

Primary and Family Stigma of Mental Illness: Comparing Perceptions of African Americans and European Americans

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Recommended Citation

Rubinshteyn, Julia, "Primary and Family Stigma of Mental Illness: Comparing Perceptions of African Americans and European Americans" (2015). *Dissertations (2009 -)*. Paper 545.
http://epublications.marquette.edu/dissertations_mu/545

PRIMARY AND FAMILY STIGMA OF MENTAL ILLNESS:
COMPARING PERCEPTIONS OF AFRICAN AMERICANS
AND EUROPEAN AMERICANS

by

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A Dissertation submitted to the Faculty of the Graduate School,
Marquette University,
in Partial Fulfillment of the Requirements for
the Degree of Doctor of Philosophy

Milwaukee, Wisconsin

May 2015

ABSTRACT
PRIMARY AND FAMILY STIGMA OF MENTAL ILLNESS:
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Marquette University, 2015

Research has shown that stigma is a significant barrier to mental health treatment seeking, and that African Americans tend to have significantly lower rates of treatment seeking compared to European Americans (Wang et al., 2005). Stigma affecting the individual directly is called *primary stigma* (Corrigan & Kleinlein, 2005), whereas stigma affecting the individual's family members is referred to as *family stigma*. In the present study, a vignette was presented to 287 undergraduate students at Marquette University. The study examined attitudes of primary and family stigma toward a target based on race (European American or African American) and type of mental illness (drug dependence or schizophrenia). Participants completed the Attribution Questionnaire-27 (AQ-27), Family Questionnaire (FQ), Level of Familiarity Scale (LOF), Color-Blind Racial Attitudes Scale (CoBRAS), Just World Scale (JWS), and Social Desirability Scale (SDS). MANOVAs were conducted to determine main effects and interaction effects of the target's race and type of mental illness on the stigma ratings for primary and family stigma of the target. In the primary stigma condition, it was found that there were higher stigma ratings for the target with drug dependence compared to the target with schizophrenia. No significant differences were found in stigma ratings based on the target's race or the interaction between race and mental illness. In the family stigma condition, the individual who had a family member with drug dependence yielded higher stigma ratings compared to the target whose family member had schizophrenia. No significant differences were found between stigma ratings based on the target's race or the interaction between race and mental illness of the family member. This study was the first to examine the relationship between race, mental illness, and family stigma ratings. Future studies can examine differences that include additional mental illnesses and additional ethnicities than the ones examined in the current study. Future studies can also further examine the impact of the race of the perceiver on stigmatizing attitudes.

ACKNOWLEDGMENTS

Julia Rubinshteyn, M.S.

I would like to thank Stephen Saunders for your guidance and mentorship throughout the past six years of this doctoral program. I particularly appreciate your help with this project and your persistence in helping me strengthen my skills as a researcher and a writer.

I would also like to thank the committee members, Michael Wierzbicki and Stephen Franzoi. I learned a great deal from you throughout graduate school and appreciate your contributions to this project. Thank you to the research assistants who helped collect data for this study, Brett Adams, Alyson Griedl, and Emily Wiersma.

I would like to thank my family for their support, including my parents and my grandmother for instilling in me a strong value in education and choosing a career path that is fulfilling and meaningful. Thank you to the Lozovatskys, Margaret, Dan, and little Sammy and Maya who have brought such great joy to my life throughout my journey in completing my dissertation.

Thank you to Zach for your love, kindness, and patience. Thank you for reading countless drafts of my manuscript, learning more than you ever expected to know about stigma, and for your unwavering support.

Thank you, Megan, for reading several drafts of manuscripts, your mentorship throughout graduate school, and your dear friendship.

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CHAPTER 1: INTRODUCTION

Primary and Family Stigma of Mental Illness:

Comparing Perceptions of African Americans and European Americans

Approximately one in two individuals will meet criteria for a mental illness in his or her lifetime (Kessler et al., 2005) and 30% of all general practitioner consultations are related to a mental illness (Hardcastle & Hardcastle, 2003). The National Comorbidity Survey (NCS) examined a representative sample of 9,282 Americans and found that approximately half of Americans met criteria for a DSM-IV disorder in their lifetime, and approximately 6% of the U.S. population suffered from the most severe mental disorders (Kessler et al., 2005). Despite these high prevalence rates, many individuals never seek treatment for mental health concerns. The NCS study, for example, found that only 41.1% of individuals who met criteria for a DSM-IV disorder sought treatment over the course of one year (Wang et al., 2005). Individuals with more serious mental illnesses are equally as unlikely to seek treatment as those with relatively minor mental disorders (Narrow et al., 2000), demonstrating that individuals with any type of mental illness encounter barriers to seeking treatment.

One of the most salient reasons that individuals fail to seek treatment is the stigma related to their mental illness (e.g., Corrigan, 2004). Mental illnesses are impairing and distressing to an individual, but research has shown that the effects of stigma can be even more impairing than the mental illness (Hinshaw & Stier, 2008; Link, Struening, Rehav, Phelan & Nuttbrock, 1997; Wright, Gronfein, & Owens, 2000). Individuals with mental illness often struggle with shame and social isolation.

Research further suggests that minority ethnic groups may experience the stigma of mental illness differently, which may account for differences in treatment-seeking. For example, African Americans have reported significantly lower rates of treatment seeking for mental health disorders than European Americans (Wang et al., 2005). African Americans who have mental illness face a unique combination of stigma related both to ethnicity and mental illness.

The following provides a review of the literature on stigma as it relates to mental illness, including how stigma serves as a barrier to mental health treatment seeking. In order to place the stigma of mental illness in proper context, the review starts by differentiating the concepts of stereotype, prejudice, and discrimination. A detailed definition of stigma is provided, and the concept of *family stigma* is introduced, which will demonstrate how the stigma of mental illness expands beyond the individual who is directly affected. The relationship between stigma, family stigma and mental illness is then examined, with particular emphasis on how it relates to African American culture. Finally, the aim of the present study, to discover perceptions of primary and family stigma of European Americans compared to African Americans, will be presented.

Stereotypes, Prejudice, and Discrimination

Individuals naturally categorize others based on their shared characteristics. The tendency is to separate people into *ingroups* and *outgroups*. The ingroup refers to the group that an individual belongs to, whereas the outgroup refers to the group in which an individual is not a member. The *outgroup homogeneity effect* refers to the tendency to perceive members of the outgroup as more alike than members of the ingroup. Individuals tend to perceive members of the outgroup as being uniform and having

similar characteristics, and they perceive members of the ingroup as being more complex (Simon & Pettigrew, 1990).

Stereotypes

The tendency to view members of the outgroup as being uniform or one-dimensional leads to the development of stereotypes, which are beliefs about people that put them into categories that do not allow for individual variation (Schneider, 2004). Stereotypes are widely endorsed beliefs about specific social groups. Stereotypes are adaptive because they are an efficient way to organize information. They allow individuals to quickly form an impression about a person who is part of a certain group.

Research shows that various negative stereotypes exist relating to mental illness, such as the notion that individuals who are mentally ill are dangerous and incompetent (Corrigan & Watson, 2002). That said, stereotypes are not inherently negative. An example of a positive stereotype is the notion that Asian individuals are smart and good at math. Moreover, awareness of stereotypes does not necessarily mean that the person endorses the beliefs. For example, individuals can generally name well-known stereotypes about racial or ethnic groups, but that does not necessarily mean they endorse these beliefs (Corrigan & Watson, 2002; Jussim, Nelson, Manis & Soffin, 1995).

Prejudice

When someone believes that a negative stereotype is true, it can lead to prejudice, which are attitudes toward members of a group that suggest they have an inferior status (Glick & Hilt, 2000). Prejudicial beliefs are different from stereotypes because they have an added evaluative component that is typically negative (Corrigan & Watson, 2002).

Prejudice can be explicit or implicit, meaning that it can entail beliefs that people hold either consciously or unconsciously, respectively.

Prejudiced attitudes include negative evaluative thoughts on the part of the person holding them, and they can also induce a negative emotional component. A negative prejudiced attitude about mental illness is the notion that all individuals with mental illness are bad because they are violent or dangerous. Such a prejudiced attitude would likely lead to strong negative emotional reactions, such as fear toward someone known to have a mental illness (Corrigan & Watson, 2002; Devine, 1989).

Discrimination

Discrimination occurs when prejudicial attitudes and beliefs lead to negative action toward members of a specific group (Brewer & Brown, 1998). Discrimination is not an inevitable result of prejudiced beliefs, but it is a possible outcome.

Discrimination can be overt or covert. Overt discriminatory actions might include violence toward ethnic minority groups or refusal to serve a customer due to skin color. Research suggests that employers routinely discriminate against persons with mental illness by not hiring employees with a known mental illness. Because overt forms of discrimination are deemed to be less acceptable in modern American society, discrimination often takes a covert, less obvious and blatant form. Example of covert racism is a taxi driver who does not pick up an African American passenger or someone who is subject to additional screening at an airport due to the person's ethnicity (Sue, Bucceri, Lin, Nadal, & Torino, 2007).

Discrimination occurs both at an individual and an institutional level. Institutional, or structural, discrimination occurs if policies of private or public

institutions discriminate against individuals. An example of institutional discrimination occurs if a business refuses to service a specific group of people. Institutional discrimination also occurs if a business refuses to hire someone with a mental health condition.

Discrimination can also occur intentionally or unintentionally. *Intentional institutional discrimination* occurs when there are rules, policies, or procedures from an entity in power that purposefully restricts rights of a certain group of individuals. One example of this is Jim Crow laws, which explicitly restricted rights of African Americans. An example of intentional institutional discrimination related to mental illness is the legal restriction of rights for individuals with mental illness and the overrepresentation of negative stories about individuals with mental illness in the media (Corrigan, Markowitz, & Watson, 2004).

Unintentional institutional discrimination occurs when discrimination results from indirect prejudice from an entity in power. An example of this is when universities use ACT and SAT scores as criteria for admission of students. African American and Hispanic students tend to score lower on these standardized tests, making it less likely that they will be admitted. The result of this action is that fewer ethnic minorities are admitted into the university, even though it is not an overtly discriminatory act (Corrigan et al., 2004; Pincus, 1999).

Unintentional institutional discrimination is evident when policies, which are seemingly committed to neutrality, unintentionally negatively affect a stigmatized group. For example, some insurance companies have increased premiums in neighborhoods where crime is higher, which results in unintentional discrimination toward African

Americans, who predominantly live in these neighborhoods. Link and Phelan (2001) discussed this form of discrimination as it related to mental illness. They explained that public health is affected by unintentional institutional discrimination because research on treatment for psychiatric illnesses received less financial support than research on treatment for physical illness (e.g., cancer). Furthermore, many mental health professionals operate through a private sector instead of the public health sector because salaries tend to be higher in the private sector. Consequently, these providers tend to provide treatment for less severe disorders, meaning that individuals with more serious mental health concerns tend to have fewer available treatment options.

In sum, there are various stereotypes about individuals with mental illness. Prejudiced beliefs occur when individuals endorse the negative stereotypes and discrimination occurs when prejudicial attitudes turn into behavior. Discrimination can occur at an individual or an institutional level and can be both intentional and unintentional. Stereotypes, prejudice, and discrimination are all components of stigma.

Stigma of Mental Illness

The following section includes the definition of stigma and the evolution of this definition throughout the stigma literature. After establishing the definition, several types of stigma will be discussed. First, public and self stigma will be reviewed. Following this, primary and family stigma will be defined and reviewed.

Defining Stigma

Goffman's original definition. Goffman (1963) was among the first to define stigma in a social psychological context. The author defined the concept as “an attribute that is deeply discrediting” (Goffman, 1963, p. 3). It was further explained that it can be

seen as “a special kind of relationship between attribute and stereotype” (Goffman, 1963, p. 4). This definition created a link between the notion of negative stereotypes and a “deeply discrediting” attribute in an individual. Goffman’s definition was effective in introducing the concept of stigma into the realm psychological research, but did not incorporate all the complex nuances of the term. Since this definition was first published, researchers have continued to build on Goffman’s concept of stigma and have altered the definition to be more nuanced and descriptive.

Six dimensions of stigma. Jones et al. (1984) elaborated on Goffman’s definition by focusing on the connection between attribute and stereotype that was introduced by Goffman. Attributes are not necessarily linked to stereotypes or stigmatizing attitudes. The authors described various aspects of attributes that predict higher levels of stigmatizing attitudes.

Jones et al. (1984) identified six dimensions of stigma, which determine the extent to which an individual with an attribute will experience stigma. The first dimension is *concealability*, which is the capacity to avoid negative consequences by hiding the stigmatized attribute from others. The second dimension is *course*, which refers to the patterns associated with a stigmatized condition over time. If it is thought that someone may recover from their condition, then that is associated with more positive attitudes, and less stigma, toward the person. The third dimension is *disruptiveness*, which is the tendency for a condition to impair interpersonal relationships. Stigma tends to increase toward an individual when he or she is perceived to have a condition that disrupts relationships. The fourth dimension is *aesthetic qualities*. When someone does not appear to have aesthetic qualities that fit into the norm, stigmatized attitudes are more likely to

increase. This may apply to mental illness when someone struggles to maintain physical appearance or displays inappropriate interpersonal behavior as a result of the mental illness. The fifth dimension is *origin*, or the cause of the stigmatized condition. In particular, when someone is perceived to be responsible for the mental illness, it leads to increased stigma toward the person. Finally, *peril* is the perceived danger that is posed by a condition. This dimension is most likely to lead to social rejection of the person with the condition. It is most relevant to mental illness, because individuals with mental illness are often perceived by the public to be dangerous (Overton & Medina, 2008).

Inclusion of discrimination and power. The dimensions outlined by Jones et al. (1984) are useful in understanding stigma more fully than Goffman's initial definition. A limitation of their work is that it primarily focused on attitudes (prejudice) but did not address behaviors (discrimination). Link and Phelan (2001) expanded the definition of stigma to include the component of discrimination. They conceptualized stigma as "the convergence of interrelated components...stigma exists when elements of labeling, stereotyping, separation, status loss, and discrimination occur together in a power situation that allows them" (Link & Phelan, 2001, p. 377). The authors argued that all five components must be present, in the context of a power situation, for stigma to exist.

Link and Phelan argued that certain labels (e.g., skin color, sexual preference) are more salient in a society than others (e.g., eye color). The term *label* is preferred to the term *attribute*, because a label could be more or less salient depending on the social place, time, and situation. The term *attribute* focuses exclusively on the individual's characteristics, whereas *label* is a term that places higher emphasis on the significance of the social process and social significance of the word. The meaning of a label can change

based on the context. For example, in modern American society, the label “hyperactivity” is much more salient and indicative of the mental health disorder ADHD than it has been in other time periods or than it is in other cultures.

The second component occurs when labels become associated with negative stereotypes. Goffman recognized this association, and this is the aspect of stigma that has been most prominently evaluated in psychological research on the topic. This is a key component in stigma because it connects an individual’s label to a negative stereotype, causing the target individual to be associated with negative characteristics. For example, the label of “mentally ill” tends to be associated with negative characteristics, such as dangerousness and unpredictability.

Separation occurs when labels create a separation of “us” and “them,” which represents the establishment of an ingroup and an outgroup. During this part of the stigma process, a perceiver believes that those with certain labels have certain characteristics that make them fundamentally different from those who do not have that label. An example of separation is when stigmatized individuals are referred to as the label. When people with schizophrenia are referred to as “schizophrenics,” they are being defined by their label rather than their other attributes (Link & Phelan, 2001). As with stereotyping, separation does not necessarily have a direct, negative impact on the target. For example, saying and believing that “the rich are different” probably does not negatively affect wealthy people.

Once it has been established that a labeled individual is different from the majority through separation, the stigmatizing process is fulfilled if the individual experiences both status loss and discrimination. Status loss occurs when an individual is

seen as having a lower position in society as a direct result of negative stereotypes associated with a label and his or her perceived separation from society.

Link and Phelan (2001) argued that it is particularly important to include discrimination in the definition of stigma, but most definitions of stigma did not do so. They argued that labeling, stereotyping, and separation do not fully encompass what it means to be stigmatized. For example, if labeling and stereotyping alone were used to define stigma, as Goffman proposed, then any group that is associated with labels or stereotypes, even if they are positive, would be considered stigmatized. Jones et al.'s (1984) definition was more descriptive and incorporated negative stereotypes and prejudices, but the authors failed to include any aspect of behavior. Link and Phelan (2001) argued, however, that individuals are not stigmatized unless the process of labeling, stereotyping, and separating leads to social exclusion by rejection. They clearly distinguished stigmatized conditions as being perceived negatively by others and as leading to discrimination, thus encompassing more thoroughly the experience of someone with a stigmatized condition.

