ADVICE FROM SOCIAL REFERENTS AND ITS RELATIONSHIP TO INTERNALIZED STIGMA OF MENTAL ILLNESS: A STUDY FROM THE PERSPECTIVE OF PEOPLE WITH MENTAL ILLNESSES

by

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Advice from Social Referents and its Relationship to Internalized Stigma of Mental Illness: A Study from the Perspective of People with Mental Illnesses

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy at George Mason University

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DEDICATION

This is dedicated to those individuals who have battled against stigma and discrimination of any kind, but especially those who have confronted mental illness stigma. In addition, it is dedicated to those students with a mental illness history who agreed to participate in this research and share their experiences. My hope is that research may lead to improved ways to reduce mental illness stigma.

This is also dedicated to my children, Avonelle Rose and Viviette Eloise—may you have the same opportunities for education, and may they enable you to contribute to and expand knowledge.

Finally, this is dedicated to my husband, Jeff, and parents, Donna and Burt, whose continual support through graduate school and life has always been a primary source of strength and inspiration.

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I would like to thank George Mason University and the GMU psychology department, who saw and cultivated my clinical and scientific interests from my years as an undergraduate honors student through my doctoral studies. I am honored to say that I am, twice, a GMU graduate.

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ABSTRACT

ADVICE FROM SOCIAL REFERENTS AND ITS RELATIONSHIP TO INTERNALIZED STIGMA OF MENTAL ILLNESS: A STUDY FROM THE PERSPECTIVE OF PEOPLE WITH MENTAL ILLNESSES

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Research has demonstrated that people with mental illnesses internalize negative public stereotypes about mental illness and anticipate stigma (e.g., Ritsher et al., 2003). When individuals with a mental illness experience stigma, they may experience psychological effects (e.g., lower self-esteem, more negative affect, reduced feelings of authenticity, increased levels of intrusive thoughts) and behavioral effects (e.g., avoidance, more effortful social interactions) (e.g., Angermeyer et al., 2004; Link, 1987; Markowitz, 1998; Rosenfield, 1997). This study aims to investigate one component that may be related to this stigma – advice from people close to the individual with a mental illness (Herman, 1993; Wahl, 1999a). In this study, I examined stigma from the perspective of individuals with a mental illness by investigating the advice that college student mental health consumers receive from social referents such as professionals and family members. The advice assessed primarily focused on two areas, 1)

Disclosure/Concealment and 2) Lowered Expectations. This study found that that the level of advice someone with a mental illness receives to conceal his or her mental illness and the advice he or she receives to lower expectations is positively correlated with the individual's level of stigma (i.e., greater internalization of stigma and higher stigma consciousness) and concealment behavior, and negatively correlated with self-esteem. Contrary to the hypotheses, neither type of advice was related to help-seeking behavior. This study provides additional information from the perspective of the mental health consumer about how stigma information/advice is concenptualized and the relationship between this advice and stigma/adverse outcomes.

CHAPTER 1: INTRODUCTION

As humans, we constantly encounter vast amounts of new physical and social stimuli, which we are expected to analyze, remember and use. In order not to become overwhelmed, our mind quickly categorizes similar information in cognitive structures called schemas (Macrae & Bodenhausen, 2000). Derived from our past experiences, schemas are the mental frameworks that tell us what is cognitively relevant and what we should expect from any given type of person, role, or situation. The use of schemas is crucial to organize into a manageable format the extensive information we are bombarded with on a daily basis. When activated under appropriate conditions, schemas save valuable cognitive effort and help us understand and predict our environment. By activating memories of relevant knowledge and experiences, we can more easily incorporate new information into an existing framework. However, their powerful effect on social cognition can sometimes cause inaccuracies in our perception of others (Macrae & Bodenhausen, 2000).

Categorizing people based on their similarities and developing generalizations about the groups we create provides a way to simplify social information (Crocker & Lutsky, 1986). This categorization, or "lumping" of similar individuals into a single homogeneous group, often leads to the creation of a type of schema called stereotypes (Jones, Farina, Hastorf, Markus, Miller, & Scott, 1984). Stereotypes are the cognitive

frameworks in which we store information and beliefs about specific social groups, such as their typical traits and behaviors (Macrae & Bodenhausen, 2000). The mental activation of stereotypes saves cognitive effort; since we already know what typical members of a specific group act like, we can avoid thorough systematic processing and instead use the heuristics of our preconceived beliefs. However, since stereotypes are over-generalized and frequently negative in nature, they can sometimes lead to harmful, erroneous perceptions of others, which is often referred to as stigma. Inclusion in a stigmatized social group can greatly increase these detrimental misperceptions of both the group as a whole and individuals within the stigmatized group. (Jones, et al., 1984). In fact, Jones and his colleagues (1984, p. 155) believe that "stereotyping is at the heart of the stigmatizing process."

Stigma is a powerful marker of disgrace or discredit that may be elicited by both overt, physical conditions such as skin color, appearance, or paraplegia, as well as by more societal or psychological circumstances such as poverty, a criminal record, or mental illness (Goffman, 1963; Jones et al., 1984; Wahl, 1999b). Once stigmatized, an individual or group is not only unfairly tainted and devalued by the specific characteristic that society deems undesirable, but in general is perceived far more unfavorably than someone without a stigmatizing trait (Goffman, 1963; Farina, 2000; Jones et al., 1984). In fact, what makes stigma so powerful is that it becomes a negative lens through which all other attributes of the marked person, including potentially positive characteristics, are filtered and framed (Jones et al., 1984).

Cognitively, the stigmatized characteristic achieves what Goffman (1963) terms

"master status" - the tendency to eclipse all positive aspects of the stigmatized person. According to Jones and his colleagues (1984), this impression engulfment occurs because the deviant marker is linked to a fundamental aspect of the marked person's disposition and becomes regarded as an integral part of his or her identity. Not surprisingly, this "spoiling" as the authors term it, arouses complex emotions that can lead the stigmatized target person or group to be seen in global, permanent ways as genetically flawed, fatally unglued, or morally degenerate (Jones, et. al, 1984). For example, if a job applicant of a certain race is believed by some employers to be lazy and untrustworthy, all other characteristics of the person may be overlooked (e.g., no one notices that person's good grades) or interpreted to confirm to the master status (e.g., those grades must have been 'given to him' rather than earned).

Members of targeted groups such as these are often aware of these societal opinions and experience internal stigma. Therefore, two types of stigma exist: public stigma, or the views the general public holds about members of the stigmatized group, and self-stigma, or the internalized stigma members of the targeted group experience. A person with a mental illness who experiences self-stigma may come to believe the negative societal views about mental illness and as a result experience reduced self-esteem or lowered goals. This personal stigma can result from public occurrences of stigma, such as when key community members like landlords or employers exhibit discrimination toward individuals with mental illness (Rusch, Angermeyer, & Corrigan, 2005; Wahl, 1999a). In conclusion, schemas about marginalized groups can exert a powerful effect on social cognition and can queue up negative views about stigmatized

group members. (Farina, 2000; Jones et al., 1984; Macrae & Bodenhausen, 2000).

Stigma

Public Stigma

Public stigma comprises three components: stereotypes, prejudices, and discriminations (Rusch, Angermeyer, & Corrigan, 2005). The term Stereotype refers to commonly held beliefs about certain groups or roles. Most people are aware of stereotypes, although not everyone endorses them equally. Prejudices are the extent to which someone agrees with negative stereotypes or personally endorses these beliefs. Prejudice can involve a cognitive belief in a stereotype or an emotional reaction (e.g. anger, fear). In contrast, discrimation is more active than prejudice. Discrimination involves enacting the prejudice through behavioral avoidance, ostracizing, or other methods.

Self-Stigma

Members of stigmatized groups often internalize society's negative stereotypes and experience self-stigma (Rusch et al., 2005). Self-stigma involves many of the same components as public stigma, but the manifestations are much more personally relevant for the target person. For example, most individuals with a mental health history are aware of the negative stereotypes about their group held by the general public. When members of a target group such mental health consumers apply these beliefs to themselves (e.g., through agreement with beliefs, negative emotional reactions, low self-

esteem), then self-stigma occurs. Further, members of stigmatized groups can experience or manifest discrimination through their behavioral responses (e.g., failing to pursue work and housing opportunities, not seeking help).

In summary, both public and self stigma can plague an individual with a mental illness. Thus, these individuals are negatively impacted by society's beliefs about the mentally ill, as well as by their own self-stigma (Corrigan, Markowitz, Watson, Rowan, & Kubiak, 2003). The internalized self-stigma someone with a psychiatric disorder experiences, coupled with the disorder's inherent psychological distress, led Corrigan (2005) to refer to mental illness as a "double-edged sword."

Comparison of Individuals with a Mental Illness to other Stigmatized Groups

Research has shown that people with mental illnesses are among the most stigmatized groups (Albrecht, Walker, and Levy, 1982; Combs and Omvig, 1986; Harris and Associates, 1991; Lamy, 1966; Towler & Schneider, 2005; Tringo, 1970). Regarded as one of the most rejected conditions, mental illness is generally grouped with more negative social conditions such as drug addiction, juvenile delinquency, and ex-convict status, instead of with other medical conditions such as cancer, arthritis, and heart disease (Albrecht et. al., 1982).

Social distance scales are often utilized to measure public acceptance of individuals with mental illness. Social distance scales assess people's willingness to interact with individuals who have a potentially stigmatizing condition such as mental illness in various social situations. In a study using a social distance scale, managers at

medium to large corporations rated mental illness as 24 out of 27 possible stigmatizing conditions (Albrecht, Walker, & Levy, 1982). Participants in this study rated mental illness worse than all physical disabilities that were listed in the study, such as blindness or paraplegia. Only the highly stigmatizing conditions of alcoholism, drug addiction, and juvenile delinquency received more negative ratings than mental illness. Surprisingly, participants indicated even more willingness to accept an ex-convict for employment than someone with a history of mental illness (Albrecht, Walker, & Levy, 1982).

The fact that having a prison record is often more accepted than being a formal mental patient was first documented by Lamy in 1966. When given a choice between an ex-convict or a former mental patient, respondents judged a very solicitous mother as more likely to leave her children in the sole care of ex-convict for a weekend camping trip. Furthermore, most people indicated they would place more trust in a former prison inmate during an emergency than someone reported to have been in a mental hospital (Lamy, 1966).

A more recent replication of Lamy's (1966) study shows that the negative stigma of mental illness evidenced in his research is not an artifact of the sixties (Skinner, Berry, & Byers, 1995). As in Lamy's study, participants were given a forced-choice task to choose between what the authors term "deviant social roles" for social interactions, in this case ex-mental patients, ex-convicts, and ex-drug addicts. Although this study shows some improvement of the stigma associated with mental illness, there remained a significant negative component to deep-level attitudes towards former patients, primarily in the areas of trust, responsibility, and social embarrassment (Skinner, Berry, & Byers,

1995).

These negative sentiments were echoed in a nationwide survey of public attitudes towards people with disabilities, which revealed that mental illness was the disability with which the least number of participants reported feeling at ease. Only 19 percent of respondents indicated they would feel “very comfortable” interacting with someone with a psychiatric disorder (Harris and Associates, 1991). This study found that while physical disabilities, such as deafness, blindness, and use of a wheelchair are upsetting to some, they produce considerably less discomfort than mental disabilities such as mental retardation, senility, and especially, mental illness.

A more recent study supports the finding that mental illness is the stigmatizing condition that people feel the most uncomfortable with in social settings (Towler & Schneider, 2005). In their study, these authors investigated how people classify and evaluate different stigmatized groups. Participants in this study used a card sorting technique to classify 54 stigmatizing conditions. Analyses revealed seven main clusters of stigmatized groups: physically disabled (e.g. “the blind, epileptics”), mental (e.g. "the depressed, mental patients"), physical appearance (e.g. "the obese, people with severe acne"), sexual identity (e.g. " gays, lesbians"), racial identity (e.g. "Blacks, Hispanics"), social deviants ("murderers, reformed felons"), and economically disadvantaged ("the homeless, welfare recipients"). Multidimensional scaling revealed that individuals with a mental stigma were rated as significantly more socially undesirable than individuals with overt, physical stigmas such as physical disability or racial identity.

The negative perceptions of individuals with mental illnesses are further

illustrated in a follow-up study, where the same authors had participants provide evaluation ratings of six stigma groups (Towler & Schneider, 2005). In this study, participants completed Likert-scale ratings of comfort (e.g." To what extent to which you feel comfortable with this person?") and ratings of evaluation (e.g. "to what extent do you think you will like this person?") about individuals in the stigmatized groups. Among these groups, individuals in the mental stigma group received the most negative evaluations. Further, individuals in the mental stigma cluster were also perceived as having more control over their condition than individuals in the physically disabled or racial identity clusters had over their conditions. The belief that someone has control over his or her stigmatizing condition is often associated with more negative evaluations. Furthermore, as in previous studies, participants reported being the least comfortable interacting with individuals in the mental stigma group. In conclusion, studies have demonstrated people with mental illnesses are among the most stigmatized groups and that people often desire significant levels of social distance from someone with the label "mental illness" (Combs and Omvig, 1986; Harris and Associates, 1991; Towler & Schneider, 2005; Tringo, 1970).

Public Perceptions of Mental Illnesses

While the previously mentioned studies seek to compare mental illness with other disabilities or stigmatizing conditions, research focusing solely on the general public's view of mental illness reveals a similarly negative picture (NMHA, 1999; Neff & Husaini, 1985; Nunnally, 1961). Nunnally's seminal (1961) comprehensive six-year

research summary assessed mental illness through opinions of mental health specialists, content analyses of mass media (i.e., television, radio, newspapers) and extensive surveys of the general public. His research revealed that people with a mental illness are often viewed by others with distrust, fear, and general dislike. The mere label of mental illness evokes damaging connotations, such as dangerous, unpredictable, dirty and worthless.

Nearly forty years after Nunally's (1961) work, perceptions of mental illness and its etiology remain largely negative. For example, more recent surveys revealed that 71 percent of people believe that mental illness is caused by "emotional weakness," 65 percent believe it can be caused by bad parenting, and 43 percent of people believe that people bring mental illnesses on themselves. In addition, 35 percent believe that sinful behavior causes mental illness (NMHA, 1999).

While poor parenting and personality factors can certainly lead to psychological distress, more recent stress-diathesis theories implicate the additive effects of physical/genetic causal factors along with environmental and social ones. Later adaptations of the stress-diathesis theory, such as the reciprocal approach, view causal factors as more interactive and dynamic (Saudino, Pederson, Lichenstein, McClearn, & Plomin, 1997). In this approach, certain vulnerability factors influence or interact with other factors in a reinforcing pattern. For example, if you are genetically predisposed to be painfully shy, others may tell you that you are shy, you may internalize these stereotypes about shyness and exhibit reduced contact with others; lack of contact with others leads to reduced social interactions, which causes high stress due to lack of belonging, which leads to greater depressive thoughts. This pattern of multiple

influences contributing to and maintaining mental illness can also be seen in the maintenance of internalized stigma, discussed later. Therefore, explanations such as bad parenting or sinful behavior causing mental illness may be overly simplistic at best, or entirely incompatible with modern knowledge of the environmental influences and biological substrates of mental illness at worst. An important question therefore arises, "Will conceptualizing mental illness in more modern or biological terms reduce stigma?"

Neff and Husaini (1985) found that regarding mental illness as a medical condition fails to change the detrimental mind-set of the public or initiate tolerance toward people with a mental illness. Though 90% of surveyed adults in a rural area identified the person described in a vignette of typical schizophrenic behavior as ill, 56% still agreed that this person should be "viewed and treated as morally weak." Further, 92% of the over 700 adults in the same survey would strongly discourage their children from marrying this person (Neff & Husaini, 1985). Therefore, even though individuals in the study viewed schizophrenia as an illness, they still desired a large amount of social distance from these individuals.

Endorsing a more medical etiology for mental illness may actually increase rather than decrease prejudicial attitudes. Angermeyer and Matschinger (2005) conducted a trend analysis on two different population surveys conducted 11 years apart. In their study, they examined the relationship between causal attributions about mental illness and stigmatizing views. Over the 11 year period, the public evidenced an increase in their endorsement of brain disease (51% in 1990 vs. 70% in 2001) and heredity (41% in 1990 vs. 60% in 2001) as causes for schizophrenia. Parallel to this trend, however, the public

also increased their desire for social distance from individuals with schizophrenia. For example, the number of individuals desiring social distance from a tenant with schizophrenia increased from 44% to 63%; while the number of people desiring social distance from someone with schizophrenia as a neighbor increased from 19% to 35%. Therefore, the more that the public attributed schizophrenia to biological causes, the more they desired social distance from individuals with schizophrenia. The authors of the study indicate that over the 11-year period studied the general public's understanding of schizophrenia's etiology became more aligned with professional views. However, contrary to expectations, these more "educated" views about schizophrenia were related to increased rather than decreased stigma.

Research suggests that educating the public about mental illness is not a very effective method for reducing stigma (Watson & Corrigan, 2005). Studies have shown that educational programs can lead to short-term changes in attitudes (e.g., Keane, 1991). Keane measured the effect of a psychiatric nursing course on senior nursing students' attitudes towards mental illness. The nursing students were given the Opinion about Mental Illness (OMI) questionnaire before and after an eight week psychiatric course. Another group of student nursing students who did not take the course served as a control group. The nursing students who took the educational course exhibited more positive post-course attitudes in the areas of Authoritarianism (i.e., the belief that the mentally ill require coercive management) and Interpersonal Etiology (the belief that mental illness results from lack of nurturing during childhood). However, individuals who completed the course also expressed higher stereotypical attitudes about individuals with mental

illness than did the control group. Relative to controls, individuals who completed the educational course were more likely to perceive people with mental illnesses as unpredictable, lacking personal hygiene, and making others feel uncomfortable or frightened. Corrigan & Watson (2005) indicate that the power of stereotypes is what limits the effects of educational interventions. According to these authors, stereotypes provide a schema that makes encoding disconfirming information difficult. Therefore, if people believe that someone with a mental illness is dangerous, they will be less attentive to data stating that most individuals with mental illnesses are not dangerous, and more attentive to news stories about crimes committed by someone who is mentally ill. Because of this schematic bias, stereotypes can be very difficult to change even through educational information. In summary, these schematic biases serve to perpetuate many of the accepted beliefs about both mental illness causality (e.g., caused by emotional weakness or sinful behavior) and about people with a mental illness (e.g., that they are dangerous, unpredictable, dirty) (NMHA, 1999; Nunally's, 1961).

Effects of Stigmatizing Views

As the previous public opinion studies indicate, symptomatic behavior or the label of mental illness tends to evoke negative judgments. Numerous studies have shown that people perceive identical behavior far more unfavorably when accompanied by a mental illness label (Farina & Ring, 1965; Farina, Felner, & Bourdreau, 1973: Oppenheimer & Miller, 1988; Page, 1977; Purvis, Brandt, Rouse, Wilfredo, & Range, 1988). For

example, one study presented participants with identical vignettes of formerly hospitalized individuals that differed only in a past diagnosis of a physical disorder (cancer) or a psychological disorder (schizophrenia) (Purvis, et. al., 1988). Despite the fact that students rated cancer as a more severe illness, they viewed individuals hospitalized for schizophrenia with significantly more negative regard. The former mental patients were rated as less able to function in the community, less acceptable as neighbors, and less likely to receive help in obtaining a job in comparison to the former cancer patients (Purvis, et. al., 1988).

However, the harmful effects of stigma evidenced in this study are not applicable only to more severe mental illnesses such as schizophrenia. Even those seeking therapy for stress are not immune to the damaging effects of the stigma associated with mental illness (Oppenheimer & Miller, 1988). Over 500 training directors of various graduate medical programs were asked to evaluate hypothetical male or female applicants in one of two conditions, either a history of seeking psychological counseling for interpersonal difficulties arising from stress, or no record of psychological counseling. Applicants with a record of seeking therapy were not only rated as less likely to be called for an interview or accepted into the program, but were also perceived as less competent, less decisive, less of a leader, colder, weaker, and more dependent than applicants with otherwise identical objective qualifications (Oppenheimer and Miller, 1988). In sum, many people are impacted by the stigma of mental illness, ranging from those seeking treatment to stress to those with more chronic conditions such as schizophrenia.

Stigma by Other Stakeholder Groups

In addition to the general public, researchers have identified three groups with attitudes relevant to the stigma of mental illness as "stakeholder groups" (Van Dorn, Swanson, Elbogen, & Swartz, 2005). Members of stakeholder groups are individuals who are associated with someone with a mental illness on a more direct level than the general public. These stakeholder groups include family members of individuals with a mental illness, mental health clinicians, and individuals with a mental illness. Research has shown that all of these groups experience the stigma associated with mental illness (Van Dorn et al., 2005).

Stigma Experiences by Family Members of Individuals with Mental Illness

As mentioned earlier, a stigmatizing condition is often perceived as a "master status" that has the ability to eclipse all other characteristics (Goffman, 1963). Because stigma is so powerful, it can also affect the people related to stigmatized individuals. In effect, stigma has the ability to take on the quality of a "contagion" and affect people who are closely associated with individuals with mental illness, causing these associates to become targets of stigma as well. Researchers have numerous terms for this phenomenon, including courtesy stigma (Goffman, 1963), shame by association (Lefley, 1992) or associative stigma (Mehta & Farina, 1988). Associative stigma affects parents, children, siblings, spouses or significant others, and other family members (Corrigan & Kleinlein, 2005). Family members experience associative stigma in areas such as social exclusion or withdrawal, unrealistic perceptions of responsibility or blame, and

discrimination by mental health professionals (Angell, Cooke, & Kovac, 2005; Corrigan & Kleinlein, 2005; Dubin & Fink, 1992; Lefley, 1992; Schulze & Angermeyer, 2003).

Researchers have documented two primary types of associative stigma experienced by relatives of individuals with mental illnesses. Family members may experience stigma from others (e.g., stigma that generalizes from the mentally ill person to the family), as well as self-stigmatization (e.g., feelings of guilt) (Angell, Cooke, & Kovac, 2005; Lefley, 1989). Families often struggle to come to terms with their own potentially negative attitudes, while at the same time managing those of others such as friends, other family members, coworkers, and the general public. As members of the general public, relatives of individuals with a mental illness likely held stereotyping or stigmatizing views about mental illness before their family member became ill. When a relative is diagnosed with a mental illness, these views become personally relevant for family members (Angell, Cooke, & Kovac, 2005). Perhaps because this stigma is so salient, relatives may endorse or perceive stigma as much as or more than the general public does, as the following research illustrates.

A study of different stakeholder groups' views revealed that family members of mental health consumers did not statistically differ from the general public in their perceptions of the likelihood of violence by a mentally ill person or in their desire for social distance from an hypothetical individual with a mental illness (Van Dorn, Swanson, Elbogen, & Swartz, 2001). Another study with relatives of clients in New York found that 70% of the 461 caregivers surveyed agreed with statements indicating that most people would devalue individuals with serious mental illness. Counter-

intuitively, this percentage is actually higher than the results found in most national surveys. For example, Van Dorn et al. (2001) found that 79% of the family members agree or strongly agree that others perceive mentally ill individuals as violent or unpredictable. The authors contrast these findings with national averages that suggest 60 to 61% of the general public agrees or strongly agrees that mentally ill individuals are violent or unpredictable (Struening, Moore, Link et al, 2001; Link, Phelan, & Bresnahan et al., 1999).

Given their beliefs about the publics' view of mental illness, it is not surprising that family members may feel stigmatized. Relatives perceive that their association with mental illness causes others to view them more negatively. In one survey of family members of individuals with serious mental illness, nearly half of the relatives questioned expressed feeling devalued by others (43%) (Struening, Perlick, Link, Hallman, Herman, & Sirey, 2001). For example, 47% of relatives in the study agreed or strongly agreed with the statement "most people look down on families that have a member who is mentally ill living with them" (Struening et. al., 2001, p. 1636).

Relatives also report that they experience social stigma and withdrawal. Several large studies indicate that 10% to 30% of family members report social avoidance by extended family or friends (Ostman & Kjellin, 2002; Struening et al. 2001; Wahl & Harman, 1989). In Struening et al.'s (2001) study, 40% of relatives agreed or strongly agreed with the statement "most people in my community would rather not be friends with families that have a relative who is mentally ill living with them." This social stigma may lead relatives of consumers to withdraw from some family members and friends.

For example, one study, which examined the experiences of relatives of individuals with obsessive-compulsive disorder (i.e., spouses, parents, and children), found that families may avoid social activities for fear of stigmatizing reactions (Stengler-Wenzke, Trosbach, Dietrich, & Angermeyer, 2004). Furthermore, many relatives in the study reported that they attempt to conceal their relative's illness. Family members confided that concealment and silence could be burdensome. For example, some relatives reported worrying that their relative would be perceived as "being crazy" and, instead of labeling the disorder as a mental illness, attempted to portray the individual as having a "quirk." (Stengler et al., 2004, p. 92). Family members reported that they felt concealment of their relative's mental illness was necessary in order to protect themselves from stigmatization, to protect their mentally ill relative and other family members from stigma, or to honor a request by the mentally ill relative not to reveal his or her status. Along the same lines, Corrigan and Miller's (2004) literature review on family stigma found that between 25% to 50% of family members think that their relationship with the individual experiencing a mental illness should be kept hidden or shame will be brought on the family. The unwillingness of relatives to discuss their family member's mental illness is in sharp contrast to the experiences of families with a physically ill member. One study indicated that family shame was 40 times more likely to occur in families of individuals with a mental illness than in families with a relative who has cancer (Ohaeri & Fido, 2001).

