

ABSTRACT

Cultural and Religious Factors on Mental Health Perceptions and Attitudes among Indian Orthodox Christians in the United States

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Culture and religion play a significant role in the development and maintenance of mental health stigma. They influence beliefs about the causes of mental illness and also impact willingness to seek treatment. In the United States, little is known about the psychological adjustment of South Asians, particularly Indian immigrants and first generation Indian American Christians. In this study, I investigated the effect of acculturation, ethnic identity, and religious commitment on stigma, etiological beliefs about common childhood and adolescent psychological disorders (attention deficit-hyperactivity disorder (ADHD), depression, anxiety, alcohol abuse, and autism), and help-seeking attitudes in the Indian Orthodox population. Forty-six Indian immigrants and 64 first generation Indian Americans completed electronic or paper questionnaires assessing their level of acculturation, ethnic identity, and religious commitment. Participants also completed measures on stigma, help-seeking attitudes, and causal beliefs (biological, psychosocial, and spiritual). The results showed that religious commitment was negatively associated with stigma and positively associated with help-seeking attitudes. Participants who rated high on acculturation endorsed biological underpinning

for ADHD, autism, depression, anxiety, and alcohol abuse. Previous knowledge of mental illness was linked to fewer ratings of spiritual causes for ADHD, autism and depression, but religious commitment was associated with increased ratings of spiritual causes for alcohol abuse.

Cultural and Religious Factors on Mental Health Perceptions and Attitudes
among Indian Orthodox Christians in the United States

by

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A Dissertation

Approved by the Department of Psychology and Neuroscience

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Submitted to the Graduate Faculty of
Baylor University in Partial Fulfillment of the
Requirements for the Degree
of
Doctor of Psychology

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Accepted by the Graduate School
August 2014

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CHAPTER ONE

Introduction

Description of Model

Acculturation, ethnic identity, and religious commitment contribute to the disparity in mental health use among the South Asian population. These three factors were examined to see how well they predicted each of the following within the Indian Orthodox population: stigma, etiological beliefs (i.e., biological, psychosocial, spiritual) about five childhood and adolescent psychological disorders (i.e., ADHD, depression, anxiety, alcohol abuse, and autism), and help-seeking attitudes.

Background

South Asians comprise the third largest and fastest growing ethnic subpopulation among Asian Americans in the United States. Approximately two-thirds of South Asian Americans are foreign-born, and the majority (83%) are of Indian origin (Masood, Okazaki, & Takeuchi, 2009; U.S. Census Bureau, 2010).

South Asians refers to a group of people whose ethnicities originate in India, Pakistan, Bangladesh, Bhutan, Maldives, Nepal or Sri Lanka (Loya, Reddy, & Hinshaw, 2010). This differs from *East Asians*, which describes people from Japan, the People's Republic of China, North Korea, South Korea, Mongolia, and Taiwan, and from *Southeast Asians*, which refers to people from Brunei, Burma, Cambodia, East Timor, Indonesia, Laos, Malaysia, Philippines, Singapore, Thailand, and Vietnam (United Nations Statistics Division, 2011).

During the late 1800s, the number of East Asians residing in America increased with the influx of Chinese and Japanese immigrants. For several years, these two groups exclusively represented the Asian population in the United States and were used as subjects in research to elucidate the social and psychological adjustment of Asians in America (Ramisetty-Mikler, 1993). The passing of the Immigration Act of 1965 initiated the arrival of many Indians. While this subsequently widened the representation of ‘Asians’ in the United States, much less is known about the experiences of Indians and their American born children (Masood et al., 2009; Ramisetty-Mikler, 1993).

India is divided into 28 states where fifteen official languages, as well as many regional dialects, are spoken. Four major religions (i.e., Hinduism, Islam, Buddhism, Sikhism) are recognized and more are practiced locally (i.e., Christianity, Jainism, Judaism, etc.) (The Registrar General & Census Commissioner, 2011). Given the innumerable cultural, religious, and regional differences of India, psychologists have only been able to capture a fraction of the diversity. The majority of existing psychological research on Indian Americans has focused on Hindu beliefs and help-seeking behavior (i.e., Ahmed & Lemkau, 2000; Cinnirella & Loewenthal, 1999; Conrad & Pacquiao, 2005; Halliburton, 2005; Kermode, Bowen, Arole, Joag, & Jorm, 2010; Kumar & Nevid, 2010; Masood et al., 2009; and Ramisetty-Mikler, 1993). The lack of diffuse representation of Indians (and South Asians as a whole) constrains researchers to make inappropriate generalizations from a few subgroups in India to all Indians. Failure to understand the unique needs and attitudes present among specific Indian and South Asian groups produces diagnostic error and increases the difficulty in getting this population

into treatment (Conrad & Pacquiao, 2005; Farver, Narang, & Bhadha, 2002; Kumar & Nevid, 2010).

Significance of this Study

In this study, I highlight some of the specific obstacles and mechanisms that may be contributing to the underutilization of mental health services among children and adolescents in the Indian Orthodox population. Perceptions of mental illness in India continue to have an impact on Indian immigrants and their children in the United States. By focusing on Indian immigrants and Indian Americans in the United States, we can perhaps gain a better understanding of the impact of acculturation, ethnic identity, and religion on mental health stigma, perception, and treatment use. This study determines whether these factors work in conjunction with one another or independently.

I will review the prevalence rates of ADHD, depression, anxiety, alcohol abuse, and autism in India. An epidemiologic overview of these disorders is provided followed by a narrowed discussion of prevalence rates in Kerala, a state in south India where most Indian Orthodox Christians reside. Since little is known about Indian Christians, inferences will be made based on existing research on mental health stigma, etiological beliefs, and help-seeking behaviors and attitudes in India and South Asia.

CHAPTER TWO

Literature Review

Child and Adolescent Mental Health in India

Psychiatric problems among children and adolescents in India are rising. Bhola and Kapur (2003) identified 55 studies on prevalence rates of childhood and adolescent psychiatric disorders in India conducted in community and school settings between 1964 and 2002. The epidemiological literature has since expanded, but prevalence rates of childhood and adolescent psychiatric disorders are inconsistent and highly variable across studies (Bansal & Barman, 2011; Deivasigamani, 1990; Hackett, Hackett, Bhakta, & Gowers, 1999; Malholtra, Kohli, Kapoor, & Pradhan, 2009; Pillai et al., 2008; Sahoo & Khess, 2010; Sarkar, Sinha, & Praharaj, 2012; Srinath et al., 2005). While some studies yield prevalence rates ranging from 2.6% to 35.6% for psychiatric disorders (Bansal & Barman, 2011; Deivasigamani, 1990; Sharan & Sagar, 2008), others produce a much smaller range between 6 to 15% (Maholtra et al., 2009; Pillai et al., 2008; Srinath et al., 2005).

In one school sample, Deivasigamani (1990) found a prevalence rate of 33.7% for psychiatric disorders (n = 70) among 207 children aged 8 to 12 years old in the southern state of Tamilnadu. In another sample of students 13 to 14 years of age, Bansal and Barman (2011) found a slightly lower prevalence rate of 20.2% (n = 199) among 311 children from four schools in north India. In a six year follow up study of 186 school children aged 4 to 11 years in Chandigarh, a state in north India, Maholtra et al. (2009) found an even lower prevalence rate of 10.75% with 20 children who met criteria for a

psychological disorder. In community samples, Srinath et al. (2005) found a prevalence rate of 12.4% (n = 256) among 2064 children aged 0 to 16 years from Bangalore, a city in south India. Pillai et al. (2008), however, observed a much lower rate of 1.81% (n = 37) among 2,048 adolescents aged 12 to 16 years in Goa, a state in west India.

Researchers have attributed the discrepancy in rates to a series of methodological inconsistencies, including sampling error, instrumentation, and differences in the description and classification of disorders (Bansal & Barman, 2011; Pillai et al., 2008, Sharan & Sagar, 2008). In spite of the disparities, one can conclude from these estimates that mental illnesses do exist among Indian children and adolescents in school, urban, and rural settings, even if the severity and frequency of disorders cannot be assessed accurately.

Several of the studies mentioned above found a higher frequency of hyperkinetic disorders¹, depression, anxiety, in both males and females, than other childhood and adolescent psychological disorders. Developmental disorders (i.e., autism spectrum disorders), however, were less common. Malhotra and Gupta (2002) screened 2,687 case files of patients with childhood psychiatric disorders in north India. Forty-three cases (1.6%) met ICD-10 diagnostic criteria for a pervasive developmental disorder (PDD). From this sample, 21 (49%) met additional criteria for typical autism, 12 (28%) met criteria for childhood disintegrative disorder, and the remaining 10 (23%) met criteria for other disorders related to PDD (i.e., atypical autism, asperger syndrome, Rett syndrome).

¹ The International Statistical Classification of Diseases and Related Health Problems–10th Revision (ICD-10) is used in India to classify mental and behavioral disorders. Hyperkinetic disorders fall in the category of “behavioural and emotional disorders with onset usually occurring in childhood and adolescence” and are comparable to a diagnosis of attention deficit-hyperactivity disorder as stated in the Diagnostic Statistical Manual-Fourth Edition-Text Revision (DSM-IV-TR) (American Psychological Association, 2000).

According to a recent report from the Center for Disease Control and Prevention, 1 in 88 children in the United States has been identified with an autism spectrum disorder (Centers for Disease Control and Prevention [CDC], 2012). With the assumption that autism is a population-based disorder, even conservative estimates suggesting that 4 to 5 children in 10,000 suffer from autism would indicate that about half a million in India are affected (Daley & Sigman, 2002), given that India comprises over a billion people (The Registrar General & Census Commissioner, 2011). Daley and Sigman (2002) argue that cultural factors likely play a role in the way autism symptoms are defined and recognized in India, the course of the disorder, and the type of treatment that is administered. Though Indian researchers have published more than 50 studies on infantile autism since the 1960s, as it stands, the lack of empirical findings among Indian children would suggest that these disorders are rare, nonexistent, or underreported (Daley, 2004; Daley & Sigman, 2002).

