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The Stigma of Mental Illness in South Asian Cultures

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Abstract

The stigma of mental illness in South Asian cultures has harmful effects on individuals in these societies (Kishore, Gupta, Jiloha, & Bantman, 2011). The present research examines the influence of cultural values on stigmatizing attitudes of individuals from different ethno-cultural groups, and further examines how these values may be passed on to future generations. Study 1 examined the endorsement of three kinds of stigma (public stigma, onset responsibility, and courtesy stigma) in three ethnic-cultural groups in the United States (South Asians, East Asians and European Americans), and tested the associations of these stigmas with cultural mechanisms (collectivism/individualism; interdependent/independent self-construals). Contrary to predictions, the three ethnic-cultural groups did not differ in their endorsement of public stigma and onset responsibility, however, South Asians were significantly more likely to endorse courtesy stigma than European Americans. Collectivist values were associated with higher stigmatizing attitudes, whereas interdependent self-construals were associated with lower stigma.

Study 2 examined how differences in endorsement of stigma between South Asian American and European American parents may influence the socialization of stigmatizing attitudes in children. Parents' explanations of mental illness to their children were compared across ethnic-cultural groups and across ages of participants' children. Categories of explanations used by parents to explain mental illness to children did not vary across ethnic-cultural groups. However, across cultural groups, parents were more likely to encourage older children to maintain relationships with individuals with mental illness.

Keywords: stigma, culture, socialization, collectivism, self-construals

231 words

Stigma of Mental Illness in South Asian Cultures

Overview

The South Asian population within the United States is over 3.4 million people (South Asian Americans Leading Together [SAALT], 2012) with Indians comprising of 80% of the population followed by 11% Pakistani, almost 4% Bangladeshi and a smaller percentage of Nepalis, Sri Lankans, Bhutanese and Maldivians. The South Asian community has become the fastest growing major ethnic group in the United States with an 81% increase since 2000 (South Asian Americans Leading Together [SAALT], 2012). The rapid growth of the South Asian community is one of the reasons Loya, Reddy and Hinshaw (2010) found the substantial lack of mental illness research in this population so alarming. To contribute to this gap in the literature, the present study examines stigmatizing attributions and beliefs regarding mental illness in this population. Specifically, the present study expands current research by investigating the influence of culture and various cultural values on stigmatizing attitudes of individuals from different ethno-cultural groups, and further examines how these values may be passed on to future generations.

In the present research, Study 1 aims to compare the endorsement of two different types of mental illness stigma - *onset responsibility* and *courtesy stigma* – across South Asian Americans, East Asians Americans and European Americans. We further explore how cultural values of collectivism and interdependent and independent self-construals are associated with endorsement of these stigmas. Study 2 investigates how differences in endorsement of stigma across cultures may influence the parental socialization of stigmatizing attitudes in children. We then test whether the parental socialization of these attitudes vary across cultures and across the age of the participants' children.

General Stigma

Stigma has been defined as "a relationship of devaluation in which one individual is disqualified from full social acceptance" (Thara & Srinivasan, 2000, p. 135). Stigma targets multiple issues in society including physical diseases, homosexuality and especially mental illnesses, ranging from illnesses as severe as schizophrenia to more prevalent ones such as depression. Thara and Srinivasan's (2000) definition of stigma construes stigma as a general phenomenon; however, stigma is far more complex and can be conceptualized into numerous different components. A classic definition by Goffman (1963) adds a unique component to this definition by going beyond the relationship of devaluation between the stigmatized and the stigmatizer and taking into account the characteristic of the stigmatized individual that leads to their devaluation. This characteristic "reduces its bearer from a whole and a usual person to a tainted, discounted one", which is then used to justify the individual's devaluation in society (Jones & Corrigan, 2014, p. 10). These characteristics have been sorted into three categories of stigma elaborated by Goffman (1963): tribal identities, abominations of the body, and blemishes of individual character *(Figure 1)*.

Goffman's categories of stigma classify stigma based on the individual's characteristics that lead to social devaluation. The stigma of tribal identities is a category of negative attitudes that discredit an individual from social acceptance for their race, nation, socio-economic class and religion and is further described as "stigma that can be transmitted through lineages and equally contaminate all members of a family" (Goffman, 1963, p. 4). The second axis, the stigma of the abominations of the body, emphasizes the physical abnormalities and deformities of an individual which allow them to become the target of negative attitudes on sight (Goffman, 1963). Finally, the blemishes of individual character are unseen characteristics such as "weak will,

domineering or unnatural passions, treacherous and rigid beliefs, and dishonesty" which are attributed to individuals with mental illness, alcoholism, addiction and even those who are homosexual or unemployed (Goffman, 1963, p. 4).

Mental Illness Stigma

Stigma of mental illness falls within Goffman's conceptualization of the blemishes of individual character. Goffman notes that individuals who have a "known record of mental disorder" are often attributed negative characteristics such as dishonesty, treachery, for no other reason than the label of mental illness that has been attached to them in society (Crisp, Gelder, Rix, Meltzer, & Rowlands, 2000; Goffman, 1963, p. 4). Jones and Corrigan (2014) further classify mental illness stigma into four categories which add the nuance of situation and consequence to the experience of stigmatization; *public stigma, self-stigma, label avoidance* and *structural stigma*.

Contexts of mental illness stigma. Jones and Corrigan's (2014) four categories of stigma describe unique contexts of the stigma of mental illness and further describe an inherent relationship between these categories in which they not only coexist in society but also feed off of each other. Public stigma is the constant perpetuation of negative stereotypes of mental illness in the public sphere which encourages an environment of discrimination towards individuals with these illnesses. These negative stereotypes include beliefs that individuals with mental illness are unpredictable, violent, or dangerous in some way, and that they hold the responsibility and blame for contracting their illness. These stereotypes translate into negative emotions that are felt toward individuals with mental illness. For example, fear may stem from the dangerousness stereotype, and anger may stem from the blame associated with these individuals. In the public sphere, negative emotions easily become discriminatory behaviors such as

avoidance, where people try to maintain distance from individuals with mental illness due to their fear of danger; segregation, where society is so avoidant of these individuals that they support their complete segregation from the community by placing them in mental hospitals for instance; and coercion, by which they take away agency and decisions from individuals with mental illness by forcing them to receive treatment, take medications and more (Corrigan & Kosyluk, 2014).

The normalization, and even encouragement, of the discrimination of mental illness in the public sphere contributes to the formation of self-stigma, which is described as "the individual's internalization of public stereotypes and the self-discrimination that follows" (Jones & Corrigan, 2014, p. 18). The notion that societal encouragement of stigmatization drives individuals with mental illness to agree with negative beliefs about themselves and even apply these negative attitudes towards themselves is extremely problematic. The endorsement of self-stigma can have a detrimental impact on the individual including "diminished hope, self-esteem, and achievement," which will all further reinforce the individual's devaluation of their own self (Jones & Corrigan, 2014, p. 18).

The internalization of stigma and fear of the discrimination that accompanies it encourage individuals with mental illness to partake in the next type of stigma, label avoidance. Label avoidance is defined as the "process whereby individuals decline or refuse to engage with specific types of services in order to avoid being labeled or stereotyped" (Jones & Corrigan, 2014, p.19). This has a detrimental impact on the individual considering the longer they prolong treatment, the worse their prognosis becomes, and the more their mental illness interferes with their daily activities.

Over time, these attitudes toward mental illness become deeply ingrained in the society leading to the final category of stigma, structural stigma. Structural stigma is defined as "intentional and unintentional private and public institutional rules, regulations and norms that discriminate against individuals with stigmatized conditions" (Jones & Corrigan, 2014, p. 19). The integration of mental illness stigma at the structural level becomes a great disadvantage for people with mental illness who must then overcome institutional discrimination. This institutional discrimination can be evidenced at various levels, including a job market that devalues their contribution, a prison system which imprisons individuals with mental illness disproportionately compared to the general population, and an education system which hinders students with mental illness from achieving their true potential.

Subtypes of Mental Illness Public Stigmas. Jones and Corrigan's (2014) overarching model of mental illness stigma encompasses different subtypes of stigmas within these four categories. Within the categorization of public stigma, there exist two particular forms of stigma that capture the felt experience of negative attitudes towards mental illness in the public sphere: onset responsibility and courtesy stigma (See Fig. 1).

Corrigan and Kosyluk (2014) define onset responsibility as the "blame for originally contracting a disorder…for example, because of some egregious act, the person became exposed to mental illness and absorbed it as a result" (p. 37). Onset responsibility can be explained in part by Weiner and colleagues' (1988) Attribution Theory, which suggests that, unlike physical and sensory disabilities that are perceived as uncontrollable and therefore leading to empathy, mental illnesses are perceived as caused by negligent or irresponsible behaviors. Through this supposition that mental illness is "onset-controllable," Attribution Theory also provides an explanation for the emotional (e.g., fear, anger and pity) and behavioral responses (e.g., altruistic

and discriminatory) to mental illness (Brown, 2008). In sum, blaming the individual for the onset of the disorder contributes to the negative emotions and behaviors that comprise public stigma.

The belief that people with stigmatized illnesses deserve their fate also contributes to the moral model of disability, which explains disability by associating its onset with "sinful and evil thoughts and acts" (Livneh, Chan & Kaya, 2014, p. 95). This set of beliefs perpetuates the stigma of mental illness with its blame on the victim which, in turn, furthers the need for concealment of stigmatizing conditions and internalization of this stigma by the individual. Furthermore, onset responsibility can be attributed to a belief of divine punishment, which stems from the "biblical notion of divine retribution for a sinful mind and behaviors" (Livneh, Chan & Kaya, 2014, p. 95). The notion of divine punishment further smears the reputation and characters of people with mental disorders by labeling them as sinful and untrustworthy individuals "who must be shunned and avoided by others" (Livneh, Chan & Kaya, 2014, p. 106).

Another experience of stigmatization in the public sphere is the discrimination against and isolation of people associated with individuals with mental illness, especially family members. Courtesy stigma refers to the "contagion effect of social stigma from the 'marked' individual to others with whom he or she is related" and due to this association, family members are often victims of the same social devaluation and discrimination experienced by the individual with mental illness (Moses, 2014, p. 248). Many studies have focused on the families of people with serious mental illnesses and have found varying rates of reported courtesy stigma (e.g., Corrigan, Watson & Miller, 2006; Phelan, Bromet, & Link, 1998). In one study of a sample of families of adults with severe and persistent mental illness, 10% to 50% of family members reported experiences of societal discrimination, social isolation, and experiences of other forms of stigma (Corrigan, Watson & Miller, 2006).

Stigmas toward Specific Mental Illnesses. The endorsement of different categories of stigma may also vary by the type of mental illness. People tend to perceive danger more strongly in individuals with schizophrenia compared to those with depression and hold the belief that people with schizophrenia have a worse prognosis than those with depression (Crisp et al., 2000; Norman, Windell, & Manchanda, 2012). Crisp et al. suggest that people tend to perceive individuals with schizophrenia as dangerous because individuals with this disorder may have symptoms which make them behave in way that are dangerous to others and thus, this perception is generalized to all individuals with schizophrenia, even if they do not behave in a dangerous manner (Crisp et al., 2000). However, people tend to place more blame and personal responsibility on an individual with depression than with schizophrenia, perhaps due to the belief of the "weakness of character" of an individual with depression (Norman et al., 2012, p. 71). There is also a greater belief in biological causes of mental illness for schizophrenia as compared to depression (Angermeyer, Matschinger, & Corrigan, 2004; Crisp et al., 2000; Norman et al., 2012). Assessing stigma in terms of social distance, participants maintain more social distance from individuals with schizophrenia than from people with depression; this gap in social distance contributed to factors such as perceived responsibility for illness, prognosis of the illness and belief in biological causes (Norman et al., 2012). Considering these factors of perceived responsibility, prognosis and belief in biological causes all vary by type of illness, the experience of stigma felt by those with depression and those with schizophrenia must also differ.

Mental Illness Stigma and Level of Instruction in Psychology. Previous research suggests that the a person's familiarity with mental illness acts as a buffer to mental illness stigma (Angermeyer et al., 2004). One study found that individuals more familiar with mental illness will be less likely to fear individuals with mental illness, less likely to consider them

dangerous, and less likely to want social distance (Angermeyer et al., 2004). Another study found that familiarity with mental illness was negatively associated with authoritarianism, demonstrating that individuals who were familiar with mental illness were less likely to believe that people with mental illness cannot take care of themselves and so a paternalistic health care system must take care of them (Corrigan, Edwards, Green, Diwan, & Penn, 2001). This finding suggests that individuals who are more familiar with mental illness will be less likely to support the forced treatment of individuals with mental illness. On the other hand, another study showed that adolescents who had more familiarity with mental illness were more likely to endorse mental illness stigma, both attributing greater responsibility to people for the mental illness and viewing them as dangerous (Corrigan, Lurie, et al., 2005). The authors speculated that this counterintuitive relationship between familiarity with mental illness and stigma may be due to the type of contact the adolescents have had with individuals with mental illness reinforcing mental illness stereotypes rather than challenging them (Corrigan, Lurie, et al., 2005).

Mental Illness Stigma and South Asian Culture

Although the existence of the stigma toward mental illness is accepted and well-researched (Corrigan, 2014; Hinshaw, 2007), the cultural context in which this stigma occurs is often overlooked. Although mental illness stigma is a global phenomenon (Rao & Valencia-Garcia, 2014, p. 284), it is ultimately an individual experience that occurs between the stigmatized individual and the stigmatizer, both of whom are heavily influenced by a set of cultural ideals and beliefs (Markus & Kitayama, 2010). Thus, the experience of stigma cannot be analyzed without placing it into a cultural context. The following sections discuss how three different dimensions of stigma discussed previously- label avoidance, public stigma, onset

responsibility and courtesy stigma (Corrigan & Kosyluk, 2014; Jones & Corrigan, 2014; Moses, 2014) – may be particularly relevant in the South Asian cultural context.

Label Avoidance in South Asian Culture. Due to the taboo of mental illness in South Asia (Kishore, Gupta, Jiloha, & Bantman, 2011) and the strong emphasis on public honor or "*izzat*" in South Asian society (Weston, 2003), label avoidance can be commonly encountered in the population, often with harmful negative consequences. South Asian societies tend to be communal (Triandis, 1995) and therefore, the social status and image one portrays to the community is given utmost importance. In order to uphold the perfect image in a collectivist society, any stigmatizing characteristics are likely to be repressed and hidden from public view. Amri and Bemak (2012) confirm the importance of public image as a major contributor to mental illness stigma by arguing that some cultures, Muslim countries such as Pakistan and Bangladesh in particular, "believe that admitting to having a mental health problem is a form of loss of face and shameful" (p. 50).

The fear of losing face in South Asian communities or becoming an outcast in the community has been shown to be a valid concern. In their research on attitudes prevalent in South Asian communities towards interacting with people with mental illness, Ahmad, Macaskill and Tabassum (2000) found, for example, that people were willing to interact on a superficial level but none of the sample would consider marriage, less than a quarter would consider a close relationship and less than half would be prepared to socialize. The feeling of shame in being associated with mental illness contributes to the existence of label avoidance and may further act as a deterrent to treatment. Knowing the repercussions of being labeled mentally ill, such as being outcast by the community, individuals with mental illness "refrain from seeking services that would be helpful" or discontinue treatment often against the advice of a medical or

psychiatric professional in a process sometimes referred to as nonadherence (Corrigan & Kosyluk, 2014, p. 40).