The shame inherent in having to hide a relative's mental illness and the potential risk of being excluded by others in social situations appears to be related to the strong

sense of blame that is sometimes placed on family members of mentally ill relatives (Corrigan & Miller, 2004). In reviewing the research on the impact that mental illness stigma has on family members, Corrigan & Miller identified three main themes: shame, blame, and contamination. According to their review, different types of relatives experience different types of blame and contamination. Children of someone with a mental illness are more likely to be viewed as "contaminated by their parents," while siblings and spouses of the person with a mental illness are more likely to be blamed for not helping for the client adhere to recovery measures (Corrigan & Miller, 2004, p. 538). Lastly, parents of someone with a mental illness are more likely to be blamed for the onset of their child's illness. The fact that family members experience blame for causing or contributing to the development of their relatives' mental illness has been documented in several studies (e.g., Angell, Cooke, & Kovac, 2005; Struening, Perlick, Link, Hallman, Herman, & Sirey, 2001). For example, Struening et. al. (2001) found that half of the relatives sampled believed that the majority of people blame parents for their child's mental illness. Feeling that they might have contributed to the onset or exacerbation of their relative's illness can lead relatives to internalize the stigma in the form of guilt and low self-esteem. In Wahl and Harman's (1989) study of 487 relatives from 20 different states, 21% endorsed the statement that "as someone with a mentally ill relative" stigma had "much" or "very much" unfavorably impacted their own self-esteem. These feelings of lowered self-esteem may be related to the shame or guilt that relatives may feel. Lefley (1992) states that "guilt is the most prevalent manifestation of internalized stigma" (p. 129). The fact that family members report experiencing blame

from different sources, such as professionals and their peers, may contribute to their experience of internalized stigma. It can be very difficult and distressing for family members to experience blame from influential groups such as members of their extended family and mental health professionals (Dubin & Fink, 1992; Wasow, 1995).

Many researchers on family stigma indicate that notions of parental culpability may have originally stemmed from mental health professionals (Angell, Cooke, & Kovac, 2005; Corrigan & Miller, 2004; Goldstein, 1981; & Lefley, 1989). Traditional explanations for the etiology of serious mental illnesses such as schizophrenia often implicated parental weakness or "crazy-making families." (Goldstein, 1981). In accordance with these views, professionals often espoused the wrongly held belief that family members "should leave their relative with mental illness in peace so that professionals can provide the real supporting care needed by the patient" (Corrigan & Miller, 2004, p.541). Although these authors acknowledge that these theories are no longer widely endorsed by the field, their impact remains prevalent through their spread to the general public. Angell et al. (2005) stress that these nurture theories of psychopathology are so prevalent in popular culture that many families continue to feel guilt and blame.

Family members also continue to report feeling stigmatized by mental health professionals and the medical care system (Stengler-Wenzke, Trosbach, Dietrich, & Angermeyer, 2004). According to Stengler-Wenzke and colleagues (2004), relatives report that their interactions with mental health professionals are the most stigmatizing experiences. As research in the following sections illustrates, clinicians appear to hold

many of the same stigmatizing views about mental illness as the general public. To conclude, mental illness stigma can have a contagion effect, wherein even associated groups such as family members also experience stigma. This stigma can even originate from unlikely sources, such as the mental health professionals enlisted to aid recovery (Stengler-Wenzke et al., 2004).

Mental Health Professionals and Stigma

Mental health professionals, whose goal is ostensibly to ameliorate distress, can in fact contribute to stigma and discrimination (Angermeyer, Schulze & Dietrich, 2003). A study that examined the views of the general public and different mental health stakeholder groups, found that mental health professionals (e.g., psychiatrists, clinical social workers) did not differ from the general public or other mental health stakeholder groups in their desire for social distance from consumers or in their estimation of the likelihood that someone with a mental illness would be violent (Van Dorn et al., 2005). Clinicians however, did differ from the public and other stakeholder groups in their perception of the causes of mental illness. For example, professionals were less likely to believe that mental illness was caused by "God's will."

Because professionals may hold less naïve views than members of other groups, they may not stigmatize consumers in the same ways as others (Angell et al., 2005). Angell et al. (2005) indicate that these professionals usually have benevolent intentions toward individuals with mental illnesses. However, these authors describe that while trying to do good, professionals may also have conscious or unconscious derogatory

attitudes toward consumers, which are expressed through paternalistic or coercive strategies. In Angell et al.'s review of first person narratives by individuals with mental illnesses, three main themes occurred. According to consumers, the most frequent types of negative views held by mental health professionals are dehumanization (perceiving consumers as lacking feelings or basic rights), infantilization (treating consumers like children that need to be taken care of), and lowered expectations (the belief that mental illness is a lifelong disability and that consumers should adjust their prospects accordingly).

In addition to examining the perceptions of consumers, professional stigma can be examined through an exploration of the mental health care system. Dubin & Fink (1992) describe how professionals perpetuate stigma in settings such as hospitals. According to Dubin and Fink, individuals in psychiatric hospitals are not granted basic privileges; rather, they must earn them. Instead of trying to make the hospital setting as normal as possible for each individual person, patients often start out with a universally imposed set of restrictions. Rather than reviewing each person's situation on a case-by-case basis, the assumption is made that mentally ill individuals are dangerous and/or unpredictable and that they must prove they are normal before they can earn the same set of privileges that they would have outside the hospital. Even when individuals in a psychiatric hospital prove that they are not dangerous to themselves or others, they are usually not afforded the same amenities as an individual in a physical hospital. Unlike hospitals for primarily physical illnesses, mental hospitals do not allow most patients to have TVs or telephones in their rooms. The inability of some professionals in psychiatric settings to acknowledge

that some mental health clients may be able to handle the freedom that allows them to meet social and relaxation needs, and for professionals to then prevent clients from meeting these needs, is what many clients report is at the heart at the dehumanization process (Angell et al., 2005; Fox, 1999).

The language used to describe people with a mental illness also reveals potentially negative attitudes. When someone has a physical illness that person "has cancer," but when someone has a mental illness that person "is mentally ill," or "is schizophrenic". Describing people in this way (e.g., "he is depressed") reflects the master status that stigma has in defining and being integral to the person's identity. Most physical illnesses are not labeled in this way. Rarely, if ever, would someone say "she is cancerous" or "he is heart-diseased," because these attributes are believed to be just part of the individual, not his or her defining characteristic. (Link & Phelan, 2001; Rusch, Angermeyer, & Corrigan, 2005). The ideas reflected in this terminology perpetuate the phenomenon of "separation of 'us' from 'them'" (Rusch et al., 2005). The person with cancer effectively remains one of 'us,' as cancer is just an attribute, while the person with a mental illness is schizophrenic and therefore one of 'them'. These terms serve to further reduce consumers' sense of belonging and acceptance by focusing on ways in which they constitute a different, distinct group. The utilization of other terms, such as the professional treatment terminology of consent and co-operate and comply, rather than terms such as choose, further represent separation and stigmatizing attitudes. When a client is told to "co-operate" with treatment, rather than being asked to "choose" his or her treatment, he or she may feel more like a child, with little choice, and less like a

worthy, active participant in his or her care. Use of these terms by professionals illustrates infantilization -- the idea that consumers are childlike and need to be cared for of by others (Angell et al., 2005; Leete, 1993).

The idea that people with mental illnesses are categorically different and viewed as "less than" professionals is represented in a study of psychology graduate students (Oliver, Bernstein, Anderson, Blashfield, & Roberts, 2004). In this study, the authors asked graduate students to comment on the number and types of impairments faced by fellow students in the graduate program. While not representative of all graduate students' views, a quote from one respondent illustrates the "us vs. them" sentiments held by some professionals. When asked about the types of problems fellow graduate students experienced, one respondent indicated, "Nothing too major, I think our program does a good job of screening out any major pathology" (p. 143). Other professionals in training who responded to the survey indicated a different concern. For example, some participants noted that the directors of clinical training in their program sometimes judged students based on the fact that they had a mental illness, rather than first looking at whether or not having this mental illness impaired their ability to meet the needs of the program.

Since professionals may hold underlying views that clients are defined by their mental illness (e.g., it is a primary, permanent part of their identity) and, therefore, need to be taken care of, it follows that they may advise clients to lower their expectations (Angell et al., 2005). Clients report that they sometimes feel dismissed by professionals and describe negative interactions with clinicians as "spirit-breaking" in which "our

hopes are shattered" (Deegen, 1990, p. 306; Gray, 2002; Russinova, 1999). The theme of lowered expectations is further reflected in Wahl's (1999a) national survey of over 1300 people with a mental illness. In this survey, 47% indicated that they had at least sometimes "been advised to lower my expectations in life because I am a consumer." As hope is integral to psychiatric rehabilitation, these comments may not only cause immediate distress, but also likely impede recovery (Russinova, 1999). Overall, even mental health professionals can hold negative views about mental illness such as dehumanization, infantilization, and lowered expectations, which, when present may decrease hope and recovery.

Individuals with Mental Illness and Stigma

Like other stakeholder groups such as family members and professionals, individuals with a mental health history are also affected by stereotypes about mental illness. Personal narratives and surveys of people with a mental illness indicate that individuals with a label of mental illness are aware of and affected by instances of stigma in their daily lives (Angell et al., 2005; Wahl, 1999a; Wahl, 1999b). Wahl's (1999a) nationwide survey of mental health consumers revealed that 78% of consumers "sometimes" to "very often" hear people saying unfavorable or offensive comments about mental illness, while 77% of consumers indicated that they witnessed offensive portrayals in the media.

Unfortunately, the stigma that people with mental illness experience often

translates into experiences of discrimination and rejection (Corrigan, 2005; Green, Hayes, Dickinson, Whittaker, & Gilheany, 2003; Wahl, 1999a; Wahl, 1999b). In Wahl's (1999a) study, seven out of ten respondents reported they had at least sometimes been treated as less competent by others, while 53% indicated they had been turned down for a job for which they were qualified when it was revealed that they had a mental illness. Additional studies support that discrimination is a serious problem for individuals with a current or prior mental illness. In-depth interviews with clients who had been formally hospitalized revealed that 51% had experienced occurrences of overt discrimination, such as being shunned or rejected in social situations (Green et al. 2003).

In addition to having immediate negative effects, experiences of stigma and discrimination impact consumers in more global and long-term ways, affecting both their beliefs about themselves and their behavior. Because of the negative connotations associated with the label, the negative effects of stigma can continue even after an individual with mental illness experiences improved health (Link, Struening, Rehav, & Phelan, 1997). Higher levels of perceived stigma are associated with lower self-esteem (Link, Struening, Neese-Todd, Asmussen, & Phelan, 2001), a reduced sense of mastery (Wright, Gronfein, & Owens, 2000), and reduced quality of life (Markowitz, 1998). Furthermore, stigma can affect behavior, leading to impaired social interactions (Green et al., 2003), reduced adherence to medication (Sirey, Bruce, Alexopoulous, Perlick, Friedman, & Meyers, 2001), and reduced help-seeking behavior (Barney at al., 2006).

The interaction of these numerous negative effects of stigma can lead to what some researchers term a vicious cycle. In this cycle, experiences of stigma such as

perceived prejudice or discrimination lead to decreased self-esteem, reduced social networks and fewer jobs (Corrigan, 2005). All of these factors then cause greater amounts of stress and reduced well-being, which then increase the risk that one's mental illness will occur again or worsen, therefore increasing the chance that the person will be exposed to more stigma (Corrigan, 2005).

This cycle often begins with the impact that stigma has on the client's self-concept. Because mental illness stigma is so prevalent and the tainted mark or condition is believed to be so integral to the self, clients may experience what researchers term internalized stigma or self-stigmatization (Corrigan, 2005). "Internalized stigma is the devaluation, shame, secrecy and withdrawal triggered by applying negative stereotypes to oneself" (Ritcher et al., 2003 p. 32). As people with mental illness internalize these negative stigmatizing views, they begin to see themselves as others perceive them and their perception of their own worth and ability is diminished.

Two studies of psychiatric outpatients illustrate the link between stigma and individuals with mental illness' erosion of morale (Ritsher & Phelan, 2004; Ritsher, Otilingam, & Grajales, 2003). Both of these studies assessed stigma with the Internalized Stigma of Mental Illness (ISMI) scale, which was developed with consumer input and includes five dimensions of internalized stigma -- alienation, stereotype endorsement, discrimination experience, social withdrawal, and stigma resistance. In the first study, Ritsher et al. (2003) examined the relationship between internalized stigma and clients' self-concept. Internalized stigma was associated with lower self-esteem (r = -.59, p < .01), reduced feelings of empowerment (r = -.52, p < .01), and lower levels of recovery

orientation (the belief that people with mental illnesses have the ability to overcome their symptoms and recover) (r = -.49, p < .01). To further understand how internalized stigma affects well-being over time, Ritsher & Phelan (2004) assessed levels of these constructs at two different times. Consumers' level of internalized stigma (ISMI) at baseline predicted both depression and self-esteem at the follow-up assessment. Depression was related to global internalized stigma as well as several of the ISMI subscales. Lower self-esteem was associated with the subscale Alienation, which assesses individuals with a mental illness' experience of having a spoiled identity or feeling that they are less than a full member of society and includes items such as "I am embarrassed or ashamed that I have a mental illness" (Ritsher, Otilingman, & Grajales, 2003, p. 35). As this finding illustrates, feeling shame or embarrassment about one's mental illness is related to negative emotional outcomes.

Another study examined how self-stigma and experiences of rejection relate to clients' perceptions of mastery. Wright, Gronfein, & Owens (2000) study of discharged clients from a mental hospital found that social rejection continues to be a source of stress for these clients after they leave the hospital. Supporting the idea of a vicious cycle, Wright et al. found that when clients experience rejection, their level of self-deprecating feelings increases, which then weakens their perceptions of self-mastery. In conclusion, experiences of stigma and discrimination can impact consumers in interactive, long-term ways, affecting both their perceptions and their behavior (Ritsher, Otilingman, & Grajales, 2003; Wright, Gronfein, & Owens, 2000).

Self-fulfilling Prophecy

Individuals with high levels of internalized stigma report having low self-worth and expect to be stigmatized because of their mental illness (Ritsher et al., 2003; Ritsher & Phelan, 2004). These beliefs can then affect consumers' interactions through the phenomenon of self-fulfilling prophecy, which is often considered in the context of self-verification theory. According to self verification theory, an individual pursues or accepts evaluations from others that are consistent with his or her current self-concept (Swann, 1996).

These biases then affect the way in which consumers interpret and interact with their social environment. For example, if you believe that others will stigmatize or reject you if they find out about your mental illness, then you may actively attend to and seek out information the confirms these beliefs (e.g., the confirmation bias). Information that confirms these beliefs will likely be quite negative. In addition, the fact that consumers may discount or ignore information that contradicts these views (e.g., she doesn't really like me, she just feels sorry for me), further compounds the problem (Edwards & Smith, 1996; Nickerson, 1998). The need for cognitive consistency between beliefs and actions may partially explain why individuals with mental illnesses are more likely to act in ways that confirm stigmatizing beliefs when they believe others are aware of their status. By acting in accordance with negative stereotypes and expectations, actions are more consistent with perceptions, and both cognitive consistency and schemas are maintained. Cognitive dissonance may be reduced, but the cycle of stigma is perpetuated.

A seminal study by Farina, Gliha, Boudreau, Allen, and Sherman (1971)

demonstrated how these cognitive biases can influence behavior of someone with a mental illness through self-fulfilling prophecy. In this study, people with a mental illness were divided into two groups: mental health consumer status revealed and mental health consumer status concealed. Both groups were paired with non-mental health consumers to complete a task. In the first group—mental health consumer status revealed, consumers were informed that the other people in the social setting had been told about their mental illness; whereas, in the second group—concealment, consumers believed that others did not know about their mental illness. The belief that others knew about their mental illness led the consumers in the revealed group to feel less appreciated, to perceive the task as more difficult, and even decreased their task performance. Furthermore, in the revealed condition, an observer viewed the consumer participants as tenser, more anxious, and less well-adjusted.

These findings are echoed in a more recent study, in which Wright et al. (2000) found that individuals who expressed more worries about rejection from others subsequently experienced more rejection. In this study, Wright et al. operationalized concerns about rejection as defensive strategies or "strategies that would minimize possible stigmatization or discrimination through withdrawal or inaction" (p. 75). Wright et al. found that individuals in an inpatient setting with greater concern about stigma reported more experiences of rejection one year after being discharged than did hospitalized individuals with lower concern about stigma. Thus, even after a person has began to recover, these cognitive biases can continue to influence behavior through avenues such as the self-fulfilling prophecy (Farina, Gliha, Boudreau, Allen, & Sherman,

1971).

Anticipated Stigma

Part of the vicious cycle of internalized stigma illustrated by self-fulfilling prophecy research is that individuals with mental illnesses come to expect or anticipate stigma. Anticipated stigma is related to public stigma, or the views that the public holds about those with mental illness, but it also different, in that it more specifically focuses on the degree to which those individuals expect bad reactions to occur, namely, that they *anticipate* the stigma. "The concern that others will look down upon, shun, or discriminate against them is at the heart of anticipated stigma. *Anticipated stigma* refers to the degree to which individuals expect that others will stigmatize them if they know about the concealable stigmatized identity" (Quinn & Chaudoir, 2009, p. 626).

Eighty-one percent of a nationwide sample of people with a mental illness indicated that they at least sometimes worry that others will view them unfavorably because they have a mental health history, with 66% indicating that this is often or very often a concern (Wahl, 1999a). While not an active form of discrimination, anticipated stigma has both cognitive and behavioral consequences. Much like those who suffer from other types of stigma and discrimination, individuals who experience greater levels of anticipated stigma are more likely to have lower self-esteem, reduced quality-of-life, and increased levels of demoralization, depressiveness, and employment problems (Link, 1987; Rosenfield, 1997; Wright et al., 2000). Anticipated stigma may have these powerful effects on the lives of individuals with mental illnesses for several reasons,

including: 1) Anticipated stigma has the ability to shape all interactions, not just the ones in which they experience overt stigma, 2) Anticipated stigma affects the quality of the social interaction – making people feel more self-conscious and less authentic, and 3) Anticipated stigma occurs more frequently than actual stigma or discrimination (Angermeyer et al., 2004; Markowitz, 1998; Scheff, 1988).

When consumers anticipate stigma, they are likely to feel ashamed and worry that others will reject them because of their mental illness. As evidenced in the studies of relatives of individuals with mental illness, feelings of shame and guilt are powerful components of stigma. Experiencing negative self-referent emotions such as shame and guilt in many ways parallels the experience of anticipated stigma (Scheff, 1988). According to Scheff (1988), shame and pride drive our actions through a reward system wherein individuals are constantly evaluating possible shame or pride that will be achieved with any action. Scheff indicates that although "formal rewards and punishments are infrequent, even rare, the deference-emotion system functions virtually continuously, even when we're alone, since we can imagine and anticipate its motions in vivid detail" (Scheff, 1988, p. 396). In this way, anticipated stigma may be even more powerful than actual discrimination, since it may influence individuals with mental illness' perceptions all of the time, not just in discreet instances of overt stigma or discrimination.

Research confirms that anticipated stigma occurs even more often than experienced stigma (Markowitz, 1998). A study with clients from self-help groups in New York found higher rates of anticipated stigma compared to rates of actual

discrimination. In this study, 72% of the clients surveyed "agreed" or "strongly agreed" that someone with a mental illness -- like themselves -- will experience discrimination and be devalued, while, approximately half of the clients reported incidences of actual discrimination in the prior six months (Markowitz, 1998). In another study, Angermeyer et al. (2004) interviewed 210 German clients with either schizophrenia or depression. Angermeyer et al. assessed these clients' experiences across four domains of subjective stigmatization (interpersonal interaction, public image of mentally ill people, access to social roles and structural discrimination). For both individuals with schizophrenia and individuals with depression, anticipated stigma occurred more frequently than actual stigma in all areas. The difference between anticipated stigma and actual stigma was especially salient in the area of employment, where less actual discrimination occurred (1.9% - 19% of clients reported), but much more discrimination was anticipated (69% - 82% of clients reported).

Anticipated stigma may also be more prevalent in individuals with mental illness than it is in individuals with a physical illness. A study of individuals with either a mental or physical illness found that individuals with a mental illness (60%) were twice as likely as individuals with diabetes (28%) to report worrying about being fired if their illness were revealed in the workplace (Lee, Lee, Chiu, she Kleinman, 2005). In the same study, 56% of people with a mental illness anticipated that their friends would distance themselves if their illness were revealed, compared with only 4% of clients with diabetes.

Anticipated stigma can also affect performance on cognitive tests (Quinn, Kahng,

& Crocker, 2004). In their study, Quinn et al. examined the performance of college students with a history of mental illness on GRE reasoning tests when they either revealed or did not reveal their mental illness history. Revealing a history of a mental illness such as depression before taking the test significantly decreased performance compared to the no-reveal condition. This study's findings are consistent with the overall conclusions reached in research about anticipated stigma. This research has consistently demonstrated that anticipated stigma can influence individuals with mental illness' perceptions and behaviors, even when discreet instances of overt stigma or discrimination are not present.

Stigma Consciousness

While anticipated stigma is more common for people with a mental illness, not all mental heath consumers anticipate the same degree of social stigma. Consistent with the self-fulfilling prophecy phenomenon, the extent to which one is conscious of stigma in social settings affects the quality of consumer's social interactions. Pinel (1999) developed a self-report measure of Stigma Consciousness (SCQ) to assess the extent to which target groups expect to be stereotyped by others. In this way, stigma consciousness can be conceptualized as a way to define and measure a specific operationalization of anticipated stigma: the degree to which people are aware of or conscious about the public stigma/stereotypes impacting their specific group membership/identity. Pinel's work investigating stereotype target groups such as women,

and gay men and lesbian women, demonstrates that stigma consciousness has many cognitive and behavioral outcomes. Women who are high in stigma consciousness (i.e., expect men to treat them in sexist ways) are more self-conscious about how others view them, perceive greater levels of discrimination, and are able to provide more specific examples of discrimination than women low in stigma consciousness. Pinel also found similar patterns for gay men and lesbian women who are high in stigma consciousness. In addition to affecting cognitions, stigma consciousness also affects the way targets of stigma act in social situations. In Pinel's study, women who were high in stigma consciousness were more likely to avoid opportunities with males, in which they could disprove or disconfirm stereotypes. Furthermore, when women in another study were led to believe that their male partner was sexist, they acted more critically toward him. In turn, these critical behaviors provoked negative responses from male participants, which then provided justification for women's initial expectations of sexism (Pinel, 2002).

Expectations of racial stigma can also negatively impact the social interactions of minority group members. Two studies examining real-world social interactions between sets of ethnic minority and Caucasian college students found that the more minorities expected to experience prejudice, the more negative social interactions they experienced (Shelton, Richeson, & Salvatore, 2005). The first study examined the everyday experiences of ethnic minority and Caucasian college roommate sets. For ethnic minorities, high levels of stigma consciousness about race were associated with greater feelings of anger and hostility during social interactions with their roommates. In addition, ethnic minority members who were high in stigma consciousness reported that

they felt less authentic during these interactions than ethnic minority members with low levels of stigma consciousness.

A second study by the same authors examined how ethnic minority and Caucasian pairs interact when expectations of stigma are primed in a laboratory setting (Shelton, Richeson, & Salvatore, 2005). In this study, half of the participants were primed with thoughts about how ethnic minorities are often the targets of prejudice (race prime condition), while another group was primed with thoughts about how elderly individuals are often the targets of prejudice (elderly prime condition). For ethnic minority members high in stigma consciousness, being primed about racial prejudice reduced how much they liked their partner, increased their negative feelings, and reduced their feelings of authenticity during social interactions. Interestingly, Caucasian members found their interactions with ethnic minorities who were primed to expect racial prejudice more enjoyable than their interactions with ethnic minorities who were primed about elderly prejudice. Caucasian members who interacted with the racial prejudice expectations group experienced less negative feelings during the interaction, liked their partner more, and found the interaction more enjoyable. The authors explain that ethnic minorities in the racial prejudice group may have employed compensatory strategies to alleviate possible adverse effects from prejudice, which made them more likable to Caucasian participants. However, as the previous study illustrates, these compensatory strategies come at a cost -- individuals may come across wonderfully to others, but they feel like they are not able to be themselves (authentic) and harbor internal negative feelings. In essence, there is a divide between the experience of targets of prejudice and the

experience of non-targets, with targets bearing the brunt of the stigma internally. Overall, these studies demonstrate that expecting to be the target of prejudice can cause emotional and cognitive reactions (more negative affect; reduced feelings of authenticity), as well as affect behavior (more criticism, avoidance, or use of compensatory strategies).