Mental Health in Kerala

In the last twenty years, advances have been made in defining, diagnosing, and treating mental illnesses in Kerala. Despite efforts to treat mental illnesses, it is estimated that only 10-20 percent of those in need receive appropriate treatment (Mental Health Policy for Kerala State [MHPKS], 2000). Like the rest of India, Kerala, too, lacks reliable estimates of mental illness due to inconsistent epidemiological data. In 2001, the World Health Organization reported that 10% of Keralites (about 3 million people) suffered from a psychiatric illness. Among these, 2% (n = 63,682) suffered from a severe psychiatric disorder such as schizophrenia, 2 to 3% suffered from psychosomatic

disorders and neuroses, and 1 in every 100 kids below the age of six was intellectually delayed (Kerala State Mental Health Authority [KSMHA], 2012).

The Global Status Report on Alcohol in 2001 reported a prevalence rate of 21.4% for alcohol consumption in India. The per capita consumption of alcohol in the country from 1994-1996 was 0.93 liters (which later increased to 4 liters in 2006 as cited in Retheesh, 2010). Though consumption in India was much lower than consumption in the United Kingdom (9.25 liters), Australia (9.68 liters), and France (14.02 liters) during this time, it should be noted that over two decades (1970-1996), alcohol consumption in India increased by 106% and decreased in other countries (Ray, Mondal, Gupta, Chatterjee, & Bajaj, 2004).

In Kerala, specifically, alcohol abuse is a major public health problem (MHPKS, 2000). The consumption (8.3 liters/year) in this state remains the highest in all of southern India, with 15% of Kerala's population consuming alcohol and 5% percent suffering from alcohol related problems (KMSHA, 2012; MHPKS, 2000). In a subpopulation of Kerala, alcohol consumption was reported to be frequent and heavy (either daily or 4 times a week), and dependent on one's wages (Mohindra, Narayana, Anushreedha, & Haddad, 2011). In general, drinking was traditionally reserved for older males, but recent data show increasing alcohol abuse among young adolescent males. In 1990, the average age in which the first drink was consumed was 19 years. By 1996, the average age was 14 years (MHPKS, 2000).

In addition to alcohol abuse, suicide also impacts a number of Keralites. The World Health Organization (1999) reported a global mortality rate of 16 per 100,000 population. In 2000, about 1 million people in the world committed suicide. Based on

these values, it is projected that by 2020, about 1.53 million people will die from suicide while 10 to 20 times more people will attempt suicide worldwide (KMSHA, 2012; MHPKS, 2000; Rethesh, 2010). Kerala accounts for 10.1% of all the suicides occurring in India, which is 2.5 times higher than the national average (KMSHA, 2012; Rethesh, 2010). According to the National Crime Records Bureau (NCRB), 8,962 suicides were recorded in Kerala in 2007 alone. Seventy-three percent of suicide victims were male (Rethesh, 2010), though women are three times more likely than men to attempt suicide (Eapen, 2009). Family problems were the most common cause of suicide (43% in males; 40.6% in females), followed by physical illness (29.6% in males; 36.7% in females). Fifteen percent of suicides were attributed to insanity/mental illness and prolonged illness (i.e., depression, feelings of hopelessness) and a small percentage of suicide resulted from drug abuse and addiction (Rethesh, 2010).

Despite variability in values, the incidence rates of mental health problems in India and Kerala support the presence of mental illness and do not appear to be markedly lower than that of the United States or other westernized countries. India's overall neglect of mental health may then be partly explained by the misconception that the country has a much lower prevalence rate of mental illness than the West (MHPKS, 2000). Stigma, etiological perceptions of mental illnesses, and low help-seeking attitudes among Indians also contribute to the underutilization of mental health service in the country.

Stigma and Help-Seeking Attitudes

Fear of stigma and prejudicial behavior serve as barriers among Indian patients in recognizing their own mental health problems and seeking early interventions (Chen &

Mak, 2008; Conrad & Pacquiao, 2005; Klin & Lemish, 2008; Sieff, 2003; Stout, Villegas, & Jennings, 2004). Mukherji (1995) argues that factors related to social desirability also contribute to the rejection or postponement of treatment among all Asian groups (Kumar & Nevid, 2010). Within these cultures, public displays of emotional instability are believed to reflect poorly on the individual, the family, and the community (Chen & Mak, 2008; Kumar & Nevid, 2010). The suggestion of mental illness often elicits shame and denial (Ahmed & Lemkau, 2000).

Despite treatment progress and advances in the understanding of disease processes, negative perceptions of mental illnesses persist. People with mental illnesses are often tagged with undesirable characteristics and ostracized from communities. Harmful attitudes toward the mentally ill derive from misperceived notions that they are dangerous, unpredictable, developmentally disabled, of low intelligence, dysfunctional, lazy, childlike, and unable to care for themselves (Klin & Lemish, 2008; Sieff, 2003; Stout et al., 2004). In South Asian countries, a diagnosis of cancer is viewed more favorably than a psychological illness (Ahmed & Lemkau, 2000).

Various types of media have cultivated and perpetuated negative perceptions of the mentally ill (Klin & Lemish, 2008; Wahl, 2003). In India, regional movies provide a medium for the portrayal of psychiatric illnesses and reinforce negative stereotypes (Prasad, Babu, Chandra, & Chaturvedi, 2009). Prasad et al. (2009) found that characters in South Indian films who depicted psychosis were chained to beds and the psychiatrists who treated them often became “mad” themselves (pg. 230). Mood disorders usually depicted postpartum depression, and alcoholism was portrayed as immoral and a bad

habit of the characters. Personality disorders were coupled with criminal behavior and psychopathy was presented as the result of social factors. Lastly, individuals with intellectual impairments provided comic relief (Prasad et al., 2009).

Treatment of these disorders in media is often religiously based and includes the use of shamans, prayers, and temples. Ayurvedic medicine, the traditional Hindu system of medicine and an alternative to Western medicine, is also common. Oil massages, for example, are used to treat amnesia and other neuropsychological disorders. Psychiatry and psychotherapy play a secondary role to these practices (Prasad et al., 2009).

The stigmatization of mental illness makes it increasingly difficult for families to accept the mental health condition of members (Conrad & Pacquiao, 2005). They may deny or hide the illness from extended family members or close friends to avoid shame and embarrassment and maintain the reputation of all family members (Ahmed & Lemkau, 2000). Among the Pakistani Muslim population, in particular, seeking professional help would not only tarnish one's reputation, but is perceived as a sign of weakness (Cinnirella & Loewenthal, 1999). One individual specifically noted,

our people do not [go to the Doctor when depressed], in fact they hide it because they think that if people know about it they will not accept them and they'll be laughed at and would be completely shut off because there is this prejudice...(Cinnirella & Loewenthal, 1999, p. 519).

Fear of negative perception towards those who seek mental health services may impede individuals from accessing appropriate services and reduce their help-seeking attitudes (Ahmed & Lemkau, 2000; Turner, 2011). In South Asian cultures, responsibility is placed on the family to decide if and when to seek help for mental distress and where help will be sought. For those with schizophrenic and bipolar

disorders, professional treatments tend to be delayed until clear psychotic features emerge or symptoms become unmanageable (Kermode et al., 2010). Help that is sought tends to be episodic in nature and is often discontinued prematurely once acute symptoms have abated (Conrad & Pacquiao, 2005).

Parents who believe that their child's emotional/behavioral problems are the result of trauma or a biological/physical issue may be more likely to seek medical or psychiatric services. Parents who believe that their children's problems are due to spiritual issues, however, may seek a religious leader for guidance. Services may not be sought for disorders that are believed to involve relational, personality, or familial concerns (Yeh et al., 2005).

Acculturation and Ethnic Identity

Among native-born Indians and South Asians, there are several indications that hint at elevated stigma, underutilization of mental health services, and skewed beliefs about psychological disorders. Culture, in particular, influences attitudes and lay beliefs regarding the etiology, prevalence, and persistence of mental illness (Furnham & Malik, 1994; Serafica & Vargas, 2006) and can play a role, specifically, in how an individual labels and communicates distress, how symptoms are manifested, and how much support a family and community provides. Culture can also impact help-seeking behaviors, treatment efficacy appraisals, treatment compliance, and mental health utilization rates (Furnham & Malik, 1994; MHPKS, 2000).

In order to appreciate the experiences of immigrant and first generation Indians in the United States, one must first understand the concepts of acculturation and ethnic identity. Berry, Phinney, Sam, and Vedder (2006) define *acculturation* as a bidirectional

process in which an individual selectively incorporates behaviors, values, and cultural practices from the host culture into currently held behaviors, values, and cultural practices from the native culture (Berry et al., 2006). Exposure to the host culture can lead to changes in one's beliefs, values, and behaviors, though researchers suggest that behaviors of a new culture are adopted more quickly than cultural values and beliefs (Kumar & Nevid, 2010). Berry (1993) proposes four ways in which ethnic minorities relate to their host culture: assimilation, marginalization, separation, and integration. Assimilation occurs when an individual strictly identifies with the host culture and severs all ties with his native culture. Conversely, separation results when an individual solely identifies with his native culture and rejects the host culture. Marginalization occurs when an individual rejects both the native and host cultures. When an individual is able to maintain aspects of both the native and host cultures, integration occurs (Farver, Xu, Bhadha, Narang, & Lieber, 2007).

Though related to acculturation, ethnic identity is a separate construct (Farver et al., 2007) and refers to an individual's a sense of belongingness to an ethnic group, his or her identification as a group member, his or her attitudes towards ethnic group membership, and his or her degree of affiliation or involvement (Phinney, 1989; Phinney, 1992). Through the process of *enculturation*, parents transmit their ethnic identity to their children. Children are taught to participate in cultural practices, observe religious rituals, and endorse the same traditional beliefs as their parents (Farver, Narang, & Badha, 2002). Thus, children are dependent on adults for their cultural orientation, health awareness, and care (MHPKS, 2000). Robinson (2005) found that ethnic identity scores

were high for first generation² Indian and Pakistani adolescents in Britain. The study measured both ethnic and majority (host) identities. While majority identity was important for Indian and Pakistani adolescents, ethnic identity was more important for all groups.