Due to this negative attitude towards mental illness in South Asian communities, mental health help is often not considered by the majority of South Asians (Suhail, 2005). This negative perception of mental illness has a detrimental effect not only on people in need of mental health treatment but also extends to people already seeking treatment. As argued by Corrigan and Kosyluk (2014), in order "to avoid labeling, some people refrain from seeking services that would be helpful, or they do not continue to use services once initiated" (p. 40). This cessation of treatment does not bode well for the individual themselves or family members who are also affected by the illness of their relative.

Although the practice of label avoidance is common due to stigma of mental illness throughout the world, it is particularly salient in South Asian cultures, both in South Asia itself and the South Asian diaspora. For example, hospitalization for mental illness in a Pakistani community in the United Kingdom was seen as a last resort and only when the family themselves could not cope any longer with the patient and their significant behavior changes (Ahmad et al., 2000, p. 176). Furthermore, the social stigma associated with being a mental patient is one of the largest contributors to this avoidance of hospitalization or even outpatient treatment (Ahmad et al., 2000). In support of Ahmad et al.'s findings, in their study of the Muslim immigrant community in the United States, Amri and Bemark (2012) found reluctance to seek treatment stemming from the "fear of being stigmatized and outcast in their communities" (p. 50).

Public Stigma in South Asian Cultures. A number of studies provide support for public stigma in South Asian cultures. One study conducted in Singapore compared the Malay, Chinese and Indian ethnic groups in Singapore, finding that the Indian group was significantly more

likely than the Chinese group to agree that the public needed to be protected from individuals with mental illness suggesting a cultural influence on the prevalence of discrimination (Chong et al., 2007). This study further demonstrated that 38% of their sample believed individuals with mental illness are dangerous, around 20% believed people with mental illness are to blame for their own condition and almost 50% believed the public should be protected from them (Chong et al., 2007). Although the sample was not entirely South Asian, the similar cultural values of these three ethnic groups give us a greater insight into how public stigma is endorsed in these populations. These results depict not only the existence of the negative stereotype of dangerousness and blame, but also discrimination in the form of feeling like the public needs to be "protected" from these individuals which can be in the form of segregation and coercion.

Similarly, another study found that in many developing countries in Asia, there is a general fear of people with mental illness, and they are "regarded as a danger which should be kept out of the community" (Lauber & Rössler, 2007, p. 171). Another discussion of the stigma of mental illness in India accounted extensively for the tendency to avoid individuals with mental illness and to reject them from society (Wig, 1997). Wig further cites assumption of violence and danger from individuals with mental illness as the "strongest prejudice against mental illness" and explains that the Indian public uses this assumption of danger as a justification of their "fear and rejection of people labeled mentally ill" and "attempt to segregate them in the community" which portrays how serious the issue of public stigma is in the Indian context, and more broadly, South Asia (1997, p. 188). This perpetuation of negative stereotypes regarding mental illness, and resulting discriminatory attitudes, leads to serious social disadvantages for individuals with mental illness with serious consequences, including being denied jobs, being forcefully

hospitalized for their illness, being arrested for behaviors they cannot control while "actively psychotic" and often times homelessness (Corrigan & Kossyluk, 2014).

Onset Responsibility in South Asian Cultures. Previous research suggests that onset responsibility, the blame placed upon an individual with mental illness for acquiring a disorder, may be expressed in a number of different ways in South Asian cultures. Divine punishment demonstrates the prevalence of lay theories regarding the onset of mental disorders including attribution of mental illness to supernatural causes in South Asia. Amri and Bemak (2012), for example, claim that "the belief that mental problems are attributed to a lack of faith, spirit possession, bad karma, and the evil eye is strongly ingrained in many non-Western cultures" (p. 50). The method of treatment for mental illnesses commonly sought in South Asia also alludes to the belief in supernatural causes. Suhail (2005) found in a study of mental health literacy in Pakistan that many people considered hakims and homeopaths (4.22%), magical (13.11%) and religious healers (13.54%) to be the appropriate people to contact for the treatment of mental disorders such as psychosis and depression. The common use of traditional healers for serious mental disorders implies that the sample of Pakistanis who utilized these remedies attribute such conditions to supernatural, magical or religious, causes. Furthermore, the religious implications of the belief in religious or supernatural causes of mental illness are that the "individual with mental health problems is viewed as 'crazy', someone who has lost their faith in God or has lost their way" (Amri & Bemak, 2012, p. 50).

Interestingly, some of these supernatural causes of mental illness take the blame away from the individual with the condition and place it on higher beings or other people. For example, the belief in the evil eye (nazar) is frequent in South Asian cultures in which illness is believed to be caused by the jealous or malevolent glance of another person (Dein & Sembhi,

2001). Therefore, when mental illness is believed to have been caused by the evil eye, the blame is removed from the individual with the condition to the other person who looked with the malevolent gaze. Similarly, attributing the illness to magical sources such as black magic also removes the blame from the individual and makes them the victim of others' malicious intent. In this context, the individual with the condition is viewed as the victim and people may empathize with them. However, this pity for individuals with mental illnesses is not entirely positive because although there is less blame on the individual, seeing them as not responsible for the condition also implies they are helpless to recover from it, as they have no agency in the matter (Roe, Lysaker & Yanos, 2014). This perpetuates what is called benevolence stigma, the stigma by which individuals with mental illness are viewed as pitiable and perceived as incapable of making their own life decisions and in need of a "benevolent authority who can make decisions for them" (P. W. Corrigan, Watson, Byrne, & Davis, 2005, p. 365). Furthermore, taking away the individual's agency by viewing them as helpless or pitiful reduces their empowerment which is detrimental for their recovery from their condition (Roe, Lysaker & Yanos, 2014).

Courtesy Stigma in South Asian Cultures. South Asian cultures are considered collectivistic due to the emphasis on family as central to society. In contrast to many Western countries, families often live together and the definition of family usually extends beyond immediate family to the point where extended family is as close and valued as immediate family. Due to this tight-knit family dynamic, each family member is influenced greatly by the struggles of another. People with mental illness, especially in collectivist societies, often depend on their families for emotional and practical support which, in turn, involves the family into their struggle against mental illness. However, the difficulties shared by the individual and their family does not just include the illness itself but also the societal response which comes in the form of

stigma. The inclusion of the family in the experience of stigma from the community is a global reality referred to as courtesy stigma.

Courtesy stigma often stems from the lay theories in cultures which allude to contamination by association. In Chinese and Indian societies, for example, "lay theories allude to the belief that family members of persons living with mental illness become socially contaminated" (Rao & Valencia-Garcia, 2014, p. 287). The fear of social exclusion due to courtesy stigma compels family members to conceal the condition and its symptoms from the view of the public. One study found that almost 40% of families either told no one about the hospitalization of their relative for mental illness or limited this information to a tight circle of close friends and family (Phelan, Bromet, & Link, 1998, p. 120).

The concealment of the stigmatized condition can be attributed to multiple reasons. Firstly, due to an internalization of the courtesy stigma the family experiences in society, family members have negative thoughts about the individual with the condition and are embarrassed to be associated with them (Moses, 2014). On the other hand, concealment of the condition may also be a practical step to protect the family from discrimination and abuse in a stigmatizing society although they themselves do not endorse similar stigmatizing attitudes (2014). Regardless of the motive, concealment can have negative consequences on family members and their family dynamics due to the stress and isolation they experience (Moses, 2014).

We have established that family members are negatively affected by courtesy stigma due to their association with a person with mental illness, but the actual extent of this effect on all aspects of the family's lives is quite extensive. Parents are often blamed for the onset of the stigmatizing condition which has shifted, with the increase in biological discourse, to blame for not handling the condition properly (Moses, 2014). Moreover, the family members often feel

stigmatized by mental health professionals trying to uncover the cause of the condition by inquiring about early childhood relationships or traumas. This stigma experienced from mental health professionals is common based on the finding that "professionals are indeed more likely than family members themselves to attribute responsibility for the onset of the disorder or its poor management to family members' behavior" (Moses, 2014, p. 250). Parents are especially blamed for causing the stigmatizing condition when heredity is believed to be the cause of onset.

Although the biological explanation of "bad genes" contributes to placing less blame on the family by the community (Moses, 2014), this genetic explanation also contributes to stigmatizing of siblings and children of the individual with the stigmatized condition. Siblings and children are considered "genetically contaminated" and the children are often viewed as "damaged goods" (Moses, 2014). Due to these negative perceptions, siblings and children of the stigmatized individual are socially isolated which has detrimental consequences on important aspects of their lives including employment and marriage. Marriage of the patient or others in the family is another way by which South Asian caregivers of patients with mental illness experience stigma (Thara & Srinivasan, 2000). The custom of arranged marriage is partly responsible for this effect due to the process in which "families examine the prospective bride or groom and their families for any undesirable characteristics, such as leprosy or mental illness" (Van Brakel & Miranda Galarza, 2014, p. 143). Being perceived as genetically contaminated automatically jeopardizes a person's marriage prospects in society which can further perpetuate internalized stigma.

Cultural Values, Self-Construals, and Mental Illness Stigmas.

Although much research has supported the existence of mental illness stigma in South Asian cultures, little research has compared the endorsement of stigma across cultures and

examined the different cultural mechanisms that may explain these stigmas. The endorsement of different types of stigmas is situated within a greater context of cultural norms and societal values. Two cultural mechanisms which may be particularly relevant to the endorsement of different stigma in South Asian cultures, and comparable endorsement of stigma in East Asian cultures, are the societal values of collectivism and individualism, and interdependent and independent self-construals.

Prior literature has explored the individualism-collectivism paradigm as a factor influencing stigmatizing attitudes in different cultures. Papadopoulos, Foster and Caldwell (2013) found that high stigmatizing attitudes were positively correlated with collectivism whereas low stigmatizing attitudes were correlated with individualism. Triandis (1989) suggests that since in-group goals are given greater importance in collectivist cultures, the spread of negative attitudes towards mental illness amongst in-group members in collectivist societies is also greater (Papadopoulos, Leavey, & Vincent, 2002). Furthermore, cultural norms shape societal attitudes, particularly in Asian cultures where societal values of conformity to norms encourage members to devalue and stigmatize anything that is considered outside of the norms, namely mental illness (Abdullah & Brown, 2011).

Similarly, in association with collectivist values, independent and interdependent self-construals may also have an influence on endorsement of stigmatizing attitudes. In collectivist societies, individuals tend to define themselves in relation to other members of their community which is identified as interdependent self-construals (Shea & Yeh, 2008). Asian Americans tend to have interdependent self-construals whereas European Americans tend to have independent self-construals, in which they define themselves in terms of their own internal traits (Okazaki, 1997).

Research has found that this conceptualization of the self may have an impact on mental health help-seeking attitudes. Yeh and colleagues (2002, 2008) found that interdependent self-construals were highly associated with more positive attitudes towards help-seeking. Although interdependent self-construals have a positive impact on help-seeking behaviors of individuals with mental illness, they may also play a role in increasing stigmatizing attitudes towards individuals with mental illness. A study on people with HIV in Beijing and Hong Kong found that employers were likely to refrain from hiring individuals with HIV in order to "maintain workplace harmony" which they suggest is a "reflection of society's collectivistic tendencies and interdependent self-construals" (Rao, Angell, Lam, & Corrigan, 2008, p. 1548).

In this paper we look at how collectivist values and interdependent and independent self-construals may have an impact on the endorsement of the stigma of mental illness, particularly courtesy stigma, among South Asian Americans, East Asian Americans and European Americans. Although the majority of the literature we reviewed conflates South Asians Americans and East Asian Americans into one category as Asian or Asian-American, the present study explores the differences in the cultural mechanisms across these two groups and how they may differently influence stigmatizing behaviors.

Socialization of Mental Illness Stigma

In addition to identifying cultural mechanisms associated with the endorsement of mental illness stigma, it is also important to examine how stigmatizing attitudes are transmitted across generations. Parents are key players in shaping children's biases at a young age (Priest et al., 2014). Although there is limited research investigating the parental socialization of mental illness stigma in children, it is possible to draw comparisons with parental socialization processes of other stigmatizing attitudes, such as racial and ethnic stigma. Ethnic-racial socialization is the

"process by which children discuss and learn about racism and diversity" (Priest et al., 2014, p. 140). These processes may be "both verbal and non-verbal messages about the meaning and significance of race and ethnicity; racial and ethnic group membership and identity; racial and ethnic stratification; and intergroup and intragroup interactions" (Priest et al., 2014, p. 140). Parents' socialization of children may come in many different forms, such as modeling, discussion, actions and explicit statements (Hamm, 2001). These forms of socialization may also vary across cultures: African American parents tend to use the form of discussion to help their children understand issues of race whereas White parents may tend to transmit their attitudes towards race by the means of modeling and explicit statements (Hamm, 2001). Understanding how forms of socialization vary across ethnic-cultural groups is important in order to understand how different ethnic-cultural groups may socialize the stigma of mental illness differently and how this would impact the type of stigmatizing attitudes ingrained into a child. In the present study, we will assess socialization in the form of parents' explicit statements in response to open-ended questions about individuals with mental illness.

One study found that parents' ethnic-racial attitudes have a strong influence on children's implicit and explicit ethnic-racial attitudes (Sinclair, Dunn, & Lowery, 2005). Children were significantly more likely to adopt more prejudicial attitudes such as attributing more positive characteristics to white children and preferring white playmates to black playmates. Other research suggests that parents may also socialize positive ethnic-racial attitudes. In a study by Aboud and Doyle (1996), white mothers with less prejudicial views towards black people had children with less biased ethnic-racial attitudes. This research indicated that parents not only play a significant role in transmitting their own ethnic-racial prejudices into their children at a young age but also have the ability to socialize positive ethnic-racial views into their children at a

young age. Applied to the present study, it is possible that parents play a key role in socializing their own stigmatizing attitudes of mental illness into children throughout early childhood, and that their negative attitudes result in negative attitudes endorsed by their children.

It is also important to explore at what age parents are most likely to socialize their discriminatory attitudes towards mental illness in their children. Although there is little research on the socialization of attitudes towards mental illness in children at different stages of childhood, the likelihood that these socialization processes occur may be inferred by children's different attitudes towards mental illness at different ages. Children in different age ranges conceptualize mental illness, its causes and consequences differently. Younger children (6-7 years) tend to rely on their knowledge of physical illnesses like the common cold to conceptualize mental illness, whereas older children (10-11 years) have distinctly different conceptualizations of mental illness and physical illness (Fox, Buchanan-Barrow & Barrett, 2010). More specifically, younger children use their knowledge of physical illnesses to conceptualize the cause (e.g., "she caught it") and consequences/cures of mental illness (e.g., "see a doctor") suggesting a biomedical understanding of mental illness. On the other hand, older children are capable of distinguishing the conceptualization of physical illness from mental illness in both the causes (e.g., "it's to do with how she thinks and feels") and consequences/cures (e.g., "have therapy") (Fox, Buchanan-Barrow, & Barrett, 2010). The different conceptualizations of mental illness in children are likely to influence children's attitudes towards mental illness. Fox et al. (2010) claim that children as young as 6 to 7 years old have been found to hold negative attitudes towards individuals with mental illness. Adler and Wahl (1998) found that children in the third-grade hold more negative perceptions such as

dangerousness, stupidity, badness and helplessness towards individuals with mental illness than to those with physical disabilities or no disabilities.

