
	Separation problems	17	17.1%
	Bedtime/sleeping problems	13	13.1%
	Delays in development	9	9.0%
	Bedwetting/soiling	3	3.0%
	Hyperactivity/inattention	21	21.1%
	Communication problems	7	7.0%
	Eating Disorders	4	4.0%
	Other	44	44.4%
Presence of Mental Health Problem: Parent	Yes	43	17.7%
	No	200	82.3%
Parent Diagnosis	Depression	15	34.9%
	Anxiety	12	27.9%
	Obsessions	3	6.9%

	Panic attacks	9	20.9%
	Phobias	2	4.6%
	Sleeping problems	10	23.2%
	Concentration Problems	1	2.32%
	Hyperactivity	0	.0%
	Eating disorders	0	.0%
	Physical symptoms	3	6.9%
	Worrying about a number of things	1	2.32%
	Other	0	.0%
Previous Medical Help Sought: For Child	Yes	74	30.5%
	No	169	69.5%
Type of Previous Medical Help Sought: For Child	Family Doctor	53	71.6%
	Neurologist	3	4.1%
	Psychiatrist	25	33.8%
	Other	2	2.7%
Previous Mental Health Service Sought: For Child	Yes	89	36.6%
	No	154	63.4%
Type of Previous Mental Health Service Sought: For Child	Counsellor	29	32.5%
	Clinical Psychologist	79	88.7%
	Priest, Sheikh	29	32.5%
	Other	20	22.5%
Previous Medical Health Service Sought: For Parent	Yes	32	13.2%
	No	211	86.8%
Type of Previous Medical Health Service Sought: For Parent	Family Doctor	13	40.6%
	Neurologist	4	12.5%
	Psychiatrist	16	50.0%
	Other	0	.0%
Previous Mental Health Service sought: For Parent	Yes	35	14.4%
	No	208	85.6%
Health Insurance Availability	Yes	127	52.3%
	No	116	47.7%
Health Insurance Coverage of Mental	Yes	5	3.9%
	No	122	96.1%

Health Services

Parents' Knowledge of NGOs	Yes	158	65.0%
	No	85	35.0%
Parents' Willingness to Seek Help from NGOs	Yes	157	64.6%
	No	86	35.4%
Parents' Willingness to Seek Help from Alternative Sources (e.g., Priest, Sheikh…)	Yes	123	50.6%
	No	120	49.4%

H. Statistical Assumptions for Multiple Regression Analysis

Before running our regression analysis, we tested a few assumptions. Firstly, to make sure that we had a large enough sample to be able to run our regression analysis; we calculated the ratio of cases to independent variables. The number of participants needed per variable included should be greater than $N > 50 + 8$*number of predictors (Tabachnick & Fidell, 2007). Based on this rule, we need a minimum of 114 participants. In our study, we ended up having 243 participants; therefore, we met the statistical assumption of ratio of cases to independent variables.

The histograms with a superimposed normal curve, the normal P-P plots and scatterplots for our dependent variable are presented in Figures 14, 15, and 16 in Appendix IV. Based on these figures, the following assumptions were all met: Normality (i.e., normal curve in figure 14), linearity (i.e., residuals are well lined in figure 15), and homoscedasticity (e.g., residuals are randomly scattered in figure 16 with no cone or fan-shaped pattern in the data). The independence of errors or residuals assumption was also met. The Durbin Watson of our model was situated between 1.5 and 2.5 (Tabachnick & Fidell, 2007). Our model had a Durbin Watson value of 1.658, which further supports the independence of errors or residuals.

As for multicollinearity and singularity among our variables, we inspected the VIF values, correlations values, and tolerance values. An examination of the coefficients table showed that the VIF values did not exceed 10, and the Tolerance values were all above .1 (Pallant, 2016). Moreover, multicollinearity is believed to be an issue when the independent variables are highly correlated (r = .9 and above; Pallant, 2016). In our case, correlations between our independent variables did not surpass .90. It is worth noting that the correlation coefficients between public, internalized and

treatment stigma were above .8, but still below .9 (Please see Table 5). Additionally, the VIF and Tolerance values for the three stigmas scales were below 10 and above .1 respectively. Based on these findings, multicollinearity and singularity were not identified as problematic in our dataset. Next, we will move to a presentation of our correlation analysis.

I. Correlations

We start by presenting the significant correlations between our independent variables and dependent variable, followed by the significant correlations between our control variables and dependent variable.

In terms of independent variables, public stigma was found to have a negative correlation with parental attitudes towards seeking mental health services for their children ($r\ (243) = -.879$ $p < .001$). This result obtained indicates that lower levels of public stigma were correlated with more positive parental attitudes towards seeking mental health services for their children. Similarly, parents' internalized stigma was found to have a negative correlation with parental attitudes towards seeking mental health services for their children ($r\ (243) = -.830$, $p < .001$). Hence, lower levels of internalized stigma were correlated with more positive parental attitudes towards mental health services. Likewise, treatment stigma was found to have a negative correlation with parental attitudes towards seeking mental health services for their children ($r\ (243) = -.882$, $p < .001$). Thus, lower levels of treatment stigma were correlated with more positive parental attitudes towards mental health services. Interestingly, a positive correlation was identified between openness to experience and parental attitudes towards seeking mental health services for their children ($r\ (243) = .815$, $p < .001$).

Thus, higher levels of openness to experience among parents were correlated with a more positive attitude towards seeking mental health services. We also found a positive correlation between confidence in mental health professionals in Lebanon and parental attitudes towards seeking mental health services for their children ($r\ (243) = .189$, $p < .01$). Therefore, greater parental confidence in mental health professionals in Lebanon was correlated with more positive attitudes towards mental health services for their children. We also found a positive correlation between subjective parental recognition of their child's mental health problems and the need for help, and parents' attitudes towards seeking mental health services for their children ($r\ (243) = .278$, $p < .001$). Hence, greater parental recognition of the child's symptoms as problematic was correlated with more positive attitudes towards seeking mental health service. Likewise, we also found a positive correlation between parents' household income and parental attitudes towards seeking mental health services for their children ($r\ (243) = .654$, $p < .001$). Therefore, higher parental income was correlated with more positive parental attitudes towards seeking mental health services for their children. Finally, we found a positive correlation between health insurance availability and parental attitudes towards seeking mental health services for their children ($r\ (243) = .543$, $p < .001$). Hence, health insurance availability was correlated with positive attitudes towards seeking mental health services for their children.

As for our control variables, we found a positive correlation between social desirability and parental attitudes ($r\ (243) = .400$, $p < .001$). Hence, answering in a socially desirable manner was correlated with more positive parental attitudes towards seeking mental health services for their children. Also, we found a positive correlation between parents' previous mental health services sought for their child and parental

attitudes towards these services ($r\ (243) = .294$, $p < .001$). In other words, parents who had previously sought mental health services for their children were more likely to have positive attitudes towards these services. Finally, we found a positive correlation between parents' previous mental health services sought for themselves and parental attitudes towards mental health services ($r\ (243) = .194$, $p < .01$). Parents who sought mental health services for themselves in the past are more likely to endorse positive attitudes towards mental health services for their children. The correlation matrix is presented in table 5. In the upcoming section, we will present the results obtained from our main regression analysis.

Table 5

Correlation Matrix

Variable	1	2	3	4	5	6	7	8	9	10	11	12
1. Parental Attitudes	-											
2. Public Stigma	-.879***	-										
3. Parents' Internalized Stigma	-.830***	.843***	-									
4. Treatment Stigma	-.882***	.889***	.811***	-								
5. Parental Recognition of the Child's Mental Health Problem-Objective	-.030	.104	.060	.118	-							
6. Openness to Experience	.815***	-.700***	-.664***	-.716***	.017	-						
7. Parental Recognition of the Child's Mental Health Problem-Objective	.278***	-.218***	-.236***	-.225***	.540***	.222***	-					

8. Confidence in Mental Health Professionals	.189**	-.099	-.102	-.106	.087	.149*	.293**	-				
9. Health Insurance Availability for Parent	.543***	-.478***	-.481***	-.472***	.085	.454***	.155*	-.023	-			
10. Parent's Household Income	.654***	-.556***	-.520***	-.561***	.006	.543***	.104	.066	.454***	-		
11. Social Desirability	.400***	-.383***	-.312***	-.344***	-.076	.350***	.023	.004	.246***	.136*	-	
12. Previous Mental Health Service Sought for Child	.294***	-.177**	-.200**	-.198**	.540***	.208***	.748***	.188**	.162*	.146*	.040	-
13. Previous Mental Health Services Sought for Parent	.194**	-.171**	-.160*	-.213***	.043	.162*	.038	-.183**	.204**	.183**	-.036	.126*

*Note: ***p < .001*
***p < .01*
**p < .05*

J. Multiple Regression Analysis

In this study, we aimed to explore the association between each of the following independent variables: parental income (Hypothesis 1), health insurance availability (Hypothesis 2), parental recognition of their child's mental health problems and the need for help (Hypothesis 3), public stigma (Hypothesis 4), parents' internalized stigma (Hypothesis 5), treatment stigma (Hypothesis 6), openness to experience (Hypothesis 7), and confidence in mental health professionals in Lebanon (Hypothesis 8) and parental attitudes towards mental health services.

To test our hypotheses, we conducted a multiple regression, using the "enter" method, with parental attitudes towards mental health services as the dependent variable. Our independent and control variables were force entered into one block. We entered our control variables (social desirability and previous mental health services sought for child and/or parent) into one block with our independent variables to control for their effect. Also, all variables were entered into the model at once because we did not have theoretical reasons for entering them in steps (hierarchical regression model). All variables were treated as continuous. In the following section, we discuss the main findings of our statistical analysis.

Overall, our results showed that our model was significant (R^2 = .911, F (12, 242) = 196.43, p < .01). These results obtained indicate that both our independent variables and control variables explained 91.1 % of the variance in our dependent variable: parental attitudes towards mental health services. The model summary, including R, R^2, adjusted R^2, and standard error of the estimate can be found in Table 6.

Table 6

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.955	.911	.906	10.889	1.658

The regression coefficients of our model including unstandardized regression coefficients (*B*), its standard error, and the standardized coefficients (β and *t*) are presented in Table 6. We start by presenting the significant associations between our independent variables and parental attitudes, followed by the significant associations between our control variables and parental attitudes towards mental health services.

The independent variables that were found to be associated with parental attitudes towards mental health services, after controlling for social desirability and previous mental health services sought for parent and/or child are: public stigma, parents' internalized stigma, treatment stigma, openness to experience, parental income, health insurance availability and confidence in mental health professionals in Lebanon. Public stigma was found to be negatively associated with parental attitudes towards mental health services (β = -.224, t = - 4.522, p < .001). Likewise, parent's internalized stigma was found to be negatively associated with parental attitudes towards mental health services (β = -.142, t = -3.679, p < .001). Also, treatment stigma was found to negatively associated with parental attitudes towards mental health services (β = -.243, t = -5.157, p < .001). These results showed that lower levels of public stigma, parents' internalized stigma and treatment stigma, were associated with more positive parental attitudes towards mental health services. Inversely, openness to experience was found to be positively associated with parental attitudes towards mental health services (β = .240, t = 7.850, p < .001). Thus, higher levels of openness to experience were associated with more positive parental attitudes towards mental health services. Likewise, parental income was found to be positively associated with parental attitudes (β = .134, t = 5.218, p < .001). Hence, higher levels of parental income were associated with more positive attitudes towards seeking mental help for their children. Similarly, parents'

confidence in mental health professionals in Lebanon was found to be positively associated with parental attitudes towards mental health services (β = .075, t = 3.495, p < .001). This result obtained indicates that more confidence in mental health professionals in Lebanon was associated with more positive parental attitudes towards seeking mental help for their children. Likewise, health insurance availability was found to be positively associated with parental attitudes towards seeking mental health services for their children (β = .055, t = 2.261, p = .025). Thus, having health insurance was associated with positive parental attitudes towards mental health services.

As for control variables, the variables that were found to be significantly associated with parental attitudes are social desirability, and previous mental health services sought for the child. Social desirability was found to be positively associated with parental attitudes towards mental health services (β = .064, t = 2.918, p < .01). Likewise, previous mental health services sought for the child was found to be positively associated with parental attitudes towards mental health services (β = .123, t = 3.954, p < .001). Therefore, answering in a more socially desirable manner was found to be positively associated with parental attitudes towards mental health services. Unsurprisingly, parents' previous health-seeking for their children was associated with more positive parental attitudes towards mental health services.

To sum up the regression results, public stigma, parents' internalized stigma, and treatment stigma, openness to experience, parental income, health insurance availability and confidence in mental health professionals in Lebanon were all associated with parental attitudes towards seeking mental health services for their children. The aforementioned results were obtained after controlling for social desirability and previous mental health services sought for child and/or parent. It is worth noting that

parental recognition of their child's mental health problem and the need for help, subjectively and objectively, were not associated with parental attitudes towards mental health services.

Table 7

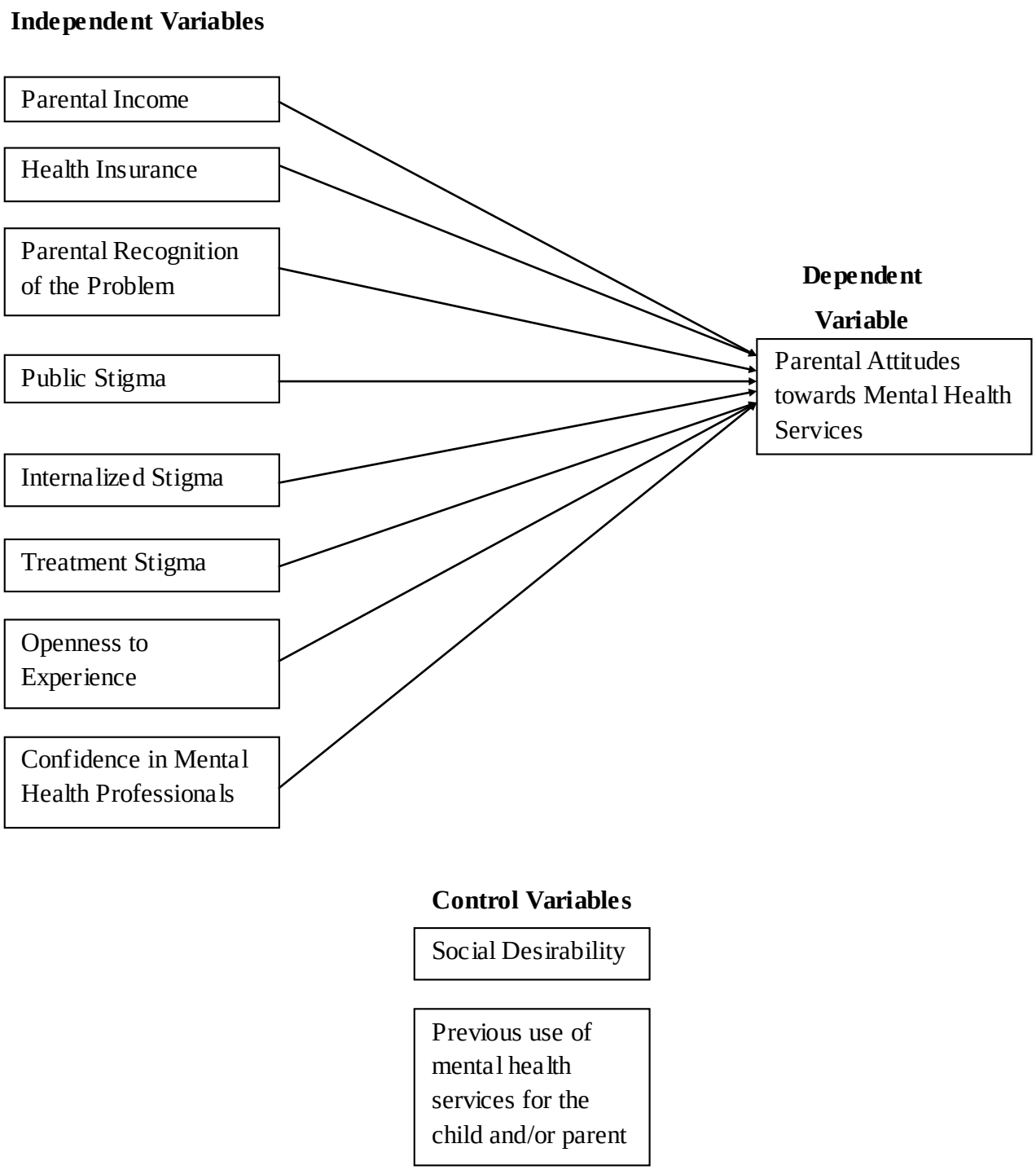
Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95% Confidence Interval	
	B	Std. Error	B			Lower Bound	Upper Bound
(Constant)	74.585	10.38		7.186	.000	54.134	95.037
Public Stigma	-.641	.142	-.224	-4.522	.000**	-.921	-.362
Parents' Internalized Stigma	-.208	.056	-.142	-3.679	.000**	-.319	-.097
Treatment Stigma	-1.708	.331	-.243	-5.157	.000**	-2.361	-1.056
Parental Recognition of Mental Health Problem-Objective	-.158	.145	-.028	-1.085	.279	-.444	.129
Openness to Experience	2.685	.342	.240	7.850	.000**	2.011	3.359
Social Desirability	1.326	.454	.064	2.918	.004**	.430	2.221
Parental Recognition of Mental Health Problem-Subjective	-.120	.111	-.035	-1.076	.283	-.340	.100
Confidence in Mental Health Professionals in Lebanon	.221	.063	.075	3.495	.001**	.096	.345
Health Insurance Availability	3.882	1.717	.055	2.261	.025*	.498	7.266
Previous Mental Health Service	9.074	2.295	.123	3.954	.000**	4.552	13.596

Sought for Child							
Previous Mental Health Services	.999	2.141	.010	.466	.641	-3.220	5.218
Sought for Parent							
Parent's Household Income	7.350	1.409	.134	5.218	.000**	4.574	10.125

CHAPTER X

CONCETUAL MODEL



CHAPTER XI

DISCUSSION

The goal of the present study was to identify variables associated with parental attitudes toward mental health services. To pursue the stated objective, we recruited a sample of 243 parents of children between the ages of 1.5 and 18 years old in Lebanon. According to Maalouf et al. (2020), 94% of adolescents in need of mental health services in Lebanon are not receiving any. The treatment gap for children and adults in Lebanon was estimated at 90% (Obeid & Saade, 2022). Based on this perceived need, this study attempted to investigate the association between parental income, health insurance availability, parental recognition of their child's mental health problem and the need for help, public stigma, parents' internalized stigma, treatment stigma, openness to experience, confidence in mental health professionals in Lebanon and parental attitudes toward mental health services for their children. The reason why we were interested in parental attitudes is mainly attributed to the fact that parental attitudes usually precede help-seeking behaviors (Fischer & Turner, 1970; Wamser-Nanney & Campbell, 2020). Parents holding negative attitudes toward mental health services are less likely to take their children to mental health professionals (Reardon et al., 2017). This negative attitude could subsequently prevent children from receiving mental health services (Reardon et al., 2017). As such, we wanted to determine what variables might influence parents' attitudes as a first step to facilitate their help-seeking behaviors. In other words, we wanted to determine what variables could play a role in reducing the treatment gap in Lebanon (Obeid & Saade, 2022). This is the first study, to our knowledge, to comprehensively evaluate variables that might be associated with

parental attitudes toward mental health services for children in Lebanon. In the upcoming section, we will discuss the main findings of our study.

A. Interpretations of the Findings Obtained

In summary, we found that public stigma, parents' internalized stigma, treatment stigma, parental income, openness to experience, health insurance availability, and confidence in mental health professionals in Lebanon were significantly associated with parental attitudes toward mental health services for their children. Each of these variables could potentially contribute to reducing the treatment gap in Lebanon. In the following sections, we will elaborate on our findings. We begin our discussion with the association between parental income and parental attitudes toward mental health services in Lebanon.

Our first hypothesis (H1), which postulates that higher income levels will be associated with more positive parental attitudes towards seeking mental health services for their children, was supported. The result obtained with regard to parental income aligns with our hypothesis. Our result indicates that having higher income levels is associated with positive parental attitudes towards mental health services for their children. Based on the literature, our finding is not surprising. In fact, our finding aligns with that of Alonso and Little (2019), Eapen and Ghubash (2004), Ibrahim et al. (2019), Keller and McDade (2000), and Picco et al. (2016). As a whole, our result indicates that parents with higher income levels tend to hold more favorable views of mental health services for their children. Thus, our results underline the important role parental income plays in reducing the treatment gap for children and adolescents in Lebanon; especially given the economic crisis the country is currently witnessing (Obeid & Saade,

2022). According to Ibrahim et al. (2019), compared to participants with lower income levels, those with higher income levels are more likely to have positive attitudes towards mental health services for their children. We believe that the reason as to why we obtained such a result could be because our participants held decent household incomes. Therefore, they had the financial resources to seek mental health services if they wanted to. The good income levels among our sample could also explain why our sampled parents did not want to receive their small monetary compensation. To the best of our knowledge, no study to date has investigated parental income and parental attitudes towards mental health services for children in Lebanon. Our finding could therefore contribute to the meager literature in Lebanon. In the upcoming section, we will discuss the association between health insurance availability and parental attitudes toward mental health insurance for their children.

Our second hypothesis (H2) which states that having health insurance that covers mental health services will be associated with more positive parental attitudes toward mental health services was partially supported. For transparency's sake, we did not initially intend to measure health insurance broadly. Due to the high number of missing responses to this question, we ended up excluding the mental health insurance coverage question from our analyses. We instead decided to focus on having health insurance more broadly. Thus, in our study, we examined the association between health insurance availability in general and parental attitudes towards mental health services for their children. Even though our results indicate that the availability of health insurance is associated with more positive attitudes toward mental health services, we do not know whether having health insurance that covers mental health services plays a prominent role. In Global South countries, Al-Shannaq and Aldalaykeh's (2021) found

that health insurance that covers mental health services was not a significant predictor of Arab youths' attitudes towards seeking mental health services. As for Global North countries, even though in Jagdeo et al. (2019) parents with health insurance held positive attitudes towards mental health services, health insurance in the US and Canada usually covers some mental health services (Jagdeo et al., 2019; Mulvale & Hurley, 2008). Thus, we believe that the reason why health insurance in general was found to be associated with parental attitudes towards mental health services in our study could be due to the fact that therapy is usually expensive. Due to the current dire financial situation parents are currently experiencing (Obeid & Saade, 2022); health coverage in general, could play a significant role in parental attitudes towards mental health services for their children. Health insurance that covers mental health services (falling under having health insurance) could also be associated with positive parental views of mental health services. To the best of our knowledge, few studies have examined the association between help-seeking attitudes and health insurance in both the Global North (e.g., US, Canada; Jagdeo et al., 2019) and the Global South (Al-Shannaq & Aldalaykeh, 2021). No study to date has examined this association in Lebanon. We believe that the dearth of such studies is probably attributed to the limited availability of health insurance covering children's mental health services in the Global South and specifically in Lebanon. Our findings point to the importance of mental health coverage in parental attitudes towards mental health services for children. We hope that our findings will pave the way for future researchers to delve deeper. Examining the role health insurance coverage of mental health services could play in parents' view of mental health services for their children is pertinent. Next, we will present on parental

recognition of their children's mental health problems and the need for help, as well as their attitudes towards mental health services.