Link and Phelan's (2001) final component of stigma is power, which is also unique to their definition. The authors contended that stigma is "entirely dependent on social, economic, and political power" (p. 375). Because social power is inevitable in a society, stigmatization is also inevitable. This sometimes occurs because of the tendency of individuals who are more powerful in a society to blame those who have less power (e.g., individuals with mental illness) in order to decrease guilt for those in power for any social inequality that may exist. This is also explained by the *just world hypothesis* (Lerner, 1980), which is the belief that individuals tend to experience consequences that

are consistent with their actions. Therefore, it is believed that if someone is afflicted with an illness, it is because that individual has done something to deserve it. This allows members of the majority to reduce their own guilt regarding the notion that someone may be afflicted with a mental illness randomly or through no fault of their own.

In summary, Link and Phelan's (2001) definition of stigma entails the notion that the process of stigmatization of mental illness is not merely due to individual cognitive processes, such as labeling and stereotyping, but is also the result of a complex social process involving status loss, discrimination, and power. Using this definition of stigma, there are several types of stigma that can offer additional information regarding the effects of this process as experienced by individuals with mental illness.

Subtypes of Stigma

Corrigan (2004) defined *public stigma* and *self stigma*, which are public and private aspects of stigma, respectively, that are experienced by individuals with mental illness. Both public stigma and self stigma include aspects of stereotypes, prejudice, and discrimination. The primary focus of the current study is public stigma. The following includes a definition of public and self-stigma and an explanation of each construct as it pertains to the current study. Next, primary and family stigma are defined and the research regarding family stigma is reviewed.

Public stigma. Public stigma refers to “what a naïve public does to the stigmatized group when they endorse the prejudice about that group” (Corrigan, 2004, p. 616). That is, public stigma includes stereotypes, prejudices, and discrimination that often result in negative consequences for the stigmatized individual. The research regarding public stigma, as introduced by Corrigan (2004), focuses exclusively on mental illness.

Stereotypes include widely-endorsed public beliefs about individuals with mental illness, such as the notion that “all people with mental illness are dangerous.” An example of prejudice is the belief that all individuals with mental illness are dangerous and should be feared (Corrigan, 2004). Public stigma discrimination occurs when individuals are actively denied opportunities due to their mental illness, such as the compromised ability of individuals with mental illness to obtain decent jobs or find acceptable housing.

The level of public stigma for individuals with mental illness tends to vary based on various factors. One of the most important factors that influences the level of public stigma from a perceiver is the type of mental illness. One study by Link and colleagues (1999) examined public perceptions of mental illness. The study surveyed 1,444 members of the general public regarding perceptions of mental illness. Participants read a vignette in which individuals were depicted to have symptoms of schizophrenia, major depressive disorder, alcohol dependence, drug dependence, and a control group that included a “troubled person” with ambiguous symptoms. Participants identified stress as the most likely cause for each of the disorders, except for drug dependence, which was attributed to the person’s own bad character. The target with drug dependence was also perceived to be most violent and the person from whom to keep the greatest social distance. After drug dependence, the disorders that were perceived as most violent and more likely to be avoided were alcohol dependence, schizophrenia, major depression, and the “troubled person.” The results of this study illuminates the phenomenon that some individuals may experience more public stigma based on their mental health condition if

it is perceived as more negative by the public. Therefore, negative stereotypes and prejudices tend to be stronger for some mental health conditions compared to others.

In general, individuals who suffer from mental illness are perceived to be blamed more frequently for their conditions than their counterparts with physical health conditions (Corrigan, et al., 1999). Previous studies have demonstrated that participants tend to view individuals who have mental illness or substance abuse with higher levels of anger, are less likely to help the person, more likely to avoid them socially, and are more likely to want support coercive methods for providing mental health treatment (Corrigan et al., 1999; Corrigan et al., 2000).

The negative stereotypes and prejudices held by the public of individuals with a mental illness can lead to discriminatory behavior. Public stereotypes and prejudice regarding mental illness often prevent individuals from acquiring and maintaining employment and finding safe housing (Corrigan, 2004) because employers are less likely to hire and landlords are less likely to rent to someone with a psychiatric diagnosis. Link (1987) found that individuals with an identified mental illness earn less than their counterparts who have the same psychiatric diagnosis, but whose employers are not aware of it. The author also found that the label alone of a psychiatric disorder negatively affects employment opportunities, regardless of the individual's ability level or qualifications for a position.

Individuals with mental illness also are less likely to receive the same benefits from the public health system than their counterparts without mental illness. For example, Druss, Allen and Bruce (1998) determined that individuals with mental health illnesses received fewer insurance benefits. The authors examined data consisting of 20,283

individuals over six regions in the United States consisting of 46 health plans. They found no significant differences in physical symptoms in the two groups, but the individuals with higher rates of depressive symptoms were significantly less likely to be enrolled in HMOs and more likely to be enrolled in fee-for-service plans, which offer less coverage. Mental illness served as a barrier not only to physical health coverage, but to physical health services in general. One study found that out of 113,653 individuals who suffered a myocardial infarction, those who identified having a mental illness were significantly less likely to undergo percutaneous transluminal coronary angioplasty, the preferred procedure to treat coronary artery disease (Druss et al., 2000).

Another consequence of public stigma is the discriminatory behavior of criminalizing of mental illness. This occurs when individuals with mental illness are dealt with by legal system rather than the mental health treatment system. As a result, there is a high prevalence of individuals with mental illness in jail (Corrigan, 2004). Hinshaw and Stier (2008) referred to the Los Angeles County Jail as the largest mental hospital in the nation, if not the world. Each day, the population of this jail consists of numerous inmates who suffer from untreated mental illness. This problem is exacerbated by the lack of available treatment for these individuals; not only are various offenses criminalized (e.g., drug-related offenses), but there are not enough available mental health services for these individuals (Corrigan & Kleinlein, 2005).

In addition to overt criminalization of mental illness, there are also state laws that are inherently discriminatory toward those who are mentally ill (Corrigan et al., 2004). These laws are examples of intentional institutional discrimination, which are forms of public stigma. For example, approximately one third of the states in the U.S. have laws

that restrict the right to vote, obtain or renew a driver's license, serve on a jury, or hold public office (Burton, 1990). Approximately half of the states prevent parents who are mentally ill from having custody of their children. Some sociologists contend that some current laws can be compared to the Jim Crow laws that discriminated against African Americans (Hill, 1988; Wilson, 1990) Further research is necessary, however, to determine how frequently these laws are enforced in State courts (Corrigan et al., 2004).

Watson, Ottati, and Corrigan (2003) discussed the connection between prejudiced beliefs and discriminatory behavior. The authors attributed the discrimination of reduced occupational and housing opportunities to *controllability*. Overton and Medina (2008) defined this as “the amount of volition one has in a situation” (p. 146). Employers and landlords might be less likely to want to deal with somebody if they believe that the mental illness is something internal and the person has control over behavior related to the mental illness. This is similar to Jones et al.'s (1984) stigma component of *origin*, which means that there is less stigma when someone is perceived not to have control over their condition. Reduced ability to obtain housing and employment compared to the majority is also an example of the power differential among individuals with mental illness compared to the majority. This exemplifies Link and Phelan (2001)'s conceptualization of stigma, which must occur in the context of a power differential between the majority group and the stigmatized group.

Self-stigma. Self-stigma refers to “what members of a stigmatized group may do to themselves if they internalize the public stigma” (Corrigan, 2004). In addition to affecting how an individual is perceived by society, stigma can often be internalized, causing an individual to feel less valued due to the mental illness. Like public stigma,

self-stigma also includes stereotypes, prejudice, and discrimination. With self-stigma, however, these thoughts and behaviors are generally internal to the individual with a mental illness. For example, someone who has a mental illness might believe and internalize the stereotype that individuals with mental illness are all incompetent. This would lead to the prejudiced belief that “because I have a mental illness, I must be incompetent.” The person might then discriminate against him or herself by not attempting to seek employment because of the belief that he or she is incompetent (Corrigan, 2004).

Research has shown that individuals affected by self-stigma often experience negative emotional ramifications. In particular, self-esteem and self-efficacy are affected. Diminished self-esteem usually leads to feelings of shame (Corrigan & Miller, 2004), and this shame is strongly associated with the tendency to not seek mental health treatment (Corrigan, 2004).

Although public stigma is the primary focus of the current research, self-stigma is a direct result of the effects of public stigma and is important to review briefly in order to gain a more thorough understanding of the potential impact of public stigma.

Family Stigma. Public stigma and self-stigma affect more than just the individual who has a mental illness. The stigma that affects the individual directly is called *primary stigma* (Corrigan & Kleinlein, 2005). Researchers have also determined that stigma can affect individuals who are associated with someone with a mental illness. Goffman (1963) used the term *courtesy stigma*, which refers to prejudice and discrimination that someone experiences by being linked to someone who has a stigmatized attribute. Since Goffman introduced this term in the literature, researchers have referred to this as

associative stigma, or the stigma experienced by a person who is associated with someone with a mental illness (e.g., Mehta & Farina, 1988).

Individuals are perceived to be associated with someone, even when the association is coincidental (i.e., sitting in a waiting room next to someone with an undesirable characteristic; Hebl & Mannix, 2003). Individuals are also perceived to be associated with someone when they are part of the same social unit.

Families are generally perceived as the social groups that are most closely bonded as a social unit (Pryor, Reeder, & Monroe, 2012). Thus, *family stigma* is a common type of associative stigma, and it is especially common with mental illness (Farina, 2000). One explanation provided by Farina is that individuals who appear together in public seem to be alike. Another potential reason is because of the assumption that someone who associates with a marginalized person must not have much worth themselves. A third explanation is a genetic interpretation that individuals who are related to those with a mental illness might be more genetically predisposed to mental illness themselves.

Studies have confirmed that family members of someone who has a mental illness tend to experience the phenomenon of associative stigma. A study by Phelan, Bromet, and Link (1998) examined family stigma among 156 parents and spouses of hospitalized psychiatric patients. They found that more than half of the participants endorsed concealing the hospitalization. They also found that family members were more likely to conceal the mental illness if the person with mental illness was female, or if the person had less severe symptoms.

Van der Sanden and colleagues (2013) administered a survey to 527 family members of individuals with mental illness. Their survey assessed stigma by association

by examining participants' cognitive, emotional, and behavioral reactions to being related to someone with a mental illness. They also assessed how participants perceived public stigma by administering a scale that assessed how they thought most people would react to someone with a mental illness. The participants' own psychological distress was evaluated by asking about psychiatric symptoms of disorders such as depression and anxiety. The researchers found that those who endorsed experiencing stigma by association also reported greater psychological distress.

Public and Self-Stigma in Families of Someone with a Mental Illness. The research in this area is limited, and tends to focus mostly on measuring self-reported discrimination of individuals who have a family member with a mental illness. Because the research has mostly focused on self-reports of family members, it is predominantly measuring self-stigma, rather than public stigma.

Research has shown that individuals who have family members with mental illness tend to experience significant discrimination (e.g., Link, Cullen, Frank & Wozniak, 1987). The most common form of discrimination is avoidance. Family members experience public stigma similar to that of the individuals themselves (e.g., discrimination from employers and landlords). One crucial area affected for family members is social relationships. Several studies have been conducted examining the effect of mental illness of a family member on family relationships and found that family members tended to report strained and distant relationships with extended family and/or friends due to having a family member with mental illness (Corrigan & Miller, 2004).

One distinction for family members compared to individuals with mental illness is that avoidance tends to be more pronounced for family members in social spheres than in

work spheres. Shibre et al. (2001) reported that family stigma reduced marriage opportunities in a rural community not only for the individual with a mental illness, but for the individual's family members. Another social sphere that can be affected is within faith communities. Families of someone with a mental illness reported feeling less accepted in their religious communities (Corrigan & Lundin, 2001).

Phelan, Bromet, and Link (1998) found that family members of someone who was hospitalized for psychiatric symptoms reported higher levels of avoidance by others when they had higher education. The researchers attributed this finding to the tendency for individuals with higher SES to endorse higher levels of stigma.

Corrigan and Miller (2004) explained that it is unclear whether the relationship between shame and avoidance in family stigma can be attributed to public or self-stigma. It seems as though shame plays a role in both types of stigma, and they negatively affect each other. More research needs to be conducted in this area to better determine the relationship between shame and public and self-stigma and how it relates to discrimination and avoidance. Overall, however, the authors concluded that the research is clear regarding the negative impact of stigma on family members of individuals with mental illness. Family members experience prejudice, discrimination, self-stigma, and public stigma in similar ways as the individual who is afflicted. Relatives often experience decreased levels of self-esteem, social impairments, and occupational struggles.

Differences in Family Stigma Based on Relationship with Affected Member.

Research has found that public stigma, such as avoidance, varied depending on the relationship with the family member. Avoidance tends to be reported about twice as

much by spouses of individuals with mental illness than it does for parents (Phelan, Bromet, & Link, 1998). It is possible that the level of discrimination is higher for spouses because they are perceived as having chosen to associate with the person who has a mental illness. Other family members experience stigma differently. Parents, for example, are often blamed for poor parenting skills when their child has a mental illness (Corrigan et al., 2000) and are viewed by the public as being responsible for the child's symptoms. Overall, the research suggests that parents tend to be blamed for the onset of the disease, or the source for how the symptoms started, whereas spouses and siblings tend to be blamed for the offset of the disease, or the source for symptom maintenance (Weiner, 1995).

Contamination. Children of individuals with mental illness are the most likely to experience the common stereotype referred to as *contamination*, which is the notion that close association with someone who has a mental illness leads to diminished worth (Jones et al., 1984). It is possible that this stereotype is at least partially rooted in the reality that children can be negatively affected by living with a parent who has a mental illness (e.g., alcoholism) or have a genetic predisposition to a disorder. Regardless, it is a stereotype that causes children to be perceived more negatively than their peers in social situations (Mehta & Farina, 1988).

For example, a study by Mehta and Farina (1988) examined judgments made by participants about a hypothetical roommate of the same gender whose father is either depressed, has alcoholism, is in jail for tax fraud, is old, or has only one leg. Results revealed that participants perceived someone whose father is depressed, an alcoholic, or in jail with the highest levels of stigmatizing attitudes. These individuals were perceived

as being most impaired in the realms of school and family as compared to their peers. Those who had fathers who were depressed or in jail were viewed as being the most impaired in the realm of friends. Having a father with one leg was viewed as having the least impact on a child. Since this study, minimal research has been conducted in the United States examining the perceptions of a child whose father has a mental illness.

Public Perception of Family Stigma. Most research regarding family stigma has focused on the family member's perception of the stigma. Corrigan, Watson, and Miller (2006) examined the public perception of blame, shame, and contamination of the family member. The goal was to determine whether the perception of family members is based in a realistic public perception. Their study included a national sample of 968 members of the general public. They presented participants with a vignette that varied regarding the disease of the person with the disorder, role of the family member, gender of the person with the disorder, and gender of the family member. Results showed that family stigma related to drug dependence was endorsed at higher levels than family stigma of schizophrenia or health condition, with family members being blamed for the onset and offset of the disorder and a higher likelihood of social exclusion. The results also showed that children of someone with a mental health disorder were most likely to be perceived as *contaminated* by the condition than other family members, particularly in the drug dependence condition.

Corrigan and colleagues (2006) found that families of individuals with drug dependence are perceived with the most stigmatizing attitudes by the general public, and children of someone with a mental health disorder are most likely to be perceived as *contaminated* by the disorder. These results extended the findings from Link et al.'s

(1999) study that showed that individuals with drug dependence are perceived with the highest levels of stigmatizing attitudes by the general public as compared to other psychological disorders.

Stigma of Mental Illness in African Americans

The following contains a review of stereotypes, prejudice, and discrimination as it relates to African Americans. The literature regarding reduced mental health treatment seeking among African Americans is reviewed as it relates to the *double stigma* of being African American and having a mental illness. Finally, the literature about family stigma of mental illness in African Americans will be reviewed.

Stereotypes, Prejudice, and Discrimination Toward African Americans

The stereotypes, prejudice, and discrimination associated with being African American in the United States is incontrovertible. Based on Link and Phelan (2001)'s definition, African Americans experience stigma because they are easily labeled based on their race, stereotyped against, experience separation and status loss, and face various forms of discrimination by the dominant group.

