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More than "mentally-ill": Differentiating help-seeking from mental-illness stigma in a college population

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ABSTRACT

Two disparate and long-standing lines of research exist: studies of the stigma of mental illness (e.g., Link et al., 1989) and studies of the self-stigma of seeking psychological help (e.g., Vogel, Wade, & Haake, 2006). While some researchers implicitly treat these two constructs as synonymous (e.g., Corrigan, Watson, & Barr, 2006), others make the argument that they are theoretically and empirically distinct (e.g., Ben-Porath, 2002). To help clarify this debate, the present investigation examined measures of both constructs among 729 undergraduate students at a large Midwestern University. Exploratory factor analysis indicated that, while there is a strong correlation between the two types of stigma, they are conceptually distinct. Simultaneous multiple regression analysis indicated that help-seeking self-stigma explains 16% of the variance in attitudes toward seeking help whereas mental illness self-stigma explains roughly 2% of this variance. Additionally, for those with clinical levels of psychological distress who had not sought treatment, mean values of the self-stigma of mental illness were higher than mean values of the self-stigma of seeking psychological. Still, a test of dependent r's indicated that the self-stigma of seeking psychological help was more strongly correlated with attitudes toward seeking help for this population. Finally, logistic regression revealed that the self-stigma of seeking psychological help is negatively associated with the likelihood a person will have sought help. No such relationship was observed for the self-stigma of mental illness. Together, these findings provide strong evidence that the stigma of mental illness is conceptually distinct from the stigma of seeking psychological help, and that the stigma of seeking help may be more proximal to help-seeking attitudes and behaviors. Implications for researchers and clinicians interested in enhancing mental health service utilization are discussed.

Keywords: *stigma of mental illness, stigma of seeking psychological help, help-seeking behaviors, college students*

CHAPTER 1: OVERVIEW

Only 11% of individuals in the United States with a mental health concern receive treatment from a counselor or mental health professional (Andrews, Issakidis, & Carter, 2001). In college student populations, only 50% will receive needed treatment (Blanco et al., 2008). Variables that affect access to care, including fairness in financing healthcare and overall health expenditure, do not predict the rates of consultation for mental health issues (World Health Organization, 2000; Andrews, Issakidis, & Carter, 2001). Rather, it is the perceptions of counseling as an uncomfortable, debilitating, and a potentially dangerous experience that most greatly contributes to under-utilization (Hinson & Swanson, 1993). Indeed, stigma, treatment fears, fear of emotional expression, the anticipated utility and risks of treatment, and fears of self-disclosure are consistent predictors of help-seeking behavior (Stefl & Prosperi, 1985; Vogel et al., 2005). Much of the battle to enhance psychotherapy utilization must then be in changing perceptions of what it means to be a seeker of psychological help.

Subsequent to Link's (1987) seminal work on the negative impacts of receiving the label of a "mental patient", publically-stigmatizing attitudes toward those who seek psychological help have often been subsumed under a broader conceptualization of mental illness stigma. Much research has been done to resolve the "nonspecific labeling effect" of mental illness; the notion that there is a single, broad attribute of mental illness against which the general population stereotypes and discriminates (Corrigan, 2004). More recent research has started to identify that the general public differentiates among stigmatizing mental health concerns such that even highly similar characteristics or disabilities (e.g. psychosis and depression) may be judged more or less harshly (Corrigan et al., 2000). Although direct

comparison studies of differing mental health diagnoses are becoming more prevalent, few studies have applied this same framework to compare the stigma of seeking psychological help to that of mental illness.

This is despite the fact that seeking psychological help is an attribute with a known set of uniquely stigmatizing perceptions. As early as Freeman's (1961) study on attitudes toward the mentally-ill, attitudes toward mental hospitals have been thought to differ from attitudes toward mental disorders. More recent research suggests that current or past utilization of psychological treatment is associated with labels such as awkward, cold, defensive, dependent, insecure, unsociable (Sibicky & Dovidio, 1986), not in control of one's emotions (Oppenheimer & Miller, 1988), and weak or disturbed (King, Newton, Osterlund, & Baber, 1973). Additionally, those who have sought mental health treatment report higher levels of perceived discrimination than those who have not received treatment (Jorm & Wright, 2008).

In 2002, Ben-Porath completed one of the first studies to empirically demonstrate the existence of stigma for receiving psychotherapy above and beyond the stigma of simply having a mental illness. In this study, undergraduate students rated vignettes of depressed individuals and depressed individuals who were receiving psychotherapy. The participants rated the depressed individuals who were also receiving help as less emotionally stable and less confident than those who were depressed but not seeking treatment (Ben-Porath, 2002). Still, many questions remain about the relationship between mental illness and help-seeking stigma. These include how conceptually distinct or related the two are, if the two are differentially impacted by past mental healthcare utilization or experiences of mental illness, and if help-seeking should be differentiated from or subsumed under that of mental-illness in assessing attitudes toward psychological help.

The Present Study

Building from the work of Ben-Porath (2002), the present study seeks to assess if and to what extent the stigma of having a psychological problem should be differentiated from the stigma associated with psychological help-seeking behavior. The specific aims of the present study are to 1) examine if the stigma of seeking psychological help and the stigma of mental illness are separate constructs, 2) examine if having experienced a mental illness differently impacts these two stigmas, 3) to examine if the two stigmas uniquely predict attitudes toward seeking help, and 4) to examine if the two stigmas differently impact help-seeking behavior. A college student sample was utilized given the high levels of stigmatizing beliefs in this population and the need to better understand what keeps this group from seeking treatment.

CHAPTER 2: LITERATURE REVIEW

Since Goffman's (1963) seminal definition of stigma as an attribute that reduces an individual "[…] from a whole and usual person to a tainted, discounted one" (pg. 3), counseling psychologists have been interested in how the stigma surrounding mental health care might interfere with one's self-concept. Stigma's potentially devasting effects on a person with mental health concerns has led counseling psychologists to examine stigma in a large number of studies. Unfortunately, researchers have not always clearly described or operationalized their conceptualization of stigma. This has led at times to contradictory results and some confusion in the literature. More recent studies, however, have begun to approach stigma as a nuanced concept, recognizing that far from a single construct, stigma includes a number of interdependent processes that differ depending on the characteristic being stigmatized and the psychological attributes of the person receiving stigmatization.

In attempting to tease out these important distinctions in the stigma concept, recent studies have examined the self-stigma of seeking psychological help. According to Vogel, Wade, & Haake (2006), the self stigma of seeking psychological help is best defined as the decrement in self-concept, self-esteem, and self-efficacy that results when an individual self-labels himself or herself as a seeker of psychological help. Understanding this facet of stigma is not only important in highlighting a crucial distinction, but is also important in designing effective stigma-reduction interventions. Growing evidence suggests that self-stigma is more proximate to help-seeking attitudes than public stigma (e.g., Vogel, Wade, & Hackler, 2007). Therefore, help-seeking stigma is salient to any individual who considers seeking psychological help (whereas mental-illness stigma might not be) and may be more important than mental illness stigma in a person's decisions to seek help. Thus it is important that the

stigma of seeking psychological help be understood as conceptually distinct from mental illness stigma.

The present literature review will briefly trace the development of the concept of stigma and its proposed role in seeking help, distinguishing between public and self stigma and mental illness and help-seeking stigma. It will then continue to condense the number of definitions of self-stigma into a unified conceptualization. Next, literature examining how stigma relates to experiencing a mental illness, seeking treatment, and attitudes toward help will be reviewed. Finally, interventions aimed at decreasing self-stigma will also be examined.

Overview of Main Concepts

As the literature on stigma has grown, several terms have been used and examined. The ones that are critical to this literature review and study are mental health stigma and help-seeking stigma. Both of these can be further understood as either public or self-stigma. Thus, there are four main concepts in the research literature; the public stigma of mental illness, the self-stigma of mental illness, the public stigma of seeking psychological help, and the self-stigma of seeking psychological help.

The public stigma of mental illness might best be described as the prejudiced reactions the general public endorses toward those with a mental illlness, whereas the self-stigma of mental illness is what mentally-ill persons do to themselves when they internalize these prejudiced thoughts and behaviors (Corrigan, 2004). The public stigma of seeking help, on the other hand, is the prejudiced reactions the general public endorses about the simple behavior of seeking psychological help, regardless of the reasons for seeking such help (Vogel & Wade, 2009). In a parallel fashion, the self-stigma of seeking psychological help is what persons who seek psychogolical help do to themselves when they internalize these stigmatized

beliefs (Vogel et al., 2006). Although different researchers emphasize different components of self-stigma (e.g. affect, cognition, behavior; Brohan et al., 2010), a core component of self-stigma is a decrement in self-regard (Corrigan, 2004; Vogel et al., 2006). Each of these concepts will be dealth with more fully in the following review.

The Process of Stigmatization

Goffman (1963) succinctly defined stigma as an attribute that devalues or discredits the identity of an individual. Though the stigmatized attribute (e.g. physical disability, race, gender, mental illness, etc.) is an isolated characteristic, the individual's broader identity receives devaluation. Through activating culturally-entrenched stereotypes, stigma links a single mark of disgrace to a range of negative qualities (Jones et al., 1984; Goffman, 1963). According to Fiske (1998) and Crocker, Major, & Steele (1998), stereotypes act as heuristics that increase cognitive efficiency in decision-making. Culturally-sanctioned categories are cognitive short-hands that operate at the preconscious level. Holding a stereotype allows an individual to make split-second decisions and attend to other matters (Fiske, 1998). Stigma, by labeling an individual, links a person with known stereotypes that allows for easy cognitive processing (Link & Phelan, 2001).

Goffman (1963) suggests that stigmatization occurs because of the need of others to psychologically distance themselves from the individual with stigma. By devaluing the entire individual, the majority can isolate the stigmatized person and separate themselves from similar devaluation (Goffman, 1963). Phelan and colleagues have added to this, suggesting that the public holds stigmatizing attitudes toward groups of individuals in order to 1) exploit and dominate them, 2) avoid association with the "disease" associated with the stigma, and 3) to reinforce cultural norms (Phelan, Link, & Davidio, 2008).

In order for the process of stigmatization to begin, the majority must receive some signal that an individual possesses a stigmatized attribute (Link & Phelan, 2001). In the case of mental illness, these signals might include psychiatric symptoms, social skills deficits, or physical appearance. Thus, erratic behavior, talking to one's self aloud, a disheveled appearance, inappropriate dress, or choice of discussion topics could all mark an individual as mentally-ill (Corrigan, 2005). Notice, however, that the signals of mental illness are potentially misleading; a morbid individual or one that is poor and homeless might exhibit what are seen as marks of mental illness without actually having a psychiatric disorder. Alternatively, a person with a clinical diagnosis could exhibit none of these characteristics.

What is common amongst those stigmatized for being mentally-ill then is not a shared attribute or group of attributes, but rather a social label. Labeling Theory suggests that mental-illness is a socially-sanctioned label (Corrigan, 2005). When a person exhibits certain marked behaviors (primary deviance), the majority responds to the labeled person with fear, disgust, or alienation. This label causes the person to exhibit further deviant behavior (secondary deviance), which only cements their position as a stigmatized individual. Over the course of several studies conducted in the late 80s, Link and colleagues provided evidence for the concept of secondary deviance, showing that, indeed, societal reactions can exacerbate the course of what are pre-existing psychological disorders (Link, 1987; Link et al., 1989).

The Stigma of Seeking Psychological Help

The stigma associated with having a mental illness is not the only stigmatizing attitude of the general public that can negatively impact people with psychological concerns. There is also stigma associated with seeking psychological help, regardless of the particular reasons for which one seeks help. There is a large body of literature demonstrating a correlation between

current or past utilization of mental health treatment and labels such as awkward, cold, defensive, dependent, insecure, unsociable (Sibicky & Dovidio, 1986), not in control of one's emotions (Oppenheimer & Miller, 1988), and weak or disturbed (King, Newton, Osterlund, & Baber, 1973).

Several studies suggest that help-seeking is not simply a behavioral cue that links a person to the stigma of mental illness, but that it has its own unique stigma and associated stereotypes. In 2002, Ben-Porath demonstrated that there is stigma for receiving psychotherapy above and beyond the stigma of simply having a mental illness. In this study, 402 undergraduate students enrolled in introductory psychology courses rated vignettes of depressed individuals and depressed individuals who were receiving psychotherapy. The participants evaluated the individuals on measures of emotional stability, interest, and confidence. Depressed individuals who were also receiving help were rated as less emotionally stable and less confident than those who were depressed but not seeking treatment (Ben-Porath, 2002). Additionally, in a study of 3,746 Australian youth and parents, Jorm and Wright (2008) found that those who have sought mental health treatment in the past report higher levels of perceived discrimination than those who have not received treatment.

Conceptual Models of Stigmatizing Attributes

One framework for examining the ways in which stigma may vary according to the attribute receiving stigma has been proposed by Jones and colleagues (1984). This theory offers six primary factors of stigma: how concealable the condition is (concealibility), attributions of responsibility for the condition (origin), the development of the condition and its likely outcomes (course), how much the condition interferes with interactions (*disruptiveness*), how the condition impacts the person's attractiveness (*aesthetic qualities*),

and attributions of the dangerousness a condition proposes (peril). Empirical studies based on attribution theory have argued for perhaps only two of these dimensions: controllability and course (Weiner, Perry, & Magnusson, 1988) or controllability and concealability (Crocker, Major, & Steele, 1998). Bresnahan and Zhuang's (2010) factor analysis supports several of Jones' initial dimensions. These researchers derived 105 stigma items from previous measures related to HIV/AIDS and analyzed the items with factor analytic strategies. In this study, the authors identified Labeling (which included items related to the danger or peril of the attribute), Negative Attribution (which related to the inferiority and weakness of those with the attribute), Distancing (related to a desire for social distance from persons with the attribute), Status Loss (relating to perceptions of others negative views of those with the attribute), and Controllability (how much the persons is responsible for the condition; Bresnahan & Zhuang, 2010). Although it is not entirely clear which of Jones' initial dimensions are most salient, it appears evident that characteristics of the stigmatized attribute can impact the associated stigmatizing beliefs.