Children's attitudes towards individuals with mental illness likely change over the formative years of childhood. In a longitudinal study by Weiss (1994), children's emotions (e.g., fear, distrust and dislike) towards individuals with mental illness were evident by kindergarten and remained stable over time. However, a prior study by the same author suggested that stigmatizing attitudes in children decreased as they grew older: children have a less authoritarian attitude towards individuals with mental illness over time, see them more similar to themselves, increased in benevolence such that they were more willing to help mental patients and even viewed them as less of a threat to society (Weiss, 1985). This study found a developmental effect of stigmatizing attitudes between Grades 2 and 4 in a more positive direction and found that stigmatizing attitudes become relatively stable between Grades 6 and 8 (Weiss, 1985). Based on these findings, the present study assessed parents of children in these age ranges (between Grades 2-4 and Grades 6-8) and tested whether the parental socialization of attitudes towards mental illness at different ages are parallel to the ages in which children develop and alter their attitudes towards mental illness as indicated by previous research.

The Present Research

Two studies were conducted to examine stigma towards mental illness in South Asian Americans. East Asian American, and European American adults (Study 1) and the socialization of these stigmatizing attitudes by South Asian American and European American parents with their children (Study 2).

Study 1

The first study (Study 1) investigated the endorsement of public stigma, onset responsibility and courtesy stigma in South Asian Americans, East Asian Americans and European Americans, and examined the relationship between onset responsibility and public stigma. Furthermore, we examined how different cultural values of collectivism and self-construals are associated with these stigmatizing attitudes. Finally, in an effort to address possible preventative measures of stigma, Study 1 examined whether the endorsement of stigma varied by the level of instruction in psychology.

The hypotheses for Study 1 were as follows. First, we hypothesized that South Asian American, East Asian American and European American participants would vary in their endorsement of both onset responsibility and courtesy stigma. Due to South Asian Americans' causal attributions of mental illness, including supernatural causes and the evil eye, we hypothesized that South Asian Americans would endorse onset responsibility the least of the ethnic-cultural groups. However, due to the collectivistic nature of South and East Asian societies and the important role familial association plays in each aspect of an individual's life including employment and marriage, we hypothesized that these groups would endorse courtesy stigma more than the European American group. Consistent with Attribution Theory, we predicted onset responsibility would be positively associated with public stigma. We also hypothesized that an endorsement of collectivist values and interdependent self-construals would be positively associated with courtesy stigma in particular. Furthermore, in all participants, we expected that stigma would be greater towards individuals with schizophrenia compared to those with depression. Finally, we hypothesized that participants' levels of instruction in psychology would be associated with both lower onset responsibility and lower courtesy stigma.

Method

Participants. Study 1 consisted of 175 participants; 52 South Asian American, 52 East Asian American, 61 European American, 3 African-American, 5 Hispanic, 2 South-East Asian and 1 Middle-Eastern participant, one participant that identified as Tanzanian, and one participant that identified as Asian-American without specifying further. 55.4% of participants identified as female and 51.2% identified as male. Participants included Wellesley College students and members of the broader community with a mean age of 20.4 years (standard deviation 2.22 years, min age 18 and max age 33). Participants were either compensated $5 for completion of the half-hour study (39.2% of participants) or given psychology course credit for Wellesley College 100- and 200- level courses (60.8% of participants).

RAF approval was obtained from the Wellesley College Psychology Department Ethics Committee, and IRB approval was obtained from the Wellesley College Institutional Review Board to recruit participants from the greater community beyond Wellesley. Data collection began in Fall 2014 and continued until February of Spring 2016. In Fall 2014 and Spring 2015, students from 100- and 200- level psychology courses were recruited for research participation credit, and in Spring 2015 the study was expanded to recruit South Asian American students from cultural organizations on campus via email. The participants from cultural organizations responded to the researcher's recruitment email expressing interest in participating and were sent the Qualtrics link to the study as an email. In Fall 2015 and Spring 2016, participants were recruited from online social media platforms, where the researcher posted a description of the study with the online link to her personal Facebook account which was shared by friends to their personal Facebook pages, and also from online recruitment through Amazon Mechanical Turk.

Materials. The materials for the current experiment consisted of six scales assessing demographic information, causal attributions of mental illness, onset responsibility, and endorsement of courtesy stigma, collectivist values and participants' independent or interdependent self-construals. These scales included a demographics questionnaire designed for this study, the Attribution Questionnaire-27 (Corrigan et al., 2002), the Revised Causal Dimension Scale (McAuley, Duncan & Russell, 1992), the Family Stigma Survey (Corrigan, Watson & Miller, 2006), Asian Values Scale (Kim & Hong, 2004), and the Singelis Self-Construal Scale (Singelis, 1994). The stimuli for this study were compiled into one online Qualtrics survey.

Attribution Questionnaire (Corrigan et al, 2002). Participants responded to 27 statements on a 9-point Likert scale based on a brief vignette about a character with mental illness. The Attribution Questionnaire was presented twice to participants. First, with the vignette character Harry, an individual diagnosed with schizophrenia, and then Jason, an individual diagnosed with depression. The vignettes described the character's age, occupation and living situation, and the prominent symptoms of schizophrenia, hearing voices and having been hospitalized several times, or depression, losing interest in activities he used to enjoy and having suicidal thoughts. The 27 statements address public stigma, assessing different stigmatizing behaviors towards individuals with mental illness including blame (e.g., "I would think that it is Jason's own fault that he in the present condition"), anger (e.g., "I would feel aggravated by Jason"), pity (e.g., "I would feel pity for Jason"), help (e.g., "I would be willing to talk to Jason about his problems"), dangerousness (e.g., "I would feel unsafe around Jason"), fear (e.g., "Jason would terrify me"), avoidance (e.g., "I would share a car pool with Jason every day"), segregation (e.g., "I think it would be best for Jason's community if he were put away in a psychiatric hospital") and coercion

(e.g., “If I were in charge of Jason's treatment, I would force him to live in a group home”). Participants were asked to rate the extent of their agreement with these statements on a 9-point Likert scale (1=“Not at All”; 9=“Very Much”). Scores on the Attribution Questionnaire-27 (Corrigan et al, 2002) were computed using the mean of three items per subscales which consisted of blame, anger, pity, help, danger, fear, avoidance, segregation and coercion for a vignette about schizophrenia and a vignette about depression. All subscales in both the schizophrenia version (Table 1a) and the depression version (Table 1b) had acceptable reliability except for the Coercion subscale. These nine subscales to the Attribution Questionnaire-27 (Corrigan et al. 2002) were aggregated into six factors based on a previous factor analysis of the scale (Brown, 2008). These factors consisted of Fear/Dangerousness, Help/Interact, Responsibility, Forcing Treatment, Empathy and Negative Emotions. All of the factors, including the schizophrenia version (Table 1a), the depression version (Table 1b) and the combined subscales (Table 1c), had acceptable reliability in our sample and thus were used for all further statistical analyses.

The causal attributions of mental health are reflected in the Responsibility subscale which assessed participants’ belief that individuals with mental illness are responsible for the onset of their illness. Strong endorsement of these causal attributions of mental health are an indication of the strong endorsement of one of the types of stigma of interest; onset responsibility, the stigma blaming individuals for originally contracting their disorder. The remaining factors of the Attribution Questionnaire- Fear/Dangerousness, Help/Interact, Forcing Treatment, Empathy and Negative Emotions- are all measures of the endorsement of another type of stigma of interest; public stigma, the negative stereotypes and discriminatory behaviors enacted towards an

individual with mental illness in the public sphere. These factors reflect different attitudes and behaviors which are reflective of public stigma.

Family Stigma Survey. (Corrigan, Watson & Miller. 2006) Participants were presented with seven statements which they rated on a 7-point Likert scale based on a brief vignette describing the mother of an individual with mental illness. The Family Stigma Survey was presented twice to participants with Janet, the mother of Frank who has been diagnosed with schizophrenia, presented first and Anna, the mother of Paul who has been diagnosed with depression, presented second. The Family Stigma Survey assesses participants' stigmatizing beliefs regarding the family members of an individual with mental illness (e.g., "Janet bears some responsibility for Frank originally getting ill"; "I would not want to socialize with Anna"). Participants rated their agreement with each statement on a 7-point scale (Strongly Disagree; Disagree; Somewhat Disagree; Neither Agree nor Disagree; Somewhat Agree; Agree; Strongly Agree). The score on the Family Stigma Survey was computed using the mean of all seven items on the scale. Two Family Stigma Surveys were administered for a vignette character with schizophrenia and the other with depression. Therefore, the Family Stigma Survey was scored as Family Stigma Survey- Schizophrenia and Family Stigma Survey- Depression, and a mean score of the two was calculated for the overall Family Stigma Survey score which was used in analysis. Family Stigma Survey Schizophrenia and Family Stigma Survey Depression both had acceptable reliabilities (Table 2).

Revised Causal Dimension Scale (McAuley, Duncan & Russell, 1992). The Revised Causal Dimension Scale consists of 12 items assessing participants' beliefs regarding the causes of mental illness. Participants were presented two opposing statements (e.g., "mental illness is something stable over time" or "mental illness is something variable over time"; "mental illness

is something that reflects an aspect of the individual" or "mental illness is something that reflects an aspect of the situation") and rated the extent of their agreement on a 9-point scale between the opposing statements with the closer they rated to a statement, the more they agreed with it. Four dimensions of participants' beliefs of the causality of mental illness are addressed in this survey; the locus of causality subscale reflects the degree to which a participant believes mental illness reflects an aspect of the situation rather than the self (e.g., "mental illness is something inside of you" or "mental illness is something outside of you"), external control subscale reflects the degree to which a participant believes mental illness is not under the control of other people rather than believing it is under other's control (e.g., "mental illness is something under the power of other people" or "mental illness is something not under the power of other people"), the stability subscale which reflects the degree to which participants believe mental illness is temporary as opposed to permanent (e.g., "mental illness is something unchangeable" or "mental illness is something changeable") and finally, personal control which reflects the degree to which a participant believes individuals with mental illness have no control over their mental illness as opposed to having control (e.g., "mental illness is something you can regulate" or "mental illness is something you cannot regulate"). The score on the Causal Dimension Scale was computed using the sum of the three items in each subscale which consisted of locus of causality, external control, stability and personal control. Only the external control and personal control subscales had acceptable reliabilities (Table 3). The locus of causality and stability subscales were removed from further analyses due to low reliability.

Asian Values Scale. The Asian Values Scale (Kim & Hong, 2004) was used to assess participants' endorsement of the cultural mechanisms, collectivism and individualism. A total

score for the Asian Values Scale was computed using the sum of all 25 items, 12 of which were reverse scored. The Asian Values Scale had an acceptable reliability (Table 2).

Singelis Self-Construal Scale. The Singelis Self-Construal Scale (Singelis, 1994) was used to assess participants' endorsement of the cultural mechanisms, interdependent and independent self-construals. The Singelis Self-Construal Scale consists of 25 items assessing participants' independent (e.g., "I act the same way no matter who I am with"; "My personal identity independent of others, is very important to me") or interdependent (e.g., "I have respect for authority figures with whom I interact"; "I will sacrifice my self-interest for the benefit of the group I am in") self-construals. Participants were asked to rate the statements on a 7-point Likert scale (1= Strongly Disagree; 7=Strongly Agree). The Asian Values Scale consists of 26 items assessing participants' collectivist values (e.g., "One should not deviate from familial and social norms"; "One should consider the needs of others before considering one's own needs"). Participants were asked to rate each item on a 4-point Likert scale (Strongly Disagree; Disagree; Agree; Strongly Agree). Finally, the overall score on the Singelis Self-Construal Scale was computed by calculating a score for interdependence and independence for each participant. The mean of 12 items was used to calculate the interdependence score, and the mean for another 12 items was used to calculate the independence score. Both Singelis- Independence and Singelis-Interdependence had acceptable reliabilities (Table 2).

Procedure. All participants completed the study entirely online on a Qualtrics survey. Surveys completed required a maximum of 30 minutes per session, although participants were free to take as much time as needed in order to complete the study. In each session, participants were taken to a page with the demographics questionnaire immediately after giving consent to participate in the study. Once participants had completed each measure, they were taken to a new

page with the next measure. All participants received the same order of presentation of the measures. Following the completion of the survey measures, participants were automatically redirected to a new page where they entered their name and email address for compensation purposes. Identifying information was not linked to the main survey responses in order to maintain the anonymity of the survey responses and information entered for compensation purposes was kept confidential.

Results

Participants' survey responses were downloaded from the online Qualtrics survey and their survey responses were checked for validity using two catch items, one in the Singelis Sel-Construal scale asking participants to choose "Disagree" and one in the Asian Value Scale asking participants to leave it blank. 13 participants were removed from data analysis due to having either chosen the wrong option for the "Disagree" catch item or having filled both catch items incorrectly. Participants with just the blank catch item incorrect were kept in the data since many participants had clicked an option accidentally and were unable to undo it due to the Qualtrics format.

Attribution Theory. In order to test the hypothesis that, based on the Attribution Theory, onset responsibility would be positively associated with public stigma, zero-order correlations examined the relations between causal attributions of mental health, as measured by the Responsibility factor on the Attribution Questionnaire-27, and the endorsement of public stigma, as measured by the Fear/Dangerousness, Help/Interact, Forcing Treatment, Empathy and Negative Emotions factors of the Attribution Questionnaire-27 (Table 4). There was a significant relationship between responsibility and the fear/dangerousness factor, $r = .45$ $p < .001$, suggesting that the more responsibility placed on an individual with mental illness for the onset

of their illness the more likely the participant is to fear them and believe they are dangerous. Similarly, responsibility had a significant positive correlation with forced treatment, $r = .47$, $p < .001$, and negative emotions, $r = .59$, $p < .001$, suggesting that individuals who blame an individual with mental illness for the onset of their illness also tend to support them to be forcefully treated, and have more negative emotions for them including anger, annoyance and irritation. Similarly, responsibility has a significant negative correlation with help/interact, $r = -.21$, $p < .001$, and empathy, $r = -.35$, $p < .001$, suggesting that participants who blame individuals with mental illness are less likely to help and interact with individuals with mental illness, and even less likely to have empathy for them.

Onset Responsibility by Ethnicity. To test the hypothesis South Asian Americans would endorse onset responsibility the least of the three ethnic-cultural groups, three one-way analyses of variance comparing causal attributions of mental health across the South Asian American, East Asian American and European American groups were conducted. Before conducting the one-way ANOVAs and t-tests, three participants who identified as multi-ethnic were removed from analysis in order to maintain the Independent Samples assumption of the one-way ANOVA. A one-way between-group analysis of variance (ANOVA) was conducted to compare the effect of ethnic-cultural group on causal attributions of mental illness to external control in the South Asian American, East Asian American and European American groups. There was no significant effect of ethnic-cultural group on attributions of mental illness to external control, $F(2, 156) = 1.10$, $p = .335$, suggesting that the three different ethnic-cultural groups do not vary significantly in their attributions of mental illness to the control of other people. Furthermore, another one-way between-group ANOVA was conducted to compare the effect of ethnic-cultural group on causal attributions of mental illness to personal control in the

South Asian American, East Asian American and European American groups. Once again, there was no significant effect of ethnic-cultural group on attributions of mental illness to personal control, $F(2, 156) = .36$, $p = .699$, suggesting that the three different ethnic-cultural groups do not vary significantly in their beliefs of whether mental illness is manageable by the individual themselves. Finally, a one-way between-group ANOVA was conducted to compare the effect of ethnic-cultural group on responsibility placed on the individual with mental illness in the South Asian American, East Asian American and European American groups. There was no significant effect of ethnic-cultural group on responsibility placed on the individual with mental illness, $F(2, 156) = 1.84$, $p = .163$.