As the previous studies illustrate, members of stigmatized groups differ in the degree that they expect to be stereotyped. Demographic and environmental factors are two components that can affect the level of mental health consumers' anticipated stigma. For example, in one study, individuals with depression and those with schizophrenia anticipated approximately the same level of stigma, even though individuals with schizophrenia had more occurrences of actual stigma (Angermeyer, Beck, Dietrich & Holzinger, 2004). Furthermore, people with a mental illness living in small towns anticipate more stigma than individuals with mental illness who live in the city, even though the reported rates of discrimination are the same in both locations (Angermeyer et al., 2004). Overall, research has demonstrated that stigma consciousness impacts many different stereotype target groups and has many cognitive and behavioral outcomes.

Concealment

Anticipating stigma may also lead individuals to conceal their mental illness. If people with mental illnesses believe that others will stigmatize them because of their consumer status, it follows that they will attempt to conceal this information. Numerous first-person narratives and survey studies of individuals with a mental illness indicate that concealment is a common occurrence. Green et al.'s (2003) study of former psychiatric

patients found that “the overwhelming response to the perceived stigma of mental illness was a strategy of non-disclosure.” (p. 228). Furthermore, Wahl’s (1999a) nationwide survey of people with a mental illness found that 55% of participants “often” to “very often” avoided indicating their mental health consumer status on written applications (for licenses, housing, etc) for fear that this information would be used against them. In the same study, 76% of consumers indicated that they had avoided telling others outside of their immediate family about their mental illness, with 47% indicating that this was often or very often the case.

While a common occurrence, concealment is often not an effective coping strategy, and in fact, can even make one’s situation worse (Link, Mirotznik, & Cullin, 1991). Link and his colleagues assessed coping orientations that people with a mental illness might use in response to stigmatizing labels. They defined and assessed three different types of responses, secrecy (concealment of treatment history from employers, relatives, or potential lovers to avoid rejection), selective avoidance or withdrawal (limiting social interactions to those who know about one's mental illness), and educating others (trying to educate and enlighten others to ward off negative attitudes). They chose these coping responses because of their prominence in the literature, utilization by consumers, and because mental health professionals often recommend these coping strategies. In this study, researchers examined the association between coping mechanisms and outcomes such as feelings of demoralization expectations of rejection, and the experience of unemployment.

Results of the study found that utilizing secrecy as a coping mechanism did not

significantly improve outcomes. In fact, there was a trend for individuals who used secrecy to experience more feelings of demoralization and unemployment. In addition, while not statistically significant, using secrecy as a strategy made expectations of rejection more salient, not less salient. The coping mechanism of educating others was associated with a pattern of results similar to those for the secrecy coping strategy. However, utilizing withdrawal and avoidance strategies to cope with stigma had slightly different outcomes. Individuals who used withdrawal as a coping mechanism reported less salient expectations of rejection, however, they experienced more feelings of demoralization and problems with employment. One interpretation of these results is that avoidance may provide a quick-fix to stigma by temporarily removing thoughts of rejection. However, these results indicate that long-term consequences result from this avoidance, such as increased feelings of demoralization and unemployment. In conclusion, educating others, concealment and avoidance are not effective coping mechanisms for dealing with one's mental health status. Despite the fact that these strategies are the ones most frequently recommended by professionals and used by consumers, research supports that utilization of these strategies may make things worse rather than better. These strategies can be harmful because they can lead to more social withdrawal and reinforce patients' negative views of themselves and increase their expectations of rejection.

As these results have demonstrated, concealing a mental illness can have deleterious effects on consumers' personal lives. People with a mental illness may conceal their stigmatizing conditions in order to avoid negative reactions. However,

attempting to avoid stigma can lead to greater preoccupation with the stigmatizing condition (Smart & Wegner, 1999), social avoidance (Pinel, 1999), more effortful interactions in workplace and social settings (James, LaCroix, Kleinbaum, & Strogatz, 1984; Smart & Wegner, 1999) and poorer physical health (James et al., 1984).

Research on concealable stigma and mental control illustrates how keeping a secret affects individuals with a mental illness' thoughts and social interactions (Smart & Wegner, 1999). Smart & Wegner examined how concealing or revealing one's mental illness affects consumers' external behavior (social interactions with a peer) and internal experiences: levels of thought suppression (attempts to push away thoughts), intrusive thoughts (thoughts popping up), secrecy (desire to hide and conceal), and projection (how much they believed their partner exhibited stigmatized traits). This study utilized an interview paradigm, where sets of participants with and without eating disorders were randomly assigned to either role-play someone with an eating disorder (ED) or someone without an ED. When participants with eating disorders concealed their status, they reported having more intrusive thoughts about eating and engaging in more attempts to suppress these thoughts during an interview with researchers. In addition, individuals in the concealed ED condition exhibited more secrecy, and were more likely to project ED symptoms onto the other participant (even though they did not know this participant's ED status). In essence, concealment, which is designed to reduce stigma led to more intrusive thoughts, not less, resulting in a "rebound effect." This finding is consistent with work in the area of intrusive thoughts. Researchers have termed the seemingly paradoxical effect of being more likely to remember something that you make an effort to forget as the

"white bear" effect. Namely, this effect has demonstrated that if someone tells you to not think about white bears, you will be more likely, not less likely, to think about white bears (Wegner, 1987).

In contrast to their finding about thought suppression, Smart and Wegner (1999) found that concealing one's eating disorder (ED) had a relatively positive effect on social interactions. Participants who concealed their ED were rated as more comfortable, less neurotic, and less emotional than participants with an ED who revealed their status. The results of this study are consistent with previous research, which demonstrated that individuals with stigmatizing conditions may appear to do well in social situations on the outside, all the while struggling to manage more negative or intrusive experiences of stereotyped beliefs on the inside. Taken together, these findings demonstrate that hiding a stigmatizing characteristic does not make it go away, instead, feelings of stigmatization may be turned inward.

Attempting to avoid stigma is not an easy task for consumers, and can be quite effortful at times In their paper about current conceptualizations of stigma, two of the most prominent stigma researchers constructed a stigma concept that outlines core issues in stigma research (Link & Phelan, 2001). According to Link and Phelan, one core issue in stigma research is the fact that while individuals can, and often do, put forth a great amount of effort to avoid stigma-related outcomes such as medical insurance discrimination, social rejection, or an insult to self-esteem, efforts to avoid stigma have many costs. Attempting to avoid stigma reduces the amount of energy that people with a mental illness have to focus on other things and can take a toll on one's mental health

(e.g., more intrusive thoughts) and physical well-being (e.g., higher blood pressure) (James, LaCroix, Kleinbaum, & Strogatz, 1984).

Previous research has illustrated how attempting to avoid stigma and utilizing compensatory strategies negatively affects psychological outcomes, but these mechanisms also have the ability to affect physical health. A related study of Black American male employees demonstrates how the perception that others hold stigmatizing views in the workplace can contribute to an increase in blood pressure. In this study, the authors investigated John Henryism, which is defined as a cultural pattern wherein some black males attempt to work extra hard in order to compensate for a potentially stigmatizing environment. In their study, the compensatory strategy of John Henryism was related to increases in diastolic blood pressure (James et al., 1984). In this circumstance, the effort exerted to reduce one negative outcome essentially creates stress that in turn may affect another adverse outcome, hypertension (Link & Phelan, 2001; James et al., 1984).

Even in trying to avoid stigma through methods such as concealment, consumers can never feel certain that they have succeeded in achieving this goal. In a study of individuals with mental illness' experiences with disclosure, individuals who did not disclose their status at work still expressed concerns that others knew about their psychiatric disability (Goldberg, Killeen, & O'Day, 2005). In reviewing the statements of people with mental illness in this qualitative study, the authors concluded that "whether the employers actually knew about the participant's psychiatric disabilities is not as important as the fact that the participants believed they did." In other words,

keeping one's mental health status a secret did not necessarily protect consumers from the belief that they were currently being stigmatized or could be stigmatized by their employers in the future. One example of this is an individual in the study who held a government job and was currently seeking another government job. When she had difficulty in finding a new job, she wondered if potential employers might have found out about her psychiatric disability, despite the fact that she had not revealed her mental illness at work. To conclude, both first-person narratives and survey studies of individuals with a mental illness indicate that concealment is a common occurrence (e.g., Green et al., 2003).

The Decision to Disclose

Another component of attempting to avoid stigma is the difficult decision many individuals face regarding whether to reveal or conceal their mental illness. Because of the complex situations surrounding the determination whether or not to disclose, Goldberg et al. (p. 478, 2005) describe this difficult decision as the "Disclosure Conundrum." In their qualitative study of people with psychiatric disabilities, individuals with mental illness described benefits of concealment such as the ability to "blend in" as well as costs. However, there are also difficulties in non-disclosure. Examples of challenges faced by individuals who choose nondisclosure included difficulties in explaining gaps in employment history, problems obtaining accommodations in the workplace, and difficulty maintaining the confidential nature of the diagnosis. In this study, people with mental illness described the effort involved in creating complicated

stories in order to avoid disclosure. For example, one individual with a psychiatric disability described the difficulties in fabricating stories as, "inventing it creates stress and it is using your mind to concoct all these things."

Williams & Healy (2001, p. 112) conducted an exploratory interview-based study of disclosure decisions in people with "minor mental health problems" (consumers of mental health services – primarily for anxiety and depression - with no known prior history of mental illness). In this study, individuals with mental health problems reported concerns that their disclosure would have a negative impact on the way they are perceived by others. Three frequently mentioned perceived negative impacts of disclosure included 1) that other would view them as weak, 2) that others would believe that they lacked self-control and could not hide their emotions, and 3) that others would see them as unable to cope with life. As a result of these perceptions about disclosure, many individuals were in the process of " 'passing' (attempting to conceal their problems) or 'covering' (attempting to reduce their significance)" (Williams & Healy, 2001, p. 112). As one individual described, "I project an image outside of this house that I don't want shattered" (p.113).

As the previous studies illustrate, attempting to "pass" can be a common occurrence with individuals who have concealable stigmatizing conditions. However, additional research illustrates that this "passing" may reduce some ill effects such as rejection, but can in turn increase other negative outcomes. In one pilot and two experimental studies, Barreto, Ellemers, & Banal (2006) researched the positive and negative effects of "passing" while completing a partner-based task. In their pilot study,

the authors asked college students to relate an experience where they had hidden an identity. When relating these experiences many members reported feeling that concealing this identity or passing would make them feel better, that is, they expected that concealing this identity would have a positive impact. However, for most people, the opposite effect occurred – few people reported feeling better as a result of concealment, whereas 84% reported a negative emotional impact (e.g., feeling uncomfortable, guilty, ashamed or insecure), and 11% reported negative effects on actions (e.g., considered termination of the relationship). In the two studies that stemmed from these results, individuals were randomly assigned to be in and possibly "pass" as a member of a "contextually devalued group" (someone without an art history major on an art history task—where knowledge of art was desirable) (Barreto, Ellemers, & Banal, 2006, p. 340).

In the first experiment, individuals were randomly assigned to either pass or reveal their devalued identity. After completing a partner-based art evaluation task, some members were told that their partner had requested to work with an art history major. Members were then asked to either reveal their identity (state their true major) or lie about their major (pretend to be an art history major when they were not). Participants who were advised to lie about their identity and attempt to "pass" as an art history major believed that their partner had more positive evaluations of them, as they were perceived as members of the more desirable identity group. However, negative effects were seen on participants' performance-related self-confidence, that is, they felt less self-confident about their own performance. A follow-up study revealed that concealing their identity on a similar task also had a negative emotional impact on participants' feelings of guilt

and shame. These feelings of guilt and shame explained the low self-confidence participants experienced. Consistent with other research, these studies support that concealing one's mental illness is associated with more positive evaluations by others, wherein at the same time may lead to an increase in negative internal consequences such as feelings of guilt and shame and lowered self-confidence.

Disclosure in the Workplace

Choosing to reveal or conceal one's mental illness status in the workplace is an especially precarious decision. On one hand, research has shown that employers discriminate against individuals with psychiatric disabilities (Albrecht, Walker, & Levy, 1982). On the other hand, if individuals with disabilities do not reveal their mental health status then they do not have the ability to utilize the Americans with Disabilities Act (ADA). Not only does the ADA prohibit discrimination, but declares employers must provide reasonable accommodation such as modifying the work environment, purchasing new equipment, reassigning job duties, or alternating work schedules to assist qualified employees (Klimoski & Palmer, 1994). However, individuals with mental illness will not be able to take advantage of these accommodations if they do not reveal their mental health consumer status in the workplace. Utilization of the ADA may further be inhibited by powerful groups or individuals advising people with mental illness not to reveal their status at work.

In a study designed to determine the accessibility of the ADA to people with psychiatric disabilities, those who know the ADA best, heads of EEOC offices, civil

rights ADA attorneys, and ADA consultants to companies, were personally interviewed (Solomon, 1993). Solomon found that the risk of discrimination for those with psychiatric disabilities in the workplace is considered so high that even with ADA protection, not one of the respondents endorsed disclosing a mental health history (Solomon, 1993). Ironically, in having to self-identify to request accommodation, people with mental illnesses are often reluctant to exercise their lawful rights for fear of discrimination by the very legislation enacted to prohibit it (Bonnie & Monahan, 1997).

However, not all workplace experiences for individuals with mental illness are negative. Many of the individuals with mental illness in Green et al.'s (2003) survey of former psychiatric patients reported concern about workplace discrimination. However, most participants who had disclosed their illness in the workplace experienced "to their profound surprise" a sympathetic or supportive reaction from employers and coworkers (p. 227). Furthermore, in Wahl's (1999a) study, consumers indicated that the majority of their supervisors and coworkers were positive or accommodating when they revealed their mental illness, with 31% indicating that this was "often" or "very often" the case. Integrating relatively positive findings such as these with the more negative findings from other workplace discrimination studies epitomizes the disclosure conundrum consumers face. How can consumers make the decision to reveal or not reveal? As Dubin & Fink (p. 6, 1992) describe in Effects of Stigma on Psychiatric Treatment, mental health professionals are often asked for advice on this topic, for which there is no easy answer. In this way, advice occurs in the context of many factors, which have to be weighed and considered by both the advice giver and the person receiving the advice. This may be

why qualitative research shows that people may seek advice from several different groups (Dubin & Fink, 1992; Herman, 1993).

Often mental health professionals are put on the horns of a dilemma, having to weigh the realities of stigma in society versus the therapeutic efforts to instill a sense of normality in our patients. For example, a 21 year-old patient asks: "Doctor, I want to go to medical school. Should I put it on my application that I've seen you in psychotherapy for two years?" What is the response? It is a difficult decision.

Family members and friends may also give solicited and unsolicited advice to consumers about disclosure. Herman (1993) conducted a four year long research study of discharged chronic and nonchronic psychiatric patients from seven different general hospitals and two psychiatric hospitals. Her study consisted of three to five hour individual interviews with 146 chronic and 139 non-chronic former patients. In Herman's study, one- third of the clients that were interviewed indicated that they had participated in disclosure "coaching sessions" with other people such as parents, close friends, spouses, or other patients. Individuals with mental illness described these sessions as involving many practice exercises and role-plays, through which consumers could learn to manage their status as someone with a mental illness, often through the use impression management or deceptive strategies. This coaching may provide a crash course in what Goffman (1963) termed "disclosure etiquette," or knowing how and when to reveal a stigmatizing condition. This disclosure training may be very helpful to mental health consumers in avoiding or reducing stigma, and also may impact their decisions.

In their "Disclosure Conundrum," research Goldberg, Killeen, & O'Day (2005)

found additional support that mental health consumers' employment decisions were influenced by the perceptions of their counselors and families. Individuals who felt more support and reported higher expectations from their social network -- described as the belief that individuals in their support network believed that they would be able to maintain employment overtime, were more willing to seek full-time employment or higher-paying work. Since family member and therapist beliefs about the feasibility of maintaining a long-term job have been shown to impact clients' behavior, it is worth considering what kind of message this type of advice may send (e.g., if people at your work know you have a mental illness, you could lose your job or be discriminated against), and how this may correspond to the decisions that consumers make about their own abilities and future prospects.

Rationale

The strategies that people with mental illness choose for stigma management have important consequences for their sense of self and social identity. According to Goffman (1963), what a stigmatized individual desires most is acceptance. Success for individuals with mental illness involves the ability to think of themselves as normal, non-deviant human beings and for others to accept them in this way (Herman, 1993). Much like all human beings, individuals with mental illness have an intrinsic desire to belong (Baumeister & Leary, 1995; Goffman, 1963). This suggests the questions: what factors contribute to individuals with a mental illness' sense of belonging, and what factors perpetuate the idea that they are part of a stigmatized "other" group?

Research has demonstrated that mental health consumers internalize negative public stereotypes about mental illness (Ritsher et al., 2003). When consumers are conscious of stereotypes and anticipate stigma, they may experience psychological effects (e.g., lower self-esteem, more negative affect, reduced feelings of authenticity, increased levels of intrusive thoughts) and behavioral effects (e.g., avoidance, more effortful social interactions) (e.g., Angermeyer et al., 2004; Link, 1987; Markowitz, 1998; Rosenfield, 1997; Scheff, 1988; Wright et al., 2000). However, these consequences are not inevitable -- not all consumers expect to be stereotyped to the same extent (Ritsher et al., 2003). Because consumers vary in the level in which they are conscious of stigma and anticipate negative reactions from others, it is important to investigate what factors may correlate with stigma awareness and internalization.

One factor closely related to stigma is the decision to disclose or conceal a mental illness. As research has shown, choosing to disclose or conceal one's mental illness is a decision that many consumers grapple with both during and after their illness (e.g., Goldberg et al., 2005; Williams & Healy, 2001). Both professionals and individuals with mental illness agree that disclosure decisions are not easy (Solomon, 1993). On the one hand, keeping one's mental illness a secret protects individuals from potentially adverse reactions and rejections from others, yet, on the other hand, concealing forces individuals to hide a part of themselves, which takes effort and can perpetuate anticipated stigma, shame, intrusive thoughts about "passing" or concealing, and an "us" versus "them" phenomenon.

In attempting to make decisions about their lives, consumers may actively seek

out consultation from both mental health professionals and family members (Goldberg et al., 2005; Herman, 1993). Individuals with mental illness may seek advice on such topics as making choices about revealing or establishing appropriate goals. Research has shown that family members often give advice and provide coaching about ways in which individuals with mental illness can conceal their mental illness, while professionals may advise clients to lower their expectations or pursue less demanding goals (Herman, 1993; Wahl, 1999a). This advice may be well intended, or possibly even helpful (e.g., designed to reduce occurrences of rejection or failure). However, it is possible that this advice, while helpful or solicited, may also be correlated with stigma factors such as internalized stigma, stigma consciousness, and concealment behavior. Therefore, in the way that some advice or treatment may be helpful (e.g., antibiotics may kill harmful bacteria), it is also possible that this well-intended, and possibly even effective, treatment could also be related to unintended consequences (e.g., decreasing good bacteria, causing secondary infections, upset stomach, etc.). Given the possibility of these different relationships, we wanted to look at how this possibly well-intended advice may correlate with adverse outcome/increased stigma. This information would help give a more complete pictures of the possible advice correlates, as people may continue to worry about mental illness stigma even after their symptoms/treatment stop. Because of the negative connotations associated with the mental illness label, concerns about stigma have been shown to continue even after an individual with mental illness experiences improved health (Link, Struening, Rehav, & Phelan, 1997; Wright, Gronfein, & Owens, 2000).

Current Study Design

The current study sought to advance mental illness stigma research by investigating how constructs established by prior researchers, such as stigma consciousness and internalized stigma, may be related to the advice received by mental heath consumers. In this study, I examined stigma from the perspective of individuals with a mental illness by investigating the advice that these individuals received from social referents such as professionals and family members. This advice primarily focused on two areas, 1) Disclosure and 2) Lowered Expectations. Stigma consciousness and internalized stigma are robust phenomena that research has demonstrated are frequently associated with negative outcomes (Pinel, 1999; Ritsher & Phelan, 2004). However, few prior studies have examined how factors from individuals with mental illness' social environment are related to stigma and its correlates. Thus, this study aimed to close this gap in the research by investigating how the advice individuals with a mental illness receive is related to constructs such as the internalization of stigma (how much they apply mental illness to themselves), stigma consciousness (awareness of mental illness stigma), self-esteem, and help-seeking behavior.

In this study, individuals with a mental illness or history of a mental illness were administered adapted self-report measures about the advice that they received from important social referents (i.e., family members, mental health professionals). The first scale, the Advice from Social Referents Scale about Disclosure (ASRS-D) contained items designed to measure the advice that social referents gave individuals with mental

illness about disclosing their status as someone with a mental illness. In addition, mental health consumers completed the Advice from Social Referents Scale about Lowering Expectations (ASRS-LE), which assessed the advice that people with mental illness received about reducing their expectations in different environments such as school or work because of their mental illness. The Action Impact scale and the Emotion Impact scale of the ASRS-D and ASRS-LE contained items designed to assess the perceived/self-reported impact that the advice had on mental health consumers' lives in the areas of well-being and decision-making/action. Two scales were computed from these measures to assess the impact of advice from social referents on individuals with a mental illness' well-being (emotional impact) and decision making (action impact). Individuals with a mental illness were also administered measures of the aforementioned outcomes: 1) internalization of stigma, 2) stigma consciousness, 3) self-esteem, and 4) help-seeking behavior. Details about each measure are provided in the Methods section of this paper and copies of each measure are located in the attached Appendix A. In the current study, the following hypotheses were put forth.

Hypotheses

Advising someone with a mental illness to conceal his or her status as someone with a current or former mental health problem may communicate to this individual that his or her status may not be accepted by others. This expectation to be rejected if the mental illness is revealed, in some ways, equates to telling the individual to anticipate being stigmatized by others. While this advice may be helpful (or even necessary for

navigating some areas such as employment), research has illustrated that anticipating/expecting stigma can also be related to negative outcomes both in behavior and self-concept. For example, higher levels of anticipated stigma are associated with lower self-esteem, reduced quality-of-life, reduced help-seeking behavior and increased levels of demoralization and depressiveness (e.g., Barney, Griffiths, Jorm. & Christensen, 2006; Link, 1987; Rosenfield, 1997; Vogel, Wade, & Hacker, 2007; Wright et al., 2000). Past research has also shown that an avoidance of help-seeking behavior is related to a desire to conceal mental health problems for fear of negative implications for one's job/career path. For example, a qualitative study of medical students found that "avoidance of appropriate help-seeking behavior starts early and is linked to perceived norms which dictate that experiencing a mental health problem may be viewed as a form of weakness and has implications for subsequent successful career progression" (Chew-graham, Rogers, & Yassin, p. 873, 2003). If not seeking help is a way to conceal (e.g., keep it off school or company insurance records), then this may be related to receiving more advice to conceal. To explore the possibility of these relationships, the following hypotheses were put forth:

1. Receiving more advice to conceal one's mental illness is expected to be positively correlated with levels of internalized stigma (the degree to which one personally endorses and internalizes stigma) and stigma consciousness (the degree to which one expects stigma, whether or not they agree with the stereotypes or not), and negatively correlated with self-esteem, and help-seeking behavior (e.g., seeking therapy).

Research examining the experiences of individuals with mental illness from their perspective reveals that people with a mental illness are often advised to lower their expectations. For example, about 70% of the 1,300 individuals with a mental illness in Wahl's (1999a) study reported they had at least sometimes been treated as less competent by others, while 47% indicated that they had been advised to lower expectations because of their mental illness. Even mental health professionals can hold negative views about the capabilities of individuals with a mental illness. According to individuals with a mental illness, the most frequent types of negative views that seem to be held by mental health professionals are dehumanization (perceiving consumers as lacking feelings or basic rights), infantilization (treating consumers like children that need to be taken care of), and lowered expectations (the belief that mental illness is a lifelong disability and that consumers should adjust their prospects accordingly) (Angell et al., 2005).

Stigmatizing beliefs and advice to lower expectations can contribute to the feeling that an individual with a mental illness is different and flawed because of his or her status as someone with history of a mental illness. Because of the negative connotations associated with the label, the negative effects of stigma can continue even after an individual with mental illness experiences improved health (Link, Struening, Rehav, & Phelan, 1997). Higher levels of perceived stigma are associated with lower self-esteem (Link, Struening, Neese-Todd, Asmussen, & Phelan, 2001), a reduced sense of mastery (Wright, Gronfein, & Owens, 2000), and reduced quality of life (Markowitz, 1998). Furthermore, stigma can affect behavior, leading to impaired social interactions (Green et al., 2003) and reduced help-seeking behavior (Barney et al., 2006). While being less able

may be part of the mental illness symptoms, these perceptions can linger, even after the illness remits (Link & Phelan, 2001). In conclusion, being perceived in stigmatizing ways, such as having less abilities and lowered options for positive outcomes, is related to increased stigma and reduced help-seeking,. Therefore, it is possible that receiving advice, in essence directly telling someone to lower expectations/that they are less able, may also be related to these adverse outcomes. Thus, the following hypothesis was put forth:

2. Receiving advice to lower expectations is expected to be positively correlated with levels of internalized stigma (the degree to which one personally endorses and internalizes stigma) and stigma consciousness (the degree to which one expects stigma, whether or not they agree with the stereotypes or not) and negatively correlated with self-esteem, and help-seeking behavior (e.g., seeking therapy).