The Distinction Between Mental Illness and Help-seeking Stigma

Although no known study has examined the stigma of mental illness and of seeking psychological help on these dimensions, theory suggests several possible points of departure. While both stigmas fall within Goffman's (1963) original category of *blemishes of moral character*, the two may differ along the various identified stigma dimensions. Mental illness is likely perceived by the general public as more concealable than the decision to seek psychological help. Key to the definition of concealability is the notion that persons can choose situations in which they feel comfortable and safe to reveal their identity (Quinn, 2006). Because seeking help is necessarily an interpersonal process and not an individual

one, it is likely that help-seeking stigma, like other visible stigmatizing attributes, would be seen as more uncomfortable in this regard. Indeed, those who desire to conceal personal information show a decreased likelihood to seek help (Cepeda-Benito & Short, 1998). The decision to seek help may also be viewed as more controllable than mental illness. Previous researchers have argued that the self-stigma associated with seeking help, unlike that of mental illness, is voluntary and thus the label is internally-driven (Vogel & Wade, 2009; Schomerus & Angermeyer, 2008). Because ratings of persons who are more in control of their disorders are rated as less worthy of pity and worse prognostically (Weiner, Perry, & Magnusson, 1988), it may be the case that help-seeking is more stigmatizing in this regard. It is less clear how seeking psychological help and mental illness stigmas differ on the categories of outcomes, disruptiveness, and danger. While Ben-Porath's (2002) study suggests that those who seek help for depression are seen as more emotionally unstable, less interesting, less competent, and less confident than those who have depression but do not seek help, these findings are confounded by the depression diagnosis in both cases. It may be the case that help-seeking for personal growth or other concerns is less stigmatizing, and thus that seeking help itself carries less stigma.

Public stigma

Stigma has been usefully differentiated into public and self-stigma (Corrigan & Watson, 2002). Public stigma is the reaction that the general population has toward people with a mental illness. Public stigma can be further broken down into three subcomponents: stereotypes, prejudice, and discrimination (Corrigan, 2005). Whereas a person can be aware of a stereotype but not agree with it, prejudice occurs when an individual endorses a negative stereotype and generates an emotional reaction (fear, disgust, alienation). Prejudice involves

not only a belief about a group of individuals but also a (typically negative) evaluation of their

value (Fiske, 1998). Discrimination, the final level of public stigma, is when an individual

takes action based on their prejudiced appraisal of a group of individuals. For mental illness

stigma, discrimination may manifest itself as withholding rightful life opportunities (housing,

jobs, etc.), unjustly prosecuting the mentally ill, or withholding full healthcare benefits

(Corrigan, 2005).

Self Stigma

       Self-stigma as internalized public stigma. Self-stigma, on the other hand, is the

negative self-appraisal stigmatized persons engage in as a result of being a member of a

stigmatized group (Corrigan, Watson, & Barr, 2006). In earlier models of the stigma of

mental illness, researchers conceptualized self-stigma as the internalization of public stigma.

Such models posit that, growing up in a society that stigmatizes individuals with mental

illness, persons begin to agree with and apply such labels to others. For those who develop

psychological concerns during their life, however, these beliefs gain personal relevance as

they begin to fear possible rejection and devaluation (Link & Phelan, 2001).

    Several studies support the conceptualization of self-stigma as internalized public stigma.

Vogel and colleagues (2007) found that in a group of 676 undergraduate psychology students

from a large Midwestern university, the public stigma of mental illness was associated with

the self-stigma of seeking help ($r = .27$). Moses' (2009) study of self-labeling adolescents

adds to this conceptualization. Moses conducted interviews and assessments of 54 adolescent

males receiving integrated mental health care in a Midwestern urban area. Of the 54

adolescents, 11 (20.3%) used psychiatry terms, or "self-labeled", when referring to their

problems. Adolescents who self-labeled were more likely to exhibit higher levels of self-

stigma (Moses, 2009). Those individuals who talk about their own problems using psychological terms are also those who experience the greatest self-stigma, suggesting that self-stigma is a process of applying publically-stigmatizing attitudes to oneself (Moses, 2009).

Conceptualizing self-stigma as internalized public-stigma also makes sense of the presence of management strategies meant to hide one's mental illness or one's decision to seek psychological help (Corrigan, et al., 2010). Because mental illness and being a psychological help-seeker are non-obvious attributes that in many instances can be hidden from the public, individuals with stigma may protect themselves from additional discrimination by staying in the closet (Corrigan et al., 2010), withdrawing socially (Link, et al., 1989), and/or limiting their contact to only interacting with others with serious mental illnesses (Angell, 2003). Some of the negative effects of self-stigma then might come from the strategies individuals use to avoid public discrimination, rather than from the negative self-appraisal stemming from agreement with other's appraisals of their worth. Corrigan and colleagues analyzed coping styles of 85 persons with serious mental illness recruited from rehabilitation programs in the Chicago area. In these individuals, coming out about one's mental illness was associated with a greater quality of life than staying in the closet (Corrigan et al., 2010). Additionally, social withdrawal has been shown to constrict one's social networks and systems of support (Link & Phelan, 2001; Link et al., 1989).

Self-stigma as the opposite of personal empowerment. Another way of viewing self-stigma is the reduction in or absence of personal empowerment. Researchers have delineated between two factors of empowerment—interest in affecting one's community to increase life opportunities (community orientation) and confidence that one is worthy and able despite societal stigma (personal orientation; Corrigan, Faber, Rashid, & Leary, 1999; Segal,

Silverman, & Temkin, 1995). In research exploring this conceptualization, self-stigma was found to relate to pessimistic expectations of future success, in other words to low personal empowerment (McCubbin & Cohen, 1996).

One particularly interesting facet of this line of research is its ability to make sense of a strange finding by Crocker and Lawrence (1999) that many stigmatized persons show higher levels of self-esteem than the majority. Research on personal empowerment explains this phenomenon by suggesting that some people react to publically-stigmatizing attitudes by being energized to righteous anger (Corrigan & Watson, 2002). Such persons have low self-stigma because they oppose negative evaluations of their abilities and respond with positive self-perceptions (Corrigan, 2005). In many ways, personal empowerment can be viewed as a self-stigma management strategy that is the opposite of hiding the condition. Strategies of personal empowerment—including coming out about one's mental illness, the decision to seek treatment, righteous anger to challenge stigmatizers, or the desire to correct public misinformation—affirm the value of a person despite their stigmatizing condition (Tagney, Stuewig, & Mashek, 2007).

There is evidence to suggest that the ability to tolerate stigma, or to feel empowered despite stigmatizing attitudes, plays a major role in how one internalizes stigma for seeking help. The Stigma Tolerance subscale of the Attitudes Toward Seeking Professional Psychological Help Scale (ATSPPHS; Fischer & Farina, 1995) measures the likelihood a person will feel positive about seeking help in the face of publically stigmatizing attitudes. Ting & Hwang (2009) examined levels of stigma tolerance in 107 Asian American students living in the Rocky Mountain area of the United States. In these individuals, stigma tolerance was positively related to help-seeking attitudes. This was above and beyond other

psychological predictors of attitudes toward seeking help, including age, social support, gender, and general distress (Ting & Hwang, 2009). This lends support to the conceptualization of self-stigma as the opposite of personal empowerment.

Self-stigma as diminished self-esteem and self-efficacy. Self-stigma has more recently been conceptualized as the reduction in self-esteem and self-efficacy that results from applying publically-stigmatizing labels to oneself. In this conceptualization, self-esteem can be operationally defined as a person's view of their personal worth (Corrigan et al., 1999). Rosenberg (1965) describes self-esteem as a single construct of "the feeling that one is 'good enough'" (p. 31). More recent models of self-esteem have added complexity to Rosenberg's by proposing multiple, independent factors such as self-competence and self-liking (Tafarodi & Swan, 2001). Rosenberg maintained the simplicity of his conceptualization by supposing factors other than self-liking, such as self-competence, to be secondary contributors to self-esteem, and self-liking to be self-esteem's primary constitutive element (Rosenberg, 1979).

Self-efficacy is defined as the expectation that one will be able to successfully cope with life's demands in achieving personal goals (Bandura, 1977). Unlike self-esteem, self-efficacy is thought to be largely context-specific. A person's sense of ability to cope and be successful can vary largely in different settings, i.e. a person may be highly self-efficacious in terms of work situations but lack a sense of efficacy in social relationships (Bandura, 1977). The main point in these models is that, through the self-stigma of being a seeker of psychological help, a person may devalue themselves and experience a range of negative emotional reactions leading to reduced self-efficacy and self-esteem.

Toward a unified conceptualization of self-stigma. The most accurate description of self-stigma is not any one of these models individually, but rather an incorporation of all

three; like public stigma, self-stigma is not a single construct. Taken together, the above models indicate that self-stigma might be most adequately defined as the reduction in self-esteem and self-efficacy that results from internalized public-stigma in the absence of personal empowerment.

Consistent with the above definition, Corrigan and colleagues have recently conceptualized self-stigma as a three stage process (Corrigan et al., 2006). In this model a person engages first in stereotype agreement, next in self-concurrence, and finally self-esteem decrement (Corrigan et al., 2006). Corrigan and colleagues suggest that self-stigma begins when one accepts publically-held stereotypes as true. This suggests that a person must have some awareness of public attitudes in order to engage in self-stigma. As an example of stereotype agreement with respect to seeking help, a person might think "I agree with the general public, people who seek help from a therapist are weak-willed". Self-concurrence occurs when people further believe that the culturally entrenched stereotype is true of them; i.e. "I am weak-willed because I sought help from a therapist". It is at the level of self-concurrence that self-stigma becomes harmful, for self-concurrence can often results in self-esteem decrement; a diminishment in one's self-esteem because of internalized stigmatizing beliefs (Link & Phelan, 2001).

Further support for this conceptualization comes from Corrigan and colleagues' development of the Self-Stigma of Mental Illness Scale, or SSMIS (Corrigan et al., 2006). In predicting the existence of these three levels of self-stigma, Corrigan and colleagues administered the SSMIS to sixty persons with psychiatric disabilities. They hypothesized that stereotype awareness (measured by questions such as "I think the public believes most people with mental illness are unpredictable") would be uncorrelated with questions measuring

stereotype agreement, concurrence, and self-esteem decrement. In line with their hypotheses, the researchers found that stereotype awareness was not correlated with self-esteem or self-efficacy decrement ($r = .15$ and $r = .11$, respectively). However, stereotype agreement was correlated with stereotype concurrence and self-esteem decrement ($r = .55$ and $r = .47$, respectively) and stereotype concurrence was highly correlated with self-esteem decrement ($r = .85$). Taken together, Corrigan's findings suggest that people with mental illness can be fully aware of the stigmatizing attitudes but choose to reject them (suggesting the presence of facets of personal empowerment) and thus not engage in any level of self-stigma. Their findings also suggest that those who agree with the public about the stigma of mental illness may not apply the label of 'mentally-ill' to themselves, and thus not suffer from negative self-appraisals. If a person agrees with and applies a stigmatizing label to themselves, however, they are likely to experience a decrease in self-esteem and self-efficacy (Corrigan et al., 2006).

Assessing Self-Stigma

Measuring the self-stigma of mental illness. Given the various conceptualizations of self-stigma, it is not surprising that there are currently numerous measures to assess the self-stigma of mental illness. In a review of stigma measures, Brohan, Slade, Clement, and Thornicroft (2010) report the presence of five scales used to assess the self-stigma of mental illness. None of these measures assess solely the self-stigma of mental illness, but rather measure aspects of self-stigma along with elements of public stigma and experienced stigma (Brohan et al., 2010). Because other researchers have noted a clear distinction between public and self-stigma (e.g. Corrigan et al., 2006) it may be helpful to develop a stand-alone measure to directly assess the self-stigma of mental illness. This would allow researchers to examine

whether avoidance of professional help is related to the self-stigma of mental illness or other factors. Such a measure might focus on the self-esteem decrement that relates to self-concurrence with publically stigmatizing attitudes (Brohan et al., 2010).

The five measures reviewed by Brohan and colleagues that assess the self-stigma of mental illness include the Internalized Stigma of Mental Illness scale (ISMI; Ritsher, Otilingam, & Grajales, 2003), the Self Stigma of Mental Illness scale (SSMI; Corrigan, Watson & Barr, 2006), the Depression Self-Stigma scale (DSS; Kanter, Rüsch, & Brondino, 2008), the Stigma Scale (SS; King et al., 2007), and the Inventory of Stigmatizing Experiences scale (ISE; Stuart, Milev, & Koller, 2005). Consistent with the definition derived in the present review, Brohan and colleagues suggest that self-stigma contains cognitive, affective, and behavioral elements. All three of these elements can be found in the five measures identified. The ISMI parses out these three elements specifically as subscales through Alienation (affect), Stereotype Endorsement (cognition), and Social Withdrawal (behavior).

Measuring the self-stigma of seeking help. In 2006, Vogel and colleagues developed a measure of the self-stigma of seeking psychological help, the first of its kind (Vogel et al., 2006). Filling a gap in the help-seeking literature, the SSOSH does well to assess the presence of self-esteem decrement, self-efficacy decrement, and self-devaluation related to seeking psychological help. Whereas other researchers have used single measures of self-esteem as indicative of the presence of self-stigma (Allport, 1979), the effects of seeking help are correlated with decrements in self-esteem, confounding this method of measurement (Corrigan, 2005). The SSOSH, which uses questions phrased as hypothetical "if…then" statements, avoids this potential problem by assessing self-esteem related to the specific

context of seeking psychological help. As Corrigan (2005) suggests, by assessing negative

self-statements about the person (e.g. "It would make me feel inferior to ask for help from a

therapist"), the SSOSH is able to assess diminished self-esteem due to self-stigma. Because

the SSOSH alone does not measure levels of perceived stigma, which are a necessary first

component in the self-stigma process (Corrigan et al., 2006), it is perhaps best utilized when

paired with other measures of the perceived stigma of seeking help.

Correlates of Self-Stigma

 Predictors of the self-stigma of mental illness. Research over the past decade has

revealed several demographic and psychological predictors of the self-stigma of mental

illness. Being younger, male (Eisenberg, Downs, Golberstein, & Zivin, 2009), of a lower

socioeconomic status, having less education (Werner, Stein-Shvachman, & Heinik 2009),

being African American (Alvidrez, Snowden, & Patel, 2010), an immigrant (Nadeem et al.,

2007), international, and more religious (Eisenberg et al., 2009) have all been correlated with

higher levels of self-stigma of mental illness. Many of these predictor variables are also

indicators of potential marginalization (being of low-socioeconomic status, being of an ethnic

or racial minority, etc.); suggesting that being vulnerable to other prejudices and

discrimination may relate to the self-stigma of mental illness.