Research has shown that most European Americans perceive African Americans more negatively than they perceive themselves. For example, a study conducted by Davis and Smith (1990) using the General Social Survey examined European American perceptions of African Americans in the United States. They found that compared to European Americans, the participants were five times more likely to view African Americans as unintelligent, nine times more likely to view them as lazy, fifteen times more likely to view them as preferring to live on welfare, and three times more likely to be prone to violence. African Americans were also viewed more negatively than any of

the other ethnic groups (i.e., Hispanic, Asian-American, and Jewish). The results support the notion that racist attitudes have persisted in American society, even though many Americans argue that it has diminished since the 1950s (Williams & Williams-Morris, 2000).

The impact of perceived prejudice due to race has been shown to have a direct, negative effect on well-being (e.g., Branscombe, Schmitt, & Harvey, 1999). Racial minorities tend to feel reduced feelings of control compared to the majority, which leads to lowered self-esteem. This is likely because increased self-esteem is largely associated with having an increased sense of control over the environment (Gecas & Schwalbe, 1983; Ruggiero & Taylor, 1997). Research has shown that when African Americans perceive themselves to be receiving unequal treatment in various situations, they tend to resent the group in power, and feel closer to others who are in the same minority group (Branscombe, Schmitt, & Harvey, 1999).

Reduced Treatment Seeking Among African Americans

Minority groups, particularly African Americans, have reduced rates of mental health treatment seeking compared to European Americans. Snowden (2001) reported that African Americans are less likely to seek outpatient mental health treatment compared to European Americans, even when controlling for differences in socioeconomic status and differences in presenting problems. Not only are there differences in initial treatment seeking, but African Americans are also less likely to remain in treatment compared to European Americans (Sue, Zane, & Young, 1994).

Barriers to Treatment Seeking. Research suggests that lower treatment seeking rates is not due to lower rates of mental illness. For example, Alvidrez (1999) interviewed

187 Latina, African American, and European American women at a women's clinic. The study examined women of similar socioeconomic status and similar rates of mood and anxiety disorders. Results showed that African American women were one third as likely as European American women to make a mental health visit (Alvidrez, 1999). They also found that African Americans endorsed the belief that their problems should not be discussed outside of the family at significantly higher levels than European Americans, suggesting potential embarrassment or shame related to the psychological condition.

In another study by Ward, Clark, and Heidrich (2009), the authors conducted a qualitative study to investigate African American women's beliefs about mental illness. The researchers asked participants to indicate barriers to mental health treatment seeking. Participants indicated that one of the barriers to treatment seeking for the participants was poor access to care. One participant stated that "I was never able to get professional help, so I had to fight my way through" (Ward et al., 2009, p. 10). Another barrier was lack of awareness about mental illness. Some of the women in the study reported denial of existence of mental illness in the African American community altogether. This perspective about mental illness among the participants was highly influenced by their culture. Participants indicated that "Blacks are supposed to be strong" (Ward et al., 2009, p. 9), which included denial of mental illness. Participants stated that even though they had empathy for individuals with a mental illness, they also endorsed blaming the person. Of particular importance is that this study found that stigma served as a clear barrier to mental health treatment seeking in participants. Although participants identified stigma as a barrier, the study was unclear about how the participants defined stigma. A future study would benefit from clearly defining and measuring the aspects of stigma (e.g., public

stigma and discrimination, self-stigma and shame) that are experienced by the participants in the study.

Additional studies have uncovered that stigma does seem to be a barrier to treatment seeking. For example, a study by Nadeem and colleagues (2007) included 15,383 low-income European American, African American, and Latina women who were screened for depression and asked about barriers to mental health treatment seeking, intention to seek treatment, and stigma-related concerns. The results showed that among those who reported symptoms of depression, African American women (both U.S.-born and foreign-born) were more likely to report concerns related to the stigma of mental health treatment seeking compared to European American women (both U.S.-born and foreign-born). Furthermore, the study showed that women who had stigma-related concerns were less likely to express a desire to seek treatment. These results suggest that the stigma of mental illness treatment is directly associated with the decreased desire to seek treatment among African American women.

Similar results were found in a study that found stigma to be a barrier to treatment seeking. A study was conducted that examined treatment barriers for African Americans with undiagnosed Posttraumatic Stress Disorder (PTSD). Participants were recruited in a non-psychiatric hospital that served mostly low-income African Americans. Results showed that many of the participants who met criteria for PTSD were not being treated. Individual barriers, including stigma, were found to be significant barriers for participants. Participants with PTSD reported that strong cultural barriers to seeking treatment included feeling fearful of family and community disapproval in response to treatment seeking (Davis, Ressler, Schwartz, Stephens, & Bradley, 2008). This is

consistent with previous findings regarding the perception among ethnic minorities that family members would disapprove of an individual for seeking mental health treatment (Leaf, Bruce, & Tischler, 1986). Based on this study alone, however, it is unclear whether this barrier is significantly higher for African Americans as compared to European Americans with untreated PTSD.

Thompson, Bazile, and Akbar (2004) conducted a focus group with 201 African Americans to assess their opinions about psychotherapy and barriers to treatment seeking. Stigma was identified by participants as a significant barrier to treatment seeking. Individuals in the study included both participants who had mental health services in the past and those who had none. Individuals indicated that those in the African American community with mental illness tend to hide their illness. Quotes from participants included sentiments such as “the average person, when they find out a person is having mental problems, they turn their back on them” and “If they do [go to therapy], they try to keep it confidential and no one knows about it because you are labeled very quickly” (Thompson, Bazile, & Akbar, 2004, p. 22). The authors concluded that participants indicated that serious mental illness (e.g., schizophrenia, suicidal ideation, alcohol abuse), as opposed to daily stressors, were the most likely reasons for seeking treatment. This suggests that participants only seek treatment when symptoms are severe. Although this study is useful in gaining insight into the perceptions of African Americans toward mental illness, it would be important to test these theories through empirical research rather than through a focus group.

Conner and colleagues (2010) conducted a study in older adults with depression. They examined the impact of public stigma and self-stigma among older African

Americans and European Americans on their treatment seeking attitudes and behaviors. The researchers spoke to 248 African American and European American adults over the age of 60 who were determined to meet criteria for depression. The researchers asked questions to assess treatment seeking attitudes and behaviors. The African American older adults in the study reported more negative attitudes toward mental health treatment seeking and lower intentions of seeking mental health services. In this study, the African American adults endorsed more negative attitudes in general about mental health services. The results of Conner et al.'s (2010) study also revealed that African Americans tend to endorse similar levels of public stigma, but higher levels of internalized stigma than European Americans in the study.

Results of Conner et al.'s (2010) study suggest that there is a relationship between race, depressive symptoms, and the stigma of mental illness. Together, these factors serve as significant barriers to seeking services among individuals who are in need of mental health treatment. The authors concluded that African Americans, particularly those who are older, tend to be less likely than members of other racial groups to seek treatment based on their race, tend to internalize stigma related to mental health, and generally tend to internalize negative thoughts as a symptom of depression. The majority of African Americans in Conner et al.'s study endorsed feelings of mistrust for the mental health care system and did not indicate that mental health treatment was the most effective way to reduce psychiatric symptoms. Participants indicated that if they sought treatment, they would prefer to have a therapist who is the same race in order for treatment to be effective.

Overall, African American participants in Conner et al.'s (2010) indicated that they were more concerned about the stigma of mental illness than European Americans, they were more likely to internalize these beliefs, and the results suggest that they live in a community that might hold more stigmatized beliefs toward mental illness. These results are consistent with findings from additional studies that suggest that African Americans are concerned about stigma of mental illness (e.g., Alvidrez, 1999; Snowden, 2001)

History of Mistrust for Healthcare System. Research suggests that an important contributing barrier to reduced mental health treatment seeking among African Americans is the long history of distrust for the healthcare system that was established through unethical research practices. Studies have found that African Americans are particularly hard to recruit for research studies relating to healthcare (Freimuth et al., 2001). The Tuskegee Syphilis Study, in which penicillin was knowingly withheld from African American participants, resulting in deaths of many of the subjects, set a damaging precedent for African American trust not only in research, but for healthcare providers in general.

Freimuth et al. (2001) explained that African Americans often lack knowledge about research and the medical system in general because of lack of access to care. Many African Americans receive primary health care in emergency rooms and from multiple providers, meaning that they do not typically have one provider that is more invested in the long-term wellbeing of the patient (Shavers-Hornaday, Lynch, Burmeister, L., & Torner, 1997).

When African Americans are hesitant to trust the medical health care system, it is likely to be even more challenging to trust the system to mental health care. When the combined stigma of mental health illness and race may already prevent an individual from seeking treatment, the general distrust of the healthcare system exacerbates this issue and further prevents African Americans from seeking treatment for concerns related to mental illness.

Double Stigma for African Americans with Mental Illness. It has been established that individuals who are African American and those with mental illness both experience stigma. *Double stigma* refers to the stigma faced by individuals who have more than one characteristic that can be stigmatized Gary (2005). This applies directly to the current study because ethnic minorities who have a mental illness tend to experience discrimination that is magnified by their minority status and leads to increased stigmatized attitudes. African Americans in particular have a long history of stereotypes, prejudice, and discrimination that continue to be pervasive in American society. African Americans who have mental illness face challenges such as decreased access to health care and decreased quality of available health care compared to European Americans (Byrd & Clayton, 1992; Poussaint, & Anderson, 2000). This creates additional barriers to treatment seeking for African Americans who also have a mental illness.

A study conducted by Gibbons and colleagues (2004) examined a panel of 684 African American families. Their findings showed that increased reported discrimination as experienced by parents in the study was related to increased substance use in children. Their substance use was also affected by reported symptoms of anxiety and depression. Race-based discrimination was frequently reported among the African American

participants, as well as their 10 year-old children. Parents in the study reported that they thought others had low expectations of them because they were African American. The authors found that discrimination in parents was a strong predictor of substance use among the children as well, suggesting that the race-based discrimination experienced by African American parents was associated with higher levels of substance abuse in both parents and children. The authors explained that direct experiences with discrimination also produced distress for the adolescents, which led to increase substance use, which the authors attribute to being a way to cope with the discrimination and distress. This study demonstrated the negative, cyclical effects of the double stigma of being an ethnic minority and struggling with a mental illness such as substance abuse. According to this study, the discrimination that was experienced due to being an ethnic minority, particularly the perceived low expectations due to race and distress due to discrimination, led to an increase in substance abuse.

African Americans were found to be more likely than European Americans to be hospitalized for psychiatric symptoms and more likely to be diagnosed with more severe disorders such as schizophrenia (Snowden & Cheung, 1990). Wong et al. (2009) found that there were an increased number of ethnic minorities, particularly including African Americans, who sought treatment for recent-onset psychosis, which the authors attribute to the tendency for African Americans to delay treatment seeking from voluntary professional mental health services.

This increased likelihood for hospitalization and delay in treatment is exacerbated by the increased likelihood for African Americans with mental health diagnoses to be incarcerated. Ward, Clark, and Heidrich (2009) examined the beliefs of African

American women about mental illness, coping behaviors, and barriers to treatment seeking. Results showed that the women often endorsed the belief that African Americans with mental illness were frequently hospitalized or imprisoned. The actual rates of hospitalization and imprisonment among African Americans compared to European Americans are consistent with these beliefs, meaning that a biased medical and legal system appears to be propelling these stereotypes. In the state that the study was conducted, African American women tended to be hospitalized for mental illnesses such as bipolar disorder at a higher rate than their European American counterparts (Wisconsin Minority Health Program, 2004). Also, African Americans made up 6% of the general population of the state, but made up 48% of prisoners in the state (Ward, Clark, & Heidrich, 2009). These rates are particularly concerning because they contribute to stereotypes about African Americans and exacerbate negative beliefs about mental illness when applied to African Americans. They increase the likelihood that these notions will become internalized, self-stigmatizing beliefs.

Discrepancies in rates of incarceration between African Americans and European Americans begin in adolescence. Cauce et al. (2002) found that African American adolescents who have emotional problems are more likely than their European American counterparts to be in the juvenile justice system rather than the mental health system. When they do enter the mental health system, it is more likely to be involuntary compared to European American adolescents, even when the symptoms are at comparable levels (Fabrega, Ulrich, & Mezzich, 1993).

A study by Kaplan and Busner (1992) examined rates of admissions to mental health facilities and juvenile correctional facilities in New York over a 1-year period. The

study revealed no significant differences among European American, African American, and Hispanic adolescents to mental health facilities. The study did, however, reveal that significantly more African American adolescents were admitted in the juvenile correctional system. Even though this study appears to show that there is no ethnic discrepancy in adolescents who enter into mental health facilities, a likely explanation for these findings is that many African American adolescents who have psychiatric disorders are more likely to be entered into the legal system rather than the mental health system. This demonstrates the double stigma African Americans have to face regarding both the public stigma of mental health illness and the public stigma related to race. It further demonstrates how the double stigma of race and mental illness hinders African Americans from accessing appropriate mental health treatment.

Rates of hospitalization and incarceration revealed that the concerns about discrimination are rooted in the realities of biased criminal justice and mental health institutions. The stereotypes, prejudices, and discrimination in the healthcare and criminal justice systems perpetuate the public stigma and contribute to the self-stigma for ethnic minorities with a mental illness because the beliefs become internalized. Research has found that the stigma about mental illness among African Americans leads to decreased likelihood of treatment seeking, which results in higher rates of mortality and morbidity, and decreased overall well-being compared to European Americans (Cooper, Corrigan, and Watson, 2003; Gary, 2005).

Even after seeking treatment, African Americans continue to experience the effects of stigma. Not only are African Americans less likely to seek mental health treatment, but they attend significantly fewer sessions than European Americans. A study

across 40 universities that included 1,166 participants found that European Americans attended significantly more sessions than African Americans, even though both groups appeared to benefit from psychotherapy as displayed by a reduction in symptomatology (Kearney, Draper, & Baron, 2005).

African Americans and Family Stigma

As reviewed earlier, the stigma of mental illness extends to family members of the individual as well. Although family stigma has been somewhat researched in studies in the general population, the empirical research to date of this phenomenon in African Americans is limited. Thompson, Bazile, and Akbar (2004) conducted a focus group of 201 African Americans to assess their perceptions of psychotherapy, and participants indicated that family members of individuals with a mental illness tend to hide the mental illness because it is associated with shame and embarrassment for other members of the family. Another study by Alvidrez (1999) reported that African American participants reported shame regarding having a family member with mental illness and participants reported the sentiment that problems related to mental illness should not be discussed outside the family. Aside from these reports, this theory has not been empirically supported.

The study by Wong and colleagues (2009) also examined family stigma in family members of someone who sought psychiatric treatment for psychotic symptoms. They found that African American participants were more likely than European American participants to endorse the belief that others in the family could be contaminated by the mental illness. African American participants were also significantly more likely than the other participants to endorse a sense of shame and need to conceal the mental illness of

their family member. Although these findings provide evidence for perceived family stigma among family members of someone with a mental illness involving psychosis in the African American community, the sample size of the study was limited.

The study reviewed above by Gibbons and colleagues (2004) demonstrates the effects of double stigma, and it also demonstrates the effects of family stigma of mental illness among African Americans. The authors found that African American children of parents who endorsed substance use were more likely to endorse substance use themselves if their parents experienced discrimination due to their skin color. The authors explained that this finding was likely because discrimination experienced by the parents affected the children by creating negative affect and distress in the parent. The authors explained that direct experiences with discrimination were also associated with increased substance use in children, and that the substance use was a potential coping mechanism for the distress associated with the discrimination. This study shows a strong connection between perceived discrimination due to skin color and mental illness. No studies have been conducted, however, comparing African Americans who have a parent with substance use to European Americans.

Summary

Recent research has found that racism continues to pervade American society and that African Americans are viewed the most negatively compared to other ethnic groups in the United States. The current literature about stigma of mental illness and mental health treatment seeking in African Americans suggests that there is a higher level of stigma among African Americans compared to European Americans, particularly internalized, or self-stigma.

African Americans face a number of barriers to mental health treatment seeking including cultural beliefs about mental illness, stigma of treatment seeking, and poor access to care compared to European Americans. The stigma of mental health treatment seeking in African Americans is unique compared to European Americans because it is highly intertwined with high levels of distrust for the healthcare system.

African Americans face the double stigma of mental illness and race, and are faced with biased and discriminatory mental health and criminal justice systems that perpetuate the stigma by hindering African Americans from gaining access to appropriate mental healthcare as compared to European Americans. Although research regarding family stigma among African Americans is limited, previous studies have shown that African Americans endorse shame, contamination, and discrimination due to mental illness in a family member.