By understanding patterns of acculturation among Indian immigrants, Patel, Power, and Bhavnagri (1996) argue that one can begin to understand their perceptions of mental health and illness (Kumar & Nevid, 2010). Indian immigrants tend to have a negative view of psychotherapy and counseling, which they bring with them to the United States (Bhalla, 2006; Panganamala & Plummer, 1998; Ramisetty-Mikler, 1993; Steiner & Bansil, 1989). Panganamala and Plummer (1998) observed attitudes towards counseling among Indian immigrants and first and second generation Indians ranging in age from 13 to 65 years. Indians who immigrated to the United States before the age 10 were more likely to demonstrate positive attitudes toward psychotherapy than those who immigrated after the age of ten. Additionally, older Indian immigrants and Indian Americans with children had more negative opinions. Similarly, Cinnirella and Loewenthal (1999) found that a Pakistani Muslim respondent reported greater difficulty among older members in accepting the existence of mental illnesses than younger generations. If a woman claimed to be depressed, for example, he stated that many would “say [she] is just making it up, she is just a housewife and has nothing better to do” (p. 519).

In Britain, interactions between religious affiliation, ethnic origin, and acculturation produced important differences in the lay beliefs about mental illness for

² Robinson (2003) used the term “second generation” to refer to naturally born citizens of Britain. In keeping with the definitions set forth in this paper, “second generation” was replaced with “first generation” to avoid confusion.

South Asian immigrants. Furnham and Malik (1994) studied the etiological beliefs about depression among native-born British women and South Asian-born immigrants for two age groups (17 to 28 years and 35 to 42 years). No differences were found among the first generation South Asians born in Britain, the South-Asian born immigrants who migrated to Britain at a young age, and the Caucasian native-born British subjects in the younger sample. However, they found that perceptions of symptoms and causes of depression among middle-aged South Asian-born immigrants, who were mostly Muslim, differed significantly from the middle-aged native British Christian sample.

Religious Beliefs about the Causes of Mental Illnesses

Within the literature on religion and mental health, researchers have focused on the viewpoint of fundamentalist Christians, as they have been shown to hold a more pejorative and rejecting stance on mental illnesses than other religious groups (Altemeyer, & Hunsberger, 1992; Favazza, 1982; Hartog & Gow, 2005; Hunsberger, 1996; Hunsberger, Alisat, Pancer, & Pratt, 1996; McLatchie, & Draguns, 1984; Vess, Arndt, Cox, Routledge, & Goldenberg, 2009; Wamser, Vandenberg, & Hibberd, 2011). For Christians who ascribe to fundamentalist beliefs, mental and emotional suffering was considered to be the result of personal sin or moral failings (Hartog & Gow, 2005). In a sample of Protestant congregants, McLatchie and Draguns (1984) found that members who held fundamental beliefs felt that severely depressed people had a spiritual problem due to sin. They also believed that demon possession was an acceptable explanation in the case of some mentally ill individuals.

Researchers have considered the impact of Christian beliefs in understanding the etiology and stigmatization of mental illness in the United States (Cinnirella &

Loewenthal, 1999; Hartog & Gow, 2005; Leavey, 2010; McLatchie & Draguns, 1984, Stanford, 2007; Stanford & McAlister, 2008; Stanford & Philpott, 2011; Wesselmann & Graziano, 2010). To date, no studies have looked at the influence of Christian beliefs on perceptions of childhood and adolescent psychiatric illnesses and help-seeking attitudes in the Indian immigrant³ and first generation⁴ Indian American populations.

Shams and Jackson (1993) argue that religious beliefs, in particular, have a significant impact on mental health help-seeking attitudes and treatment strategies within South Asian populations (Cinnirella & Loewenthal, 1999). Given the number of diverse cultural, religious, and philosophical systems in India, it has been difficult, as a country, to identify a uniform mental health paradigm (Kermode et al., 2010). As a result, many explanations exist concerning the etiology of mental disorders. While some understand mental illness from a western biomedical framework, others endorse economic, psychosocial, and relational factors, such as personal disposition, weather, diet, sleep loss, inactivity, poverty, bereavement, difficulties at work, childhood problems, an addicted family member, character weakness, and family conflicts (Cinnirella & Loewenthal, 1999; Kermode et al., 2010). In some rural areas of India, the absence of marriage is believed to be the cause of psychosis. With these cases, marriage is considered the best solution, especially among males (Kermode et al., 2010).

As a group, Indians accept that religion has power to heal (Trivedi, 2001). Those researching this population focus mainly on Hindu religious, supernatural, and astrological explanations of mental illness including karma, evil eye, planetary

³ Immigrants will be used to refer to foreign-born citizens or residents who have immigrated to the United States and have been naturalized.

⁴ First generation will be used to refer to naturally born citizens of the United States.

misalignment, and spirit possession (Ahmed & Lemkau, 2000; Cinnirella & Loewenthal, 1999; Conrad & Pacquiao, 2005; Halliburton, 2005; Kermode et al., 2010; Kumar & Nevid, 2010; Masood et al., 2009). While diseases with strong biological roots such as schizophrenia and bipolar disorder are often treated as mental illnesses, diseases with origins that are less clear (i.e., anxiety and depression) tend to be linked to a “suffering of the spirit” (Conrad & Pacquiao, 2005, p. 34; Kumar & Nevid, 2010). Consequently, individuals who attribute mental illness to supernatural causes are more likely to consult traditional or religious healers than a mental health professional (Kermode et al., 2010).

In the present study, I focused specifically on the Indian Orthodox population in the United States as I believe that some degree of overlap between Orthodox beliefs and several core Christian fundamental beliefs exists, particularly with regard to mental illness.

Orthodoxy

In the United States, Orthodox Christians comprise 0.3 % of the population with 2,551 parishes and 1,056,535 members. The exact number of Indian Orthodox Christians residing in the United States is unknown; however, records from 2010 show the establishment of 92 Indian Orthodox churches with 17,000 members and 9,000 regular attendees across the country (Grammich et al., 2012).

Many Orthodox priests have been known to embrace counseling and medicine in the treatment of certain psychological disorders (Rogers, 2002). In fact, the use of medicines, therapeutic diet practices, even surgical operations have generally been understood throughout the history of the Church as appropriate, fitting, and desirable ways of cooperating with God in the healing of human illnesses (T. Thomas, personal

communication, August 17, 2012). Kymissis (2004) states that because God created medication, it would be “ridiculous to demand miracles from [Him] if we do not use the medical means available...” (p. 45). He continues, “where there is a clear genetic and biological component to a psychiatric disease, then the available medical and pharmacological interventions are indicated” (p. 45). For disorders where the boundaries between biological and psychological factors are blurred (i.e., when stressors include sin, guilt, irrational fears, hate, holding grudges, etc.), Kymissis (2004) argues that a spiritual process is necessary for true healing to come about. Furthermore, he notes that anxiety is created when an individual fails to understand himself because he fails to understand God. Kymissis (2004) asserts that only when an individual can find meaning in life through God will he experience relief from anxiety. The Orthodox Church upholds the belief that certain psychological problems result when one’s soul is corrupted through the separation from God. As effective treatment practices, the Church emphasizes repentance, ascetic discipline, and grace from God (Rogers, 2002).

In light of these treatment strategies, Rogers (2002) lists three instances in which psychological referrals to mental health professionals are appropriate: (1) if the psychological problem is “serious” (p. 286) and rooted in trauma (i.e., abuse, grief, injury, etc.) or its cause is biologically determined (i.e., schizophrenia, bipolar disorder, obsessive compulsive disorder), a mental health professional is needed to help restore normal functioning (i.e., through counseling or medication) before the individual can be led to God (2) if the illness is outside the priest’s scope of knowledge, experience, or ability (i.e., child abuse, sexual molestation, alcohol or drug rehabilitation), he may need

the help of a professional for full healing to take place (3) if the individual is not willing to discuss or embrace the Orthodox faith, outside help may prove essential.

From the Orthodox perspective, spirituality transcends scientific barriers and cannot be explained with research (Kymissis, 2004). Without communion with God, a troubled individual will remain empty regardless of how balanced, functional, and adjusted he or she is in relation to the environment (Rogers, 2002). The task of the Orthodox Christian healer, then, is to go beyond the fulfillment of psychological balance and help individuals “walk in Christ, be transformed, and be transforming” (Koshy, 2007, p. 34) through daily practices of their faith (Rogers, 2002). Ultimately, it is believed that only Christ, the “true physician,” can heal souls and hearts and cure humankind (Jaquet, 2004, p. 98).

Though Orthodox priests have taken a stance that appears to embrace counseling and the use of medicines to treat psychological disorders, they have also delineated which disorders they believe require professional treatment (i.e., clear genetic and biological origin) and which do not (i.e., vague origin). Schizophrenia, bipolar, and obsessive-compulsive disorder are viewed as psychological disorders that require assistance beyond the Church while depression and anxiety are understood to be a function of one’s faith or lack thereof (Jaquet, 2004; Koshy, 2007; Kymissis, 2004; Rogers, 2002). These beliefs are likely shared by congregants.

Overview of Current Study

The aim of the current study was to examine the predictive relationship of acculturation, ethnic identity, and religious commitment on stigma, etiological beliefs about childhood and adolescent psychological disorders, and help-seeking attitudes

among Indian Orthodox Christian immigrants and first-generation Indian Americans. It was hypothesized that:

1. Levels of acculturation, ethnic identity, and religious commitment will significantly predict mental health stigma.
2. Levels of acculturation, ethnic identity, and religious commitment will significantly predict help-seeking attitudes.
3. Levels of acculturation, ethnic identity, and religious commitment will significantly predict biological, psychosocial, and spiritual beliefs about ADHD, depression, autism, anxiety, and alcohol abuse.