Courtesy Stigma by Ethnicity. To test the hypothesis that South Asian American and East Asian American groups would endorse courtesy stigma more than the European American group, another one-way between-group ANOVA was conducted to compare the effect of ethnic-cultural group on endorsement of courtesy stigma in the South Asian American, East Asian American and European American groups. There was a significant effect of ethnic-cultural group on endorsement of courtesy stigma, $F(2, 156) = 3.57$, $p = .031$, suggesting that levels of endorsement of courtesy stigma varied by ethnic-cultural groups. Post-hoc comparisons using the Games-Howell test indicated that the mean score of courtesy stigma for the South Asian American group ($M = 2.38$, $SD = 1.01$) was significantly higher ($p < .05$) than the European American group ($M = 1.19$, $SD = .99$). However, the mean score of courtesy stigma for the East Asian American group ($M = 2.22$, $SD = .97$) did not differ significantly from both the South Asian American group ($M = 2.38$, $SD = 1.01$) and the European American group ($M = 1.19$, $SD = 0.99$). The suggests that South Asian Americans tend to endorse courtesy stigma more often than European Americans, whereas East Asian Americans do not differ significantly in their levels of

endorsement from both South Asian Americans and European Americans. Table 2 shows the mean score of participants on the Family Stigma Survey in each ethnic-cultural group.

Gender as a Covariate. Since most females in the sample (55.4%) were students at the same all-women's college, and all males were recruited from other colleges or through Amazon Mechanical Turk, an analysis of covariance (ANCOVA) was conducted with gender added as a covariate. Adding gender as a covariate did not change the group means. A one-way ANCOVA was conducted to determine the difference between South Asian Americans, East Asian Americans and European Americans groups in their endorsement of courtesy stigma controlling for gender. There was still a significant effect of ethnic-cultural group on endorsement of courtesy stigma after controlling for gender, $F(2, 173) = 3.5$, $p < .05$. A one-way ANCOVA controlling for gender was conducted to examine difference between South Asian Americans, East Asian Americans and European Americans groups in their causal attributions of mental illness to external control. There was no significant effect of ethnic-cultural group on the causal attributions to external control after controlling for gender, $F(2, 173) = 1.12$, $p = .329$. A one-way ANCOVA was conducted to determine the difference between South Asian Americans, East Asian Americans and European Americans groups in their causal attributions of mental illness to personal control controlling for gender. There was no significant effect of ethnic-cultural group on causal attributions to external control after controlling for gender, $F(2, 173) = 0.371$, $p = .691$.

Courtesy Stigma with Collectivist Values and Interdependent Self-Construals. Zero-order correlations were conducted to examine associations between collectivist values, interdependent self-construals with the endorsement of courtesy stigma (Table 5). Collectivist values and interdependent self-construals were positively correlated, $r = .27$, $p < .001$, suggesting that the more collectivist values an individual has the more likely they are to have

interdependent self-construals. As hypothesized, collectivist values were positively correlated with the endorsement of courtesy stigma, $r = .17$, $p < .05$, suggesting the more collectivist values endorsed by an individual, the more likely they are to endorse courtesy stigma. However, contrary to our hypothesis, interdependent self-construals were negatively correlated with the endorsement of courtesy stigma, $r = -0.17$, $p < .05$, suggesting that the more an individual identified with interdependent self-construals, the less likely they were to endorse courtesy stigma. Independent self-construals were not significantly associated with endorsement of courtesy stigma, $r = -.05$, $p = .504$.

Public Stigma with Collectivist Values and Interdependent Self-Construals. Zero-order correlations were conducted to examine associations between collectivist values, interdependent self-construals with the endorsement of public stigma (Table 6). As hypothesized, collectivist values were positive correlated with fear/dangerousness, $r = .26$, $p < .001$, suggesting that the more an individual endorsed collectivist values, the more likely they were to fear individuals with mental illness and believe they are dangerous. Similarly, collectivist values were also positively correlated with forced treatment, $r = .41$, $p < .001$, suggesting that individuals who endorsed collectivist values were also more likely to support that individuals with mental illness be forcefully treated for their illness. On the other hand, collectivist values had a negative relationship with help/interact, $r = -.22$, $p < .01$, suggesting that endorsing collectivist values also made an individual less likely to interact with individuals with mental illness and help them. There was no significant relationship of collectivist values and empathy, $r = .12$, $p = .12$, and negative emotions, $r = .11$, $p = .17$.

Furthermore, there was a positive relationship between interdependent self-construals and help/interact, $r = .26$, $p < .001$, and empathy, $r = .34$, $p < .001$. These findings suggest that

individuals who identified with interdependent self-construals were more likely to be willing to help an individual with mental illness, interact with them and feel empathy for them. There was no significant association of interdependent self-construals with fear/dangerousness, $r = -.11$ $p < .163$, forcing treatment, $r = -.04$ $p < .615$, and a marginally significant relationship with negative emotions, $r = -.14$ $p < .07$.

Level of Instruction in Psychology. To test the hypothesis that participants' levels of instruction in psychology would be associated with both lower onset responsibility and lower courtesy stigma, the relationship between the number of psychology courses taken with the causal attributions of mental illness and the endorsement of courtesy stigma was calculated using correlations (Table 7). Number of psychology courses taken was significantly negatively correlated with the responsibility factor of Attribution Questionnaire-27, $r = -.21$, $p = .007$, suggesting that the more psychology courses an individual has taken, the less likely they are to hold an individual with mental illness responsible for contracting their disorder. However, there was no significant relationship between the number of psychology courses taken and the causal attribution of mental illness to personal control, $r = -.02$, $p = .786$, nor to external control, $r = -.04$, $p = .585$. Furthermore, the number of psychology courses taken was not significantly correlated to the endorsement of courtesy stigma, $r = -.10$, $p = .217$. Interestingly, individuals who had taken a greater number of courses in psychology were less likely to endorse collectivist values, $r = -.2$, $p = .009$, and also less likely to endorse public stigmas (Table 8), including feeling less fear toward individuals with mental illness and being less likely to believe that individuals with mental illness are dangerous, $r = -.20$, $p < .01$, and being more likely to help and interact with individuals with mental illness, $r = .17$, $p = .023$.

Types of Mental Illness. Paired sample t-tests were used to compare the endorsement of courtesy stigma and public stigma in schizophrenia and depression conditions. There was a significant difference in the levels of endorsement of courtesy stigma in the depression case (M = 2.29, SD = 1.11) and the schizophrenia case (M = 1.97, SD = 0.97); $t(172) = 6.29$, $p < .001$. Contrary to our hypotheses, these results suggest that participants endorsed greater levels of courtesy stigma in the case where the individual had depression as compared to schizophrenia, which suggests that family members of individuals with schizophrenia were significantly less discriminated against than the family members of individuals with depression. There was also a significant difference in the score on the factor of fear/dangerousness in the depression case (M = 2.76, SD = 1.84) and the schizophrenia case (M = 4.06, SD = 1.99); $t(172) = -9.48$, $p < .001$. This suggests that participants tend to fear individuals with schizophrenia more than those with depression, and believe they are more dangerous. Furthermore, there was a significant difference in the score on the factor of forced treatment in the depression case (M = 3.21, SD = 1.67) and the schizophrenia case (M = 3.91, SD = 1.87); $t(172) = -5.76$, $p < .001$. These results suggest that participants support forcing individuals with schizophrenia to receive treatment more than they would individuals with depression.

In fact, participants are more willing to help and interact with individuals with depression as compared to those with schizophrenia as shown by the significant difference in the score on the factor of help/interact in the depression case (M = 5.91, SD = 1.55) and the schizophrenia case (M = 5.34, SD = 1.75); $t(172) = 5.31$, $p < .001$. However, there was no significant difference in the scores on the factor of empathy in the depression case (M = 6.88, SD = 1.63) and the schizophrenia case (M = 6.84, SD = 1.59), $t(172) = .50$, $p = .621$, suggesting that participants do not differ in the empathy they show to individuals with depression and those with schizophrenia.

There was also no significant difference in the scores on the factor of negative emotions in the depression case (M = 2.50, SD = 1.63) and the schizophrenia case (M = 2.60, SD = 1.54); $t(172) = -.90$, $p = .367$. These results suggest that participants do not differ in their negative emotions, such as anger, irritation and annoyance, directed towards individuals with schizophrenia and depression.

Discussion

Attribution Theory. The Attribution Theory suggests that the blame and responsibility placed on an individual with mental illness contributes to the negative emotions and behaviors which comprise of public stigma. In accordance with this theory, we predicted onset responsibility would be positively associated with the different elements of public stigma, including fear/dangerousness, help/interact, forcing treatment, empathy and negative emotions. The current findings first showed that the greater the endorsement of onset responsibility, the more an individual will fear individuals with mental illness and believe they are dangerous. This demonstrates the negative consequences of having causal attributions of mental illness which place the blame of an illness onto the individual suffering from the illness. Not only does the blame contribute to feeling fear of the individual, but also more direct consequences of attaching the label of dangerousness to individuals with mental illness. These attitudes towards individuals with mental illness not only perpetuate negative stereotypes about mental illness in the public sphere and affect the way communities interact with individuals with mental illness but also result in the integration of this stereotype into societal norms resulting in structural stigma.

One manner by which the label of dangerousness and fear of individuals with mental illness affects the lives of these individuals is by increasing their amount of social distance from the community. The findings of the present study provide evidence of this occurrence by

showing that participants who blame individuals with mental illness are less likely to interact with them and help them, and even less likely to have empathy for them. With an increasing amount of social distance from the community, individuals with mental illness are left isolated, lonely and dejected which further worsens their mental health. These negative experiences of public stigma have a lasting effect on individuals with mental illness and are likely to be internalized as self-stigma in which the individual has negative stigmatizing attitudes and beliefs directed towards themselves which can result in diminished hope, lower self-esteem and devaluation of the self (Jones & Corrigan, 2014).

Finally, in further support of the Attribution Theory, individuals who endorsed onset responsibility also had more negative emotions for individuals with mental illness including anger, annoyance and irritation. These negative emotions can be a painful experience for individuals with mental illness which further segregates them from the community and does not allow them to be fully integrated into society, regardless of their own efforts. It is another experience which displaces individuals with mental illness from a support system and may even encourage them to hide their illness in fear of being the recipient of these negative emotions. Feeling the need to hide their illness can often lead to label avoidance, in which individuals refuse mental health services and treatment in order to avoid being attached with the stigmatizing label of a mental illness. This process of label avoidance is dangerous for individuals with mental illness as they are not receiving the help they need which may worsen their illness and further disrupt their daily activities.

The current findings reflecting the tendency of individuals who endorse onset responsibility to also support individuals with mental illness being forcefully treated for their illness is also an important finding reflecting the dire consequences of stigmatizing causal

beliefs. Forcing an individual with mental illness to receive treatment, such as medications and hospital admission, has been a part of the history of mental health care stemming from the justification that the patient is a danger to themselves or others around them (Pescosolido, Monahan, Link, Stueve, & Kikuzawa, 1999). Forcing treatment suggests not only a lack of respect for the individual's autonomy but also perpetuates a loss of agency and inability to take an active role in decision-making involving their own body. The experience of forceful treatment devalues the individual with mental illness and their decisions, and fosters a sense of distrust for the system that imposes these regulations upon them.

Onset Responsibility by Ethnicity. The present study questions the endorsement of onset responsibility, the blame placed upon an individual with mental illness for contracting their disorder, across cultures. We hypothesized that differing causal attributions of mental illness across cultures, such as divine punishment, supernatural attributions and the evil eye, may contribute to the varying levels of onset responsibility across South Asian, East Asian and European American cultures. Members of these ethnic-cultural groups endorse stigmatizing attitudes, namely onset responsibility, based on these causal attributions which either place on or take away blame from the individual with the illness. Considering the fact that many causal attributions associated with South Asian cultural beliefs remove blame from the individual with mental illness, instead placing it upon a higher being, we hypothesized that South Asian Americans would endorse onset responsibility the least.

In the current findings, contrary to our hypotheses, the causal attributions of the three ethnic-cultural groups did not differ significantly. South Asian Americans, East Asian Americans and European Americans all had similar beliefs that mental illness, at least to a certain extent, was not under the control of others but did not completely believe in the absence of this external

control. Furthermore, all three groups tended to agree to a certain degree that mental illness was not under the personal control of the individual with mental illness. These findings suggest that South Asian Americans, East Asian Americas and European Americans hold similar beliefs regarding causal attributions of mental illness, as well as ideas as to where the control for mental illness really lies. Their responses to these subscales on the Causal Dimension Scale indicated that all of the ethnic-cultural groups under investigation in this study agree that mental illness is not under the personal control of the individual with mental illness, thus removing blame and responsibility from the individual themselves, and thereby demonstrating a low endorsement of onset responsibility. Further, they held similar beliefs that mental illness is somewhat not under external control as well, which also removes blame from persons associated with the individual with mental illness resulting in fewer stigmatizing attitudes towards other individuals in the vicinity of individuals with mental illness.

Courtesy Stigma by Ethnicity. We predicted that South and East Asian ethnic-cultural groups would greatly endorse courtesy stigma as opposed to the European American group due to the collectivistic nature of these societies and the importance of familial relationships in their communities. The current findings demonstrated a significant effect of ethnic-cultural group on the endorsement of courtesy stigma, suggesting that the different groups differed in their levels of stigmatizing attitudes towards the family of an individual with mental illness. In accordance with our hypotheses, the South Asian American group did in fact endorse courtesy stigma significantly more than did the European American group. This provides further evidence for Thara & Srinivasan (2000) who demonstrate that caregivers of individuals with schizophrenia in India often tended to feel grief or depression because of the illness of their relative, worried that

people would find out about the relative's illness, and worried that neighbors would treat them differently or avoid them.

The European American group showed significantly lower levels of courtesy stigma, likely due to the individualistic nature of Western societies, where individuals are often seen as separate from their family unit and the family is not held responsible for an individual's problems. However, these findings are interesting considering the increasing belief in the West in the biological causes of mental illness, by which genes and heredity are given a major role in the onset of mental illness. The belief in "bad genes" and "genetic contamination" could increase stigmatizing attitudes towards the siblings and children of individuals with mental illness. However, despite the strong endorsement of biological causal attributions of mental illness, European Americans were low in the endorsement of courtesy stigma.

On the other hand, despite the collectivistic nature of the East Asian and South Asian cultures, the East Asian group did not differ significantly in their endorsement of courtesy stigma from either the South Asian American group or the European American group. The East Asian American group endorsed courtesy stigma at a level lower than the South Asian American group but higher than the European group, suggesting a mid-range of stigmatizing attitudes. These findings are important in distinguishing between East Asian-Americans and South Asian-Americans, who are often categorized together in psychology research as "Asian-Americans". These data reinforce the fact that East Asian Americans and South Asian Americans are different populations with different attitudes and behaviors based on distinct cultural beliefs and attributions. The current findings, demonstrating that South Asian Americans differ significantly from European Americans whereas East Asian Americans do not differ from either group, proves

the merit of studying these ethnic-cultural groups separately in order to completely understand cross-cultural differences in mental health attributions and stigmatizing behaviors.

Courtesy Stigma with Collectivist Values and Interdependent Self-Construals.