Concealing one's mental illness is a strategy utilized by individuals with a mental illness to avoid potentially stigmatizing reactions (when they anticipate stigma) (e.g., Chew-graham, Rogers, & Yassin, 2003). Furthermore, they may conceal their mental illness to avoid the negative views (possibly in a protective fashion) that are held by others such as dehumanization (perceiving consumers as lacking feelings or basic rights), infantilization (treating consumers like children that need to be taken care of), and lowered expectations (the belief that mental illness is a lifelong disability and that consumers should adjust their prospects accordingly) (Angell et al., 2005). However, while conferring some benefits, attempting to avoid stigma/negative views by others can

lead to greater preoccupation with the stigmatizing condition (Smart & Wegner, 1999), social avoidance (Pinel, 1999), more effortful interactions in workplace and social settings (James et al., 1984; Smart & Wegner, 1999) and poorer physical health (James et al., 1984). Therefore, it was expected that receiving advice to conceal one's mental illness or being told to lower expectations would be associated with negative emotional and action-based outcomes, as well as with greater levels of concealment.

3. Receiving advice to conceal one's mental illness is expected to be negatively correlated with positive emotional impact (advice made the individual feel better), and positively correlated with action impact (changed what the individual did) and concealment behavior (CI).
4. Receiving advice to lower expectations is expected to be negatively correlated with positive emotional impact (advice made the individual feel better), and positively correlated with action impact (changed what the individual did) and concealment behavior.

In addition to these hypotheses, we also examined some descriptive characteristics of the population in order to better understand mental health consumers on a college campus. This demographic information helps put the advice components in context and aids comparisons with other studies. Furthermore, as this is one of the first studies that we are aware of that examined the advice component, we looked at comparisons between advice types and type of social referent to provide additional information that may not be captured in prior research. Lastly, as many of these measures were newly created/adapted for the current study, we performed an exploratory factor analysis to better understand the underlying structure of these measures (see Appendix B).

CHAPTER 2: METHOD

Participants

Participants were 270 college students with a current or prior mental illness (mental health consumers). All ages of college students were allowed to participate, with those individuals under 18 requiring additional written parental consent, per HSRB requirements. Individuals with a history of a mental illness were recruited from the psychology participant pool at a Mid-Atlantic University. Survey solicitation materials indicated a preference for people with a history of mental health problems, therefore, the participant pool was likely not a representative sample of the college research population. For this study, mental health consumer status was defined using a screening measure from prior research, such that individuals must have both 1) experienced a psychological problem that caused significant distress and 2) sought treatment for said distress from a mental health professional (Quinn, Kahng, & Crocker, 2004) (see Materials section for more information about for screening items). Individuals who did not meet both of these screening criteria did not participate in the research, but instead watched an educational stigma video (lecture alternative) or received partial credit for the time spent completing the screening. 706 non-consumers completed the lecture option and/or received partial credit for the screening items.

Overall, 986 individuals from the psychology participant pool completed the

screening items. Of those individuals, 516 reported having experienced "psychological problems that significantly affected your life", while only 292 additionally reported having been treated for a mental illness and were eligible to complete the survey (met the criteria for mental illness history). Of those 292, 270 mental health consumers completed most or all of the research study items. Twenty-two participants who met the screening criteria either dropped out/did not complete or chose not to respond to a significant number of survey items. T-tests comparing the participants who dropped out to the 270 respondents who completed the surveys did not reveal any significant differences ($\alpha = 0.05$) between the groups on the major demographic descriptors noted below. In both groups, anxiety and depression were the most commonly reported mental illnesses and there were no reported differences in severity or impairment caused by illness.

Demographically, consumer participants were predominantly female (72%), and racially diverse (see Table 1). Participants ranged in age from 18 to 63, with an average age of 22. The consumer population was roughly evenly distributed across undergraduate college levels, with a mode of "College Senior" (34%), while those at the graduate or high school level comprised a small minority (2.5% combined).

Table 1

Demographic Summary

Age	*N*	(%)	Race	*N*	(%)	Highest Level of Education	*N*	(%)
18-19	74	(27%)	Caucasian	186	(66%)	High School Student	3	(1%)
20-21	75	(27%)	Asian/PI	33	(12%)	College Freshman	60	(21%)
22-23	42	(15%)	Hispanic	23	(8%)	College Sophomore	50	(18%)
24-25	26	(9%)	African American	18	(6%)	College Junior	67	(24%)
26+	38	(13%)	American Indian	1	(< 1%)	College Senior	96	(34%)
Missing / Chose not to respond	25	(9%)	Other	19	(7%)	Graduate Student	4	(1%)

As the workplace is consistently reported as a primary location where stigma may occur, we also assessed employment status in the demographics section. Regarding work history, most participants had spent more time employed in part-time positions (66%) than in full-time positions (27%). While the longest time employed ranged from 0 to 37 years, a sizeable majority (67%) answered 3 years or less, and the modal time employed was 2 years. This generally young population showed a relative lack of employment history, a fact with possible implications considered below in the discussion section.

Table 2

Employment Summary

Longest Type of Employment	*N*	(%)	Longest Time Employed (years)	*N*	(%)
Full-time	75	(27%)	0-1	48	(17%)
Part-time	185	(66%)	2-3	122	(44%)
Never employed	16	(6%)	4-5	44	(16%)
Other	4	(1%)	6-7	25	(9%)
			8+	16	(6%)
			Missing / Chose not to respond	25	(9%)

The demographics screening items for mental health consumers also included an assessment of the type of psychological difficulties experienced based on prior research (Quinn et al., 2004). More details about the categories used in this study are available in the Materials section below. Among mental health consumer participants, most reported seeking treatment for one (45%) or two (36%) problem types, with approximately 6% reporting treatment for 4 or more types of psychological difficulties. The most frequently cited categories of psychological problems were mood disorders/depressed mood (73%), anxiety/OCD (56%). However, it is important to note that we did not perform formal diagnostic assessments, but rather collected self-reported problem types, consistent with prior research (e.g., Mann, McFarland, Wahl, & Sleigh, 2003; Quinn, Kahng, & Crocker, 2004). The problem types we found are consistent with prior research conducted with a similar pool of college participants, which found depression and anxiety to be the most frequently reported categories of psychological problems (Mann, McFarland, Wahl, &

Sleigh, 2003). Several problem types were rarely reported by participants, indicating that limited assumptions can be made about the stigma/advice experiences of college students with these psychological problems (see Discussion for further commentary). Of the 10% mentioning an illness in another/write-in category, the top responses were sleep-related difficulties (5 people: e.g. Primary Insomnia, Nightmare Disorder) and PTSD (4 people).

Table 3

Mental Health Summary

Number of Problems	*N*	(%)
1	125	(45%)
2	101	(36%)
3	36	(13%)
4	14	(5%)
5+	4	(1%)

Treatment Received	*N*	(%)
Counseling only	108	(36%)
Medication only	37	(12%)
Both counseling and medication	144	(49%)
Other/Chose not to respond	3	(1%)

Problem Type (more than 1 possible)	*N*	(%)
Depression	205	(73%)
Bipolar	40	(14%)
Anxiety/OCD	156	(56%)
Psychotic	4	(1%)
ADHD	57	(20%)
Eating Disorder	38	(14%)
PTSD	4	(1%)
Other/NA	24	(12%)

A majority of participants reported that the psychological problems they had experienced had caused at least a moderate amount of distress. Most participants stated

that their past difficulties had led to either "Some" or "Major" impairment (80%), while an equal percentage rated their current impairment as none or little (79%). Consistent with this measure of current functional impairment, 79% of participants also reported the status of their current psychological symptom severity as either "Full remission" or "Mild or mostly under control with medication or therapy."

Table 4

Symptom Severity and Functional Impairment

Symptom Severity			Impairment					
Current	*N*	(%)	Past	*N*	(%)	Current	*N*	(%)
Full remission	98	(35%)	None	12	(4%)	None	99	(35%)
Mild symptoms	123	(44%)	Little	42	(15%)	Little	119	(43%)
Moderate symptoms	55	(20%)	Some	124	(44%)	Some	56	(20%)
Severe symptoms	4	(1%)	Major	100	(36%)	Major	4	(1%)

Materials

Participants in this study completed the following list of self-report assessment items designed to assess their mental health history, stigma experiences, and related behavioral and emotional correlates.

- History of Mental Illness Screening Measure
- Demographics Questions
    - Basic Demographics
    - Mental Illness Type/History
    - Employment History

- Advice from Social Referents Scale about Disclosure (ASRS-D)
    - Advice Received (Frequency & Intensity)
    - Emotional Impact of Advice (how it made them feel)
    - Action Impact of Advice (did it change self-reported actions)
- Advice from Social Referents Scale about Lowering Expectations (ASRS-LE)
    - Advice Received (Frequency & Intensity)
    - Emotional Impact of Advice (how it made them feel)
    - Action Impact of Advice (did it change self-reported actions)
- Concealment Inventory (CI)
- Stigma Consciousness Questionnaire (SCQ)
- Internalized Stigma of Mental Illness Questionnaire (ISMI)
- Rosenberg Self-Esteem Scale (SES)
- Attitudes Toward Seeking Professional Psychological Help Scale – Short Form (ATSPPHS-SF)

Mental Illness Screening Measure

Each individual who signed up for the study first completed a screening measure to determine if he or she met the criteria for having a history of a mental illness. The following screening measure was selected because it was used in prior stigma researcher to identify mental illness history in a college student population. In their research (a series of several studies), Quinn et al. (2004) used the screening items with participants from the University of Michigan introductory psychology participant pool. Their peer reviewed research, published in the Journal of Personality and Social Psychology Bulletin, also focused on a similar topic area, stigma (stigma's relationship to test performance and self-esteem). Additional details about Quinn et al.'s (2004) findings can

be found in the Introduction. The screening measure for this study was taken directly from this prior research and used to "qualify as having a mental illness history" (p. 806). We used the same standards that Quinn et al. described in their research to identify participants who qualified as having a mental illness. To be identified, for the purpose of this research, as having a mental illness, participants must answer yes to both of the first two questions and also indicate some type of treatment in the last question. Participants who did not meet all of these criteria were able to receive partial credit for the time spent registering for the study/completing the screening items or to participate in an alternative lecture option (watching a stigma video).

Demographic Questions

Participants also completed demographics questions regarding basic demographic factors, the type and status/severity of their mental illness, and their employment history. The demographic questions we used to identify the type of mental illness participants had experienced were also adapted from Quinn et al.(2004). In this demographics section, participants selected from several categories of commonly experienced psychological problems (e.g., difficulties, related to depressed mood, difficulties related to anxiety, etc.). We also collected information about the severity and current status of the mental illness, using assessment items adapted from prior research (Mann, McFarland, Wahl, & Sleigh, 2003). Because the *Diagnostic and Statistical Manual of Mental Disorders – IV (*DSM-IV) defines mental illness in terms of both the symptoms experienced and the functional impairment caused by these symptoms, we inquired about both severity of the

symptoms and the level of impairment reported to be caused by the mental illness. More information about the demographics responses can be found in the above *Participants* section or in the attached list of measures used (Appendix A).

Advice from Social Referents Scale about Disclosure (ASRS-D) and Lowered Expectations (ASRS-LE)

One of the primary goals of this study was to assess the type and amount of advice that mental health consumers received from important people in their lives (social referents). Therefore, participants were administered two adapted self-report measures about the advice that they received from important social referents (i.e., family members, mental health professionals) in two main categories 1) advice to conceal/disclose and 2) advice to lower expectations. In prior research, the people most frequently cited as sources of this information are family members and mental health professionals (Goldberg et al., 2005; Herman, 1993). Thus, the advice received from both of these groups was collected in items on the Advice from Social Referents Scale about Disclosure (ASRS-D) and Advice from Social Referents Scale about Lowering Expectations (ASRS-LE).

The first scale, the Advice from Social Referents Scale about Disclosure (ASRS-D) contained 22 items regarding concealing or revealing one's mental illness. This scale was developed to measure the advice that individuals received about disclosing their status as someone with a current or prior mental illness. To develop the ASRS-D, an initial set of topics of focus/items were obtained by reviewing relevant questions from

Wahl's (1999a) national survey of over 1300 people with a mental illness. Wahl's study (details reported in introduction) was carried out in coordination with the National Alliance on Mental Illness (NAMI) to address the stigma and discrimination issues that individuals with mental illness face. Several areas where disclosure or concealment of their status may present concerns included relationships/friends, the workplace, and society/others in general. Some areas from the NAMI survey were excluded from the current research because they did not involve areas directly related to concealment or lowered expectations, such as mass media portrayals and adverse treatment by law enforcement. An additional area of college/school was added for this sample to reflect their current environment as university students. Questions from Wahl's NAMI study were then altered and rephrased from the perspective of the consumer (as originally written), to instead reflect the advice that may have been given, e.g., from "I have avoided…" to "I have been advised to avoid…."

A review of qualitative research assessing the experiences of mental health consumers and the advice that they received generated additional lists of items for each category. Items were then reviewed for redundancy and similar items were deleted or combined. Items that were mentioned infrequently (in one or less publication) were also deleted. A final list of potential items was then shown to 3 doctoral graduate-level student therapists at a University clinic, who work with clients similar to the ones assessed in this research. These clinicians assessed the items for the following qualities: 1) clearly written/would be easy for clients to understand and 2) had face validity/reflected the common stigma concerns they heard expressed by clients. The suggested changes were

then incorporated into the survey as appropriate, and all items were reviewed again by a university faculty member familiar with survey design.

This process led to a total of 22 items for the ASRS-D in the following categories (general advice to conceal = 7 items, advice to conceal in the workplace = 5, advice to conceal in relationships = 5 items, advice to conceal at school =3 items). Once the items were developed, the research team considered what type of scale would be appropriate to assess the items. Wahl's (1999a) study used a frequency scale (never to very often). Therefore, frequency was identified as the primary outcome measure for the ASRS-D. However, much of the prior research also mentioned intensity as a component of advice (Herman, 1993; Soloman, 1993). In fact, some mental health consumers reported, that although advice to conceal was rarely given, when it was presented, it was given very strongly (i.e., intensely). Therefore, this factor was also assessed using an intensity/strength likert scale of *not strongly at all* to *very strongly.* Thus, each scale contained 22 items and total possible scores for both scales ranged from 22 to 154.

The idea of assessing the two different advice components (frequency and intensity) was predicated on research in related areas. A search on PyscInfo for psychological scales that used frequency and intensity components indicated several measurements in frequent use that follow this 2-part design. Examples of measures using this format include, The Clinician-Administered PTSD Scale (CAPS) (Blake, Weathers, Nagy, Kaloupek, Charney, & Keane, 1995; Weathers, Keane, & Davidson, 2001), Functional Behavioral Analysis, a frequently-used school-based assessment of child behavior problems (Steege, &Watson, 2009), and the Inspiration Scale (IS), a measure

utilized in the field of positive psychology (Thrash & Elliot, 2003). While both the IS and CAPS report that these two dimensions are correlated, both of the scales' creators report that the two scales also contribute independent data that can be used separately, or combined in a sum.

Frequency and intensity are two components that are also often mentioned in qualitative research about concealment advice. Reports of former psychiatric patients reveal that some individuals with a mental health history may undergo frequent "coaching" sessions about concealment (Herman, 1993). In addition, psychiatrists in another study indicated that their mental health clients frequently ask for advice about disclosure, which may be delivered in a strong manner (Dubin & Fink, 1992). Since most stigma studies use a frequency measure (e.g., Wahl, 1999a), we decided to maintain this as our primary metric, but elected to also include the intensity scale to determine if this assessment provided additional useful information about the advice.

The Advice from Social Referents Scale- Disclosure (ASRS-D) evidenced good overall reliability (Cronbach's $\alpha = .94$) (see Table 5). We decided to conduct a Cronbach's alpha of the overall scale, even though we had some hypotheses about possible subscales, as these subscales had never before been empirically tested. Furthermore, past stigma research (e.g., Ritsher & Phelan, 2004) has also followed this pattern of reporting on newly developed scales, when it is possible that a larger unifying construct may exist. Alphas of over .9 can sometimes suggest that the construct is too specific or that the items are redundant (Briggs & Cheek, 1986). In the current study, the high coefficient alpha could be an artifact of the design, in that some similar questions

were presented in different formats (e.g., Mental Health Professionals told me…..vs. Family members told me…). Cortina (1993), therefore, suggests that when alphas are high, it is better to conduct a factor analysis rather than to assume that a high alpha indicates unidimensionality, a procedure that I conduct and describe in Appendix B.

Table 5

Scale Reliabilities

Scale	# Items	α	Min CITC[†]	Max CAID[††]
ASRS-D	22	.94	.46	.94
ASRS-D General	7	.85	.45	.85
ASRS-D Work	7	.92	.52	.92
ASRS-D Relationship	8	.85	.58	.85
ASRS-D School	3	.76	.59	.68
ASRS-LE	19	.94	.55	.93
ASRS-LE General	3	.76	.55	.72
ASRS-LE Work	6	.85	.59	.84
ASRS-LE Relationship	5	.88	.67	.87
ASRS-LE School	5	.77	.48	.75
CI	21	.91	.16	.91
SCQ	10	.77	.16	.78
ISMI	29	.93	-.06	.94
ISMI Alienation	6	.88	.57	.87
ISMI Stereotype Endorsement	7	.81	.46	.79
ISMI Discrimination Experience	5	.87	.59	.87
ISMI Social Withdrawal	6	.85	.50	.85
ISMI Stigma Resistance	5	.65	.25	.67
SES	10	.88	.47	.88
ATSPPH-SF	10	.78	.17	.80

α = Cronbach's α. [†] Min CITC = Minimum Corrected Item-Total Correlation. [††] Max CAID = Maximum Cronbach's α if Item Deleted.

In addition, Cronbach's alpha is impacted by the number of items on the scale and by the number of subjects. Our study had over 270 participants, which is in the

moderate/large range and may have influenced the internal consistency score. Furthermore, The ASRS-D had 22 items, which is a relatively large number of items for a scale. Therefore, we also conducted individual reliability assessments for the subscales (see Table 6). Subscales on the ASRS-D were divided according to the domain (place that the advice applied to: e.g., work or relationships). All four subscales on the ASRS-D evidenced good reliability. The work subscale had the highest reliability ($\alpha = .94$), followed by the General setting subscale ($\alpha = .85$), the Relationship subscale ($\alpha = .85$), and the School subscale ($\alpha = .76$).

Table 6

ASRS-D Scale Reliability Item Statistics

ASRS-D (Cronbach's α = .94)		
ASRS-D General (Cronbach's α = .85)	CITC[†]	CAID[††]
People have advised me that others will be less accepting (if) when I reveal my mental illness.	.67	.82
People in my family seem to worry that others will find out about my mental illness.	.74	.81
People in my family have led me to believe that others would not be understanding of my mental illness (if) when I revealed it.	.71	.81
I have been advised to conceal my mental illness.	.57	.83
People in my family have told me that they worry knowledge of my mental illness will spread around town and embarrass us or cause others to distance themselves.	.59	.83
Mental health professionals have told me that it is better if others do not know about my mental illness.	.45	.85
People in my family have implied that they would rather not to talk about my mental illness.	.56	.84
ASRS-D Work (Cronbach's α = .92)		
Family members have told me not to talk about my mental illness on job applications or in work settings.	.78	.90
People have suggested that co-workers at a job would not be accepting of me if they found out that I had a mental illness.	.78	.90
People have advised me not to talk about the fact that I have (or had) a mental illness in work environments/at a job.	.80	.90
People have advised me not to mention that I have (or had) a mental illness on job applications or in interviews.	.83	.90
I have been told that if people at a job/work know about my mental illness, they may treat me differently (e.g., give me less responsibility, doubt my ability to do the work, etc.).	.72	.91
People have told me that I would be less able to get a job if employers found out about my mental illness.	.79	.90
Mental health professionals have advised me not to talk about my mental illness on job applications or in work settings.	.52	.92
ASRS-D Relationship (Cronbach's α = .85)		
I have been told that some people may not want to be friends with me (if) when they learn about my mental illness.	.75	.87
People have warned me that others may be less likely to want to be romantically involved with me (if) when they find out about my mental illness.	.66	.88
Family members have told me that I should not talk about my mental illness with my peers (e.g., friends or people that I am involved with romantically).	.76	.86
People have advised me not to talk about my mental illness with friends.	.71	.87
Mental health professionals have told me that I should not talk about my mental illness with peers (e.g., friends or people that I am involved with romantically).	.61	.88
ASRS-D School (Cronbach's α = .76)		
Family members have suggested that I should not talk about my mental illness at college.	.61	.67
I have been advised not to tell professors or teachers about my mental illness.	.60	.67
Mental health professionals have suggested that I should not talk about my mental illness at college.	.59	.68

[†] CITC = Corrected Item-Total Correlation. [††] CAID = Cronbach's α if Item Deleted.

We also examined two item-level internal consistency statistics to assess the reliability of individual items (see Table 7). The first statistic I examined was the Corrected Item Total Correlation (CITC). The CITC is a way to examine how well one item's score is consistent with/reflects the composite scale score. The CITC measures the correlation between the individual item's score and the total score of the other items on that scale or subscale. If the item correlation is too weak—a suggested rule of thumb is < .3—then it may be advisable to consider removing the item from the scale (de Haus, 2004). We computed CITC scores for each item on the four subscales. For the ASRS-D, the majority of CITCs were > .5, and the lowest CITC was .45, suggesting that no item should be deleted from any subscale based on lack of internal consistency. Item- level CITC analyses run on the entire ASRS-D (not displayed) also did not suggest any items for deletion based on this criteria (lowest CITC = .46). We also examined the Cronbach's alpha if item deleted (CAID) scores for each item. This statistic reports how the overall reliability would be impacted if that specific item were deleted from the scale. If deleting an item significantly increases alpha, then it may be advisable to remove that item. The CAIDs for the ASRS-D indicated that overall and subscale alphas would not be benefitted by removing items (highest overall $\alpha = .94$ vs. highest overall CAID = .94; highest subscale $\alpha = .92$ vs. highest subscale CAID = α of .92).

The second scale, the Advice from Social Referents Scale about Lowering Expectations (ASRS-LE) (see Appendix A) is similar to the ASRS-D in its development, design, and scoring format. The ASRS-LE contains items designed to measure the advice that social referents give individuals with mental illness about lowering their

expectations. Research suggests that individuals sometimes receive advice about lowering their expectations in different domains (e.g., pursuing a less stressful job, expecting to have difficulties relating to friends). Therefore, the same basic categories for advice types are utilized in the ASRS-LE (1) general advice to lower expectations, (2) advice about lowering expectations at work, (3) advice about lower expectations for relationships, and (4) advice about lowering expectations at college/school. The ASRS-LE Frequency scale and the ASRS-LE Intensity scale each contained 19 items and possible total scores for both scales ranged from 19 to 133.

Table 7

ASRS-LE Scale Reliability Item Statistics

ASRS-LE (Cronbach's α = .94)		
ASRS-LE General (Cronbach's α = .76)	CITC[†]	CAID[††]
Family members have told me that it will be more difficult for me to reach my goals because of my mental illness.	.65	.59
Mental health professionals have told me that it will be more difficult for me to reach my goals because of my mental illness.	.57	.70
People have told me that I may have a harder time getting things accomplished in life because of my mental illness.	.55	.72
ASRS-LE Work (Cronbach's α = .85)		
People have told me to reduce expectations of success at a job (e.g., don't expect to be promoted, or being told that you may not be able to "handle" job) because of my mental illness.	.69	.82
People have told me that there may be certain jobs that are too stressful or that I cannot do because of my mental illness.	.59	.84
Family members have told me to lower my expectations about work or not take certain jobs because of my mental illness.	.65	.83
I have been advised to avoid work for some time (e.g., postpone working, postpone looking for work, or quit a job) because of my mental illness.	.68	.82
I have been advised to reduce my workload at my job (e.g. reduce hours) because of my mental illness.	.66	.83
Mental health professionals have told me to lower my expectations about work or not take certain jobs because of my mental illness.	.64	.83
ASRS-LE Relationship (Cronbach's α = .88)		
People have told me to expect to have difficulties with romantic relationships (e.g., boyfriends/girlfriends, partners, spouses) because of my mental illness.	.77	.85
People have told me expect to have difficulties with friends because of my mental illness.	.81	.84
Mental health professionals have me that I may have a hard time getting along with people because of my mental illness.	.67	.87
Family members have told me that I may have a hard time getting along with people because of my mental illness.	.69	.87
People have told me to expect to have difficulties with roommates or people I live with because of my mental illness.	.70	.86
ASRS-LE School (Cronbach's α = .77)		
Mental health professionals have told me to pursue a less challenging career/major or expect to have problems in school because of my mental illness.	.61	.72
I have been advised to reduce my workload (e.g., take fewer classes, take a semester off) at school because of my mental illness.	.58	.72
People have told me to expect to have difficulties with classes (e.g., problems paying attention, problems competing homework, lower grades) because of my mental illness.	.60	.71
People in my family have told me to pursue a less challenging career/major or expect to have problems in school because of my mental illness.	.52	.74
I have been advised to postpone or avoid applying for college because of my mental illness.	.48	.75

[†] CITC = Corrected Item-Total Correlation. [††] CAID = Cronbach's α if Item Deleted.