CHAPTER THREE

Methodology

Participants

There were 110 participants in this study (64 females, 46 males). Forty-two percent were Indian immigrants and 58% were first-generation Indian American adults, ranging in age from 18 to 67 years ($M = 31.5$, $SD = 11.7$). The age of immigration ranged from 1 to 38 years ($M = 7.2$, $SD = 11.9$). Education level of participants ranged from completion of high school (5%) to graduate training (49%). Sixty-nine percent did not have children, 7% had one child, 16% had two children, and 8% had three children. Ninety-seven percent identified as Orthodox Christian and 3% did not. Seven percent categorized themselves as very conservative, 27% as conservative, 57% as mixed conservative and liberal, 8% as liberal, and 1% as very liberal. Finally, 14% reported being very knowledgeable of mental illnesses, 45% identified as knowledgeable of mental illnesses, 35% reported having little knowledge, 4% felt that they had very little knowledge, and 2% had no knowledge.

Procedure

Participants were recruited from various Indian Orthodox Churches in Connecticut, Florida, Indiana, Kansas, Massachusetts, Maryland, Michigan, North Carolina, Oklahoma, Pennsylvania, Virginia, Washington, New York, New Jersey, Texas, and Illinois. All participants reported being able to read and understand English during the recruitment process. Prior to data collection, approval was obtained from the

Institutional Review Board at Baylor University. Participants were provided a brief description of the study and informed of the voluntary and confidential nature of their participation. After receiving online consent to participate in the study, participants completed a series of questionnaires. Paper copies were distributed to participants with limited knowledge of or access to computers. Ninety-one percent of participants filled out an electronic version of the survey while nine percent completed the survey on paper.

Measures

Demographic Information

Participants completed a questionnaire gathering relevant demographic information (i.e., age, gender, current state of residence, marital status, number and age of children, employment, level of education) as well as information pertaining to their faith, immigrant status, and mental health. Sample questions include: “Do you identify as an Orthodox Christian?” “How would you characterize yourself theologically on a scale from (1) *Very Conservative* to (5) *Very Liberal*?” “Were you born in the United States?” “What age did you come to the United States?” “What is your knowledge of mental illnesses on a scale from (1) *No Knowledge* to (5) *Very Knowledgeable*?” and “Has your child ever had a mental illness?”

Acculturation

Farver, Narang, and Badha (2002) adapted the *Acculturation Rating Scale for Mexican Americans-II* (ARMSA-II; Cuéllar, Arnold, & Maldonado, 1995) for use with Asian Indians. ARSMA-II was further modified for this study by rewording items so that the designation *Asian Indian* was replaced with *Malayalee* and *Anglo* with *Caucasian*.

ARMSA-II is a 30-item multiple choice measure that assesses the level of adherence to common Malayalee and American values. The scale consists of two subscales, orientation to Malayalee culture (MOS; 17 items) and orientation to Western culture (WOS; 13 items), and includes items relating to language, self-identity, behavior, attitude, and friendship preferences of Malayalee and Malayalee Americans. Items are rated on a 5-point scale ranging from 1 (*not at all*) to 5 (*extremely often*), with higher scores indicating a greater cultural orientation to either Malayalee or Western culture. Internal reliabilities of the two original subscales, Anglo Orientation Subscale (AOS) and Mexican Orientation Subscale (MOS), were found to be good ($\alpha = .86$ and $.88$, respectively; Cuéllar et al., 1995). In the current study, the total acculturation score was used ($\alpha = .73$).

Ethnic Identity

Phinney (1992) developed the *Multigroup Ethnic Identity Measure* (MEIM) for use with high school and college students of various ethnicities. The MEIM consists of 14-items assessing three components of ethnic identity: positive ethnic attitudes and sense of belonging (5 items), ethnic identity achievement, including exploration and resolution of identity issues (7 issues), and ethnic behaviors or practices (2 items). Items are rated on a 4-point scale from 1 (*strongly agree*) to 4 (*strongly disagree*). Higher scores indicate high ethnic identity. The Cronbach's alpha coefficient for the overall measure was .81 for a high school sample and 0.90 for a college sample. For the 5-item Affirmation/Belonging subscale, Cronbach's alpha was 0.75 and 0.86 for high school and college samples, respectively. For the 7-item Ethnic Identity Achievement subscale, Cronbach's alpha was 0.69 and 0.80, respectively, for the two groups. Reliability

coefficients were not calculated for the final subscale because it contained 2 items (Phinney, 1992). In the current study, the total score for ethnic identity was used ($\alpha = .83$).

Causes of Mental Illness

Stanford and Philpott (2011) adapted the *Causes of Mental Illness* scale (Lafuze, Perkins, & Avirappattu, 2002) for use with Baptist pastors in Texas. Principal component analyses of items revealed three factors addressing biological causes (inherited genes and chemical imbalances in the brain), psychosocial causes (inconsistent parenting, social pressure), and spiritual causes (spiritual poverty, demonic oppression, personal sin and lack of faith). The item “excessive drugs and alcohol,” which was included in the original scale, was excluded from the modified version because it loaded onto more than one factor. Items from each group were rated on a 10-point scale (1 = small contribution to 10 = major contribution) according to participants’ perceived contribution of biological, psychosocial, and spiritual factors to each of the following DSM-IV-TR (American Psychiatric Association, 2000) Axis I psychiatric diagnoses: ADHD, depression, anxiety, alcohol abuse, and autism. The Cronbach’s alpha reliabilities for each of the disorders in the current study were good (ADHD: $\alpha = .82$; depression: $\alpha = .79$; anxiety: $\alpha = .85$; alcohol abuse: $\alpha = .82$; autism: $\alpha = .72$).

Attitudes toward Child Mental Health

The *Parental Attitudes toward Psychological Services Inventory* (PATPSI; Turner, 2011) measured help-seeking attitudes, mental health stigma, and help-seeking intentions. The PATPSI consists of 21-items and is rated on a 5-point scale from 0

(*strongly disagree*) to 5 (*strongly agree*). The PATPSI was adapted from the *Attitudes toward Seeking Professional Psychological Help Scale* (ATS-PPHS; Fisher & Turner, 1970) as a multidimensional measure of parental attitudes. Internal reliability of the total score and subscales (help-seeking intentions, help-seeking attitudes, and stigmatization) of the PATPSI were $\alpha = .90$, $\alpha = .70$, $\alpha = .88$, and $\alpha = .89$, respectively. Internal consistency was also examined for various ethnic groups based on parents' ethnicity (European American, $\alpha = .90$, African American, $\alpha = .90$, Hispanic-American, $\alpha = .91$, and Asian American, $\alpha = .92$) (Turner, 2011). The current study used scores from the stigmatization, $\alpha = .82$, and help-seeking attitudes, $\alpha = .82$, subscales. Participants were asked to respond to the subscales in response to a real or fictional child with a mental illness.

Religious Commitment

The *Religious Commitment Inventory-10* (RCI-10; Worthington et al., 2003) was used to measure participants' intrapersonal and interpersonal religious commitment to Orthodoxy. The RCI-10 consists of 10-items and is rated on a 5-point scale from 1 (not at all true of me) to 5 (totally true of me). The RCI-10 is a shorter version of the RCI-17 (McCullough, Worthington, Maxie, & Rachal, 1997). The Intrapersonal Religious Commitment subscale is highly correlated with the Interpersonal Religious Commitment, $r(154) = .72, p < .001$). The alpha coefficient for the full scale was $\alpha = .93$. The alpha coefficients for the subtests were $\alpha = .92$ for the Intrapersonal Religious Commitment subscale, and $\alpha = .87$ for the Interpersonal Religious Commitment subscale (Worthington et al., 2003). In the current study, the full scale was utilized ($\alpha = .89$).

CHAPTER FOUR

Results

Multiple linear regression analysis was conducted to test whether the weighted sum of the independent variables (i.e., acculturation, ethnic identity, and religious commitment) as a set aided in predicting the outcome variables (i.e., stigma, etiological beliefs about ADHD, depression, autism, alcohol abuse, and anxiety, and help-seeking attitudes). Each regression model used hierarchical entry with demographics (i.e., age, gender, knowledge of mental illness, presence of children) entered in the first block as control variables. These variables were chosen based on findings within the literature on attitudes towards counseling among South Asians (Cinnirella & Loewenthal, 1999; Panganamala & Plummer, 1998). Acculturation, ethnic identity, and religious commitment were entered in the second block of each model to assess the increment in variance accounted for by these variables. The increment in variance accounted for by acculturation, ethnic identity, and religious commitment were tested for statistical significance ($p < .05$). Statistical analyses were computed using SPSS version 21.0 (SPSS, 2012).

Hypothesis 1

Acculturation, ethnic identity, and religious commitment will significantly predict stigma.

The control variables accounted for 1% of variance in stigma. Acculturation, ethnic identity, and religious commitment accounted for 8% of additional variance in stigma, which was not significant, $F(7, 102) = 1.33, ns$. Religious commitment was

significantly and negatively associated with stigma. Individuals who reported more commitment to Orthodoxy worried less about the perception of others when considering help for psychological disorders than those who were not as religiously committed (Table 2).

Hypothesis 2

Acculturation, ethnic identity, and religious commitment will significantly predict help-seeking attitudes.

The control variables accounted for 6% of the variance. Acculturation, ethnic identity, and religious commitment accounted for 14% of additional significant variance in help-seeking attitudes, $F(7, 102) = 2.36, p < .05$. Religious commitment was significantly and positively associated with help-seeking attitudes. Participants who reported increased commitment to Orthodoxy were more open to the possibility of seeking professional help than participants who were less committed religiously (Table 2).

Hypothesis 3

Acculturation, ethnic identity, and religious commitment will significantly predict biological, psychosocial, and spiritual beliefs about ADHD, depression, autism, anxiety, and alcohol abuse.