Our third hypothesis (H3), which postulates that higher parental recognition of their children's mental health problems and the need for help will be associated with more positive parental attitudes towards mental health services, was not supported. Our result did not align with our hypothesis. More specifically, parental recognition of their child's mental health problem and the need for help was not found to be associated with parental attitudes towards mental health services. It is worth noting that we measured parental recognition of their child's mental health problems and the need for help subjectively as well as objectively. This was not the case in all previous studies. Despite the fact that our sampled parents had high levels of subjective and objective recognition of their children's mental health challenges and the need for help on average, parental recognition was not associated with more positive parental attitudes toward mental health services. Our findings do not align with those of Alonso and Little (2019), Al-Mohsin et al. (2020), Bordin et al. (2018), and Morawska and Sultan (2016), who found parental recognition of their children's mental health problems and the need for help to be a significant predictor of parental attitudes towards mental health services. Our results indicate that parents, who recognized their children's symptoms as problematic and requiring help, did not tend to hold more favorable views of mental health use for their children. A probable explanation for this null result is probably attributed to our decision to control for previous mental health services for the children. Controlling for previous mental health services sought for the child was important and allowed us to fully grasp the impact of parental recognition of their children's mental health problems and the need for help on parental attitudes towards mental health services. Thurston et

al. (2015) showed that previous mental health services sought for the child seem to affect parental help-seeking attitudes and parental help-seeking behaviors, hence the importance of controlling for this variable. Interestingly, based on our correlation analyses, previous mental health services sought for the child were found to be positively correlated with parental recognition of their children's mental health problems and the need for help. Similarly, parental recognition of their child's mental health problem and the need for help was positively correlated with parental attitudes towards mental health services for their children. However, after controlling for previous mental health services sought for the child in our regression analysis, parental recognition of their children's mental health problems and the need for help was not found to be associated with parental attitudes towards mental health services. In our study, the association between parental recognition of their children's mental health problems and the need for help and positive parental attitudes towards mental health services for their children was probably influenced by the fact that parents had previously sought mental health services for their children. In answering our questions, parents could have been influenced by their previous experiences with mental health professionals. Around 40% of our sampled parents had previously sought mental health services for their children. It is worth mentioning that Alonso and Little (2019), Al-Mohsin et al. (2020), Bordin et al. (2018), and Morawska and Sultan (2016), did not control for previous mental health services sought for the children. This lack of adequate control could explain why parental recognition of their children's mental health problems and the need for help was found to be associated with parental attitudes towards mental health services in their studies. Our finding highlights the important role previous mental health services sought for one's child could play in reducing the

treatment gap. In the upcoming section, we will discuss the association between public stigma and parental attitudes towards mental health services.

Most studies conducted on stigma and attitudes toward help-seeking (Doumit et al., 2017, Mohamadi et al., 2019, Turner et al., 2015; Hansen et al., 2021) did not distinguish between different types of stigma. As such, we decided to investigate three types of stigmas: Public, internalized, and treatment stigma. Our fourth hypothesis (H4) which states that higher levels of public stigma will be associated with lower parental attitudes towards mental health services was supported. The results obtained in our study on public stigma align with our hypothesis. More specifically, public stigma held by parents was found to be negatively associated with parental attitudes toward seeking mental health services for their children. Our finding aligns with those of Doumit et al. (2017), Turner et al. (2015), Mahsuda et al. (2018), and Hansen et al. (2021). As a whole, our results suggest that parents with lower levels of public stigma tend to hold more favorable views of mental health services for their children. According to Doumit et al. (2017), public stigma in Lebanon was negatively associated with positive parental attitudes towards mental health services. As hypothesized, public stigma could play a prominent role in parents' attitudes towards mental health services for their children. This finding is particularly important in terms of facilitating access to mental health services. It is worth noting that Doumit et al. (2017), Turner et al. (2015), and Hansen et al. (2021) did not control for social desirability. We believe that controlling for social desirability while examining public stigma is crucial, particularly in Lebanon. Social desirability has been found to play a prominent role in previous studies, particularly when asking about delicate clinical constructs (e.g., Saade et al., 2023a). Next, we will move to parents' internalized stigma.

Our fifth hypothesis (H5) which states that higher levels of parents' internalized stigma will be associated with less positive parental attitudes towards mental health services was also supported. Similarly to public stigma, parents' internalized stigma was found to be negatively associated with parental attitudes toward mental health services for their children. Our finding aligns with those of Smith et al. (2018), Tekola et al. (2020) and Mohamadi et al. (2019). Overall, our result indicates that parents with less internalized stigma tend to hold more positive views of mental health services for their children. This finding emphasizes the important role parents' internalized stigma could play in reducing the treatment gap for children and adolescents in Lebanon. According to Mohamadi et al. (2019), parents of children with low levels of internalized stigma were more likely to hold positive attitudes toward mental health services. Compared to public stigma (M = 30.43), our sampled parents expressed on average, more internalized stigma (M = 67.94). One of the reasons why parents in our study held more internalized stigma could be due to the fact that our sampled parents could be blaming themselves (to varying extents) for their children's mental health problems. In general, children play a prominent role in parents' self-perception (Patridge, 1988). This is especially true of parents in Lebanon (Fares et al., 2023). It is worth mentioning that 34.9% of our sampled parents reported having depression symptoms. Tekola et al. (2020) and Mohamadi et al. (2019) found that parents with depression tend to internalize the stigma of having a child with a mental health problem. To the best of our knowledge, no study to date investigated the association between parental internalized stigma and parental attitudes in Lebanon. In the upcoming section, we will present the significant association between treatment stigma and parental attitudes towards mental health services.

Our sixth hypothesis (H6) which postulates that higher levels of treatment stigma will be associated with lower positive parental attitudes toward mental health services was supported. Our result pertaining to treatment stigma aligns with our hypothesis. Similarly to our findings on public and internalized stigma, treatment stigma was also found to be negatively associated with parental attitudes towards mental health services for their children. Our results indicate that lower levels of treatment stigma are associated with more positive parental attitudes toward mental health services for their children. Based on the literature, our finding was not surprising. Our results align with those of Aguirre et al. (2020), Elhai et al. (2008), Shectman et al. (2016), and Zolezzi et al. (2018). As a whole, our results indicate that parents with low levels of treatment stigma tend to hold more favorable views on mental health services for their children. Alongside public and parents' internalized stigmas, this finding highlights the pivotal role treatment stigma could also play in reducing the treatment gap in Lebanon. Compared to internalized stigma and public stigma, treatment stigma has not been evaluated frequently. We still decided to evaluate this construct, as seeking treatment could be particularly stigmatizing in Global South countries (e.g., Qatar; Zolezzi et al., 2017) and more specifically in Lebanon (Doumit et al., 2017). According to Zolezzi et al. (2017), compared to Qatari non-Arabs, Qatari Arabs tend to report both high levels of treatment stigma and low positive attitudes towards mental health services. These findings could help shed light on our findings. Lastly, it is worth noting that compared to public and internalized stigma, our sample reported the lowest level of treatment stigma (M = 12.83). As mentioned earlier in the literature, one of the possible reasons as to why treatment stigma could arise is due to a limited understanding of mental health problems, and limited knowledge of mental health services (Saade et al., 2023;

Shectman et al., 2016). In our study, treatment stigma was the least reported type of stigma. This could be due to the fact that in our study, parents had high levels of knowledge about their children's mental health problems and the need to seek help. Around 40% of parents in our study had previously sought mental health services for their children. Additionally, 64.6% of the sampled parents expressed their willingness to seek mental health services in case their child should need them. Additionally, sampled parents were mostly residing in Beirut (e.g., 33.3%) and Mount Lebanon regions (e.g., 66.7%). These areas have a high concentration of psychological, educational, and economical activities (Abi Doumit et al., 2019). Also, our sampled parents are rather highly educated, with decent income levels (not struggling financially). In addition, the three main mental health hospitals in Lebanon (e.g., AUBMC, Saint George University Medical Center, and Mount Lebanon Hospital) are localized in Beirut and Mount Lebanon respectively (Abi Doumit et al., 2019). There is also a concentration of mental health clinics (e.g., Embrace, IDRAAC, Brainstation clinics, M.I.N.D clinics, SKILD center) in these areas. All in all, parents' knowledge about their children's mental health problems and the need for help, as well as their knowledge of mental health services, could explain their low levels of treatment stigma. Most importantly, another reason why parents' internalized stigma was the most frequently reported form of stigma in our study is because parents are more likely to develop negative feelings about themselves because the public discriminates against their children (Latlova et al., 2014). Around 51.3% of our sampled parents had children with behavioral/externalizing problems (e.g., conduct problems, oppositional defiant problems, hyperactivity, tantrums). According to Serchuk et al. (2021), children with behavioral/externalizing mental health problems are more likely to suffer from other people's discrimination (Serchuk et al., 2021). Society

as a whole tends to blame parents for having children with conduct problems, oppositional problems and other behavioral/externalizing problems (e.g., hyperactivity; Serchuk et al., 2021), this could increase parents' likelihood to internalize the stigma of having a child with a mental health problem. Resultantly, parents are more likely to blame themselves for having a child with a behavioral/externalizing problem (Serchuk et al., 2021). Parents of children with behavioral/externalizing problems in our study were more likely to strongly agree with all the self-stigma items included in the PISMI scale. Some examples of the PISMI items are: If I have a son or daughter with a mental illness, I wouldn't socialize as much as I used to if my child's mental illness might make me look or behave "weird", People would discriminate against me if I have a son or daughter with a mental illness, and If I have a son or daughter with a mental illness, I would avoid getting close to people who don't have a son or daughter with a mental illness to avoid rejection. Based on our findings, parents' internalized stigma seems to be the most endorsed type of stigma in Lebanon. This finding points to the importance of targeting all three types of stigma individually and paying particular attention to internalized stigma. In the following section, we will discuss the significant association between openness to experience and parental attitudes towards mental health services in our study.

In terms of personality traits, our seventh hypothesis (H7) which states that higher levels of openness to experience are associated with more positive parental attitudes toward mental health services was also supported. Higher levels of openness to experience were found to be positively associated with parental attitudes toward mental health services for their children. Our result indicates that higher levels of openness to experience among parents are associated with more positive attitudes towards seeking

mental health services for their children. Studies evaluating the association between openness to experience and attitudes towards mental health services are scarce (Chen et al., 2020; Ferah et al., 2019; Fino et al., 2019). Our finding aligns with those conducted with non-parents in Global North (e.g., Italy; Fino et al., 2019) and Global South countries (e.g., China, Turkey; Chen et al., 2020; Ferah, 2019 respectively). According to Fino et al. (2019), Chen et al. (2020) and Ferah et al. (2019), participants with more openness to experience tend to hold more positive attitudes towards mental health services. Our finding is not too surprising as seeking mental health services could be viewed as a new experience, especially in Lebanon (Abi Doumit et al., 2022). On average, our sampled parents were found to be open to seeking mental health services for their children in case they needed them. We think that our sampled parents' openness to seeking mental health services is due to their exposure to these services. As previously mentioned the majority of our sample came from regions with a high concentration of mental health services (Abi Doumit et al., 2019); hence, raising awareness about the benefits of mental health services could make parents more open to seeking mental health services for their children. According to Fino et al. (2019), participants who were more open to seeking mental health services were more aware of their benefits. Given the results obtained, we hope this new finding could help shed light on the role parents could play in getting their children the help they need. Next, we will conclude our discussion with the association between confidence in mental health professionals in Lebanon and parental attitudes toward mental health services.

Our last hypothesis (H8) which postulates that higher confidence in mental health professionals in Lebanon will be associated with more positive parental attitudes towards mental health services for their children was also supported. Greater confidence

in mental health professionals in Lebanon was found to be positively associated with parental attitudes toward mental health services. Based on the literature, our result was expected. Our result aligns with those of Bonanno and Veselak (2020), Hansen et al. (2021), Al-Mohsin et al. (2020), Daeem et al. (2019), Eapen and Ghubash (2004), and Liu et al. (2020). All in all, our result indicates that parents with confidence in mental health professionals in Lebanon held more favorable attitudes toward mental health services for their children. Liu et al. (2020) found that parents with more confidence in mental health professionals held more positive attitudes towards mental health professionals, and this explains the positive association obtained. Thus, our results underline the important role parents' confidence in mental health professionals could play in reducing the treatment gap for children and adolescents in Lebanon. Despite the fact that parents' confidence in mental health professionals was associated with more positive attitudes towards mental health services, our sampled parents, had on average, low confidence in mental health professionals. It seems that our some of our sampled participants preferred seeking help for their children from non-mental health services (e.g., Priest, Sheikh, family member). Indeed, 50.6% of our participants reported being willing to seek help from non-mental health services (e.g., Priest, Sheikh…). This result underscores the important role religion could play in Global South societies' view of mental health problems, specifically in Lebanon (Anjori et al., 2022). In the upcoming section, we will move to a presentation of the limitations of our study.

B. Limitations

Our study had a number of limitations. The first one pertains to fact that we measured parental attitudes toward mental health services without measuring parental

help-seeking behaviors. As mentioned in the literature, even though parental attitudes usually precede help-seeking behaviors (Fischer & Turner, 1970; Picco et al., 2016; Wamser-Nanney & Campbell, 2020); parental attitudes are not the same as parents' help-seeking behaviors. For instance, help-seeking behaviors and attitudes are correlated in some studies (Alonso & Little, 2019; Ebrahimi et al., 2019; Yee et al., 2020), but this is not always the case. We would recommend future researchers to evaluate help-seeking attitudes and behaviors. Additionally, although we had initially planned to investigate the association between health insurance that covers mental health services and parental attitudes towards mental health services, we decided to focus on having insurance coverage more broadly. However, investigating mental health insurance coverage could be perceived as a limitation, because in the Arab world (Al-Shannaq & Aldalaykeh, 2021) and specifically in Lebanon, most health insurance policies do not cover mental health services. Another limitation is the fact that our results cannot necessarily be generalized to all parents in Lebanon. Our sample only included English-speaking parents in Lebanon, as our questionnaires were not translated into Arabic. Also, mothers constituted the largest percentage of our sample. The majority of the parents were BA/BS and Masters' holders, and on average, had a good income that covered their needs. Moreover, our participants mostly resided in Beirut and Mount Lebanon. Moreover, we did not control for the order effect. All participants had the same sequence of questionnaires. Therefore, not changing the order of presentation of the study questionnaires might have made them respond in an organized manner (Christensen et al., 2011). Participants' fatigue due to the long battery of questionnaires is also worth noting. Lastly, a limitation could be linked to the fact that our study's

questionnaires could only be accessed online. In the next section, we will move to a presentation of some of our study results' limitations.

1. Limitations of Study Results

In the previous section, we presented our study's general limitations. In this section, we will focus on some of the problematic results we obtained, and we will provide probable explanations as to what might have caused such problematic statistical results.

First and foremost, some of our variables were highly correlated. For instance, public stigma, parents' internalized stigma, treatment stigma, and openness to experience were highly correlated with parental attitudes (r = -.879, r = -.830, r = -.889, r = .815 respectively). Similarly, all three stigmas were highly correlated with each other (Please See Table 5). In addition, in our study, Cronbach's alpha values for the following scales: PISMI, PATPSI, and SSRPH, were higher than the ones obtained by the scale developers. In our study, the SSRPH had a Cronbach's α = .971; however, the scale developers, Komiya et al. (2002) who originally validated the scale in the US, obtained a Cronbach's α = .69. The PATPSI had a Cronbach's α = .993 in our study. The scale developer Turner (2012), who originally validated the scale in the US, obtained a Cronbach's α = .8. Also, in our study, PISMI had a Cronbach's α = .983; however, Boyd et al. (2014) who originally validated the scale in the US, obtained a Cronbach's α = .91. Our factor analysis results showed that the PSS, PISMI, SSRPH, PATPSI, subjective measure of parental recognition of the child's problem and confidence in mental health professionals' measure, had highly correlated items (above .8). Despite this finding, items of these scales were not removed. As mentioned earlier, we did not remove the

problematic items from these scales since the assumptions of our factor analyses were not met, and instead, we relied on alpha values. These highly correlated items might have contributed to problematic high alpha values and high correlation coefficients (Tavakol & Dennick, 2011). For example, in the PSS some of the problematic items are 1, 2, 5, and 9 as their correlation coefficients with other items exceeded .8. In the PISMI, some of the problematic items are 2, 8, 9, 11 and 29. In the SSRPH, some of the problematic items are 4 and 5. In the PATPSI, some of the problematic items are 5, 7, 13, 15, 19, 20, and 21. In the subjective measure of parental recognition of the problem and the need for help, the problematic items are 2 and 3. In the confidence in mental health professionals' measure, the problematic items are 2 and 3. Moreover, the results of our multiple regression analysis showed that our model explained 91.1% of the variance in our dependent variable (Please See Table 6). Such a value of the coefficient of determination (e.g., $R^2 = .91$) is considered high. This unusually high R^2 is probably due to an over-fitting of our model. The purpose of every study is to choose a regression model that will estimate the true model for the targeted population (Field et al., 2012). The over-fitting of our model could probably be attributed to our interest in evaluating the association between 9 variables and parental attitudes towards mental health services while controlling for 3 other variables using a small sample size. In other words, the large number of variables studied in our study made our model complex. When researchers are evaluating a complex model, using a large sample size is recommended (e.g., 500 and more; Andrade, 2020). In our case, we had 13 variables in total, and the minimum sample size required for our study is 260 since the sample size should be 20 times the number of studied variables (Mundfrom et al., 2005). In our case, we ended up with 243 parents (due to time constraints). For instance, Masuda et al. (2018) evaluated

a model that was also based on the Fischer and Turner (1970) model. However, Masuda et al. (2012) investigated the association between 2 variables, mental health stigma and self-concealment, and parental attitudes towards mental health services while controlling for previous mental health services. Their study was based on 700 participants. Their model's determination coefficient was $R^2 = .28$ (Masuda et al., 2012). The issue of generalizability is also worth noting. Our sample is small, and specific to a certain population of parents who are educated and enjoying a more or less comfortable income. This is not necessarily the case for all people in Lebanon. In addition, our sample mostly resided in Beirut (e.g., Achrafieh) and Mount Lebanon Regions (e.g., Jounieh, Brumana, Adma). Both regions have a high concentration of mental health services (Abi Doumit et al., 2019). Our study flyer was mainly circulated on WhatsApp groups of parents of children in private schools in Beirut and Mount Lebanon regions (e.g., Brumana Highschool, Sabis Adma etc.), and through WhatsApp groups created by social workers for parents they work with. This recruitment strategy could explain the high levels of parental knowledge of mental health services and mental health problems obtained in our sample. However, this makes our sample special and not representative of all parents in Lebanon. Additionally, the present study did not control for gender, age, and educational level. Our parents were predominately females (e.g., mothers), and highly educated (e.g., BA/BS holders) with high-income levels. Future studies should investigate the role of public stigma, internalized stigma, treatment stigma, openness to experience, confidence in mental health professionals, income, health insurance, and parental recognition of the child's problem while controlling for age, gender, and education because some studies showed that these sociodemographic variables could play a role in attitudes towards mental health services (Masuda et al., 2012).

The high correlations and high R^2 value of our model could also be due to our participants' acquiescence bias or agreement bias. Acquiescence bias occurs when participants agree with research items, and their responses to these items are not a genuine depiction of their position on the scale's items (Kreitchmann et al., 2019). Acquiescence bias could occur due to many reasons, but we will only state those related to our study. One of the reasons acquiescence bias could occur is because participants hold extreme views about particular topics (Kreitchmann et al., 2019). This is especially true about mental health issues in Lebanon (Farran, 2021). In other words, participants could respond in extreme ways (e.g., Strongly Agree, Strongly Disagree) because of their strong views on an item (Kreitchmann et al., 2019). In our study, the majority of participants strongly disagreed with statements portraying stigma and negative attitudes towards mental health services (e.g., PSS, PISMI, SSRPH, PATPSI, BFT-2XS, BIDR; Appendix III). Some parents strongly agreed with all stigma items, strongly disagreed on openness to experience items, and strongly disagreed on items reflecting positive attitudes towards mental health services. These results might explain the skewed distributions of some of our scales (e.g., PATPSI, PSS, PISMI; See Table 2). In other words, it seems that our sampled parents had polar responses, especially on the PATPSI. This polarity can be detected in the PATPSI histogram (Appendix III). Lebanese people in general, tend to have strong views of mental health issues (Farran, 2021).

Another reason why acquiescence bias might occur is because participants are responding in a socially desirable manner. In other words, when participants are aware that the researchers will be viewing their answers, they could stick to socially desirable attitudes or attitudes that they believe align with the researchers' aims or purpose of the study (Kreitchmann et al., 2019).

Fatigue is also worth noting. If the survey is long, participants are less likely to answer thoughtfully. They are more likely to take shortcuts in their responses (Kreitchmann et al., 2019). A common shortcut would be to respond positively to the items (Kreitchmann et al., 2019). Our study included long questionnaires (e.g., CBCL) possibly causing response fatigue. As a result, our sample might have been responding with acquiescence bias on the survey (e.g., positive responding). This acquiescence bias could have been heightened because we did not control for the order effect. Participants were presented with the same order of questionnaires (e.g., 1. PSS, 2. PISMI, 3. SSRPH, 4. CBCL, 5. BFT-2XS, 6. PATPSI, 7. BIDR, 8. sociodemographic questionnaire). Questionnaires presented early in the survey might affect how participants answer questionnaires that appear later in the study (Bosch & Wilbert, 2020). A carryover effect could have exacerbated participants' fatigue making them respond similarly to all our scales. For example, the majority of our parents reported strongly disagreeing with all stigma items, strongly agreeing with openness to experience items, and strongly agreeing with items reflecting positive attitudes towards mental health services. In the future, we would recommend adding attention checks and excluding participants who completed the study questionnaires too quickly. In the following section, we will present some future directions for other researchers to consider.

C. Future Directions

As mentioned earlier, we would recommend for future researchers to examine the association between health insurance that covers mental health services and parental attitudes towards these services in Lebanon. Another recommendation is to investigate

the three types of stigma: public stigma, parents' internalized stigma and treatment stigma with parental attitudes distinctly. Further investigation of these different types of stigma while controlling for social desirability is pertinent, since most studies in the literature focused on one type of stigma and did not control for social desirability. In addition, we would also recommend for future researchers to examine the association between parental recognition of their children's mental health difficulties and the need for help while controlling for previous mental health services. Translating our study into Arabic and recruiting participants from various regions of Lebanon would also be pertinent and informative. Future researchers could shorten the survey to avoid fatigue. Moreover, complementing our study questionnaires with qualitative data could be interesting in the future.

In addition, given our study limitations, future researchers investigating the association between our chosen variables should recruit a larger sample size of parents (e.g., 500). Future researchers should recruit parents from various regions of Lebanon, with various educational levels, and various household income levels. Also, for greater generalizability of study results, researchers could translate the survey into Arabic and make the survey available in a paper format. Another recommendation for future researchers to avoid participant fatigue is to use short surveys. In our study, we had to use two scales with a large number of items (e.g., CBCL/1.5-5, CBCL/6-18). These scales allowed us to measure objective parental recognition of the child's problem as they were available for free. Future researchers could only use the CBCL with overlapping items rather than the two long CBCLs used here. To avoid participant fatigue, researchers could ask participants to select a specific number (e.g., 3) on an item to make sure they are paying attention. If a participant selects a different number,

their answers could be removed from the dataset due to inattention. We would also recommend changing the order of questionnaires to prevent order effects. To limit acquiescence bias that may arise because of participants' extreme views on certain constructs (e.g., stigma, mental health), researchers could measure stigma implicitly (Obeid et al., 2020). Researchers could also avoid leading questions that might elicit extreme responses. In the upcoming section, we will present some implications of the study.