 Predictors of self-stigma of seeking psychological help. Certain psychological

variables also predict levels of the self-stigma of seeking help. In the original scale validation

of the Self-Stigma of Seeking Psychological Help (SSOSH) scale, Vogel and colleagues

(2006) evaluated the responses of 2471 undergraduate psychology students across five

studies. They found that the self-stigma of seeking psychological help was positively

correlated with the tendency to conceal personal information ($r = .15$), the anticipated risks of

disclosure ($r = .30$), and the distress associated with disclosing personal information ($r = .25$). The self-stigma of help-seeking was also negatively correlated with the perceived benefits of disclosing personal information ($r = -.32$; Vogel et al., 2006). Finally, scoring higher on measures of depression, having lower self-esteem (Werner, 2009), and having lower personal empowerment (McCubbin & Cohen, 1996) have also been correlated with higher levels of the self-stigma of help seeking.

Additionally, certain personality traits, including extroversion and neuroticism, make a person more susceptible to internalizing public stigma and experiencing self-stigma of seeking psychological help (Miller, 2009). In 2009, Miller examined the personality characteristics and stigma of 874 undergraduate psychology majors. His findings suggested that individuals who score high on neuroticism are actually less-likely to experience self-stigma in the presence of publicly stigmatizing attitudes. Those who score high on extroversion are actually more likely to experience self-stigma in the face of publicly stigmatizing attitudes. Interestingly, personality traits do not seem to mediate the relationship between self-stigma and seeking help. This suggests that once a person has applied stigmatizing attitudes toward themselves they will have poorer attitudes toward seeking help regardless of their personality traits (Miller, 2009).

Self-Stigma in College Populations

Given the unique predictors of the self-stigma of both mental illness and help-seeking—including being younger (Eisenberg et al., 2009), being of a racial or ethnic minority (Alvidrez, Snowden, & Patel, 2010), being international (Eisenberg et al., 2009) having lower self-esteem (Werner, 2009), and having lower personal empowerment (McCubbin & Cohen, 1996)—college populations are particularly at risk for self-stigmatizing

beliefs. Indeed, Sirey and colleagues (2001) found that although people of all ages with depression perceive discrimination for mental illness, younger people perceive greater stigmatization.

Although 50% of college populations will meet the diagnostic criteria for a mental health disorder (Blanco et al., 2008) and nearly three quarters of life-time mental illnesses have their onset by age 24 (Kessler, Berglund, Demler, Jin, Merikangas, & Walters, 2005), only 25% of college students receive mental health treatment (Blanco et al., 2008). Universities, by encompassing social networks, residences, and services, can offer a unique opportunity to address mental health issues early and provide a lifetime of benefits (Eisenberg et al., 2009). As such, it is important to better understand both the nature of stigmatizing beliefs and how these relate to help-seeking attitudes and intentions for college populations.

Stigma Before and After Treatment

Public and self-stigma not only decrease the quality of life for individuals experiencing psychological distress, they also interfere with seeking psychological treatment. Early studies suggested a negative correlation between public stigma and a person's intentions and attitudes toward seeking psychological help (Vogel et al., 2005; Komiya, Good, & Sherod, 2000; Deane & Todd, 1996). Also, individuals who needed treatment but had not sought help were twice as likely as those who needed treatment and had sought help to report stigma as an important barrier to help-seeking (Stefl & Prosperi, 1985).

More recent longitudinal studies have found no relationship between people's perception of public stigma and actual help-seeking behavior (Alvidrez, Snowden, & Patel, 2010; Golberstein, Eisenberg, & Gollust, 2009; Brown, et al., 2010). Instead, it has been suggested that public stigma only affects the decision to seek help through its impact on self-stigma

(Brown, et al., 2010; Vogel et al., 2007). In 2007, Vogel and colleagues evaluated the role of self-stigma of help-seeking in public stigma and attitudes toward seeking psychological help in 676 undergraduate students. These researchers determined that the relationship between public stigma of mental patients and a person's attitude toward counseling was fully mediated by their self-stigma of seeking psychological help. Public stigma was positively correlated with self-stigma ($r = .27$) and self-stigma was highly correlated with attitudes toward counseling ($r = .79$), but public stigma was not correlated to attitudes toward counseling ($r = .08$). That is, even if a person perceived a high level of public stigma toward treated persons, they would still feel positively about seeking help if they did not believe a decrement in self-regard would come with help seeking.

Complicating this, however, are studies of the relationship between public stigma and self-stigma for populations outside of the United States (Shechtman et al., 2010; Brown, et al., 2010; Fung & Tsang, 2010). In Schectman et al.'s study, for example, no significant relationship was found between public and self-stigma for college students from northern Israel ($r = .02$). The authors suggest that, because of a lack of clear social norms in the area, public stigma may not play a substantial role in an individual's opinions about seeking psychological help (Shechtman et al., 2010). This, taken together with studies on other groups, including African Americans (Brown, et al., 2010) and Asians (Fung & Tsang, 2010), challenges the universality of Vogel's 2007 findings. Still, given that self-stigma is a significant predictor of attitudes toward counseling in these groups ($r = .51$; Shechtman et al., 2010), these studies do not challenge the importance of the role of self-stigma in seeking help.

There is indication that the public stigma of mental illness does not naturally decrease during the course of regular psychotherapy. Link and colleagues (1997) assessed a group 84

men receiving mental health treatment in the New York City area. The Devaluation-Discrimination scale (Link, Cullen, Frank, & Wozniak, 1987) was used to assess levels of public stigma, stigma coping orientations, and the recall of rejection experiences at time of entry and after a year of treatment. These individuals showed non-significant differences between the two time points, suggesting that individual therapy alone may not be sufficient to decrease the public stigma of mental illness (Link, Struening, Rahav, Phelan, & Nuttbrock, 1997).

The self-stigma of seeking psychological help, however, does appear to decrease during the course of regular psychotherapy. Vogel and colleagues (2006) demonstrated that people who have sought counseling report lower self-stigma for seeking help than those who have not. Additionally, a single session of process-oriented group psychotherapy appears to decrease the self-stigma of seeking psychological help (Wade, Post, Cornish, Vogel, & Tucker, 2011). This drop was primarily accounted for by an alliance with the group as well as the depth of the session, which the researchers related to an increase in the meaningfulness and value of psychotherapy and a resulting decrease in beliefs about how psychotherapy might negatively impact their self-worth.

Mental Illness and Help-Seeking Stigma in Decisions to Seek Help

Although there is a compelling body of literature suggesting that students will avoid pursuing mental health services in order to avoid being stigmatized as "mentally ill" (Garfield & Bergin, 1971; Leaf, Bruce, & Tischler, 1986), much of this literature has subsumed the self-stigma of seeking help concept under the self-stigma of mental illness. Corrigan (2005), for example, includes stigmatizing attitudes related to seeking help in the analysis of how mental illness self-stigma relates to treatment (pg. 27-28). Barney, Griffiths, Jorm, & Christensen

(2006) utilize a mental illness stigma scale that asks students how embarrassed they would be if they were to see a professional for depression. The Depression Self-Stigma Scale (DSSS; Kanter, Rüsch, & Brondino, 2008) includes a factor labeled "Treatment Stigma," which assesses how students believe others would feel toward them if they had received treatment for their depression. The recent Self-Stigma of Mental Illness Scale (SSMIS; Corrigan et al., 2006) includes questions that are very proximal to the self-stigma of seeking help (e.g. "I respect myself less because I am unable to care for myself"). For this reason, it is difficult to determine whether it is the self-stigma of mental illness or the self-stigma of seeking psychological help that is most proximal to the decision to seek help.

It can be argued that when a person's approach factors outweigh avoidance factors toward seeking counseling, a person has necessarily self-identified as a "help-seeker" (Vogel & Wade, 2009). It is not necessarily the case, however, that they have accepted the label of "mentally-ill"; an often externally-granted label. Those who are considering seeing a psychiatrist or psychologist often have not yet received a diagnosis. For this reason it is important to assess the role of the self-stigma of help-seeking and of mental illness for those with a diagnosis and for those who identify as having sought psychological help. This adds importance to not only identifying the role of the self-stigma of seeking help in help-seeking decisions but also in determining the relative contributions of mental illness self-stigma and help-seeking self-stigma in the decision to seek help. Such comparison studies should be conducted in order to determine the aim and content of future anti-stigma interventions (Schomerus & Angermeyer, 2008).

Interventions to Decrease Self-Stigma

Since the 1999 Surgeon General's report on the importance of evaluating interventions to increase help-seeking behaviors (U.S. Department of Health and Human Services, 1999) the number of anti-stigma interventions in the United States has increased drastically (Corrigan, 2008). Interventions aimed at reducing public stigma and self-stigma vary in their approaches, content, and empirical support. Three main strategies have been found effective in reducing the public stigma of mental illness: protest, education, and contact (Corrigan & Penn, 1999). Protest refers to reacting against stigmatizing messages in the media or public statements. Protest has been shown to be an effective means of diminishing negative public images of mental illness (Wahl, 1995). It is not, however, thought to be able to reduce prejudiced attitudes (Rüsch, Angermeyer, & Corrigan, 2005). Because of this and the difficulty in studying protest as an intervention strategy, few stigma reduction interventions have focused on validating the effectiveness of protest.

Several studies have examined the effectiveness of education and contact, oftentimes in conjunction. Education provides information that contradicts stereotypes in order to diminish stigmatizing attitudes. One such education intervention was the use of counter-stereotypes to reduce the public stigma of mental illness in a group of 1,051 depressed 14-22 year olds across the United States. In this study, depressed adolescents were randomly assigned to one of two conditions. In the first, the adolescents were provided with no information about a person other than their diagnosis and symptoms. In the second, the participants were instructed to first imagine that the person in question had been successfully treated and had no symptoms. Those who received treatment information showed decreased personal stigma toward the individual in question and had fewer negative evaluations (Romer & Bock, 2008). As such, help-seeking, when persons conceptualize it as a routinely effective

treatment, may actually decrease publically-stigmatizing beliefs about those with mental illness. This sort of educational contact may prove to be an important strategy given the relevance of help-seeking stigma in decisions to seek help.

Contact is an intervention strategy that presents persons with mental illness to participants. One empirically examined contact intervention includes Corrigan and colleagues' (2007) 10-minute educational contact video. In this study the video was presented to 224 community college students from the Chicago area. Filmed contact was shown to be more effective than filmed education in lowering mental health stigma. Filmed education, however, did decrease viewer's sense of a sufferer's responsibility for their illness.

It may be the case that, when offered together, education and contact are more effective in reducing public stigma than either alone. Chan, Mak, & Law (2009), for example, analyzed public stigma in 255 9th grade students from three secondary schools in Hong Kong. Using randomized trials, the researchers found that participants who underwent demythologizing education followed by a brief contact video had significantly lower public stigma scores than those who completed just the educational portion. The ability of this intervention to create long-lasting public stigma change, however, is still unclear. No significant effect was found for any of the interventions at a 1-month follow-up (Chan et al., 2009).

It has been suggested that self-stigma, as the concealed process of internalizing negative appraisals of persons fitting a particular characteristic, responds to intervention differently than to the overt form of public stigma. Whereas public stigma has been shown to be subject to interventions based on contact and education (Corrigan & Watson, 2002), self-stigma is best combated through avoiding sharp demarcations between mental illness and

health, providing psychoeducation on the biopsychosocial nature of mental illness, and invalidating beliefs about the disabling effects of mental illness (Hayward & Bright, 1997).

Three known studies have examined interventions targeted specifically at reducing the self-stigma of seeking psychological help. The first of these is a study conducted by Hammer & Vogel (2010) on 4,967 men recruited from internet websites with depression who had not sought help. The recruited males were randomly assigned to three conditions: receipt of a "Real Men Real Depression" (RMRD) brochure put out by the National Institute of Mental Health, receipt of a gender-neutral version of the RMRD brochure, and receipt of a male-sensitive brochure meant to improve upon the RMRD brochure. The results indicated that the male-sensitive brochure produced significantly greater improvements in the self-stigma of help-seeking when compared to the RMRD brochure, though no such difference was found between the male-sensitive brochure and the gender neutral brochure. Additionally, the male-sensitive brochure was the only brochure to show significant reductions in self-stigma. These results suggest that it is important for messages intended to reduce self-stigma to be tailored to the psychological attributes of the target population.

In 2010, Kaplan, Vogel, Gentile, & Wade, examined the effects of an intervention video on the self-stigma of help-seeking in 290 undergraduates from a large, Midwestern university. Participants were randomly assigned to one of three conditions; intervention video repeated viewing (IVR), intervention video single viewing (IVS), or control repeated condition (CR). Participants in all groups were assessed at four time points with time four occurring six weeks after time one. The IVR group viewed an intervention video three times, the CR group viewed a control video three times, and the IVS group viewed the intervention video once. The results indicated that multiple viewings of the intervention video showed

significant, long-term improvements in attitudes toward counseling and perceived peer help-seeking norms whereas the single viewing did not. Self-stigma, however, was not significantly reduced in either the single or repeated viewings conditions. The authors cite that perhaps self-stigma of help-seeking may be more entrenched in a person's ideas about themselves (Kaplan et al., 2010). Hammer and Vogel's (2010) study, in which the self-stigma of seeking psychological help was reduced after only a single viewing of a mental health brochure, however, would suggest otherwise. The authors also posit that perhaps the portrayal of the character in the video as mostly related to help-seeking rather than mental health problems could have presented a problem. The rationale provided was that even help-seeking self-stigma is more closely tied with fears of anticipated discrimination for having a mental illness than for seeking help itself. As Jorm and colleagues (2000) findings suggest, however, it is not fear of anticipated discrimination that keeps persons from seeking help. Rather, it is likely that other beliefs and attitudes, one of which is the self-stigma of seeking help, influence help-seeking (Schomerus & Angermeyer, 2008).