Acculturation, ethnic identity, and religious commitment significantly predicted biological causes for all disorders: ADHD ($F(7, 102) = 3.65, p < .01$), depression ($F(7, 102) = 3.83, p < .01$), anxiety ($F(7, 102) = 3.13, p < .01$), autism ($F(7, 102) = 4.59, p < .001$), and alcohol abuse ($F(7, 102) = 2.89, p < .01$). Acculturation was significantly and

positively associated with biological ratings for ADHD, depression, anxiety, and alcohol abuse. Thus, individuals who were more acculturated were more likely to endorse biological causes for these disorders over psychosocial or spiritual origins. Conversely, previous knowledge of mental illness was significantly and positively associated with biological causes of autism. Ratings endorsing biological bases of autism were significantly higher for individuals who classified themselves as knowledgeable to very knowledgeable of mental illnesses than those who rated themselves as having very little to no knowledge of mental health concerns.

Acculturation, ethnic identity, and religious commitment were not significant for any of the disorders predicting psychosocial causes. Additionally, no significant predictors emerged from within this predictor set.

The significance of acculturation, ethnic identity, and religious commitment for spiritual causes varied across disorders. The regression model was significant for depression, anxiety, and alcohol abuse, but not ADHD and autism. Knowledge of mental illness was significantly and negatively associated with spiritual causes for all disorders except anxiety and alcohol abuse. Thus, individuals with increased knowledge of mental illnesses endorsed spiritual causes for disorders less frequently than those with decreased knowledge. On the contrary, religious commitment was significantly and positively associated with spiritual causes of alcohol abuse. Participants who reported more commitment to Orthodoxy endorsed spiritual causes for alcohol abuse than those who reported less commitment. Finally, no significant predictors emerged from within the predictor set for spiritual causes of anxiety. Results are presented in Tables 2-7.

Correlations between Outcome Variables

Table 1
Summary of Correlations

	Stg	Ha	Ab	Ap	As	D1	D2	D3	A1	A2	A3	A4	A5	A6	A7	A8	A9
Stg	--																
Ha	-0.57**	--															
Ab	0.00	0.11	--														
Ap	-0.04	-0.07	0.22*	--													
As	0.01	-0.12	-0.14	0.39**	--												
D1	-0.12	0.22*	0.64**	0.25**	-0.20*	--											
D2	0.06	-0.02	0.37**	0.54**	0.04	0.25**	--										
D3	0.13	-0.09	0.05	0.28**	0.50**	-0.15	0.49**	--									
A1	0.10	0.09	0.66**	0.15	-0.23*	0.51**	0.30**	0.04	--								
A2	-0.07	-0.16	-0.04	0.33**	0.35**	0.06	0.25**	0.20*	-0.09	--							
A3	0.01	-0.12	-0.13	0.14	0.61**	-0.18	0.07	0.42**	-0.17	0.55**	--						
A4	-0.11	0.24*	0.50**	0.25**	-0.01	0.55**	0.22*	-0.01	0.37**	0.19*	0.06	--					
A5	0.06	0.02	0.49**	0.31**	-0.18	0.43**	0.67**	0.25**	0.52**	0.02	-0.16	0.25**	--				
A6	0.14	0.01	0.20*	0.25*	0.25**	0.14	0.39**	0.59**	0.22*	0.20*	0.23*	0.07	0.41**	--			
A7	-0.07	0.24*	0.62**	0.15	-0.24*	0.72**	0.33**	-0.05	0.59**	0.07	-0.07	0.63**	0.54**	0.10	--		
A8	0.03	0.09	0.42**	0.47**	0.05	0.36**	0.77**	0.39**	0.43**	0.21*	0.02	0.27**	0.73**	0.51**	0.49**	--	
A9	0.17	-0.05	0.20*	0.26**	0.46**	0.03	0.40**	0.76**	0.17	0.21*	0.37**	0.15	0.32**	0.71**	0.10	0.52**	--

*p<.05. **p<.01. ***p<.001; Stg = stigma; Ha = help-seeking attitudes; Ab = ADHD biological; Ap = ADHD psychosocial; As = ADHD spiritual; D1 = depression biological; D2 = depression psychosocial; D3 = depression spiritual; A1 = autism biological; A2 = autism psychosocial; A3 = autism spiritual; A4 = alcohol abuse biological; A5 = alcohol abuse psychosocial; A6 = alcohol abuse spiritual; A7 = anxiety biological; A8 = anxiety psychosocial; A9 = anxiety spiritual

Table 1 looks at the correlational relationships between stigma, help-seeking attitudes, biological, psychosocial, and spiritual causes of ADHD, anxiety, depression, autism, and alcohol abuse. There were several patterns that emerged: biological causes were negatively associated with spiritual causes and positively associated with help-seeking attitudes, and stigma was negatively associated with biological causes and help-seeking attitudes. In general, participants who endorsed biological causes for one disorder appeared to endorse biological causes for other disorders. The same was true for spiritual and psychosocial causes. There was tendency for participants to answer in a similar fashion across disorders.

Post Hoc Analysis

Post hoc analyses were conducted to look at differences in scores between immigrant and first-generation participants. Although not an original hypothesis, an independent t-test revealed significant differences between the immigrant sample and the first generation Americans on levels of acculturation, ratings of biological causes of ADHD, and ratings of psychosocial causes of depression. As expected, the first generation Indian Americans ($M = .75$, $SD = .69$) were more acculturated than the immigrant sample ($M = -.16$, $SD = .87$; $t(108) = 6.07$, $p < .001$). The magnitude of the differences in the means was very large (Cohen's $d = 1.15$). This group also endorsed biological causes of ADHD ($M = 7.10$, $SD = 2.07$) and psychosocial causes of depression ($M = 7.30$, $SD = 2.23$) more frequently than their native Indian counterparts ($M_{ADHD} = 6.12$, $SD_{ADHD} = 2.72$; $M_{Dep} = 6.37$, $SD_{Dep} = 2.47$; $t_{ADHD}(108) = 2.15$, $p < .05$; $t_{Dep}(108) = 2.06$, $p < .05$). The magnitudes for both were small to medium ($d_{ADHD} = .41$; $d_{Dep} = .40$).

CHAPTER FIVE

Discussion

Overview

The purpose of this study was to explore the impact of acculturation, ethnic identity, and religious commitment on stigma, help-seeking attitudes, and etiological beliefs about ADHD, depression, autism, anxiety, and alcohol abuse. The data gathered produced mixed results. Acculturation, ethnic identity, and religious commitment predicted help-seeking attitudes, biological causes for ADHD, depression, autism, alcohol abuse, and anxiety, and spiritual causes for depression, anxiety, and alcohol abuse. The regression model remained significant for each of these variables after controlling for age, gender, knowledge of mental illness, and presence of children. Conversely, acculturation, ethnic identity, and religious commitment did not predict stigma, spiritual causes for ADHD and autism, and psychosocial causes for any of the disorders.

Stigma and Help-Seeking Attitudes

My first hypothesis, which stated that acculturation, ethnic identity, and religious commitment would predict stigma, was not supported. The data, however, supported the second hypothesis, which looked at the predictive relationship of the regression model on help-seeking attitudes. For both hypotheses, religious commitment was a more robust predictor than acculturation and ethnic identity, and was negatively related to stigma and positively related to help-seeking attitudes. This finding was unexpected given the

existing literature on stigma, Christian fundamentalist beliefs, and help-seeking behaviors. Studies show that individuals who hold firmly to their Christian beliefs are less likely than others to seek treatment for a psychological problem because of the negative perceptions regarding the cause of mental illnesses and the stigma attached to receiving assistance (Cinnirella & Loewenthal, 1999; Favazza, 1982; Hartog & Gow, 2005; Stanford, 2007; Stanford & McAlister, 2008; Trice & Bjorck, 2006; Wesselmann & Graziano, 2010).

To understand the findings in this study, it should be noted that the sample was less religiously conservative than initially expected. While Orthodoxy is considered a conservative religion, participants rated themselves less so. More than half of participants described themselves as a “mix between conservative and liberal” and only 7% were categorized as “very conservative.” No significant differences in theological self-ratings and religious commitment were found between the immigrant and first generation groups. Unlike other studies, commitment to Orthodoxy did not appear to have a strong negative impact within this population. In fact, the flexibility and latitude in beliefs appears to have contributed to the ratings of stigma and help-seeking attitudes.

Biological Causes

One important finding that was upheld was the third hypothesis, which stated that acculturation, ethnic identity, and religious commitment would predict biological bases for ADHD, depression, anxiety, autism, and alcohol abuse. This hypothesis was supported, with acculturation being a significant and positive predictor. In this sample, immigrant and first generation Indian Americans significantly differed in their level of acculturation. According to the cutoff scores listed in Cuéllar et al. (1995), immigrants

were classified as “[Malayalee] oriented to approximately balanced bicultural” (ARSMA-II = -.15) and first generation Indian Americans were classified as “slightly [Caucasian] oriented bicultural” (ARSMA-II = .74). Both groups were considered integrated. The level of acculturation for each participant appeared to contribute to his or her causal rating for the disorders with acculturated individuals endorsing more biological causes than non-acculturated individuals. With regard to ADHD, in particular, first generation Indian Americans endorsed biological causes more frequently than Indian immigrants.

Another interesting finding was the positive relationship between help-seeking attitudes and biological ratings of disorders. Individuals were more likely to seek help if they endorsed biological causes for the disorders and less likely if they endorsed spiritual or psychosocial causes. Similarly, individuals who believed that the disorders were biologically based reported less stigma than those who endorsed spiritual or psychosocial causes. These results are similar to findings from Kuppin and Carpiano (2006) who found that causal beliefs about mental disorders significantly impacted treatment options. In their study, respondents who perceived biological causes were more likely to endorse biologically focused treatments (i.e., psychiatrist, prescription medication, mental hospital, general doctor) as appropriate options over talking to friends or family.