D. Implications of the Study

The results obtained from this study are pertinent as they offer avenues of reducing the treatment gap in Lebanon. Amongst those avenues are tackling: public stigma, parents' internalized stigma, treatment stigma, parental knowledge about mental health problems in children and adolescents, parental income, parental openness to seeking help for their children from mental health services, confidence in mental health professionals and mental health insurance coverage. One way of reducing public stigma is through public awareness campaigns (Saade et al., 2023b). Public awareness can take different forms such as holding information sessions in schools, providing informational pamphlets at the pediatricians' office, offering parents free online training similar to the step by step campaign and other information outlets that could be accessible to parents of children across Lebanon. Raising awareness that mental health problems should not be perceived as insanity (Zolezzi et al., 2018) are warranted. In the same vein, awareness campaigns explaining that seeking help for mental health services should not be viewed as a weakness (Aguirre et al., 2020) could help reduce treatment stigma. Such campaigns could help dispel the belief that having a child with a mental health is a

weakness (Tekola et al., 2020). Mental health campaigns could organize general public sessions intended to reduce parents' internalized stigma and its harmful effects (Drapalski et al., 2021). Teaching parents numerous strategies such as cognitive-behavioral strategies, handling stigma, and strengthening their positive sense of self are recommended (Drapalski et al., 2021). Most importantly, these sessions could provide support groups for parents of children with mental health problems. In addition, targeting parental knowledge of children's mental health problems is also pertinent (Saade et al., 2023a). Increasing parents' knowledge of mental health problems could make it easier for them to recognize their child's symptoms as problematic and get them the help they need. In parallel, these campaigns should raise parents' awareness about the role of mental health professionals and emphasize that confidentiality is at the core of mental health professionals' ethical standards. Also, mental health campaigns should continue informing parents about the prevalence of mental health problems in children and adolescents, and the importance of seeking mental health services in alleviating psychological distress. Mental health campaigns should inform parents about what to expect from therapy. This would be particularly useful for parents with low levels of openness to experience. We also think that it might be a good idea for mental health campaigns to advertise the free of charge services NGOs can provide in Lebanon. This would be particularly helpful in making mental health services accessible to parents with different SES levels.

E. Conclusion

In conclusion, the results of our study revealed that the following variables: public stigma, parents' internalized stigma, treatment stigma, openness to experience,

parental income, health insurance availability and confidence in mental health professionals in Lebanon are associated with parents' attitudes toward mental health services in Lebanon. We hope the results of this study have clinical, research and theoretical implications that will help get the people the help they need. Children are tomorrow's generation. All efforts and help should be targeted towards helping them reach their full potential.

APPENDIX I

SURVEY

Variables Associated with Parental Attitudes towards Mental Help Seeking for their Children

Consent Form
Please feel free to screen shot or copy this consent form for your records.

Researcher's Statement
We are asking you to take part in a collaborative research study being conducted at the American University of Beirut (AUB) in collaboration with the Université du Québec à Trois-Rivières and Case Western Reserve University. Before you decide to participate in this study, it is important that you understand why the research is being conducted and what it will involve. This form is designed to give you information about the study so you can decide whether to be in the study or not. Please take the time to read the following information carefully. Please ask the researcher if there is anything that is not clear or if you need more information. When all your questions have been answered, you can decide if you want to be in the study or not. This process is called "informed consent."

Principal Investigator: Sabine Saade, Ph.D., Department of Psychology, American University of Beirut, ss241@aub.edu.lb

Thesis Student: Elissa Hanna, Clinical Psychology Graduate Student, Department of Psychology, American University of Beirut, ejh02@aub.edu.lb

Purpose of the Study
Mental health services for children and adolescents in Lebanon (e.g., psychotherapy, psychiatry, etc.) are relatively new. We are interested in determining what variables could be associated with parental positive attitudes towards mental help seeking for their children. To achieve this goal, we are asking 300 parents currently residing in Lebanon to participate in our study

Recruitment Methodology
The study link will be posted on various social media platforms (e.g., Instagram, Facebook, WhatsApp, Twitter and LinkedIn), and in community settings. The study will be made continuously available until the required number of participants is reached. In addition to posting the study link online, the research team will also print the questionnaires and directly approach random people they encounter asking them to take part of the study. Hard copy

questionnaires will be filled out in a private space (e.g., the PI's office). All safeguards will be taken to ensure privacy. We are interested in parents residing in Lebanon who have children between the ages of 1.5 and 18 years old. Target participants will need to be English literates. We aim to recruit 300 parents in total. Exclusion criteria include parents not currently residing in Lebanon. Participation is completely voluntary.

Study Procedures
To take part in this study, participants will be asked to complete questionnaires online (LimeSurvey) or on paper. Participation in this study is expected to take between 30 and 45 minutes in total.

Risks and discomforts
This study is considered minimal risk. All responses are completely anonymous as no identifiers are requested from participants. The biggest risk to you is loss of confidentiality. As described below under Protections, we will take significant precautions to ensure that this does not happen. Participants will be provided with a referral sheet including a list of easily accessible psychological services/hotlines to access psychological support in case of psychological distress. Some of these services/hotlines are free of charge, while others are available at a fee. This sheet is posted on the end page of the survey.

Benefits
We do not know of any way you would benefit directly from taking part in this study. However, this research may help us understand what variables might be associated with parents' attitudes towards help seeking. It is our hope that this approach can eventually help us understand the contributors to mental help-seeking attitudes as a first step in changing how and why parents access mental health services for their children.

Incentives for participation:
20,000 LBP in cash will be awarded to participants who complete 50% of the questions as displayed on the progress bar for online participation, or participants who complete the first four questionnaires (1 to 4) for in-person participations. 40,000 LBP will be awarded in cash for participants who complete more than 50% of the questions (e.g. 50%-100%) as displayed on progress bar for online participations, or participants who complete more than four questionnaires for in-person participation (e.g. up to eight questionnaires). This cash amount will be awarded by the master's student at a convenient time and place for the participant. Please send a screenshot of final page with a picture of your Lebanese I.D to the above email to receive the money to the following email: parentalattitudes@gmail.com

Privacy/Confidentiality
While we will not be collecting identifiable information from you, this research involves the transmission of data over the Internet. Every reasonable effort has been taken to ensure the effective use of available technology; however, confidentiality during online communication (emails) cannot be guaranteed. All data will be labeled with a study ID on LimeSurvey hosted online by Elissa Hanna and Dr. Sabine Saade's accounts at the American University of Beirut. In addition to being stored on our secure lab server and/or lab computers in our locked lab. In an effort to secure anonymity, all data will be linked to a randomly LimeSurvey generated ID. The data you submit will be kept in de-identified form indefinitely. As for paper questionnaires, they will be stored in the PI's office under lock and key and will only be accessible to the research team.

All study documents will be accessible only to IRB approved study members and co-investigators. Records will be monitored and may be audited by the IRB while assuring confidentiality. If you have any concerns, please contact the targeted order/association and IRB to opt out of having your email address not shared with us.

Taking part is voluntary

Your involvement in the study is voluntary, and you may choose not to participate or to stop at any time without penalty or loss of benefits to which you are otherwise entitled. Refusal or withdrawal from the study will not affect your relationship with AUB/AUBMC. If you decide to stop or withdraw from the study, the information/data collected from or about you up to the point of your withdrawal will be kept as part of the study and may continue to be analyzed, unless you choose otherwise.

If you have questions

The main researcher conducting this Dr. Sabine Saade, Ph.D, assistant professor at the American University of Beirut. Please ask any questions you have now. If you have questions later, you may contact Elissa Hanna at ejh02@aub.edu.lb, and Dr. Sabine Saade at ss241@aub.edu.lb. If you have any questions or concerns regarding your rights as a research participant in this study, you may contact the Institutional Review Board (IRB) at 01-350 000, ext: 5445 or irb@aub.edu.lb.

Research Subject's Consent to Participate in Research:

To voluntarily agree to take part in this study, you must check the appropriate box below. By checking this box, you are verifying that you are a parent with children between the ages of 1.5 and 18 years and that you have read this entire consent form and agree to participate in the study. If you do not wish to participate in the study, you may simply close your browser.

☐ I notify that I have read all the information in the **Informed Consent Sheet** and agree to participate in the study.

APPENDIX I-A

PUBLIC STIGMA SCALE

Instructions: Below are some attitudes that some people have. For each question, please mark the extent to which you agree with the statement. There is no right or wrong answer. For each item, please mark whether you strongly disagree (1), disagree (2), neutral (3), agree (4), or strongly agree (5).

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1. If my child had a mental health problem and others knew of it, they would think my child is dangerous	1	2	3	4	5
2. If my child had a mental health problem and others knew of it, they would be terrified of my child	1	2	3	4	5
3. If my child had a mental health problem and others knew of it, they would keep their children away from my child	1	2	3	4	5
4. If my child had a mental health problem and other people knew of it, they would bully my child	1	2	3	4	5
5. If my child had a mental health problem and others knew of it, they would feel pitty for my child	1	2	3	4	5

6. If my child had a mental health problem and others knew of it, they would feel irritated with my child	1	2	3	4	5
7. If my child had a mental health problem and others knew of it, they would be supportive of my child.	1	2	3	4	5
8. If my child had a mental health problem and others knew of it, they would be willing to help my child.	1	2	3	4	5
9. If my child had a mental health problem and others knew of it, they would be accepting of my child.	1	2	3	4	5
10. If my child had a mental health problem and others knew of it, they would be more understanding of my child's mental health condition.	1	2	3	4	5

APPENDIX I-B

PARENTS' INTERNALIZED STIGMA OF MENTAL ILLNESS INVENTORY (PISMI; Zisman-Ilani et al., 2014)

Instructions: We are going to use the term "mental illness" in the rest of this questionnaire, but please think of it as whatever you feel is the best term for it. For each question, please mark whether you strongly disagree (1), disagree (2), agree (3), or strongly agree (4).

	Strongly Disagree	**Disagree**	**Agree**	**Strongly Agree**
1. I would feel out of place in the world if my son or daughter has a mental illness	1	2	3	4
2. Mentally ill children tend to be violent	1	2	3	4
3. People would discriminate against me if I have a son or daughter with a mental illness	1	2	3	4
4. If I have a son or daughter with a mental illness, I would avoid getting close to people who don't have a son or daughter with a mental illness to avoid rejection	1	2	3	4
5.I would be embarrassed or ashamed if I have a son or daughter with a mental illness	1	2	3	4
6. Mentally ill people shouldn't	1	2	3	4

get married				
7. People with mental illnesses make important contributions to society	1	2	3	4
8. If I have a son or daughter with a mental illness, I would feel inferior to others who don't have a son or daughter with a mental illness.	1	2	3	4
9. If I have a son or daughter with a mental illness, I wouldn't socialize as much as I used to if my child's mental illness might make me look or behave "weird."	1	2	3	4
10. People having a son or daughter with mental illness cannot live a good, rewarding life.				
11. If I had a child with a mental illness, I wouldn't talk about them much because I don't want to burden others with his/her mental illness	1	2	3	4
12. Negative stereotypes about mental illness keep me isolated from the "normal" world.	1	2	3	4

13. If I have a son or daughter has a mental illness, then being around people who don't have a son or a daughter with a mental illness would make me feel out of place or inadequate.	1	2	3	4
14. I would feel comfortable being seen in public with my son or daughter if they had an obvious mental illness	1	2	3	4
15. If I have a son or daughter with mental illness, people would often patronize me	1	2	3	4
16. If I have a son or daughter with a mental illness, I would be disappointed in myself.	1	2	3	4
17. If I have a son or daughter with a mental illness I would consider my life as ruined.	1	2	3	4
18. People could tell if I have a son or daughter with a mental illness by the way I look.	1	2	3	4
19. If I have a son or daughter	1	2	3	4

with a mental illness, I would need others to make most decisions for them.				
20. If I have a son or daughter with a mental illness, I would keep away from social situations in order to protect my family or friends from embarrassment.	1	2	3	4
21. If I have a son or daughter with a mental illness, people without a son or daughter with a mental illness would not be understanding of me.	1	2	3	4
22. If I have a son or daughter with a mental illness, people would ignore me or would take me less seriously	1	2	3	4
23. If I have a son or daughter with a mental illness, I can't contribute anything to society	1	2	3	4
24. If I had a son or daughter with a mental illness, I would consider living with them has made me a tough survivor	1	2	3	4
25. If I have son	1	2	3	4

or daughter with a mental illness, nobody would be interested in getting close to me				
26. In general, I am able to live my life the way I want to even if my son or daughter has a diagnosis with a mental illness.	1	2	3	4
27. I can have a good, fulfilling life, despite having a son or daughter with a mental illness	1	2	3	4
28. Others would think that I can't achieve much in life if I have a son or daughter with a mental illness	1	2	3	4
29. If my son or daughter has a mental illness, then stereotypes about the parents of children with mentally ill would apply to me	1	2	3	4

APPENDIX I-C

STIGMA SCALE FOR RECEIVING PSYCHOLOGICAL HELP (SSRPH; Komiya, Good, & Sherrod, 2000)

Instructions: Below are some attitudes that some people have. For each question, please mark the extent to which you agree with the statement. There is no right or wrong answer.

		Strongly disagree	Disagree	Agree	Strongly agree
SSRPH1	Seeing a psychologist for your child's emotional or interpersonal problems carries social stigma.	0	1	2	3
SSRPH2	It is a sign of personal weakness or inadequacy to see a psychologist for your child's emotional or interpersonal problems.	0	1	2	3
SSRPH3	People will see a child in a less favorable way if they come to know that this child has seen a psychologist.	0	1	2	3
SSRPH4	It is advisable for a parent to hide from people the fact that they have seen a psychologist for their child.	0	1	2	3
SSRPH5	People tend to like less, children who are receiving professional psychological help.	0	1	2	3

APPENDIX I-D

CHILD BEHAVIOR CHECKLIST-PARENT FORM (CBCL/1.5-5 years old; Achenbach & Rescorla, 2001)

Instructions: Below is a list of items that describe children. For each item that describes your child now or within the past 6 months, please choose 2 if the item is *very true or often true* of your child. Choose 1 if the item is *somewhat or sometimes true* of your child. If the item is *not true*, then choose 0.

	Not True	**Somewhat True**	**Very True**
1. Aches or pains (without a medical cause; **do not** include stomach or headaches)	0	1	2
2. Acts too young for age	0	1	2
3. Afraid to try new things	0	1	2
4. Avoids looking others in the eyes	0	1	2
5. Can't concentrate, can't pay attention for too long	0	1	2
6. Can't sit still, restless, or hyperactive	0	1	2
7. Can't stand having things out of place	0	1	2
8. Can't stand waiting; wants everything now	0	1	2
9. Chews on things that aren't edible	0	1	2
10. Clings to adults, or too dependent	0	1	2
11. Constantly seeks help	0	1	2
12. Constipated, doesn't move bowels(when not	0	1	2

sick)			
13. Cries a lot	0	1	2
14. Cruel to animals	0	1	2
15. Defiant	0	1	2
16. Demands must be met immediately	0	1	2
17. Destroys his/her things	0	1	2
18. Destroys things belonging to his/her family or others	0	1	2
19. Diarrhea or loose bowels (when not sick)	0	1	2
20. Disobedient	0	1	2
21. Disturbed by any change in routine	0	1	2
22. Doesn't want to sleep alone	0	1	2
23. Doesn't answer when people talk to him/her	0	1	2
24. Doesn't eat well (describe):	0	1	2
25. Doesn't get along with other kids	0	1	2
26. Doesn't know how to have fun; acts like a little adult	0	1	2
27. Doesn't seem to feel guilty after misbehaving	0	1	2
28. Doesn't want to go out of home	0	1	2
29. Easily frustrated	0	1	2
30. Easily jealous	0	1	2
31. Eats or drinks things that are not food-**don't** include sweets (describe):	0	1	2
32. Fears certain animals, situations or places (describe):	0	1	2

33. Feelings are easily hurt	0	1	2
34. Gets hurt a lot, accident-prone	0	1	2
35. Gets in many fights	0	1	2
36. Gets into everything	0	1	2
37. Gets too upset when separated from parents	0	1	2
38. Has troubles sleeping	0	1	2
39. Headaches (without medical cause)	0	1	2
40. Hits others	0	1	2
41. Holds his/her breath	0	1	2
42. Hurts animals or people without meaning to	0	1	2
43. Looks unhappy without good reason	0	1	2
44. Angry moods	0	1	2
45. Nausea, feels sick (without medical cause)	0	1	2
46. Nervous movements or twitching (describe):	0	1	2
47. Nervous, highstung or tense	0	1	2
48. Nightmares	0	1	2
49. Overeating	0	1	2
50. Overtired	0	1	2
51. Shows panic for no reason	0	1	2
52. Painful bowel movements	0	1	2
53. Physically attacks people	0	1	2

54. Picks nose, skin or other parts of the body (describe):	0	1	2
55. Plays with own sex parts too much	0	1	2
56. Poorly coordinated or clumsy	0	1	2
57. Problems with eyes (without medical cause) (describe):	0	1	2
58. Punishment doesn't change his/her behavior	0	1	2
59. Quickly shifts from one activity to another	0	1	2
60. Rashes or other skin problems (without medical causes)	0	1	2
61. Refuses to eat	0	1	2
62. Refuses to play active games	0	1	2
63. Repeatedly rocks head or body	0	1	2
64. Resists going to bed at night	0	1	2
65. Resists toilet training (describe):	0	1	2
66. Screams a lot	0	1	2
67. Seems unresponsive to affection	0	1	2
68. Self-conscious or easily embarrassed	0	1	2
69. Selfish or won't share	0	1	2
70. Shows little affection to people	0	1	2
71. Shows little interest in things around him/her	0	1	2
72. Shows too little fear of getting hurt	0	1	2

73. Too shy or too timid	0	1	2
74. Sleeps less than most kids during day and/or night (describe):	0	1	2
75. Smears or plays with bowel movements	0	1	2
76. Speech problems (describe)	0	1	2
77. Stares into space or seems preoccupied	0	1	2
78. Stomachaches or cramps (without medical cause)	0	1	2
79. Rapid shiftiness between sadness and excitement	0	1	2
80. Strange behavior (describe):	0	1	2
81. Stubborn, sullen or irritable	0	1	2
82. Sudden changes in mood or feelings	0	1	2
83. Sulks a lot	0	1	2
84. Talks or cries out in sleep	0	1	2
85. Temper tantrums or hot tempers	0	1	2
86. Too concerned with neatness or cleanliness	0	1	2
87. Too fearful or anxious	0	1	2
88. Uncooperative	0	1	2
89. Underactive, slow moving , or lacks energy	0	1	2
90. Unhappy, sad or depressed	0	1	2
91. Unusually loud	0	1	2
92. Upset by new people or situations (describe):	0	1	2
93. Vomiting, throwing up (no medical cause)	0	1	2

94. Wakes up often at night	0	1	2
95. Wanders away	0	1	2
96. Wants a lot of attention	0	1	2
97. Whining	0	1	2
98. Withdrawn, doesn't get involved with others	0	1	2
99. Worries	0	1	2
100. Please write in any problems the child has that were not listed above.			

APPENDIX I-E

CHILD BEHAVIOR CHECKLIST-PARENT FORM (CBCL/6-18 years old; Achenbach & Rescorla, 2001)

Instructions: Below is a list of items that describe children and youths. For each item that describes your child now or within the past 6 months, please choose 2 if the item is *very true or often true* of your child. Choose 1 if the item is *somewhat or sometimes true* of your child. If the item is *not true,* then choose 0.

	Not True	**Somewhat True**	**Very True**
1. Acts too young for his/her age	0	1	2
2. Drinks alcohol without parents' approval (describe):	0	1	2
3. Argues a lot	0	1	2
4. Fails to finish things he/she starts	0	1	2
5. There is very little he/she enjoys	0	1	2
6. Bowel movements outside toilet	0	1	2
7. Bragging, boasting	0	1	2
8. Can't concentrate, can't pay attention for too long	0	1	2
9. Can't get his mind off certain thoughts (describe):	0	1	2
10. Can't sit still, restless, or hyperactive	0	1	2
11. Clings to adults, or too dependent	0	1	2
12. Complains of loneliness	0	1	2
13. Confused or seems to be in a fog	0	1	2
14. Cries a lot	0	1	2

15. Cruel to animals	0	1	2
16. Cruelty, bullying, or meanness to others	0	1	2
17. Daydreams or gets lost in his/her thoughts	0	1	2
18. Deliberately harms self or attempts suicide	0	1	2
19. Demands a lot of attention	0	1	2
20. Destroys his/her things	0	1	2
21. Destroys things belonging to his/her family or others	0	1	2
22. Disobedient at home	0	1	2
23. Disobedient at school	0	1	2
24. Doesn't eat well	0	1	2
25. Doesn't get along with other kids	0	1	2
26. Doesn't seem to feel guilty after misbehaving	0	1	2
27. Easily jealous	0	1	2
28. Breaks rules at home, school, or elsewhere	0	1	2
29. Fears certain animals, situations or places other than school (describe):	0	1	2
30. Fears going to school	0	1	2
31. Fears he/she might think or do something bad	0	1	2
32. Feels she/he has to be perfect	0	1	2
33. Feels or complains that no one loves him/her	0	1	2

34. Feels others are out to get him/her	0	1	2
35. Feels worthless or inferior	0	1	2
36. Gets hurt a lot, accident-prone	0	1	2
37. Gets in many fights	0	1	2
38. Gets teased a lot	0	1	2
39. Hangs around with others who get in trouble	0	1	2
40. Hears voices or sounds that aren't there (describe):	0	1	2
41. Impulsive or acts without thinking	0	1	2
42. Would rather be alone than with others	0	1	2
43. Lying or cheating	0	1	2
44. Bites fingernails	0	1	2
45. Nervous, highstrung, or tense	0	1	2
46. Nervous movements or twitching (describe):	0	1	2
47. Nightmares	0	1	2
48. Not liked by others	0	1	2
49. Constipated, doesn't move bowels	0	1	2
50. Too fearful or anxious	0	1	2
51. Feels dizzy or lightheaded	0	1	2
52. Feels too guilty	0	1	2
53. Overeating	0	1	2
54. Overtired without good reason	0	1	2
55. Overweight	0	1	2

56. Physical problems without known medical causes:	0	1	2
a. Aches or pain (*not* stomach or headache)	0	1	2
b. Headaches	0	1	2
c. Nausea, feels sick	0	1	2
d. Problems with eyes (***not*** if corrected with eyeglasses) (describe):	0	1	2
e. Rashes or skin problems	0	1	2
f. Stomachaches	0	1	2
g. Vomiting, throwing up	0	1	2
h. Other (describe):	0	1	2
57. Physically attacks people	0	1	2
58. Picks nose, skin or other parts of the body (describe):	0	1	2
59. Plays with own sex parts in public	0	1	2
60. Plays with own sex parts too much	0	1	2
61. Poor school work	0	1	2
62. Poorly coordinated or clumsy	0	1	2
63. Prefers being with older kids	0	1	2
64. Prefers being with younger kids	0	1	2
65. Refuses to talk	0	1	2
66. Repeats certain acts over and over; compulsions (describe):	0	1	2
67. Runs away from home	0	1	2
68. Screams a lot	0	1	2

69. Secretive, keeps things to self	0	1	2
70. Sees things that aren't there (describe):	0	1	2
71. Self-conscious or easily embarrassed	0	1	2
72. Sets fires	0	1	2
73. Sexual problems (describe):	0	1	2
74. Showing off or clowning	0	1	2
75. Too shy or timid	0	1	2
76. Sleeps less than most kids	0	1	2
77. Sleeps more than most kids (describe):	0	1	2
78. Inattentive or easily distracted	0	1	2
79. Speech problems (describe):	0	1	2
80. Stares blankly	0	1	2
81. Steals at home	0	1	2
82. Steals outside the home	0	1	2
83. Stores up too many things he/she doesn't need (describe):	0	1	2
84. Strange behavior (describe):	0	1	2
85. Strange ideas (describe):	0	1	2
86. Stubborn, sullen or irritable	0	1	2
87. Sudden changes in mood or feelings	0	1	2
88. Sulks a lot	0	1	2
89. Suspicious	0	1	2
90. Swearing or obscene language	0	1	2
91. Talks about killing oneself	0	1	2
92. Talks or walks in sleep (describe):	0	1	2

93. Talks too much	0	1	2
94. Teases a lot	0	1	2
95. Temper tantrums or hot temper	0	1	2
96. Thinks about sex too much	0	1	2
97. Threatens people	0	1	2
98. Thumb-sucking	0	1	2
99. Smokes, chews or sniffs tobacco	0	1	2
100. Trouble sleeping (describe):	0	1	2
101. Truancy, skips school	0	1	2
102. Underactive, slow moving, or lacks energy	0	1	2
103. Unhappy, sad or depressed	0	1	2
104.Unusually loud	0	1	2
105. Uses drugs for nonmedical purposes (describe):	0	1	2
106. Vandalism	0	1	2
107. Wets self during the day	0	1	2
108. Wets the bed	0	1	2
109. Whining	0	1	2
110. Wishes to be the opposite sex	0	1	2
111. Withdrawn, doesn't get involved with others	0	1	
112. Worries	0	1	2
113. Please write in any problems the child has that were not listed above.			