In addition, I considered the internal consistency of The Advice from Social Referents Scale-Lowered Expectations (ASRS-LE) (see Table 7). The ASRS-LE evidenced good overall reliability (Cronbach's α = .94). Furthermore, all four subscales on the ASRS-LE evidenced good internal consistency. The Relationship subscale had the highest reliability (α = .88), followed by the Work setting subscale (α = .85), the School subscale (α = .77), and the General subscale (α = .76). Additional item-level statistics performed on the subscales and overall scale indicated that the deletion of items would not increase internal consistency. The Corrected Item-Total Correlation (CITC) scores suggest that all items correlate well within the subscales (lowest CITC = .48). Furthermore, the Cronbach Alpha if Item Deleted (CAID) statistics for the ASRS-LE indicated that overall and subscale alphas would not increase if items were removed (highest overall α = .94 vs. highest overall CAID = .94; highest subscale α = .88 vs. highest subscale CAID = α of .87).

Finally, I analyzed the reliability for the final scale that was adapted for the current study, the Concealment Inventory (CI). The Concealment Inventory evidenced adequate internal reliability (α = .91). Furthermore, the Cronbach's alpha could not be improved by deleting any items (maximum CAID = .91). Three items on the CI evidenced low correlation with others items. Corrected Item Total Correlations (CITC) for these items ranged from .16 to .30. When low correlations exist between individual items and the entire scale, it suggests that they may be measuring something different and/or that they are better captured in another factor. These findings are described in more detail in the section on factor analysis (see Appendix B).

Emotional Impact (EI) and Action Impact (AI) of Advice Scales

Research suggests that advice to conceal a stigmatizing identity or lower expectations can affect individuals' emotional well-being as well as affect the choices they make. In their studies assessing stigma from both the mental health consumer's perspective and the perspectives of families, Stuart and colleagues discuss a multi-factor approach to gathering "Stigma Experiences" (Stuart, Koller, Milev, 2008). In their assessments, mental health consumers or families report both the amount of the stigma they experience, and also recount the psychosocial impact of stigma on major life domains (p. 194). These authors report that although the amount of stigma experienced is correlated with the impact, the impact provides unique data to capture a range of stigma experiences (p. 194). Therefore, in the current study, two types of impact, Emotional Impact (EI) and Action Impact (AI), were assessed through items embedded on both the ASRS-D (22 EI & AI items, range of 22 – 154 possible) and the ASRS-LE (19 EI & AI items, range of 19 – 133 possible). Emotional impact (EI) is defined as the effect that the advice has on the individual's emotional well-being and was assessed through a 7-point Likert scale from 1 – made me feel worse to 7 – made me feel better. Action impact (AI) was defined as the effect that the advice has on the decisions and actions a person takes as a result of the advice and was assessed through a 7-point Likert scale from did not change what I did to changed what I did.

Concealment Inventory (CI)

Participants also completed a scale designed to assess concealment of their mental illness, Concealment Inventory (CI). This scale was designed to assess how often participants reveal or conceal their mental illness. Items for this scale were loosely based on the Outness Inventory (OI) developed by Mohr & Fassinger (2000) in that participants reported about how much they discussed a potentially stigmatizing status (in this case a history of a mental illness) in several social groups (e.g., family, friends, workplace). However, it is important to note that the scales measure two different concepts, outness vs. concealment. While both studies use a Likert-type scale, the format for the CI is slightly different from the OI in order to reflect themes and wording specific to mental illness stigma found in other research (e.g., Wahl, 1999a). In this scale, information was collected about concealment to different groups of people (e.g., concealed my mental illness to my sister) and about concealment in different environments (e.g., concealed my mental illness at work). Concealment behavior was assessed on a seven-point Likert scale (never to very often). The scale contained 21 items with a range of possible total scores of 21-147. The Concealment Inventory evidenced adequate internal reliability (α = .91). Furthermore, the Cronbach's alpha could not be improved by deleting any items (maximum CAID = .91).

Stigma Consciousness Questionnaire (SCQ)

Pinel (1999) developed stigma consciousness as a general construct designed to represent the extent to which members of stigmatized groups expect to be the target of

stereotypes. People high in stigma consciousness do not have to be dissatisfied with the standing of their social group in society, nor do they have to endorse the negative stereotypes about their group, rather, they only have to expect to be stigmatized by others. According to Pinel, some people high in stigma consciousness may actually reject stereotypes about their group.

Pinel's 10 item self-report measure, the Stigma Consciousness Questionnaire (SCQ), assesses the extent to which someone expects to be stigmatized. Pinel has developed several versions of the SCQ, including a version for women and a version for gay men and lesbians. The SCQ contains items such as "I never worry that my behaviors will be viewed as stereotypically female" (from the SCQ for Women, Pinel, 1999, p. 116). On the SCQs, participants indicate how much they agree with each statement on a 7-point Likert scale ranging from strongly disagree to strongly agree, with a midpoint indicating that participants neither agree nor disagree. Both SCQ versions were reported to have adequate internal consistency in validation studies (SCQ for Women coefficient alphas ranged from .72 to .74; SCQ for Gay Men and Lesbians coefficient alpha = .81). Because no SCQ version exists for individuals with a mental illness, I adapted Pinel's (1999) previous two SCQs into a measure of stigma consciousness for individuals with a mental illness (see Appendix A). For example, an item on the SCQ for women, "I never worry that my behaviors will be viewed as stereotypically female," was changed to "I never worry that my behaviors will be viewed as stereotypical of someone with a mental illness." Scores on the SCQ were computed by reverse scoring appropriate items and then summing all items, wherein higher scores equal higher levels of stigma consciousness,

and a range of summary scores of 0-60 were possible. The Stigma Consciousness Questionnaire (SCQ) evidenced adequate reliability ($\alpha = .77$) in the current study, which is consistent with prior research that reported Cronbach's alphas on the different SCQ versions ranging from ~.72-.81.

Internalized Stigma of Mental Illness Scale (ISMI)

The construct of internalized stigma represents the application of society's negative views about the stigmatized group onto oneself, causing the stigmatized person to experience feelings of shame and devaluation, and behaviors such as secrecy and withdrawal (Corrigan, 1998; Ritsher, Otilingam, & Grajales, 2003; Ritsher & Phelan, 2004). Ritsher et al. (2003) developed the 29-item self-report Internalized Stigma of Mental Illness (ISMI) scale to assess the experience of internal stigma for people with mental illness. The ISMI contains items such as "I feel inferior to others who don't have a mental illness," and participants were instructed to indicate whether they (1) strongly disagree, (2) disagree, (3) agree, or (4) strongly agree with each statement (see Appendix A). The ISMI has five subscales including: 1. Alienation (feeling like less than a full member of society or that feeling one has a "spoiled" identity), 2. Stereotype Endorsement (the extent that one endorses stereotypes about mental illness), 3. Discrimination Experience (participants perception of how they are treated), 4. Social Withdrawal Scale (beliefs and actions about acceptance and withdrawal in social situations), and 5. Stigma Resistance (resisting stigma and its negative effects). Scores on the ISMI were computed by reverse scoring appropriate items and then summing all

items, wherein higher scores equal higher levels of internalized stigma. This scale contained 19 items and a range of total scores from 19 to 133 was possible.

The ISMI has demonstrated adequate internal consistency (coefficient alpha = .91) and test-retest reliability (r = .92, p < .05) in prior research (Ritsher & Phelan, 2004). Furthermore, in their meta-analysis of internalized stigma, Livingston & Boyd (2010) reported that across the 10 studies they reviewed, the average coefficient for internal consistency specifically on the ISMI measure was α = .85. In addition, we examined the internal consistency of the ISMI subscales. Both overall scale and individual scale coefficient alphas are reported, as this was how the data was presented in the scale's development literatures. In prior research, the ISMI sub-scales demonstrated adequate internal consistency (coefficient alphas ranging from .62 to .96) and test-retest reliability (coefficients ranging from r = .61 to r = .91). In the current study, the Internalized Stigma of Mental Illness scale also evidenced adequate reliability (Cronbach's α = .93) consistent with prior research. The ISMI's five subscales also had adqueate internal consistency (average subscale α = .81) in the current research. The subscales all evidenced levels of internal consistency in line with the subscale reliabilities reported in the scale's development literature (average subscale α = .74) (Ritsher & Phelan, 2004). Four of the current ISMI subscales evidenced reliability above .80 in the current study. One subscale, Stigma Resistance, evidenced reliability of only .65. However, this is consistent with prior research, in which this subscale also evidenced the lowest reliability of the five subscales (α =.62) (Ritsher & Phelan, 2004).

Rosenberg Self-Esteem Scale (SES)

Self-esteem was measured with the Rosenberg Self-esteem Scale (SES) (Rosenberg, 1979). The SES contains ten items about participants' subjective beliefs about their self-worth (see Appendix A). Participants indicated the extent to which they endorsed each item using a four-point scale where 1=strongly agree and 4=strongly disagree. Scores on the SES were computed by reverse scoring appropriate items and then summing all items, wherein higher scores equal higher levels of self-esteem. Possible scores on the SES ranged from 10 to 40. For the Self Esteem Scale (SES), internal consistency for the current sample was adequate (Cronbach's $\alpha = .88$) and in line with prior research on the scale's development, which reported an alpha of .87 (Rosenberg, 1979).

Attitudes Toward Seeking Professional Psychological Help Scale, Short-Form, ATSPPH-SF

The Attitudes Toward Seeking Professional Psychological Help Scale-Short Version (ATSPPHS-S) is a 10-item scale of help-seeking attitudes developed by Fisher and Farina (1995), which was developed from a longer 29-item version of the same scale (Fisher & Turner, 1970). Participants indicate to what degree they agree with each item using a 4-point Likert-scale (0 = disagree, 1 = partly disagree, 2 = partly agree, 3 = agree). Scores for the scale were obtained by summing all items, with higher scores indicating more positive attitudes toward help-seeking. Possible scores on this scale ranged from 10 to 40. The scale has adequate internal consistency (coefficient alpha =

.84) and test-retest reliability (r = .80) in prior research. In the current study, the internal consistency of the willingness to seek help scale (ATSPHS-SF) was also adequate (α = .78) and consistent with prior research (α = .84).

Procedure

Participants for this study were recruited through the George Mason Psychology department's online research portal SonaSystems. Participants received research credit hours equivalent to the number of hours needed to complete the survey (.5 to 1). In the recruiting materials, a preference was indicated for individuals who had experienced a mental illness in the past, but all participants were allowed to complete the screening measure. Those identified as having a mental illness history completed the research, while those with no history completed a non-research lecture option or received partial credit for the time spent completing the screening items.

Mental health consumer participants completed the survey measures online using the secure internet survey platform Surveymonkey.com. Participants completed an informed consent over the internet, and participants under 18 turned in an additional parental consent form before beginning the research. Participants completed the surveys online in the following order: 1) Advice from Social Referents Scale about Disclosure (ASRS-D), 2) Advice from Social Referents Scale about Lowering Expectations (ASRS-LE), 3) Impact Scales – Emotional Impact (EI) and Action Impact (AI), *note:* - these impact scales were embedded in the ASRS-D and ASRS-LE, 4) Concealment Inventory, 5) Stigma Consciousness Questionnaire (SCQ), 6) Internalized Stigma of Mental Illness (ISMI), 7) Rosenberg Self-Esteem Scale, 8) The Attitudes Toward Seeking Professional

Psychological Help Scale-Short Form (ATSPPHS-SF). After completing these scales, participants received a debriefing sheet over the internet about their survey experience.

CHAPTER 3: RESULTS

Primary Findings: Hypotheses

Data for Hypothesis 1 were analyzed by computing Pearson correlations between participants' total Frequency scores on the Advice from Social Referents Scale about Disclosure (ASRS-D) and participants' summary scores on the Stigma Consciousness Questionnaire (SCQ), Internalized Stigma of Mental Illness Scale (ISMI), Rosenberg's Self Esteem Scales (SES), and Attitudes Toward Seeking Professional Psychological Help Scale-Short Version (ATSPPHS-S). Specific information about how scores for individual scales were calculated can be found in the above Materials section. Missing data were generally negligible, with typical item-level response rates in excess of 97%, and only 1 respondent who completed the survey failing to respond to most items. For the few missing data values, we imputed average values from other sub-scale items for the individual respondent. Participants who failed to complete a majority of items were excluded from analyses. These participants represented a small number of participants and did not differ from participants who completed all/most items on demographic or symptom-severity factors (see Participants section for more information).

Hypothesis 1 was partially supported (see Table 8). The more advice that individuals received to conceal their mental illness, the more aware they were of mental illness stigma. Receiving more advice to conceal (not disclose) one's mental illness

(ASRS-D) was positively correlated with levels of stigma consciousness (SCQ) (r = .47, p < .01). In addition to being more aware of stigma, people who received higher levels of advice to conceal also turned the stigma inward and applied it to themselves. Receiving more advice to keep one's mental illness a secret (ASRS-D) was also positively correlated with levels of internalized stigma (ISMI) (r = .50, p < .01). Individuals who were told by important people in their lives not to reveal their mental illness were also more likely to believe that the negative stereotypes about mental illness directly applied to them. In other words, they were more likely to say that they had internalized the stigma as an integral part of their personhood.

People who received more advice to conceal also reported lower self-esteem. Frequency scores on the ASRS-D were negatively correlated with self-esteem on Rosenberg's self-esteem scale (SES) (r = -.23, p < .01). However, no correlation was found between receiving more advice to conceal (ASRS-D) and help-seeking behavior (ATSPPHS-S) (r = .06, ns). Therefore, receiving greater advice to keep one's mental illness a secret was not related to mental health consumers' reported views about therapy and their likelihood to seek treatment for future mental health problems.

Table 8

Advice to Disclose or Lower Expectations and Stigma Variables: Correlations

	Variables	1	2	3	4	5
1	Advice-Disclosure (ASRS-D)	–				
2	Advice-Lowered Expectations (ASRS-LE)	.76**	–			
3	Awareness of Stigma (SCQ)	.47**	.49**	–		
4	Internalized Stigma (ISMI)	.50**	.51**	.51**	–	
5	Self-Esteem (SES)	-.23**	-.29**	-.35**	-.59**	–
6	Help-Seeking Behavior (ATSPPHS-S)	.06	.06	.18**	-.15*	.10

N = 241 to 275. * Correlation is significant at the .05 level. ** Correlation is significant at the .01 level.

Data for Hypothesis 2 were calculated in a similar manner to Hypothesis 1, except that this analysis utilized advice to lower expectations (ASRS-LE) rather than advice to conceal (ASRS-D). This hypothesis was tested by computing Pearson correlations between participants' Frequency scores on the Advice from Social Referents Scale about Lowering Expectations (ASRS-LE) and participants' summary scores on the Internalized Stigma of Mental Illness Scale (ISMI), Stigma Consciousness Questionnaire (SCQ), Rosenberg's Self Esteem Scales (SES), and Attitudes Toward Seeking Professional Psychological Help Scale-Short Version (ATSPPHS-S).

Hypothesis 2 was partially supported (see Table 8). Receiving more advice to lower expectations (i.e., higher scores on the ASRS-LE) was positively correlated with levels of stigma consciousness (SCQ) (r = .49, p < .01). That is, the more that people were aware of stigma, the more likely they were to report receiving advice to lower their expectations. As with advice to disclose (ASRS-D), advice to lower expectations (ASRS-

LE) was also associated with internalized stigma (ISMI). People who were told by important social referents that they should expect to have less success in life because of their mental illness, were also more likely to believe that the negative views about mental illness applied directly to them. Internalized stigma (ISMI) was positively correlated with advice received to lower expectations (ASRS-LE) (r = .51, p < .01). Furthermore, as hypothesized, receiving advice to lower expectations (ASRS-LE) was negatively correlated with self-esteem (SES) (r = -.29, p < .01). People who had received advice to expect less positive outcomes in life because of their mental illness also reported lower views of their own self-worth. However, as seen in the prior hypothesis, no correlation was found between receiving more advice to lower expectations (ASRS-LE) and help-seeking behavior (ATSPPHS-S) (r = .06, ns). There was no relationship between having been told to lower expectations and an individual's reported likelihood to seek future treatment for mental health problems.

Data for Hypothesis 3 were analyzed by computing Pearson correlations between participants' summary scores on the Advice from Social Referents Scale about Disclosure (ASRS-D) and participants' scores on the Emotional Impact of Disclosure scale (EI-D), Action Impact of Disclosure scale (AI-D), and Concealment Inventory (CI). Scores on the EI-D were computed by summing emotional impact items, wherein higher scores equal higher levels of positive emotional impact (made the individual feel better) and lower scores equal negative emotional impact (made the individual feel worse).

Hypothesis 3 was supported (see Table 9). Receiving advice to conceal one's mental illness (ASRS-D) was negatively correlated with positive emotional impact/made

the individual feel better (EI-D) (r = -.26, p < .01). Individuals who reported receiving more advice to conceal indicated that this advice made them feel worse. Furthermore, receiving advice to conceal (ASRS-D) was also positively correlated with action impact/changed what the individual did (AI-D) (r = .58, p < .01). People reported that not only did this advice make them feel bad, it also made them more likely to change their actions. Lastly, being told to conceal was also related to attempts to keep one's mental illness a secret. Advice from Social Referents Scale to Disclose (ASRS-D) was positively correlated with concealment behavior (CI) (r = .44, p < .01).

Table 9

Emotional & Behavioral Impact of Advice and Concealment Levels: Correlations

	Variables	1	2	3	4	5	6
1	Advice-Disclosure (ASRS-D)	–					
2	Emotional Impact of Disclosure (EI-D)	-.26**	–				
3	Action Impact of Disclosure (AI-D)	.58**	-.28**	–			
4	Advice-Lowered Expectations (ASRS-LE)	.76**	-.17**	.43**	–		
5	Action Impact of Lowered Expectations (AI-LE)	.40*	-.17**	.65**	.40**	–	
6	Emotional Impact of Lowered Expectations (EI-LE)	-.09	.61**	-.17*	-.12	-.03	–
7	Level of Concealment (CI)	.44**	-.27**	.41**	.35**	.20**	-.28**

N = 241 to 275. * Correlation is significant at the .05 level. ** Correlation is significant at the .01 level.

Hypothesis 4 was partially supported (see Table 9). Data for Hypothesis 4 were analyzed by computing Pearson correlations between participants' summary scores on the Advice from Social Referents Scale about Lowering Expectations (ASRS-LE) and participants' scores on the Emotional Impact of Lowered Expectations scale (EI-LE), Action Impact of Lowered Expectations scale (AI-LE), and Concealment Inventory (CI). Receiving advice to lower expectations (ASRS-LE) was positively correlated with action impact/changed what the individual did (AI-LE) ($r = .40$, $p < .01$). People reported that the advice that they received to lower their expectations did change their behaviors. In addition, the amount of advice a person received to lower expectations (ASRS-LE) was also related to concealment behavior (CI) ($r = .35$, $p < .01$). Individuals who received more advice to expect less success in life because of their mental illness also reported more efforts to keep their mental illness a secret. While these findings are consistent with

the hypothesis, part of this hypothesis was not supported. There was no relationship found between advice to lower expectations (ASRS-LE) and positive emotional impact/made the individual feel better (EI-LE) (r = -.12, ns). Therefore, contrary to what we expected, receiving more advice to lower expectations had no association with how the person felt. This lack of relationships could be influenced by the fact we had a relatively high-functioning sample (according to self-reported symptom levels and due to the fact that they are attending college), an issue explored in more detail in the Discussion section.

Descriptives

Means

In general, the current population of undergraduate students reported low levels of advice to conceal their mental illnesses (ASRS-D) or to lower their expectations of positive outcomes (ASRS-LE), medium levels of concealment behavior (CI), low levels of stigma consciousness (SCQ) and internalized stigma (ISMI), and medium or higher levels of self-esteem (SES) and help-seeking behavior (ATSPPH-SF) (see Table 10). Levels of advice to lower expectations were slightly higher than levels of advice to conceal. In general, people were told to lower expectations more often than they were told to hide their mental illness.

Overall, most people in the study evidenced low levels of internalized stigma. In their research on the ISMI, Ritsher and colleagues (2003) defined "high" levels of stigma as falling above the midpoint of 2.5 and "low" levels of stigma as falling below 2.5. We

used these researchers' midpoint rubric to assess the levels of other measures as well, in order to capture the general sense of "high" or "low" levels of a given construct. All subscale means for the ISMI were below the 2.5 midpoint for the 1-4 scale, with the lowest levels reported for Stereotype Endorsement (e.g. "Mentally ill people tend to be violent", "Mentally ill people shouldn't get married", "People can tell that I have a mental illness by the way I look"). People in the study were also more likely to report moderate to high levels of self-esteem and help-seeking behaviors. The mean SES (self-esteem scale) score was slightly above the mid-value of 2.5 for the scale (2.9), as was the mean ATSPPH-SF (measure of help-seeking) score (3.0).

Regarding concealment (CI), participants reported that they conceal most with casual acquaintances and least with close non-family relations. This finding is consistent with expectations, as you would expect people to reveal more with people that they are close with (e.g., romantic partners, college roommates) and less with people with whom they have more casual/formal interactions. There was also variability within some factors, especially in the area of family relationships. For example, participants reported concealing from their fathers (item mean = 4.72) at a level similar to that for concealing from casual acquaintances (factor average = 4.72); and concealing from their mothers much less (item mean = 3.51).

Table 10

Index & Subscale Summary Statistics

Index / Subscale	Total		Item Equivalent*		
	M	*SD*	# *Items*	*M*	*SD*
ASRS-D Frequency	49.38	27.27	22	2.24	1.24
ASRS-D Intensity	68.27	32.69	22	3.10	1.49
ASRS-D Emotion	77.49	24.33	22	3.52	1.11
ASRS-D Action	67.66	30.27	22	3.08	1.38
ASRS-LE Frequency	44.10	22.98	19	2.32	1.21
ASRS-LE Intensity	65.68	30.75	19	3.46	1.62
ASRS-LE Emotion	69.60	22.01	19	3.66	1.16
ASRS-LE Action	64.39	29.28	19	3.39	1.54
CI	76.56	26.61	21	3.65	1.27
CI Factor 1 (lying)			6	3.41	1.93
CI Factor 2 (conceal from casual acquaintances)			5	4.72	1.94
CI Factor 3 (talk openly with family members†)			3	4.24	1.76
CI Factor 4 (worry about/conceal from close relations)			7	2.74	1.57
SCQ	28.80	10.19	10	1.52	0.54
ISMI	49.09	14.62	29	1.69	0.50
ISMI Alienation			6	1.84	0.74
ISMI Stereotype Endorsement			7	1.44	0.48
ISMI Discrimination Experience			5	1.62	0.65
ISMI Social Withdrawal			6	1.68	0.65
ISMI Stigma Resistance°			5	1.97	0.59
SES	29.25	6.04	10	2.92	0.60
ATSPPH-SF	29.92	4.49	10	2.99	0.45

*ASRS-D, ASRS-LE, and CI items range from 1-7. SCQ items range from 0-6. ISMI, SES and ATSPPH-SF items range from 1-4.

† Based on reverse scored items, such that higher scores equate to more concealment behavior.

° Based on reverse scored items, such that lower scores equate to less acceptance of stigmatizing beliefs.

As mentioned in the Participants section, this sample also had low levels of current mental health symptoms. Although past research supports that people with low current symptoms/in remission may continue to experience stigma, we wanted to see how symptoms levels related to stigma in the current study. We, therefore, performed independent samples T-tests to examine the role of current impairment status as a possible mitigating factor. Participants whose symptoms were in remission (by self-report, see Participants section for more details) (N = 95) reported significantly lower stigma levels than those with current symptoms (N = 182) on both the SCQ (M = 26.9 versus 29.8, t = -2.3, p = .02) and ISMI scales (M = 45.3 versus 51.1, t = -3.1, p = .002). However, these differences did not impact the results for hypotheses. Correlations remained similar to those already reported for both groups, as summarized in Table 11.

Table 11

Advice to Disclose or Lower Expectations and Stigma Variables: Correlations by Current Symptom Status

		1		2		3		4		5		6	
		Have†	None°	Have	None	Have	None	Have	None	Have	None	Have	None
1	ASRS-D	–	–										
2	ASRS-LE	.75**	.78**	–	–								
3	CI	.44**	.45**	.31**	.40**	–	–						
4	SCQ	.43**	.55**	.47**	.54**	.33**	.46**	–	–				
5	ISMI	.49**	.52**	.48**	.54**	.48**	.46**	.52**	.45**	–	–		
6	SES	-.27**	-.15	-.28**	-.23*	-.39**	-.18	-.36**	-.27**	-.51**	-.60**	–	–
7	ATSPPH-SF	.00	.17	.04	.06	.04	.12	.18*	.14	-.25*	-.13	.10	.25*

† Have = Current self-reported symptoms. ° None = No current symptoms/self-reported in remission.
*Correlation is significant at the .05 level, **Correlation is significant at the .01 level

Comparisons of means

In addition to assessing the relationship between social referent advice and other psychological variables, an additional goal of this study was to gain a better understanding of the type and source of the advice, and to identify potential differences between these groups. The ASRS (D & LE) scales' design defined subscales based on the Domain dimension (i.e. what setting did the advice pertain to: General setting, Work, Relationship, or School). To determine differential response patterns on the Domain subscales, I conducted a within-subjects ANOVA with domain type as the factor. On the ASRS-D, the mean frequency scores (standardized to a single-item 7-point Likert scale) were 2.2 for General, 2.6 for Work, 2.2 for Relationships, and 1.8 for School. The ANOVA shows that these values are significantly different, $F(3, 264) = 40.04$, $p < .001$, partial $\eta^2 = .31$. Data supported the within-subjects ANOVA assumptions of normally distributed dependent variables at each level, homogeneity of variance, with skewnesses less than 1.5 and absolute kurtoses less than 1.4. Mauchly's test of sphericity yielded a W-value of .863, $p = .000$. Therefore, people reported receiving different levels of advice to conceal based on the Domain/setting. Work was the area where people received the most advice to hide their mental illness status. In contrast, School/College was the domain where participants received the least advice to conceal.