In many ways, the three elements of effective self-stigma interventions suggested by Hayward and Bright (1997) describe the normalization process of effective psychotherapy. By incorporating psychoeducation on the expectations of counseling and the nature of mental illness and by reframing personal weaknesses as problems of living (Hill, 2004), effective counseling would seem to also be an effective self-stigma reduction strategy. While psychotherapy appears to decrease the stigma of seeking psychological help (Wade et al., 2011), its role in impacting mental illness stigma is less clear.

Hypotheses and Rationale of the Present Study

The current study utilizes a cross-sectional, quantitative descriptive design to address the question of conceptual differentiation between the public and self-stigma of mental illness and the public and self-stigma of seeking psychological help. Specifically, I constructed a measure, the Self-Stigma of Mental Illness scale (SSOMI), to assess the self-stigma of mental illness without contamination by other constructs such as public-stigma of mental illness or experiences of discrimination for having a mental illness. The SSOMI is methodologically identical to the Self-Stigma of Seeking Help scale (SSOSH; Vogel et al., 2006). Because the differences between the two scales are very minimal (i.e. changing the wording of the measure from "seeking help" to "having a mental illness"), any observed differences were thought to communicate a large effect (Prentice & Miller, 1992). I then examined the SSOSH and SSOMI along with measures of public stigma of mental illness and of help-seeking and other relevant concepts to examine how each stigma may differentially relate to experiences of seeking help, having a mental illness, and attitudes toward seeking help.

Are the four stigma constructs unique? Given recent findings to suggest that help-seeking carries public stigma above and beyond that of mental illness (e.g. Ben-Porath, 2002), I hypothesize these to be separate constructs. In addition, because self-stigma is conceptualized as an internalization of publically-stigmatizing attitudes toward a given attribute, I hypothesize the self-stigma of seeking help to be distinct from the self-stigma of mental illness. Finally, because research has clearly demarcated between public and self-stigmatizing beliefs (e.g. Corrigan & Watson, 2002; Corrigan et al., 2006), I expect measures of the public stigma of mental illness, public stigma of seeking help, self-stigma of mental illness, and self-stigma of seeking help to be recognizably different from each other. Specifically, I hypothesize that through an exploratory factor analysis each measure will load

on a unique factor with minimal to no cross-loading. This method has been described as a useful strategy for differentiating between underlying constructs (Fabrigar, Wegener, MacCallum, & Strahan, 1999).

Does having a mental illness differently predict self-stigma of mental illness and self-stigma of help-seeking? In prior literature on the stigma of mental illness, it has been suggested that persons avoid labels that they stigmatize in order to buffer their self-image and avoid devaluation (Corrigan, 2004). Additionally, when compared to the general public, individuals with mental illness value their in-group more highly (Rüsch et al., 2009b). As such, I hypothesize that those who have experienced a mental illness will have significantly lower self-stigma of mental illness scores than those who have not. Given that help-seeking is less proximal to self-labels of mental illness, I additionally hypothesized that the self-stigma of seeking psychological help would not be different for those who reported having experienced a mental illness from those who had not. In order to examine the differential impacts of having experienced a mental illness on the self-stigma of mental illness and the self-stigma of help-seeking, I conducted two univariate analyses of variance comparing those who reported having experienced a mental illness to those who had not on values of the SSOSH and SSOMI.

Do self-stigma of mental illness and self-stigma of seeking help uniquely and differentially predict attitudes toward seeking help? The self-stigma of seeking help appears to be more directly relevant to the help-seeking process (Schomerus & Angermeyer, 2008). This is because those who seek help often do not yet have a diagnosis and do not directly face self-stigmatizing beliefs about mental illness (Schomerus & Angermeyer, 2008). Therefore I hypothesized that help-seeking self-stigma would (a) account for the greatest

amount of variance in attitudes toward seeking help, such that other variables in the model would be non-significant, and (b) be more strongly correlated with attitudes toward help seeking than the self-stigma of mental illness. In order to examine the differential role of mental illness and help-seeking stigmas in attitudes toward seeking counseling, I conducted a simultaneous multiple regression with semi-partial coefficients.

Perhaps the most important population for which to examine these two stigmas in relation to help-seeking attitudes is for those with clinical levels of distress who have not sought treatment. It is this population that interventions to increase help-seeking behaviors must target. For this group, mental illness may actually be the more stigmatizing attribute as it may be linked with greater disruptiveness, poorer outcomes, and more danger than the act of seeking help. As hypothesized above, however, it may be less proximal to help-seeking attitudes. To examine these questions, I first compared mean values of the self-stigma of mental illness to the self-stigma of seeking psychological help. I also compared the bivariate correlations between attitudes and the self-stigma of mental illness and the self-stigma of seeking help by testing the significance of the difference between dependent r's (Cohen & Cohen, 1983). I hypothesized that although mean values of the self-stigma of mental illness may be higher in this population, the self-stigma of seeking psychological help would be more highly correlated with attitudes toward seeking help.

Do the self-stigma of mental illness and self-stigma of help-seeking differently associate with past help-seeking behavior? Although it has been reported that greater self-stigma of mental illness predicts psychiatric hospitalization, it has not been found to predict use of counseling or psychotherapy (Rüsch et al, 2009). The self-stigma of seeking psychological help, however, has been shown to predict past utilization of psychotherapy

(Vogel et al., 2006). Therefore, I hypothesized that the self-stigma of seeking psychological help would associate with having sought psychological help in the past while mental illness self-stigma would not. To examine this question, I conducted a logistic regression analysis in which the self-stigma of mental illness and the self-stigma of seeking help were entered as explanatory variables of the dichotomous outcome of reporting having sought psychological help.

CHAPTER 3: METHOD

Sample Size Planning

For exploratory factor analysis, sample size planning should typically be based on if communalities between variables are high and whether at least three or four variables have high structure coefficients for each factor (Kahn, 2006). Because the measure of the self-stigma of mental illness was developed for this study and based off of the psychometric properties of the self-stigma of seeking help (SSOSH) scale, it was assumed that there would be a high percentage of common variance among variables. Because the variables in the analysis were derived from pre-existing questionnaires, each with adequate internal validity, structure coefficients were assumed to be low. This is because structure coefficients become larger to the extent that factors are highly correlated (Kahn, 2006). In such instances researchers have made recommendations to have at least 300 cases (Kahn, 2006) or to have as many as 500 or more cases (Gorsuch, 1983). Because of the quantitative descriptive design of the present study and a desire to achieve the more conservative sample size, a minimum of 500 cases was established.

Participants

The sample in the present study consisted of 852 undergraduate students at a large, Midwestern university. Of those, 123 participants (14.4%) indicated random responding and were removed from further analysis (see *Data Screening* section below). The remaining 729 participants were 66% female and 34% male. The mean age of the participants was 19 years (*sd*=3.49 years). The majority of students were first year undergraduates (51%), followed by sophomores (27%), juniors (15%), seniors (6%), and graduate students (1%). Thirty percent of the sample (*n*=217) met the clinical cut-off score on the GP-CORE at the time of the study,

40% of the sample (*n=*292) reported that at some time in the past they had experienced at least one mental illness, and 26% of the sample (*n=*188) had sought help from a mental health professional.   The majority of the sample was U.S. native (93%) and native English speaking (95%). Twenty-one percent (*n=*153) currently had clinical levels of psychological distress but had not sought help at any time. Most participants were European American (85%), followed by Asian American (4%), international students (3%), multi-racial American (3%), Latino American (2%), Black (1%), African American (1%), and Native American (1%).

Procedure

Students were recruited to participate in the study through announcements in their psychology and communication studies classes. Participants were instructed that they would receive extra credit for their involvement, were offered an equivalent option (i.e., participate in another experiment or a writing assignment), and participated voluntarily.   Participants completed questionnaires online at a computer of their choosing. After completing an informed consent sheet, participants completed a battery of self-report questionnaires containing the main measures for this study and questions from other researchers (item total = 81). The University Institutional Review Board (IRB) approved the study procedures.

Instruments

Psychological symptoms. The General Population Clinical Outcomes in Routine Evaluation measure (GP-CORE; Sinclair & Barkham, 2005) is a 14 item measure derived from the larger 25-item Clinical Outcomes in Routine Evaluation-Outcome Measure (CORE-OM; Barkham, et al., 1998; 2005; Evans et al., 2000; 2002). The CORE-OM was developed to measure changes in severity in psychological symptoms over the course of treatment as well as to help differentiate between clinical and non-clinical populations (Evans et al., 2000).

The GP-CORE was developed to improve upon the CORE-OM in its use with the general public and college student populations by removing risk items and all but two high-intensity items. Remaining items include statements such as "I have felt tense, anxious, or nervous" and "I have felt warmth or affection for someone" (reverse scored). Responses are rated on a 5 point Likert-scale from 0 'not at all' to 4 'most or all of the time' (Sinclair et al., 2005).

When included in the CORE-OM, the 14 items composing the GP-CORE demonstrate high internal reliability ($\alpha = .87$), and high test-retest reliability ($r = .91$). The measure has been psychometrically evaluated as a stand-alone measure using a large student population as well ($n=781$). Coefficient alpha for the GP-CORE is .83. Evidence of the convergent validity of the scale comes from its strong correlations with other measures of psychological distress (e.g. BDI-II $r = .84$) and through significant differences between those who have never sought help and those who have sought or are currently in some form of psychological support (Kruskal-Wallis $p <.001$). The authors of the scale used their sample to identify cutoff scores for distinguishing between clinical and non-clinical levels of distress (1.49 for males, 1.63 for females; Sinclair et al., 2005). These values were used in the present study to identify students with clinical levels of distress. In the present study, Cronbach's Alpha was .86.

Public stigma of seeking psychological help. The Stigma Scale for Receiving Psychological Help (SSRPH; Komiya et al., 2000) was designed to assess perceptions of the public stigma associated with seeking professional help. It is a five question measure, with items rated on a Likert-scale ranging from 1 'strongly disagree' to 5 'strongly agree'. The items are summed so that higher scores connote greater perceptions of stigma associated with receiving psychological help. Items include questions such as "It is advisable for a person to hide from students that he/she has seen a psychologist." The SSRPH has been validated using

a group of 311 undergraduate students at a large Midwestern university (Komiya et al., 2000).

Important to this study, factor analysis strongly indicates the existence of one factor. As

evidence of construct validity, the SSRPH scale has been correlated with attitudes toward

seeking professional help (r= -.40, p < .0001), and, consistent with other research on

stigmatizing attitudes, women (M = 5.1, sd = 2.88) score lower than men (M = 6.86, sd =

3.03). The internal consistency for the measure is adequate (α = .72; Komiya et al., 2000). In

the present study Cronbach's Alpha was .77.

Public stigma of mental illness. The Beliefs about Devaluation-Discrimination (DD)

scale is a 12-item scale that measures the extent to which a person believes the general public

will both devalue and discriminate against a mentally-ill person (Link, 1987). Devaluation is

a loss of status in the eyes of others whereas discrimination is the maintenance of social

distance by others (Link, 1987). Questions are in reference specifically to "mental patients"

or entering a mental hospital, and include items such as "Most people in my community would treat a

former mental patient just as they would treat anyone". Items are rated on a 6-point Likert scale from

1 'strongly disagree' to 6 'strongly agree'. Half of the items are reversed scored such that a

higher total score indicate greater public stigma toward mental patients. A total score is

achieved by adding item scores together and dividing by the number of items answered.

The DD has been evaluated using a sample of 429 community residents and 164

psychiatric patients in the New York City area (Link, 1987). The DD shows adequate internal

consistency overall (α = .76; Link, Cullen, Struening, Shrout, & Dohrenwend, 1989).

Evidence of convergent validity comes from the measure's moderate correlation with

demoralization in repeat-treatment mental health patients (r = .48; Link, 1987). Evidence of

discriminant validity comes largely from the face validity of the measure and its low and

nonsignificant correlation with measures of compliance (Link, 1987). Test-retest reliability has generally not been reported for this scale. In the present study, Cronbach's Alpha was .87.

Self-stigma of seeking psychological help. The Self-Stigma of Seeking Help (SSOSH; Vogel et al., 2006) scale is a 10-item questionnaire with a unitary factor structure. The SSOSH measures the reduction in self-esteem and self-efficacy that results from receiving the label of a seeker of psychological help (Vogel & Wade, 2009). Questions are phrased as "if … then" statements, asking a person about their feelings if they were to seek help (Vogel et al., 2006). Items include statements such as "If I went to a therapist, I would be less satisfied with myself."

The SSOSH demonstrates good construct validity through correlations with intentions to seek counseling, attitudes toward counseling, and the public stigma for seeking help (Vogel et al., 2006). Other researchers have verified that the SSOSH predicts attitudes not only toward individual counseling but also toward group counseling (Shechtman et al., 2010) and career counseling (Ludwikowski et al., 2009). Additionally, the SSOSH has been shown to distinguish between those who seek help and those who do not. The SSOSH demonstrates discriminant validity through its low, nonsignificant correlation with self-esteem ($r = .06$; Vogel et al., 2006), and demonstrates adequate test-retest reliability over a period of 2 months ($\alpha = 0.72$) and has high internal consistency ($\alpha = .89$). In the present study, Cronbach's Alpha was .90.

The self-stigma of mental illness. The Self-Stigma of Mental Illness (SSOMI) is a 10-item scale developed for the present study to measure the belief that having a mental illness would threaten one's self-regard, self-satisfaction, self-confidence, and overall worth.

The measure was developed to parallel the Self-Stigma of Seeking Help (SSOSH) scale. Items were generated by replacing references to seeking psychological help on the SSOSH with having a mental illness (see Appendix). In the present analysis, convergent validity of the SSOMI was demonstrated through its strong, positive correlation with the modified Self-Stigma of Depression Scale ($r = .73$, $p < .001$; SSD; Barney, Griffiths, Christensen, & Jorm, 2010). Additionally, the SSOMI and the SSD were similarly correlated with other variables in the model (see Table 1). The SSOMI was more highly correlated with the Social Inadequacy ($r = .66$, $p < .001$), Shame ($r = .66$, $p < .001$), and Help-Seeking Inhibition ($r = .60$, $p < .001$) subscales of the SSD than the self-blame factor ($r = .43$, $p < .001$). This suggests that the SSOMI may focus more on decrements in self-regard rather than feelings of responsibility for having a mental illness. Discriminant validity for the SSOMI comes from its small, negative correlation with self-esteem ($r = -.25$, $p < .001$). In the present study, Cronbach's Alpha for the SSOMI was .87, suggesting adequate internal consistency.