APPENDIX I-F

CHILD BEHAVIORAL CHECKLIST WITH OVERLAPPING ITEMS (CBCL-O)

Instructions: Below is a list of items that describe children and youths. For each item that describes your child now or within the past 6 months, please choose 2 if the item is *very true or often true* of your child. Choose 1 if the item is *somewhat or sometimes true* of your child. If the item is *not true,* then choose 0.

	Not True (0)	**Somewhat True (1)**	**Very True (2)**
1. Aches or pains (without a medical cause; **do not** include stomach or headaches)	0	1	2
2. Acts too young for age	0	1	2
3. Can't concentrate, can't pay attention for too long	0	1	2
4. Can't sit still, restless, or hyperactive	0	1	2
5. Clings to adults, or too dependent	0	1	2
6. Constipated, doesn't move bowels(when not sick)	0	1	2
7. Cries a lot	0	1	2
8. Cruel to animals	0	1	2
9. Destroys his/her things	0	1	2
10. Destroys things belonging to his/her family or others	0	1	2
11. Disobedient	0	1	2
12. Doesn't eat well (describe)	0	1	2
13. Doesn't get along with other kids	0	1	2
14. Doesn't seem to feel guilty after misbehaving	0	1	2
15. Easily jealous	0	1	2

16. Fears certain animals, situations or places (describe)	0	1	2
17. Gets hurt a lot, accident-prone	0	1	2
18. Gets in many fights	0	1	2
19. Has troubles sleeping	0	1	2
20. Headaches (without medical cause)	0	1	2
21. Nausea, feels sick (without medical cause)	0	1	2
22. Nervous, highstung or tense	0	1	2
23. Nervous movements or twitching (describe)	0	1	2
24. Nightmares	0	1	2
25. Overeating	0	1	2
26. Overtired	0	1	2
27. Physically attacks people	0	1	2
28. Picks nose, skin or other parts of the body (describe):	0	1	2
29. Plays with own sex parts too much	0	1	2
30. Poorly coordinated or clumsy	0	1	2
31. Problems with eyes (without medical cause) (describe)	0	1	2
32. Rashes or other skin problems (without medical causes)	0	1	2
33. Screams a lot	0	1	2
34. Self-conscious or easily embarrassed	0	1	2
35. Too shy or too timid	0	1	2
36. Speech problems (describe)	0	1	2
37. Stares into space or seems preoccupied	0	1	2
38. Stomachaches or cramps (without medical cause)	0	1	2
39. Strange behavior (describe):	0	1	2
40. Stubborn, sullen or	0	1	2

irritable			
41. Sudden changes in mood or feelings	0	1	2
42. Sulks a lot	0	1	2
43. Temper tantrums or hot tempers	0	1	2
44. Underactive, slow moving , or lacks energy	0	1	2
45. Unhappy, sad or depressed	0	1	2
46. Unusually loud	0	1	2
47. Vomiting, throwing up (no medical cause)	0	1	2
48. Withdrawn, doesn't get involved with others	0	1	2
49. Whining	0	1	2
50. Worries	0	1	2

APPENDIX I-G

EXTRA SHORT FORM OF BIG FIVE TEST-2XS: OPENNESS TO EXPERIENCE ITEMS (BFT-2XS; Soto & John, 2017)

Instructions: This is a personality test, it will help you understand why you act the way that you do and how your personality is structured. Circle the number that indicates how much you disagree or agree with each statement. Begin each statement with "I am someone who…."

I am someone who…	Disagree Strongly	Disagree a little	Neutral; No opinion	Agree a little	Agree Strongly
5. Is fascinated by art, music, or literature.	1	2	3	4	5
10. Has little interest in abstract ideas	1	2	3	4	5
15. Is original, comes up with new ideas	1	2	3	4	5

APPENDIX I-H

PARENTAL ATTITUDES TOWARDS PSYCHOLOGICAL SERVICES INVERNTORY (PATPSI; Turner, 2012)

Instructions: For each item, indicate whether you strongly disagree (0), disagree (1), somewhat disagree (2), somewhat agree (3), agree (5) and strongly agree (5). The term "psychological problems" refer to reasons one might visit a professional. Similar terms include: mental health concerns, emotional problems, mental problems, and personal difficulties. The term "professional" refers to individuals who have been trained to deal with mental health problems (e.g., psychologist, psychiatrist, social workers, and physicians).

0	1	2	3	4	5
Strongly Disagree	Disagree	Somewhat Disagree	Somewhat agree	Agree	Strongly Agree

1. I would not want others (friends, family, teachers, etc.) to know if my child had a psychological or behavior problem.	**0**	**1**	**2**	**3**	**4**	**5**
2. To avoid thinking about my child's problems, doing other activities is a good solution.	**0**	**1**	**2**	**3**	**4**	**5**
3. Having been mentally ill carries with it feelings of shame.	**0**	**1**	**2**	**3**	**4**	**5**
4. If my child were experiencing a serious psychological or behavior problem at this point in my life, I would be confident that I could find relief in professional help.	**0**	**1**	**2**	**3**	**4**	**5**
5. If my child were to experience a psychological or behavior problem, I could get professional help if I wanted to	**0**	**1**	**2**	**3**	**4**	**5**
6. Important people in my life would think less of my child if they were to find out that he/she had a psychological or behavior problem.	**0**	**1**	**2**	**3**	**4**	**5**
7. Psychological problems tend to work out by themselves.	**0**	**1**	**2**	**3**	**4**	**5**
8. It would be relatively easy for me to find the time to take my child to see a professional for help.	**0**	**1**	**2**	**3**	**4**	**5**
9. I would want to get professional help if my child 92 were worried or upset for a long period of time.	**0**	**1**	**2**	**3**	**4**	**5**
I would be uncomfortable seeking professional help for my child because people (friends, family, coworkers, etc.) might find out about it	**0**	**1**	**2**	**3**	**4**	**5**
11. I would not want to take my child to a professional because of what	**0**	**1**	**2**	**3**	**4**	**5**

people might think.	
12. There is something admirable in the attitude of people who are willing to cope with their conflicts and fears without seeking professional help.	**0 1 2 3 4 5**
13. If I believed my child was having a mental breakdown, my first decision would be to get professional help.	**0 1 2 3 4 5**
14. I would feel uneasy going to a professional because of what some people would think.	**0 1 2 3 4 5**
15. Strong willed individuals can handle emotional or behavior problems without needing professional help.	**0 1 2 3 4 5**
16. Had my child received treatment for a psychological or behavior problem, I would feel that it should be "kept secret".	**0 1 2 3 4 5**
17. I would be embarrassed if my neighbor saw me going into the office of a professional who deals with mental health concerns.	**0 1 2 3 4 5**
18. People should work out their own problems instead of getting professional help.	**0 1 2 3 4 5**
19. There are things that happen in my family I would not discuss with anyone.	**0 1 2 3 4 5**
20. Seeking professional help is a sign of weakness.	**0 1 2 3 4 5**
21. Strong willed parents can handle problems without professional help.	**0 1 2 3 4 5**

APPENDIX I-I

SHORT VERSION OF THE BALANCED INVENTORY OF DESIRABLE RESPONDING (BIDR; Hart et al., 2015).

Instructions: Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide whether the statement is Not True, Somewhat True or False as it pertains to you personally by putting a (x) in the box.

	Not True 1	**Somewhat True 4**	**Very True 7**
I have not always been honest with myself.			
I always know why I like things.			
I sometimes tell lies if I have to.			
I never cover up my mistakes.			

APPENDIX I-J

ENGLISH SOCIODEMOGRAPHIC QUESTIONNAIRE AND ACCESS TO MENTAL HEALTH SERVICES IN THE PAST THREE YEARS

PARENT'S DEMOGRAPHICS:

Your sex:

1. Male
2. Female
3. Intersex
4. Prefer not to say

What languages do you speak? You can select more than one

1. Arabic
2. English
3. French
4. Other, specify:

What is your Nationality? You can select more than one

1. Lebanese
2. Other, please Specify:

In what country are you currently residing?

1. Lebanon
2. Other, Please specify:

If you are currently residing in Lebanon, Please specify the town OR city, where you currently live:

1. Beirut
2. Tripoli
3. Jounieh
4. Other, Please Specify:

PARENT'S EDUCATION LEVEL

What is the highest level of education completed by YOU?

1. Less than Grade 12 or Baccalaureate II
2. Grade 12 or Baccalaureate II
3. Vocational degree or skills-based training

4. Some college education but no degree
5. Bachelor's degree (e.g. BA, BS, DEA)
6. Master's degree (e.g. MA, MS, Med, DESS)
7. Doctorate (e.g. MD, PhD, EdD)
8. Post Doctoral Degree
9. Medical Degree
10. No Education

FAMILY INCOME

Which of the below best describes your household income?

1. Our household income covers our needs well, and we can save from it
2. Our household income covers our needs, but we cannot save from it
3. Our household income does not cover our needs, and we face difficulties meeting those needs
4. I refuse to answer
5. I don't know

YOUR CHILD'S MENTAL HEALTH

Please think of one of your children while answering the following questions. If more than one child suffers from mental health problems, think of one child while answering the questions below.

Does your child have any mental health problems you think they need help with?

Yes
No (If you answered no please jump to section V)

If Yes, what is the age of the child suffering from mental health problems (in years)?

_____

What is the sex of the child suffering from mental health problems?

1. Male
2. Female
3. Intersex
4. Prefer not to say

If Yes, please specify the mental health problem(s) of your child: You can select more than one

Opposition (e.g., arguing a lot, refusing to do what is asked of them)

Conduct problem (e.g., frequently disregarding of rules, physically violent, aggression towards others/animals…)

Feeling sad

Feeling anxious (e.g., worrying a lot, excessive fears)
Learning difficulty (e.g. difficulty in math, in reading, and/or in writing…)
Tantrums/whining
Separation problems (e.g., having a hard time separating from one parent…)
Bedtime/Sleep problems
Delays in development (e.g., took time to walk, took time to talk, took time to complete potty training…)
Bedwetting/soiling
Hyperactivity/inattention (e.g., inability to sit still, fidgeting a lot, having a hard time staying focused, easily distracted…)
Communication problems (e.g., pronunciation difficulties, poor vocabulary)
Eating Disorders
Other, Please Specify:

RECOGNITION OF THE CHILD'S PROBLEM AND THE NEED FOR MENTAL HELP:

1. **On a scale from 1 to 10 how problematic would you say your child's behaviors are? (1 means Not At All and 10 means Very Much).**

1 2 3 4 5 6 7 8 9 10

2. **On a scale from 1 to 10 how disturbing would you say your child's symptoms are to their *general* functioning (e.g. performance at school, relationships with friends)? (1 means Not At All and 10 means Very Much).**

1 2 3 4 5 6 7 8 9 10

3. **On a scale from 1 to 10 how disturbing would you say your child's difficulties are to family functioning? (1 means Not At All and 10 means Very Much).**

1 2 3 4 5 6 7 8 9 10

4. **On a scale from 1 to 10 how likely are to consider taking your child to a psychologist or psychiatrist if they had a mental health problem? (1 means Not At All and 10 means Very Much).**

1 2 3 4 5 6 7 8 9 10

ACCESS TO MENTAL AND NON-MENTAL HEALTH SERVICES: FOR YOUR CHILD

1. Medical Help: For Your Child

During the past three years, have you ever consulted a medical professional for any psychological, emotional or academic problem (e.g., feeling worried, feeling sad,

physical symptoms that have no medical explanation such as tension, insomnia, pounding heart, or fatigue) Your Child is experiencing/has experienced? If no Jump to number 2.

Yes
No

If Yes, what type of medical professional did you consult for your child? You can select more than one

1. Family doctor (e.g., generalist, pediatrician)
2. Neurologist
3. Psychiatrist
4. Other, Please Specify:

2. Previous Use of Mental Health Services: For Your Child

During the past three years, have you ever consulted a Mental Health Professional (e.g., a psychologist) for any psychological, emotional or academic/work problem (e.g., feeling worried, feeling sad, physical symptoms that have no medical explanation such as tension, insomnia, pounding heart, or fatigue) Your Child is experiencing/has experienced If no jump to section VII

Yes
No

If Yes, what kind of Non-Medical/Mental Health Professional did you consult for your child? You can select more than one

1. Counselor
2. Clinical psychologist/ psychotherapist
3. Alternative professional (priest, sheikh, or traditional healer)
4. Other, Please Specify:

ACCESS TO MENTAL AND NON-MENTAL HEALTH SERVICES FOR YOU (Parent)

1. Medical Help: For the Parent

During the past three years, have you ever consulted a medical professional for any psychological, emotional or academic/work problem (e.g., feeling worried, feeling sad, physical symptoms that have no medical explanation such as tension, insomnia, pounding heart, or fatigue) You are experiencing/have experienced? If No jump to question 2

Yes
No

If yes, what type of medical professional did you consult? You can select more than on

1. Family doctor (e.g., generalist)
2. Neurologist
3. Psychiatrist
4. Other, please specify:

2. Previous Use of Mental Health Services: For the Parent

Do you currently or have you ever struggled with mental health problems?

Yes
No

If Yes, indicate what you are currently/have struggled with in the past (You can select more than one option)

Depression (e.g., feeling sad often, having a hard time staying focused, feeling fatigued, etc.)
Anxiety (e.g., worrying about a lot of things, feeling tensed most of the time etc.)
Obsessions (e.g., preoccupation with cleanliness, order, checking, disturbing sexual thoughts, disturbing thoughts about germs, etc.)
Panic attacks
Phobias (e.g., extreme fear of blood, spiders, heights, etc.)
Sleeping problems
Concentration problems
Hyperactivity (e.g., cannot sit still, fidgets a lot etc.)
Eating Disorders
Physical symptoms that have no medical explanation such as tension, pounding heart, or fatigue
Worrying
Other, Please Specify:

During the past three years, have you ever consulted a mental health professional (e.g., a psychologist or counselor) for any psychological, emotional or academic/work problem you are/have experienced (e.g., feeling worried, feeling sad, physical symptoms that have no medical explanation such as tension, insomnia, pounding heart, or fatigue?*)* If No skip to part VIII

Yes
No

VALUE AND TRUST IN MENTAL HEALTH PROFESSIONALS

1. **On a scale from 1 to 10 how well trained do you think mental health professionals in Lebanon are in terms of children's mental health problems? (1 means Not At All and 10 means Very Much).**

1 2 3 4 5 6 7 8 9 10

2. **On a scale from 1 to 10 how comfortable are you discussing your child's difficulties with a mental health professional in Lebanon? (1 means Not At All and 10 means Very Much).**

1 2 3 4 5 6 7 8 9 10

3. **On a scale from 1 to 10 <u>how helpful would you say mental health professional in Lebanon are in answering questions pertaining to your child's mental health problems?</u> (1 means Not At All and 10 means Very Much).**

1 2 3 4 5 6 7 8 9 10

4. **On a scale from 1 to 10 how much do you trust mental health professionals in Lebanon to help your child's with their mental health problem? (1 means Not At All and 10 means Very Much).**

1 2 3 4 5 6 7 8 9 10

<u>HEALTH INSURANCE</u>

1. Do you have health insurance? If No skip to question 3

Yes
No

2. Does <u>your insurance cover mental health services for your child?</u>

Yes
No

3. If you answered No for questions 1 and 3, do you know of non-governmental organizations that provide mental health services free of charge or for low charge (e.g. IDRAAC, Embrace…)?

Yes
No

4. Regardless of your answer to question 1, would you be willing to seek mental health services from NGOS (e.g. IDRAAC, Embrace…) if your child needed them?

Yes
No

5. Regardless of your answer to question 1, would you be willing to seek help for your child's mental health problems from a family member, a priest a Sheikh, etc.?

Yes
No

APPENDIX I-K

END OF SURVEY

Thank you for your participation! You have reached the final page of the survey, please take a screenshot of this page and send it to the following email alongside your Lebanese I.D in order for you to be compensated for your time: parentalattitudes@gmail.com.

Referral Sheet:

Embrace	Beirut	81003870/1564
SKOUN	Beirut	78824730
MDM	Beirut	81314932
MJO	Beirut	01321672
Makhzoumi	Beirut	01660890 ext: 120
CDLL	Beirut	71446746
PU-AMI	Beirut/South/Nabateye	76442383
Red Oak Lebanon	Beirut	76704039
Al Najat Village	Beirut	03785443
Daher foundation	Beirut	76374091
Build psychological center	Beirut	71868723
Lebanese Red Cross	Beirut	01372802 ext: 8191
Dispensaire HDF	Beirut	
IDRAAC	Beirut	03730475
Blue Mission	Beirut	07732363
Heartland	Akkar/North	81375562/71989038
MSF	Akkar/Baalbeck El Hermel	71994147
IMC	Akkar/North/Baalbeck El Hermel/Nabateye/Mount Lebanon	81311748
RI	North	76079915
Caritas Lebanon	North/South/Bekaa/Mount Lebanon	71034346
RESTART Lebanon	North/Mount Lebanon	06411451/06410577
Imam Sadr Foundation	South/Nabateye	07343311 ext: 124
MDM	Baalbeck El Hermel/Mount Lebanon	76182616
AMEL	Baalbeck El Hermel/Bekaa	08240413
Humedica	Bekaa	76065117
MEDAIR	Bekaa	71157388
IAHV	Mount Lebanon	78890789

APPENDIX II

FACTOR MATRICES

Table 7

Factor Matrix for Public Stigma Scale (PSS)

Factor Matrix

	Factor
	1
If my child had a mental illness and others knew of it, they would think my child is dangerous	.849
If my child had a mental illness and others knew of it, they would be terrified of my child	.852
If my child had a mental illness and others knew of it, they would keep their children away from my child	.887
If my child had a mental illness and other people knew of it, they would bully my child	.904
If my child had a mental illness and others knew of it, they would feel pity for my child	.912
If my child had a mental illness and others knew of it, they would feel irritated with my child	.913
If my child had a mental illness and	-.967

others knew of it, they would be supportive of my child.	
If my child had a mental illness and others knew of it, they would be willing to help my child.	-.974
If my child had a mental illness and others knew of it, they would be accepting of my child.	-.975
If my child had a mental illness and others knew of it, they would be more understanding of my child's mental health condition.	-.975

Extraction Method: Maximum Likelihood.

a. 1 factor extracted. 8 iterations required.

Table 8

Factor Matrix for Parental Internalized Stigma Scale (PISMI)

Factor Matrix

	Factor
	1
I would feel out of place in the world if my son or daughter has a mental illness	.909
Mentally ill children tend to be violent	.801
People would discriminate against me if I have a son or daughter with a mental illness	.921
If I have a son or daughter with a mental illness, I would avoid getting close to people who don't have a son or daughter with a mental illness to avoid rejection	.934
I would be embarrassed or ashamed if I have a son or daughter with a mental illness	.933
Mentally ill people shouldn't get married	.849
People with mental illnesses make important contributions to society	-.766
If I have a son or daughter with a mental illness, I would feel inferior to others who don't have a son or daughter with a mental illness	.934

If I have a son or daughter with a mental illness, I wouldn't socialize as much as I used to if my child's mental illness might make me look or behave "weird"	.949
People having a son or daughter with mental illness cannot live a good, rewarding life.	.925
If I had a child with a mental illness, I wouldn't talk about them much because I don't want to burden others with his/her mental illness	.929
Negative stereotypes about mental illness keep me isolated from the "normal" world	.951
If I have a son or daughter has a mental illness, then being around people who don't have a son or a daughter with a mental illness would make me feel out of place or inadequate.	.942
I would feel comfortable being seen in public with my son or daughter if they had an obvious mental illness	-.751
If I have a son or daughter with mental illness, people would often patronize me	.926
If I have a son or daughter with a mental illness, I would be disappointed in myself	.924
If I have a son or daughter with a mental illness I would	.937

consider my life as ruined	
People could tell if I have a son or daughter with a mental illness by the way I look	.950
If I have a son or daughter with a mental illness, I would need others to make most decisions for them	.938
If I have a son or daughter with a mental illness, I would keep away from social situations in order to protect my family or friends from embarrassment	.951
If I have a son or daughter with a mental illness, people without a son or daughter with a mental illness would not be understanding of me	.911
If I have a son or daughter with a mental illness, people would ignore me or would take me less seriously	.945
If I have a son or daughter with a mental illness, I can't contribute anything to society	.953
If I had a son or daughter with a mental illness, I would consider living with them has made me a tough survivor	.884
If I have son or daughter with a mental illness, nobody would be interested in getting close to me	.952
In general, I am able to live my life the way I want to even if my son	-.478

or daughter has a diagnosis with a mental illness	
I can have a good, fulfilling life, despite having a son or daughter with a mental illness	-.542
Others would think that I can't achieve much in life if I have a son or daughter with a mental illness	.911
If my son or daughter has a mental illness, then stereotypes about the parents of children with mentally ill would apply to me	.912

Extraction Method: Maximum Likelihood.

a. 1 factor extracted. 5 iterations required.

Table 9

Factor Matrix of Treatment Stigma Scale (SSRPH)

Factor Matrix

	Factor
	1
Seeing a psychologist for your child's emotional or interpersonal problems carries social stigma	.890
It is a sign of personal weakness or inadequacy to see a psychologist for your child's emotional or interpersonal problems	.860
People will see a child in a less favorable way if they come to know that this child has seen a psychologist	.968
It is advisable for a parent to hide from people the fact that they have seen a psychologist for their child	.964
People tend to like less children who are receiving professional psychological help	.972

Extraction Method: Maximum Likelihood.

a. 1 factor extracted. 4 iterations required.