On the ASRS-LE, a different pattern emerged, with School as the area where individuals received the most advice to lower expectations, and Work as the area where people received the least advice to lower expectations. The mean frequency scores were 2.5 for General, 2.0 for Work, 2.3 for Relationships, and 2.6 for School. These

differences were significant, F (3, 264) = 25.49, $p < .001$, partial $\eta^2 = .23$. Data supported the within-subjects ANOVA assumptions of normally distributed dependent variables at each level, homogeneity of variance, with skewnesses less than 1.5 and absolute kurtoses less than 2.0. Mauchly's test of sphericity yielded a W-value of .947, $p = .013$. It is noteworthy that the ASRS-D and ASRS-LE reverse the rankings of the Domain means. For the ASRS-D, Work was highest, School was lowest and General/Relationships were in between; whereas for the ASRS-LE, School was highest, Work was lowest, and General/Relationships were again in between. In other words, respondents reported receiving more advice to conceal their mental illness at work, but less advice to lower their expectations for success at work—and vice versa for their school setting. One potential hypothesis for this statement, which is explored in the Discussion section, is that the more open a person is in a domain (the less they conceal), the more trouble they may be advised to expect in that area, whereas concealing their symptoms, as in the case of the workplace, may confer some protective factors.

We carried out a similar analysis for the Referent dimension (i.e. who gave the advice: Generic "People", Family, and Mental Health Professional) to quantify differences in referent subscale scores for survey participants. On the ASRS-D, mean scores were 2.6 for Generic social referents, 2.3 for Family referents, and 1.7 for Mental Health Professional referents. Subscale differences were significant, F (2, 276) = 76.16, $p < .001$, partial $\eta^2 = .36$. For the ASRS-LE, mean scores were 2.4 for Generic referents, 2.0 for Family referents, and 1.7 for Mental Health Professional referents. The differences were significant, F (2, 273) = 54.27, $p < .001$, partial $\eta^2 = .28$. These results

suggest that beliefs about who is giving the advice are conceptualized more strongly in general terms, and that when people are asked in concrete terms about who has given the advice, they report receiving it less often, a finding reviewed in more detail in the Discussion section.

The subscale analyses so far have focused on frequency scores for ASRS-D and ASRS-LE subscales (for both Domain and Referent dimensions). While we did not include the intensity scores for the overall measures because calculating frequency scores was the most research-supported and parsimonious approach (Wahl, 1999a), we did want to examine the intensity output in more detail. Prior research on similar scales has evidenced that the frequency and intensity components of constructs can sometimes provide different and unique information. However, in the current study, comparison of means on intensity scores generally painted a picture similar to the intensity findings.

Mean intensity subscale scores (standardized to a single-item 7-point Likert scale) for ASRS-D were 3.1 for General domain, 3.3 for Work domain, 3.0 for Relationships domain, 2.8 for School domain, 2.6 for Generic referents, 2.3 for Family referents, and 1.7 for Mental Health Professional referents. To summarize, regarding advice to conceal, Intensity mirrored the exact pattern as Frequency. People received the most intense levels of advice to conceal at work and the least intense levels of advice to conceal at school. Furthermore, they reported receiving the strongest/most intense advice from generic "People" and the least intense advice from Mental Health professionals.

For the ASRS-LE, the intensity levels were more evenly distributed across the different domains. However, school still emerged as the largest domain area for lowered

expectations, with people reporting receiving the most intense advice to lower expectations in college/school settings. The means were 3.3 for General domain, 3.2 for Work domain, 3.2 for Relationship domain, and 3.5 for School domain. The referent pattern was also consistent with the study's other findings, with "People" reported to have given the strongest advice: 2.4 for Generic referents, 2.0 for Family referents, and 1.7 for Mental Health Professional referents. Therefore, across both types of advice (advice to disclose and advice to lower expectations) and in both amount (frequency) and strength (intensity) of advice, the generic "People" reportedly gave the most and the strongest advice and the mental health professionals gave relatively less and weaker advice. In general, participants reported higher levels of intensity as compared to frequency. However, this discrepancy may be somewhat explained by the measures' design, in that participants who Never received advice chose N/A for their response (as intensity did not apply to them, since no advice was given). Therefore, the intensity scores may have less or limited utility in this relatively low stigma population.

Item summaries

Specific item statistics reflect the patterns observed in the overall subscale analyses (see Tables 12 & 13). For example, each of the top 3 ASRS-D items (i.e. highest mean on frequency scale) referred to Generic referents, the highest overall referent value; and 2 of these 3 refer to the Work domain, the highest overall domain value. Therefore, consistent with other examinations of the data, participants reported receiving the most frequent advice to conceal at work and receiving this advice most often from a generic "Person" or "People." In contrast, each of the bottom 3 items (i.e. lowest mean on

frequency scale) referred to Mental Health Professional referents, while the domains were mixed (but all non-work setting). The same pattern for referent can be seen on the ASRS-LE (see Table 14), which also shows a reversed domain pattern, with 4 of the bottom 5 items (i.e. lowest frequency mean scores) asking about the Work domain. This reversal reflects the differences in means for the ASRS-LE subscales noted above. In addition, all item means fell below the average score of 4 on the 7-point Likert scale, reflecting the population's generally low levels of stigma, the implications of which are explored in more detail in the Discussion.

Table 12

ASRS-D Frequency Index: Selected Response Distributions

Item	*N*	Response category[†] / distribution percentages						
Top 3 items (highest means)		1	2	3	4	5	6	7
People have advised me not to mention that I have (or had) a mental illness on job applications or in interviews.	263	43	5	5	17	8	3	18
People have advised me not to talk about the fact that I have (or had) a mental illness in work environments/at a job.	267	44	9	3	19	6	8	10
People have advised me that others will be less accepting (if) when I reveal my mental illness.	273	43	11	7	22	7	4	5
Bottom 3 items (highest means)		1	2	3	4	5	6	7
Mental health professionals have suggested that I should not talk about my mental illness at college.	263	76	6	5	8	4	2	0
Mental health professionals have told me that it is better if others do not know about my mental illness.	274	76	7	7	7	1	0	2
Mental health professionals have told me that I should not talk about my mental illness with peers (e.g., friends or people that I am involved with romantically).	266	74	10	5	8	1	1	1

[†] Response categories: 1 = Never, 4 = Sometimes, 7 = Often

Table 13

ASRS-D Item Statistics

Item	Frequency Index			Intensity Index		
	N	Mean	SD	N	Mean	SD
People have advised me not to mention that I have (or had) a mental illness on job applications or in interviews.	263	3.25	2.33	175	3.69	1.34
People have advised me not to talk about the fact that I have (or had) a mental illness in work environments/at a job.	267	2.99	2.16	182	3.62	1.51
People have advised me that others will be less accepting (if) when I reveal my mental illness.	273	2.73	1.88	190	3.28	1.61
People have told me that I would be less able get job if employers found out about my mental illness.	265	2.71	2.05	171	3.34	1.43
People have warned me that others may be less likely to want to be romantically involved with me (if) when they find out about my mental illness.	266	2.68	2.00	174	2.90	1.74
Family members have told me not to talk about my mental illness on job applications or in work settings.	268	2.60	1.93	164	3.55	1.33
I have been advised to conceal my mental illness.	274	2.56	1.78	192	3.45	1.63
I have been told that if people at a job/work know about my mental illness, they may treat me differently (e.g., give me less responsibility, doubt my ability to do the work, etc.).	259	2.49	1.94	157	3.23	1.40
People in my family have led me to believe that others would *not* be understanding of my mental illness (if) when I revealed it.	275	2.49	1.86	182	3.54	1.81
People in my family have implied that they would rather not to talk about my mental illness.	273	2.47	1.88	178	3.79	1.97
People have suggested that co-workers at a job would not be accepting of me if they found out that I had a mental illness.	259	2.46	1.95	151	3.42	1.45
Family members have told me that I should not talk about my mental illness with my peers (e.g., friends or people that I am involved with romantically).	262	2.31	1.87	149	3.50	1.84
People in my family seem to worry that others will find out about my mental illness.	274	2.25	1.76	169	3.75	1.78
People have advised me not to talk about my mental illness with friends	269	2.08	1.58	161	3.64	1.56
Family members have suggested that I should not talk about my mental illness at college.	261	2.08	1.73	138	3.63	1.35
I have been told that some people may not want to be friends with me (if) when they learn about my mental illness.	264	2.06	1.71	137	3.38	1.67
Mental health professionals have advised me not to talk about my mental illness on job applications or in work settings.	264	1.89	1.56	128	3.75	1.40
I have been advised not to tell professors or teachers about my mental illness.	265	1.79	1.39	133	3.83	1.27
People in my family have told me that they worry knowledge of my mental illness will spread around town and embarrass us or cause others to distance themselves.	273	1.62	1.40	124	3.99	2.02
Mental health professionals have suggested that I should not talk about my mental illness at college.	263	1.62	1.25	119	3.98	1.41
Mental health professionals have told me that it is better if others do not know about my mental illness.	274	1.61	1.29	131	4.30	1.62
Mental health professionals have told me that I should not talk about my mental illness with peers (e.g., friends or people that I am involved with romantically).	266	1.58	1.19	118	3.97	1.63

Table 14

ASRS-LE Item Statistics

Item	Frequency Index			Intensity Index		
	N	Mean	SD	N	Mean	SD
People have told me that I may have a harder time getting things accomplished in life because of my mental illness.	273	3.05	1.89	208	3.19	1.50
People have told me to expect to have difficulties with romantic relationships (e.g., boyfriends/girlfriends, partners, spouses) because of my mental illness.	265	2.79	1.97	179	2.82	1.51
People have told me to expect to have difficulties with classes (e.g., problems paying attention, problems competing homework, lower grades) because of my mental illness.	264	2.66	1.99	157	3.42	1.29
I have been advised to reduce my workload (e.g., take fewer classes, take a semester off) at school because of my mental illness.	265	2.57	2.00	156	3.76	1.69
People have told me that there may be certain jobs that are too stressful or that I cannot do because of my mental illness.	267	2.50	1.84	171	3.32	1.57
I have been advised to reduce my workload at my job (e.g. reduce hours) because of my mental illness.	262	2.44	1.89	150	3.69	1.43
Family members have told me that it will be more difficult for me to reach my goals because of my mental illness.	270	2.34	1.80	167	3.54	1.71
People have told me to expect to have difficulties with roommates or people I live with because of my mental illness.	262	2.28	1.70	149	3.40	1.34
People have told me expect to have difficulties with friends because of my mental illness.	266	2.28	1.70	156	3.42	1.39
Family members have told me that I may have a hard time getting along with people because of my mental illness.	268	2.10	1.67	142	3.43	1.68
I have been advised to avoid work for some time (e.g., postpone working, postpone looking for work, or quit a job) because of my mental illness.	263	2.08	1.71	138	3.57	1.62
Mental health professionals have told me that it will be more difficult for me to reach my goals because of my mental illness.	268	2.00	1.57	147	4.01	1.64
Mental health professionals have me that I may have a hard time getting along with people because of my mental illness.	264	1.83	1.43	127	3.82	1.41
People in my family have told me to pursue a less challenging career/major or expect to have problems in school because of my mental illness.	261	1.70	1.51	112	3.72	1.68
Family members have told me to lower my expectations about work or not take certain jobs because of my mental illness.	263	1.70	1.46	114	3.91	1.72
People have told me to reduce expectations of success at a job (e.g., don't expect to be promoted, or being told that you may not be able to "handle" job) because of my mental illness.	264	1.64	1.37	109	3.81	1.69
I have advised me to postpone or avoid applying for college because of my mental illness.	258	1.55	1.27	109	3.70	1.83
Mental health professionals have told me to lower my expectations about work or not take certain jobs because of my mental illness.	261	1.53	1.28	109	4.16	1.68
Mental health professionals have told me to pursue a less challenging career/major or expect to have problems in school because of my mental illness.	260	1.53	1.23	104	3.96	1.62

1.

CHAPTER 4: DISCUSSION

Main Findings

This study demonstrated that the advice that people receive from important individuals in their lives (i.e., family members and mental health professionals) about their mental illness is related to stigma factors. Overall, the study found that being told implicitly or explicitly to hide one's mental illness history or to lower one's expectations was correlated with increased perceived stigma and reduced self-esteem. While the study design does not provide evidence for causal relationships, it does allow for a broader look at the many correlates of stigma.

In this study, people who received more advice to conceal their mental illness and to lower their expectations were significantly more aware of the stigma associated with having a mental illness (stigma consciousness). Being aware of the stigma about mental illness, or having high levels of stigma consciousness, indicates that an individual is conscious of the stereotypical views related to his or her mental health consumer status/history. Consistent with research on the self-fulfilling prophecy, having high levels of stigma consciousness in social settings may influence the quality of mental health consumers' social interactions (Pinel, 1999). Past research has demonstrated that people who are highly aware of a potentially stigmatizing characteristic are more self-

conscious about how they are perceived, believe that they will experience greater levels of discrimination, and are able to provide more concrete instances of discrimination than people low in stigma consciousness (Pinel, 1999). While this awareness may confer some protective factors, it can also make moving past one's mental illness history more difficult.

The current study's findings are consistent with this prior research on Stigma Consciousness and Pinel's assessment of Stigma Consciousness across many different groups. "The SCQ can be adjusted for use with any stigmatized group by inserting the proper names of the in-group (stigmatized group)" (Bazemore, Janda, Derlega, & Paulson, 2010, p. 88). In the current study, we inserted "Mental Illness" into the stigma consciousness items, but prior researchers have inserted other possibly stigmatizing terms such as race (e.g., "Black") or nationality/foreign status (e.g., "Foreigners"), sex, (e.g., Woman), or sexuality (e.g., "Homosexual") (Bazemore Janda, Derlega, & Paulson, 2010; Brown & Pinel, 2003; Pinel, 1999). Pinel's (1999) theory and research have shown that individuals vary in how much they are aware of the negative stereotypes about their in-group membership and that being aware of stereotypes is related to adverse outcomes. In several previous studies, researchers have assessed the relationships between stigma consciousness and other psychological variables and personal experiences (e.g., anxiety, trust in people, public and private self-consciousness, and personal and group-level discrimination experiences) (Brown & Pinel, 2003; Pinel, 1999).

Pinel's research consistently demonstrates that among these variables, Stigma Consciousness is most highly correlated with Personal Discrimination experiences

(average r values of ~.6 - ~.7). In other words, people with high levels of stigma consciousness are also very likely to report a history of personal discrimination. This may be because of a selection effect, in that people who are more aware of negative stereotypes are more likely to notice them. This could also apply to our current study, in that people who are more conscious of stereotypes are more likely to remember advice to lower expectations or conceal, which would be consistent with the stereotypes of infanitlization or shame mentioned in prior research (Angell et al., 2005; Corrigan & Miller, 2004). Alternatively, it may be that receiving advice to keep one's mental illness a secret or being told to lower expectations is one way that individuals with mental illness are reminded/made conscious of the stigma associated with mental illness. If we take the definition of discrimination to mean differential/prejudicial treatment of different categories of people on the basis of group membership, it may be that simply hearing advice to conceal or being told to lower expectations, is in and of itself, an experience of stigma or discrimination. This perspective, if true, would also be consistent with past research on anticipated stigma. Anticipated stigma occurs more frequently than other forms of discrimination, but has many of the same effects, such as making people feel more self-conscious and less authentic (Angermeyer et al., 2004; Markowitz, 1998; Scheff, 1988). While these ideas are currently speculative, the implication of stigma consciousness and its correlates are addressed further in the Directions for Future Research section, as providing coping mechanisms to manage one's awareness and experience of stereotypes can be an important tool. Future research may be able provide

greater insight on how to balance stigma's potentially negative impact with the real world consequences that can occur when one reveals a mental illness.

In addition to being conscious of the negative views that others may hold about them, people with a history of mental illness may also believe that the stigmatizing views about mental illness apply to themselves, or have internalized stigma. If stigma consciousness is analogous to "Others may think I am faulty/less equal" then internalized stigma is analogous to "I am faulty/less equal." In the present study, receiving advice to conceal one's mental illness or lower expectations was related to increased feelings of self-stigma. While experiencing a mental illness may cause real functional impairments, stigma can linger even after the symptoms remit (Link, Struening, Rehav, & Phelan, 1997). Even though participants in the current study were from a non-clinical sample with relatively low levels of self-reported current symptoms, the same relationship between stigma and adverse outcomes demonstrated in prior studies was still evidenced. Individuals who received more frequent advice from family members and mental health professionals to conceal their mental illness also reported experiencing greater levels of internalized stigma. In other words, when they were advised to keep their mental illness a secret or to lower their expectations, they were more also more likely to believe that the negative stereotypes about mental illness applied to themselves. These correlations/relationships remained, and in some cases were even stronger when no current symptoms were present, which is again consistent with the fact that stigma can continue to be present in people even when symptoms are no longer evident (Link, Struening, Rehav, & Phelan, 1997).

It is possible individuals' generalized stigma schemas cause them to notice more stigma-consistent cues. This explanation would fit with stigma theories, which have demonstrated that stigma can have a master status, eclipsing and coloring all interactions (e.g., Goffman, 1963). These stigma views may give a realistic view of the obstacles faced by individuals with a mental illness history, both in recovery obstacles (e.g., need to adjust expectations) and the stigma that exists in the world. This knowledge may help individuals navigate their recovery path more realistically. However, internalized stigma can also have adverse consequences.

Prior research has also identified components of internalized stigma as risk factors for negative outcomes, such as developing increased depressive symptoms. Internalized stigma factors such as Alienation and Stereotype Endorsement both predicted the development of depressive symptoms in prior research, even when controlling for baseline depression levels (Ritsher & Phelan, 2004). While we did not assess for depression in the current study, the moderate relationship between advice not to disclose (ASRS-D) and the internalized stigma components of Alienation and Stereotype Endorsement ($r = .42$ & $.36$, respectively) suggests that this may be an area to explore in future studies, especially since many participants in the current study evidenced a history/vulnerability for depression.

Further, receiving high levels of advice to conceal and lower expectations was also related to lower levels of self-esteem. The relationship between self-esteem and stigma has been evidenced in many prior studies. For example, in their meta-analysis of 127 internalized stigma studies from the mental health consumer's perspective (including

measures of internalized stigma other than just the ISMI), Livingston & Boyd (2010) found that there was a significant negative relationship between stigma and low self-esteem in 88% of the studies (the other 12% of studies found no relationship). It is important to note that this study includes many different assessments of internalized stigma other than the ISMI, so direct comparisons cannot be made. Furthermore, it is unknown from the current data if receiving the advice to conceal or lower expectations is stigma, or contributes to/is caused by stigma. However, the present finding does indicate that some relationship exists between self-esteem and advice received. In the current study, the relationship between self-esteem and advice to disclose (ASRS-D) was r = -.23, while the relationship between advice to lower expectations and self-esteem was r = -.29. The previously mentioned meta-analysis reported a higher relationship between stigma and self-esteem: r = -.55, compared with the current research. Again, these differences may be caused by the variety of different assessments of internalized stigma used in Livingston and Boyd's (2010) research. Another possible explanation for this discrepancy could be that the correlations may be attenuated due to the restricted range (relatively low levels of stigma) evidenced in the current study. Alternatively, this difference in correlations could indicate that, compared with traditional stigma variables, there may be less of a relationship between receiving advice to lower expectations/conceal and self-esteem. This could be because of a moderating variable/step in the process that is, it may be that the advices leads to stigma or anticipated stigma, which in turn leads to low self-esteem. On the other hand, it may be

that a general negative bias/low self-esteem predisposes people to notice negative stereotypes. These development paths may be useful to explore in future research.

In addition to assessing the relationship between the advice that mental health consumers received and internal experiences such as self-esteem and stigma, I also examined the relationship between the advice that mental health consumers received and their behaviors. Behavioral reactions were assessed using the Action items on the ASRS-D and ASRS-LE scales (e.g., this changed what I did) and the Concealment Inventory. The action items on the Advice scales represented the self-reported persuasive impact, with individuals reporting that the advice that they received had in fact changed what they did (impacted their actions). Furthermore, receiving advice to keep one's mental illness a secret and to lower one's expectations was also related to reported concealment behavior. Prior qualitative research has evidenced that individuals incorporate the advice that they received from others when making decisions to conceal or reveal their mental illness (Williams & Healy, 2001). This is the first non-qualitative research that we are aware of which identifies a relationship between concealment behavior and receiving this advice, thereby filling an important gap in the research.

Family members may have a personal stake in reminding individuals with mental illness of the stigma and promoting concealment. Relatives may have an incentive to help protect family members from stigma in the world through strategies that may offer protection such as stigma management. This would be consistent with past qualitative research, which indicates that many consumers have participated in disclosure "coaching sessions" with other people such as parents, close friends, spouses, or other patients.

Individuals with mental illness described these sessions as involving many practice exercises and role-plays, through which consumers could learn to manage their status as someone with a mental illness, often through the use impression management or deceptive strategies. These coaching sessions may help the mental health consumer learn how to appropriately manage the disclosure of their illness/prevent stigma.

Because of the contagion effect of stigma, or associative stigma, social referents may also be directly trying to manage their own stigma (associative stigma). Associative stigma affects parents, children, siblings, spouses or significant others, and other family members (Corrigan & Kleinlein, 2005). Family members experience associative stigma in areas such as social exclusion or withdrawal, unrealistic perceptions of responsibility or blame, and discrimination (Angell, Cooke, & Kovac, 2005; Corrigan & Kleinlein, 2005; Dubin & Fink, 1992; Lefley, 1992; Schulze & Angermeyer, 2003). In one survey of family members of individuals with serious mental illness, 47% of relatives in the study agreed or strongly agreed with the statement "most people look down on families that have a member who is mentally ill living with them" (Struening et. al., 2001, p. 1636). Therefore, in promoting concealment, family members may, in essence, be protecting themselves as well.

While protective in some ways, prior research has shown that this concealment may also have costs for mental health consumers, and may in fact even make the stigma worse (Link, Mirotznik, & Cullin, 1991). Utilizing secrecy as a coping mechanism is related to increased feelings of demoralization and unemployment. Consistent with the expectation that this advice to conceal would impact how mental health consumers feel,

we found that individuals who received advice to conceal reported feeling worse after hearing the advice (negative emotional impact "this advice made me feel…"). As many individuals in the current study experienced depression, which is often accompanied by feelings of apathy and/or perceived lack of options, it could be that feeling worse after hearing the advice further increases discouragement and contributes to a cycle of continued stigma and mental illness (Link et al., 2001). While this hypothesis is outside of the scope of the current study, these findings and prior studies suggest that future research and/or stigma programs would benefit from considering a balance between the protection afford by concealment and the possible costs of stigma. Concealment (or the choice to reveal) is not a unitary construct influenced by just one thing, such as advice. Rather, people view concealment differently across domains and may respond to unique environmental and personal factors when making the decision to reveal or discuss their mental illness. This finding is consistent with prior qualitative research, which evidences that many factors contribute to a person's discussion to reveal or conceal his or her mental illness history (Goldberg, Killeen, & O'Day, 2005).

In a pattern similar to what we saw on disclosure, receiving advice to lower one's expectations (ASRS-LE) was also related to a change in what participants reportedly did after receiving the advice (Action impact). In addition, people who received more advice to lower expectations also reported more concealment behavior (Concealment Inventory). However, receiving advice to lower expectations did not appear to be related to making the person feel worse (e.g., emotional impact). The reasons for this lack of relationship are unknown. It is possible that this advice did not make the person feel worse because

these views were consistent with the person's pre-existing views about him or herself (e.g., self-stigma). Extrapolating from these results, it is possible that self-stigma connotes a cognitive vulnerability/selection effect, such that individuals high in self-stigma perceive and remember advice consistent with pre-existing schemas, rather than advice leading to self-stigma. Prior schema research has evidenced the all-encompassing "engulfment" effect that mental illness stigma can have on individuals, which may be partially or wholly explained by internal cognitions (Goffman, 1963; Farina, 2000; Jones et al., 1984).

Furthermore, contrary to our expectation, receiving advice to conceal or lower expectations was not related to help-seeking behavior. This result was unexpected, as a willingness to seek help for mental health problems is usually broadly and inversely correlated with mental illness stigma (Barney at al., 2006). One reason that this study did not find the same relationship may be an artifact of the selection measure utilized to identify people as having a mental illness history. For purposes of this study, having a mental illness was operationally defined as both having a serious psychological problem and seeking professional treatment for this problem. This definition, based on prior research, was utilized in order to reduce false positives (e.g., people with sub-clinical or misinterpreted mental health concerns) However, as the very definition of prior mental illness used in this study required that individuals had sought prior treatment, this sample may have experienced less stigma/more positive personal experiences regarding help-seeking as compared to populations in prior research.