Considering the significantly greater endorsement of courtesy stigma in the South Asian American group as compared to the European American group, we expected the collectivistic nature of South Asian society, as compared to the individualistic nature of Western societies, to play a significant role in driving this difference. As predicted, the endorsement of collectivistic values was positively associated with endorsement of courtesy stigma which showed that, in fact, the collectivistic nature of South Asian societies is one of the factors which contributes to the tendency of South Asian Americans to demonstrate more stigmatizing attitudes towards the family of individuals with mental illness than do European Americans where these collectivistic values are far less prevalent. These findings reflect the findings of Papadopoulos, Foster and Caldwell (2013) who found that high stigmatizing attitudes were associated with collectivism and low stigmatizing attitudes reflected individualism. The prioritizing of the group over the individual would place a greater importance on the family unit, especially when making major decisions such as employment, arranged marriages, and other social interactions which gives much room for stigmatizing attitudes towards the family members of individuals with mental illness. South Asian Americans' families enact courtesy stigma in arranged marriages by being resistant to a marriage into another family that has "undesirable characteristics" like mental illness due to the idea of genetic contamination (Van Brakel & Miranda Galarza, 2014, p. 143).

However, it is interesting to consider the factors which influenced the East Asian American group which, although they are a collectivistic society, did not differ significantly from the European American group in their endorsement of courtesy stigma. As the findings

above demonstrate, collectivism is associated with courtesy stigma; but in this investigation, it must have been outweighed by some other factors which reduced this level of endorsement. One of these factors might include the influence of interdependent self-construals on endorsement of stigmatizing attitudes. Our findings demonstrated the positive relationship between collectivism and interdependent self-construals suggesting that the more collectivist values an individual has the more likely they are to have interdependent self-construals. Since individuals with interdependent self-construals tend to define themselves in relation to other members of their community, we predicted this overlapping identity would also encourage others to discriminate against family members of an individual with mental illness by association.

However, the current findings invalidate this hypothesis by showing the opposite effect that that the more an individual identified with interdependent self-construals, the less likely they were to endorse courtesy stigma. These results may be due to the fact that individuals who identify with interdependent self-construals are more aware of the relationship between family members and are thus more empathetic to the suffering of the family of individuals with mental illness, thereby reducing their likelihood of discriminating against them. In fact, their understanding of the family's situation manifested in being supportive to the individual with mental illness may encourage them to be even more understanding and helpful to these individuals.

Public Stigma with Collectivist Values and Interdependent Self-Construals. Taking into consideration the opposite effects that collectivist values and interdependent self-construals had on courtesy stigma, despite their positive association with each other, it is relevant to assess how these societal norms and cultural values may influence public stigma. Consistent with our previous findings, collectivist values were associated with higher levels of stigmatizing attitudes.

Individuals with collectivist values were more likely to believe an individual with mental illness is dangerous and to fear them, and were less likely to interact with or help individuals with mental illness. Similarly, individuals with collectivist values were also more likely to support the forced treatment of individuals with mental illness. These findings show the strong influence collectivist values have on stigmatizing attitudes and discriminatory behaviors in the public sphere. Cultures and societies where collectivism is a norm will tend to have greater stigma and discriminatory treatment of community members who have mental illness.

Once again, interdependent self-construals had the opposite impact on public stigma. Individuals with interdependent self-construals were more likely to interact with individuals with mental illness, help them and feel empathy for them. Interdependent self-construals did not have any significant relationship with stigmatizing attitudes and discriminatory behaviors. Not only do individuals with interdependent self-construals stigmatize the family members of an individual with mental illness less, but they are also more understanding and supportive of the individual with mental illness themselves. It is interesting to find that interdependent self-construals and collectivist values, two cultural values that are highly associated, have such drastically opposing effects on stigma. More research must be conducted to understand why these values have such different impacts on stigma although they do often coexist in the same societies, and whether their opposing effects may have a counterbalancing effect on stigma in these societies.

Level of Instruction in Psychology. In the present study we accounted for participants' varying levels of exposure to mental health education and training, which might change their mental health causal attributions, and discriminatory attitudes and behaviors towards both the individuals themselves and to their families. Thus, we hypothesized that participants' levels of instruction in psychology would be associated with lower onset responsibility, lower public

stigma, and lower courtesy stigma. Consistent with our hypotheses, we found that level of instruction in psychology was negatively associated with onset responsibility, showing that the more exposure to and training an individual has in psychology, the less blame they will place on an individual with mental illness for incurring the illness. However, instruction in psychology did not have any relationship with causal attributions of mental illness, suggesting that more instruction in psychology did not, in fact, increase an individual's belief that mental illness is not under the personal control of the individual with mental illness, nor did it increase their belief that mental illness is also not under external control.

Furthermore, instruction in psychology had no relationship with endorsement of courtesy stigma, contrary to our prediction that more instruction in psychology would lead to lower courtesy stigma. However, instruction in psychology was associated with lower public stigma, where individuals who had taken a greater number of courses in psychology were less likely to endorse negative stereotypes about mental illness such as the belief that individuals with mental illness are dangerous, were less likely to fear these individuals and most importantly were more likely to interact with and help individuals with mental illness. These findings are in line with previous research suggesting that individuals more familiar with mental illness will be less likely to fear individuals with mental illness, less likely to consider them dangerous, and less likely to want social distance (Angermeyer et al., 2004).

However, these findings contradict those of Corrigan et al. (2005) which suggested that adolescents who were more familiar with mental illness believed individuals with mental illness were responsible for their illness and viewed them as dangerous. The present study targeted a similar age cohort and showed the expected impact of instruction in psychology. It would be interesting to explore this finding further in future research comparing the impact of level of

instruction in psychology on adolescents and young adults to see if there is any developmental effect between the two age groups.

Types of Mental Illness. The experience of stigma for individuals with different types of mental illness can be very unique, with different negative stereotypes attached to each mental illness resulting in varying discriminatory attitudes and behaviors. In the present study, we compared stigma towards two different types of mental illness that are commonly known; depression and schizophrenia. We hypothesized that stigma- courtesy stigma and public stigma- would be greater towards individuals with schizophrenia compared to those with depression.

The study's findings showed the opposite effect of type of mental illness on courtesy stigma than we were expecting. The present results found that participant's endorsement of courtesy stigma tended to be greater for the family of individuals with depression as opposed to those with schizophrenia. This is interesting to find considering schizophrenia is more highly associated with genetic and heredity causes than is depression. Genetic and heredity explanations can often result in greater courtesy stigma towards family members of individuals with mental illness due to the belief in the concept of genetic contamination (Angermeyer et al., 2004; Corrigan & Miller, 2004). There could be many factors contributing to the finding that families of individuals with depression experience greater levels of discrimination including blaming the family for not being able to better handle the depression of their relative, especially since depression is viewed as more controllable than schizophrenia due to lower biological causal attributions (Angermeyer et al., 2004).

On the other hand, the association of the type of mental illness with public stigma was in accordance with our hypotheses. People believed individuals with schizophrenia were more dangerous than individuals with depression and tended to fear them more. This finding is in line

with Norman et al.'s finding that individuals with schizophrenia were perceived as far more dangerous, were more often associated with social inappropriateness and had a discontinuity with normal experience (Norman et al., 2012). In fact, people tended to support the forced treatment of individuals with schizophrenia more so than individuals with depression which may stem from similar stereotypes about schizophrenia. For instance, the belief that schizophrenia is attributed to biological causes far more often than is depression leads to the assumption that the person will have little control over their illness and that their behavior will interfere with their ability to make decisions about their own treatment thereby helping participants to justify their support of the forced treatment of individuals with schizophrenia (Angermeyer et al., 2004).

In a similar line of reasoning, the results suggested that people were far more willing to interact with and help individuals with depression than individuals with schizophrenia, which was likely due to their belief as to the degree to which these individuals are dangerous, and their level of fear of them. However, people did not vary in their feelings of empathy or in their negative emotions towards individuals with schizophrenia compared to those with depression. Regarding both individuals with schizophrenia and those with depression, people tended to agree that they would treat these individuals with empathy and disagreed that they would feel any negative emotion towards them. Although there were no significant differences between the attitudes towards the different types of mental illness, the extent of agreement with these factors suggests that people have similar non-stigmatizing attitudes and emotions towards individuals with various forms of mental illness. People tend not to be irritated or angered by individuals with mental illness, but rather feel empathy for them and their situation, which is a positive direction for the presence of stigma in society.

Study 2

To extend the findings of Study 1, Study 2 examined the socialization of stigmatizing attitudes in young children and adolescents by their caregivers. Specifically, Study 2 examined parents of young children from the two of the cultural groups assessed in Study 1 - South Asian Americans and European Americans – and measured their endorsement of onset responsibility and courtesy stigma. Similar to Study 1, parents' collectivist values, self-construals and level of instruction in psychology were assessed. However, parents were further evaluated qualitatively via responses to hypothetical vignettes as to how they might socialize these stigmatizing attitudes into young children. Furthermore, we explored the differences in the parental socialization of stigma towards individuals with schizophrenia compared to those with depression. Finally, similar to Study 1, we examined the relationship between the parents' mental health attributions (i.e., scores on responsibility subscale of Attribution Questionnaire-27, Causal Dimension Scale external control subscale and personal control subscale), their verbal explanations of mental illness, and their endorsement of public stigma.

Similar to Study 1, we predicted that South Asian American and European American participants' attitudes towards mental illness would be similar to the findings of Study 1, in that South Asian Americans would be more likely to endorse courtesy stigma. We also hypothesized that mental illness explanations would vary between South Asian American and European American parents, and also expected that these explanations would vary depending on the age of the child. Specifically, we expected ambiguous and unclear explanations of mental illness to be prevalent in the responses of South Asian American parents of younger children, whereas we predicted that themes of emotional explanations would be reflected in responses of European American parents. Among parents of older children, we expected South Asian American

responses to suggest themes of supernatural explanations and European American responses to suggest themes of biomedical explanations. We hypothesized South Asian American parents would be more likely to encourage their children to avoid individuals with mental illness whereas European American parents would be more likely to encourage their children to maintain relationships. Furthermore, similar to Study 1, we hypothesized that parents' responses in all groups would express greater negative attitudes towards individuals with schizophrenia as compared to those with depression. Finally, we predicted that parents that were more likely to blame individuals with mental illness would also be more likely to endorse public stigma behaviors, and provide ambiguous explanations of mental illness and encourage avoidance of individuals with mental illness.

Method

Participants. Study 2 consisted of 36 participants; 7 South Asian American, 22 European American, 5 African American, and 1 Hispanic and 1 Asian-American participant. Thirty-four of the participants identified as female, 1 identified as male and 1 chose the "other" option. The mean age of participants was 35.5 years (standard deviation of 5.2 years; minimum age of 29 years and maximum age of 51 years). Individuals were eligible to participate if they were parents of at least one child between the ages of 5 and 12 years of age and identified as either South Asian/South Asian-American or European American. Despite these eligibility criteria, participants from other ethnic-cultural groups, including African Americans and Hispanics, also completed the study and were added to the data. Participants were recruited from online social media platforms, where the researcher posted a description of the study with the online link to her personal Facebook account which was shared by friends to their personal Facebook pages,

and through direct personal connections. Participants were compensated $5 for completion of the half-hour study.

Materials. The materials for the experiment incorporated the same six instruments as did Study 1. Demographic information was assessed using a demographics questionnaire designed for this study, causal attributions of mental illness were assessed using the Revised Causal Dimension Scale, endorsement of onset responsibility was assessed using the Attribution Questionnaire-27 (Corrigan et al, 2002), and endorsement of courtesy stigma was assed using the Family Stigma Survey (Corrigan, Watson & Miller, 2006). Participants' collectivist values were evaluated using the Asian Values Scale (Kim & Hong, 2004), and participants' independent or interdependent self-construals were evaluated using the Singelis Self-Construal Scale (Singelis, 1994). All scales were computed using the same scoring guidelines employed in Study 1. All subscales on the Attribution Questionnaire-27 (Corrigan et al, 2002)- blame, anger, pity, help, danger, fear, avoidance, segregation and coercion- in both the depression and schizophrenia versions had acceptable reliability except for the Pity and Avoidance subscales (Table 9a; Table 9b). These nine subscales to the Attribution Questionnaire-27 (Corrigan et al, 2002) were aggregated into six factors based on a previous factor analysis of the scale (Brown, 2008). These factors consisted of Fear/Dangerousness, Help/Interact, Responsibility, Forcing Treatment, Empathy and Negative Emotions, all of which had acceptable reliability in our sample in the schizophrenia (Table 9a), depression (Table 9b) and combined factors versions (Table 9c) except for the Empathy factor. Empathy was removed from all further statistical analyses due to low reliability.

All subscales on the Causal Dimension Scale- locus of causality, external control, stability and personal control- had acceptable reliability except the Locus of Causality subscale

which was removed from further analyses due to low reliability (Table 10). Furthermore, both Family Stigma Surveys- Schizophrenia and Depression had acceptable reliability (Table 11). The means of the schizophrenia and depression surveys were calculated for the overall Family Stigma Survey score which was used in analysis. The Asian Values Scale (Kim & Hong, 2004) had an acceptable reliability (Table 11). Finally, only the Interdependence subscale of the Singelis Self-Construal Scale (Singelis, 1994) had acceptable reliability (Table 11). The Independence subscale was removed from further analyses due to low reliability (Table 11).

Parent Socialization of Mental Illness Stigma. To assess parent socialization of mental illness stigma, two qualitative assessments were incorporated after the Attribution Questionnaires and Family Stigma Surveys. Parents first read a brief vignette describing their child's friendly relationship with either "Harry" or "Jason", earlier introduced in vignettes (Appendix A) associated with the Attribution Questionnaire and Family Stigma Survey scales. Participants were then asked "how would you respond to your [blank] year-old's question about Harry/Jason's behavior?" with the survey designed to fill in the ages of their children between ages 5 and 12. This question was asked for each child the participant had between the ages of 5 and 12 in order to account for any differences in explanations for children in different age ranges. Parents' responses were coded using the Consensual Qualitative Research (CQR) method (Hill et al, 2005).

In previous research, the CQR methodology has been used in the coding of in-depth interviews, with a sample size ranging between 8 and 12 participants (Kim, Brenner, Liang, & Asay, 2003). By contrast, in the present study, 36 participants responded to the qualitative questions with brief answers ranging from a short phrase to a few sentences. There are three central components of the Consensual Qualitative Research method: 1) Developing Domains 2)

Constructing Core Ideas and 3) Cross-Analysis (Inman, Howard, Beaumont, & Walker, 2007). In the first step of developing domains, two researchers categorized the data into "broad topic areas" which were topic areas that reflected the overall themes that emerged from the data. Each researcher then identified multiple main ideas from each domain which better represented particular recurring ideas from the qualitative responses. Since the CQR methodology usually consists of in-depth interviews and the present data consisted of brief sentences or phrases, the researchers in the present study identified domains and core ideas across cases, finding similar topic areas in the responses of all participants, rather than the customary coding within cases, and identifying emerging themes from each participant interview. The two researchers developed a consensus version of these domains and core ideas after a review of each researcher's individual versions and a thorough discussion of whether these domains and main ideas encompassed the present data.

In accordance with the CQR methodology, this consensus version of the domains and core ideas was reviewed by an uninvolved auditor. The uninvolved auditor was another Wellesley College student working as a research assistant for the current study's faculty advisor. The auditor reviewed the consensus version of the domains and core ideas and ensured that these were both reflective of the data and accurately represented all of the data. The primary researchers met again to incorporate the suggestions of the auditor into their domains and core ideas.