To date, no research has examined the public view of African Americans compared to European Americans who have family members with mental illness. It is important to determine how the public perceives these individuals in order to gain a more thorough understanding of the potential obstacles faced by family members of someone with a mental illness, and whether these obstacles differ according to race. The present study aims to examine the impact of both primary and family stigma and issues such as *contamination* as they are perceived about the African American community as compared to the European American community.

Present Study

The overall aim of this study is to expand the existing literature regarding primary and family stigma. To be specific, the study seeks to determine whether stigmatizing attitudes towards a person with mental illness or towards a familial relation of a person with a mental illness are influenced by race and by the type of mental illness. The study investigates stigmatizing attitudes of perceivers (i.e., participants rating target individuals), including labeling, stereotyping, perception of separation, and status loss. The present study also assessed prejudicial attitudes by asking participants to identify their anticipated course of action toward the target individual.

The present study has two parts. In the first study, *primary stigma* will be examined by comparing attitudes towards two mental illnesses experienced by a target individual and the race of that target. The second study will examine the same predictor variables (mental illness and race), but the variable of interest will be *family stigma*.

Study 1: Primary Stigma

The first study aims to examine primary stigma by determining an individual's stigmatizing attitudes toward a target individual with a mental illness (drug dependence or schizophrenia). The illness schizophrenia comprises distinctive symptoms and behaviors that are often stereotyped and perceived by the public as dangerous and disruptive, which makes it a likely target for stigmatizing attitudes (Link et al., 1987; Wong et al., 2009). Drug dependence has been shown in previous research to be one of the most stigmatized mental health conditions. Individuals with drug dependence are perceived by the public to be among the most violent and a person from whom it is best to keep great social distance (Link, Phelan, Bresnahan, Stueve, & Pescosolido, 1999).

Individuals with drug dependence are more likely to be blamed for their condition (e.g., Corrigan et al., 1999; Link et al., 1999).

The goal of this study is to confirm findings from previous studies that drug dependence is perceived as the most stigmatized mental health condition. The study also seeks to extend the previous research by determining whether a difference in stigmatizing attitudes exists based on race of the target individual. The study will further examine the perceived stigma of an individual based on the combined factors of race and type of mental illness of the target individual. The purpose of this study is to examine primary stigma of mental illness and to determine whether primary stigma varies based on the race of the target individual.

Hypotheses. The following are the hypotheses for Study 1:

1) Consistent with previous research, it is hypothesized that individuals with drug dependence will be perceived with the highest levels of stigmatizing attitudes (Corrigan et al., 1999; Corrigan, Watson, & Miller, 2006; Link et al., 1999).

2) Although there is insufficient previous research in this area, it is further hypothesized that target individuals who are African American will be perceived with higher levels of stigmatizing attitudes than their European American counterparts (Davis & Smith, 1990; Williams & Williams-Morris, 2000).

3) It is predicted that there will be an interaction between race and mental illness, such that individuals who are African American with a mental illness will be perceived with higher levels of stigmatizing attitudes compared to European Americans. Because African Americans tend to be perceived with higher levels of stigma than European American, and individuals with drug dependence are perceived with higher levels of

stigma compared to those with schizophrenia, it is hypothesized that African Americans with drug dependence will be perceived with the highest levels of stigmatizing attitudes and that European Americans with schizophrenia will be perceived with the lowest levels of stigmatizing attitudes.

Study 2: Family Stigma

The second study examines family stigma by evaluating participants' stigmatizing attitudes toward a target individual whose father has a mental illness (i.e., drug dependence or schizophrenia). It examines whether family stigma toward mental illness varies based on the race of the target individual.

The goal of this study is to confirm previous findings that individuals who have a family member with drug dependence are perceived with the highest levels of stigmatizing attitudes compared to individuals who have a family member with other mental health conditions. (Corrigan et al., 2006). The study also seeks to extend the previous research by determining whether a difference in stigmatizing attitudes exists based on the race of the target individual who has a family member with mental illness.

Hypotheses. The following are the hypotheses for Study 2:

1) Consistent with previous research, it is hypothesized that individuals who have a family member with drug dependence will be subjected to the highest levels of stigmatizing attitudes (Corrigan et al., 2006).

2) Despite the scarcity of research in the area of examining families of a target individual, it is predicted that individuals who are African American will receive higher levels of stigmatizing attitudes than their European counterparts (Davis & Smith, 1990; Williams & Williams-Morris, 2000).

3) It is also predicted that there will be an interaction between race and mental illness, such as individuals who are African American and have a father with a mental illness will be perceived with higher levels of stigmatizing attitudes compared to European Americans who have a father with mental illness, due to *double stigma* (Gary, 2005) of ethnicity and mental illness. It is hypothesized that African Americans with a family member with drug dependence in particular will be perceived with the highest levels of stigmatizing attitudes and that European Americans with a family member with schizophrenia will be perceived with the lowest levels of stigmatizing attitudes.

CHAPTER 2: METHODS

Participants

Participants were 287 undergraduate students at Marquette University. Participants were 67.6% female and ranged in age from 18 to 29, with the vast majority between ages 18 and 22 ($M = 19.33$, $SD = 1.36$). Participants were 69.7% Caucasian, 11.8% Hispanic/Latin American, 9.1% Asian American/Pacific Islander, 4.9% Black/African American, and 3.8% Other. When asked about marital status, 71.1% students reported being single, 28.2% reported being in a committed relationship, and .3% reported being married. 60.1% of participants were freshman, 16.4 sophomores, 13.3% juniors, and 10.1% seniors. Table 1 displays the number of participants based on gender, ethnicity, marital status, and year in school in the primary and family stigma conditions.

Due to the small number of individuals who responded “other” to ethnicity in both the primary and family stigma conditions, these participants were removed from analyses. Furthermore, due to the small number of African Americans ($n = 4$) who responded to the family stigma questionnaire, this group was also removed from the analyses in the family stigma condition.

Instruments

Attribution Questionnaire-27. The Attribution Questionnaire-27 (AQ-27; see Appendix 1) was developed by Cooper, Corrigan, and Watson (2003). It assesses stereotypes about people with mental illness using nine subscales. Seven of the nine subscales were used in the current study. The other two subscales were omitted because they were not relevant to the present study. Participants are presented with a vignette

about Michael and asked to respond to each statement on a Likert Scale from 1 (not at all) to 9 (very much). The responses are summed to determine a score on each of the scales. The scales include blame (e.g., “I would think that it was Michael’s own fault that he is in the present condition”), anger (e.g., “I would feel aggravated by Michael”), pity (e.g., “I would feel pity for Michael”), help (e.g., “I would be willing to talk to Michael about his problems”), dangerousness (e.g., “How dangerous would you feel Michael is?”), fear (e.g., “Michael would terrify me”), avoidance (e.g., “If I were an employer, I would interview Michael for a job”).

The psychometric properties of the AQ-27 suggest that it is a reliable and valid measure of primary stigma (Corrigan et al., 2002), with good test-retest reliability and validity as shown through confirmatory factor analysis, which supported the content validity of the measure. Coefficient alpha of the AQ-27 in the present study was 0.88.

Family Questionnaire. The Family Questionnaire (FQ) was developed by Corrigan, Watson, and Miller (2006). This questionnaire assesses public stereotypes about family members of individuals with mental illness. It comprises seven of the nine dimensions that are assessed in the AQ-27: blame, anger, pity, help, dangerousness, fear, and avoidance (Corrigan et al., 2006).

Corrigan et al. (2002) conducted an exploratory and confirmatory factor analysis of the AQ-27. They identified the item that had the highest loading on each factor, and used these items to develop the FQ. Therefore, the FQ contains one item to assess each of the seven domains stated above. In addition to the domains above, this questionnaire also assesses four additional domains that are unique to family stigma: blame of the family member for recovery, shame of the family member, contamination from the individual

with a mental illness, and whether the family member should stay away from the individual with a mental illness. These items were selected based on Corrigan and colleagues' (2006) review of common themes in primary stigma of mental illness and drug dependence research (Corrigan, 2005), common themes identified by family members in their experience of family stigma (Corrigan & Miller, 2004), and responses from a focus group of family members of individuals with mental illness. For the present study, all three questions for each domain from the AQ-27 were used. Therefore, the questionnaire contained the 12 original items from the FQ and 14 additional items from the AQ, for a total of 26 items.

The psychometric properties of the FQ suggest that it is a reliable and valid measure of family stigma (Corrigan et al., 2006). The results of their study found that individuals with a family member with a mental illness were viewed with higher stigmatizing attitudes compared to an individual with a physical health condition, suggesting that this measure is a valid measure for attitudes of family stigma toward a target. Coefficient alpha for the FQ in the present study was 0.82.

Level of Familiarity Scale. The Level of Familiarity Scale (LOF) assesses how familiar an individual is with mental illness. The participants are presented with eleven items that vary in level of familiarity with mental illness (e.g., "I have a severe mental illness," "I have a relative who has a severe mental illness," "My job involves providing services/treatment for persons with a severe mental illness"). The items are ranked and coded from 1 (little intimacy) to 11 (most intimate contact with a person with mental illness). Individuals are instructed to "check all that apply." When the measure is scored,

the participant's score is assigned by determining the number of the endorsed item with the highest level of contact with a person with mental illness.

The psychometric properties of the LOF suggest that it is a reliable and valid measure of familiarity with mental illness (Corrigan et al., 2001). It was developed based on scales used in previous stigma research (e.g., Link et al., 1987). Three experts in psychiatric disability ranked situations based on varying levels of intimacy of contact and interrater reliability was .83. The rank order was validated in a sample of 100 research participants (Holmes et al., 1999).

Color-Blind Racial Attitudes Scale. The Color-Blind Racial Attitudes Scale (CoBRAS) is a 20-item scale that measures attitudes toward racism in the United States (Neville et al., 2000). The CoBRAS contains three subscales. The first subscale contains seven items that assess unawareness of white racial privilege (e.g., "White people in the U.S. have certain advantages because of the color of their skin"). The second subscale contains seven items that assess unawareness of institutional racism (e.g., "English should be the only official language in the U.S."). The third subscale contains six items that assess unawareness of blatant racial issues (e.g., "Talking about racial issues causes unnecessary tension"). Each item is rated on a Likert scale ranging from 1 (strongly agree) to 6 (strongly disagree). Item scores are added to determine subscale scores and a total score. Higher scores indicate higher levels of unawareness or denial of racism.

The psychometric properties of the CoBRAS suggest that it is a valid and reliable measure for assessing attitudes related to unawareness or denial of racism (Neville et al., 2000). Support was found for acceptable two week test-retest reliability. Cronbach's alphas ranged from .70 to .86 and coefficient alphas were .80 (unawareness of racial

privilege), .76 (unawareness of institutional racism), and .61 (unawareness of blatant racial issues). Coefficient alpha for the CoBRAS in the present study was 0.83.

Construct validity was supported by results from exploratory and confirmatory factor analyses, which resulted in a three factor solution. The measure showed good concurrent validity with two measures of racial prejudice, including the Modern Racism Scale (McConahay, 1986) and the Quick Discrimination Index (Ponterotto et al., 1995), which suggested that higher levels of color-blind racial attitudes were associated with higher levels of racial prejudice. Concurrent validity was established with the inverse relationship between items on the CoBRAS and the Just World Scale, which suggests that higher color-blind racial attitudes were correlated with the belief that the world is just and fair. No association was found between the CoBRAS responses and the Marlowe-Crowne Social Desirability Scale (Reynolds, 1982), which measures social desirability (Neville et al., 2000).

Just World Scale. The Just World Scale (JWS) is a 20-item scale that was developed by Rubin and Peplau (1975) and assesses an individual's belief in a just world. In the theory introduced by Lerner (1970, 1980), some individuals believe that people get what they deserve and conversely deserve what they get. The JWS aims to measure the extent to which participants agree with the just world theory. Individuals are presented with statements that are just (e.g., "Basically the world is a just place" and "By and large, people deserve what they get.") and unjust (e.g., "The political candidate that stands up for his principles rarely gets elected" and "Good deeds often go unrewarded"), and respond on a Likert scale ranging from 0 (strongly disagree) to 5 (strongly agree). Some

of the items are reverse-scored and items are summed. Total scores range from 0 to 100, with higher scores indicating a stronger belief in a just world.

The psychometric properties of the JWS suggest that it is a reliable and valid measure for assessing attitudes related to the belief in a just world (Rubin & Peplau, 1975). Coefficient alphas were .80 in one sample and .81 in another sample, suggesting high internal consistency. Coefficient alpha for the JWS in the present study was 0.66.

Social Desirability Scale. The Marlow-Crowne Social Desirability Scale (SDS) is a widely used 33-item scale that assesses an individual's socially desirable response bias. Individuals rate a series of 33 statements as "true" or "false" (e.g., "Before voting I thoroughly investigate the qualifications of all the candidates," "I have never intensely disliked anyone," "I like to gossip at times"). Some of the items are reverse scored and the items are summed. Totals range from 0 to 33. Totals from 9-19 are considered to be in the average range. Scores above 19 suggest that a person is responding in a way that is socially desirable.

The psychometric properties of the SDS suggest that it is a reliable and valid measure for assessing socially desirable responses (Crowne & Marlow, 1960). The coefficient alpha was .88 and a test-retest correlation of .89 was obtained (Crowne & Marlowe, 1960). The coefficient alpha for the SDS in the present study was 0.70. The SDS was found to be positively correlated with the validity scales of the MMPI (Crowne & Marlowe, 1960), suggesting that this is a valid measure of socially desirable responding.

Procedure

Participants completed the study in a computer lab with a facilitator present. Each participant was assigned to be in one of the eight categories of the study based on the order that they participated presented to the lab (e.g., first participant was assigned to the first condition, next person to the second, etc.). The facilitator provided each participant with a link to the survey for the assigned condition. Participants provided informed consent via a procedure approved by Marquette University to allow their responses to be used in the current study.

In the primary stigma conditions, participants read a vignette about Michael, a college student who has a mental illness (drug dependence or schizophrenia). The race of the individual in the vignette was either White or African American. Participants completed the seven scales of the AQ-27 listed above in order to determine whether they endorsed primary stigma.

In the family stigma conditions, participants read a vignette about Michael, who is a college student whose father was diagnosed with a mental health condition (drug dependence or schizophrenia). Michael was either Caucasian or African American. Participants then completed the FQ regarding their perceptions of Michael in order to determine attitudes about family stigma.

In both conditions, participants completed the LOF, CoBRAS, JWS, and SDS. Likewise, in both conditions, demographic information of participants was collected including age, gender, education, race, and ethnicity. After completing the survey, participants viewed a debriefing page informing them of the purpose of the study.

Planned Analyses

Primary Stigma. For the primary stigma study, the seven dependent variables were the primary stigma measures, including blame, anger, pity, help, dangerousness, fear, and avoidance. The independent variables are the race of the target (White or African American) and mental illness (drug dependence and schizophrenia). First, correlations were examined between variables, including participant characteristics (gender and ethnicity of participants) and supplemental measures (SDS, JWS, CoBRAS, LOF). Next, preliminary assumption testing was conducted.

A MANOVA was then conducted to determine main effects and interaction effects of the independent variables on the outcome measures. If any of the participant characteristics or supplemental measures are found to have a significant relationship with the outcome measures, these variables will be run as covariates in a MANCOVA.

Family Stigma. For this study, the eleven dependent variables were the family stigma measures, including blame, anger, pity, help, dangerousness, fear, avoidance, blame of Michael for father's recovery, shame of target, contamination of target, and belief that target should be kept away from his father. The independent variables are the race of the target (White or African American) and mental illness (drug dependence or schizophrenia). The analyses for this study was conducted the same way as for the primary stigma study.

CHAPTER 3: RESULTS

Study 1: Primary Stigma

Preliminary Analyses. Prior to conducting MANOVA and ANOVA analyses, preliminary analyses were conducted. First, the demographics of participants were examined for the primary stigma condition, including gender and ethnicity of participants. See Table 2 for the number of participants, mean, standard deviation, median, and range for the outcome measures. According to Tabachnik and Fidell (2007), it is necessary for each cell to have at least as many cases as the number of dependent variables. Because of this assumption, the “other” category for ethnicity was omitted from the following analyses because there were only six cases and there are seven dependent variables. The remaining categories include White/Caucasian, Hispanic/Latin American, Black/African American, and Asian American/Pacific Islander.

Next, descriptive statistics were examined for all of the supplemental measures, including the LOF, SDS, JWS, and CoBRAS scales. See Table 3 for descriptive statistics of all supplemental measures including the number of participants, mean, standard deviation, median, and range. As part of the preliminary analyses, correlations were examined among the scores on the supplemental measures. See Table 4 for correlations.