Another characteristic of the current sample of college students was the relatively low levels of stigma that they reported. Using Ritsher and Phelan's (developers of the Internalized Stigma of Mental Illness (ISMI)) definition of "High" levels of stigma, only 8% of the current study reported High levels of internalized stigma. In contrast, during the development of the ISMI, these researchers reported that about a third of the sample they assessed reported High levels of stigma. However, the sample that they assessed was quite different (patients at a Veteran's mental health center). Reviews of mental illness treatment in the military show that it is an area with high levels of stigma (Greene-Shortidge, Britt, & Andrew, 2007). Mental illness is likely to be perceived and accepted differently in a military culture compared to a college culture, as well as result in different consequences. For example, in the military, perceived/real mental health problems may cause a person not be promoted or be discharged from active duty (Greene-Shortidge, Britt, & Andrew, 2007). However, it is less likely for a college student to be held back or formally discharged from college because of mental illness. Furthermore, some differences in age and gender also existed between the two samples, with our present sample being mostly female and the ISMI study military sample being 91% male (Current Study Mean Age = 22, ISMI Development Study Mean Age = 51). Nonetheless, just because a sample evidences low levels of stigma, this does not invalidate the conclusions. In fact, many of the patterns and relationships were identical to those seen in other prior research, suggesting that the assumptions of the current study, while limited, are valid (example provided at the end of the paragraph). However, our results, like Ritsher & Phelan's (2004) work and that of other stigma researchers, have

generalizability limited to the populations assessed. Despite the significant differences between these two specific studies, there are similarities between the current study and the larger research pool on internalized stigma that suggest reliable relationships across different samples. In a meta-analysis of 19 studies that utilized the ISMI measure of internalized stigma, the mean relationship between internalized stigma and self esteem across studies was r = -.55 (Livingston & Boyd , 2010). This is very consistent with findings from the current study, which found a similar relationship between ISMI and stigma (r = -.59). Therefore, even though the levels of stigma reported in the present study are lower than in some prior research, the same patterns and relationships are still evident.

Subscales and Domains

In addition to the overall Advice to Disclose and Advice to Lower Expectations Scales, we also looked at subscales/domains. Subscales on the ASRS-D and ASRS-LE were divided according to the domain (place that the advice applied to: e.g., work or relationships) and referent type/person giving the advice (General, Family Member, or Mental Health Professional). First, people generally receive more advice to conceal their mental illness in work contexts than in other contexts, but less advice to lower their expectations about success at work. Perhaps advice-givers believe that consumers can, by concealing their mental illness, avoid the negative effects of stigma and/or conflict which might result from knowledge of their mental illness and/or behaviors associated with their mental illness. In this way, family members may be trying to assist their

relatives in avoiding revealing in some of the most stigmatizing environments and also escaping the consequences/shunning that could follow.

On the other hand, in domains where people were less discouraged from disclosing (e.g. school & relationships), they were advised to lower their expectations more frequently. Inverting the previous logic, perhaps advice-givers believe that in situations where disclosure is more permissible or inevitable, there may also be negative consequences from stigma and/or complications resulting from maladaptive behavior. In other words, the people giving advice may believe that when it is possible to keep the mental illness a secret, there will be more favorable outcomes, hence their advice to conceal may be perceived as helpful, rather than intended to stigmatize.

The most consistent trend among both the original subscales and the emergent factors concerned the Referent dimension. Specifically, the ranking of referent mean scores was consistent: Generic (highest), Family, and then Mental Health Professionals (lowest). We found that for both advice to conceal and advice to lower expectations, consumers reported receiving the least amount of advice to conceal from mental health professionals. This finding is contrary to qualitative research and studies examining family member perceptions about mental health professionals, which found that relatives report that their interactions with professionals are among the most stigmatizing experiences (Stengler-Wenzke, Trosbach, Dietrich, & Angermeyer, 2004). This pattern suggests that reported beliefs about who has given potentially stigmatizing advice may be schematically represented in broader, less specific terms. This finding has implications for how the information is stored, in that participants were most likely to report that a

generic “someone” or “people” gave them the advice. While this may indicate that people from many different categories were providing advice, it may also indicate that the advice is stored at a vaguer/more abstract level. In other words, they think that “someone” must have told them, but they cannot remember the source of the information.. Therefore, it is possible that they believe that they received advice from a person, when in fact; it may be coming from their own internal stigmatizing beliefs.

These errors in perception/memory, if they exist, are consistent with Johnson & Raye’s (1981) theory of Reality Monitoring. This theory states that people remember data from two primary sources: external (things they perceive) and internal (things they create internally through imagination, thought, or reasoning), and that this source monitoring is influenced by many factors such as age and type of source (Hashtroudi, Johnson, & Chrosniak, 1989). According to this research, a cognitive system is “capable of generating information on its own and integrating information from multiple sources. Constructive and reconstructive processes that interpret, embellish, transform, and synthesize experiences are powerful engines for comprehension and creativity, but the potential cost is distorted memories and beliefs” (Mitchell & Johnson, 2000, p.179). Therefore, given the powerful nature of stigma, it could be possible that sometimes the source of information about concealment or lowering expectations is internal rather than external.

The idea that the information may be stored at a broad level is consistent with schema research, which finds that people who report high levels of stigma often conceptualize stigma in general, pervasive ways (e.g., Jones et al., 1984). Furthermore, it

is also consistent with anticipated stigma research, which finds that people expect to be stigmatized more frequently than actual stigmatization occurs. In other words, they may believe that they have received advice more frequently than they actually have, if they are unaware of the source. We found this theme echoed in our current research, where people reported lower levels of advice to conceal or lower expectations when prompted about specific advice-givers. Future research could investigate whether other types of referents such as friends or professors are driving up the "general" perception by also giving advice, or—if no such referents can be found—whether people's own implicit beliefs about stigma may be inflating their perceived level of advice. Either way, therapists and stigma researchers could benefit from this understanding and then apply cognitive techniques to alter consumers' schemas about the prevalence and/or source of potentially stigmatizing beliefs and advice. If there are other types of specific referents who tend to give more such advice, the therapist/employment coach could help the client cognitively separate those referents from other referents who offer different views. On the other hand, if no specific types of referents are actually giving higher levels of potentially stigmatizing advice, the therapist/coach may be able to challenge the client's cognitions and potentially alleviate a source of distress. Like many things, stigma programs and advice/concealment research may benefit from a "everything in moderation," approach, where stigma is assessed on a realistic level, while being neither ignored nor exaggerated.

Implications

Research has shown that having a mental illness is one of the most stigmatizing characteristics. Social referents such as family members and mental health professionals are often aware of the negative stereotypes surrounding mental illness, as are individuals with mental illnesses. When compared to other commonly stigmatized groups (e.g., physically disabled, criminal history, or racial identity clusters), individuals in the mental stigma group consistently receive the most negative evaluations/are the group that other individuals would be the least comfortable interacting with (Towler & Schneider, 2005). Research has demonstrated that the mere label of mental illness can evoke damaging connotations, such as being emotionally weak, unpredictable, dirty and worthless (NMHA, 1999).

Stigma can have adverse consequences for individuals who experience or anticipate shame and ostracism. Therefore, the results of the current study may be useful in contributing to a better understanding of the factors that influence how stigma information might affect individuals with present or past mental illnesses. The results of this research increase our understanding of the advice that individuals with mental illnesses receive from important people in their lives. This study provides supportive evidence of the relationship between advice to conceal/lower expectations from social referents and self-stigma, stigma consciousness, and low self-esteem. These findings are an important first step in an area of research that has had little prior exploration. Efforts to combat stigma are often made by treating the manifest symptoms of stigma, similar to how we approach medical illnesses or problems. However, taking a more preventative tactic may help individuals avoid some of the harmful effects of stigma. Understanding

more about one possible correlate of mental illness stigma, advice from social referents, contributes to stigma research and indicates a new approach to understanding stigma in mental illness. Furthermore, knowing that advice is a correlate of stigma, suggests future research that will help put the advice process in context. In other words, this advice may be better conceptualized once the processes (e.g., it may be solicited from consumers) and protective benefits are better understood. Incorporating knowledge of this relationship between type of advice and stigma, in tandem with additional research to clarify and understand causal paths, may help inform and develop strategies to reduce stigma and its negative impact.

Limitations

The primary limitation of the current study was the sample that we utilized. In the present study, the stigma reported was less than in some prior research, and the frequency and intensity of advice given was overall on the lower side. For example, on the ASRS-D index, only a small proportion of the sample reported totals above the mid-value possible (10% above average of 4 per item). However, this result was consistent with data for the ISMI measure, for which only 8% of the sample reported totals above the mid-value. In contrast, Ritsher & Phelan (2004) found that about a third of participants in their study had high levels of stigma, defined as "an average score above the midpoint of the possible range (2.5 on a 1-4 scale)." The difference in ISMI scores may be related to differences in the samples, since Ritsher & Phelan studied mental health clients at a Veterans Affairs medical center. In contrast, most of our current sample was relatively

high functioning, in that they are attending college, are currently experiencing low levels of distress (as evidenced by their self-reported low levels of current symptomotology) and are in the outpatient population (non-hospitalized).

The current study's sample of college students reported generally low levels of advice to disclose or lower expectations as well as low levels of internalized stigma. Since this was a college student sample, our results may be different from those that would be obtained from a clinical or inpatient population. Therefore, generalizability is limited to stigma experiences in similar relatively high functioning college student populations. In addition, most participants in our study suffered from mood or anxiety disorders, so these results may not be generalizable to other mental illnesses such as schizophrenia or PTSD. Prior research has demonstrated some differences among diagnoses in stigma experiences. However, research has consistently found that stigma exists across all diagnoses and even occurs for people with less severe mental illnesses/mental health problems. Furthermore, the current study also assessed current and prior mental illness. In other words, the participant did not have to be currently experiencing a mental illness to participate. However, individuals with a history of mental illness are commonly included in stigma research studies, as the stigma does not necessarily go away when the symptoms abate (Wahl, 1999a). However, as current findings (no differences in assessed correlations between current and prior mental health consumers) and past research demonstrates, even people with a prior mental illness can still experience stigma and worry about the past status being revealed (Link, Struening, Rehav, & Phelan, 1997). However, the more time that passes, the more that retrospective

memory bias may impact recollections, which highlights a limitation inherent in any retrospective design such as ours.

Another limitation with the current study is that some of the measures utilized in this study had not been used before or subjected to rigorous scale and item-level analysis before being utilized in the study. The primary goal of the current study was to obtain a first-glance snapshot at a relatively unstudied possible component of stigma – advice received from social referents. The strong correlations between this advice and other psychological and stigma variables suggest that this may be a viable area in which to conduct future research.

Future Research

The current study's findings provide further evidence of the many correlates surrounding mental illness stigma. Individuals who receive higher levels of advice to conceal or lower expectations are also more likely to believe that others think they are flawed (stigma consciousness), that they should keep their mental illness a secret and lower their expectations (impact of advice), and are more likely to believe that the stigmatizing aspects apply to themselves (internalized stigma). The findings of this study are consistent with prior research describing how mental illness can become a powerful "master status" and lead to "impression engulfment." (Goffman, 1963). When this happens, all other characteristics may be interpreted through this negative lens, with the deviant mark linked to a fundamental aspect of the person's disposition and regarded as an integral part of his or her identity (Goffman, 1963; Jones, 1984). Therefore, the

advice that individuals receive to keep their mental illness a secret and/or to lower their expectations may be noticed because of this schema and/or contribute another angle from which these individuals are confronted with stigma. Additionally, because the advice sometimes comes from individuals close to the consumers, it may hold even more weight, and influence outcomes, both protective and possibly harmful.

Meta-analysis of stigma research reveals that many prior stigma studies are based on correlational designs. Future research may therefore want to expand the type of research that is conducted to include more experimental or longitudinal designs. In addition, because many factors are related to stigma, additional research may want to examine the relationship between all of these variables and how they impact one another. A path analysis or structural equation modeling design may serve to reveal the interactive and causal relationships between these variables (Bryant & Yarnold, 1995; Muthén, & Asparouhov, 2011). In addition, as many of the stigma measures assess similar constructs, an overall factor analysis of all of the measures may provide valuable information about related variables and highlight areas of "hanging together" in broader categories or redundancy.

Before additional research is conducted, it may also be beneficial to further refine the measures developed/adapted and to incorporate the findings of the factor analysis (see Appendix B). In addition, a confirmatory factor analysis could be also conducted with another data set to see if the same factors emerge. These refined scales could then be used to assess the domain and referent dimensions with more certainty. However, analyses on the shortened measures/reduced factors were largely similar to the findings on the whole

scale, indicating that underlying constructs are fairly robust, but that the measures may be a bit redundant and could benefit from further refinement.

Overall, stigma regarding mental illness remains a difficult aspect that many individuals will struggle with on their road to recovery from psychological distress. As Ritsher and Phelan discuss, "surely internalized stigma must impede recovery from mental illness." (2004, p. 259). In fact, in their study, they found that stigma can also lead to additional mental health symptoms. However, knowing that stigma exists may also confer benefits obtained from being cognizant of it, a role where advice givers may provide a valuable service in increasing awareness. The more that we know about the complex domain of stigma, the more that we can empower mental health consumers and those that work closely with them to make more informed decisions and to overcome impediments to recovery.

APPENDIX A

Introduction

Welcome to the research study: Advice from Social Referents to Mental Health Consumers

To get started, we need to find out your age. Your age will allow the researchers to give you the correct Informed Consent or Informed Assent form.

Are you over the age of 18?

- ◯ Yes
- ◯ No

The following questions on this page apply to minors (those under the age of 18) only.

If you have a participant number (minors only) enter it below.

Please enter your password (minors only)

If you are under 18, have you completed and turned in your PARENTAL CONSENT form?

- ☐ Yes
- ☐ No

Informed Consent

INFORMED CONSENT

ADVICE FROM SOCIAL REFERENTS TO MENTAL HEALTH CONSUMERS

RESEARCH PROCEDURES

This research is being conducted to investigate the advice that mental health consumers (people with a current or prior mental illness) receive from social referents (e.g., people in general, family members, etc.) and the possible effects of this advice. If you are a mental health consumer, you will be asked to answer a set of questionnaires administered over a secure website about the advice that you may have received and how this advice may have affected you (e.g., did it make you feel better or worse). People who have not experienced a mental illness will be directed to a non-research option that involves watching and answering questions about a video discussing mental illness stigma. It should take about 45-60 minutes both options.

RISKS

The foreseeable risks or discomforts for mental health consumer participants are believed to be small and may include mild distress about recalling experiences such as times that you may have received advice and the effect that this may have had on you. You may contact the George Mason University Counseling Center to discuss your experience at 703-993-2380. There are no other foreseeable risks.

BENEFITS

There are no direct benefits to the participants.

CONFIDENTIALITY

If you take part in the research portion of this study, the data in this study will be confidential. 1) Names and other identifiers such as your GMU ID will not be placed on surveys or other research data. 2) A code/participant number will be placed on the electronic survey and other collected data; 3) through the use of an identification key, the researchers will be able to link your survey to your identity in order to provide you with course credit only; and (4) only the researchers will have access to the identification key. The research key will be kept in a password-protected file separate from the results and will not be used for any reason other than to provide course credit. Your participation in this study will be confidential and all data collected will be coded so that you cannot be identified. Data collected over the internet will be identified with the use of a unique participant identifier and a password (in order to access the website) only. No person identifiable information will be collected as part of the internet-based research. While it is understood that that no computer transmission can be perfectly secure, reasonable efforts will be made to utilize a secure platform and protect the confidentiality of your transmission.

PARTICIPATION

Your participation is voluntary, and you may withdraw from the study at any time and for any reason. If you decide to not participate or withdraw from the study, there is no penalty or loss of benefits to which you are otherwise entitled. There are no costs to you or any other party. You will receive 1 hour of credit for this study.

ALTERNATIVES TO PARTICIPATION

You also have a non-research option if you do not want to participate in research. You may view a psychology video and answer questions about the video. You will receive the same amount of credit (1 hour). If you wish to do this activity instead, please sign up on GMU's SONA systems or contact the researcher at bmann@gmu.edu.

CONTACT

This research is being conducted by Brittany Mann and Linda Chrosniak at George Mason University. Dr. Chrosniak may be reached at 703-993-4139 for questions or to report a research-related problem. You may contact the George Mason University Office of Research Subject Protections at 703-993-4121 if you have questions or comments.

CONSENT

This research has been reviewed according to George Mason University procedures governing your participation in this research. The George Mason University Human Subjects Review Board has waived the requirement for a signature on this consent form. However, if you wish to sign a consent form, please contact the researcher at lchrosni@gmu.edu or (703) 993-4139.

I have read the information provided above about my rights as a research participant. Being in this study is my choice and I agree to consent.

◯ Yes

◯ No

Informed Assent

INFORMED ASSENT

PLEASE NOTE THAT YOU MAY NOT PARTICIPATE IN THIS RESEARCH UNTIL YOU HAVE TURNED IN YOUR PARENTAL CONSENT FORM.

ADVICE FROM SOCIAL REFERENTS TO MENTAL HEALTH CONSUMERS

RESEARCH PROCEDURES

This research is being conducted to investigate the advice that mental health consumers (people with a current or prior mental illness) receive from social referents (e.g., people in general, family members, etc.) and the possible effects of this advice. If you are a mental health consumer, you will be asked to answer a set of questionnaires administered over a secure website about the advice that you may have received and how this advice may have affected you (e.g., did it make you feel better or worse). People who have not experienced a mental illness will be directed to a non-research option that involves watching and answering questions about a video discussing mental illness stigma. It should take about 45-60 minutes both options.

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PARTICIPATION

Your participation is voluntary, and you may withdraw from the study at any time and for any reason. If you decide to not participate or withdraw from the study, there is no penalty or loss of benefits to which you are otherwise entitled. There are no costs to you or any other party. You will receive 1 hour of credit for this study.

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You also have a non-research option if you do not want to participate in research. You may view a psychology video and answer questions about the video. You will receive the same amount of credit (1 hour). If you wish to do this activity instead, please sign up on GMU's SONA systems or contact the researcher at bmann@gmu.edu.

CONTACT

This research is being conducted by Brittany Mann and Linda Chrosniak at George Mason University. Dr. Chrosniak may be reached at 703-993-4139 for questions or to report a research-related problem. You may contact the George Mason University Office of Research Subject Protections at 703-993-4121 if you have questions or comments.

CONSENT

This research has been reviewed according to George Mason University procedures governing your participation in this research. The George Mason University Human Subjects Review Board has waived the requirement for a signature on this consent form. However, if you wish to sign a consent form, please contact the researcher at lchrosni@gmu.edu or (703) 993-4139.

I have read the information provided above about my rights as a research participant. Being in this study is my choice and I agree to consent.

- ◯ Yes
- ◯ No

Demographic Information

Age

Sex

- ◯ Male
- ◯ Female

Race

- ◯ African-American
- ◯ American Indian
- ◯ Asian/Pacific Islander
- ◯ Caucasian/White
- ◯ Hispanic
- ◯ Other

Highest Level of Education

- ◯ Graduate level
- ◯ College Senior
- ◯ College Junior
- ◯ College Sophomore
- ◯ College Freshman
- ◯ High School
- ◯ Other

What type of employment status have you held for the longest time?

- ◯ Full-time
- ◯ Part-time
- ◯ Never employed
- ◯ Other

If you have been employed, what is the longest time you have been employed (in years)?

Number of years

Background

Have you ever experienced any psychological problems that significantly affected your life (e.g., feeling very depressed?)

- ◯ No
- ◯ Yes
- ◯ I choose not to answer this question

Have you ever been treated for a mental health problem?

- ◯ No
- ◯ Yes
- ◯ I choose not to answer this question

If you have been treated for the mental health problem, what treatment was it (is it)?

- ◯ Counseling (therapy only)
- ◯ Medication only
- ◯ Both Counseling and Medication
- ◯ I choose not to answer this question

Background 2

If you have been treated, what kinds of psychological difficulties brought you to treatment? (check as many as are applicable)

- ☐ Difficulties related to depressed mood (e.g., major depression)
- ☐ Difficulties related to elated mood (e.g., bipolar disorder)
- ☐ Difficulties related to anxiety (e.g., anxiety disorder)
- ☐ Difficulties related to psychotic symptoms (e.g., schizophrenia or schizophreniform)
- ☐ Other: Attention-Deficit/Hyperactivity Disorder
- ☐ Eating Disorder (e.g. anorexia, bulimia)
- ☐ Other: Developmental Disorder (e.g., Autism or Aspergers' Disorder)
- ☐ Not Applicable
- ☐ I choose not to answer this question

Other type of mental illness or psychological problem

The term "mental illness" is going to be used in the rest of this questionnaire, but please think of it as whatever you feel is the best term for it.

What do you consider the current status of your mental illness (please check the box next to the one item that best represents the current status)?

- ◯ In full remission, something I am not currently experiencing
- ◯ Symptoms are mild or are mostly under control with medication or therapy
- ◯ Symptoms are moderate or vary (worse sometimes, better other times)
- ◯ Symptoms are often severe

The next question is about impairment that your mental illness may have caused. Some examples of impairment that mental illness may cause include: needing to limit certain activities, preventing work completion, making social situations more difficult, experiencing problems completing schoolwork or attending classes, or other types of impairment.

	Not caused any impairment in functioning	Caused little impairment in functioning	Caused some impairment in functioning	Caused major impairment in functioning
Would you say that your mental illness has **in the past**:	◯	◯	◯	◯
Would you say that your mental illness has **currently**:	◯	◯	◯	◯

Instructions and Sample Item

The term "mental illness" is going to be used in the rest of this questionnaire to indicate a current *OR* a prior/history of a mental illness, but please think of it as whatever you feel is the best term for it. The following questions ask about the advice you may have received about concealing or revealing your mental illness. Please read each item and then indicate how frequently the advice was given, how strongly the advice was given, how the advice made you feel, and indicate whether or not the advice changed your actions. Try the sample item below:

SAMPLE: People have advised me not to reveal the fact that I am in college.

	Never			Sometimes			Very Often	N/A
	◯	◯	◯	◯	◯	◯	◯	◯

	Not Strongly at all			Somewhat Strongly			Very Strongly	N/A
This was communicated:	◯	◯	◯	◯	◯	◯	◯	◯

	Made me feel worse			Mixed Feelings or Neutral			Made me feel better	N/A
This made me feel:	◯	◯	◯	◯	◯	◯	◯	◯

	Did not change what I did			Somewhat changed what I did			Significantly changed what I did	N/A
This affected my actions:	◯	◯	◯	◯	◯	◯	◯	◯

ASRS-D General

1. I have been advised to conceal my mental illness.

	Never			Sometimes			Very Often	N/A
	◯	◯	◯	◯	◯	◯	◯	◯
	Not Strongly at all			Somewhat Strongly			Very Strongly	N/A
This was communicated:	◯	◯	◯	◯	◯	◯	◯	◯
	Made me feel worse			Mixed Feelings or Neutral			Made me feel better	N/A
This made me feel:	◯	◯	◯	◯	◯	◯	◯	◯
	Did not change what I did			Somewhat changed what I did			Significantly changed what I did	N/A
This affected my actions:	◯	◯	◯	◯	◯	◯	◯	◯

2. People have advised me that others will be less accepting (if) when I reveal my mental illness.

	Never			Sometimes			Very Often	N/A
	◯	◯	◯	◯	◯	◯	◯	◯
	Not Strongly at all			Somewhat Strongly			Very Strongly	N/A
This was communicated:	◯	◯	◯	◯	◯	◯	◯	◯
	Made me feel worse			Mixed Feelings or Neutral			Made me feel better	N/A
This made me feel:	◯	◯	◯	◯	◯	◯	◯	◯
	Did not change what I did			Somewhat changed what I did			Significantly changed what I did	N/A
This affected my actions:	◯	◯	◯	◯	◯	◯	◯	◯

3. People in my family have led me to believe that others would *not* be understanding of my mental illness (if) when I revealed it.

	Never			Sometimes			Very Often	N/A
	◯	◯	◯	◯	◯	◯	◯	◯

	Not Strongly at all			Somewhat Strongly			Very Strongly	N/A
This was communicated:	◯	◯	◯	◯	◯	◯	◯	◯

	Made me feel worse			Mixed Feelings or Neutral			Made me feel better	N/A
This made me feel:	◯	◯	◯	◯	◯	◯	◯	◯

	Did not change what I did			Somewhat changed what I did			Significantly changed what I did	N/A
This affected my actions:	◯	◯	◯	◯	◯	◯	◯	◯

4. People in my family seem to worry that others will find out about my mental illness.

	Never			Sometimes			Very Often	N/A
	◯	◯	◯	◯	◯	◯	◯	◯

	Not Strongly at all			Somewhat Strongly			Very Strongly	N/A
This was communicated:	◯	◯	◯	◯	◯	◯	◯	◯

	Made me feel worse			Mixed Feelings or Neutral			Made me feel better	N/A
This made me feel:	◯	◯	◯	◯	◯	◯	◯	◯

	Did not change what I did			Somewhat changed what I did			Significantly changed what I did	N/A
This affected my actions:	◯	◯	◯	◯	◯	◯	◯	◯

5. People in my family have told me that they worry knowledge of my mental illness will spread around town and embarrass us or cause others to distance themselves.