Self-esteem. The Rosenberg Self-Esteem (RSE; Rosenberg, 1979) scale is a well-known measure of global self-esteem. Self-esteem is a person's overall appraisal of their worth. The RSE consists of 10 questions such as 'On the whole, I am satisfied with myself'. Each question is rated on a four-point Likert scale, with greater scores reflecting more positive self-appraisals. The RSE demonstrates adequate internal consistency (Cronbach's α = .87). The scale also demonstrates adequate test-retest reliability at 2-week follow-up (α = .82; Silber & Tippet, 1965). Rosenberg (1965) describes self-esteem as a single construct of "the feeling that one is 'good enough'" (p. 31). More recent models of self-esteem have added complexity to Rosenberg's by proposing multiple, independent factors such as self-competence and self-liking (Tafarodi & Swan, 2001). Rosenberg maintained the simplicity of

his conceptualization by supposing factors other than self-liking, such as self-competence, to be secondary contributors to self-esteem, and self-liking to be self-esteem's primary constitutive element (Rosenberg M. , 1979). Recent factor analysis supports a single structure consistent with Rosenberg's original, unidimensional view (Gray-Little, Hancock, & Williams, 1997). In the present study, Cronbach's Alpha was .90.

The self-stigma of depression. In the present study, a modified version of the Self-Stigma of Depression (SSD; Barney et al., 2010) scale was used as another measure the self-stigma related to mental illness. This 16-item scale consists of four factors; Shame, Self-blame, Help-seeking Inhibition, and Social Inadequacy. Questions begin with "if I were depressed I would…" and include items such as : "[. . .] feel inferior to other students" (Shame), "[. . .] think I should be able to cope with things" (Self-Blame), "[. . .] feel embarrassed about seeking professional help for depression" (Help-seeking Inhibition), and "[. . .] Feel I couldn't contribute much socially" (Social Inadequacy). These subscales are consistent with Brohan and colleagues' (2010) suggestion that self-stigma contains cognitive, affective, and behavioral elements. Intercorrelations (r) between factors range from .29 (between self-blame and social inadequacy) to .57 (between shame and social inadequacy). Help-seeking Inhibition is correlated with the other factors to varying degrees (Shame $r =$ 0.42, Self-blame $r = .32$, and Social Inadequacy $r = 0.31$). In the present study, references to depression were replaced with the term "mental illness". This was done in order to assess for more general mental illness self-stigma while still utilizing the various subscales of the SSD to provide discriminant and convergent validity for the SSOMI as well as the other primary study variables.

The SSD was validated using a group of 1312 randomly selected residents of New South Wales, Australia. The scale demonstrates adequate internal consistency (Cronbach's α = .87 for total SSD) and shows moderate test-retest reliability across and within subscales (SSDS Total $p\hat{} = 0.63$; Shame $p\hat{} = 0.56$; Self-Blame $p\hat{} = 0.54$; Help-Seeking Inhibition $p\hat{} = 0.63$; Social Inadequacy $p\hat{} = 0.49$). The scale demonstrates convergent validity through its moderate associations with perceived social distance from those with depression ($r = .23$). An indication of the scale's discriminant validity is its weak, negative correlation with self-esteem ($r = -.14$). The SSD performs consistently regardless of level of current depressive symptoms (Barney et al., 2010). In the present study, Cronbach's Alpha for the SSD were: .87 for the Shame subscale, .78 for the Self-blame subscale, .78 for the Help-seeking Inhibition subscale, .80 for the Social Inadequacy subscale, and .91 overall.

Attitudes toward seeking psychological help. The Attitudes Toward Seeking Professional Psychological Help—Short Form (ATSPPH-SF; Fischer & Farina, 1995) is a shortened, 10-item revision of the original 29-item ATSPPH (Fischer & Turner, 1970). The revised scale strongly correlated with the full version ($r = .87$), suggesting that the two are measuring the same construct (Fischer & Farina, 1995). Items are rated on a 4-point Likert-scale from 0 'disagree' to 3 'agree'. Five items are reversed scored so that higher scores reflect more positive attitudes toward seeking psychological help. Items include such statements as "If I believed I was having a mental breakdown, my first inclination would be to get professional attention." Evidence of convergent validity comes from the revised scale's correlation with use of professional psychological help ($r = .39$, $p < .001$). The scale demonstrates adequate 1-month test–retest ($r = .80$) and internal consistency ($r = .84$) reliability (Fischer & Farina, 1995). In the present study, Cronbach's Alpha was .81.

Intentions to seek help. The Intentions to Seek Counseling Inventory (ISCI; Cash, Begley, McCown, & Weise, 1975) is a 17-item scale measuring how likely respondents are to seek psychological services if they were to experience any of the specific problems listed. Items are rated on a 6-point Likert scale from 1 'very unlikely' to 6 'very likely'. Responses on the ISCI are summed such that higher scores indicate a greater likelihood of seeking services for the given issues. In Cepeda-Benito and Short's (1998) factor analysis of the ISCI, three factors were revealed; Psychological and Interpersonal Concerns, Academic Concerns, and Drug Use concerns (α = .71). In the present study, only questions loading on the Psychological and Interpersonal Concerns and Academic Concerns factors were included, resulting in 14 items. This was because measures used in the present study assess only for the stigma of mental illness and receiving help for psychological concerns. The stigma surrounding substance abuse concerns and receiving treatment for substance use are hypothesized to be importantly different from that of mental illness (Link et al., 1997).

Evidence of the convergent validity of the ISCI comes from the measure's ability to detect differences in college students' intentions to seek psychological services when therapists are presented as more or less attractive (Cash et al., 1975). Additionally, the ISCI relates to the perceived significance of a current problem and to general attitudes toward seeking help (r = .36; Kelly & Achter,1995). In the present study, Cronbach's Alpha was .90.

CHAPTER 4: RESULTS

Descriptive Statistics and Preliminary Analyses

      Random Responders. Random response rates from even 5% of participants can have a significant impact on observed correlations (Credé, 2010), and it is highly recommended that researchers identify and eliminate random responders (Osborne & Blanchard, 2011). In the present study, 14.4% (*n*=123) indicated random responding by failing to answer correctly one or both of two questions prompting a specified response (e.g. "Please select "Strongly Agree" for this item"). There was concern, however, that directly eliminating random responders might disproportionately remove participants with certain characteristics. In particular, I was concerned about disproportionately removing participants based on native language, ethnic identity, and gender. I hypothesized that non-native English speakers may find the test too time consuming and thus respond randomly in order to complete the assessment quickly. Also, it has been suggested that quantitative research may be perceived as representative of the majority culture and marginalizing to multicultural research participants (Heppner, Wampold, & Kivlighan, 2007). As such, ethnic minority participants were hypothesized to be more likely to respond randomly. Finally, because males report greater risk-taking than females (Byrnes, Miller, & Schafer, 1999), I hypothesized that males would be more likely to respond randomly.

      Because demographic variables were collected for all participants prior to filling out items on the questionnaires, demographic variables were considered true scores even for random responders. This allowed for the analysis of differential predictors of random responding. Chi-square tests revealed that ethnic minority participants were more likely to randomly respond than ethnic majority participants $\chi^2(1, N= 852) = 8.24, p = .004$ and that

non-native English speakers were more likely to respond randomly or not otherwise understand the questionnaire, $\chi^2(1, N=846) = 28.469, p < .001$. Males, however, were no more likely than females to respond randomly, $\chi^2(1, N=850) = .045, p = .831$.

In order to decrease the error variance of the sample and more accurately assess observed correlations (Credé, 2010), a decision was made to remove all random responders from the sample. This resulted in a total of 729 participants for further analysis. The decision to remove random responders who were disproportionately ethnic minority participants and non-native English speakers has implications for the generalizability of the present study. For further discussion of this issue see the Discussion chapter below.

Missing data. Fewer than 5% of the cases contained missing values on any questionnaire. Missing Values Analysis (MVA; IBM Company, 2010) and examinations of missingness (Bennett, 2001) were thus considered inappropriate (Tabachnick & Fidell, 2001). Pairwise deletion was used for any participant that had more than 20% missing data on a single questionnaire (considered toward the higher end of common amounts of missing data; Schlomer, Bauman, & Card; 2010). This resulted in the deletion of only a single case on a single variable. For the remaining missing values item-level mean imputation was used. This was done by finding the mean of the items participants did respond to on a given questionnaire and imputing this value for the missing item. It should be noted that because mean substitution reduces the variance of the variable, correlations among variables can be reduced (Tabachnick & Fidell, 2001). Because the amount of missing data for any one questionnaire was small, however, the extent of loss of variance was assumed to be minimal.

Assumptions of regression. The data were then screened to assess for violations of assumptions of regression analyses including linearity and normality (Cohen, Cohen, West, & Aiken, 2003). An analysis of the matrix scatterplot demonstrated that the predictor variables were generally linearly related to one another (e.g., no curvilinear relationships). An examination of the skewness of each of the instruments indicated no violation of the assumption of normality (Skewness estimates were between -.628 and .467; Leech, Barrett, & Morgan, 2011). Additionally, visual inspection of the boxplots for each variable indicated that scores were normally distributed on each instrument without significant outliers.

Descriptive Statistics. Means, possible scale ranges, actual scale ranges, standard deviations, and bivariate correlations for the main variables are presented in Table 1. All bivariate correlations were significant at the .05 level except those between self-esteem and intentions/attitudes toward seeking help and psychological symptoms and attitudes toward seeking help. The author-developed SSOMI demonstrated a pattern of correlations with other measures in the study consistent with the SSD. This provides some evidence of convergent validity of the scale. Additionally, self-esteem had a small negative correlation with the SSOMI (r = -.24, 95% CI = [-.307, -.171]) demonstrating discriminant validity from a more general measure of self-esteem.

The SSRPH demonstrated moderate correlations with the DD (r = .36, 95% CI = [.295, .421]), the SSOSH (r = .49, 95% CI = [.433, .543]), and the SSOMI (r =.36, 95% CI = [.295, .421]). A similar pattern with lower correlations was observed between the DD and the SSOSH (r = .29, 95% CI = [.222, .355]) and SSOMI (r = .30, 95% CI = [.233, .364]). Attitudes and intentions toward receiving psychological help were moderately negatively correlated with the self-stigma of seeking help (r = -.50, 95% CI = [-.552, -.444], and r = -.25,

95% CI = [-.317, -.181] respectively) and the SSOMI (r = -.26, 95% CI = [-.326, -.191], and r = -.11, 95% CI = [-.181, -.038] respectively). The SSOMI and SSOSH were correlated at r = .70 (95% CI = [.661, .735]), although the correlation between the two factors representing each construct in the exploratory factor analysis (r = .665, 95% CI = .623, .703]) may be a more accurate assessment of the correlation between these constructs. Finally, examining an item-level bivariate correlation matrix between the SSOSH and SSOMI items revealed that no items correlated with their methodological counterpart above r = .605 (95% CI = [.557, .649]).

Table 1

Correlations, Means, Standard Deviations, and Ranges.

Variable	1	2	3	4	5	6	7	8	9
1. GP-CORE	—								
2. RSE	-.64***	—							
3. SSRPH	.20***	-.26***	—						
4. DD	.11**	-.08*	.36***	—					
5. SSOSH	.20***	-.28***	.49***	.29***	—				
6. SSOMI	.19***	-.24***	.36***	.30***	.70***	—			
7. SSD	.17***	-.25***	.45***	.26***	.67***	.73***	—		
8. ATSPPH-SF	.01	-.00	-.28***	-.10**	-.50***	-.26***	-.32***	—	
9. ISCI	.14***	-.07	-.09*	-.09*	-.25***	-.11**	-.12**	.49***	—
M	17.71	21.27	13.34	45.80	29.07	34.40	50.84	15.61	29.24
SD	8.59	5.09	3.09	8.56	6.98	7.30	11.39	4.20	8.17
Possible Range	0-56	0-40	5-25	12-72	10-50	10-50	16-80	0-30	14-84
Sample Range	1-44	2-30	6-24	12-72	12-50	10-50	16-80	2-27	14-56

Note. N= 725-729. GP-CORE: General Population Clinical Outcomes in Routine Evaluation measure (Psychological Symptoms), RSE: Rosenberg Self-Esteem scale, SSRPH: Stigma Scale for Receiving Psychological Help, DD: Beliefs about Devaluation-Discrimination (public stigma of mental illness), SSOSH: Self-Stigma of Seeking Help, SSOMI: Self-Stigma of Mental Illness: SSD: Self Stigma of Depression (modified for mental illness), ATTSPPH-SF: Attitudes Toward Seeking Professional Psychological Help—Short Form, ISCI: Intentions to Seek Counseling Inventory
*p < . 05. ** p < .01. *** p < .001

Are the four stigma constructs unique?

To determine whether the public and self-stigmas of mental illness and help seeking were unique constructs, an exploratory factor analysis (EFA) was conducted. Before

conducting the EFA, a z-score transformation was done on all predictor variables to reduce

multicollinearity (Frazier, Tix, & Barron, 2004). EFA was then used to analyze how many

factors underlaid items representing the public and self-stigma of help-seeking and mental

illness. EFA is considered more appropriate than confirmatory factor analysis (CFA) when

empirically appraising an underlying factor structure (Worthington & Whittaker, 2006), and

EFA has been empirically shown to properly identify the correct factor structure the majority

of the time (Kahn, 2006). SPSS was used to complete the analysis (IBM Company, 2010).

Because an iterative process of several EFAs has been described as the best way to provide

interpretable results (Kahn, 2006; Worthington & Whitaker, 2006), no factor structure was

specified in the initial analysis. Instead factors were extracted based on Eigenvalues greater

than 1, scree testing, and approximating simple structure (Worthington & Whittaker, 2006).

Principal axis factoring (PAF), which analyzes the variance in a variable that is shared

with at least one other variable in the analysis, has been described as an appropriate and useful

extraction method when the goal is to determine latent factors (Kahn, 2006). Also, because

the variables in this analysis were derived from individual scales, which themselves had been

derived through EFA strategies, variance specific to the variable was assumed to be low.