As part of the preliminary analyses, the correlations were examined between the outcome measures for primary stigma, including the scales of blame, anger, pity, help, dangerousness, fear, and avoidance. See Table 5 for correlations among the outcomes measures for primary stigma.

Participant Demographic Variables. Although no hypotheses were made regarding participant demographics, the relationship between participant gender and ethnicity were examined in relation to the dependent variables. A one-way between groups multivariate analysis of variance (MANOVA) was performed to investigate differences in primary stigma ratings based on participant gender and ethnicity. Seven dependent variables were used, including blame, anger, pity, help, dangerousness, fear, and avoidance.

First, differences between male and female participants were examined. A MANOVA was conducted to examine whether male and female subjects endorsed the seven dependent variables differently. The results indicated that there was a statistically significant difference between males and females on the combined dependent variables ($F(7, 133) = 2.61, p = .02$, Wilks' Lambda = .88, partial eta squared = .12). Given the significant overall results, univariate ANOVAs were then conducted. Results indicated that two of the seven dependent variables were significantly different between males and females. To be specific, an inspection of the mean scores indicated that females reported higher scores for pity for the target ($M = 19.41, SD = .42$) than males ($M = 17.60, SD = .73$), $F(1, 139) = 4.63, p = .03$. Females endorsed higher scores on the help scale ($M = 19.72, SD = .44$) compared to males ($M = 17.49, SD = .76$), $F(1, 139) = 6.42, p = .01$, partial eta squared = .04.

Differences among participant ethnicities were examined. A more conservative alpha level of .025 was used for the dependent variables blame, pity, and dangerousness based on Levene's Test of Equality of Error Variances. A MANOVA was conducted to determine whether participants of different ethnicities endorsed the seven dependent

variables differently. The results indicated that there was a statistically significant difference among participant ethnicities on the combined dependent variables, $F(7, 126) = 1.71, p = .01$, Wilks' Lambda = .70, partial eta squared = .09. Given the significant overall results, univariate ANOVAs were then conducted. Results indicated that there were no significant differences among ethnicity of participants for any of the seven outcomes measures.

Supplemental Measures. The relationship between the supplemental measures and the outcome variables were examined using Pearson correlations. The supplemental measures included the SDS, JWS, and CoBRAS total and subscales. Dependent variables were the measures of primary stigma ratings including blame, anger, pity, help, dangerousness, fear, and avoidance. See Table 6 for correlations between the supplemental measures and the primary stigma ratings.

Assumptions were examined for the supplemental measures including JWS, SDS, LOF, and CoBRAS (total and subscales). Assumptions of normality, linearity, and homoscedasticity were examined. The CoBRAS unawareness of blatant racism scale violated the assumption of normality. The variable was found to be substantially positively skewed. Due to this, a logarithmic transformation was performed, per the recommendations provided by Tabachnik and Fidell (2007). No other violations were found.

The CoBRAS total score correlated positively with the blame, anger, and avoidance scales and it correlated negatively with the pity and help scales. This suggests that participants who endorsed increased racist beliefs were more likely to endorse blame, anger, and avoidance of a target. They were less likely to endorse pity and willingness to

help the target. Individual subscales of the CoBRAS scale were also investigated. Higher scores on the unawareness of blatant racist issues scale were related to higher scores on the anger scale and lower scores on the pity and help scale. Higher scores on unawareness of institutional racism was associated with higher scores on blame, anger, and avoidance and lower scores on the help scale. Higher scores on unawareness of racial privilege correlated significantly with higher scores on the blame, anger, and avoidance scales and lower scores on the pity scale.

The LOF scale revealed a bimodal distribution so a median-split was used to separate scores into high and low LOF scores. Seven independent sample t-tests were conducted to compare the seven stigma ratings between those who reported high and low levels of familiarity with mental illness. There was no significant difference in scores for those who endorsed high familiarity with mental illness compared to those who endorsed low familiarity on any of the stigma measures. See Table 7 for means, standard deviations, and *p*-values.

Finally, correlations were examined for the SDS scale and the JWS scale with the primary stigma measures. The SDS was significantly positively correlated with the help scale, with higher scores on social desirability associated with higher endorsement of the participant's willingness to help the target. The SDS was not significantly correlated with any of the other primary stigma scales. Correlations between responses on the JWS and primary stigma measures were also examined. Responses on the JWS were not significantly correlated with any of the primary stigma measures.

Target Race and Mental Illness. A one-way between groups MANOVA was performed to investigate difference in primary stigma. Differences were examined based

on two independent variables: target's race (White versus African American) and mental illness (drug dependence versus schizophrenia). Seven dependent variables were used, based on the seven subscales of the AQ: blame, anger, pity, help, dangerousness, fear, and avoidance.

Assumption testing was conducted for the outcomes measures including the following scales: blame, anger, pity, help, dangerousness, fear, and avoidance. Examination of Levene's Test of Equality of Error Variances indicated that the assumption of equality of variance was violated for the following scales: blame, pity, and dangerousness. Tabachnik and Fidell (2007) suggest that when such a violation exists, a more conservative alpha level should be used to determine significance of these variables in univariate F-tests. The alpha level of .025 was used instead of the conventional .05 level for analyses with these scales.

Assumptions were then tested for the main effects of the independent variables: type of mental illness and race of target. Assumption testing was conducted to check for normality, linearity, univariate and multivariate outliers, homogeneity of variance-covariance matrices, and multicollinearity. Examination of Levene's Test of Equality of Error Variances suggested that the assumption of equality of variance for the variables blame ($p < .01$), anger ($p = .01$), and dangerousness ($p = .04$) was violated. According to Tabachnik and Fidell (2007), this suggests that a more conservative alpha level of .025 should be used for these variables when considering significant results of univariate F-tests in place of the conventional .05 level. The more stringent alpha level was used for analyses including these variables.

Main effects for race and mental illness were examined for differences in primary stigma ratings of the target. A MANOVA was conducted to examine whether there was a difference in ratings for mental illness on the combined dependent variables. The results indicated that there was a statistically significant difference among ratings of mental illness, $F(7, 131) = 23.94, p < .01$, Wilks' Lambda = .44, partial eta squared = .56. See Table 8 for all means and standard deviations for the main effects of race and mental illness. See Table 9 for means and standard deviations for the interaction effects of race and mental illness on primary stigma.

Given the significant overall results, univariate ANOVAs were then conducted using the more conservative alpha level of .025. There were significant differences between stigma ratings for the target with drug dependence and schizophrenia on three of the seven primary stigma scales. To be specific, participants obtained higher stigma scores on the blame scale for the target with drug dependence ($M = 14.47, SD = .48$) compared to the target with schizophrenia ($M = 5.83, SD = .49$), $F(1, 137) = 156.71, p < .01$, partial eta squared = .53, higher scores on the anger scale for the target with drug dependence ($M = 10.18, SD = .50$) compared with the target with schizophrenia ($M = 6.73, SD = .51$), $F(1, 137) = 23.51, p < .01$, partial eta squared = .15, and higher scores on the avoidance scale for the target with drug dependence ($M = 18.61, SD = .61$) compared to the target with schizophrenia ($M = 12.97, SD = .63$), $F(1, 137) = 41.55, p < .01$, partial eta squared = .23.

A MANOVA was conducted to examine whether there was a difference in ratings on the combined dependent variables based on target race. The results indicated that there

was no statistically significant difference among ratings of target's race, $F(7, 131) = 1.17, p = .32$, Wilks' Lambda = .94, partial eta squared = .06.

Finally, a MANOVA was conducted to examine differences in the combined effects of target race and mental illness on participant ratings of the combined dependent variables. The results indicated that there was no significant difference on the ratings, $F(7, 131) = .68, p = .69$, Wilks' Lambda = .97, partial eta squared = .04.

Controlling for Participant Demographics. Based on the findings above, participant gender and ethnicity were significantly different when they were run as predictors of primary stigma. Because of this, both gender and ethnicity were run as covariates in a multivariate analysis of covariance (MANCOVA) to determine whether they remained significant as predictors of primary stigma ratings after controlling for the race and mental illness of the target. See Table 10 for the adjusted means and standard deviations for the main effects of race and mental illness and Table 11 for the adjusted means and standard deviations for the interaction effects of race and mental illness on primary stigma.

Before conducting the MANCOVA, assumption testing was conducted for the variables gender and ethnicity. When run as covariates, these variables were determined to violate Levene's Test of Equality of Error Variances, which suggested that the assumption of equality of variance was violated for the variables blame ($p < .01$) and anger ($p = .01$). Therefore, a more conservative alpha level of .025 was used for analyses with these variables (Tabachnik and Fidell, 2007).

The results indicated that gender ($F(7, 129) = 2.94, p < .01$, Wilks' Lambda = .86, partial eta squared = .14) and ethnicity ($F(7, 129) = 2.21, p < .05$, Wilks' Lambda = .89,

partial eta squared = .11) were both significant when run as covariates. These results suggest that participant gender and ethnicity have a significant relationship with the dependent variables, while controlling for the independent variables of race and mental illness.

Given the significant overall results, univariate ANOVAs were then conducted using the more conservative alpha level of .025 for the variables blame and anger due to the significant results of Levene's Test. Results indicated that gender was a significant covariate for the dependent variables pity ($F(1, 135) = 6.16, p = .01$, partial eta squared = .04) and willingness to help ($F(1, 135) = 6.83, p = .01$, partial eta squared = .05). Furthermore, ethnicity was a significant covariate for the dependent variable pity ($F(1, 135) = 4.51, p = .04$, partial eta squared = .03).

Controlling for Supplemental Measures. Given the significant correlations of some of the supplemental measures with the dependent variables, these measures were chosen to be run as covariates. This was done to determine whether they have a significant relationship with the outcomes measures when controlling for the independent variables. The SDS and the CoBRAS total score and the CoBRAS subscales measuring unawareness of institutional racism, unawareness of privilege, and blatant racism were run as covariates.

Results revealed that there was no significant relationship for SDS total score ($F(7, 114) = 1.61, p = 0.14$, Wilks' Lambda = 0.91, partial eta squared = .09), the CoBRAS total score ($F(7, 114) = .44, p = .88$, Wilks' Lambda = .97, partial eta squared = .03), the CoBRAS blatant racism subscale ($F(7, 114) = .36, p = .92$, Wilks' Lambda = .98, partial eta squared = .02), the CoBRAS unawareness of institutional racism subscale ($F(7, 114)$

= .25, $p = .97$, Wilks' Lambda = .99, partial eta squared = .02), or the CoBRAS unawareness of racial privilege scale ($F(1, 114) = .40$, $p = .90$, Wilks' Lambda = .98, partial eta squared = .02).

Study 2: Family Stigma

Preliminary Assumption Testing. Prior to conducting MANOVA and ANOVA analyses, preliminary analyses were conducted. First, participant demographic variables were examined, including gender and ethnicity. According to Tabachnik and Fidell (2007), it is necessary for each cell to have at least as many cases as the number of dependent variables, which, in this case, was eleven. Because of this assumption, the “Other” category, which had seven cases, was omitted from the analyses. The “Black/African American” category, which had four cases, was also omitted. The remaining categories include White/Caucasian, Hispanic/Latin American, and Asian American/Pacific Islander.

As part of the preliminary analyses, the descriptive statistics and correlations were examined between the outcome measures, including blame, anger, pity, help, dangerousness, fear, avoidance, responsibility for recovery, shame of target, contamination, and belief that target should be kept away from father were examined. See Table 12 for descriptive statistics for family stigma outcome measures. See Table 13 for correlations among the outcomes measures.

Participant Demographic Variables. A one-way between groups MANOVA was performed to investigate differences in family stigma ratings based on two independent variables: participant gender and ethnicity. Seven dependent variables were used, based on the seven subscales of the FQ: blame, anger, pity, help, dangerousness,

fear, avoidance. Four additional dependent variables were used based on the four additional domains unique to the FQ: blame of Michael for father's recovery, shame of Michael, contamination of Michael by his father, and whether Michael should be kept away from his father.

Differences between male and female participants were examined. Preliminary assumption testing was conducted to check for normality, linearity, univariate and multivariate outliers, homogeneity of variance-covariance matrices, and multicollinearity. Levene's Test of Equality of Error Variances revealed a violation of the equality of error variance assumption for blame. Because of this, a more stringent alpha level of .025 was be used for univariate F-tests for this variable.

A MANOVA was conducted to examine whether male and female subjects endorsed the dependent variables differently. The results indicated that there was no statically significant difference between males and females on the combined dependent variables, $F(11, 133) = 1.37, p = .20$, Wilks' Lambda = .90, partial eta squared = .10.

Next, differences among ethnicities were examined. When examining ethnicity, preliminary assumption testing was conducted to check for normality, linearity, univariate and multivariate outliers, homogeneity of variance-covariance matrices, and multicollinearity. Box's test of equality of covariance matrices indicated that the assumption of homogeneity of variance-covariance was violated ($p < .01$). Tabachnik and Fidell (2007) suggest, however, that Box's M can be too strict with large sample sizes.

A MANOVA was conducted to determine whether participants of different ethnicities endorsed the dependent variables differently. The results indicated that there

was a significant difference in ratings of the target among the ethnicities, $F(22, 242) = 3.1, p < .01$, Wilks' Lambda = .61, partial eta squared = .22.

Given the significant overall results, univariate ANOVAs were conducted.

Results indicated that six of the dependent variables were significantly different among participant ethnicities. To be specific, an inspection of the mean scores of the univariate comparisons indicated that there were significant differences in blame $F(2, 131) = 10.83, p < .01$, partial eta squared = .14, anger, $F(2, 131) = 25.74, p < .01$, partial eta squared = .28, dangerousness, $F(2, 131) = 13.54, p < .01$, partial eta squared = .17, fear, $F(2, 131) = 15.57, p < .01$, partial eta squared = .19, shame of the target for his father's mental illness, $F(2, 131) = 4.26, p = .02$, partial eta squared = .06, and belief that the target is contaminated by his father's mental illness, $F(2, 131) = 3.11, p < .05$, partial eta squared = .05.

Post-hoc comparisons using Bonferroni's adjustment indicated that those who identified as Asian American/Pacific Islanders endorsed significantly higher levels of blame for the target ($M = 6.31, SD = .51$) compared to those who identified as White/Caucasian ($M = 3.81, SD = .18$) or Hispanic/Latin American ($M = 3.89, SD = .43$). They also endorsed significantly higher levels of anger ($M = 7.15, SD = .49$) compared to White/Caucasian ($M = 3.45, SD = .17$) and Hispanic/Latin American participants ($M = 3.67, SD = .42$), higher levels of dangerousness ($M = 7.00, SD = .59$) compared to White/Caucasian ($M = 3.76, SD = .21$) and Hispanic/Latin American participants ($M = 3.83, SD = .50$), higher levels of fear ($M = 6.77, SD = .53$) compared to White/Caucasian ($M = 3.65, SD = .20$) and Hispanic/Latin American participants ($M = 3.67, SD = .45$). Asian American/Pacific Islander participants were more likely to endorse that the target

should experience shame due to his father's condition ($M = 2.23$, $SD = .29$) compared to Hispanic/Latin American participants ($M = 1.28$, $SD = .24$). Asian American/Pacific Islander participants were also more likely to endorse that the target is contaminated by his father's condition ($M = 2.46$, $SD = .33$) compared to Hispanic/Latin American participants ($M = 1.39$, $SD = .28$).

Supplemental Measures. Pearson correlation coefficients were used to investigate the relationship between the SDS, JWS, and CoBRAS with the dependent variables measuring levels of family stigma. The transformed variable for the CoBRAS subscale for blatant racism was used in the following analyses. See Table 14 for correlation coefficients and significance values.

The SDS was significantly positively correlated with willingness to help the target. It was significantly negatively correlated with avoidance of the target, the belief that the target is contaminated by his father's condition, and the belief that the target should be kept away from his father. This means that those with higher levels of social desirability were more likely to endorse helping the target and less likely to endorse avoiding the target, the belief that the target is contaminated, and that the target should be kept away from his father.

The CoBRAS total score was significantly negatively correlated with willingness to help the target, indicating that increased endorsement of prejudiced and racist attitudes was associated with decreased willingness to help the target.

Individual subscales of the CoBRAS scale were also investigated. Higher scores of blatant racism were significantly positively correlated with the anger scale and significantly negatively correlated with the pity and help scales. Higher endorsement of

unawareness of institutional racism was significantly positively correlated with the fear and avoidance scales, and was significantly negatively correlated with the help scale. Endorsement of unawareness of racial privilege was not significantly correlated with any of the family stigma scales.