The third component of the Consensual Qualitative Research methodology, the cross-analysis, consisted of assessing the frequency of core ideas across cases and assigning them one of three labels; General, Typical and Variant. General was assigned to core ideas that emerged in all cases, Typical was assigned to core ideas that emerged in more than half of the cases and

Variant was assigned to core ideas that emerged in less than half of the cases. The researchers conducted a stability test by reviewing two cases that were set aside from the beginning of the coding process and ensured that no new domains or core ideas emerged from these cases. Finally, the present study enhanced the Consensual Qualitative Research methodology by computing the frequencies of the cases- General, Typical and Variant- and converting them into quantitative data to be analyzed with the other quantitative measures of Study 2.

Procedure. The experiment was administered entirely online on a Qualtrics survey and each session required approximately half an hour to complete. In each session, participants were taken to a page with the demographics questionnaire immediately after giving consent to participate in the study. Once participants completed each measure and qualitative question, they were be taken to a new page with the next measure. All participants received the same order of presentation of the measures. Overall participants were shown eight measures and at completion of all eight, participants were redirected to a new page for compensation purposes.

Results

As in Study 1, participants' survey responses were downloaded from the online Qualtrics survey and their survey responses were checked for validity using two catch items, one in the Singelis Self-Construal scale asking participants to choose "Disagree" and one in the Asian Value Scale asking participants to leave it blank. Thirty participants were removed from data analysis due to having either chosen the wrong option for the "Disagree" catch item or having filled both catch items incorrectly. Participants with just the blank catch item incorrect were kept in the data since many participants had clicked an option accidentally and were unable to undo it due to the Qualtrics format.

Attribution Theory. Similar to Study 1, we evaluated the relationship between mental health causal attributions and the endorsement of public stigma using correlations. Responsibility had a significant positive correlation with fear/dangerousness, $r = .85$, $p < .001$, forcing treatment, $r = .86$, $p < .001$, and negative emotions, $r = .86$, $p < .001$, suggesting that parents that held the individual with mental illness responsible for the contraction of their disorder were more likely to partake in stigmatizing behaviors which could socialize these stigmatizing behaviors into their children through modeling. Furthermore, Causal Dimension Scale external control had a significant negative correlation with fear/dangerousness, $r = -.65$, $p < .001$, forcing treatment, $r = -.78$, $p < .001$, and negative emotions, $r = -.67$, $p < .001$. Similarly, Causal Dimension Scale personal control had a significant negative correlation with fear/dangerousness, $r = -.64$, $p < .001$, forcing treatment, $r = -.60$, $p < .001$, and negative emotions, $r = -.60$, $p < .001$. These results suggest that parents that hold the belief that mental illness is not under the control of others and not manageable by the individual themselves, are less likely to engage in stigmatizing behaviors.

Identification of Domains and Core Ideas. Using the Consensual Qualitative Research (CQR) method, three domains of explanations were identified- Explanation, Recovery, and Help Behaviors, and from these domains, 15 core ideas were extracted that represented the qualitative responses from parents. These core ideas consisted of Cause-Biomedical, Cause-Ambiguous, Cause-Previous Experience, Effects on Thoughts, Emotions and Behaviors, Effect on Personal Characteristic, Linking Explanation, Biological Recovery, Spiritual Recovery, Difficulty of Recovery, Positive Trajectory, General Healing, Active Maintenance, Passive Maintenance, Active Avoidance, and Passive Avoidance. Across all parents, regardless of ethnic-cultural group, Cause-Ambiguous was a typical response occurring in 30 of the 36 cases, with Effects on

Thoughts, Emotions and Behaviors appearing in 15 and Biological Recovery appearing in 10 cases (Table 12). Similarly in the South Asian American sample, Cause-Ambiguous was a general response appearing in all of the cases, whereas Effect on Personal Characteristic, Spiritual Recovery, Difficulty of Recovery, Passive Maintenance and Active Avoidance never occurred in explanations from this sample (Table 13). The European American sample further demonstrated this pattern with Cause-Ambiguous being a typical response appearing in 16 of the 22 cases, and Effects on Thoughts, Emotions and Behaviors also being labeled a typical response. Cause-Previous Experience was the only core idea which did not appear in the European American sample (Table 14). Across all participants and ethnic groups, the pattern of appearance of core ideas was similar with Cause-Ambiguous being the most general explanation, and Effects on Thoughts, Emotions and Behaviors and Biological Recovery being the next most common explanations of mental illness.

Quantifying Core Ideas. Each core idea extracted using the Consensual Qualitative Research method (Hill et al., 2005) was converted into a continuous variable by calculating the number of times each core idea was present in the parent's explanations of mental illness, in both the Harry and the Jason vignettes. These core ideas were further compiled into categories that were most relevant to the current hypotheses: Direct Explanation, Indirect Explanation, Behavioral Maintenance, and Behavioral Avoidance. Direct Explanation encompassed parents' responses which attempt to explain mental illness to their children in a direct manner (e.g., "sometimes when people are sick, it's not just in their body but also in their heads," "Jason is not feeling well like the same way sometimes you get upset and cry" and "something probably happened in his life tragically") and was computed using the sum of the core ideas Cause-Biomedical, Cause-Previous Experience and Linking Explanation. Indirect Explanation

encompassed parents' responses that provided an ambiguous explanation for mental illness (e.g., "he is ill") and was computed using the core idea Cause-Ambiguous. Behavioral Maintenance encompassed parental responses that encourage the child to maintain their relationship with the individual with mental illness (e.g., "we need to be patient and continue being his friends," "wish him a speedy recovery" and "come and get me if you want to see him and I can check first") and was computed using the sum of the core ideas Active Maintenance and Passive Maintenance. Finally, Behavioral Avoidance encompassed parental responses that encouraged the child to distance themselves from the individual with mental illness (e.g., "do not bother him," "keep away from him" and "keep him alone") and was computed using the subscales Active Avoidance and Passive Avoidance.

Mental Health Attributions and Socialization. To test the hypothesis that onset responsibility is positively associated with parents' socialization, zero-order correlations examining the relations between casual attributions of mental health and parents' verbal explanations were conducted (Table 15). Responsibility was not significantly correlated with Indirect Explanation, $r = .10$, $p = .532$, but was negatively correlated with Direct Explanations, $r = -.41$, $p < .01$, suggesting that parents who held the individual with mental illness responsible for the contraction of their disorder were less likely to give their child a clear and understandable explanation about the causes of mental illness. Responsibility was also negatively correlated with Behavioral Maintenance, $r = -.53$, $p < .001$, and positively correlated with Behavioral Avoidance, $r = .34$, $p < .001$, suggesting that parents who blamed the individual for their mental illness were less likely to encourage their children to maintain their relationship with individuals with mental illness and instead, more likely to encourage them to keep distance from these individuals. Furthermore, the Causal Dimension Scale of external control was positively

correlated with Direct Explanation, $r = .37$, $p < .05$, suggesting that the more parents believe mental illness is not under the control of other individuals, the more likely they are to give their children direct explanations about the causes of mental illness. No significant relationship between the external control subscale and Indirect Explanations was found, $r = -.19$, $p = .235$. As opposed to the responsibility subscale, external control was negatively correlated with Behavioral Avoidance, $r = -.34$, $p < .05$, and positively correlated with Behavioral Maintenance, $r = .65$, $p < .001$, suggesting that the belief that mental illness is not under the control of others was associated with greater encouragement to maintain a relationship and less to keep distance from individuals with mental illness. The Causal Dimension Subscale of personal control was not significantly correlated with either Indirect Explanation, $r = -.17$, $p = .296$, Direct Explanation, $r = .25$, $p = .109$, or Behavioral Avoidance, $r = -.25$, $p = .106$. However, there was a significant negative correlation with Behavioral Maintenance, $r = .57$, $p < .001$, suggesting that parents that did not believe mental illness is manageable by the individual themselves were more likely to encourage their children to maintain relationships with the individual with mental illness.

Explanation Types by Ethnicity. Independent samples t-tests were conducted to compare the categories of qualitative explanations recorded in the South Asian American and European American groups. No significant group differences for any of these four categories were found (Table 16). These results suggest that ethnic-cultural group does not have an effect on the categories of explanations used by parents to explain mental illness to children.

Level of Instruction in Psychology. Although there were no significant differences in the types of explanations given by the various ethnic-cultural groups, it is interesting to note that all of the participants with high levels of instruction in psychology, including participants with

PhDs and masters in psychology, identified as European American. To test the hypothesis that level of instruction in psychology would be associated with more Direct Explanations and Behavioral Maintenance and less Indirect Explanations and Behavioral Avoidance, the relationship between categories of explanations and level of instruction in psychology was calculated using correlations. Instruction in psychology was positively correlated with Direct Explanations, $r = .73$, $p < .001$, and negatively correlated with Indirect Explanations, $r = -.40$, $p < .01$suggesting that the more instruction in psychology an individual has the more direct explanations, and fewer indirect explanations they use to explain mental illness to their children. However, there was no significant relationship between level of instruction in psychology and Behavioral Avoidance, $r = -.20$, $p = .205$, or Behavioral Maintenance, $r = .27$, $p = .084$, suggesting that level of instruction in psychology does not affect the way parents encourage their children to interact with individuals with mental illness.

Explanations by Child Age. Furthermore, we were interested in whether the types of parental explanations would vary based on the age of the child. To test the hypothesis that the child's age would be positive associated with Direct Explanations and Behavioral Maintenance and negatively associated with Indirect Explanations and Behavioral Avoidance, the relationship between categories of explanations and child age was calculated using correlations (Table 17). There was no significant relationship between the child's age and Direct Explanations, $r = -.04$, $p = .780$, nor Indirect Explanations, $r = -.07$, $p = .673$, suggesting that the child's age did not affect the kind of causal explanation given by parents. There was also no significant relationship between the child's age and Behavioral Avoidance, $r = -.27$, $p = .084$, suggesting that the child's age did not make it more or less likely for parents to encourage their child to avoid individuals with mental illness. However, child age did have a significant positive correlation with

Behavioral Maintenance, $r = .34$, $p < .05$, which suggests that parents are more likely to encourage older children to maintain their relationship with an individual with mental illness than they are younger children.

Discussion

Identification of Domains and Core Ideas. The qualitative component of Study 2 is very robust in increasing our understanding of the conceptualization of mental illness as explained by parents to their young children. Due to the Consensual Qualitative Research methodology, we were able to pinpoint three broad themes of the responses parents gave in explaining mental illness to their children. These areas included explanation, recovery and help behaviors which are all very relevant avenues through which people develop beliefs regarding individuals with mental illness, interact with them and reflect stigmatizing attitudes and behaviors. The core ideas extracted from the qualitative responses were also crucial in exploring ideas that are at the core of perceptions of mental illness that are transmitted verbally to children.

It was not surprising to find that Cause-Ambiguous was a typical response across all parents as it reflects brief responses given by parents which are almost used as a filler response to avoid any real, thoughtful discussion and education on the subject of mental illness. These responses, such as “he is sick” are so vague by nature that children cannot gain any true understanding or insight into what mental illness truly is, which makes it difficult to understand how to interact with individuals with mental illness in society. Furthermore, Effects on Thoughts, Emotions and Behaviors was also a common core idea across all parents indicating that the effect of mental illness on an individual, their emotions and behaviors, is a concept that is commonly conveyed to children. This is a helpful core idea because it adds a layer of understanding to the individual with mental illness by explaining their emotions (e.g., “[mental illness] makes him

confused and that upsets him") and their behaviors (e.g., "[his mental illness] makes him behave differently than before" and "he can't control himself"), which allows the child to empathize with the individual with mental illness further. Biological Recovery was also a common core idea which reflected that parents often conveyed their belief that biological treatment was the optimal treatment for these individuals (e.g., "[Harry] is taking medicines to feel better" and "[Harry] needs to go away to visit his doctor").

Furthermore, we compared the prevalence of core ideas across South Asian American and European American parents. The Cause-Ambiguous explanation was a general response in the South Asian American group and a typical response in the European American group which suggests that, regardless of ethnic-cultural group, parents tend to prefer explaining mental illness to their children in vague terms which do not further their understanding of the subject. The prevalence of this core idea in both ethnic-cultural groups need not be an expression of stigmatizing attitudes towards individuals with mental illness, but rather parents may think their children are too young to be exposed to concepts of illness and discrimination. Interestingly, the core ideas of Effect on Personal Characteristic, Spiritual Recovery, Difficulty of Recovery, Passive Maintenance and Active Avoidance were never reflected in the South Asian American sample. Instead of any implications on how these core ideas are not consistent with, or conflict with, the cultural values of the South Asian cultures, this is likely due to the small sample size of the South Asian American group (n=7) and the inability for all these ideas to be present in such few responses. The only core idea which was not present in the European American group was Cause-Previous Experience, which may imply that European Americans tend to not cite prior experiences in an individual's life as the cause of their illness, however, considering the small sample size (n=22) of this group, it is difficult to reach any conclusions.

Although we can assess the types of responses parents give their children in explanation of mental illness, we do not know how these various explanations get socialized into young children and whether these explanations foster stigmatizing attitudes. This area of research requires further investigation to better understand how stigma that is socialized from parents is received by children and whether these attitudes actually develop into stigma within the child.

Attribution Theory. The Attribution Theory suggests that the blame and responsibility placed on an individual with mental illness contributes to the negative emotions and behaviors which comprise of public stigma. In order to evaluate this theory, we again predicted onset responsibility would be positively associated with the different elements of public stigma, including fear/dangerousness, help/interact, forcing treatment, empathy and negative emotions in the parents sample just as it had been in Study 1. Parents that blamed an individual with mental illness for their illness were more likely to believe individuals with mental illness are dangerous, to fear them and to feel negative emotions, such as irritation and anger, towards them. These stigmatizing beliefs and attitudes lead to more severe discriminatory consequences, where these parents were also more likely to support individuals with mental illness being forcefully treated for their illness such as forced hospitalization and taking prescription medications. Causal attributions endorsed by parents, by which they believe that individuals with mental illness are held responsible for incurring their illness, were related to greater endorsement of public stigma, discriminatory attitudes and behaviors towards these individuals.

In fact, parents that tended to believe mental illness was not under the personal control of the individual with mental illness themselves were less likely to believe the individual was dangerous and to fear them. They were also less likely to feel negative emotions towards individuals with mental illness and tended to not support the forced treatment of these

individuals. The present findings suggest that parents with mental health attributions which blame the individual with mental illness for the onset of the disorder, and who believe they themselves are the cause of the illness, will be more likely to engage in stigmatizing attitudes and behaviors, which is in accordance with the Attribution Theory. However, more in line with the goals of Study 2, these findings also suggest that parents who endorse these causal attributions of blame and further engage in stigmatizing behaviors will likely engage in this kind of behavior in front of their children and this will prove to be modeling behavior.

Due to modeling of public stigma from their parents, an incredibly influential force in the lives of young children, parents are likely to socialize these attitudes and behaviors into their children at a young age. Our findings show the association of the causal attributions of the parent and how they translate into modeling behavior, but we can only further speculate how this behavior is socialized into children. Further research is needed to explore the link between the modeling of stigma by parents and the socialization of this stigma into young children's minds and behaviors at a young age.

Mental Health Attributions and Socialization. Previously, we showed that parents' causal attributions of mental illness were associated with parents' endorsement of public stigma, the modeling behaviors used to socialize stigma of mental illness in children. Therefore, it is important to further investigate the relationship of parents' causal attributions of mental illness and their verbal explanations of mental illness to their children. In order to explore this relationship, the core ideas extracted from the qualitative responses were quantified into categories; Direct Explanations, Indirect Explanations, Behavioral Maintenance, and Behavioral Avoidance.