Because PAF focuses exclusively on common variance and ignores specific and measurement

error variance, it was considered most appropriate for this data set. Additionally, Principal

Component Analysis (PCA) is not regarded as performing well in identifying underlying

structures when communalities are high (Fabrigar et al., 1999), which was considered likely in

the present data set. Maximum iterations for convergence were set to 2500, and an oblique

rotation method (Promax; Kappa = 4) was used to help derive interpretable factors. Oblique

rotation methods have been described as appropriate in most instances in the social sciences

due to the often high factor intercorrelations (Cabrera-Nguyen, 2010). Promax has been

described as the recommended method as it allows for the data itself to determine if an

oblique or orthogonal rotation is used based on the intercorrelations amongst factors (Kahn,

2006). Coefficients below .32 were suppressed in the coefficient display consistent with the

recommendations of Worthington and Whittaker (2006). Because of the large sample size

used in the present study, Kaiser-Meyer-Olkin Measure of Sampling Adequacy was used to

determine the factorability of the data. This measure indicated appropriate sampling adequacy

(KMO=.940). As expected, communalities amongst the variables (i.e. the variance in a

variable that is shared with at least one other variable in the analysis; Kahn, 2006) were high

(see Table 2).

The initial EFA resulted in the extraction of 7 factors with eigenvalues greater than 1.

The pattern matrix, shown in Table 2, indicates only the direct path correlations from the

factor to the variable by partialling out the influence of other variables. Some authors have

recommended against retaining factors with fewer than three items unless these items are

correlated above .7 (Tabachnick & Fidell, 2001). One factor, factor 7, had a single item

loaded at $r = .491$ and was thus removed. Scree plot analysis was consistent with this,

indicating a break in the size of the eigenvalues somewhere between 3 and 6 factors (see

Figure 1). Items were considered "cross-loaded" if they loaded one more than one factor at r

$\geq .32$. Factor 6 was composed of 5 cross-loaded items from both the SSOSH and SSOMI.

These items were all moderately correlated with the factor, with the largest Pearson $r = -.43$.

Because all items on this factor were less than the value of their cross-loadings, this factor was

eliminated. Factor 5 consisted of 5 (items 5, 6, 7, 9, and 12) of the 12 items of the DD (the

public stigma of mental illness scale). One of these items (item 12) was cross-loaded with

another factor. With regard to content, these items relate to the lack of trust, views of failure,

thinking less of, lack of hireability, and taking less seriously those who have been mental

patients. These themes do not appear to differentiate these items from others on the scale.

Instead, these items have the notable commonality of being 5 of the 6 reverse scored items of

the DD. Instead of breaking the DD into two subfactors, one of which being agreement with

negative views and the other being disagreement with positive views, factor 5 was removed

from further analysis.

Figure 1

Scree Plot of Initial 7 factor model
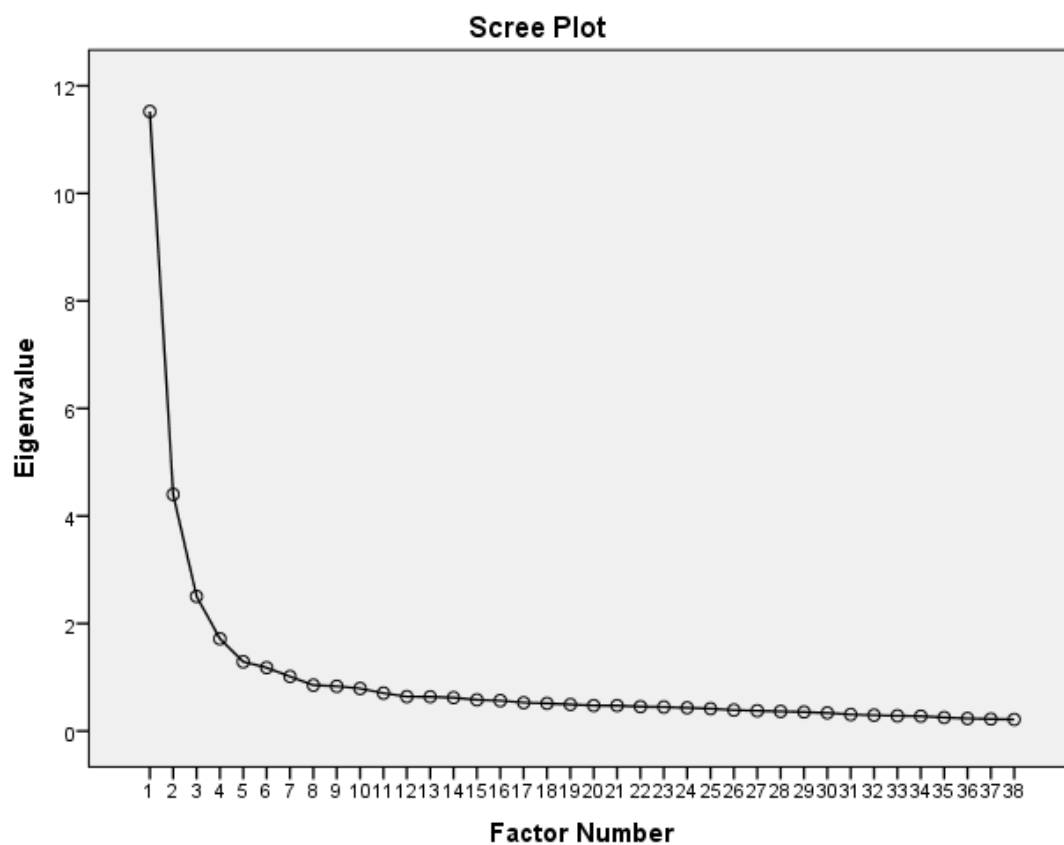
Table 2

Obliquely Rotated Principal Axis Factoring.

	Factor							Communalities	
	1	2	3	4	5	6	7	Initial	Extraction
SSOSH1: Inadequacy				-.561		-.324		.645	.679
2:self-confidence	.374			-.426				.500	.512
3: less intelligent				-.410		-.406		.589	.587
4: Self-esteem				-.646				.315	.352
5: View of self				-.404				.423	.396
6: Inferiority				-.651				.635	.671
7: feel okay about self				-.747				.559	.612
8: less satisfied				-.631				.645	.665
9: self-confidence	.332			-.472				.475	.473
10: worse about self				-.484				.465	.445
SSRPH1: social stigma			.492					.285	.293
2: sign of inadequacy			.366	-.332				.402	.411
3: seen less favorably			.790					.515	.629
4: advisable to hide			.644					.390	.441
5: liked less			.743					.499	.582
DD1: Accept as friend		.626						.399	.412
2: as intelligent		.823						.587	.645
3: as trustworthy		.851						.673	.760
4: accept as teacher		.612						.542	.557
5: failure					.618			.397	.430
6: hire for children					.643			.317	.384
7: think less of					.599			.510	.562
8: hire as employee		.493						.406	.433
9: pass over applicant					.526			.405	.419
10: treat as normal		.431						.407	.462
11: date							.470	.316	.431
12: take opinions		.349			.374			.469	.472
SSOMI1: Inadequacy	.460					-.391		.616	.640
2:self-confidence	.734							.501	.520
3: less intelligent	.453					-.425		.550	.544
4: Self-esteem	.771							.607	.618
5: View of self	.721							.528	.566
6: Inferiority	.525					-.333		.594	.615
7: feel okay about self	.630							.544	.501
8: less satisfied	.672							.615	.606
9: self-confidence	.861							.653	.701
10: worse about self	.768							.707	.731
Eigenvalues	11.522	4.402	2.505	1.716	1.288	1.178	1.015		
Percentage Total Variance	30.222	11.583	6.593	4.515	3.390	3.100	2.671		

A second exploratory factor analysis was then conducted fixing the number of factors at 4. The results of this analysis are shown in Table 3. The loading of factors is consistent

with the measures entered into the analysis save two items: item 2 of the SSOSH and item 2 of the SSRPH. Item 2 of the SSOSH is phrased as "My self-confidence would NOT be threatened if I sought professional help". This item was cross-loaded with other items from the SSOMI on factor 1 ($r = .358$). Item 2 of the SSRPH is phrased as "it is a sign of personal weakness or inadequacy to see a psychologist for emotional or interpersonal problems." In this study item 2 of the SSRPH was cross-loaded with other items from the SSOSH on factor 3 ($r = .448$).

The cross-loading of item 2 on both factor 1 (SSOMI) and factor 3 (SSOSH) may be related to a methodological error in the wording of the questions. Although four of the ten items on both scales are reverse scored, item number 2 was the only item to capitalize the word "NOT" in assessing a lack of self-stigma. This may have impacted students' tendency to endorse the item in a novel way by tapping into personal empowerment. Those with low-personal empowerment in the face of public stigmatization might have been more likely to avoid endorsing the item while those with strong personal empowerment may have been more likely to respond strongly to the item. This may have contributed to shared variance for this item in a similar way, causing the item to be cross-loaded. It is interesting, however, that this same effect was not observed for the same item on the SSOMI. It may be the case that the impacts of personal empowerment are less pronounced when students are responding to items related to the stigma of mental illness than to the stigma of seeking help.

The cross-loading of item 2 of the SSRPH with other items from the SSOSH is likely related to the item's reference to personal weakness and inadequacy. Whereas other items from the SSRPH assess the stigmatizing attitudes of others, this item assesses *personal*

weakness, and thus more likely taps into self-stigma than public stigma. This has implications

for use of the SSRPH in instances in which the measure is used to assess only public stigma.

Turning to the item level analyses of the SSOMI and the SSOSH, differences in the

loadings of particular items are clear. Items loading above a .7 on the SSOSH include items

1, 6, 7, and 8. Item 1 refers to feelings of inadequacy, 6 refers to feelings of inferiority, 7

refers to feeling okay about oneself, and 8 is being satisfied with oneself. For the SSOMI,

items loading above a .7 were 2, 4, 5, 8, 9, and 10. Items 2 and 9 refer to self-confidence,

item 4 refers to self-esteem, item 5 is ones' view of themselves, and item 10 refers to feeling

worse about oneself. These differences may have implications for the ways in which the two

attributes are differently stigmatized.

Correlations among the factors are reported in Table 4. Of particular interest to the

present study, the correlation between the factor representing items on the SSOMI and the

factor representing items from the SSOSH was large ($r = .665$). This value suggests that the

patterns of correlations have a relationship (Rummel, 1967) such that the self-stigma of

mental illness is highly related to the self-stigma of seeking psychological help. This

correlation is below the 0.7 typically recommended as problematic, however (Nunnally &

Bernstein, 1994).

Table 3

Obliquely Rotated Principal Axis Factoring, Restricted to Four Factors.

| | Factor | | | |
Item	1 (SSOMI)	2 (DD)	3 (SSOSH)	4 (SSRPH)
SSOSH1: Inadequacy			.717	
2:self-confidence	.358		.393	
3: less intelligent			.580	
4: Self-esteem			.670	
5: View of self			.382	
6: Inferiority			.787	
7: feel okay about self			.820	
8: less satisfied			.747	
9: self-confidence			.417	
10: worse about self			.521	
SSRPH1: social stigma				.528
2: sign of inadequacy			.448	.381
3: seen less favorably				.756
4: advisable to hide				.600
5: liked less				.705
DD1: Accept as friend		.593		
2: as intelligent hospital		.757		
3: as trustworthy		.852		
4: accept as teacher		.772		
5: hospital = failure		.400		
6: hire for children		.391		
7: think less of hospital		.603		
8: hire as employee		.589		
9: pass over applicant		.569		
10: treat as normal		.555		
11: date hospitalized		.422		
12: take opinions hospital		.621		
SSOMI1: Inadequacy	.511			
2:self-confidence	.795			
3: less intelligent	.503			
4: Self-esteem	.852			
5: View of self	.741			
6: Inferiority	.574			
7: feel okay about self	.671			
8: less satisfied	.727			
9: self-confidence	.915			
10: worse about self	.844			
Eigenvalues	11.307	4.335	2.343	1.631
Percentage Total Variance	30.559	11.717	6.332	4.407

Table 4

Factor Correlation Matrix

Factor	1	2	3	4
1. SSOMI	--			
2 DD	.302	--		
3 SSOSH	.665	.266	--	
4 SSRPH	.398	.335	.520	--

Does having a mental illness differently predict the self-stigma of mental illness and the self-stigma of seeking psychological help?

The goal of the remaining analyses were to further distinguish the self-stigma of mental illness from the self-stigma of seeking psychological help as well as to demonstrate their distinctiveness from the public stigma of each attribute. I was first interested in the question of whether having experienced a mental illness in the past would differently predict the self-stigma of seeking psychological help and the self-stigma of mental illness. Two, one-way between subjects ANOVAs were conducted to compare the effect of having experienced a mental illness on these two stigmas. The data was checked for violations of the assumptions of univariate analysis of variance, including normality and the equality of variances between independent groups. Visual inspection of boxplots and frequency distributions demonstrated no violation of normality. A Levene's test of homogeneity of variances, however, indicated non-equality of variances between the two groups in SSOSH scores (Levene Statistic = 4.515, $p < .05$), but not on SSOMI scores (Levene Statistic = 2.693, $p = .101$). Although this was the case, neither logarithmic nor inverse transformations significantly improved upon the violation. Thus the analysis was run on the non-transformed SSOSH values. The difference in variances, however, may suggest that the two represent different populations (Glantz,

2005). In this case, the variance in SSOSH scores for those who had *not* experienced a mental illness (*sd* = 7.530) was significantly greater than for who had (*sd* = 6.981).

There was a non-significant effect of having experienced a mental illness on help-seeking self-stigma, F (1, 720) = .230, p = .632. There was also no significant effect of having experienced a mental illness on the self-stigma of mental illness, F (1, 720) = .731, p = .393. Thus, SSOSH and SSOMI scores for those who reported having experienced a mental illness did not significantly differ in their mean values from those who did not report having experienced a mental illness.

Do the self-stigma of mental illness and the self-stigma of seeking help uniquely and differentially predict attitudes toward seeking help?

The goal of the present analyses was to understand the overall relationship between perceived stigma of mental illness, perceived stigma of seeking help, self-stigma of mental illness, and self-stigma of seeking help in attitudes toward seeking help. Although there exists a theoretical basis for entering public stigma prior to self-stigma when predicting help-seeking attitudes (e.g. Vogel et al., 2006, Shechtman et al., 2010) there was no theoretical justification for whether the stigma related to mental illness should be entered prior to or after help-seeking stigma. Because I was also interested in examining how much of the relationship is contributed uniquely to by each variable, I ran a simultaneous multiple regression equation with semi-partial correlations (sr_i) for attitudes toward seeking help.