The LOF scale revealed a bimodal distribution, so a median-split was used to separate scores into high and low LOF scores. Eleven independent sample t-tests were conducted to compare the seven stigma ratings between those who reported high and low levels of familiarity with mental illness. There was no significant difference in scores for those who endorsed high familiarity with mental illness compared to those who endorsed low familiarity on any of the stigma measures. See Table 15 for means, standard deviations, and *p*-values.

Correlations between responses on the JWS and family stigma measures were also examined. Responses on the JWS were not significantly correlated with any of the family stigma measures.

Target Race and Mental Illness. A one-way between groups multivariate analysis of variance was performed to investigate differences in family stigma. Differences were examined based on two independent variables: race (White versus African American) of the target and mental illness (drug dependence versus schizophrenia) of the target. Eleven dependent variables were used, based on the seven subscales of the FQ and the four additional questions unique to the FQ: blame, anger, pity, help, dangerousness, fear, avoidance, blame of target, shame of target, contamination, and whether target kept away from the father.

Assumption testing was conducted for the independent variables of race and mental illness of the target. Preliminary assumption testing was conducted to check for normality, linearity, univariate and multivariate outliers, homogeneity of variance-covariance matrices, and multicollinearity. Box's Test of Equality of Covariance Matrices revealed that the assumption of homogeneity of variance-covariance was violated ($p < .01$). According to Tabachnik and Fidell (2007), this value tends to be too strict when there is a large sample size, which is the case in the present study.

Examination of Levene's Test revealed that the assumption of equality of variance was violated for the following variables: the target should feel shame because of his father's condition ($p < .01$), the target is contaminated by his father's condition ($p < .05$), and the target should be kept away from his father ($p < .01$). Due to this, a more conservative alpha level of .025 will be used for these variables when interpreting univariate F-tests.

Main effects for race and mental illness were examined for differences in family stigma ratings of the target. A MANOVA was conducted to examine whether there was a difference between types of mental illness in rating of family stigma on the combined dependent variables. See Table 16 for the means and standard deviations for the main effects of race and mental illness. See Table 17 for the interaction effects of race and mental illness on family stigma. The results indicated that there was a statistically significant difference among ratings of family stigma, $F(11, 132) = 2.30, p = .01$, Wilks' Lambda = .84, partial eta squared = .16.

Given the significant overall results, univariate ANOVAs were then conducted using the more conservative alpha level of .025 for the following variables: the target

should feel shame because of his father's condition, the target is contaminated by his father's condition, and the target should be kept away from his father. Results indicated that two of the eleven dependent variables were significantly different between ratings of family stigma in the target whose father has drug dependence or schizophrenia.

To be specific, participants endorsed that the target with drug dependence was more likely to be contaminated by his father's condition ($M = 2.04$, $SD = .14$) compared to the target whose father had schizophrenia ($M = 1.55$, $SD = .14$), $F(1, 142) = 6.18$, $p = .01$, partial eta squared = .04. Participants also were significantly more likely to endorse that the target should be kept away from his father if he had drug dependence ($M = 2.61$, $SD = .17$) compared to the target whose father had schizophrenia ($M = 1.66$, $SD = .17$), $F(1, 142) = 15.43$, $p = .01$, partial eta squared = .10.

A MANOVA was conducted to examine whether there was a significant difference between race in rating of family stigma on the combined dependent variables. The results indicated that there was not a statistically significant difference among ratings of family stigma, $F(11, 132) = .93$, $p = .52$, Wilks' Lambda = .93, partial eta squared = .07.

Finally, a MANOVA was conducted to examine differences in the combined effects of the target race and mental illness of family member on participant ratings of the combined dependent variables. The results indicated that there was no significant difference on the ratings, $F(11, 132) = 1.51$, $p = .14$, Wilks' Lambda = .89, partial eta squared = .11.

Controlling for Participant Demographics. Based on the findings above, several variables were chosen to be run as covariates. The results of the MANOVAs

above for the participant factors revealed that ethnicity was significantly different on the eleven dependent variables for family stigma. Because of this, ethnicity was run as a covariate in a MANCOVA to determine whether it influenced the overall main effects or interaction effects on race and mental illness on family stigma ratings. See Table 18 for the adjusted means and standard deviations for the main effects of race and mental illness and Table 19 for the interaction effects of race and mental illness on family stigma.

Assumption testing was conducted for the variable of participant ethnicity when run as a covariate. Preliminary assumption testing was conducted to check for normality, linearity, univariate and multivariate outliers, homogeneity of variance-covariance matrices, and multicollinearity. Examination of Levene's Test of Equality of Error Variances suggested that the assumption of equality of variance for the variables fear ($p < .01$), Michael should feel ashamed ($p = .02$), and Michael should be kept away from his father ($p < .01$) was violated. According to Tabachnik and Fidell (2007), this suggests that a more conservative alpha level of .025 should be used for these variables when considering significant results of univariate F-tests in place of the conventional .05 level.

The covariate ethnicity was significant ($F(11, 119) = 5.02, p < .01$, Wilks' Lambda = .68, partial eta squared = .32). This suggests that when controlling for the independent variable, participant ethnicity has a significant relationship with the outcome variables.

Given the significant overall results for ethnicity as a covariate, univariate ANOVAs were then conducted using the more conservative alpha level of .025 for the variables fear, Michael should feel ashamed, and Michael should be kept away from his father, due to the significant results of Levene's Test listed above. Results indicated that

ethnicity was a significant covariate for the dependent variables blame ($p < .01$), anger ($p < .01$), dangerousness ($p < .01$), fear ($p < .01$), Michael should feel ashamed ($p = .01$), and responsibility for father's recovery ($p = .01$).

Controlling for Supplemental Measures. When examining the supplemental measures administered to participants, the SDS total score, CoBRAS total score, and CoBRAS subscales measuring blatant and institutional racism were significantly correlated with the dependent variables. Because of this, these variables were run as covariates in a MANCOVA to determine whether they have a significant relationship with the family stigma ratings when controlling for the independent variables. The CoBRAS subscale measuring blatant racism ($F(11, 111) = 2.17, p = .02$, Wilks' Lambda = .82, partial eta squared = 0.17) was significant as a covariate.

Given the significant overall results for CoBRAS blatant racism as a covariate, univariate ANOVAs were then conducted using a more conservative alpha level of .025 for the following variables: Michael should feel ashamed and Michael should be kept away from his father. Results indicated that endorsement of blatant racism was significant as a covariate for blame, ($p < .01$), anger ($p < .01$), dangerousness, ($p < .01$), and fear ($p < .01$).

The results indicated that SDS total score ($F(11, 111) = 1.73, p = .08$, Wilks' Lambda = 0.85, partial eta squared = 0.15), CoBRAS total score ($F(11, 111) = 1.20, p = .30$, Wilks' Lambda = 0.98, partial eta squared = .11) and institutional racism ($F(11, 111) = 1.58, p = .11$, Wilks' Lambda = .86, partial eta squared = .14) were not significant when run as covariates. These results suggest that SDS score, CoBRAS total score, and CoBRAS subscale score measuring institutional racism attitudes did not have a

significant relationship with the dependent variables of family stigma attitudes after controlling for the independent variables of race and mental illness. The participant's ethnicity and endorsement of blatant racism, however, did have a significant relationship with the dependent measures of family stigma after controlling for the independent variables.

CHAPTER 4: DISCUSSION

The present study examined differences in primary and family stigma perceptions of individuals based on race and type of mental illness. The study sought to contribute to the literature regarding perceptions of primary and family stigma based on a target's race (European American or African American) and type of mental illness (drug dependence or schizophrenia). Based on findings in previous research, it was hypothesized that individuals with drug dependence and African American individuals would be perceived with the highest levels of primary and family stigma.

Primary Stigma

The seven measures of primary stigma included participant endorsement of blame, anger, pity, help, dangerousness, fear, and avoidance of a target. Examination of participant demographic factors revealed that, when compared to male participants, females tended to report higher levels of pity toward the target and higher willingness to help the target. This is consistent with previous research by Corrigan and Watson (2007) that found that women were less likely than men to endorse prejudice or discrimination against individuals with a mental illness. This was the case regardless of type of mental illness. The authors suggested that women may be more likely to relate to stigma because they experience prejudice themselves. Another explanation for findings in the current study is that women consistently tend to report higher levels of empathy toward a target compared to men (Schieman & Van Gundy, 2000).

Although the current study found significant differences among participant ethnicities in their endorsement of stigma of the target, no differences were found when follow-up analyses were conducted. Whereas previous research has found that African

Americans endorsed higher levels of stigma in the domains of blame and belief that someone would do something violent (Anglin, Link, & Phelan, 2006), the current study did not show any significant differences between the responses of African Americans and other racial groups. Due to the limited sample of African American participants in this study, it is possible that the current results are not representative of the difference in stigmatizing attitudes between African Americans and participants of other ethnicities in the general population.

Measures were administered to assess social desirability, racial biases, and beliefs in the just world hypothesis. It was found that higher endorsement of social desirability was associated with increased willingness to help the target. This suggests that participants who responded with high social desirability were more likely to respond by indicating that they would behave in a socially positive way toward less fortunate others.

The scale measuring racial biases was administered to participants and revealed that higher endorsement of racial attitudes was associated with higher endorsement of blame, anger, and avoidance of the target and lower levels of pity and willingness to help the target.

Further investigation of endorsed racial attitudes revealed that individuals who responded with high endorsement of blatant racism were more likely than those who had lower levels of endorsement of blatant racism to endorse higher levels of anger toward the target and less likely to endorse pity and willingness to help the target. The feelings of increased anger and decreased pity toward the target are consistent with those who experience *contemptuous prejudice*. Individuals who express this type of prejudice typically have feelings of anger, contempt, disgust, hate, and resentment toward a group

(Fiske, Cuddy, Glick, & Xu, 2002). This ultimately leads to discriminatory behavior and increased stigma toward a group.

Participants who endorsed higher levels of institutional racism were more likely to endorse blame, anger, and avoidance of the target. Higher endorsement of institutional racism was also associated with decreased willingness to help the target. Participants who endorsed greater unawareness of racial privilege were more likely to endorse higher level of blame, anger, and avoidance of the target, as well as lower levels of pity toward the target. These results are consistent with the notion that those with higher levels of endorsed racist attitudes appeared to also show higher levels of stigma, in several domains, toward a target with mental illness. These findings can be best explained in the context of *social dominance orientation*, which is the extent to which an individual has preference for a hierarchical societal approach (Pratto, Sidanius, Stallworth, & Malle, 1994). Those who endorsed high levels of blatant and institutional racism are likely to have attitudes that are high on the social dominance orientation. The social dominance orientation has been found to be negatively correlated with empathy, which is consistent with the findings in the current study that those who endorsed racist beliefs were less likely to show willingness to help the target.

It was hypothesized that higher level of familiarity with mental illness would be associated with lower levels of primary stigma, however, it was found that level of familiarity with mental illness had no significant relationship with perceived stigma of the target. These results might be explained by the sample, which was comprised of undergraduate students enrolled in psychology courses. It is likely that these students are not representative of the population and have an inherently higher level of familiarity

with mental illness compared to the general population. In previous research, the LOF scale was used to assess level of familiarity of mental illness with a sample of the population that was more representative of the general population, with more variety in age and education level (Corrigan et al., 2001), suggesting that the current sample was not a representative measure of level of familiarity with mental illness as compared with the sample that was used to create this measure.

Significant relationships were not found between primary stigma measures and attitudes consistent with the belief in the just world hypothesis. This suggests that an individual's endorsement of belief in a just world was not associated with their endorsement of stigma of a target based on type of mental illness or race in this study. Endorsement of belief in a just world was associated with increased social desirability, which suggests that participants may have responded in a socially desirable manner regarding their beliefs in a just world.

When examining the effects of race and mental illness on the primary stigma scales, it was found that there was a significant difference between stigma ratings based on the target's mental illness, with higher levels of stigma for the target with drug dependence compared to the target with schizophrenia. Specifically, participants reported higher levels of blame, anger, and avoidance for the target with drug dependence compared to the target with schizophrenia. This finding was consistent with the hypothesis, and confirms previous research suggesting that drug dependence is among the most stigmatized mental health conditions (Link, Phelan, Bresnahan, Stueve, & Pescosolido, 1999), and specifically is a more stigmatized mental health condition compared to schizophrenia (Corrigan et al., 2006). This is because those with drug

dependence are perceived to have a higher level of control over their condition and are perceived to be at fault for their condition compared to those with a diagnosis such as schizophrenia (Link et al., 1999). This is also consistent with the notion that individuals tend to be perceived more negatively and with higher levels of stigma when they are thought to be responsible for their condition and have control over their situation (Jones et al., 1984; Overton & Medina, 2008; Watson, Ottati, & Corrigan, 2003).

Contrary to the hypotheses of this study, no significant differences were found in stigma ratings based on the target's race or the interaction between race and mental illness. Research regarding stigma of racial minorities, particularly African Americans, has found that the effects of being a racial minority tends to lead to lowered self-esteem, which is consistent with self-stigma (Gecas & Schwalbe, 1983; Ruggerio & Taylor, 1997), and that African Americans perceive themselves to receive unequal treatment (Branscombe, Schmitt, & Harvey, 1999). Therefore, it is possible that even though African Americans perceive themselves to be treated differently and endorse experiencing self-stigma, that the participants in the study, who are largely European Americans, do not perceive these discrepancies when measuring public stigma.

Furthermore, it has been well-documented that African Americans tend to have poor access to mental health care compared to European Americans and tend to experience more stigma about mental illness compared to European Americans (e.g., Cooper et al., 2003; Gary, 2005). Even though this has been found in numerous studies, it is possible that the demographics of the individuals in the current study, particularly the predominantly European American sample, influenced the results. The results of the current study found no support for the hypothesis that there is a greater public stigma of

African Americans compared to European Americans who have a mental illness, and that the participants did not endorse differences in public stigma based on the combination of race and mental illness. A possible implication of this lack of finding that even though disparities may exist for African Americans when they seek mental health treatment, it does not mean that there is a greater degree of public stigma of mental illness for African Americans compared to European Americans.

Because several of the supplemental measures and participant factors were found to be significantly associated with primary stigma ratings, they were examined as covariates. Results revealed that, after controlling for the independent variables of race and mental illness, participant ethnicity and gender have a significant relationship with endorsement of primary stigma. The responses on supplemental measures, on the other hand, were not found to have a significant relationship with primary stigma measures after controlling for the independent variables.

These findings suggest that participant demographics appear to be stronger predictors of endorsed primary stigma toward a target, whereas endorsed attitudes regarding social desirability, racial attitudes, and just-world beliefs do not appear to be strong predictors of primary stigma. Overall, the study measuring primary stigma found that participants endorsed differences in primary stigma ratings based on the target's mental illness, but there were no significant differences based on target race or the combined effects of race and mental illness of the target. It was further found that there were significant differences in primary stigma ratings based on participant race and ethnicity, with females endorsing lower levels of stigma toward the target as compared to the males.

Family Stigma

One of the aims of the current study was to evaluate attitudes of family stigma toward an individual who has a father with a mental illness. The eleven dependent measures included participant endorsement of blame, anger, pity, help, dangerousness, fear, and avoidance of the target, blame of target for father's recovery, shame of target, contamination of target by his father, and whether the target should be kept away from his father. Examination of participant demographic factors revealed that there was no significant difference in endorsement of family stigma between males and females.

When examining differences in ethnicity of the participant, it was determined that there was a significant difference in family stigma ratings based on participant ethnicity. Specifically, there were differences in levels of blame, anger, dangerousness, fear, shame of target, and contamination. It was found that Asian American/Pacific Islander participants endorsed significantly higher levels of blame, anger, dangerousness, and fear for the target compared to Hispanic/Latin American participants. They were also significantly more likely to endorse that the target should experience shame due to his father's condition and that the target is contaminated by his father's condition compared to Hispanic/Latin American participants.

These findings are consistent with the notion that Asian American culture tends to be more collectivistic and place a greater emphasis on the family rather than an emphasis on an individual (Triandis, 1995). Researchers have suggested that the values inherent in American psychotherapy conflict with traditional values held by Asian Americans, including open verbal communication about intense emotions and focus on the goals of the individual rather than the goals of the collective (Leong & Lau, 2001).

Based on the findings of the current study, it appears that those who endorse an ethnicity that is associated with a collectivistic culture endorse higher levels of family stigma for a target. This can be studied in future research by examining an individual's specific beliefs regarding collectivistic versus individualistic cultures and its relation to perceived levels of family stigma. The current findings suggest that a relationship may exist between higher endorsement of collectivistic culture and family stigma of an individual who has a family member with mental illness.