Table 10

Pattern Matrix of Child Behavior Checklist-Overlapping Items

Pattern Matrix

	Factor					
	1	2	3	4	5	6
Aches or pains (without a medical cause; **do not** include stomach or headaches)	.020	-.063	.278	.026	.013	.058
Acts too young for age	-.026	-.048	.017	.592	.010	.015
Can't concentrate, can't pay attention for too long	.003	.212	.027	.493	-.073	-.036
Can't sit still, restless, or hyperactive	.129	.253	-.081	.358	.016	.036
Clings to adults, or too dependent	-.031	-.060	.152	.576	.010	-.084
Constipated, doesn't move bowels (when not sick)	-.003	-.064	.019	.358	.031	.020
Cries a lot	-.060	-.086	.101	.438	-.429	-.179
Cruel to animals	.196	.516	-.050	-.054	.065	.169
Destroys his/her things	.019	.947	.018	-.142	-.048	-.091
Destroys things belonging to his/her family or others	.021	.959	.035	-.142	-.058	-.081
Disobedient	.105	.711	-.032	-.004	.008	.198
Doesn't eat well (describe)	-.036	.155	.150	.239	-.451	.133
Doesn't get along with other kids	.041	.467	-.023	.428	-.137	-.037
Doesn't seem to feel guilty	.120	.580	-.082	.018	-.054	.308

after misbehaving						
Easily jealous	-.009	.031	-.036	-.035	.011	.396
Fears certain animals, situations or places (describe)	.000	-.002	.437	.043	.123	-.013
Gets hurt a lot, accident-prone	.107	.593	-.035	.137	.023	.169
Gets in many fights	.295	.678	-.004	-.053	-.072	-.018
Has troubles sleeping	-.043	.021	.285	.184	-.104	.029
Headaches (without medical cause)	-.014	.028	.618	-.139	-.292	.003
Nausea, feels sick (without medical cause)	.032	.000	.558	-.110	-.036	.223
Nervous, highstung or tense	.000	.191	.481	-.092	-.063	.269
Nervous movements or twitching (describe)	.326	-.028	.273	.039	-.037	.151
Nightmares	.001	-.040	.286	.078	-.039	-.013
Overeating	-.013	-.034	-.006	.011	-.036	.000
Overtired	.003	-.075	.144	-.075	-.337	.019
Physically attacks people	.990	.074	-.069	-.020	-.016	-.290
Picks nose, skin or other parts of the body (describe):	.071	-.150	-.032	-.033	-.113	.405
Plays with own sex parts too much	-.050	.086	-.054	.292	.033	.050
Poorly coordinated or clumsy	.092	.265	-.055	.206	-.073	.091
Problems with eyes (without medical	.005	-.015	.066	-.018	.042	.002

cause) (describe)						
Rashes or other skin problems (without medical causes)	.047	-.092	.162	.033	-.001	.227
Screams a lot	.072	.237	.039	.281	-.014	.494
Self-conscious or easily embarrassed	.001	-.057	.414	-.090	-.406	-.053
Too shy or too timid	-.001	-.034	.481	.002	-.098	.043
Speech problems (describe)	.075	-.095	.009	.504	.021	-.026
Stares into space or seems preoccupied	-.013	-.038	-.069	.283	.025	.020
Stomachaches or cramps (without medical cause)	.025	-.031	.485	-.041	.026	-.029
Strange behavior (describe):	-.057	.194	.028	.055	.053	.423
Stubborn, sullen or irritable	-.037	.324	.046	.013	-.006	.643
Sudden changes in mood or feelings	-.048	.076	-.097	-.115	-.403	.424
Sulks a lot	.070	.101	-.014	.002	-.391	.081
Temper tantrums or hot tempers	.240	.503	-.028	.167	.024	.033
Underactive, slow moving, or lacks energy	.111	-.130	-.089	-.085	-.767	.073
Unhappy, sad or depressed	-.001	.156	.003	-.137	-.795	.084
Unusually loud	.661	.206	-.081	-.076	-.047	.068
Vomiting, throwing up	-.040	.079	.362	-.117	-.259	-.124

(no medical cause)						
Withdrawn, doesn't get involved with others	-.031	.029	.157	.027	.032	-.046
Whining	.169	.122	.040	.254	-.487	-.123
Worries	-.002	.068	.804	-.020	-.076	-.119

Extraction Method: Maximum Likelihood.

Rotation Method: Oblimin with Kaiser Normalization.

a. Rotation converged in 13 iterations.

Table 11

Factor Matrix for Openness to Experience Scale (BFT-2XS)

Factor Matrix

	Factor
	1
Is fascinated by art, music, or literature	.821
Has little interest in abstract ideas	-.743
Is original, comes up with new ideas	.902

Extraction Method: Maximum Likelihood.

a. 1 factor extracted. 4 iterations required.

Table 12

Factor Matrix for Parental Attitudes towards Psychological Services (PATPSI)

Factor Matrix

	Factor
	1
I would not want others (friends, family, teachers, etc.) to know if my child had a psychological or behavior problem.	.932
To avoid thinking about my child's problems, doing other activities is a good solution.	.919
Having been mentally ill carries with it feelings of shame.	.959
If my child were experiencing a serious psychological or behavior problem at this point in my life, I would be confident that I could find relief in professional help.	-.893
If my child were to experience a psychological or behavior problem, I could get professional help if I wanted to	-.900
Important people in my life would think less of my child if they were to find out that he/she had a psychological or behavior problem.	.932
Psychological problems tend to work out by themselves.	.834
It would be relatively easy for me to find the time to take my child to see a professional for help.	-.927
I would want to get professional help if my child were worried or upset for a long period of time.	-.819
I would be uncomfortable seeking professional help for my child because people (friends, family, coworkers, etc.) might find out about it	.958
I would not want to take my child to a professional because	.922

of what people might think.	
There is something admirable in the attitude of people who are willing to cope with their conflicts and fears without seeking professional help.	.969
If I believed my child was having a mental breakdown, my first decision would be to get professional help.	-.945
I would feel uneasy going to a professional because of what some people would think.	.971
Strong willed individuals can handle emotional or behavior problems without needing professional help.	.967
Had my child received treatment for a psychological or behavior problem, I would feel that it should be "kept secret".	.947
I would be embarrassed if my neighbor saw me going into the office of a professional who deals with mental health concerns.	.976
People should work out their own problems instead of getting professional help.	.970
There are things that happen in my family I would not discuss with anyone.	.884
Seeking professional help is a sign of weakness.	.946
Strong willed parents can handle problems without professional help.	.949

Extraction Method: Maximum Likelihood.

a. 1 factor extracted. 5 iterations required.

Table 13

Factor Matrix of Social Desirability Scale (BIDR)

Factor Matrix

	Factor
	1
I have not always been honest with myself.	.800
I always know why I like things.	-.746
I sometimes tell lies if I have to.	.696
I never cover up my mistakes.	-.654

Extraction Method: Maximum Likelihood.

a. 1 factor extracted. 4 iterations required.

Table 14

Factor Matrix of Subjective Questions for Recognizing the Problem and Need for Help

Factor Matrix

	Factor
	1
On a scale from 1 to 10 how problematic would you say your child's behaviors are?	.987
On a scale from 1 to10 how disturbing would you say your child's symptoms are to their *general* functioning (e.g. performance at school, relationships with friends)?	.993
On a scale from 1 to 10 how disturbing would you say your child's difficulties are to family functioning?	.978
On a scale from 1 to 10 how likely are to consider taking your child to a psychologist or psychiatrist if they had a mental health problem?	.341

Extraction Method: Maximum Likelihood.

a. 1 factor extracted. 4 iterations required.

Table 15

Factor Matrix of Questions Measuring Confidence in Mental Health Professionals in Lebanon

Factor Matrix

	Factor
	1
On a scale from 1 to10 how well trained do you think mental health professionals in Lebanon are in terms of children's mental health problems?	.889
On a scale from 1 to 10 how comfortable are you discussing your child's difficulties with a mental health professional in Lebanon?	.958
On a scale from 1 to 10 how helpful would you say mental health professional in Lebanon are in answering questions pertaining to your child's mental health problems?	.969
On a scale from 1 to 10 how much do you trust mental health professionals in Lebanon to help your child's with their mental health problem?	.964

Extraction Method: Maximum Likelihood.

a. 1 factor extracted. 4 iterations required.