Parents that blamed an individual with mental illness for their illness were less likely to give their children a Direct Explanation, suggesting that stigmatizing causal attributions was a factor in the decision to give their children a vague explanation of mental illness which would not further their understanding of either mental illness or individuals with mental illness. Furthermore, the belief that the individual with mental illness is to blame for the contraction of their disorder was negatively associated with Behavioral Maintenance, and positive associated with Behavioral Avoidance. On the other hand, when parents believed mental illness is not under the personal control of the individual with mental illness, they were more likely to encourage their child to maintain a relationship with the individual.

Similarly, parents that believed mental illness is not under the control of other individuals were more likely to give their children direct explanations about the causes of mental illness, suggesting a desire to further their child's true understanding of mental illness and insight into the experience of the individual with the illness. Moreover, these parents that believed mental illness is not under the external control of other individuals were also more likely to encourage their children to maintain a relationship with individuals with mental illness and less likely to tell them to keep their distance from these individuals. These findings demonstrate that the parents who have these stigmatizing attributions did, in fact, socialize some kind of stigmatizing behaviors in their children by encouraging them to keep distance from individuals with mental illness and not to maintain relationships with them. Further research would be required to explore whether these stigmatizing attitudes are adopted by their children.

Explanation Types by Ethnicity. The present results found that the two ethnic-cultural groups, South Asian American and European American, did not vary in the type of explanations of mental illness they gave their children. These results show that the frequencies of each type of

explanation were similar across both groups, and one group did not socialize stigmatizing attitudes and behaviors into their children any more than the other. These findings are consistent with our findings from Study 1 which showed that South Asian Americans and European Americans did not differ in their endorsement of onset responsibility and public stigma, and thus a logical conclusion would be that the socialization of these beliefs also does not vary across these two groups. However, although Study 1 showed that South Asian Americans were significantly more likely to endorse courtesy stigma than were European Americans, this is not reflected in these findings since the qualitative assessment focused only on the individual with mental illness, with little mention of their family and the child's interaction with the individual's family members.

Level of Instruction in Psychology. Similar to our hypotheses in Study 1, we predicted that a greater level of instruction in psychology would be associated with fewer stigmatizing attitudes in parents and less socialization of these attitudes into children. In accordance with our hypotheses, parents who had a greater level of instruction in psychology did, in fact, provide their children with less indirect explanations and more direct explanations which would help them understand mental illness. It can be speculated that with this greater understanding of mental illness, children will have fewer stigmatizing attitudes as suggested by the association of level of instruction in psychology and endorsement of public stigma in study 1. However, instruction in psychology did not play a role in the help behaviors parents encouraged their children to partake in with individuals with mental illness. Instruction in psychology neither positively influenced parents to encourage their children to maintain relationships with individuals with mental illness, nor prevented them from encouraging their children to keep a distance from them.

Explanations by Child Age. As mentioned earlier, the decision to use indirect explanations of mental illness in verbal explanations to children may not be decision stemming from the parents' stigmatizing behaviors but rather, might be a decision made by the parents based on their child's age. Parents might believe younger children are too young to be exposed to concepts of illness and discrimination, and thus tend to use indirect explanations for the younger children. In the present study, there was no relationship between the child's age and the type of explanation used to explain mental illness to the child. However, the child's age did have a positive association with behavioral maintenance, in that parents were more likely to encourage older children to maintain their relationship with an individual with mental illness rather than younger children.

These results suggest that parents' decision to give vague answers to questions about mental illness from their child might not stem from their belief in sheltering the child from concepts they believe are more appropriate for when the child is older. Rather, this decision to give vague answers, almost an effort to brush aside the child's curiosity, stems from the parents' own causal attributions, onset responsibility and public stigma. This decision perpetuates the inability to speak about mental health issues in society, where a taboo label is placed upon the subject especially in the child's mind and mental illness stigma becomes further normalized in the public sphere. On the other hand, the child's age did, in fact, play a role in parents' encouragement of children to maintain their relationship with individuals with mental illness. This may be due to the fact that parents believe older children are far more capable of handling an individual with mental illness than are young children, and are therefore more likely to stay safe. However, it is difficult to decipher the reasoning behind this distinction between child ages without further exploration with far more in-depth interviewing of parents.

General Discussion

The present study aimed to compare the endorsement of different types of stigma- public stigma, onset responsibility, and courtesy stigma- across three ethnic-cultural groups- South Asian, East Asian and European Americans. The present study provides further evidence for the Attribution Theory (Weiner, 1988) which asserts that the perception of mental illness as onset-controllable leads to stigmatizing attitudes. In the present study, stigmatizing emotions such as anger, irritation, and fear were associated with beliefs of dangerousness and stigmatizing behaviors such as social distance and forced treatment. Thus, causal attributions of mental illness have a powerful impact on individual's stigmatizing beliefs and actions, and are therefore one of the main factors which should be targeted in order to reduce stigma in the public sphere.

Although causal attributions of mental illness played an important role in influencing public stigma, these causal attributions of mental illness did not vary across ethnic-cultural groups. All three ethnic-cultural groups had similar casual attributions of mental illness, with individuals from each group believing mental illness was neither under the control of the individual with mental illness nor under any external control. These findings show that the causal beliefs that have a strong pathway to public stigma were similarly not endorsed across the three ethnic-cultural groups which suggests similar non-stigmatizing beliefs. However, there was in fact a significant difference in the endorsement of courtesy stigma in the South Asian and European American groups. Considering we found that individuals from South Asian cultures do not hold more stigmatizing causal beliefs than individuals from European American cultures, any cultural differences in the endorsement of courtesy stigma must stem from other factors which vary between the two groups.

Two cultural mechanisms which were found to be influencing factors on stigma were collectivism and interdependent self-construals, both cultural values traditionally endorsed by eastern societies. Both of these cultural mechanisms demonstrated opposing impacts on courtesy stigma, with collectivism being positively associated, and interdependent self-construals being negatively associated with endorsement of this type of stigma. In a similar trend, collectivist values were associated with higher stigmatizing behaviors, such as fear of individuals with mental illness and supporting forceful treatment, whereas interdependent self-construals were associated with lower public stigma and greater empathy and helpful behaviors. Since these two cultural mechanisms coexist in multiple cultures, it is interesting to see how they interact with each other to impact stigmatizing behaviors. Although collectivism may have outweighed the influence of interdependent self-construals in South Asian cultures, one may have counterbalanced the other in the East Asian group resulting in this group not differing from European Americans in endorsement of courtesy stigma. Further research must be conducted to better understand how these two cultural mechanisms relate to one another, and collectively influence a group member's stigmatizing behaviors.

The present study also highlighted the importance of instruction in psychology by suggesting the positive impact of psychoeducation on reducing public stigma. These findings have important policy implications on how stigma may be reduced across cultures. Increased instruction in psychology can have a positive impact on the whole by reducing stigmatizing attitudes and dispelling stigmatizing stereotypes of individuals with mental illness. Most importantly, these findings highlight the importance of psychoeducation, awareness programs of mental health and increased participation in psychology courses in combating stigma of mental illness in society. Furthermore, as expected, there was a difference in stigmatizing attitudes

towards individuals with different mental illness diagnoses. Individuals were more likely to endorse public stigma towards individuals with schizophrenia, whereas they felt more empathy for individuals with depression. On the other hand, the family members of individuals with depression tended to receive more courtesy stigma. The differences between stigmatizing attitudes towards individuals with different mental illness diagnoses suggest that the different causes, symptoms and prognoses of a mental illness may be influencing factors in the type of stigma these individuals face in society. Previous research suggests that causes, especially genetic causes, of a mental illness plays an important role on the stigmatizing attitudes individuals with mental illness must endure (Angermeyer et al., 2004), but more research is needed to understand the relative importance of each of these components- cause, symptoms and prognosis- in public stigma.

The present study was expanded in Study 2 to understand parental socialization of stigma in children. Parents' causal attributions of mental illness influenced their endorsement of public stigma, which is an important way of socializing stigmatizing attitudes in children through modeling. Similarly, causal attributions of mental illness were also found to be an important influencing factor on parents' verbal explanations of mental illness to their children, showing that parents with less stigmatizing attributions gave their children clear and direct explanations about mental illness and even encouraged their children to maintain relationships with individuals with mental illness. The role of the parent in the formation of stigmatizing behaviors in children is crucial. Therefore, it is important to target parents' casual attributions of mental illness in particular which will not only alter their socialization in the form of modeling behaviors, but also verbal explanations of mental illness and the way a child is taught to interact with an individual with mental illness.

The present study did not find any differences in the use of different mental illness explanations across ethnic-cultural groups using the Consensual Qualitative Research method. Both groups were most likely to use ambiguous explanations to explain the cause of mental illness, and the mention of biological forms of recovery was also common across the two ethnic-cultural groups. However, the parents across the two groups did differ in their endorsement of onset responsibility and public stigma, suggesting different types of socialization through modeling across ethnic-cultural groups. However, much more research is needed to truly understand the different types of socialization across these groups. It is important to note that a greater level of instruction in psychology was associated with less stigmatizing explanations, showing the importance of psychoeducation for parents of young children in order to reduce the socialization of stigmatizing attitudes to future generations. However, it is a positive indication that as children get older, parents are more likely to encourage them to interact with individuals with mental illness which suggests a more interactive way of children becoming familiar with mental illness and forming positive attitudes towards individuals with mental illness such as empathy and helpfulness.

Despite these interesting findings, this study is limited. Study 1 is limited in its comparison of three different ethnic-cultural groups. Since participants were recruited from the Greater Boston Area, all participants had different levels of acculturation into American society. Due to this, the three ethnic-cultural groups were not as distinct, resulting in less difference in the endorsement of stigma by members of the different groups. Future research can incorporate a measure of acculturation as a controlled variable. Furthermore, Study 2 is limited greatly by the use of an online survey, which resulted in participants answering the qualitative assessment using brief phrases which gave less insight into parents' verbal explanations than anticipated. The

understanding of parents' verbal explanations could have been increased greatly with the use of in-depth interviews to gain a more thorough understanding of parental socialization. Furthermore, another limitation in this study was the inability to measure the effect of socialization on children and whether children actually adopt the stigmatizing attitudes that are being modeled and verbalized to them by their parents. Future research can address this by studying both parents and children together in order to assess the effect of different types of explanations of mental illness on children in a more detailed manner.

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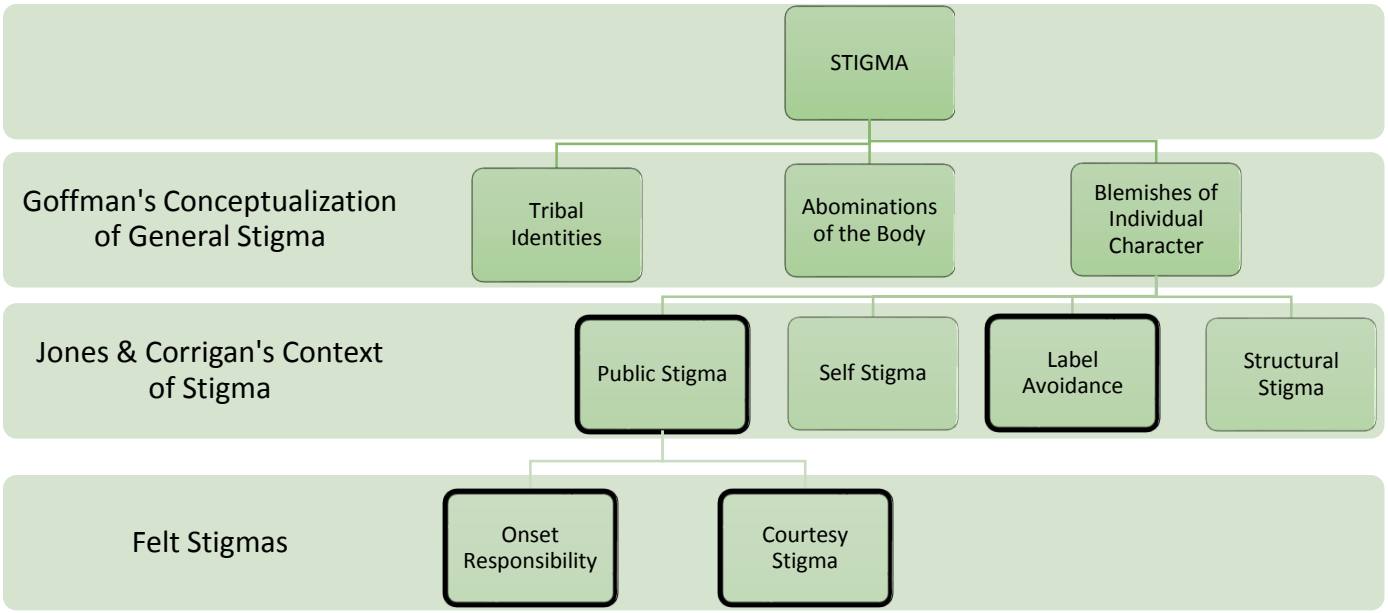

Figure 1. Conceptualization of Stigma. Types of stigma outlined in bold are the stigmas of interest in the present study.

Appendix A.

Qualitative Assessment- Harry Vignette. Harry is your next-door neighbor and used to be friendly with your child(ren). They would talk, play and your child(ren) would often visit Harry's house next door. Now Harry is having a hard time with his illness. Sometimes he hears voices and becomes upset. Harry has been hospitalized 6 times because of his illness. Your child(ren) ask why Harry is behaving like that.

Qualitative Assessment- Jason Vignette. Jason is your next-door neighbor and used to be friendly with your child(ren). They would talk, play and your child(ren) would often visit Jason's house next door. Now Jason is having a hard time with his illness. He has a depressed mood most of the time and has lost all interest in activities he used to enjoy, like playing with your child(ren). Your child(ren) asks why Jason is behaving like that.

Table 1a.

Study 1 Descriptive Statistics of Attribution Questionnaire-27 Schizophrenia.

	N	Min	Max	Mean	SD	Skew	Kurtosis	Reliability
Blame	176	1	8.67	2.38	1.49	1.54	2.88	0.72
Anger	176	1	7	2.58	1.53	0.89	-0.11	0.84
Pity	176	1	9	6.85	1.59	-0.54	-0.04	0.72
Help	176	1	9	6.13	1.99	-0.38	-0.52	0.86
Danger	176	1	9	4.19	2.03	0.41	-0.64	0.91
Fear	176	1	9	3.91	2.13	0.48	-0.72	0.92
Avoidance	176	1	9	5.48	2.09	-0.16	-0.71	0.83
Segregation	176	1	9	3.68	2.06	0.65	-0.31	0.90
Coercion	176	1	9	5.28	1.63	-0.26	-0.10	0.53
Fear/Dangerousness	173	1	9	4.06	1.99	0.49	-0.56	0.96
Help/Interact	173	1	9	5.34	1.75	-0.14	-0.37	0.84
Responsibility	173	1	8.67	2.40	1.49	1.51	2.83	0.72
Forcing Treatment	173	1	9	3.91	1.87	0.57	-0.15	0.83
Empathy	173	1	9	6.84	1.59	-0.55	-0.04	0.72
Negative Emotions	173	1	7	2.60	1.54	0.87	-0.15	0.85

Table 1b.

Study 1 Descriptive Statistics of Attribution Questionnaire-27 Depression.