Previous literature has found that there is a higher level of stigma among Asian Americans surrounding mental illness compared to other minority groups in the United States (Kleinman & Lin, 1981). Additional research has shown that the stigma surrounding mental illness tends to impede treatment seeking, with Asian Americans underutilizing mental health services more than other minority groups (Leong & Lau, 2001). A study by Tabora and Flaskerud (1997) determined that cultural values such as avoidance of shame are significant barriers to utilization of mental health services. The authors believed that the social stigma led to decrease in treatment seeking for conditions such as schizophrenia among Chinese Canadian families compared to European Canadian families.

In the current study, it was found that Asian Americans were significantly more likely than European Americans and Hispanic/Latino Americans to endorse family stigma of a target. This is likely due to the emphasis of a collectivistic culture among Asian Americans combined with a lessened emphasis on emotional expression. Previous researchers have contended that Asian American collectivistic values tend to contrast with values consistent with Western psychotherapy such as an emphasis on open verbal

communication and focus on the individual (Leong, Wagner, & Tata, 1995). Moreover, it is important to also consider when interpreting the results of this study that participants in the current study who identified as Hispanic/Latino American or Asian American include individuals from a wide array of nationalities and levels of acculturation.

Previous literature has found that there are differences in endorsement of primary and family stigma among White and non-White participants (Corrigan & Watson, 2007), but the findings in the current study are unique in that the specific groups in the “non-White” category were examined. The study by Corrigan and Watson (2007) found that non-White participants endorsed family stigma at a greater rate than White participants. The results of the current study expand on the previous literature with the findings that the primary differences in race were found between Asian Americans and other racial groups.

Unfortunately, there were not enough African American participants in this study to include in the analyses. It would be beneficial for future research to examine whether there is a significant difference in perceptions of family stigma among African Americans compared to participants of other ethnicities.

When examining responses to supplemental measures, it was found that social desirability was significantly correlated with willingness to help the target and was significantly negatively correlated with avoidance of the target, with the belief that the target is contaminated by his father’s condition, and the belief that the target should be kept away from his father. These results suggest that those who responded with higher levels of social desirability were less likely to endorse several domains stigmatizing beliefs toward the target.

Examination of racial biases revealed that endorsement of racial attitudes was associated with lower willingness to help the target, meaning that a higher endorsement of racist beliefs was associated with a decreased willingness to help the target. When examining the subscales of the racial bias measure, it was found that higher endorsement of blatant racism was associated with higher levels of anger toward the target and lower levels of pity and willingness to help the target. This suggests that those who have higher levels of blatantly racist beliefs are more likely to feel anger toward someone whose father has a mental illness and less pity and willingness to help that target. This implies that a relationship might exist between blatantly racist beliefs and endorsement of several aspects of family stigma.

It was found that higher endorsement of institutional racism was associated with higher levels of fear and avoidance of the target and lower willingness to help the target. This suggests that those who endorsed higher unawareness of inherently racist institutional systems were more likely fear and avoid, and less willing to help, a target. Endorsement of unawareness of racial privilege was not significantly associated with the family stigma measures, suggesting that awareness of racial privilege is not associated with endorsed levels of family stigma of a target.

Overall, the current study found that a relationship exists between endorsement of racist beliefs and endorsement of family stigma. This implies that a relationship might exist between blatantly racist beliefs and higher endorsement of stigma and that awareness of institutional racism might be related to increased levels of family stigma.

As was the case for primary stigma, the association of higher stigma and higher racist beliefs can be explained in the context of the social dominance orientation, with

those who endorsed high levels of racism likely having attitudes that reflect a preference for a hierarchical societal approach (Pratto, Sidanius, Stallworth, & Malle, 1994).

It was hypothesized that higher level of familiarity with mental illness would be associated with lower levels of family stigma. The level of familiarity with mental illness was found to have no significant relationship with perceived stigma of the target. As mentioned in the discussion regarding primary stigma, it is likely that these results are explained by the sample used in the current study and are not necessarily representative of the general population.

Endorsement of belief in a just world was not found to be significantly correlated with the family stigma measures. This suggests that an individual's endorsement of belief in a just world was not associated with their endorsement of stigma of a target whose father has a mental illness based on type of mental illness or race.

The main effects and interaction effects of type of mental illness of the target's father and race of the target on the stigma measures for family stigma were examined. There was a significant difference among ratings of family stigma based on type of mental illness, with drug dependence yielding higher stigma ratings. This confirms the hypothesis of the current study and previous research that a target will be perceived with higher levels of stigma if the target's family member has drug dependence compared to schizophrenia (Corrigan, Watson, & Miller, 2006). Specifically, participants were significantly more likely to endorse that the target should be kept away from his father and that the target is likely to be contaminated by his father's condition.

No significant differences were found between perceptions of stigma ratings based on the target's race or the interaction between race and mental illness. Although no

significant differences were found, the trend in the analyses was in the direction as predicted for the following variables: willingness to help the target, avoidance of the target, and responsibility of the target for his father's condition. Therefore, it is possible that with a larger sample size and lower levels of social desirability among some of the participants, these variables may have approached significance.

Because several of the supplemental measures and participant factors were found to be significantly associated with primary stigma ratings, they were examined as covariates. Ethnicity was found to be significant, suggesting that participant ethnicity has a significant relationship with endorsement of family stigma after controlling for the race and mental illness. It was found that participant ethnicity was significant as a covariate for blame of the target, anger toward the target, dangerousness of the target, fear of the target, the belief that the target should feel ashamed, and the belief that the target is responsible for his father's recovery.

Based on the differences found in family stigma ratings among participant ethnicity, with Asian Americans being more likely to endorse several family stigma measures, these results suggest that these differences are related to the outcomes measures, even when controlling for the independent measures of target race and mental illness.

Endorsement of blatant racism was also found to be significant as a covariate. Even though previous analyses showed a relationship between the social desirability and racial attitudes, including unawareness of institutional racism, these constructs were not found to be significant as covariates.

Therefore, the results of the family stigma study found that individuals endorsed differences in family stigma ratings based on the type of mental illness of the target's father, but there were not significant differences based on race or the combined effects of race and mental illness. It was also found that participant ethnicity and endorsement of blatant racism influenced family stigma ratings.

Limitations and Future Directions

One limitation of the current study was the sample. Participants included undergraduate college students enrolled in undergraduate psychology courses. The participants were mostly European American freshman, and were predominantly female and single. Previous research in the area of stigma has largely been conducted using samples that are more representative of the general population (e.g., Corrigan & Watson, 2007). Future research would benefit from examining responses to these questionnaires from a sample that is more representative of the general population.

Because the current study was the first study examining the relationship between race, mental illness, and family stigma ratings, there are several directions that can be used in future studies. The current study examined only two types of mental illness, drug dependence and schizophrenia, which have been used in previous studies when examining stigma ratings (Corrigan, Watson, & Miller, 2006; Link, Phelan, Bresnahan, Stueve, & Pescosolido, 1999). In the future, it will be beneficial to examine differences in stigma ratings for additional psychological diagnoses to determine whether there are significant differences in perceptions of family stigma based on additional mental illnesses. Future studies should also further examine whether there is an interaction between race and mental illness for additional mental illnesses on family stigma ratings.

Furthermore, the current study focused on perceptions of African Americans and European Americans. Future studies should examine perceptions of different races and ethnicities to determine whether there are significant differences in family stigma ratings. A more comprehensive study would include a representative sample of participants of various ethnicities who provide stigma ratings based on targets of various races.

A unique finding in the current study was regarding significantly different perceptions of family stigma among Asian American participants compared to Caucasian and Hispanic/Latin American participants. A limitation was the lack of African American participants in the family stigma study. In the future, it will be beneficial to examine whether African American participants respond with significantly different endorsement of family stigma ratings compared to participants of other ethnicities.

The results of the current study suggest that individuals who identify as Asian American may endorse higher levels of family stigma for an individual with a family member who has a mental illness. It is hypothesized that this might be due to higher level of collectivistic beliefs among the Asian culture. If this is the case, this finding contributes to the literature in a profound way, and has robust clinical implications. It is possible that individuals who identify as Asian American may feel more stigma themselves if they have a family member with a mental illness, regardless of whether the individual themselves have a mental illness. Clinically, this is a finding that can provide a more comprehensive cultural context when working with clients of Asian American ethnicity who have a mental illness to understand the broader implications of stigma for the individual and their family members.

Future research may also benefit from a measure of level of familiarity of mental illness that is modified to apply to a sample that might have a higher level of familiarity than the general population.

Implications and Conclusions

The findings above suggest that compared to the target's race, the type of mental illness appears to be a stronger predictor of ratings of both primary and family stigma. Although no interaction effects were found between type of mental illness and race of the target, there were several variables that were in the direction of the hypothesis for family stigma. Therefore, it is possible with a higher sample size and lower levels of social desirability among participants, a relationship may be found in future studies between type of mental illness and race of the target for family stigma.

The current studies found that gender and ethnicity were significant predictors of primary stigma ratings after controlling for race and mental illness, and participant ethnicity and endorsement of blatant racism were significant predictors of family stigma ratings after controlling for race and mental illness. These results suggest that there are characteristics of the participants that are significant predictors of their endorsement of primary and family stigma, suggesting that regardless of the type of mental illness and race of the target, there are characteristics unique to the participants that predict stigma ratings.

Clinical implications of this study include the importance of considering the stigma perceived about a person based on the type of mental illness and how this stigma may affect an individual's treatment seeking behavior. The results of this study highlight the importance of an individual's cultural background, including gender, race, and

ethnicity, as it relates to the stigma an individual may perceive about themselves and family members regarding mental illness and treatment seeking.

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Table 1

Total Participants Based on Demographic Factors

	<i>N</i>		
	Total	Primary Stigma	Family Stigma
Gender			
Male	92	35	57
Female	194	106	88
Ethnicity			
Caucasian	200	97	103
African American	14	10	4
Hispanic/Lat American	34	16	18
Asian Am/Pac Islander	26	13	13
Other	11	4	7
Marital Status			
Single	204	97	107
Committed relationship	81	43	38
Married	1	1	0
Year In School			
Freshman	172	85	87
Sophomore	47	23	24
Junior	38	16	22
Senior	29	16	13

Table 2

Descriptive Statistics for Primary Stigma Measures

Scale	<i>N</i>	<i>M (SD)</i>	Median	Range
AQ				
Blame	141	10.23 (5.95)	9.00	3 - 26
Anger	141	8.50 (4.53)	7.00	3 - 22
Pity	141	18.96 (4.36)	19.00	6 - 27
Help	141	19.16 (4.61)	19.00	7 - 27
Dangerousness	141	11.01 (4.82)	10.00	3 - 22
Fear	141	9.64 (4.71)	9.00	3 - 21
Avoidance	141	15.85 (5.90)	16.00	5 - 27

Table 3

Descriptive Statistics for all Supplemental Measures Administered to Participants

Scale	<i>N</i>	<i>M (SD)</i>	Median	Range
LOF Total	287	6.84 (2.42)	8.00	3 - 11
SDS Total	278	14.69 (4.57)	14.00	1 - 26
JWS Total	287	68.73 (9.69)	69.00	42 - 96
CoBRAS Total	287	58.49 (8.75)	58.00	37 - 83
Privilege	287	23.87 (3.77)	24.00	13 - 32
Institutional Racism	287	23.78 (5.22)	24.00	9 - 36
Blatant Racism	287	13.91 (4.17)	13.00	6 - 30

Table 4
Correlations Between Supplemental Measures

Measure	SDS	JWS	CoBRAS			
			Blatant	Institutional	Privilege	Total
SDS	--	--	--	--	--	--
JWS	-0.20**	--	--	--	--	--
CoBRAS						
Blatant	0.02	-0.21**	--	--	--	--
Institutional	-0.08	-0.19**	0.29**	--	--	--
Privilege	0.10	-0.27**	0.22**	0.26**	--	--
Total	-0.02	-0.26**	0.69**	0.80**	0.59**	--

* $p < .05$ ** $p < .01$

Table 5
Correlations Among Outcome Measures for Primary Stigma

Measure	Blame	Anger	Pity	Help	Dangerousness	Fear	Avoidance
Blame	--	--	--	--	--	--	--
Anger	0.59**	--	--	--	--	--	--
Pity	-0.21*	-0.08	--	--	--	--	--
Help	-0.18*	-0.26**	0.15	--	--	--	--
Dangerousness	0.26**	0.41**	0.15	-0.32**	--	--	--
Fear	0.21*	0.46**	0.16	-0.31**	0.87**	--	--
Avoidance	0.54**	0.52**	-0.02	-0.48**	0.47**	0.41**	--

* $p < .05$ ** $p < .01$

Table 6

Correlations Between Supplemental Measures and Primary Stigma Ratings

Stigma Measure	SDS	JWS	CoBRAS			
			Blatant	Institutional	Privilege	Total
Blame	0.00	-0.04	0.08	0.17*	0.18*	0.22**
Anger	-0.05	0.05	0.17*	0.19*	0.23**	0.28**
Pity	-0.08	0.11	-0.18*	-0.11	-0.17*	-0.21*
Help	0.24**	0.07	-0.19*	-0.30**	0.13	-0.32**
Dangerousness	-0.11	0.09	0.10	0.14	0.05	0.15
Fear	-0.04	0.05	0.13	0.09	0.04	0.13
Avoidance	-0.11	-0.04	0.06	0.20*	0.17*	0.22**

* $p < .05$ (2-tailed). ** $p < .01$ (2-tailed)

Table 7

Differences in Primary Stigma Ratings Between High and Low LOF Scale Endorsement

Scale	Low LOF (<i>n</i> = 55)	High LOF (<i>n</i> = 86)	<i>t</i> -score	<i>p</i> -value
	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)		
Blame	10.25 (5.24)	10.22 (6.40)	0.03	0.97
Anger	8.85 (4.58)	8.27 (4.51)	0.75	0.46
Pity	19.13 (4.73)	18.85 (4.14)	0.37	0.71
Help	18.44 (4.58)	19.63 (4.59)	-1.51	0.14
Dangerousness	10.93 (4.83)	11.06 (4.83)	-0.16	0.88
Fear	9.64 (4.79)	9.64 (4.68)	-0.00	1.0
Avoidance	15.64 (5.61)	15.99 (6.11)	-0.35	0.73

Table 8

Means and Standard Deviations for Main Effects of Race and Mental Illness on Primary Stigma Ratings of Target

Stigma Measure	Race				MI			
	White (<i>n</i> = 70)		AA (<i>n</i> = 71)		Drug Dep (<i>n</i> = 72)		Schizophrenia (<i>n</i> = 69)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Blame	10.67	0.49	9.62	0.49	14.46	0.48	5.83	0.49
Anger	8.20	0.51	8.71	0.50	10.18	0.50	6.73	0.51
Pity	19.02	0.51	18.92	0.51	18.21	0.51	19.73	0.52
Help	19.36	0.51	19.01	0.54	18.47	0.54	19.89	0.55
Dangerousness	10.80	0.57	11.18	0.57	11.78	0.56	10.20	0.58
Fear	9.33	0.56	9.92	0.56	10.13	0.55	9.12	0.57
Avoidance	16.28	0.62	15.30	0.62	18.61	0.61	12.97	0.63

**note: higher means indicate higher increased endorsement of the stigma measure*

Table 9

Means and Standard Deviations for Interaction Effects of Race and Mental Illness on Primary Stigma Ratings of Target

Stigma Measure	White		African American	
	Drug Dep	Schizophrenia	Drug Dep	Schizophrenia
	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
Blame	15.11 (0.68)	6.24 (0.70)	13.81 (0.68)	5.43 (0.69)
Anger	10.14 (0.70)	6.27 (0.72)	10.22 (0.70)	7.20 (0.71)
Pity	18.89 (0.71)	19.15 (0.73)	17.53 (0.72)	20.31 (0.73)
Help	18.28 (0.73)	20.44 (0.79)	18.67 (0.76)	19.34 (0.77)
Dangerousness	11.97 (0.80)	9.62 (0.82)	11.58 (0.80)	10.77 (0.81)
Fear	10.28 (0.78)	8.38 (0.81)	9.97 (0.78)	9.86 (0.80)
Avoidance	19.50 (0.87)	13.06 (0.89)	17.72 (0.87)	12.89 (0.88)

Table 10

Adjusted Means and Standard Deviations for Main Effects of Race, Mental Illness, and Covariates on Primary Stigma Ratings of Target