Kuppin and Carpiano (2006) believed that the association between biologically oriented causal beliefs and treatments were linked to messages to the public over the past decade from the medical and pharmaceutical industries as well as mental health anti-stigma groups promoting the biological aspects of cause and treatment of disorders. This may offer an explanation for the association between help-seeking attitudes and biological causal beliefs in the present study.

Finally, knowledge of mental illness played a primary role in ratings of biological causes of autism. Studies have highlighted the perceived rarity of autism and pervasive developmental disorders within Indian communities (Daley, 2004; Daley & Sigman, 2002). For this reason, participants relied on their existing knowledge of mental illnesses to recognize and understand the biological bases underlying the disorder.

Spiritual Causes

Knowledge of mental illness also provided a significant contribution to spiritual causes for ADHD, depression, and autism, even though ADHD and autism failed to reach significance with the effects of the full model. Participants relied on their existing knowledge of mental illness instead of their spiritual or cultural beliefs to determine the etiological causes of depression, autism, and ADHD.

Conversely, religious commitment positively influenced participants' ratings of spiritual causes for alcohol abuse. Individuals who exhibited more commitment to Orthodoxy were more likely to endorse spiritual causes ("spiritual poverty," "demonic oppression," "sin," and "lack of faith") for alcohol abuse than biological or spiritual underpinnings. Participants' reliance on their religious commitment to rate spiritual causes for alcohol abuse may speak to a larger issue within this population. Problems with drugs and delinquency provide great shame to the family unit (Ahmed & Lemkau, 2000). Consequently, alcohol abuse may not be a disorder that is readily understood or accepted by Indian Orthodox immigrants and first generation Americans.

In many Asian societies, a strong emphasis is placed on saving face and bringing honor to the family. Alcohol abuse may not be perceived as a personal matter but rather as a threat to the harmony of the family, bringing about shame, embarrassment, and

disappointment to the family (Jimenez, Bartels, Cardenas, & Alegría, 2013; Leong & Lau, 2001). Kuppin and Carpiano (2006) further note that biologically focused treatments were less likely to be perceived as an appropriate treatment option with respect to alcohol and drug dependence, which may endorse a lay belief that substance use disorders lack biological roots.

Psychosocial Causes

Surprisingly, psychosocial causes were not endorsed for any of the disorders. Kumar and Nevid (2010) found that behaviorally acculturated Indian immigrants (i.e., bicultural) endorsed higher psychological ratings for disorders than their less behaviorally acculturated counterparts. In this study, psychological ratings for depression differed significantly between Indian immigrants and first generation Indian Americans. Though Indian Americans endorsed psychosocial causes for depression more frequently than Indian immigrants, their responses were not significant overall.

The scale used to measure psychosocial causes looked specifically at “inconsistent parenting” and “social pressures.” In India, the family unit is a highly valued social system and is considered a source of strength (Ahmed & Lemkau, 2000; Masood, Okazaki, & Takeuchi, 2009). The sense of familial obligation to one’s parents and extended family among Asian Indians is very strong. The welfare and integrity of the family are given higher priority than individual needs and self-identity, and sacrifices are expected for the good of the group (Farver, Narang, & Badha, 2002; Masood, Okazaki, & Takeuchi, 2009). Given the importance of family in Asian cultures, it is also possible that participants, as a whole, were less willing to consider the impact of parenting or other social factors on the development of psychological disorders.

Implications

The results from the study revealed important findings within the Indian Orthodox population. For one, the reduction in stigma and the expressed increase in help-seeking attitudes among highly committed Orthodox Christians appear to present a unique paradox. With the exception of alcohol abuse, adherents did not attribute spiritual failings to the onset of mental illness. Participants' willingness to consider natural/biological factors is contrary to the literature on Christian fundamentalism and to anecdotal experience of Orthodox traditions, values, and beliefs. Though participants were committed to Orthodoxy, their beliefs were not highly conservative as surveyed by their theological self-ratings. Acculturation and knowledge of mental illnesses appeared to temper the effects of participants' religious beliefs on stigma, help-seeking attitudes, and causal beliefs. This may suggest that religiously informed view can change with time and experience.

This was not the case for perceptions regarding alcohol abuse and was the only disorder in which Indian immigrants and first generation Indian Americans rated spiritual causes. Both groups may feel that a weak and flawed spiritual life lies at the core of substance use disorders. While beliefs may not be predictive of actual behavior, professional treatment may pose a significant challenge within this population. These results highlight a need for education regarding substance abuse and addiction. Providers should educate individuals and their families about possible causes when formal treatment is warranted and should be aware of specific beliefs that can influence treatment behavior (Kuppin & Carpiano, 2006).

Endorsement of biological causes for psychological disorders suggests a notable shift within the literature and broadens explanations beyond those that are spiritual in origin (i.e., sin, spirit possession, lack of faith, weak spiritual life, karma etc.). While this is a considerable improvement in the way mental disorders are viewed and understood, it may also pose a risk for this population. To only consider biological causes may lead individuals to completely ignore or rule out factors that can significantly influence the development of psychological disorders. The lack of significant findings for psychosocial causes, for instance, may serve as a potential barrier in treatment for individuals who are unwilling to look at the impact of family, friends, and individual personality.

Lastly, it is possible that in knowing the objectives of the study, participants anticipated that stigma would be present in the population, and deviated from their normal responses. Although steps were taken to assure anonymity, knowledge that their responses would be seen and analyzed by a fellow member of the Indian Orthodox community may have led participants to respond desirably. If participants answered more favorably in response to the imagined threat of judgment, then it is likely that social desirability may impact actual treatment behavior. Mukherji (1995) explored the effects of social desirability on the treatment of mental health concerns and found that many Asian groups reject or postpone treatment in order to save face (Kumar & Nevid, 2010). Indian clients may feel particularly self-conscious and reluctant to expose vulnerabilities and problems outside of the family. This may be further exacerbated when treatment is provided by a member of the population. Care must be taken to normalize experiences, build awareness and support, remove blame and guilt, and instill acceptance.

Limitations

Undoubtedly, this study had several limitations. Though the regression analyses revealed relationships among the variables in this study, causation could not be inferred. The relationship between variables could have stemmed from many causes, including the influence of other unmeasured variables. In addition, individuals were recruited through snowball sampling from churches across the United States, which may limit generalizability of findings. The recruitment method attracted individuals who were young, highly educated, able to easily read and comprehend English, knowledgeable of mental illnesses, and liberal in their religious beliefs. These characteristics may not be representative of the greater Indian Orthodox population. The small sample size and use of online and paper surveys may have also limited the ability to detect statistically significant differences.

Furthermore, the scale used to measure ethnic identity (Multigroup Ethnic Identity Measure; Phinney, 1992) failed to produce significant findings in the study. Participants in the current sample were identified as bicultural and did not display extreme adherence to either Western or Malayalee cultural values. Similar to findings from Kumar and Nevid (2010), the restricted range of scores may have contributed to the lack of statistically significant findings. It is also possible that in using a generalized measure, the unique aspects of ethnic identity that are culturally specific to this population were lost.

Finally, participants were asked to express beliefs about causes, stigma, and help-seeking attitudes in response to a real or fictional child with a mental illness. Since the majority of individuals who participated in the study did not have children, this may have

unintentionally created some degree of distance or separation from the illness in question. As a result, responses may not accurately reflect the behavior of respondents who are faced with a similar situation in real life involving themselves or a loved one.

Suggestions for Further Research

Indian immigrants and first generation Indian Americans were grouped together in the present sample. It will be important for future studies to focus specifically on Indian immigrant and first generation Indian American parents and examine generational differences across various sects of Christianity. Translating measures into Malayalam would also attract the participation of older immigrants and produce a sample that is more representative of the population. Future researchers would also benefit from incorporating a scale that measures social desirability to account for its influence as a potential confounding variable. In the current study, help-seeking attitudes were treated as a general concept. Researchers should understand the types of help that Indian Orthodox Christians are willing to seek (i.e., psychiatrist vs. psychologist vs. primary care physician vs. clergy) and the potential barriers (i.e., financial constraints, insurance issues) that may continue to prevent them from accessing appropriate care.

A further area of study would be to look at mental health conditions that were not assessed in the current study but are relevant to this population. Suicide, for example, is a major cause of death in Kerala (Eapen, 2009; KMSHA 2012; MHPKS, 2000; Rethesh, 2010) and remains a taboo topic for many. Researchers could benefit from exploring the perceived stigma and treatment associated with this behavior. Concerns related to self-mutilation, eating disorders, posttraumatic stress disorder, obsessive-compulsive

disorders, and sexual identity/orientation might also be worth addressing. Currently, there is a paucity of research addressing these concerns within the Keralite community.

Conclusion

Little has been published on the effects of acculturation, ethnic identity, and religious commitment on stigma, lay beliefs about mental illnesses, and help-seeking attitudes within the South Indian Christian population in the United States. This study was intended to highlight what effects, if any, acculturation, ethnic identity, and religious commitment have on stigma, etiological beliefs about specific psychological disorders, and help-seeking attitudes. Religious commitment and acculturation independently produced more robust findings than the predictors together. Acculturation, in particular, had a significant impact on etiological perception of mental illnesses within this population. Individuals who were more acculturated endorsed greater ratings of biological determinants for ADHD, autism, depression, anxiety, and alcohol abuse and lower ratings of psychosocial or spiritual causes than did individuals who were less acculturated. Individuals' commitment to religion was not a strong predictor for spiritual causes and, in fact, had a favorable effect on stigma and help-seeking attitudes. Finally, knowledge of mental illness had significant and differing effects on participants' rating of etiological beliefs and often explained more of the variance than acculturation, ethnic identity, and religious commitment alone.

Tables 2-6 present both significant and nonsignificant standardized beta coefficients for the models for which the primary outcomes were stigma, help-seeking attitudes, and biological, psychosocial, and spiritual causal beliefs for ADHD, depression, autism, anxiety, and alcohol abuse.