	N	Min	Max	Mean	SD	Skew	Kurtosis	Reliability
Blame	176	1	9	3.18	1.67	0.71	0.39	0.75
Anger	176	1	8	2.51	1.62	1.17	0.88	0.88
Pity	176	1	9	6.88	1.62	-0.83	0.59	0.73
Help	176	1.33	9	6.61	1.80	-0.56	-0.49	0.87
Danger	176	1	8.67	2.91	1.94	1.06	-0.61	0.87
Fear	176	1	9	2.59	1.84	1.351	1.64	0.92
Avoidance	176	1	9	4.83	1.90	-0.11	-0.65	0.75
Segregation	176	1	9	2.59	1.75	1.18	1.03	0.86
Coercion	176	1	9	4.85	1.69	-0.11	-0.07	0.61
Fear/Dangerousness	173	1	8.71	2.76	1.84	1.20	1.09	0.95
Help/Interact	173	1.67	9	5.91	1.55	-0.12	-0.39	0.81
Responsibility	173	1	9	3.18	1.68	0.73	0.41	0.76
Forcing Treatment	173	1	9	3.21	1.67	0.77	0.21	0.80
Empathy	173	1	9	6.88	1.63	-0.82	0.56	0.73
Negative Emotions	173	1	8	2.50	1.63	1.18	0.91	0.88

Table 1c.

Study 1 Descriptive Statistics of Attribution Questionnaire-27 Factors Combined.

	N	Min	Max	Mean	SD	Skew	Kurtosis	Reliability
Fear/Dangerousness	173	1	8.86	3.41	1.69	0.78	0.45	0.72
Help/Interact	173	1.58	8.83	5.62	1.50	0.01	-0.36	0.78
Responsibility	173	1	8.67	2.79	1.42	1.00	1.35	0.75
Forcing Treatment	173	1	9	3.56	1.58	0.55	-0.01	0.75
Empathy	173	1	9	6.86	1.51	-0.68	0.55	0.86
Negative Emotions	173	1	7	2.55	1.41	0.87	0.01	0.74

Table 2.

Study 1 Descriptive Statistics of Family Stigma Scale, Asian Values Scale & Singelis Self-Construals Scale.

	N	Min	Max	Mean	SD	Skew	Kurtosis	Reliability
FSS- Schizophrenia	176	1	5.71	1.95	0.96	1.72	1.01	0.85
FSS-Depression	176	1	5.71	2.28	1.12	0.70	-0.43	0.86
AVS	175	31	92	59.07	9.36	0.82	2.10	0.87
Sing- Interdependent	176	3.17	7	5.01	0.80	-0.11	-0.15	0.79
Sing- Independent	176	2.75	6.58	4.55	0.80	0.22	-0.31	0.74

Table 3.

Study 1 Descriptive Statistics of Causal Dimension Scale.

	N	Min	Max	Mean	SD	Skew	Kurtosis	Reliability
Locus of Causality	176	3	23	13.43	3.97	-0.26	-0.33	0.46
External Control	176	4	27	16.69	4.77	-0.06	-0.5	0.80
Stability	176	6	27	17.31	3.59	-0.09	0.26	0.32
Personal Control	175	3	27	16.44	4.80	-0.42	0.40	0.73

Table 4.

Study 1 Pearson's Correlations between Public Stigma and Responsibility

Measure	1.	2.	3.	4.	5.	6.
1. AQ-27 Responsibility	-	.45***	-.22**	.47***	-.35***	.59***
2. Fear/Dangerousness	.45***	-	-.49***	.67***	.05	.64***
3. Help/Interact	-.22**	-.49***	-	-.43***	.21**	-.28***
4. Forcing Treatment	.47***	.67***	-.43***	-	.07	.43***
5. Empathy	-.35***	.05	.21**	.07	-	-.26***
6. Negative Emotions	.59***	.64***	-.28***	.43***	-.26***	-

Table 5.

Study 1 Pearson's Correlations between Courtesy Stigma and Collectivist Values and Self-Construals

Measure	1.	2.	3.	4.
1. Singelis-Interdependent	-	.07	.27***	-.17*
2. Singelis- Independent	.07	-	.01	-.05
3. Asian Values Scale	.27***	.01	-	.17*
4. Family Stigma Scale	-.17*	-.05	-.05	-

Table 6.

Study 1 Pearson's Correlations between Public Stigma and Collectivist Values and Self-Construals

Measure	1.	2.	3.	4.	5.	6.	7.	8.
1. Singelis-Interdependent	-	.07	.27***	-.11	.26***	-.04	.34***	-.14
2. Singelis- Independent	.07	-	.01	.05	.08	.06	.15*	-.16*
3. Asian Values Scale	.27***	.01	-	.26***	-.22**	.41***	.12	.11
4. Fear/Dangerousness	-.11	.05	.26***	-	-.49***	.67***	.05	.64***
5. Help/Interact	.26***	.08	-.22***	-.49***	-	-.43***	.21**	-.28***
6. Forcing Treatment	-.04	.06	.41***	.67***	-.43***	-	.07	.43***
7. Empathy	.34***	.15*	.120	.05	.21**	.07	-	-.26***
8. Negative Emotions	-.14	-.16*	.106	.64***	-.28***	.43***	-.26***	-

Table 7.

Study 1 Pearson's Correlations between Level of Instruction in Psychology and Onset Responsibility and Courtesy Stigma

Measure	1.	2.	3.	4.	5.
1. Number of Psychology Courses	-	.22	-.04	.79	-.21**
2. Family Stigma Scale	.22	-	-.14	-.27***	.62***
3. CDS- External Control	-.04	-.14	-	.16*	-.16*
4. CDS- Personal Control	-.02	-.27***	.16	-	-.37***
5. AQ-27 Responsibility	-.21**	.62***	-.16*	-.37***	-

Table 8.

Study 1 Pearson's Correlations between Level of Instruction in Psychology and Public Stigma

Measure	1.	2.	3.	4.	5.	6.
1. Number of Psychology Courses	-	-.20**	.17*	-.10	-.01	-.15
2. Fear/Dangerousness	-.20**	-	-.49***	.67***	.05	.64***
3. Help/Interact	.17*	-.49***	-	-.31***	.34***	-.29***
4. Forcing Treatment	-.10	.67***	-.31***	-	.07	.43***
5. Empathy	-.01	.05	.34***	.07	-	-.26***
6. Negative Emotions	-.15	.64***	-.29***	.43***	-.26***	-

Table 9a.

Study 2 Descriptive Statistics of Attribution Questionnaire-27 Schizophrenia.

	N	Min	Max	Mean	SD	Skew	Kurtosis	Reliability
Blame	35	1	6.67	4.39	1.49	-0.45	-1.36	0.81
Anger	36	1	8.67	4.37	1.53	-0.32	-1.42	0.95
Pity	36	4	9	6.57	1.59	0.56	1.47	0.42
Help	36	1	9	6.42	1.99	-1.28	3.36	0.80
Danger	36	1	9	4.59	2.03	-0.48	-0.90	0.94
Fear	36	1	9	4.54	2.13	-0.46	-0.77	0.96
Avoidance	36	2.33	9	4.48	2.09	1.43	2.10	0.67
Segregation	36	1	7.67	4.41	2.06	-0.56	-1.29	0.89
Coercion	35	1.67	8.67	5.33	1.63	-0.62	-0.30	0.76
Fear/Dangerousness	36	1	8.57	4.59	2.08	-0.61	-0.94	0.97
Help/Interact	36	1	8.17	5.97	1.50	-1.74	3.86	0.85
Responsibility	36	1	6.67	4.39	2.01	-0.44	-1.36	0.81
Forcing Treatment	36	1	7	4.70	1.99	-0.76	-0.97	0.87
Empathy	36	4	9	6.57	1.01	0.56	1.47	0.42
Negative Emotions	36	1	8.67	4.37	2.31	-0.32	-1.42	0.95

Table 9b.

Study 2 Descriptive Statistics of Attribution Questionnaire-27 Depression.

	N	Min	Max	Mean	SD	Skew	Kurtosis	Reliability
Blame	36	1	7	4.60	1.80	-0.71	-0.74	0.78
Anger	36	1	7	4.31	2.17	-0.60	-1.27	0.95
Pity	36	3	8.67	6.43	1.09	-0.42	1.97	0.22
Help	36	1	9	6.71	1.82	-1.15	2.74	0.94
Danger	36	1	7.33	4.34	2.40	-0.49	-1.57	0.96
Fear	36	1	8	4.30	2.41	-0.44	-1.56	0.97
Avoidance	36	1	8.33	4.33	1.51	-0.07	0.79	0.63
Segregation	36	1	7	4.13	2.21	-0.53	-1.51	0.87
Coercion	36	2.33	8.67	5.60	1.73	-0.64	-0.65	0.73
Fear/Dangerousness	36	1	7.43	4.29	2.35	-0.53	-1.56	0.98
Help/Interact	36	1.67	9	6.20	1.51	-0.79	2.11	0.86
Responsibility	36	1	7	4.60	1.80	-0.71	-0.74	0.78
Forcing Treatment	36	1	8.75	4.63	2.16	-0.44	-0.99	0.91
Empathy	36	3	8.67	6.42	1.09	-0.42	1.97	0.22
Negative Emotions	36	1	7	4.31	2.17	-0.60	-1.27	0.95

Table 9c.

Study 2 Descriptive Statistics of Attribution Questionnaire-27 Factors Combined.

	N	Min	Max	Mean	SD	Skew	Kurtosis	Reliability
Fear/Dangerousness	36	1	8	4.44	2.14	-0.52	-1.32	0.92
Help/Interact	36	1.67	8.33	6.08	1.35	-1.63	4.77	0.77
Responsibility	36	1	6.83	4.52	1.78	-0.69	-0.90	0.85
Forcing Treatment	36	1	6.88	4.67	1.90	-0.80	-0.95	0.81
Empathy	36	3.50	8.50	6.50	0.91	-0.38	2.71	0.68
Negative Emotions	36	1	7.67	4.34	2.18	-0.47	-1.53	0.94

Table 10.

Study 2 Descriptive Statistics of Causal Dimension Scale.

	N	Min	Max	Mean	SD	Skew	Kurtosis	Reliability
Locus of Causality	36	3	20	9.94	3.56	0.82	1.46	0.52
External Control	36	3	27	11.89	6.26	0.82	-0.27	0.91
Stability	36	6	25	13.42	5.91	0.52	-1.15	0.79
Personal Control	36	3	22	10.47	4.58	0.87	0.40	0.73

Table 11.

Study 2 Descriptive Statistics of Family Stigma Scale, Asian Values Scale & Singelis Self-Construals Scale.

	N	Min	Max	Mean	SD	Skew	Kurtosis	Reliability
FSS- Schizophrenia	36	1	4.71	2.21	0.96	0.92	0.32	0.84
FSS-Depression	36	1	5.71	2.26	0.97	1.23	3.17	0.86
AVS	36	40	76	62.11	8.88	-0.92	0.32	0.88
Sing- Interdependent	36	3	6.42	5.21	0.85	-1.21	0.95	0.84
Sing- Independent	35	2.92	5.92	4.99	0.60	-1.28	2.80	0.66

Table 12.

Study 2 Summary of Domains, Categories and Frequencies

Domains	*Category*	*Frequencies*
Explanation	Cause- Biomedical	Variant (7)
	Cause- Ambiguous	Typical (30)
	Cause- Previous Experience	Variant (1)
	Effects on Emotions, Thoughts, Behaviors	Variant (15)
	Effect on Personal Characteristic	Variant (3)
	Linking Explanation	Variant (3)
Recovery	Biological	Variant (10)
	Spiritual	Variant (4)
	Difficulty of Recovery	Variant (7)
	Positive Trajectory	Variant (6)
	General Healing	Variant (5)
Help Behaviors	Active Maintenance	Variant (5)
	Passive Maintenance	Variant (4)
	Active Avoidance	Variant (3)
	Passive Maintenance	Variant (6)

N=36. General = applicable to all cases; Typical = applicable to at least half the cases; Variant = applicable to less than half the cases.

Table 13.

Study 2 Summary of Domains, Categories and Frequencies for South Asians

Domains	*Category*	*Frequencies*
Explanation	Cause- Biomedical	Variant (1)
	Cause- Ambiguous	General (7)
	Cause- Previous Experience	Variant (1)
	Effects on Emotions, Thoughts, Behaviors	Variant (3)
	Effect on Personal Characteristic	Never (0)
	Linking Explanation	Variant (1)
Recovery	Biological	Variant (3)
	Spiritual	Never (0)
	Difficulty of Recovery	Never (0)
	Positive Trajectory	Variant (2)
	General Healing	Variant (1)
Help Behaviors	Active Maintenance	Variant (1)
	Passive Maintenance	Never (0)
	Active Avoidance	Never (0)
	Passive Maintenance	Variant (1)

N=7. General = applicable to all cases; Typical = applicable to at least half the cases; Variant = applicable to less than half the cases.

Table 14.

Study 2 Summary of Domains, Categories and Frequencies for European Americans

Domains	*Category*	*Frequencies*
Explanation	Cause- Biomedical	Variant (6)
	Cause- Ambiguous	Typical (16)
	Cause- Previous Experience	Never (0)
	Effects on Emotions, Thoughts, Behaviors	Variant-Typical (10)
	Effect on Personal Characteristic	Variant (2)
	Linking Explanation	Variant (2)
Recovery	Biological	Variant (7)
	Spiritual	Variant (2)
	Difficulty of Recovery	Variant (5)
	Positive Trajectory	Variant (2)
	General Healing	Variant (3)
Help Behaviors	Active Maintenance	Variant (4)
	Passive Maintenance	Variant (4)
	Active Avoidance	Variant (1)
	Passive Maintenance	Variant (4)

N=22. General = applicable to all cases; Typical = applicable to at least half the cases; Variant = applicable to less than half the cases.

Table 15.

Study 2 Pearson's Correlations between Onset Responsibility, Public Stigma and Core Idea Categories

Measure	1.	2.	3.	4.	5.	6.	7.
1. AQ-27 Responsibility	-	-.71***	-.53***	-.41**	.10	-.53***	.34*
2. External Control	-.71***	-	.78***	.37*	-.19	.65***	-.34*
3. Personal Control	-.53**	.77***	-	.25	-.17**	.57***	-.25
4. Direct Explanation	-.41**	.37*	.25	-	-.61***	.19	-.17
5. Indirect Explanation	.10	-.19	-.17	-.61***	-	-.09	-.04
6. Behavioral Maintenance	-.53***	.65***	.57***	.19	-.09	-	-.19
7. Behavioral Avoidance	.34*	-.34*	-.25	-.17	-.04	-.19	-

Table 16.

Study 2 *t*-test results comparing frequencies of categories of qualitative explanations in South Asian and European American parents

	South Asians		European Americans		
	M	SD	M	SD	*t*-test
Direct Explanations	0.36	0.67	0.43	0.73	ns
Indirect Explanations	1.55	0.69	1.39	0.78	ns
Behavioral Maintenance	0.18	0.40	0.70	0.64	ns
Behavioral Avoidance	0.09	0.30	0.30	0.64	ns

Table 17.

Study 2 Pearson's Correlations between Child Age and Core Idea Categories

Measure	1.	2.	3.	4.	5.
1. Child Age	-	-.04	-.07	.34	-.27
2. Direct Explanation	-.04	-	-.61***	.19	-.17
3. Indirect Explanation	-.07	-.61***	-	-.09	-.04
4. Behavioral Maintenance	.34*	.19	-.09	-	-.19
5. Behavioral Avoidance	-.27	-.17	-.04	-.19	-