Stigma Measure	Race				MI			
	White (n = 69)		AA (n = 67)		Drug Dep (n = 70)		Schizophrenia (n = 66)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Blame	10.64	0.49	9.60	0.50	14.36	0.49	5.57	0.50
Anger	8.18	0.51	8.74	0.52	10.03	0.51	6.89	0.52
Pity	19.00	0.52	18.73	0.53	18.18	0.51	19.55	0.53
Help	19.25	0.53	18.94	0.54	18.52	0.53	19.67	0.55
Dangerousness	10.72	0.58	11.20	0.59	11.75	0.58	10.18	0.60
Fear	9.23	0.57	9.88	0.57	9.99	0.56	9.12	0.58
Avoidance	16.25	0.61	15.37	0.62	18.51	0.61	13.10	0.62

**note: higher means indicate higher increased endorsement of the stigma measure*

Table 11

Adjusted Means and Standard Deviations for Interaction Effects of Race, Mental Illness, and Covariates on Primary Stigma Ratings of Target

Stigma Measure	White		African American	
	Drug Dep	Schizophrenia	Drug Dep	Schizophrenia
	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
Blame	14.90 (0.69)	6.38 (0.70)	13.82 (0.69)	5.37 (0.72)
Anger	10.00 (0.72)	6.37 (0.73)	10.07 (0.72)	7.41 (0.75)
Pity	18.80 (0.73)	19.20 (0.74)	17.56 (0.73)	19.90 (0.76)
Help	18.23 (0.75)	20.28 (0.77)	18.82 (0.75)	19.06 (0.78)
Dangerousness	11.83 (0.82)	9.62 (0.84)	11.67 (0.82)	10.74 (0.86)
Fear	9.95 (0.80)	8.52 (0.81)	10.02 (0.80)	9.73 (0.83)
Avoidance	19.16 (0.86)	13.33 (0.87)	17.86 (0.85)	12.87 (0.89)

Table 12

Descriptive Statistics for Family Stigma Measures

Scale	<i>N</i>	<i>M (SD)</i>	Median	Range
FQ				
Blame	146	4.06 (1.93)	3.00	3 - 13
Anger	146	3.90 (2.15)	3.00	3 - 17
Pity	146	19.24 (4.91)	19.50	3 - 27
Help	146	21.10 (5.35)	23.00	6 - 27
Dangerousness	146	4.17 (2.53)	3.00	3 - 18
Fear	146	4.03 (2.28)	3.00	3 - 16
Avoidance	146	8.18 (5.25)	7.00	3 - 24
Resp for Recovery	146	3.24 (2.07)	3.00	1 - 9
Shame of target	146	1.47 (1.06)	1.00	1 - 7
Contamination	146	1.79 (1.21)	1.00	1 - 7
Kept Away	146	2.13 (1.52)	1.00	1 - 7
Target Incompetent	110	1.22 (0.86)	1.00	1 - 7

Table 13

Correlations Among Outcome Measures for Family Stigma

Measure	Blame	Anger	Pity	Help	Dangerous	Fear	Avoidance	Resp Rec	Shame	Contamin.	Kept Away
Blame	--	--	--	--	--	--	--	--	--	--	--
Anger	0.43**	--	--	--	--	--	--	--	--	--	--
Pity	-0.08	-0.12	--	--	--	--	--	--	--	--	--
Help	-0.22**	-0.31**	0.39**	--	--	--	--	--	--	--	--
Dangerousness	0.48**	0.73**	-0.07	-0.25**	--	--	--	--	--	--	--
Fear	0.45**	0.80**	-0.13	-0.28**	0.87**	--	--	--	--	--	--
Avoidance	0.25**	0.39**	-0.22**	-0.62**	0.37**	0.41**	--	--	--	--	--
Resp Recovery	0.40**	0.24**	0.17*	-0.09	0.26**	0.22**	0.09	--	--	--	--
Shame of Target	0.43**	0.27**	-0.03	-0.20*	0.41**	0.41**	0.24**	0.31**	--	--	--
Contamination	0.31**	0.31**	0.04	-0.29**	0.40**	0.36**	0.29**	0.31**	0.62**	--	--
Kept Away	0.35**	0.22**	0.11	-0.15	0.26**	0.20*	0.19*	0.19*	0.41**	0.55**	--

* $p < .05$ ** $p < .01$

Table 14

Correlations Between Supplemental Measures and Family Stigma Ratings

Stigma Measure	SDS	JWS	CoBRAS			
			Blatant	Institutional	Privilege	Total
Blame	-0.06	-0.03	0.16	0.05	-0.06	0.06
Anger	-0.10	0.13	0.19*	0.06	-0.14	0.07
Pity	0.02	0.02	-0.20*	-0.00	-0.12	-0.13
Help	0.17*	0.01	-0.17*	-0.18*	-0.04	-0.20*
Dangerousness	-0.02	0.10	0.10	0.10	-0.10	0.07
Fear	-0.05	0.11	0.10	0.17*	-0.12	0.10
Avoidance	-0.21*	0.13	0.07	0.21**	-0.07	0.15
Resp for recovery	0.02	-0.04	0.02	0.07	0.05	0.06
Shame of target	-0.15	0.02	-0.02	0.10	0.05	0.04
Contamination	-0.25**	-0.01	0.04	0.16	-0.07	0.10
Kept away	-0.20*	0.12	0.11	0.02	-0.01	0.07

* $p < .05$ (2-tailed). ** $p < .01$ (2 tailed)

Table 15

Differences in Family Stigma Ratings Between High and Low LOF Scale Endorsement

Scale	Low LOF (<i>n</i> = 73)	High LOF (<i>n</i> = 73)	<i>t</i> -score	<i>p</i> -value
	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)		
Blame	4.18 (2.11)	3.95 (1.73)	0.73	0.47
Anger	4.15 (2.53)	3.66 (1.66)	1.39	0.17
Pity	18.48 (5.30)	19.79 (4.46)	-1.37	0.17
Help	20.40 (5.70)	21.79 (4.92)	-1.59	0.12
Dangerousness	4.26 (2.47)	4.08 (2.60)	0.42	0.67
Fear	4.18 (2.23)	3.88 (2.33)	0.80	0.43
Avoidance	8.33 (5.63)	8.03 (4.87)	0.35	0.73
Resp for Recovery	3.33 (2.06)	3.15 (2.09)	0.52	0.60
Shame of Target	1.52 (1.00)	1.41 (1.12)	0.62	0.53
Contamination	1.81 (1.20)	1.78 (1.24)	0.14	0.89
Kept Away	2.25 (1.66)	2.01 (1.37)	0.92	0.36

Table 16

*Means and Standard Deviations for Main Effects of Race and Mental Illness on Family**Stigma Ratings of Target*

Stigma Measure	Race				MI			
	White (n = 75)		AA (n = 71)		Drug Dep (n =73)		Schizophrenia (n = 73)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Blame	4.24	0.22	3.88	0.23	4.35	0.22	3.77	0.22
Anger	3.94	0.25	3.87	0.26	3.88	0.25	3.93	0.25
Pity	18.75	0.56	19.76	0.58	19.97	0.57	18.54	0.57
Help	21.38	0.62	20.78	0.64	20.80	0.63	21.36	0.63
Dangerousness	4.31	0.30	4.03	0.30	4.09	0.30	4.25	0.30
Fear	4.14	0.27	3.91	0.27	3.90	0.27	4.15	0.27
Avoidance	7.74	0.60	8.66	0.62	8.09	0.61	8.31	0.61
Resp Recovery	3.24	0.24	3.25	0.24	3.36	0.24	3.13	0.24
Shame of target	1.56	0.12	1.37	0.12	1.63	0.12	1.29	0.12
Contamination	1.74	0.14	1.85	0.14	2.04	0.14	1.55	0.14
Kept Away	1.98	0.17	2.29	0.17	2.61	0.17	1.66	0.17

**note:* higher means indicate higher increased endorsement of the stigma measure

Table 17

Means and Standard Deviations for Interaction Effects of Race and Mental Illness on Family Stigma Ratings of Target

Stigma Measure	White		African American	
	Drug Dep	Schizophrenia	Drug Dep	Schizophrenia
	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
Blame	4.53 (0.31)	3.95 (0.32)	4.17 (0.32)	3.58 (0.32)
Anger	3.82 (0.35)	4.05 (0.36)	3.94 (0.37)	3.81 (0.36)
Pity	19.30 (0.79)	18.22 (0.80)	20.66 (0.83)	18.86 (0.81)
Help	21.66 (0.87)	21.11 (0.88)	19.94 (0.91)	21.61 (0.89)
Dangerousness	4.32 (0.41)	4.30 (0.42)	3.86 (0.43)	4.20 (0.43)
Fear	4.03 (0.37)	4.24 (0.38)	3.77 (0.39)	4.06 (0.38)
Avoidance	6.95 (0.85)	8.54 (0.86)	9.23 (0.88)	8.08 (0.87)
Resp for Recovery	3.00 (0.33)	3.49 (0.34)	3.71 (0.35)	2.78 (0.34)
Shame of Target	1.87 (0.17)	1.24 (0.17)	1.40 (0.18)	1.33 (0.17)
Contamination	2.00 (0.20)	1.49 (0.20)	2.09 (0.20)	1.61 (0.20)
Kept Away	2.55 (0.24)	1.41 (0.24)	2.66 (0.25)	1.92 (0.24)

Table 18

Adjusted Means and Standard Deviations for Main Effects of Race, Mental Illness, and Covariates on Family Stigma Ratings of Target

Stigma Measure	Race				MI			
	White (<i>n</i> = 69)		AA (<i>n</i> = 65)		Drug Dep (<i>n</i> = 69)		Schizophrenia (<i>n</i> = 65)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Blame	4.16	0.22	3.93	0.22	4.33	0.22	3.77	0.22
Anger	3.79	0.21	3.89	0.21	3.84	0.21	3.84	0.21
Pity	18.81	0.57	19.79	0.59	20.10	0.57	18.50	0.59
Help	21.29	0.62	20.78	0.64	20.78	0.62	21.29	0.64
Dangerousness	4.11	0.25	4.05	0.26	4.10	0.25	4.06	0.26
Fear	3.93	0.22	3.98	0.23	3.86	0.22	4.06	0.23
Avoidance	7.48	0.60	8.66	0.62	7.93	0.60	8.22	0.62
Resp Recovery	3.16	0.25	3.33	0.26	3.39	0.25	3.09	0.26
Shame of target	1.53	0.12	1.35	0.13	1.61	0.12	1.26	0.13
Contamination	1.72	0.14	1.82	0.15	2.04	0.14	1.50	0.15
Kept Away	1.96	0.18	2.20	0.18	2.55	0.18	1.61	0.18

Table 19

Adjusted Means and Standard Deviations for Interaction Effects of Race, Mental Illness, and Covariates on Family Stigma Ratings of Target

Stigma Measure	White		African American	
	Drug Dep	Schizophrenia	Drug Dep	Schizophrenia
	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
Blame	4.44 (0.30)	3.89 (0.31)	4.22 (0.31)	3.64 (0.32)
Anger	3.75 (0.28)	3.83 (0.30)	3.92 (0.30)	3.85 (0.30)
Pity	19.40 (0.79)	18.23 (0.82)	20.80 (0.82)	18.78 (0.84)
Help	21.84 (0.86)	20.73 (0.90)	19.71 (0.90)	21.85 (0.91)
Dangerousness	4.27 (0.35)	3.95 (0.36)	3.93 (0.36)	4.16 (0.37)
Fear	3.94 (0.31)	3.92 (0.32)	3.78 (0.32)	4.19 (0.33)
Avoidance	6.62 (0.83)	8.34 (0.87)	9.25 (0.87)	8.07 (0.88)
Resp for Recovery	2.97 (0.35)	3.35 (0.36)	3.82 (0.36)	2.83 (0.37)
Shame of Target	1.18 (0.17)	1.25 (0.18)	1.13 (0.18)	1.27 (0.18)
Contamination	1.95 (0.20)	1.50 (0.21)	2.13 (0.21)	1.51 (0.21)
Kept Away	2.48 (0.24)	1.44 (0.25)	2.61 (0.25)	1.78 (0.26)

Appendix 1: The Attribution Questionnaire

PLEASE READ THE FOLLOWING STATEMENT ABOUT MICHAEL:

Michael is a 20-year old (**White/African American**) at Marquette University, and he is in one of your classes. Michael has been diagnosed with **drug dependence**. **He sometimes craves drugs** and becomes upset. He has remained at school and does okay in his classes. He has been hospitalized several times because of his illness.

Michael is a 20-year old (**White/African American**) at Marquette University, and he is in one of your classes. Michael has been diagnosed with **schizophrenia**. **He sometimes hears voices** and becomes upset. He has remained at school and does okay in his classes. He has been hospitalized several times because of his illness.

NOW ANSWER EACH OF THE FOLLOWING QUESTIONS ABOUT MICHAEL. CIRCLE THE NUMBER OF THE BEST ANSWER TO EACH QUESTION.

1. I would feel aggravated by Michael.

1	2	3	4	5	6	7	8	9
No, not at all								Very much

2. I would feel unsafe around Michael.

1	3	4	5	6	7	8	9
No, not at all							Very much

3. Michael would terrify me.

1	3	4	5	6	7	8	9
No, not at all							Very much

4. How angry would you feel at Michael?

1	3	4	5	6	7	8	9
No, not at all							Very much

5. If I were an employer, I would interview Michael for a job.

1	3	4	5	6	7	8	9
Not Likely							Very likely

6. I would be willing to talk to Michael about his problems.

1 3 4 5 6 7 8 9
 No, Very
 not at much
 all

7. I would feel pity for Michael.

1 3 4 5 6 7 8 9
 No, Very
 not at much
 all

8. I would think that it was Michael's own fault that he is in the present condition.

1 3 4 5 6 7 8 9
 No, Yes,
 not at Absolutely
 all so

9. How controllable do you think is the cause of Michael's present condition

1 3 4 5 6 7 8 9
 Not at all Completely
 under under
 personal personal
 control control

10. How irritated would you feel by Michael?

1 2 3 4 5 6 7 8 9
 Not Very
 at much
 all

11. How dangerous would you feel Michael is?

1 2 3 4 5 6 7 8 9
 Not Very
 at much
 all

12. I would share a car pool with Michael everyday.

1 2 3 4 5 6 7 8 9
 Not Very
 likely much
 likely

13. I would feel threatened by Michael.

1 2 3 4 5 6 7 8 9
 No, Yes,
 not at very
 all much

14. How scared of Michael would you feel?

Appendix 2: The Family Questionnaire

PLEASE READ THE FOLLOWING STATEMENT ABOUT MICHAEL:

Michael is a 20-year old (**White/African American**) student at Marquette University, and he is in one of your classes. You learn that his father has a diagnosis of **drug dependence. He sometimes craves drugs** and becomes upset. He works as a clerk at a large law firm. His father has been hospitalized several times because of his illness. Michael tries to see his father once a week.

Michael is a 20-year old (**White/African American**) student at Marquette University, and he is in one of your classes. You learn that his father has a diagnosis of **schizophrenia. He sometimes hears voices** and becomes upset. He works as a clerk at a large law firm. His father has been hospitalized several times because of his illness. Michael tries to see his father once a week.

NOW ANSWER EACH OF THE FOLLOWING QUESTIONS ABOUT MICHAEL. CIRCLE THE NUMBER OF THE BEST ANSWER TO EACH QUESTION.

1. I would feel pity for Michael

1	2	3	4	5	6	7	8	9
None at all								Very much

2. How much sympathy would you feel for Michael?

1	2	3	4	5	6	7	8	9
None at all								Very much

3. How much concern would you feel for Michael?

1	2	3	4	5	6	7	8	9
Not at all								Very much

4. How dangerous would you feel Michael is?

1	2	3	4	5	6	7	8	9
Not at all								Very much

5. I would feel unsafe around Michael.

1	2	3	4	5	6	7	8	9
No, not at all								Yes very much

6. I would feel threatened by Michael.

1	2	3	4	5	6	7	8	9
No, not at all								Yes, very much

7. How scared of Michael would you feel?

1	2	3	4	5	6	7	8	9
Not at all								Very much

8. Michael would terrify me.

1	2	3	4	5	6	7	8	9
Not at all								Very much

9. How frightened of Michael would you feel?

1	2	3	4	5	6	7	8	9
Not at all								Very much

10. I would think that Michael's father's condition is Michael's fault.

1	2	3	4	5	6	7	8	9
No, not at all								Yes, absolutely so

11. How much do you think Michael can control his father's condition?

1	2	3	4	5	6	7	8	9
Not at all under his control								Completely under his control

12. How responsible do you think Michael is for his father's condition?

1	2	3	4	5	6	7	8	9
Not at all responsible								Very much responsible

13. How angry would you feel at Michael?