Table 2

Multiple Linear Regression Analyses for Variables Predicting Stigma and Help-Seeking Attitudes

Variable	Stigma	Help-Seeking Attitudes
Block 1		
R^2	0.01	0.06
Age	0.03	0.13
Gender	-0.06	-0.00
Knowledge of Mental Illness	-0.09	0.18
Children	-0.10	0.17
Block 2		
R^2 change	0.08	0.14
Acculturation	-0.07	0.19
Ethnic Identity	0.17	-0.02
Religious Commitment	-0.27**	0.26**
Cumulative R^2	0.09	0.20

Note: Betas presented are standardized betas for the full model. Both significant and non significant betas are presented. * $p < .05$. ** $p < .01$. *** $p < .001$

Attention Deficit-Hyperactivity Disorder (ADHD)

Table 3

Multiple Linear Regression Analyses for Variables Predicting ADHD Causal Beliefs

Variable	Biological	Psychosocial	Spiritual
Block 1			
R^2	0.12	0.03	0.08
Age	0.02	0.13	0.07
Gender	-0.07	0.11	-0.02
Knowledge of Mental Illness	0.20*	-0.07	-0.21*
Children	-0.11	-0.16	0.04
Block 2			
R^2 change	0.08	0.01	0.03
Acculturation	0.34**	0.01	-0.14
Ethnic Identity	0.07	-0.08	0.02
Religious Commitment	-0.09	-0.02	0.11
Cumulative R^2	0.20	0.04	0.11

Note: Betas presented are standardized betas for the full model. Both significant and non significant betas are presented. * $p < .05$. ** $p < .01$. *** $p < .001$

Depression

Table 4

Multiple Linear Regression Analyses for Variables Predicting Depression Causal Beliefs

Variable	Biological	Psychosocial	Spiritual
Block 1			
R^2	0.13	0.05	0.08
Age	0.05	-0.09	-0.18
Gender	0.13	0.00	-0.06
Knowledge of Mental Illness	0.26**	0.04	-0.20*
Children	0.04	-0.07	-0.07
Block 2			
R^2 change	0.08	0.01	0.07
Acculturation	0.36**	0.10	-0.06
Ethnic Identity	0.02	0.09	0.16
Religious Commitment	0.03	0.03	0.15
Cumulative R^2	0.21	0.06	0.15

Note: Betas presented are standardized betas for the full model. Both significant and non significant betas are presented. * $p < .05$. ** $p < .01$. *** $p < .001$

Table 5

Multiple Linear Regression Analyses for Variables Predicting Autism Causal Beliefs

Variable	Biological	Psychosocial	Spiritual
Block 1			
R^2	0.20	0.02	0.07
Age	-0.10	0.08	0.07
Gender	-0.10	0.15	-0.04
Knowledge of Mental Illness	0.34***	-0.01	-0.21*
Children	-0.05	-0.01	-0.10
Block 2			
R^2 change	0.04	0.01	0.05
Acculturation	0.24*	0.05	-0.24
Ethnic Identity	0.10	0.01	0.08
Religious Commitment	-0.05	-0.10	-0.03
Cumulative R^2	0.24	0.03	0.12

Note: Betas presented are standardized betas for the full model. Both significant and non significant betas are presented. * $p < .05$. ** $p < .01$. *** $p < .001$

Table 6

Multiple Linear Regression Analyses for Variables Predicting Anxiety Causal Beliefs

Variable	Biological	Psychosocial	Spiritual
Block 1			
R^2	0.07	0.05	0.05
Age	0.02	-0.09	-0.02
Gender	0.03	0.06	-0.16
Knowledge of Mental Illness	0.18	0.01	-0.13
Children	0.07	-0.04	-0.14
Block 2			
R^2 change	0.10	0.02	0.08
Acculturation	0.41**	0.14	-0.07
Ethnic Identity	0.02	0.02	0.16
Religious Commitment	0.08	0.11	0.18
Cumulative R^2	0.18	0.07	0.13

Note: Betas presented are standardized betas for the full model. Both significant and non significant betas are presented. * $p < .05$. ** $p < .01$. *** $p < .001$

Table 7

Multiple Linear Regression Analyses for Variables Predicting Alcohol Abuse Causal Beliefs

Variable	Biological	Psychosocial	Spiritual
Block 1			
R^2	0.05	0.11	0.05
Age	0.18	-0.25	-0.08
Gender	-0.03	0.01	0.01
Knowledge of Mental Illness	0.17	0.12	-0.15
Children	-.03	0.07	-0.12
Block 2			
R^2 change	0.12	0.02	0.10
Acculturation	0.41**	0.17	-0.02
Ethnic Identity	0.05	0.06	0.12
Religious Commitment	-0.10	0.02	0.24*
Cumulative R^2	0.17	0.13	0.15

Note: Betas presented are standardized betas for the full model. Both significant and non significant betas are presented. * $p < .05$. ** $p < .01$. *** $p < .001$

APPENDICES

APPENDIX A

Certification of Informed Consent

This form asks for your consent to participate in a research project conducted by Miriam Varghese, M.S., under the supervision of Helen Benedict, Ph.D. This study is investigating the effects of culture and religion on one's beliefs about the causes of specific childhood and adolescent psychological disorders (i.e., attention deficit-hyperactivity disorder, anxiety, depression, autism, and alcohol abuse) and one's willingness to seek treatment for a child or adolescent (either hypothetical or real) suffering from one (or more) of the disorders mentioned above. You will be asked to complete five questionnaires pertaining to your culture, your commitment to Orthodoxy, your beliefs about certain childhood and adolescent psychological disorders, and your attitudes and behaviors for seeking professional help. All of the questionnaires together will take roughly 15 to 30 minutes to complete.

There are minimal risks to completing these questionnaires and it is unlikely that any physical risks will be involved. In the rare event, some items may produce unpleasant emotions, uneasiness, or discomfort.

Your participation in this study is fully voluntary and if at any time you choose not to participate, you will be able to end your participation without any penalty or loss of benefits to which you are otherwise entitled. By participating, however, you will have the experience of taking part in a scientific experiment that may help increase awareness of issues related to mental health in the Orthodox Church. After completing the survey, you will be directed to a separate page for a chance to enter into a raffle to win a \$100 Amazon Gift Card. This page will not be attached to your data and will be separate from the study.

You must be at least 18 years of age to participate in this research.

Your responses to the questionnaires will be kept confidential. When you complete the questionnaire and submit your answers online, your responses will be added to a large data file that will be used in statistical analysis. While the researchers will protect the privacy of all the data you submit, it is important to note that data sent over the Internet may be subject to interception. Therefore, it is possible that the data you send might be seen by another party, and the researchers running this study cannot control whether this happens. If you are concerned about the security of the data you send, you should not participate in this research.

If you are taking the survey on paper, two envelopes will be provided to separate the questionnaire from the consent and raffle forms at the end. This will ensure that no identifying information on the consent or raffle form will tie your name to your data.

If you have any questions or concerns about the study or any problems that result from participation, please do not hesitate to contact Miriam Varghese by phone at (516) 313-5510, by email at miriam_varghese@baylor.edu, or by mail to 801 Washington Avenue, Waco, TX, 76704. You can reach Dr. Helen Benedict at (254) 710-2961. If you have questions regarding your rights as a participant in this research, you may also contact the Baylor University Committee for Protection of Human Subjects in Research, Dr. David W. Schlueter, Ph.D., Chair Baylor IRB, Baylor University, One Bear Place # 97368 Waco, TX 76798-7368. Dr. Schlueter may also be reached at (254) 710-6920 or (254) 710-3708.

I have been fully informed of the study procedures with the possible benefits and risks and I agree to participate. By signing this, I acknowledge that I am 18 years of age or older. I also acknowledge that I have been given a copy of this consent form for my own records.

Signature of Participant

Name of Participant (Print)

Date

APPENDIX B

Demographic Questionnaire

1. Age? _____
2. Gender? _____
3. Were you born in the United States?
 - a. If not, what age did you come to the United States? _____
4. State of residence (e.g., NY, TX)? _____
5. Marital status? _____
6. Occupation? _____
7. Highest degree earned? _____
8. Number of children? _____
9. Age of children? _____
10. Has your child ever had a mental illness? _____
11. Do you identify as an Orthodox Christian? _____
12. How would you characterize yourself theologically (1= very conservative; 5 = very liberal)?

Characterization: +1 +2 +3 +4 +5
13. Please rate your general knowledge of mental illness (1= very little; 5 = very knowledgeable)

Level of Knowledge: +1 +2 +3 +4 +5

APPENDIX C

Acculturation Rating Scale for Mexican Americans-II (ARMSA-II)

For each statement below, choose a number from 1 to 5 to indicate how often the following items occur.