APPENDIX III

HISTOGRAMS OF INDIVIDUAL SCALES

Figure 1

Histogram for Public Stigma

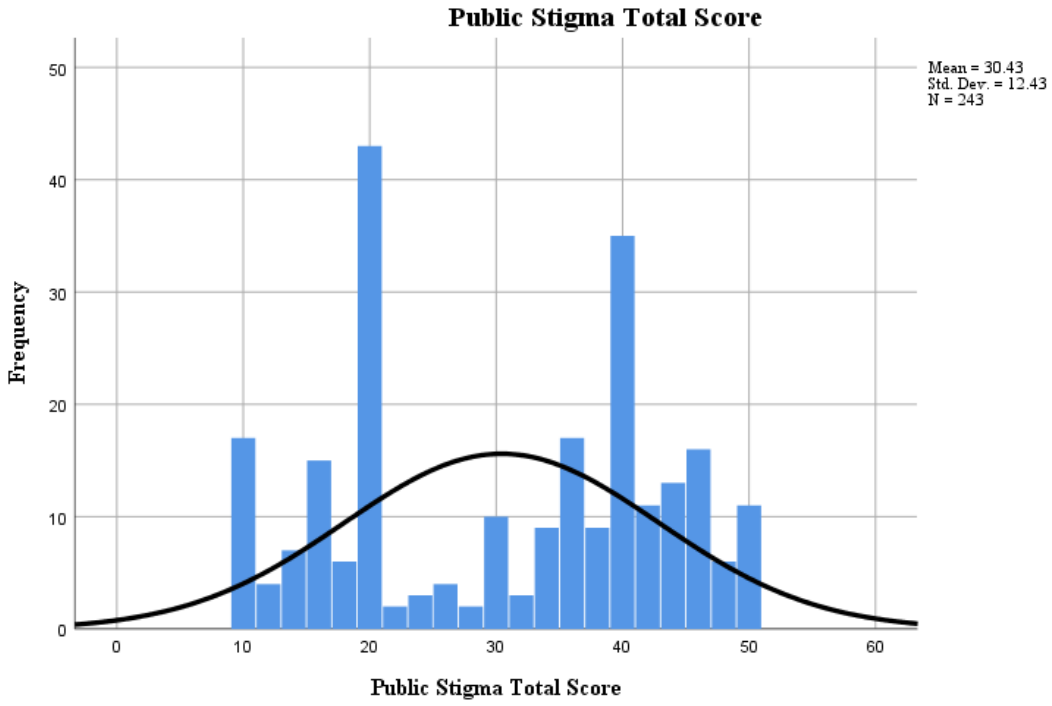


Figure 2

Histogram for Parents' Internalized Stigma

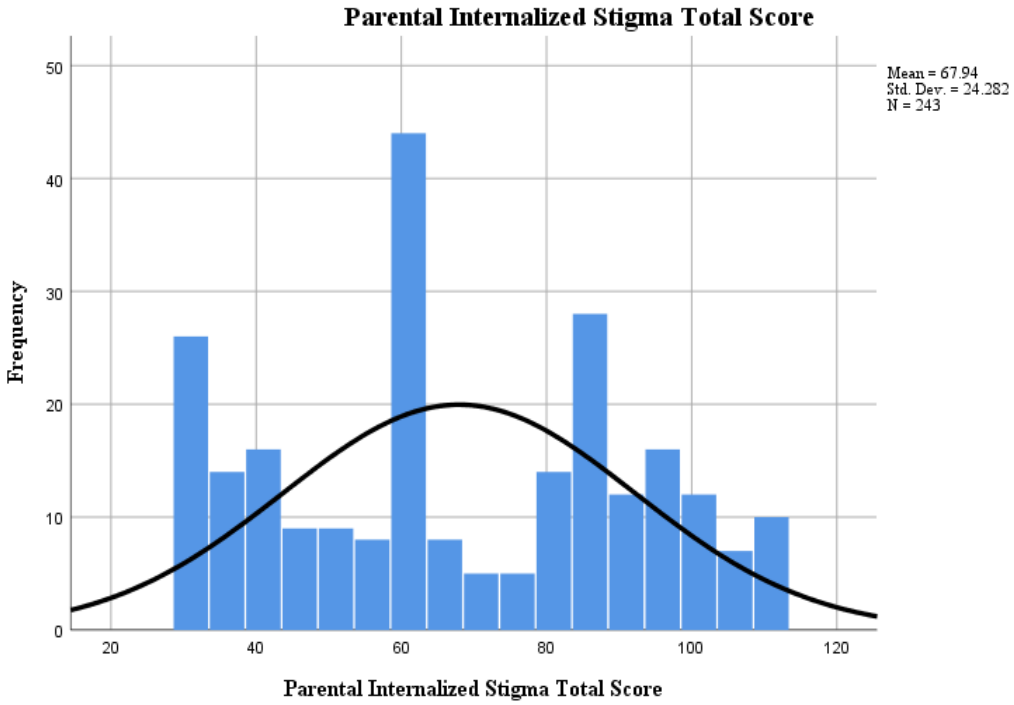


Figure 3

Histogram for Treatment Stigma

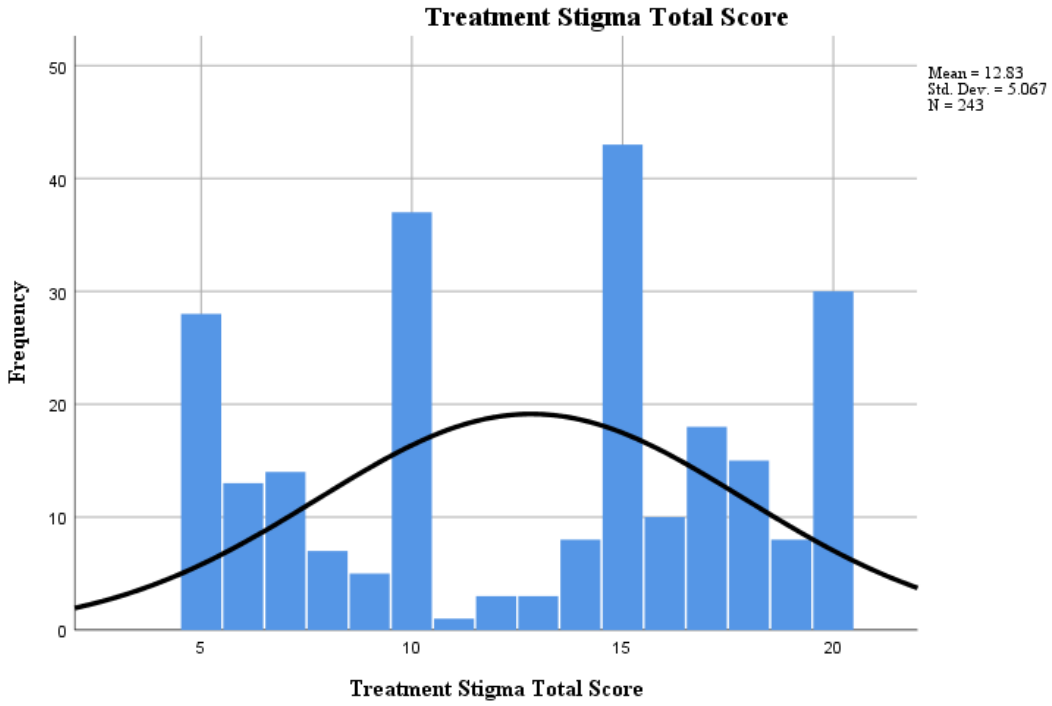


Figure 4

Histogram for Parental Recognition of Mental Health Problem Objective Measure

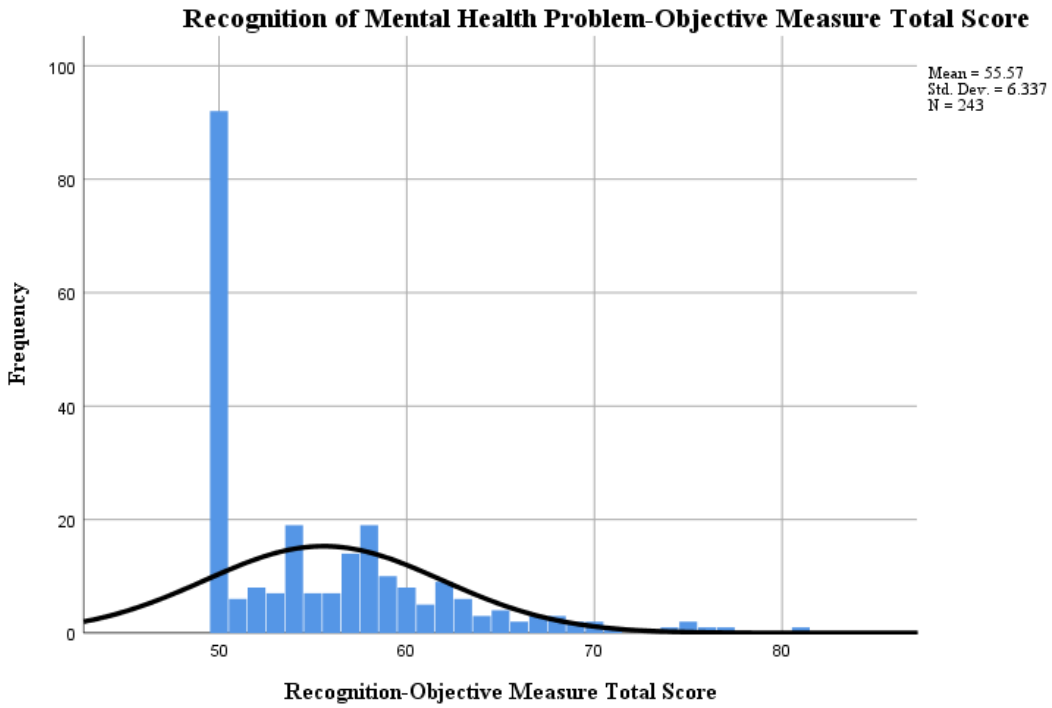


Figure 5

Histogram for Openness to Experience

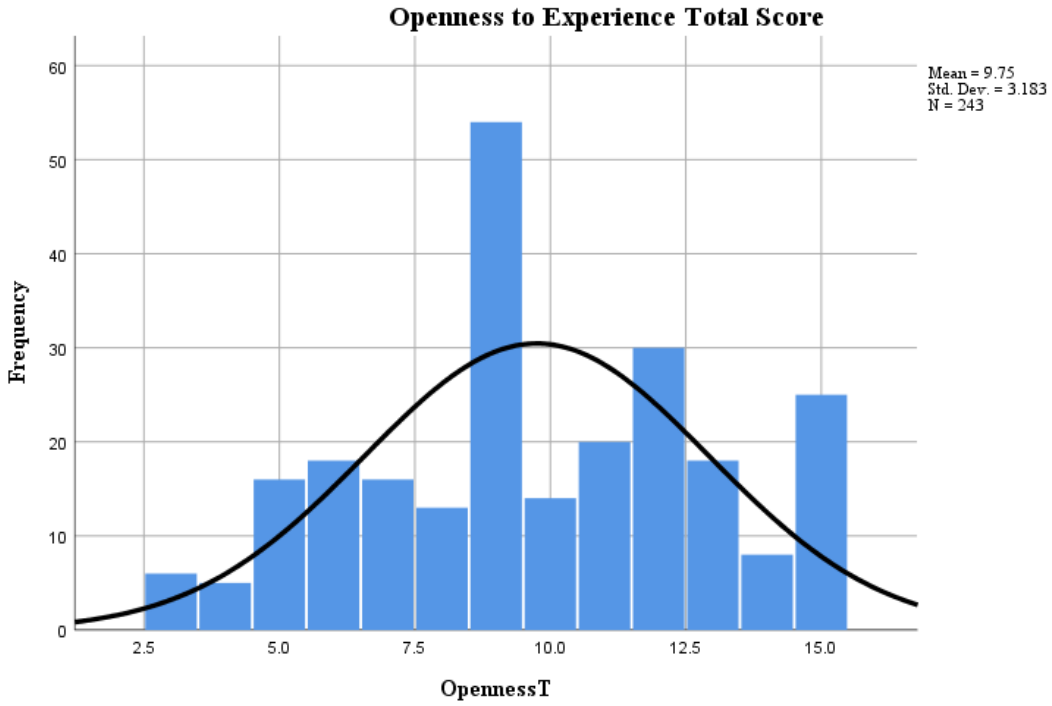


Figure 6

Histogram for Parental Attitudes towards Mental Health Services

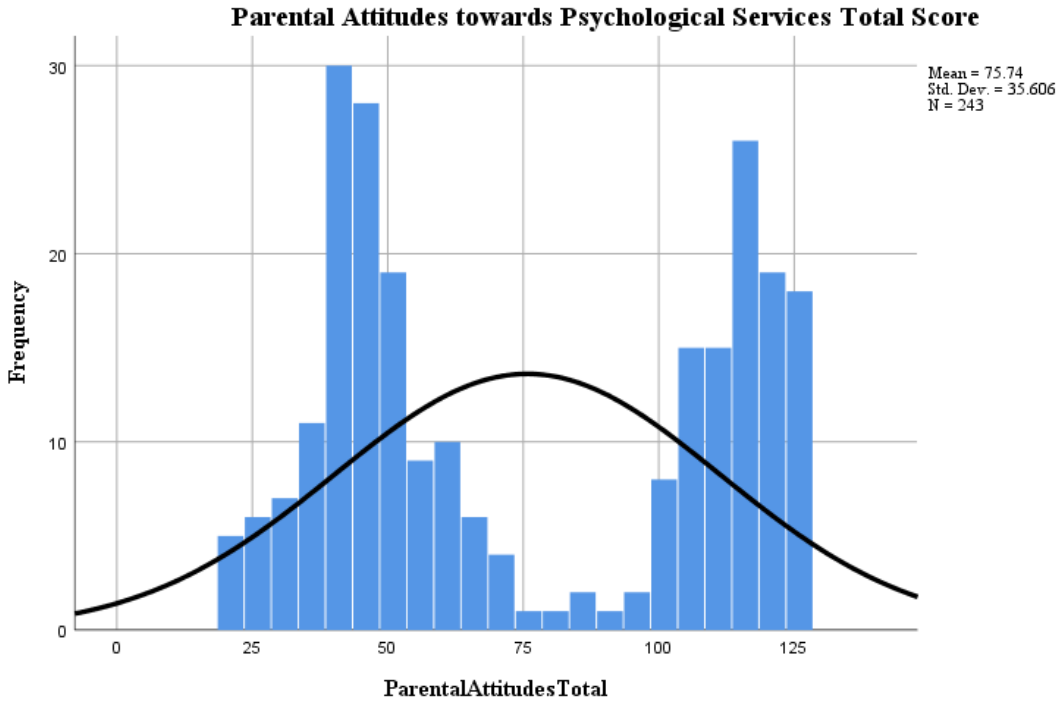


Figure 7

Histogram for Social Desirability

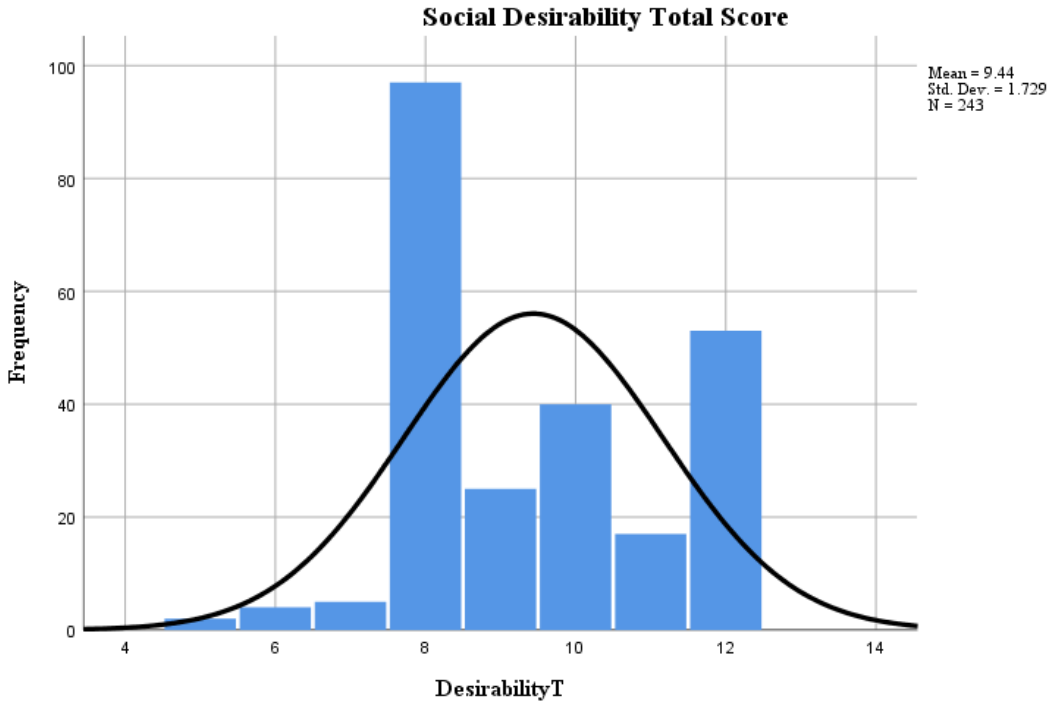


Figure 8

Histogram for Parental Recognition of Mental Health Problem-Subjective Measure

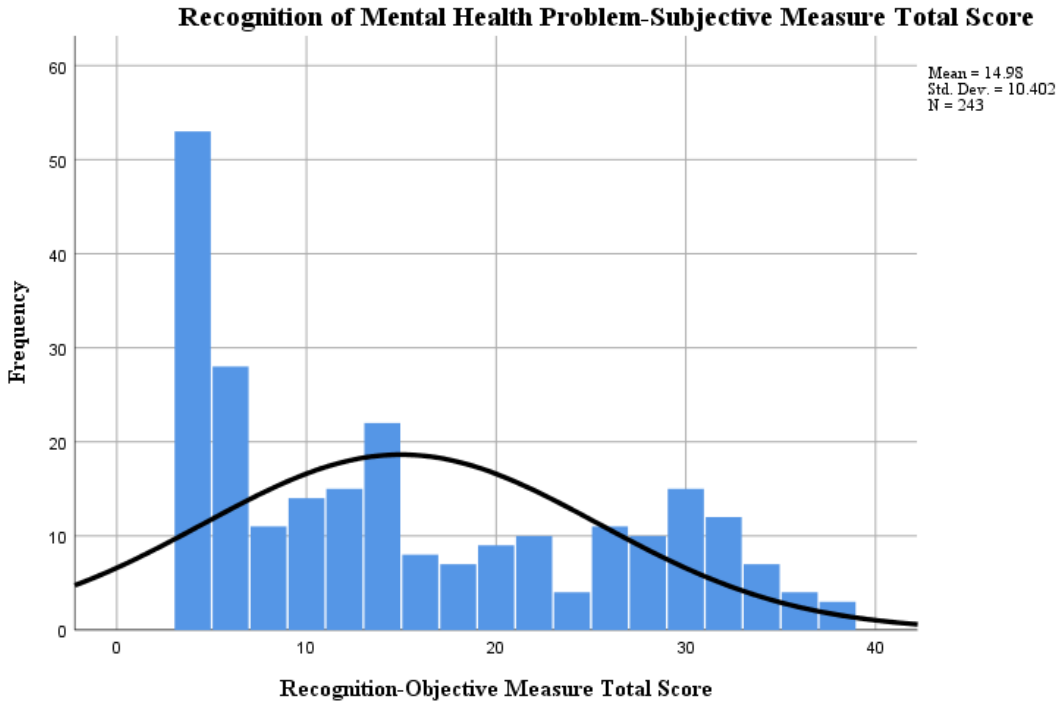


Figure 9

Histogram for Confidence in Mental Health Professionals in Lebanon

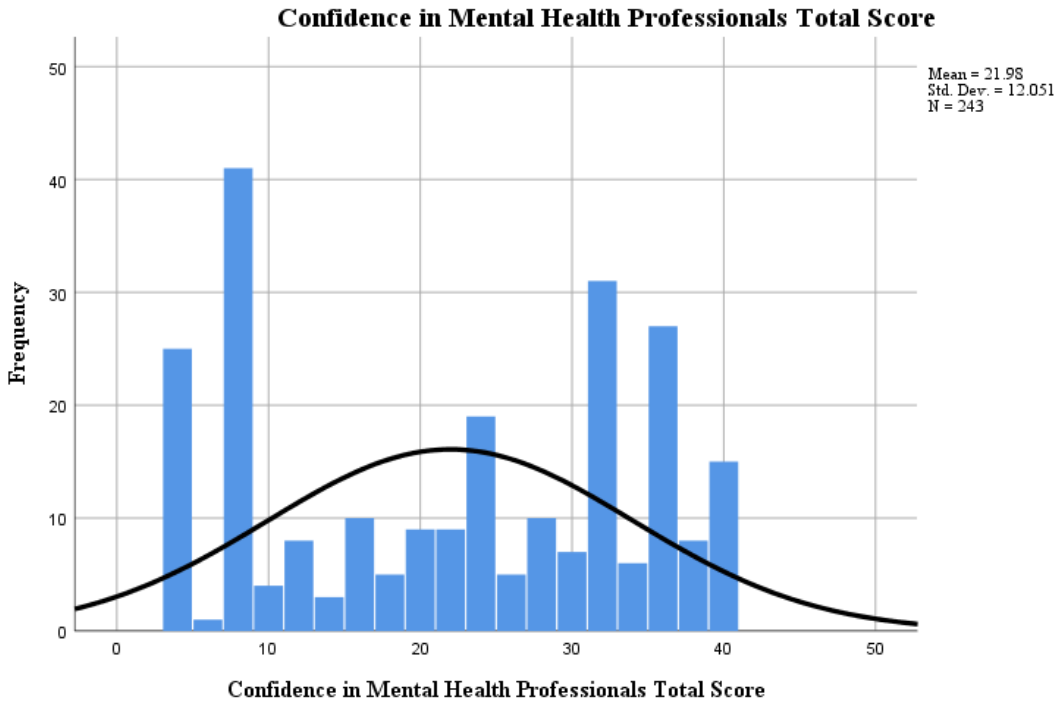


Figure 10

Histogram for Health Insurance Availability

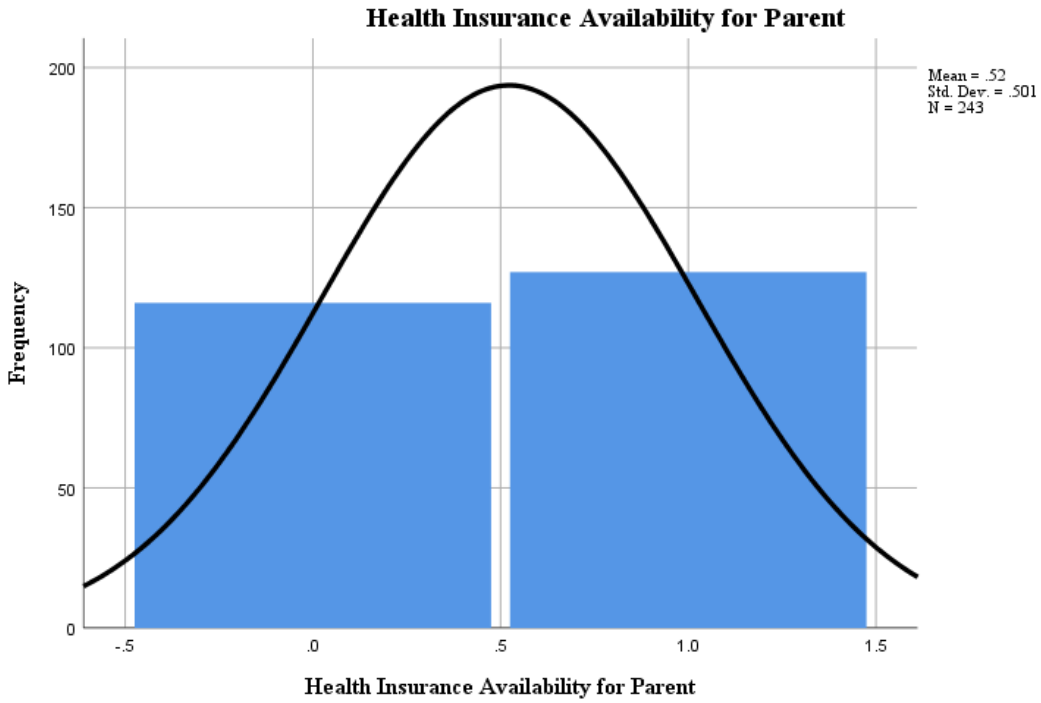


Figure 11

Histogram for Parental Income

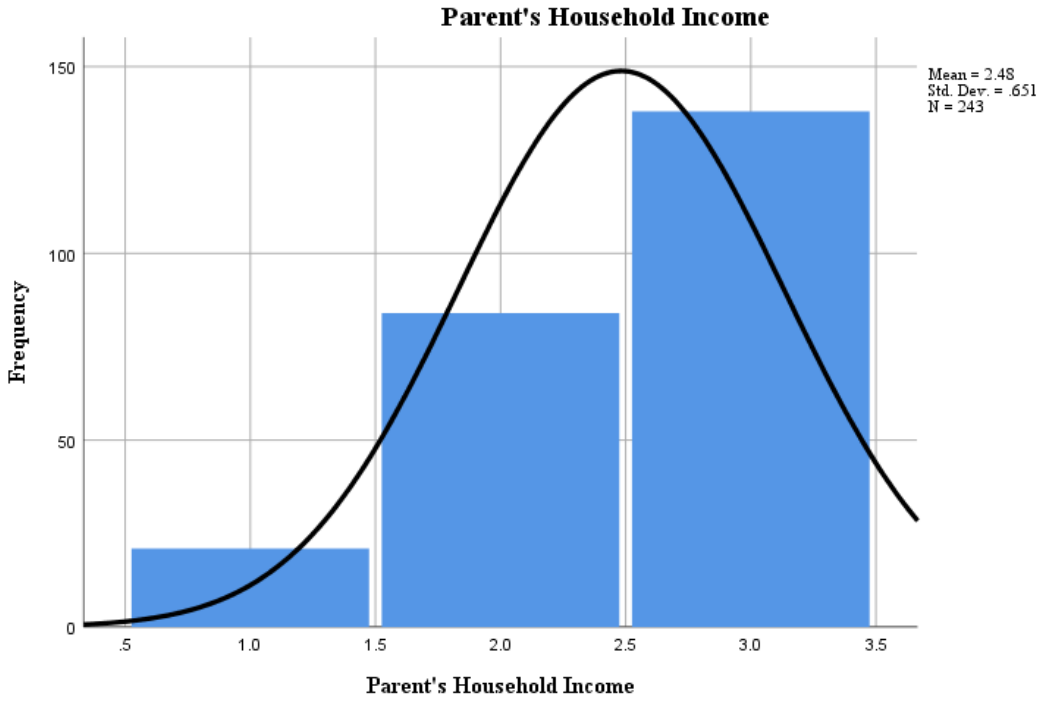


Figure 12

Histogram for Previous Mental Health Services Sought for Child

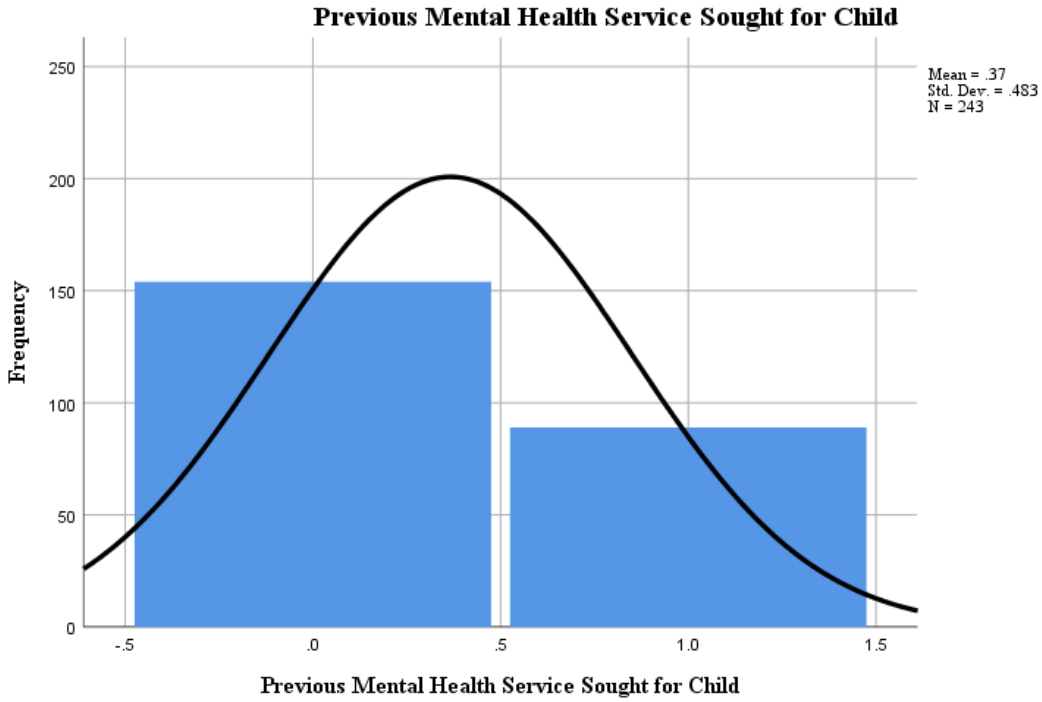
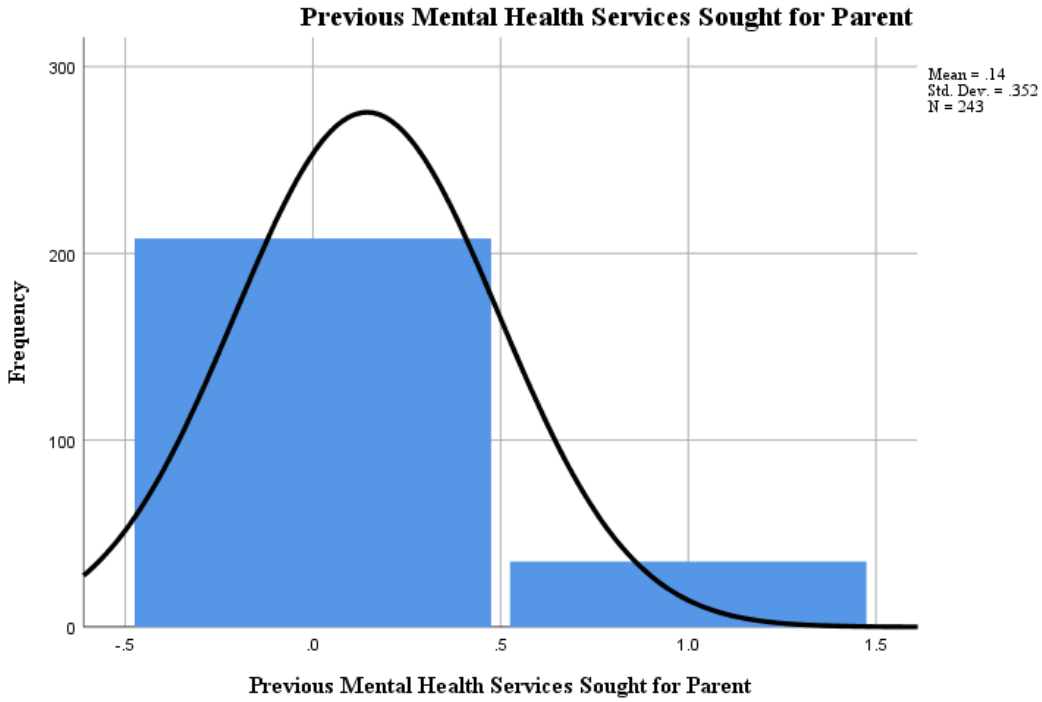


Figure 13

Histogram for Previous Mental Health Service Sought for Parent



APPENDIX IV

NORMALITY CURVE, P-P PLOTS, SCATTERPLOT

Figure 14

Histogram with Normal Curve for Parental Attitudes towards Mental Health Services

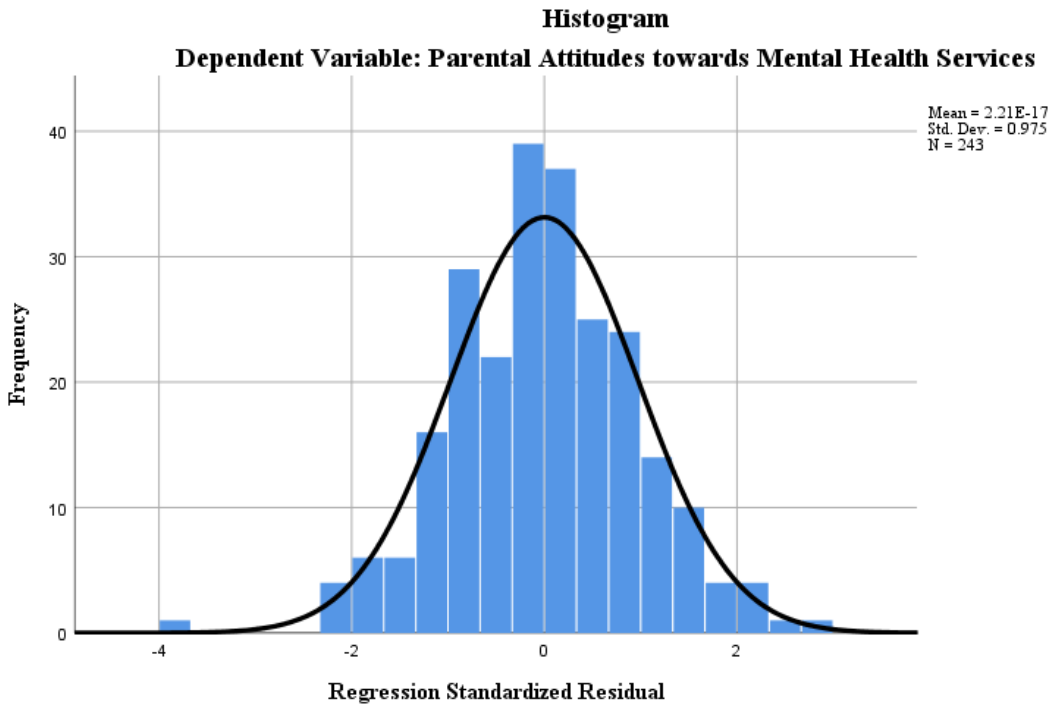


Figure 15

Normal P-P Plot for Parental Attitudes towards Mental Health Services

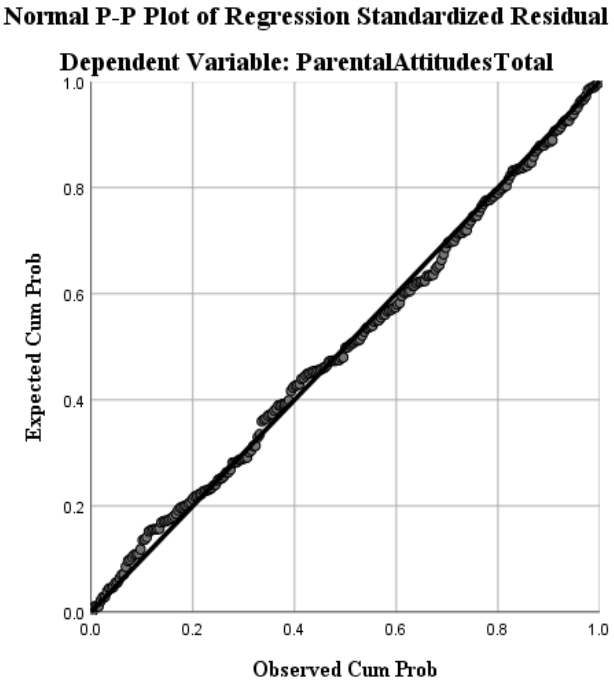
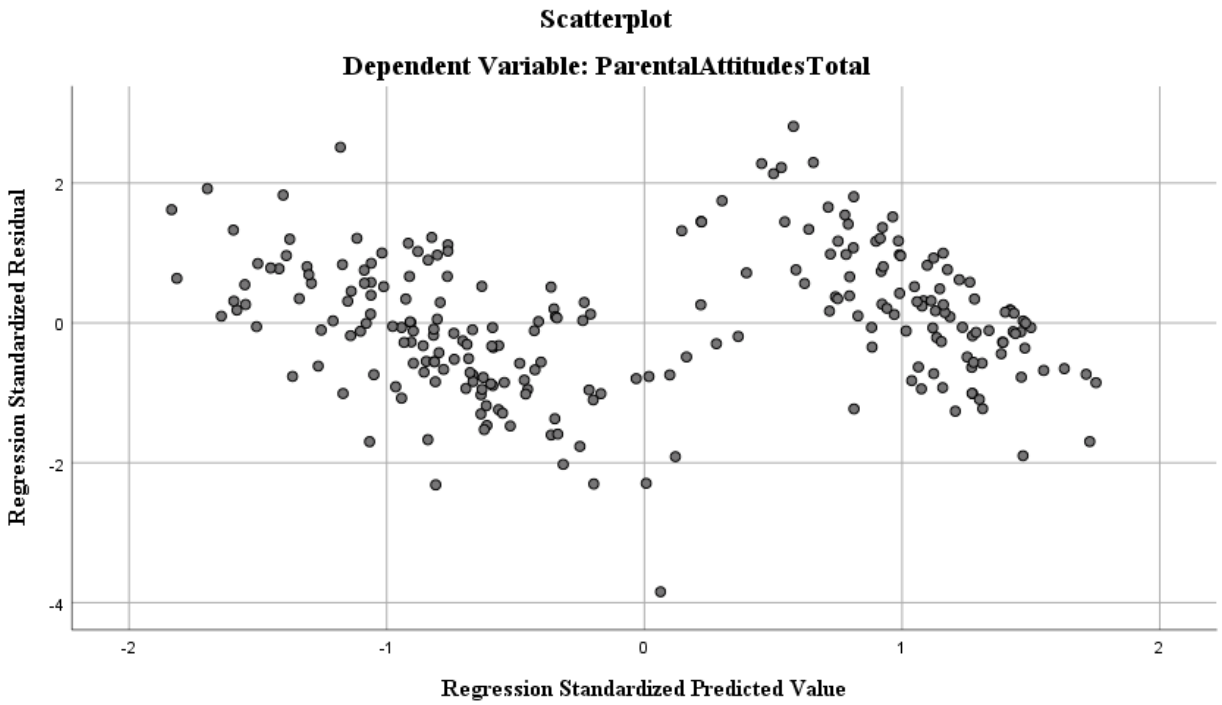


Figure 16

Scatter plot for Parental Attitudes towards Mental Health Services



REFERENCES

Abera, M., Robbins, J.M. & Tesfaye, M. (2015). Parents' perception of child and adolescent mental health problems and their choice of treatment option in Southwest Ethiopia. *Child Adolescent Psychiatry Mental Health 9***,** 40 doi: 10.1186/s13034-015-0072-5

Abi Doumit, C., Haddad, C., Sacre, H., Salameh, P., Akel, M., Obeid, S., Akiki, M., Mattar, E., Hilal, N., Hallit, S., & Soufia, M. (2019). Knowledge, attitude and behaviors towards patients with mental illness: Results from a national Lebanese study. *Public Library of Science ONE, 14*(9). doi: 10.1371/journal.pone.0222172

Achenbach, T., & Rescoral, L.A. (2001). Manual for the ASEBA School-Age Forms & Profiles. Burlington, VT: ASEBA, University of Vermont

Aguirre Velasco, A., Cruz, I., Billings, J., Jimenez, M., & Rowe, S. (2020). What are the barriers, facilitators and interventions targeting help-seeking behaviours for common mental health problems in adolescents? A systematic review. *BioMed Central Psychiatry, 20*(1), 293. doi: 10.1186/s12888-020-02659-0

Al-Darmaki, F. (2003). Attitudes towards seeking professional psychological help: What really counts for United Arab Emirates university students? *Social Behavior and Personality, 31,* 497-508.