Assumptions of linearity, normally-distributed errors, and uncorrelated errors were checked through matrix scatterplots and residual plots (Leech, Barrett, & Morgan, 2011) of the centered predictor variables on the unstandardized criterion variable for each regression. These analyses supported no violation of the assumptions of linear regression. Given the

moderate to large correlations between the self-stigma of mental illness and the self-stigma of seeking psychological help in the present study ($r = .70$, $p < .001$), problems with multicollinearity were anticipated. A high degree of multicollinearity was indeed observed between the self-stigma of mental illness and the self-stigma of seeking psychological help, though not between other variables in the model. When regressed on attitudes toward seeking help, a large change in the magnitude and direction of the slope for the self-stigma of mental illness was observed between the zero order and partial correlations for mental illness (zero-order $r = -.253$, partial $r = .143$). A high variance inflation factor (VIF) for mental illness self-stigma (VIF = 1.98) and help-seeking self-stigma (VIF = 2.23) was also observed.

Additionally, although multicollinearity diagnostics revealed no condition indexes above 15, high variance proportions (VP) for both the SSOSH (VP = .87) and the SSOMI (VP = .72) were observed on a single dimension, suggesting that these predictors were collinear. Multicollinearity was thus observed to be a problem for this dataset. Although in such cases it has been suggested that highly collinear measures may be analyzing the same concept and should thus be subsumed into a single construct (Cohen & Cohen, 2003), the results of the preceding EFA discouraged this analytic strategy. Instead, this high degree of multicollinearity was observed as a limitation of the present analysis and is reported in the discussion section.

For attitudes toward seeking help, unstandardized regression coefficients (b), standard error of the unstandardized regression coefficients (SE b), the standardized regression coefficients (β), zero-order, semi-partial correlations (sr_i), and R^2 are reported in Table 5. R^2 for the regression was significantly different from zero ($F_{(4, 719)} = 65.99$, $p < .001$). For the two regression coefficients that differed from zero, 95% confidence intervals were calculated. The

95% confidence interval for the self-stigma of seeking psychological help was -.290 to -.398 and was .047 to .144 for the self-stigma of mental illness. Altogether, 27% of the variability in attitudes toward seeking psychological help was predicted by all four variables in the model.

Semi-partial correlations (sr_i) can provide a means of assessing the relative importance of predictor variables in determining a single criterion. A semi-partial correlation is a measure of the amount by which R^2 would be reduced if that variable were deleted from the regression equation (Tabachnik & Fidell, 2001). In the regression analysis of attitudes toward seeking help, semipartial correlations were small and non-significant ($< .2$; Cohen, 1988) for the public stigma of mental illness ($sr_i = .031$, $p > .05$) and the public stigma of seeking help ($sr_i = .055$, $p > .05$). The self-stigma of mental illness was statistically significant but contributed to less than 2% of the variance in attitudes toward seeking help ($sr_i = .122$, $p < .001$, 95% CI = [.05, .193]). The self-stigma of seeking help uniquely contributed to roughly 16% of the variation in attitudes toward seeking help ($sr_i = .397$, $p < .001$, 95% CI = [.334, .456]). The difference between the total R^2 and the sum of sr_i^2 represents the shared variance between the predictor variables (Tabachnik & Fidell, 2001). In this analysis, the shared variance was .093. Although the bivariate correlations between the public stigma of mental illness and attitudes toward seeking help ($r = -.10$, $p < .01$) and between the public stigma of seeking help and attitudes toward seeking help were significant ($r = -.29$, $p < .001$), they did not contribute significantly to the regression.

A paired samples t-test was then conducted to examine if the mean values of the self-stigma of mental illness differed significantly from the mean values of the self-stigma of seeking psychological help for those with psychological levels of distress who had not sought

psychological treatment prior to the time of assessment. This test revealed a significant difference between the mean values, $t_{(151)}$= 9.719, $p < .001$, 95% CI of the difference = [3.93, 5.94], such that the self-stigma of mental illness was higher for this population than the self-stigma of seeking psychological help.

A significance difference test between dependent r's (Cohen & Cohen, 1983) was then conducted to examine if the self-stigma of mental illness correlated with attitudes toward seeking help and psychological distress to a significantly different degree than help-seeking self-stigma for those with current levels of psychological distress who had not sought treatment. A significant difference was observed ($t_{(152)}$= 5.26, $p < .001$) such that attitudes were more highly related to help-seeking self-stigma ($r = -.56$) than mental illness self-stigma ($r = -.24$).

Table 5

Summary of Simultaneous Multiple Regression of Attitudes Toward Seeking Help with

Squared Semi-partial Correlations.

Predictor	b	SE b	B	R^2	F (df)	sr_i
Overall				0.27	65.99***(4, 719)	
DD	.022	.019	.042			.031
SSRPH	-.085	.044	-.073			.055
SSOMI	.095	.025	.174***			.122***
SSOSH	-.344	.028	-.594***			.397***

Note. DD: Beliefs about Devaluation-Discrimination (public stigma of mental illness), SSRPH: Stigma Scale for Receiving Psychological Help (public stigma of seeking help), SSOMI: Self-Stigma of Mental Illness, SSOSH: Self-Stigma of Seeking Help.
* $p < . 05$. ** $p < .01$. *** $p < .001$

Do the self-stigma of mental illness and the self-stigma of seeking psychological help differently associate with help-seeking behavior?

A final question was if the likelihood that a student would have sought help was differentially related to the self-stigma of mental illness and the self-stigma of seeking psychological help. In order to answer this question, a logistic regression analysis was conducted in which the self-stigma of mental illness and the self-stigma of seeking help were entered as explanatory variables of the dichotomous outcome of reporting having sought psychological help. The ranges of the two variables are reported in Table 1. The logistic regression analysis was carried out using the binary logistic regression procedure in SPSS Version 19 (IBM Company, 2010).

According to the model (reported in Table 6), the Hosmer-Lemeshow (H-L) test yielded a χ^2 (8) of 13.357 and was not significant ($p > .05$), suggesting that the model fit the data well. The Cox and Snell and Nagelkerke indices represent variations of the R^2 concept used in OLS regression (Peng, Lee, & Ingersoll, 2002). These indices are not equivalent to R^2, however, and so it has been suggested that these estimates are better used as supplementary to goodness-of-fit indices and individual regression coefficients (Peng, Lee, & Ingersoll, 2002). In the present model the Cox and Snell R^2 index and Nagelkerke R^2 index were both small (.007 and .01, respectively; Cohen, Cohen, West, & Aiken, 2003).

The log of the odds of a person having sought help was negatively related to the self-stigma of seeking psychological help ($e^\beta = .967$ $p = .050$, 95% CI = [.935, 1.000]), but not significantly related to the self-stigma of mental illness ($e^\beta = 1.011$ $p = .506$, 95% CI = [.979, 1.043]). In other words, the higher the self-stigma of seeking help the less likely students

would be to report having sought help in the past, but no such association was found for the

self-stigma of mental illness.

Table 6[1]

Logistic Regression Analysis of Having Sought Psychological Help.

	B	*SE* β	Wald's χ^2	*df*	e^{β}
Constant	-1.052***	.085	151.692	1	.349
SSOSH	-.032*	.016	3.849	1	.968
SSOMI	.010	.015	.443	1	1.010

Note. N=722. Cox and Snell R^2 = .007. Nagelkerke R^2 (Max rescaled R^2) = .01. Hosmer and Lemeshow Test $\chi^2_{(8)}$=13.357, *p* = .100
* *p* < . 05. ** *p* < .01. *** *p* < .001

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[1]This logistic regression is meant to examine differences in the association between the SSOSH and SSOMI and having sought psychological help. It is not meant to provide evidence for the SSOSH and SSOMI in predicting help-seeking behaviors. Because logistic regression assumes that the predictor variables occur before the response variable, and because the response variable in this case is past mental health utilization, the authors would like to stress that this analyses should not be interpreted as evidence of causation.

CHAPTER 5: DISCUSSION

This study provides a new understanding of the conceptual distinction between the stigmas of mental illness and of seeking psychological help. EFA results indicate that the two are different theoretical constructs. Because the self-stigma of mental illness was measured using a scale that was methodologically identical to that of the self-stigma of seeking psychological help, we argue that the conceptual distinction between the two was actually minimized in the present study. The method invariance in assessing both constructs likely artificially increased the correlation between the two measures, thereby making it more difficult to detect differences. Because of this, the clear differences observed in the present analysis are even more notable. The theoretical distinction between the two stigmas was further implicated by the larger correlation help-seeking self-stigma shares with attitudes toward counseling, the differences between the two stigmas in accounting for variance in attitudes toward seeking help, and differences between the two stigmas in predicting help-seeking behavior.

Differentiating Mental Illness Stigma From Help-seeking Stigma

There are several implications of this study for future assessment of stigma constructs. Primarily, the present study suggests that the stigma of mental illness is conceptually distinct from that of seeking psychological help. When measures of the public stigma of mental illness, the self-stigma of mental illness, the public stigma of seeking psychological help, and the self-stigma of seeking psychological help are analyzed using a factor analytic strategy, they neatly load on separate factors consistent with each construct. This provides further evidence that help-seeking stigma is not simply a behavioral cue that links a person to the stigma of mental illness. The act of seeking help appears to carry with it a unique set of

stigmatizing beliefs, regardless of the reason one chooses to seek help. This supports previous literature demonstrating a correlation between current or past mental healthcare utilization and attributes such as awkward, cold, defensive (Sibicky & Dovidio, 1986), not in control of one's emotions (Oppenheimer & Miller, 1988), weak (King, Newton, Osterlund, & Baber, 1973), and less confident (Ben-Porath, 2002).

These findings suggest that measures which subsume help-seeking stigma under the stigma of mental illness, consistent with the non-specific labeling of effect of mental illness (Corrigan, 2004), are perhaps capturing two different stigma constructs. In particular, recently developed measures such as the DSSS (Kanter, Rüsch, & Brondino, 2008) and the SSMIS (Corrigan, Watson, & Barr, 2006) might best be conceptualized as tapping into both help-seeking and mental illness stigma. Whereas this is consistent with the large body of literature on mental illness stigma, it may overlook the unique perceptions of those who seek help.

Research has identified several dimensions on which stigma can vary based on the stigmatized attribute (e.g. Jones, 1984; Bresnahan & Zhuang, 2010), and because the literature supports differences in opinions around help-seeking and mental illness (e.g. Freeman, 1961; Ben-Porath, 2002), not differentiating help-seeking from mental illness stigma may be an important omission in the literature. In the present analysis, the differential factor loadings of items on the SSOMI and the SSOSH amay provide clues as to which stigmatizing beliefs are most central to these attributes. The present study suggests that the stigma of seeking psychological help may reflect stigmatizing beliefs about inadequacy and inferiority to others whereas the stigma of mental illness may reflect beliefs about loss of self-confidence and loss

of self-esteem. This may suggest that the mental illness relates to negative evaluations of the self while seeking psychological help reflects loss of worth in relation to others.

Additionally, although previous researchers have suggested that there may be a category of "felt stigma", e.g. a fear of stigma enactments with an accompanied feeling of shame (Knight, Wykes, & Hayward, 2006), the EFA results of the present analysis suggest that feelings of self-esteem, inferiority, and self-satisfaction related to mental illness and seeking psychological help (self-stigma) are undergirded by a fundamentally different construct than that of perceptions of how others would respond to those with mental illness or who seek such help. This distinction has been the recommendation of previous research (e.g. Brohan et al., 2006; Corrigan & Watson, 2002) as well as the finding of factor analyses of perceived and self-stigma related to mental illness (Watson et al., 2007; Ritsher, Otilingam, & Grajales, 2003). Although this distinction has been argued for with respect to help-seeking stigma, (Vogel, Wade, & Hackler, 2007; Vogel, Wade, & Ascheman, 2009), the present analysis is the first known study to distinguish the public and self-stigmas related to seeking psychological help using factor analytic methods. In particular, this study suggests that the Stigma Scale for Receiving Psychological Help (Komiya, et al., 2000), a commonly cited and used measure of the public stigma of receiving psychological treatment, also captures self-stigmatizing beliefs related to seeking help.

Mental Illness and Help-seeking Stigma in Help-Seeking Behaviors

Our hypothesis that the self-stigma of seeking help would better predict attitudes toward seeking psychological help was supported. The self-stigma of seeking psychological help uniquely contributed to roughly 16% of the variation in attitudes toward seeking help whereas the self-stigma of mental illness uniquely contributed approximately 2% to the

variance in attitudes. Although multicollinearity between the self-stigma of seeking psychological help and the self-stigma of mental illness was a factor in this analysis, a significance difference test between dependent *r*'s for those with clinical levels of distress who have not sought help supports the interpretation that the self-stigma of seeking psychological help may be the more important predictor in attitudes toward counseling. This was despite the fact that levels of the self-stigma of mental illness were on average higher than levels of the self-stigma of seeking psychological help. Additionally, our hypothesis that the two stigmas would differently associate with prior mental health services utilization was supported. The self-stigma of seeking psychological help was significantly negatively associated with past service utilization while the self-stigma of mental illness was not.

These findings are consistent with Schomerus & Angermeyer's (2008) suggestion that help-seeking stigma may be more relevant than mental illness stigma in actual decisions to seek help. These researchers suggest that a person considering seeing a psychologist often does not yet have a mental health diagnosis. Fears about discrimination and loss of status and esteem for those considering seeking treatment may thus be the result of the specific stigma attached to help-seeking. Although a person might anticipate being labeled as mentally-ill for seeing a psychologist, it appears that the stigma associated with seeing a mental health professional is the greater deterrent.