	+1	+2	+3	+4	+5
Not at all					Extremely often or almost always
1. I speak Malayalam.	1	2	3	4	5
2. I speak English.	1	2	3	4	5
3. I enjoy speaking Malayalam.	1	2	3	4	5
4. I associate with Caucasians.	1	2	3	4	5
5. I associate with Malayalees and/or Malayalee Americans.	1	2	3	4	5
6. I enjoy listening to Malayalam music.	1	2	3	4	5
7. I enjoy listening to music in English.	1	2	3	4	5
8. I enjoy watching Malayalam television shows.	1	2	3	4	5
9. I enjoy watching English television shows.	1	2	3	4	5
10. I enjoy watching movies in English.	1	2	3	4	5
11. I enjoy watching movies in Malayalam.	1	2	3	4	5
12. I enjoy reading in Malayalam (e.g., books).	1	2	3	4	5
13. I enjoy reading in English (e.g., books).	1	2	3	4	5
14. I write in Malayalam (e.g., letters).	1	2	3	4	5
15. I write in English (e.g., letters).	1	2	3	4	5
16. I think in English.	1	2	3	4	5

17. I think in Malayalam.	1	2	3	4	5
18. My experience in Kerala has been _____ (fill in the blank and rate).	1	2	3	4	5
19. My experience in the United States has been _____ (fill in the blank and rate).	1	2	3	4	5
20. My father identifies or identified himself as “Malayalee.”	1	2	3	4	5
21. My mother identifies or identified herself as “Malayalee.”	1	2	3	4	5
22. My friends, while I was growing up, were Malayalee.	1	2	3	4	5
23. My friends, while I was growing up, were Caucasian.	1	2	3	4	5
24. My family cooks Malayalee foods.	1	2	3	4	5
25. My friends now are Caucasian.	1	2	3	4	5
26. My friends now are Malayalee.	1	2	3	4	5
27. I like to identify myself as Caucasian.	1	2	3	4	5
28. I like to identify myself as Malayalee American.	1	2	3	4	5
29. I like to identify myself as Malayalee.	1	2	3	4	5
30. I like to identify myself as an American.	1	2	3	4	5

APPENDIX D

Multigroup Ethnic Identity Measure (MEIM)

In this country, people come from a lot of different cultures and there are many different words to describe the different backgrounds or ethnic groups that people come from. Some examples of the names of ethnic groups are Mexican-American, Hispanic, Black, Asian-American, American Indian, Anglo-American, and White. Every person is born into an ethnic group, or sometimes two groups, but people differ on how important their ethnicity is to them, how they feel about it, and how much their behavior is affected by it. These questions are about your ethnicity or your ethnic group and how you feel about it or react to it.

Please fill in:

In terms of ethnic group, I consider myself to be _____

Use the numbers given below to indicate how much you agree or disagree with each statement.

	+1	+2	+3	+4
	Strongly disagree			Strongly agree
1. I have spent time trying to find out more about my own ethnic group, such as its history, traditions, and customs.	1	2	3	4
2. I am active in organizations or social groups that include mostly members of my own ethnic group.	1	2	3	4
3. I have a clear sense of my ethnic background and what it means for me.	1	2	3	4
4. I like meeting and getting to know people from ethnic groups other than my own.	1	2	3	4
5. I think a lot about how my life will be affected by my ethnic group membership.	1	2	3	4

- | | | | | |
|---|---|---|---|---|
| 6. I am happy that I am a member of the group I belong to. | 1 | 2 | 3 | 4 |
| 7. I sometimes feel it would be better if different ethnic groups didn't try to mix together. | 1 | 2 | 3 | 4 |
| 8. I am not very clear about the role of ethnicity in my life. | 1 | 2 | 3 | 4 |
| 9. I often spend time with people from ethnic groups other than my own. | 1 | 2 | 3 | 4 |
| 10. I really have not spent much time trying to learn more about the culture and history of my ethnic group. | 1 | 2 | 3 | 4 |
| 11. I have a strong sense of belonging to my own ethnic group. | 1 | 2 | 3 | 4 |
| 12. I understand pretty well what my ethnic group membership means to me, in terms of how to relate to my own group and other groups. | 1 | 2 | 3 | 4 |
| 13. In order to learn more about my ethnic background, I have often talked to other people about my ethnic group. | 1 | 2 | 3 | 4 |
| 14. I have a lot of pride in my ethnic group and its accomplishments. | 1 | 2 | 3 | 4 |
| 15. I don't try to become friends with people from other ethnic groups. | 1 | 2 | 3 | 4 |
| 16. I participate in cultural practices of my own group, such as special food, music, or customs. | 1 | 2 | 3 | 4 |
| 17. I am involved in activities with people from other ethnic groups. | 1 | 2 | 3 | 4 |
| 18. I feel a strong attachment towards my own ethnic group. | 1 | 2 | 3 | 4 |
| 19. I enjoy being around people from ethnic groups other than my own. | 1 | 2 | 3 | 4 |
| 20. I feel good about my cultural or ethnic background. | 1 | 2 | 3 | 4 |

APPENDIX E

Causes of Mental Illness

From your experience and personal knowledge, please rate the relative contributions of the following causes for each mental illness commonly found in **children and adolescents** (1 = small contribution, 10 = major contribution)

Attention deficit-hyperactivity disorder (ADHD): Children and adolescents with this disorder are overactive and impulsive and have trouble paying attention (i.e., talks excessively, runs around, cannot sit still, easily distracted) for at least 6 months

	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10
	small contribution									major contribution
1. Chemical imbalances in the brain	1	2	3	4	5	6	7	8	9	10
2. Inherited genes	1	2	3	4	5	6	7	8	9	10
3. Inconsistent parenting	1	2	3	4	5	6	7	8	9	10
4. Social pressure	1	2	3	4	5	6	7	8	9	10
5. Spiritual poverty	1	2	3	4	5	6	7	8	9	10
6. Demonic oppression	1	2	3	4	5	6	7	8	9	10
7. Sin	1	2	3	4	5	6	7	8	9	10
8. Lack of faith	1	2	3	4	5	6	7	8	9	10

Depression: Children and adolescents with this disorder are sad for more than 2 months. They lose interest in things, can be irritable, lose weight, have a loss of energy, cries often, has trouble sleeping and concentrating, feels bad about themselves, and can express a lot of guilt. This disorder interferes with most, if not all, aspects of the child or adolescent's life

	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10
	small contribution									major contribution

1. Chemical imbalances in the brain	1	2	3	4	5	6	7	8	9	10
2. Inherited genes	1	2	3	4	5	6	7	8	9	10
3. Inconsistent parenting	1	2	3	4	5	6	7	8	9	10
4. Social pressure	1	2	3	4	5	6	7	8	9	10
5. Spiritual poverty	1	2	3	4	5	6	7	8	9	10
6. Demonic oppression	1	2	3	4	5	6	7	8	9	10
7. Sin	1	2	3	4	5	6	7	8	9	10
8. Lack of faith	1	2	3	4	5	6	7	8	9	10

Autism: Children and adolescents with this disorder have problems with facial expression, have trouble making eye contact, and have limited or unusual language. They are not able to make friends and have a hard time connecting with others socially and emotionally. They also like routine and structure and do not do well with change.

	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10
	small contribution								major contribution	
1. Chemical imbalances in the brain	1	2	3	4	5	6	7	8	9	10
2. Inherited genes	1	2	3	4	5	6	7	8	9	10
3. Inconsistent parenting	1	2	3	4	5	6	7	8	9	10
4. Social pressure	1	2	3	4	5	6	7	8	9	10
5. Spiritual poverty	1	2	3	4	5	6	7	8	9	10
6. Demonic oppression	1	2	3	4	5	6	7	8	9	10
7. Sin	1	2	3	4	5	6	7	8	9	10
8. Lack of faith	1	2	3	4	5	6	7	8	9	10

Alcohol Abuse: Children and adolescents with this disorder drink alcohol excessively. This causes problems in school, at home, and even with the law (i.e., absent from school, suspension, or expulsion)

+1	+2	+3	+4	+5	+6	+7	+8	+9	+10		
small contribution									major contribution		
1.	Chemical imbalances in the brain	1	2	3	4	5	6	7	8	9	10
2.	Inherited genes	1	2	3	4	5	6	7	8	9	10
3.	Inconsistent parenting	1	2	3	4	5	6	7	8	9	10
4.	Social pressure	1	2	3	4	5	6	7	8	9	10
5.	Spiritual poverty	1	2	3	4	5	6	7	8	9	10
6.	Demonic oppression	1	2	3	4	5	6	7	8	9	10
7.	Sin	1	2	3	4	5	6	7	8	9	10
8.	Lack of faith	1	2	3	4	5	6	7	8	9	10

Anxiety: Children and adolescents with this disorder worry a lot about events or activities. They have a hard time controlling the worry and may have trouble sleeping and concentrating. They may also feel irritable, restless, easily tired, or tense. This occurs for at least 6 months

+1	+2	+3	+4	+5	+6	+7	+8	+9	+10		
small contribution									major contribution		
1.	Chemical imbalances in the brain	1	2	3	4	5	6	7	8	9	10
2.	Inherited genes	1	2	3	4	5	6	7	8	9	10
3.	Inconsistent parenting	1	2	3	4	5	6	7	8	9	10
4.	Social pressure	1	2	3	4	5	6	7	8	9	10
5.	Spiritual poverty	1	2	3	4	5	6	7	8	9	10
6.	Demonic oppression	1	2	3	4	5	6	7	8	9	10
7.	Sin	1	2	3	4	5	6	7	8	9	10
8.	Lack of faith	1	2	3	4	5	6	7	8	9	1

APPENDIX F

Parental Attitudes Toward Psychological Services Inventory (PATPSI)

For each statement below, choose a number from 0 to 5 to indicate how much you agree or disagree.

+0	+1	+2	+3	+4	+5
Strongly disagree					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 would 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 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 were worried or upset for a long period of time.	0	1	2	3	4 5
10. 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 what people might think. 0 1 2 3 4 5
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 were 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 G

Religious Commitment Inventory (RCI-10)

For each statement below, please rate from 1 to 5 how true these items are to you.

+1 Not at all true of me	+2 Somewhat true of me	+3 Moderately true of me	+4 Mostly true of me	+5 Totally true of me
1. I often read books and magazines about my faith.			1 2 3 4 5	
2. I make financial contributions to my religious organization.			1 2 3 4 5	
3. I spend time trying to grow in understanding of my faith.			1 2 3 4 5	
4. Religion is especially important to me because it answers many questions about the meaning of life.			1 2 3 4 5	
5. My religious beliefs lie behind my whole approach to life.			1 2 3 4 5	
6. I enjoy spending time with others of my religious affiliation.			1 2 3 4 5	
7. Religious beliefs influence all my dealings in life.			1 2 3 4 5	
8. It is important to me to spend periods of time in private religious thought and reflection.			1 2 3 4 5	
9. I enjoy working in the activities of my religious organization.			1 2 3 4 5	
10. I keep well informed about my local religious group and have some influence in its decisions.			1 2 3 4 5	

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