Al-Krenawi, A., Graham, J., Al-Bedah, E., Mahmud Kadri, H., Sehwail, M. (2009). Cross national comparison of Middle Eastern university students: help-seeking behaviors, attitudes towards professionals, and cultural beliefs about mental health problems. *Community Mental Health Journal, 45,* 26-36. doi: 10.1007/s10597-008-9175-2

Al-Mohsin, Z. J., Al-Saffar, H. A., Al-Shehri, S. Z., & Shafey, M. M. (2020). Saudi mothers'

perception of their children with attention-deficit hyperactivity disorder in Dammam, Al-Qatif, and Al-Khobar cities, Saudi Arabia. *Journal of Family & Community Medicine*, *27*(1), 46-52. doi: 10.4103/jfcm.JFCM_149_19

Alexi, N., Moore, K., & Argyrides, M. (2017). Openness to help-seeking for mental illness among Greek-Cypriots. *Health Promotion International*, *33*(6), 990-998. doi: 10.1093/heapro/dax040

Alhomaizi, D., Alsaidi, S., Moalie, A., Muradwij, N., Borba, C. P., & Lincoln, A. K. (2018). An exploration of the help-seeking behaviors of Arab-Muslims in the US: A socio-ecological approach. *Journal of Muslim Mental Health*, *12*(1). doi: 10.3998/jmmh.10381607.0012.102

Alonso, J., & Little, E. (2019). Parent help-seeking behaviour: Examining the impact of parent beliefs on professional help-seeking for child emotional and behavioural difficulties. *The Educational al and Developmental Psychologist*, *36*(2), 60-67. doi: 10.1017/edp.2019.8

Al-Shannaq, Y., & Aldalaykeh, M. (2021). Suicide literacy, suicide stigma, and psychological help seeking attitudes among Arab youth. *Current psychology (New Brunswick, N.J.)*, 1-13. Advance online publication. doi: 10.1007/s12144-021-02007-9

American Psychiatric Association. (2013). Diagnostic and Statistical Manual of Mental Disorders (5th ed.). Arlington, VA: Author.

Andrade C. (2020). Sample size and its importance in research. *Indian Journal of Psychological Medicine*, *42*(1), 102-103. doi: 10.4103/IJPSYM.IJPSYM_504_19

Anjorin, O., & Hassan Wada, Y. (2022). Impact of traditional healers in the provision of mental health services in Nigeria. *Annals of medicine and surgery (2012)*, *82*, 104-755. doi: 10.1016/j.amsu.2022.104755

Ascher, B. H., Z. Farmer, E. M., Burns, B. J., & Angold, A. (1996). The child and adolescent services assessment (CASA). *Journal of Emotional and Behavioral Disorders*, *4*(1), 12-20. doi: 10.1177/106342669600400102

Bard, D.E., Wolraich, M.L., Neas, B., Doffing, M., & Beck, L. (2013). The psychometric properties of the Vanderbilt attention-deficit hyperactivity disorder diagnostic parent rating scale in a community population. *Journal of Developmental and Behavioral Pediatrics*, 34, 72-82

Benet-Martinez V, John OP (1998). Los Cinco Grandes across cultures and ethnic groups: Multi-trait multi-method analyses of the Big Five in Spanish and English. *Journal of Personality and Social Psychology*, *75*,729-750.

Bharadwaj, P., Pai, M. M., & Suziedelyte, A. (2017). Mental health stigma. *Economics Letters*, *159*, 57-60.

Boghosian, S. (2011). *Counseling and psychotherapy with clients of Middle Eastern descent: a qualitative inquiry* (dissertation). Utah State University, Logan, UT.

Bonanno, R., & Veselak, K. (2020). A matter of trust: Parents' attitudes toward child mental health information sources. *Advances in Social Work*, *19*(2), 397-415. doi: 10.18060/22970

Bonnie, R. J., & Backes, E. P. (2019). adolescent development. In *The promise of adolescence: Realizing opportunity for all youth* (pp. 37-76). Washington, D.C., Washington: The National Academies Press.

Bolton D., Gillett G. (2019) The Biopsychosocial Model 40 Years On. In: The Biopsychosocial Model of Health and Disease. Palgrave Pivot, Cham. doi: 10.1007/978-3-030-11899-0_1

Bordin, I. A., Curto, B. M., & Murray, J. (2018). Maternal recognition of child mental health

problems in two Brazilian cities. *Revista Brasileira de Psiquiatria, 40*(1), 63-71. doi: 10.1590/1516-4446-2016-1957

Bornheimer, L. A., Acri, M. C., Gopalan, G., & McKay, M. M. (2018). Barriers to service utilization and child mental health treatment attendance among poverty-affected families. *Psychiatric Services, 69*(10), 1101-1104. doi: 10.1176/appi.ps.201700317

Bosch, J., & Wilbert, J. (2020). Contrast and assimilation effects on self-evaluation of performance and task interest in a sample of elementary school children. *Frontiers in Education, 4.* doi:10.3389/feduc.2019.00165

Boulter, E., & Rickwood, D. (2013). Parents' experience of seeking help for children with mental health problems. *Advances in Mental Health, 11*(2), 131-142. doi:10.5172/jamh.2013.11.2.131

Boyd, J. E., Adler, E. P., Otilingam, P. G., & Peters, T. (2014). Internalized stigma of mental illness (ISMI) scale: A multinational review. *Comprehensive Psychiatry, 55*(1), 221 -231. doi: 10.1016/j.comppsych.2013.06.005

Boyd P. (2020) Openness. In: Zeigler-Hill V., Shackelford T.K. (eds) Encyclopedia of Personality and Individual Differences. Springer, Cham. doi: 10.1007/978-3-319-24612-3_1258

Bracken, B. A., & Barona, A. (1991). State of the art procedures for translating, validating and using psychoeducational tests in cross-cultural assessment. *School Psychology International, 12*(1-2), 119-132. doi: 10.1177/0143034391121010

Brannan, A. M., Heflinger, C. A., & Bickman, L. (1997). The caregiver strain questionnaire. *Journal of Emotional and Behavioral Disorders, 5*(4), 212-222. doi: 10.1177/106342669700500404

Caprara GV, Barbaranelli C, Borgogni L, Perugini M., (1993). The "big five questionnaire:" A new questionnaire to assess the five factor model. *Personality Individual*

Difference, 15, 281-288. doi:10.1016/0191-8869(93)90218-R

Carr, A. (2015). Classification, epidemiology and treatment effectiveness. In *Handbook of child and adolescent clinical psychology* (pp. 103-138). New York, NY: Routledge.

Center for Behavioral Health Statistics and Quality. (2016). *National Survey on Drug Use and Health: DSM-5 Changes: Implications for Child Serious Emotional Disturbance* (unpublished internal documentation). Substance Abuse and Mental Health Services Administration, Rockville, MD.

Chavira, D. A., Bantados, B., Rapp, A., Firpo-Perretti, Y. M., Escovar, E., Dixon, L., Drahota, A., & Palinkas, L. A. (2017). Parent-reported stigma and child anxiety: A mixed methods research study. *Children and Youth Services Review, 76*, 237-242. doi: 10.1016/j.childyouth.2017.03.013

Chen, P., Liu, X. J., Wang, X. Q., Yang, B. X., Ruan, J., & Liu, Z. (2020). Attitude toward seeking professional psychological help among community-dwelling population in China. *Frontiers in Psychiatry*, *11*. doi: 10.3389/fpsyt.2020.00417

Christensen, L. B., Johnson, B., & Turner, L. A. (2011). *Research methods, design, and analysis* (pp. 1-539). Allyn & Bacon

Corrigan, P. (2004). How stigma interferes with mental health care. *American Psychologist, 59*(7), 614-625. doi: 10.1037/0003-066x.59.7.614

Costello, E.J., & Angold, A. (1988). Scales to assess child and adolescent depression: Checklists, screens, and nets. *Journal of the American Academy of Child & Adolescent Psychiatry,* 27(6), 726-737.

Craighead, W. E., Miklowitz, D. J., & Craighead, L. W. (2017). *Psychopathology: History, diagnosis, and empirical foundations*. Hoboken, CA: Wiley.

Daeem, R., Mansbach-Kleinfeld, I., Farbstein, I., Apter, A., Elias, R., Ifrah, A., . . . Fennig, S.

(2019). Barriers to help-seeking in Israeli Arab minority adolescents with mental health problems: results from the galilee study. *Israel Journal of Health Policy Research, 8*(1), 45 doi: 10.1186/s13584-019-0315-7

Dempster, R., Wildman, B., & Keating, A. (2013). The role of stigma in parental help-seeking for child behavior problems. *Journal of Clinical Child & Adolescent Psychology, 42*(1), 56-67. doi: 10.1080/15374416.2012.700504

Doumit, M., Farhood, L. F., & Hamady, C. (2017). Focus groups investigating mental health attitudes and beliefs of parents and teachers in South Lebanon: Are they culturally determined? *Journal of Transcultural Nursing, 29*(3), 240-248. doi: 10.1177/10436596177009

Drapalski, A. L., Lucksted, A., Brown, C. H., & Fang, L. J. (2021). Outcomes of ending self-stigma, a group intervention to reduce internalized stigma, among individuals with serious mental illness. *Psychiatric Services, 72*(2), 136-142. doi: 10.1176/appi.ps.201900296

Eapen, V., & Ghubash, R. (2004). Help-seeking for mental health problems of children: Preferences and attitudes in the United Arab Emirates. *Psychological Reports, 94*, 663-667.

Ebrahimi, H., Movaghari, M., Bazghaleh, M., Shirmohammadi, N. & Mohammadpourhodki, R. (2019). Parental attitude toward children's mental disorders and its relationship with help seeking behaviors. *Journal of Complementary and Integrative Medicine*, 16(4), 20180244. doi: 10.1515/jcim-2018-0244

Elhai, J. D., Schweinle, W., & Anderson, S. M. (2008). Reliability and validity of the attitudes toward seeking professional psychological help scale-short form. *Psychiatry Research, 159*(3), 320-329. doi: 10.1016/j.psychres.2007.04.020

Evans-Lacko S, Rose D, Little K, Flach C, Rhydderch D, Henderson C, et al. (2011).

Development and psychometric properties of the reported and intended behaviour scale (RIBS): A stigma related behaviour measure. *Epidemiology and Psychiatric Sciences, 20*:263-271. doi: 10.1017/S2045796011000308

Fares, R., Najem, R., Hallit, S., Pelissolo, A., Haddad, G., & Naja, W. J. (2023). Parental alienation in Lebanon: A case report. *Journal of medical case reports, 17*(1), 164. doi: 10.1186/s13256-023-03911-3

Farran N. (2021). Mental health in Lebanon: Tomorrow's silent epidemic. *Mental Health & Prevention*, *24*, 200218. doi: 10.1016/j.mhp.2021.200218

Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods, 41*(4), 1149-1160. doi: 10.3758/brm.41.4.1149

Ferah, Ç. (2019). The relationships between the big five personality traits and attitudes towards seeking professional psychological help in mental health counselor candidates: Mediating effect of cognitive flexibility. *Educational Research and Reviews*, *14*(14), 501-511. doi: 10.5897/err2019.3706

Fields, S.A., & Hale, L.R. (2011). Psychoeducational groups for youth attention-deficit hyperactivity disorder: A family medicine pilot project. *Mental Health in Family Medicine*, 8, 157-165.

Field, A. P., Miles, J., & Field, Z. (2012). *Discovering statistics using R*. Sage Publications.

Fineberg, N. A., Haddad, P. M., Carpenter, L., Gannon, B., Sharpe, R., Young, A. H., . . . Sahakian, B. J. (2013). The size, burden and cost of disorders of the brain in the UK. *Journal of Psychopharmacology, 27*(9), 761-770. doi: 10.1177/0269881113495118

Fino, E., Agostini, A., Mazzetti, M., Colonnello, V., Caponera, E., & Russo, P. M. (2019). There is a limit to your openness: Mental illness stigma mediates effects of individual

traits on preference for psychiatry specialty. *Frontiers in Psychiatry*, *10*. doi: 10.3389/fpsyt.2019.00775

Fischer, E. H., & Farina, A. (1995). Attitudes toward seeking professional psychological help: A shortened form and considerations for research. *Journal of College Student Development, 36,* 368-373

Fischer, E. H., & Turner, J. I. (1970). Orientations to seeking professional help: Development and research utility of an attitude scale. *Journal of Consulting and Clinical Psychology, 35*(1, Pt.1), 79-90. doi: 10.1037/h0029636

Fridberg, D. J., & Ahmed, A. O. (2013). Critical synthesis package: Attribution questionnaire-short form (AQ-27). *MedEdPORTAL*. doi: 10.15766/mep_2374-8265.9532

Game, S. (2019). Parents identification and help-seeking behaviours around child mental health difficulties. *Community Practitioner*. Retrieved 2021, from https://www.communitypractitioner.co.uk/resources/2019/04/parents-identification-and-help-seeking-behaviours-around-child-mental-health.

Gearing, R. E., Schwalbe, C. S., Mackenzie, M. J., Brewer, K. B., Ibrahim, R. W., Olimat, H. S.,. . . Al-Krenawi, A. (2012). Adaptation and translation of mental health interventions in Middle Eastern Arab countries: A systematic review of barriers to and strategies for effective treatment implementation. *International Journal of Social Psychiatry, 59*(7), 671-681. doi:10.1177/0020764012452349

Gearing, R. E., MacKenzie, M. J., Ibrahim, R. W., Brewer, K. B., Batayneh, J. S., & Schwalbe, C. S. (2014). Stigma and mental health treatment of adolescents with depression in Jordan. *Community Mental Health Journal, 51*(1), 111-117. doi: 10.1007/s10597-014-9756-1

Girio-Herrera, E., Owens, J. S., & Langberg, J. M. (2013). Perceived barriers to help-seeking

among parents of at-risk kindergarteners in rural communities. *Journal of Clinical Child and Adolescent Psychology : The Official Journal for the Society of Clinical Child and Adolescent Psychology, American Psychological Association, Division 53*, *42*(1), 68-77. doi: 10.1080/15374416.2012.715365

Goodman, R. (1997). The strengths and difficulties questionnaire: A research note. *Journal of Child Psychology and Psychiatry*, *38*(5), 581-586. doi: 10.1111/j.1469-7610.1997.tb01545.x

Griffiths, K., Christensen, H., Jorm, A. F., Evans, K., and Groves, C. (2004). Effect of web-based depression literacy and cognitive-behavioural therapy interventions on stigmatizing attitudes to depression: Randomized controlled trial. *British Journal Psychiatry* 185, 342-349. doi: 10.1192/bjp.185.4.342

Griffiths, K. M., Christensen, H., & Jorm, A. F. (2008). Predictors of depression stigma. *BioMed Central Psychiatry*, *8*(1). doi: 10.1186/1471-244x-8-25

Haavik, L., Joa, I., Hatloy, K., Stain, H. J., & Langeveld, J. (2017). help seeking for mental health problems in an adolescent population: The effect of gender. *Journal of Mental Health*, *28*(5), 467-474. doi: 10.1080/09638237.2017.1340630

Haine-Schlagel, R., & Walsh, N. E. (2015). A review of parent participation engagement in child and family mental health treatment. *Clinical child and family psychology review*, *18*(2), 133-150. doi: 10.1007/s10567-015-0182-x

Hall, R. A. (2021). No assistance necessary: Arab men's attitudes towards health issues and help-seeking. *Open Journal of Social Sciences*, *09*(11), 9-23. doi: 10.4236/jss.2021.911002

Hammer, J. H., Parent, M. C., & Spiker, D. A. (2018). Mental help seeking attitudes scale (MHSAS): Development, reliability, validity, and comparison with the ATSSPH-SF and IASMHS-PO. *Journal of Counseling Psychology, 65*, 74-

85. doi: 10.1037/cou0000248

Hansen, A. S., Telléus, G. K., Mohr-Jensen, C., & Lauritsen, M. B. (2021). Parent-perceived barriers to accessing services for their child's mental health problems. *Child and Adolescent Psychiatry and Mental Health, 15*, 1-11. doi: 10.1186/s13034-021-00357-7

Hariz, N., Bawab, S., Atwi, M., Tavitian, L., Zeinoun, P., Khani, M., Birmaher, B., Nahas, Z., & Maalouf, F. T. (2013). Reliability and validity of the Arabic screen for child anxiety related emotional disorders (SCARED) in a clinical sample. *Psychiatry Research, 209*(2), 222-228. doi: 10.1016/j.psychres.2012.12.002

Harper Shehadeh, M.J., Abi Ramia, J., Cuijpers, P., El Chammay, R., Heim, E., Kheir, W., Saeed, K., van Ommeren, M., van't Hof, E., Watts, S. and Wenger, A. (2020). Step-by-step, an e-mental health intervention for depression: A mixed methods pilot study from Lebanon. *Frontiers in Psychiatry, 10*, p.986.

Hart, C. M., Ritchie, T. D., Hepper, E. G., & Gebauer, J. E. (2015). The balanced inventory of desirable responding short form (BIDR-16). *SAGE Open, 5*(4), 215824401562111. doi.org/10.1177/2158244015621113

Ibrahim, N., Amit, N., Shahar, S., Wee, L. H., Ismail, R., Khairuddin, R., Siau, C. S., & Safien, A. M. (2019). Do depression literacy, mental illness beliefs and stigma influence mental health help-seeking attitude? A cross-sectional study of secondary school and university students from 40 households in Malaysia. *BioMed Central Public Health, 19* (Suppl 4), 544. doi: 10.1186/s12889-019-6862-6

Iskra, W., Deane, F. P., Wahlin, T., & Davis, E. L. (2015). Parental perceptions of barriers to mental health services for young people. *Early Intervention in Psychiatry, 12*(2), 125-134. doi: 10.1111/eip.12281

Jagdeo, A., Cox, B. J., Stein, M. B., & Sareen, J. (2009). Negative attitudes toward help seeking for mental illness in 2 population-based surveys from the United States and

Canada. *The Canadian Journal of Psychiatry*, *54*(11), 757-766. doi: 10.1177/070674370905401106

Jang, Y., Kim, G., Hansen, L., & Chiriboga, D. A. (2007). Attitudes of older Korean Americans toward mental health services. *Journal of the American Geriatrics Society*, *55*(4), 616-620. doi: 10.1111/j.1532-5415.2007.01125.x

Jeong, Y. M., Hughes, T. L., McCreary, L., Johnson, T. P., Park, C., & Choi, H. (2017). Validation of the Korean parental depression literacy scale. *International Journal of Mental Health Nursing*, *27*(2), 712-726. doi: 10.1111/inm.12358

Jeong, Y. M., & Park, H. (2020). Influence of parental attitude toward psychiatric help on their children's suicidal ideation: A convenience sample study on one South Korean middle school. *International Journal of Environmental Research and Public Health*, *17*(20), 7656. doi: 10.3390/ijerph17207656

Johnston, O. G., & Burke, J. D. (2020). Parental problem recognition and help-seeking for disruptive behavior disorders. *The Journal of Behavioral Health Services & Research, 47*(1), 146-163. doi: 10.1007/s11414-018-09648-y

Karam, E. G., Karam, G. E., Farhat, C., Itani, L., Fayyad, J., Karam, A. N., Mneimneh, Z., Kessler, R., & Thornicroft, G. (2019). Determinants of treatment of mental disorders in Lebanon: barriers to treatment and changing patterns of service use. *Epidemiology and Psychiatric Sciences, 28*(6), 655-661. doi: 10.1017/S2045796018000422

Kassam A, Glozier N, Leese M, Henderson C, Thornicroft G. (2010). Development and responsiveness of a scale to measure clinicians' attitudes to people with mental illness (medical student version). *Acta Psychiatrica Scandinavica, 122*, 153-161. doi: 10.1111/j.1600-0447.2010.01562.x

Keizer, E., Christensen, M. B., Carlsen, A. H., Smits, M., Wensing, M., Senn, O., & Huibers, L. (2019). Factors related to out-of-hours help-seeking for acute health problems: A

survey study using case scenarios. *BioMed Central Public Health*, *19*(1). doi: 10.1186/s12889-018-6332-6

Keller, J., & McDade, K. (2000). Attitudes of low-income parents toward seeking help with parenting: Implications for practice. *Child Welfare*, *79*(3), 285-312.

Kessler, R. C., Berglund, P., Demler, O., Jin, R., Merikangas, K. R., & Walters, E. E. (2005). lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the national comorbidity survey replication. *Archives of General Psychiatry*, *62*(6), 593-602. doi: 10.1001/archpsyc.62.6.593

Kim, J. Y., Son, M. J., Son, C. Y., Radua, J., Eisenhut, M., Gressier, F., . . . Fusar-Poli, P. (2019). Environmental risk factors and biomarkers for autism spectrum disorder: An umbrella review of the evidence. *The Lancet Psychiatry*, *6*(7), 590-600. doi:10.1016/s2215-0366(19)30181-6

Kira, I. A., Ramaswamy, V., Lewandowski, L., Mohanesh, J., & Abdul-Khalek, H. (2015). Psychometric assessment of the Arabic version of the internalized stigma of mental illness (ISMI) measure in a refugee population. *Transcultural Psychiatry, 52*(5), 636-658. doi: 10.1177/1363461515569755

Komiya, N., Good, G., & Sherrod, N. (2000). Emotional openness as a predictor of college students' attitudes toward seeking psychological help. *Journal of Counseling Psychology, 47*, 138-143. doi: 10.1037/AJ022-0167,47.1.138

Kreitchmann, R. S., Abad, F. J., Ponsoda, V., Nieto, M. D., & Morillo, D. (2019). Controlling for response biases in self-report scales: Forced-choice vs. psychometric modeling of likert items. *Frontiers in Psychology*, *10*. doi:10.3389/fpsyg.2019.02309

Kronfol, N. M. (2012). Access and barriers to health care delivery in Arab countries: A review. *Eastern Mediterranean Health Journal*, *18*(12), 1239-1246. doi: 10.26719/2012.18.12.1239

Kuhl, J., Jarkon-Horlick, L., & Morissey, R.F. (1997). Measuring barriers to help-seeking behaviors in adolescents. *Journal of Youth and Adolescence, 26*, 637-650.