Previous work has identified that presenting students with information that normalizes mental illness and seeking psychological help, rather than just providing information on counseling services, can increase attitudes and expectations about the need to commit to counseling (Gonzalez Tinsley, & Kreuder, 2002). Literacy around mental illness has been the focus of many interventions aimed at increasing help-seeking behavior. It is often suggested

that by improving the general public's attitudes toward those with mental illness, through education and contact, attitudes toward seeking help will improve (Bright & Hayward, 1997). Generally such interventions have been found to be effective (Rüsch et al., 2005). The present investigation adds to this conceptualization by suggesting that it is important for interventions to address both mental illness and help-seeking processes. Because the two are conceptually distinct, it may not be the case that attending to mental-illness stigma will address stigmatizing attitudes toward seeking psychological help. Although past research has suggested that providing destigmatizing information on help-seeking is not as effective as information about the biological causes of depression in increasing willingness to seek help (Han et al., 2006), the present investigation implicates help-seeking self-stigma more than mental illness self-stigma in attitudes toward help. Researchers might consider the work of Jorm and colleagues (2003) or Romer and Bock (2008) in examining other, more effective methods of addressing help-seeking stigma.

Mental Illness and Help-seeking Stigma in Experiences of Mental Illness

Our hypothesis that having experienced a mental illness would show decreased SSOMI scores was not supported. Those who reported having experienced a mental illness did not endorse significantly different levels of mental illness self-stigma than those who had not. It was hypothesized that for some of those who did not report having experienced a mental illness might have done so because they were seeking to avoid stigmatizing labels and protect their self-image. As such, these individuals were likely to have high self-stigmatizing views about themselves if they were to have a mental illness. Additionally, because persons who experience stigmatization can perceive the legitimacy of stigmatizing views as low and

their own value as high (Rüsch et al., 2009b), we expected this group to endorse lower self-stigma.

In partial explanation of the present findings, it might be the case that because this group was a college student sample who did not have severe mental illness, they may not have had strong "in-group" perceptions nor have had the opportunity to meet and interact with others with experiences of mental illness. As such they may have perceived publically-stigmatizing views as legitimate and thus endorsed levels of self-stigma that were similar to the general public.

The self-stigma of seeking psychological help was not suspected to differ between those who had and had not experienced a mental illness as help-seeking stigma was hypothesized to be separate from and distal to views about mental illness. This hypothesis was supported. Still, there was some evidence that those who had experienced a mental illness responded differently than those who had not on questions assessing the self-stigma of seeking help. Although it was not a point of hypothesized difference, those who reported having experienced a mental illness had more similar, e.g. less distributed, perspectives on how they would perceive themselves if they sought help. This may be because help-seeking was more relevant to those who had experienced a mental illness and thus views on what this might mean for their self-worth were less varied.

Limitations and Future Research

Perhaps the largest limitation in the present study is the multicollinearity of the two measures used to analyze the self-stigma of seeking help and that of mental illness. Additionally, the correlation between the two measures may have actually been higher had the two measures been placed one after another in surveying participants (in the present analysis

they were separated by another questionnaire). Although multicollinearity was an anticipated

problem and was necessary in understanding the underlying factor structure, it proposed

difficulties for the multiple regression analyses. This made it difficult to answer a fundamental

question related to this research; that is, whether there are additive effects for mental illness

and help-seeking stigmas in predicting attitudes toward seeking help.

Another potential limitation of the present analysis was the choice to use the Self-

Stigma of Depression scale to assess the public stigma of mental illness. This scale was

developed to analyze the stigma related to depression specifically rather than mental illness

more generally (Barney et al., 2010). Our choice to generalize the scale to refer to mental

illness was done to help add convergent validity to the SSOMI developed for this study. Still,

altering the scale may have impacted its validity or reliability.

A final limitation to the present study is the overrepresentation of culturally-diverse

participants and non-native English speakers in those removed from the analysis due to

random responding. Although this is unfortunate, it was determined to be appropriate given

the unreliability of the results of these participants. It is likely the case that this difficulty is

also present in other research, though it is not frequently analyzed. One recommendation by

McHugh and Behar (2009) is for researchers to pay careful attention to the readability of

published measures. In these researchers' analysis, the vast majority of anxiety and depression

measures are above the recommended 6th grade reading level for patient materials (American

Medical Association, 1999). It is possible that the high reading level required of the measures

in the present study caused non-native English speakers to respond randomly.

With respect to understanding the experiences of culturally-diverse groups, future

studies might seek to utilize mixed qualitative and quantitative methods or involve members

of this population in the design, implementation, and evaluation stages of research (Heppner, Wampold, & Kivlighan, 2007). It is particularly important for continued research in the area of stigma to address the underrepresentation of marginalized groups. Being African American (Alvidrez, Snowden, & Patel, 2010), an immigrant (Nadeem et al., 2007), and international (Eisenberg et al., 2009) have all been correlated with higher levels of self-stigma. Because stigma concepts are intimately related to culturally-sanctioned belief structures (Link & Phelan, 2001), it may well be the case that findings of the present analysis do not generalize well to diverse groups.

The present study utilizes a cross-sectional, quantitative descriptive design. It will be important for future studies of the stigma related to help-seeking and mental illness to use experimental or analogue studies. Studies such as Ben-Porath's (2002) work can be used to examine more direct responses to stigmatized persons in understanding the nature of marked relationships and how these might differ for both mental illness and help-seeking stigma. Additionally, use of structural equation modeling with cluster analyses can be used to better capture the essence of the two variables, reduce multicollinearity, and increase the precision of measurement. Finally, it will be important for future research to examine mental illness and help-seeking stigma on the domains of stigmatizing attitudes as outlined by Jones and colleagues (1984) as well as Bresnahan and Zhuang (2010). Additionally, it may be important for future research to identify if beliefs about self-worth are more central to mental illness stigma whereas beliefs about worth in relation to others are more central to help-seeking stigma. This research can help better illuminate the ways in which persons who seek help or experience a mental illness receive stigma, interact with others in marked relationships, and pursue psychological services.

Conclusion

The present study provides strong evidence that the stigma of mental illness is conceptually distinct from the stigma of seeking psychological help. It further suggests that help-seeking stigma may be more proximal to decisions to seek help than mental illness stigma in college student populations. It also presents preliminary evidence that experiences of mental illness and help-seeking behavior differentially impact the two stigmas, suggesting that the stigmatization processes for each stigma may differ.

Because seeking psychological help is perceived as an uncomfortable, risky, and unhelpful treatment, it carries with it a unique set of publically and personally stigmatizing beliefs. These beliefs interfere with persons receiving needed psychological treatment. It will be important for researchers and clinicians to understand how to address the unique stigma related to psychological treatment in order to increase help-seeking behaviors in the general public. In order for this to happen, however, it will be necessary for future research to isolate and study the stigma of seeking help; apart from that of mental illness.

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APPENDIX: STUDY MATERIALS

Note. Items appear in the order in which they were printed.

SSDS (modified for mental illness)
1. How would you think of, or feel about, yourself if you had a mental illness.

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
I would feel embarrassed					
I would feel ashamed					
I would feel disappointed in myself					
I would feel inferior to other people					
I would think I should be able to 'pull myself together'					
I would think I should be able to cope with things					
I would think I should be stronger					
I would think I only had myself to blame					
I would feel like I was good company					
I would feel like a burden to other people					
I would feel inadequate around other people					
I would feel I couldn't contribute much socially					
I wouldn't want people to know that I wasn't coping					
I would see myself as weak if I took medication for my mental illness					
I would feel embarrassed about seeking professional help for mental illness					
I would feel embarrassed if others knew I was seeking professional help for mental illness					

1. Have you EVER sought help from a mental health professional (e.g., psychologist, psychiatrist, social worker, counselor)? If yes, how many months after you first noticed signs of a mental health concern did you seek help from a professional?

2. Have you EVER sought help from a mental health professional (e.g., psychologist, psychiatrist, social worker, counselor)? If yes, how many months after you first noticed signs of a mental health concern did you seek help from a professional?

SSRPH

3. Directions: Please read each statement and check the circle corresponding to the scale number that indicates how much you agree or disagree with the statement.

	Strongly Disagree	Disagree	Agree	Strongly Agree
Seeing a psychologist for emotional or interpersonal problems carries social stigma.				
It is a sign of personal weakness or inadequacy to see a psychologist for emotional or interpersonal problems.				
People will see a person in a less favorable way if they come to know that he/she has seen a psychologist.				
It is advisable for a person to hide from people that he/she has seen a psychologist.				
People tend to like less those who are receiving professional psychological help.				
People think it is a sign of personal weakness or inadequacy to see a psychologist for emotional or interpersonal problems.				

DD

4. Directions: Please read each statement and check the circle corresponding to the scale number that indicates how much you agree or disagree with the statement.

	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
Most people would willingly accept a former mental patient as a close friend.						
Most people would believe that a person who has been in a mental hospital is just as intelligent as the average person.						
Most people believe that a former mental patient is just as trustworthy as the average citizen.						

	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
Most people would accept a fully recovered former mental patient as a teacher of young children in a public school.						
Most people believe that entering a mental hospital is a sign of personal failure.						
Most people would not hire a former mental patient to take care of their children, even if he or she had been well for some time.						
Please select "Strongly Agree" for this item.						
8Most people think less of a person who has been in a mental hospital.						
Most employers will hire a former mental patient if s/he is qualified for the job.						
Most employers will pass over the applicant of a former mental patient in favor of another applicant.						
Most people in my community would treat a former mental patient just as they would treat anyone.						
Most young women would be reluctant to date a man who has been hospitalized for a serious mental disorder.						
Once they know a person has been in a mental hospital, most people will take his or her opinions less seriously.						

SSOMI

1. Directions: People at times find that they face mental health problems. This can bring up reactions about what mental illness would mean. Please use the 5-point scale to rate the degree to which each item describes how you might react if you were to have a mental illness.

	Strongly Disagree	Disagree	Agree/Disagree Equally	Agree	Strongly Agree
I would feel inadequate if I had a mental illness.					
My self-confidence would NOT be					

	Strongly Disagree	Disagree	Agree/Disagree Equally	Agree	Strongly Agree
threatened if I had a mental illness.					
Having a mental illness would make me feel less intelligent.					
My self-esteem would decrease if I had a mental illness.					
My view of myself would not change just because I had a mental illness.					
It would make me feel inferior to have a mental illness.					
I would feel okay about myself if I had a mental illness.					
If I had a mental illness, I would be less satisfied with myself.					
My self-confidence would remain the same if I had a mental illness.					
I would feel worse about myself if I had a mental illness.					

RSE

5. Below is a list of statements dealing with your general feelings about yourself. If you strongly agree, check the Strongly Agree circle. If you agree with the statement, check the Agree circle. If you disagree, check the Disagree circle. If you strongly disagree, check the Strongly Disagree circle.

	Strongly Disagree	Disagree	Agree	Strongly Agree
I feel that I am a person of worth, at least on an equal basis with others.				
I feel that I have a number of good qualities.				
All in all, I am inclined to feel that I am a failure.				
I am able to do things as well as most other people.				
I feel I do not have much to be proud of.				
I take a positive attitude toward myself.				
On the whole, I am satisfied with myself.				
I wish I could have more respect for myself.				

	Strongly Disagree	Disagree	Agree	Strongly Agree
I certainly feel useless at times.				
At times I think I am no good at all.				

SSOSH

2. Directions: People at times find that they face problems that they consider seeking help for. This can bring up reactions about what seeking help would mean. Please use the 5-point scale to rate the degree to which each item describes how you might react in this situation.

	Strongly Disagree	Disagree	Agree/Disagree Equally	Agree	Strongly Agree
I would feel inadequate if I went to a therapist for psychological help.					
My self-confidence would NOT be threatened if I sought professional help.					
Seeking psychological help would make me feel less intelligent.					
My self-esteem would increase if I talked to a therapist.					
My view of myself would not change just because I made the choice to see a therapist.					
Please select "Strongly Agree" for this item.					
It would make me feel inferior to ask a therapist for help.					
I would feel okay about myself if I made the choice to seek professional help.					
If I went to a therapist, I would be less satisfied with myself.					
My self-confidence would remain the same if I sought professional help for a problem I could not solve.					
I would feel worse about myself if I could not solve my own problems.					

ATTSPPH

3. Directions: Please read each statement and check the circle corresponding to the scale number that indicates how much you agree or disagree with the statement.

	Strongly Disagree	Disagree	Agree	Strongly Agree

	Strongly Disagree	Disagree	Agree	Strongly Agree
If I believed I was having a mental breakdown, my first inclination would be to get professional attention.				
The idea of talking about problems with a psychologist strikes me as a poor way to get rid of emotional conflicts.				
If I were experiencing a serious emotional crisis at this point in my life. I would be confident that I could find relief in psychotherapy.				
There is something admirable in the attitude of a person who is willing to cope with his or her conflicts and fears without resorting to professional help.				
I would want to get psychological help if I were worried or upset for a long period of time.				
I might want to have psychological counseling in the future.				
A person with an emotional problem is not likely to solve it alone; he or she is likely to solve it with professional help.				
Considering the time and expense involved in psychotherapy, it would have doubtful value for a person like me.				
A person should work out his or her own problems; getting psychological counseling would be a last resort.				
Personal and emotional troubles, like many things, tend to work out by themselves.				

GP-CORE

6. This form has 14 statements about how you have been OVER THE LAST WEEK. Please read each statement and think how often you felt that way last week. Then check the circle which is closest to this.

	Not at all	Only occasionally	Sometimes	Often	Most or all the time
I have felt tense anxious or nervous					

	Not at all	Only occasionally	Sometimes	Often	Most or all the time
I have felt I have someone to turn to when things go wrong					
I have felt OK about myself					
I have felt able to cope when things go wrong					
I have been troubled by aches, pains or other physical symptom					
I have been happy with the things I have done					
I have had difficulty getting to sleep or staying asleep					
I have felt warmth or affection for someone					
I have been able to do most things I needed to					
I have felt criticized by other people					
I have felt unhappy					
I have been irritable when with other people					
I have felt optimistic about my future					
I have achieved the things I wanted to					

ISCI
4. Instructions: Below is a list of issues people commonly bring to counseling. How likely would you be to seek counseling/therapy if you were experiencing these problems?

	Very unlikely	Unlikely	Likely	Very likely
Relationship difficulties				
Concerns about sexuality				
Depression				
Conflict with parents				
Speech anxiety				
Difficulty in sleeping				
Inferiority feelings				
Difficulty with friends				
Self-understanding				
Loneliness				
Difficulties dating				
Choosing a major				

	Very unlikely	Unlikely	Likely	Very likely
Test Anxiety				
Academic work procrastination				