Kung, W., W. (2004). Cultural and practical barriers to seeking mental health treatment for Chines e Americans. *Journal of Community Psychology*, 32, 27-43.

Kyu, H. H., Pinho, C., Wagner, J. A., Brown, J. C., Bertozzi-Villa, A., Charlson, F. J., . . . Vos, T. (2016). Global and national burden of diseases and injuries among children and adolescents between 1990 and 2013: Findings from the global burden of disease 2013 study. *Journal of the American Medical Association Pediatric, 170*(3), 267-287. doi: 10.1001/jamapediatrics.2015.4276

Kwong ASF, López-López JA, Hammerton G, et al. (2019). Genetic and environmental risk factors associated with trajectories of depression symptoms from adolescence to young adulthood. *Journal of the American Medical Association Network Open, 2*(6). doi:10.1001/jamanetworkopen.2019.6587

Latkin, C. A., Edwards, C., Davey-Rothwell, M. A., & Tobin, K. E. (2017). The relationship between social desirability bias and self-reports of health, substance use, and social network factors among urban substance users in Baltimore, Maryland. *Addictive Behaviors, 73*, 133-136. doi: 10.1016/j.addbeh.2017.05.005

Latalova, K., Kamaradova, D., & Prasko, J. (2014). Perspectives on perceived stigma and self-stigma in adult male patients with depression. *Neuropsychiatric Disease and Treatment, 10*, 1399-1405. doi: 10.2147/NDT.S54081

Liu, C. H., Li, H., Wu, E., Tung, E. S., & Hahm, H. C. (2020). Parent perceptions of mental illness in Chinese American youth. *Asian Journal of Psychiatry, 47*, 101857. doi: 10.1016/j.ajp.2019.101857

Long, E., Gardani, M., Mccann, M., Sweeting, H., Tranmer, M., & Moore, L. (2020). Mental health disorders and adolescent peer relationships. *Social Science & Medicine, 253*,

112-973. doi:10.1016/j.socscimed.2020.112973

Lubman DI, Berridge BJ, Blee F, Jorm AF, Wilson CJ, Allen NB, et al. (2016), A school-based health promotion programme to increase help-seeking for substance use and mental health problems: Study protocol for a randomised controlled trial. *Trials, 17*(1), 393

Maalouf, F. T., Alrojolah, L., Ghandour, L., Afifi, R., Dirani, L. A., Barrett, P., Nakkash, R., Shamseddeen, W., Tabaja, F., Yuen, C. M., & Becker, A. E. (2020). Building emotional resilience in youth in Lebanon: A school-based randomized controlled trial of the 8 friends intervention. *Prevention Science: The Official Journal of the Society for Prevention Research*, *21*(5), 650-660. doi: 10.1007/s11121-020-01123-5

Mahsoon, A., Sharif, L., Banakhar, M., Alasmee, N., Almowallad, E., Jabali, R., Bahamil, A., & Assur, S. (2020). Parental support, beliefs about mental illness, and mental help-seeking among young adults in Saudi Arabia. *International Journal of Environmental Research and Public Health*, *17*(15). doi: 10.3390/ijerph17155615

Martinez, A. B., Co, M., Lau, J., & Brown, J. S. (2020). Filipino help-seeking for mental health problems and associated barriers and facilitators: A systematic review. *Social Psychiatry and Psychiatric Epidemiology*, *55*(11), 1397-1413. doi:10.1007/s00127-020-01937-2

Martínez, V., Crockett, M. A., Jiménez-Molina, Á., Espinosa-Duque, H. D., Barrientos, E., & Ordóñez-Carrasco, J. L. (2020). Stigmatizing beliefs and attitudes to depression in adolescent school students in Chile and Colombia. *Frontiers in Psychology*, *11*. doi: 10.3389/fpsyg.2020.577177

Masuda, A., Anderson, P. L., & Edmonds, J. (2012). Help-seeking attitudes, mental health stigma, and self-concealment among African American college students. *Journal of Black Studies*, *43*(7), 773-786. doi: 10.1177/0021934712445806

Mclaughlin, K. A., Green, J. G., Gruber, M. J., Sampson, N. A., Zaslavsky, A. M., & Kessler, R. C. (2012). Childhood adversities and first onset of psychiatric disorders in a national sample of US adolescents. *Archives of General Psychiatry, 69*(11), 1151. doi:10.1001/archgenpsychiatry.2011.2277

Mendenhall, A. N., & Frauenholtz, S. (2013). Predictors of mental health literacy among parents of youth diagnosed with mood disorders. *Child & Family Social Work, 20*(3), 300-309. doi:10.1111/cfs.12078

Mohamadi, M., Mohtashami, J., Vasli, P., Khajavi, A., Tavakoli, S. (2019). The correlation between help-seeking behaviour, social comparison and stigma in caregivers of children with autism. *Medical Science, 23*(96), 1-16.

Morawska, A., & Sultan, A. (2016). Parental attitudes towards seeking professional help for their children: A community sample from the sultanate of Oman. *Journal of Child and Family Studies, 25*(3), 979-987. doi: 10.1007/s10826-015-0257-9

Mulvale, G., & Hurley, J. (2008). Insurance coverage and the treatment of mental illness: effect on medication and provider use. *The Journal of Mental Health Policy and Economics, 11*(4), 177-199.

Mundrom, D. J., Shaw, D. G., & Ke, T. L. (2005). Minimum sample size recommendations for conducting factor analyses. *International Journal of Testing, 5*(2), 159-168. doi: 10.1207/s15327574ijt0502_4

Nanninga, M., Jansen, D. E., Kazdin, A. E., Knorth, E. J., & Reijneveld, S. A. (2016). psychometric properties of the barriers to treatment participation scale expectancies. *Psychological Assessment, 28*(8), 898-907. doi: 10.1037/pas0000229

Nohr, L., Lorenzo Ruiz, A., Sandoval Ferrer, J. E., & Buhlmann, U. (2021). Mental health stigma and professional help-seeking attitudes a comparison between Cuba and

Germany. *Public Library of Science One*, *16*(2), e0246501. doi: 10.1371/journal.pone.0246501

Obeid, R., Bisson, J. B., Cosenza, A., Harrison, A. J., James, F., Saade, S., & Gillespie-Lynch, K. (2020). Do implicit and explicit racial biases influence autism identification and stigma? an implicit association test study. *Journal of Autism and Developmental Disorders*, *51*(1), 106-128. doi: 10.1007/s10803-020-04507-2

Obeid R, Saade S (2022). An urgent call for action: Lebanon's children are falling through the cracks after economic collapse and a destructive blast. *Global Mental Health* 1-4. doi: 10.1017/ gmh.2022.14

O'Brien, D., Harvey, K., Howse, J., Reardon, T., & Creswell, C. (2016). Barriers to managing child and adolescent mental health problems: A systematic review of primary care practitioners' perceptions. *British Journal of General Practice*, *66*(651). doi:10.3399/bjgp16x687061

Ogaryan, V. (2017). Armenian American parental attitudes toward child mental health issues [ProQuest Information & Learning]. In Dissertation Abstracts International: Section B: The Sciences and Engineering (Vol. 78, Issue 6-B(E)).

Ohan, J. L., Seward, R. J., Stallman, H. M., Bayliss, D. M., & Sanders, M. R. (2015). Parents' barriers to using school psychology services for their child's mental health problems. *School Mental Health*, *7*(4), 287-297. doi: 10.1007/s12310-015-9152-1

Osborn, R., Roberts, L., & Kneebone, I. (2020). Barriers to accessing mental health treatment for parents of children with intellectual disabilities: A preliminary study. *Disability and Rehabilitation*, *42*(16), 2311-2317. doi: 10.1080/09638288.2018.1558460

Pallant, J. (2016). *Spss survival manual: A step by step guide to data analysis using spss*. Open University Press.

Partridge, S. E. (1988). The parental self-concept: A theoretical exploration and practical application. *American Journal of Orthopsychiatry, 58*(2), 281-287. doi: 10.1111/j.1939-0025.1988.tb01589.x

Picco, L., Abdin, E., Chong, S. A., Pang, S., Shafie, S., Chua, B. Y., Vaingankar, J. A., Ong, L. P., Tay, J., & Subramaniam, M. (2016). Attitudes toward seeking professional psychological help: Factor structure and sociodemographic predictors. *Frontiers in Psychology, 7*, 547. doi: 10.3389/fpsyg.2016.00547

Polaha, J., Williams, S. L., Heflinger, C. A., & Studts, C. R. (2015). The perceived stigma of mental health services among rural parents of children with psychosocial concerns. *Journal of Pediatric Psychology, 40*(10), 1095-1104. doi: 10.1093/jpepsy/jsv054

Patel, V., Flisher, A. J., Hetrick, S., & McGorry, P. (2007). Mental health of young people: a global public-health challenge. *Lancet, 369*(9569), 1302-1313. doi: 10.1016/s0140-6736(07)60368-7

Pattyn, E., Verhaeghe, M., Sercu, C., & Bracke, P. (2014). Public stigma and self-stigma: Differential association with attitudes toward formal and informal help seeking. *Psychiatric Services, 65*(2), 232-238. doi:10.1176/appi.ps.201200561

Pescosolido, B. A., Perry, B. L., Martin, J. K., McLeod, J. D., & Jensen, P. S. (2007). Stigmatizing attitudes and beliefs about treatment and psychiatric medications for children with mental illness. *Psychiatric Services, 58*(5), 613-618. doi: 10.1176/ps.2007.58.5.613

Pine, D. S., Cohen, P., Gurley, D., Brook, J., & Ma, Y. (1998). The risk for early-adulthood anxiety and depressive disorders in adolescents with anxiety and depressive disorders. *Archives of General Psychiatry, 55*(1), 56-64. doi: 10.1001/archpsyc.55.1.56

Polanczyk, G. V., Salum, G. A., Sugaya, L. S., Caye, A., & Rohde, L. A. (2015). Annual

research review: A meta-analysis of the worldwide prevalence of mental disorders in children and adolescents. *Journal of Child Psychology and Psychiatry, and Allied Disciplines, 56*(3), 345-365. doi: 10.1111/jcpp.12381

Radez, J., Reardon, T., Creswell, C., Lawrence, P. J., Evdoka-Burton, G., & Waite, P. (2020). Why do children and adolescents (not) seek and access professional help for their mental health problems? A systematic review of quantitative and qualitative studies. *European Child & Adolescent Psychiatry*, *30*(2), 183-211. doi:10.1007/s00787-019-01469-4

Radovic, A., Farris, C., Reynolds, K., Reis, E. C., Miller, E., & Stein, B. D. (2014). Primary care providers' beliefs about teen and parent barriers to depression care. *Journal of Developmental & Behavioral Pediatrics*, *35*(8), 534-538. doi: 10.1097/dbp.0000000000000089

Rakesh Narayan Patil, Shashikant N Nagaonkar, Nilesh B Shah, Tushar S Bhat, Balaji Almale, Shriram Gosavi, Amit Gujrathi (2016). Study of perception and help seeking behaviour among parents for their children with psychiatric disorder: A community based cross-sectional study. *The Journal of Medical Research , 2*(1), 06-11.

Raviv, A., Raviv, A., Propper, A., & Fink, A. S. (2003). Mothers' attitudes toward seeking help for their children from school and private psychologists. *Professional Psychology: Research and Practice*, *34*(1), 95-101. doi: 10.1037/0735-7028.34.1.95

Rayan, A., Baker, O., & Fawaz, M. (2020). The psychometric properties of attitudes toward seeking professional psychological help scale-short form in Jordanian University students. *Journal of Muslim Mental Health*, *14*(1). doi:10.3998/jmmh.10381607.0014.102

Reardon, T., Harvey, K., Young, B., O'Brien, D., & Creswell, C. (2018). Barriers and

facilitators to parents seeking and accessing professional support for anxiety disorders in children: qualitative interview study. *European Child & Adolescent Psychiatry, 27*(8), 1023-1031. doi:10.1007/s00787-018-1107-2

Reynolds, W. M. (1982). Development of reliable and valid short forms of the Marlowe-Crowne Social Desirability Scale. *Journal of Clinical Psychology, 38*(1), 119-125 doi: 10.1002/1097-4679(198201)38:1<119::AID-JCLP2270380118>3.0.CO;2-I

Rickwood, D., Deane, F. P., Wilson, C. J., & Ciarrochi, J. (2005). Young people's help-seeking for mental health problems. *Australian E-Journal for the Advancement of Mental health, 4*(3), 218-251. doi: 10.5172/jamh.4.3.218

Rüsch, N., Angermeyer, M. C., & Corrigan, P. W. (2005). Mental illness stigma: Concepts, consequences, and initiatives to reduce stigma. *European Psychiatry, 20*(8), 529-539. doi: 10.1016/j.eurpsy.2005.04.004

Ryan, S. M., Jorm, A. F., Toumbourou, J. W., & Lubman, D. I. (2015). Parent and family factors associated with service use by young people with mental health problems: A systematic review. *Early Intervention in Psychiatry*, *9*(6), 433-446. doi: 10.1111/eip.12211

Saade, S., Bockstal-Fieulaine, B., Gillespie-Lynch, K., Besche-Richard, C., Boujut, É., Johnson Harrison, A., & Cappe, É. (2023). Evaluation of an autism training in a much-needed context: The case of France. *Autism in Adulthood*. doi: 10.1089/aut.2022.0080

Saade, S., Lamarche, A. P., Khalaf, T., Makke, S., & Legg, A. (2023). What barriers could impede access to mental health services for children and adolescents in Africa? A scoping review. *BioMed Central Health Services Research*, *23*(1). doi: 10.1186/s12913- 023-09294-x

Sadler K, Ti Vizard, Ford T et al. (2018). Mental health of children and young people in

England. Health and Social Care Information Centre, Leeds

Samek, D. R., & Hicks, B. M. (2014). Externalizing disorders and environmental risk: Mechanisms of gene-environment interplay and strategies for intervention. *Clinical Practice (London, England), 11*(5), 537-547. doi: 10.2217/CPR.14.47

Sanders, M.R., Pidgeon, A.M., Gravestock, F., Connors, M.D., Brown, S., & Young, R.W. (2004). Does parental attributional retraining and anger management enhance the effects of the triple P-positive parenting program with parents at risk of child maltreatment?. *Behavior Therapy, 35*, 513-535.

Sayal, K., Tischler, V., Coope, C., Robotham, S., Ashworth, M., Day, C., . . . Simonoff, E. (2010). Parental help-seeking in primary care for child and adolescent mental health concerns: Qualitative study. *British Journal of Psychiatry, 197*(6), 476-481. doi:10.1192/bjp.bp.110.081448

Scott, J. G., Mihalopoulos, C., Erskine, H. E., Roberts, J., & Rahman, A. (2016). Childhood mental and developmental disorders. In *Mental, Neurological, and Substance Use Disorders: Disease Control Priorities, Third Edition (Volume 4)* (Third ed., Vol. 4, pp. 145-156). Washington, D.C, Washington: The World Bank Group. doi:10.1596/978-1-4648-0426-7

Serchuk, M. D., Corrigan, P. W., Reed, S., & Ohan, J. L. (2021). Vicarious stigma and self-stigma experienced by parents of children with mental health and/or neurodevelopmental disorders. *Community Mental Health Journal, 57*(8), 1537-1546. doi: 10.1007/s10597-021-00774-0

Shahwan, S., Lau, J.H., Goh, C.M.J. et al. (2020). The potential impact of an anti-stigma intervention on mental health help-seeking attitudes among university students. *BioMed Central Psychiatry 20,* (562). doi: 10.1186/s12888-020-02960-y

Shechtman, Z., Vogel, D. L., Strass, H. A., & Heath, P. J. (2016). Stigma in help-seeking: The case of adolescents. *British Journal of Guidance & Counselling, 46*(1), 104-119.

doi: 10.1080/03069885.2016.1255717

Smith, M, R. (2018). Stigma as a predictor of parental willingness to seek mental health services for their children in rural America. *ELAIA, 1*(1), p. 143-153. Retrieved from https://digitalcommons.olivet.edu/cgi/viewcontent.cgi?article=1009&context=elaia

Soto, C. J., & John, O. P. (2017). Short and extra-short forms of the big five inventory-2: The BFI-2-S and BFI-2-XS. *Journal of Research in Personality*, *68*, 69-81. doi: 10.1016/j.jrp.2017.02.004

Stone, L. L., Janssens, J. M., Vermulst, A. A., Van Der Maten, M., Engels, R. C., & Otten, R. (2015). The strengths and difficulties questionnaire: Psychometric properties of the parent and teacher version in children aged 4-7. *BioMed Central Psychology*, *3*(1). doi: 10.1186/s40359-015-0061-8

Subu, M. A., Wati, D. F., Netrida, N., Priscilla, V., Dias, J. M., Abraham, M. S., Slewa-Younan, S., & Al-Yateem, N. (2021). Types of stigma experienced by patients with mental illness and mental health nurses in Indonesia: A qualitative content analysis. *International Journal of Mental Health Systems*, *15*(1). doi: 10.1186/s13033-021-00502-x

Sun, K. S., Lam, T. P., Kwok, K. W., Chong, K. Y., Poon, M. K., & Wu, D. (2019). Treatment of Chinese adolescents with anorexia nervosa in Hong Kong: The gap between treatment expectations and outcomes. *Public Library of Science One, 14*(5). doi:10.1371/journal.pone.0216582

Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics* (5th ed.). Pearson/Allyn & Bacon.

Tavakol, M., & Dennick, R. (2011). Making sense of cronbach's alpha. *International Journal of Medical Education*, *2*, 53–55. doi: 10.5116/ijme.4dfb.8dfd

Tekola, B., Kinfe, M., Girma, F., Hanlon, C., & Hoekstra, R. A. (2020). Perceptions and experiences of stigma among parents of children with developmental disorders in Ethiopia: A qualitative study. *Social Science & Medicine*, *256*, 113034. doi:10.1016/j.socscimed.2020.113034

Thurston, I. B., Phares, V., Coates, E. E., & Bogart, L. M. (2015). Child problem recognition and help-seeking intentions among black and white parents. *Journal of Clinical Child and Adolescent Psychology : The Official Journal for the Society of Clinical Child and Adolescent Psychology, American Psychological Association, Division 53*, *44*(4), 604-615. doi: 10.1080/15374416.2014.883929

Thyer B.A. (2015) The DSM-5 definition of mental disorder: Critique and alternatives. In: Probst B. (eds) *Critical Thinking in Clinical Assessment and Diagnosis. Essential Clinical Social Work Series*. Springer, Cham. doi: 10.1007/978-3-319-177748_3

Turner, E.A. (2006). Attitudes toward child mental health services: Adaptation and development of an attitude scale. Unpublished master's thesis, Texas A&M University, College Station, TX.

Turner, E. A. (2011). *Parental attitudes toward child mental health services: The influence of ethnicity and child characteristics on help-seeking intentions* (dissertation). Texas A & M University, College Station, TX.

Turner, E. A. (2012). The parental attitudes toward psychological services inventory: Adaptation and development of an attitude scale. *Community Mental Health Journal*, 48, 436-449. doi: 10.1007/s10597- 011-9432-7

Turner, E. A., Jensen-Doss, A., & Heffer, R. W. (2015). Ethnicity as a moderator of how parents' attitudes and perceived stigma influence intentions to seek child mental health

services. *Cultural Diversity & Ethnic Minority Psychology, 21*(4), 613-618. doi: 10.1037/cdp0000047

Vally, Z., Cody, B., Albloshi, M., & Alsheraifi, S. (2018). Public stigma and attitudes towards psychological help-seeking in the United Arab Emirates: The mediational role of self-stigma. *Perspectives in Psychiatric Care, 54,* 571-579. doi:10.1111/ppc.12282

Villatoro, A. P., DuPont-Reyes, M. J., Phelan, J. C., Painter, K., & Link, B. G. (2018). Parental recognition of preadolescent mental health problems: Does stigma matter? *Social Science & Medicine, 216,* 88-96. doi:10.1016/j.socscimed.2018.09.040

Vogel, D. L., Wade, N. G., & Haake, S. (2006). Measuring the self-stigma associated with seeking psychological help. *Journal of Counseling Psychology, 53*(3), 325-337. doi: 10.1037/0022-0167.53.3.325

Walker, E. R., Cummings, J. R., Hockenberry, J. M., & Druss, B. G. (2015). Insurance status, use of mental health services, and unmet need for mental health care in the United States. *Psychiatric services (Washington, D.C.), 66*(6), 578-584. do:10.1176/appi.ps.201400248

Wamser-Nanney, R., & Campbell, C. L. (2020). Predictors of parenting attitudes in an at-risk sample: Results from the Longscan Study. *Child Abuse & Neglect, 99,* 104282. doi: 10.1016/j.chiabu.2019.104282

Wang, R., Zheng, S. C., Zhang, Q., Xu, X., & Zhang, Y. J. (2012). *Sichuan da xue xue bao. Yi xue ban. Journal of Sichuan University. Medical science edition, 43*(4), 562-565.

Whitney DG, Peterson MD. (2019). US National and state-level prevalence of mental health disorders and disparities of mental health care use in children. *Journal of the American Medical Association Pediatrics, 173*(4), 389-391.

doi:10.1001/jamapediatrics.2018.5399

Williams, S. L., and Polaha, J. (2014). Rural parents' perceived stigma of seeking mental health services for their children: Development and evaluation of a new instrument. *Psychological Assessment*, 26(3), 763-773.

Wolraich, M. L., Lambert, W., Doffing, M. A., Bickman, L., Simmons, T., & Worley, K. (2003). Psychometric properties of the Vanderbilt ADHD diagnostic parent rating scale in a referred population. *Journal of Pediatric Psychology, 28*, 559-568.

Woodman, A. C., Mailick, M. R., & Greenberg, J. S. (2016). Trajectories of internalizing and externalizing symptoms among adults with autism spectrum disorders. *Development and Psychopathology, 28*(2), 565–581. doi: 10.1017/S095457941500108X

Xu, G., Strathearn, L., Liu, B., & Bao, W. (2018). Prevalence of autism spectrum disorder among US children and adolescents, 2014-2016. *Journal of the American Medical Association, 319*(1), 81-82. doi: 10.1001/jama.2017.17812

Yee, T., Ceballos, P. & Diaz, J. (2020). Examining the psychological help-seeking attitudes of Chinese immigrants in the U.S. *International Journal for the Advancement of Counselling* 42, 307-318. doi: 10.1007/s10447-020-09403-z

Zisman-Ilani, Y., Levy-Frank, I., Hasson-Ohayon, I., Kravetz, S., Mashiach-Eizenberg, M., & Roe, D. (2013). Measuring the internalized stigma of parents of persons with a serious mental illness. *Journal of Nervous & Mental Disease, 201*(3), 183-187. doi: 10.1097/nmd.0b013e3182845d00

Zolezzi, M., Alamri, M., Shaar, S., & Rainkie, D. (2018). Stigma associated with mental illness and its treatment in the Arab culture: A systematic review. *International Journal of Social Psychiatry, 64*(6), 597-609. doi: 10.1177/0020764018789200