	Never			Sometimes			Very Often	N/A
	◯	◯	◯	◯	◯	◯	◯	◯

	Not Strongly at all			Somewhat Strongly			Very Strongly	N/A
This was communicated:	◯	◯	◯	◯	◯	◯	◯	◯

	Made me feel worse			Mixed Feelings or Neutral			Made me feel better	N/A
This made me feel:	◯	◯	◯	◯	◯	◯	◯	◯

	Did not change what I did			Somewhat changed what I did			Significantly changed what I did	N/A
This affected my actions:	◯	◯	◯	◯	◯	◯	◯	◯

6. People in my family have implied that they would rather not to talk about my mental illness.

	Never			Sometimes			Very Often	N/A
	◯	◯	◯	◯	◯	◯	◯	◯

	Not Strongly at all			Somewhat Strongly			Very Strongly	N/A
This was communicated:	◯	◯	◯	◯	◯	◯	◯	◯

	Made me feel worse			Mixed Feelings or Neutral			Made me feel better	N/A
This made me feel:	◯	◯	◯	◯	◯	◯	◯	◯

	Did not change what I did			Somewhat changed what I did			Significantly changed what I did	N/A
This affected my actions:	◯	◯	◯	◯	◯	◯	◯	◯

7. Mental health professionals have told me that it is better if others do not know about my mental illness.

	Never			Sometimes			Very Often	N/A
	◯	◯	◯	◯	◯	◯	◯	◯

	Not Strongly at all			Somewhat Strongly			Very Strongly	N/A
This was communicated:	◯	◯	◯	◯	◯	◯	◯	◯

	Made me feel worse			Mixed Feelings or Neutral			Made me feel better	N/A
This made me feel:	◯	◯	◯	◯	◯	◯	◯	◯

	Did not change what I did			Somewhat changed what I did			Significantly changed what I did	N/A
This affected my actions:	◯	◯	◯	◯	◯	◯	◯	◯

ASRS-D Work

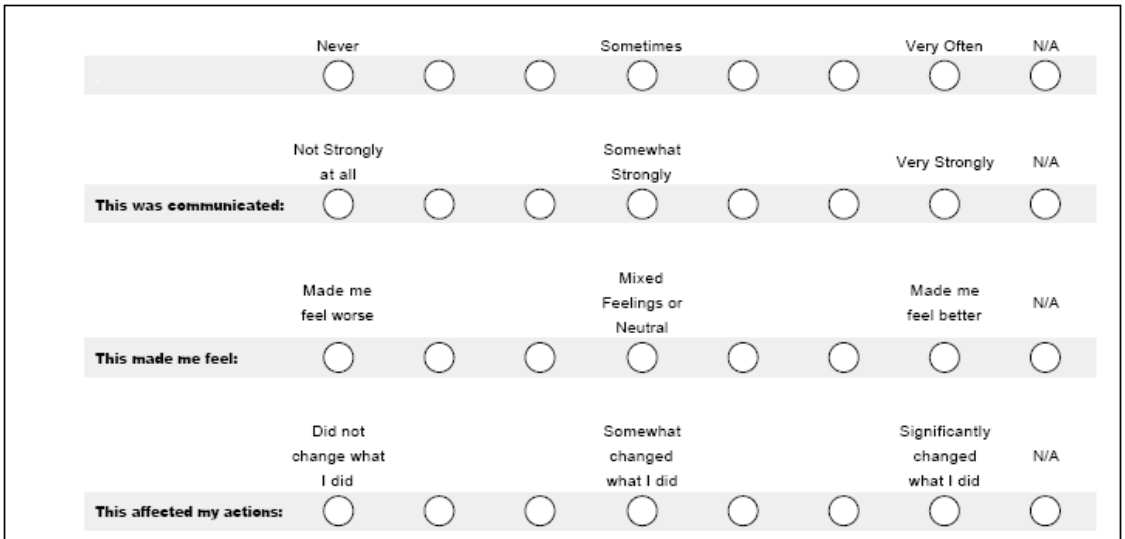
8. People have advised me not to talk about the fact that I have (or had) a mental illness in work environments/at a job.

	Never			Sometimes			Very Often	N/A
	◯	◯	◯	◯	◯	◯	◯	◯
	Not Strongly at all			Somewhat Strongly			Very Strongly	N/A
This was communicated:	◯	◯	◯	◯	◯	◯	◯	◯
	Made me feel worse			Mixed Feelings or Neutral			Made me feel better	N/A
This made me feel:	◯	◯	◯	◯	◯	◯	◯	◯
	Did not change what I did			Somewhat changed what I did			Significantly changed what I did	N/A
This affected my actions:	◯	◯	◯	◯	◯	◯	◯	◯

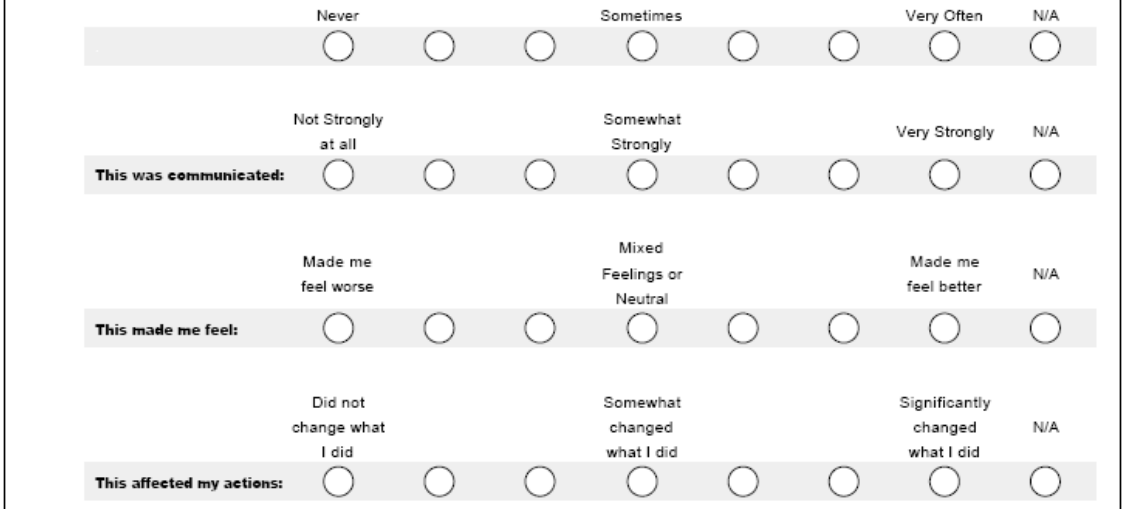
9. People have advised me not to mention that I have (or had) a mental illness on job applications or in interviews.

	Never			Sometimes			Very Often	N/A
	◯	◯	◯	◯	◯	◯	◯	◯
	Not Strongly at all			Somewhat Strongly			Very Strongly	N/A
This was communicated:	◯	◯	◯	◯	◯	◯	◯	◯
	Made me feel worse			Mixed Feelings or Neutral			Made me feel better	N/A
This made me feel:	◯	◯	◯	◯	◯	◯	◯	◯
	Did not change what I did			Somewhat changed what I did			Significantly changed what I did	N/A
This affected my actions:	◯	◯	◯	◯	◯	◯	◯	◯

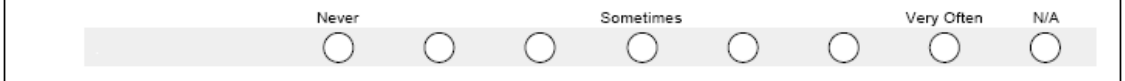
10. People have told me that I would be less able to get a job if employers found out about my mental illness.



11. People have suggested that co-workers at a job would not be accepting of me if they found out that I had a mental illness.



12. I have been told that if people at a job/work know about my mental illness, they may treat me differently (e.g., give me less responsibility, doubt my ability to do the work, etc.).



	Not Strongly at all			Somewhat Strongly			Very Strongly	N/A
This was communicated:	◯	◯	◯	◯	◯	◯	◯	◯

	Made me feel worse			Mixed Feelings or Neutral			Made me feel better	N/A
This made me feel:	◯	◯	◯	◯	◯	◯	◯	◯

	Did not change what I did			Somewhat changed what I did			Significantly changed what I did	N/A
This affected my actions:	◯	◯	◯	◯	◯	◯	◯	◯

13. Mental health professionals have advised me not to talk about my mental illness on job applications or in work settings.

	Never			Sometimes			Very Often	N/A
	◯	◯	◯	◯	◯	◯	◯	◯

	Not Strongly at all			Somewhat Strongly			Very Strongly	N/A
This was communicated:	◯	◯	◯	◯	◯	◯	◯	◯

	Made me feel worse			Mixed Feelings or Neutral			Made me feel better	N/A
This made me feel:	◯	◯	◯	◯	◯	◯	◯	◯

	Did not change what I did			Somewhat changed what I did			Significantly changed what I did	N/A
This affected my actions:	◯	◯	◯	◯	◯	◯	◯	◯

14. Family members have told me not to talk about my mental illness on job applications or in work settings.

	Never			Sometimes			Very Often	N/A
	◯	◯	◯	◯	◯	◯	◯	◯

	Not Strongly at all			Somewhat Strongly			Very Strongly	N/A
This was communicated:	◯	◯	◯	◯	◯	◯	◯	◯

	Made me feel worse			Mixed Feelings or Neutral			Made me feel better	N/A
This made me feel:	◯	◯	◯	◯	◯	◯	◯	◯

	Did not change what I did			Somewhat changed what I did			Significantly changed what I did	N/A
This affected my actions:	◯	◯	◯	◯	◯	◯	◯	◯

ASRS-D Relationships

15. People have advised me not to talk about my mental illness with friends.

	Never			Sometimes			Very Often	N/A
	◯	◯	◯	◯	◯	◯	◯	◯
	Not Strongly at all			Somewhat Strongly			Very Strongly	N/A
This was communicated:	◯	◯	◯	◯	◯	◯	◯	◯
	Made me feel worse			Mixed Feelings or Neutral			Made me feel better	N/A
This made me feel:	◯	◯	◯	◯	◯	◯	◯	◯
	Did not change what I did			Somewhat changed what I did			Significantly changed what I did	N/A
This affected my actions:	◯	◯	◯	◯	◯	◯	◯	◯

16. I have been told that some people may not want to be friends with me (if) when they learn about my mental illness.

	Never			Sometimes			Very Often	N/A
	◯	◯	◯	◯	◯	◯	◯	◯
	Not Strongly at all			Somewhat Strongly			Very Strongly	N/A
This was communicated:	◯	◯	◯	◯	◯	◯	◯	◯
	Made me feel worse			Mixed Feelings or Neutral			Made me feel better	N/A
This made me feel:	◯	◯	◯	◯	◯	◯	◯	◯
	Did not change what I did			Somewhat changed what I did			Significantly changed what I did	N/A
This affected my actions:	◯	◯	◯	◯	◯	◯	◯	◯

17. People have warned me that others may be less likely to want to be romantically involved with me (if) when they find out about my mental illness.

	Never			Sometimes			Very Often	N/A
	◯	◯	◯	◯	◯	◯	◯	◯

	Not Strongly at all			Somewhat Strongly			Very Strongly	N/A
This was communicated:	◯	◯	◯	◯	◯	◯	◯	◯

	Made me feel worse			Mixed Feelings or Neutral			Made me feel better	N/A
This made me feel:	◯	◯	◯	◯	◯	◯	◯	◯

	Did not change what I did			Somewhat changed what I did			Significantly changed what I did	N/A
This affected my actions:	◯	◯	◯	◯	◯	◯	◯	◯

18. Family members have told me that I should not talk about my mental illness with my peers (e.g., friends or people that I am involved with romantically).

	Never			Sometimes			Very Often	N/A
	◯	◯	◯	◯	◯	◯	◯	◯

	Not Strongly at all			Somewhat Strongly			Very Strongly	N/A
This was communicated:	◯	◯	◯	◯	◯	◯	◯	◯

	Made me feel worse			Mixed Feelings or Neutral			Made me feel better	N/A
This made me feel:	◯	◯	◯	◯	◯	◯	◯	◯

	Did not change what I did			Somewhat changed what I did			Significantly changed what I did	N/A
This affected my actions:	◯	◯	◯	◯	◯	◯	◯	◯

19. Mental health professionals have told me that I should not talk about my mental illness with peers (e.g., friends or people that I am involved with romantically).

	Never			Sometimes			Very Often	N/A
	◯	◯	◯	◯	◯	◯	◯	◯

	Not Strongly at all			Somewhat Strongly			Very Strongly	N/A
This was communicated:	◯	◯	◯	◯	◯	◯	◯	◯

	Made me feel worse			Mixed Feelings or Neutral			Made me feel better	N/A
This made me feel:	◯	◯	◯	◯	◯	◯	◯	◯

	Did not change what I did			Somewhat changed what I did			Significantly changed what I did	N/A
This affected my actions:	◯	◯	◯	◯	◯	◯	◯	◯

ASRS-D School

20. I have been advised not to tell professors or teachers about my mental illness.

	Never			Sometimes			Very Often	N/A
	◯	◯	◯	◯	◯	◯	◯	◯
	Not Strongly at all			Somewhat Strongly			Very Strongly	N/A
This was communicated:	◯	◯	◯	◯	◯	◯	◯	◯
	Made me feel worse			Mixed Feelings or Neutral			Made me feel better	N/A
This made me feel:	◯	◯	◯	◯	◯	◯	◯	◯
	Did not change what I did			Somewhat changed what I did			Significantly changed what I did	N/A
This affected my actions:	◯	◯	◯	◯	◯	◯	◯	◯

21. Mental health professionals have suggested that I should not talk about my mental illness at college.

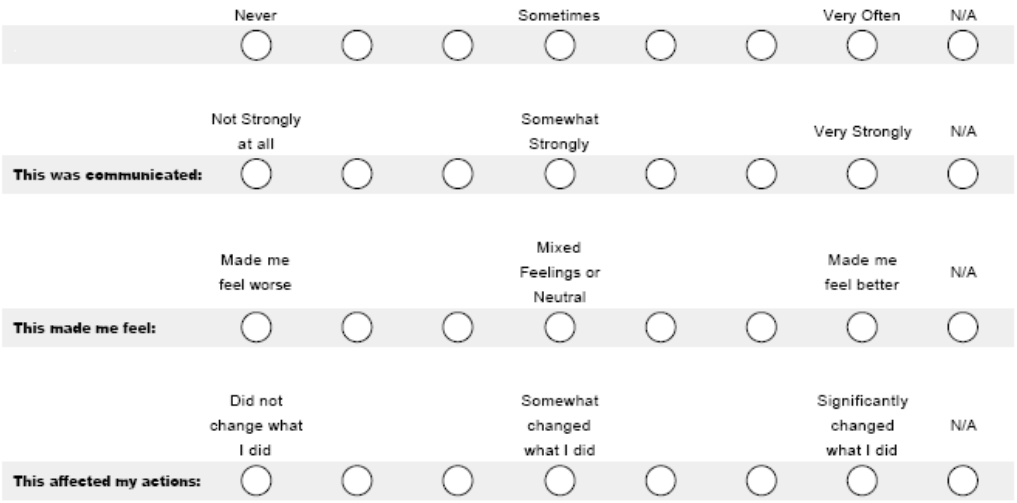
	Never			Sometimes			Very Often	N/A
	◯	◯	◯	◯	◯	◯	◯	◯
	Not Strongly at all			Somewhat Strongly			Very Strongly	N/A
This was communicated:	◯	◯	◯	◯	◯	◯	◯	◯
	Made me feel worse			Mixed Feelings or Neutral			Made me feel better	N/A
This made me feel:	◯	◯	◯	◯	◯	◯	◯	◯
	Did not change what I did			Somewhat changed what I did			Significantly changed what I did	N/A
This affected my actions:	◯	◯	◯	◯	◯	◯	◯	◯

22. Family members have suggested that I should not talk about my mental illness at college.

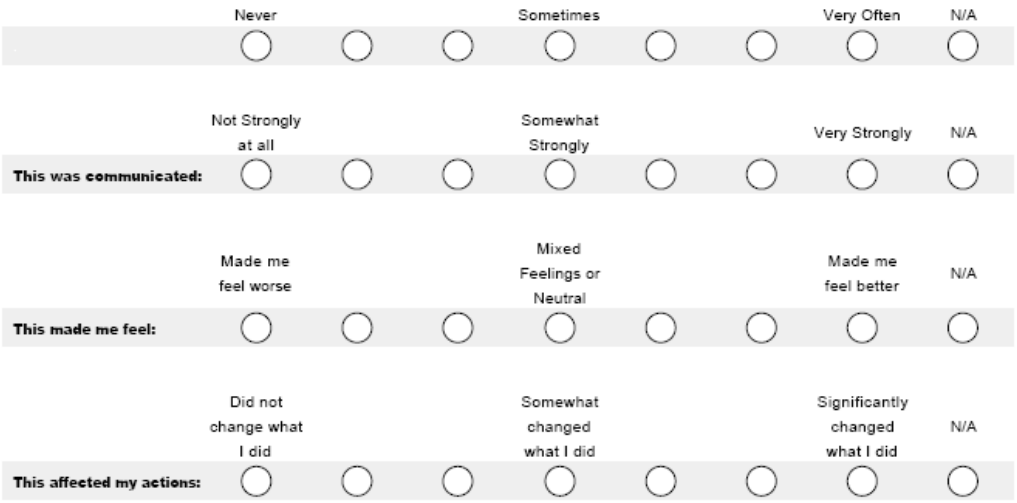
	Never			Sometimes			Very Often	N/A
	◯	◯	◯	◯	◯	◯	◯	◯
	Not Strongly at all			Somewhat Strongly			Very Strongly	N/A
This was communicated:	◯	◯	◯	◯	◯	◯	◯	◯
	Made me feel worse			Mixed Feelings or Neutral			Made me feel better	N/A
This made me feel:	◯	◯	◯	◯	◯	◯	◯	◯
	Did not change what I did			Somewhat changed what I did			Significantly changed what I did	N/A
This affected my actions:	◯	◯	◯	◯	◯	◯	◯	◯

ASRS-LE General

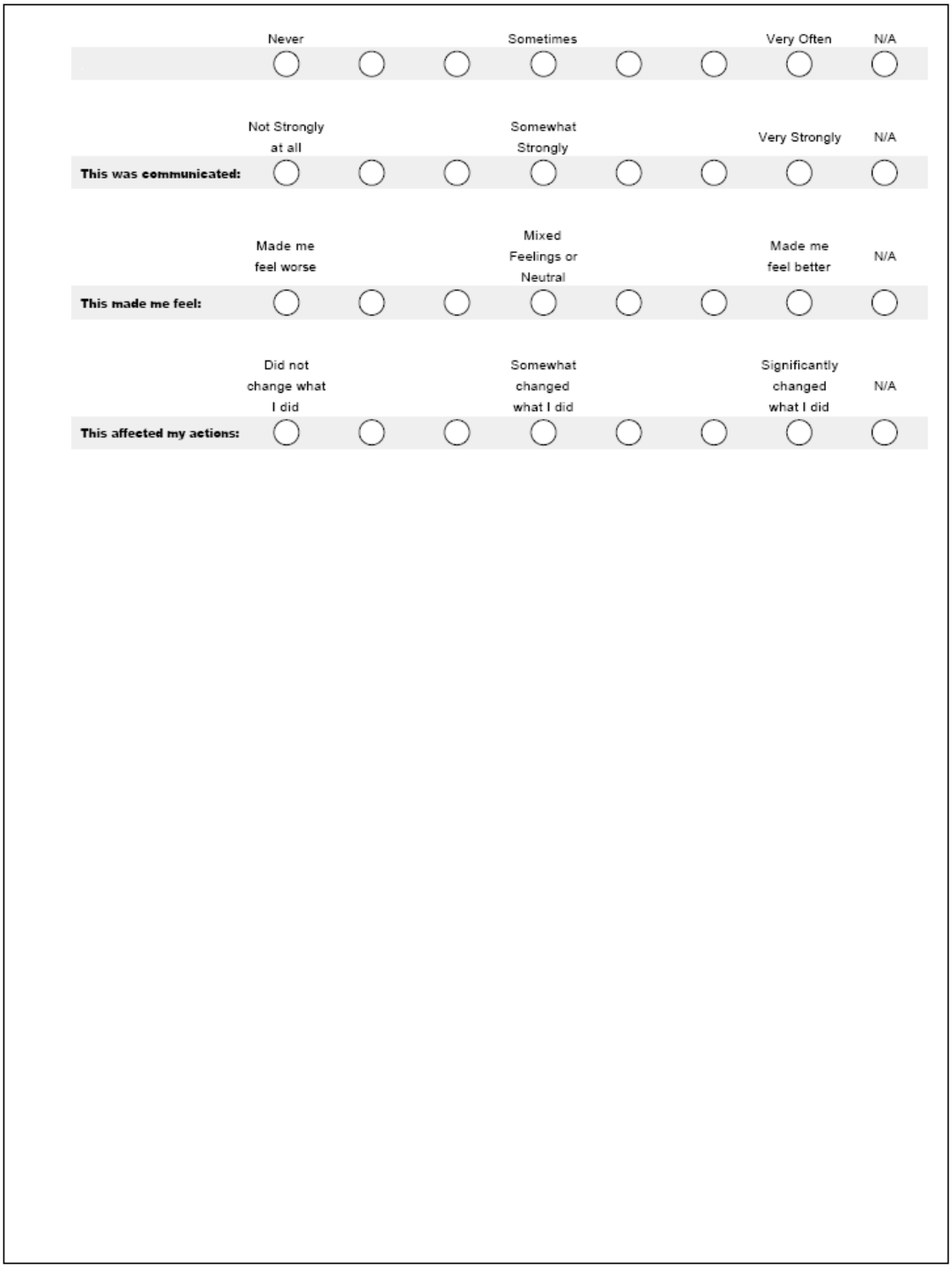
1. People have told me that I may have a harder time getting things accomplished in life because of my mental illness.



2. Family members have told me that it will be more difficult for me to reach my goals because of my mental illness.



3. Mental health professionals have told me that it will be more difficult for me to reach my goals because of my mental illness.


Never
Sometimes
Very Often
N/A
Not Strongly at all
Somewhat Strongly
Very Strongly
N/A
This was communicated:
Made me feel worse
Mixed Feelings or Neutral
Made me feel better
N/A
This made me feel:
Did not change what I did
Somewhat changed what I did
Significantly changed what I did
N/A
This affected my actions:

ASRS-LE Work

4. People have told me that there may be certain jobs that are too stressful or that I cannot do because of my mental illness.

	Never			Sometimes			Very Often	N/A
	◯	◯	◯	◯	◯	◯	◯	◯
	Not Strongly at all			Somewhat Strongly			Very Strongly	N/A
This was communicated:	◯	◯	◯	◯	◯	◯	◯	◯
	Made me feel worse			Mixed Feelings or Neutral			Made me feel better	N/A
This made me feel:	◯	◯	◯	◯	◯	◯	◯	◯
	Did not change what I did			Somewhat changed what I did			Significantly changed what I did	N/A
This affected my actions:	◯	◯	◯	◯	◯	◯	◯	◯

5. I have been advised to avoid work for some time (e.g., postpone working, postpone looking for work, or quit a job) because of my mental illness.

	Never			Sometimes			Very Often	N/A
	◯	◯	◯	◯	◯	◯	◯	◯
	Not Strongly at all			Somewhat Strongly			Very Strongly	N/A
This was communicated:	◯	◯	◯	◯	◯	◯	◯	◯
	Made me feel worse			Mixed Feelings or Neutral			Made me feel better	N/A
This made me feel:	◯	◯	◯	◯	◯	◯	◯	◯
	Did not change what I did			Somewhat changed what I did			Significantly changed what I did	N/A
This affected my actions:	◯	◯	◯	◯	◯	◯	◯	◯

6. I have been advised to reduce my workload at my job (e.g. reduce hours) because of my mental illness.

	Never			Sometimes			Very Often	N/A
	◯	◯	◯	◯	◯	◯	◯	◯

	Not Strongly at all			Somewhat Strongly			Very Strongly	N/A
This was communicated:	◯	◯	◯	◯	◯	◯	◯	◯

	Made me feel worse			Mixed Feelings or Neutral			Made me feel better	N/A
This made me feel:	◯	◯	◯	◯	◯	◯	◯	◯

	Did not change what I did			Somewhat changed what I did			Significantly changed what I did	N/A
This affected my actions:	◯	◯	◯	◯	◯	◯	◯	◯

7. People have told me to reduce expectations of success at a job (e.g., don't expect to be promoted, or being told that you may not be able to "handle" job) because of my mental illness.

	Never			Sometimes			Very Often	N/A
	◯	◯	◯	◯	◯	◯	◯	◯

	Not Strongly at all			Somewhat Strongly			Very Strongly	N/A
This was communicated:	◯	◯	◯	◯	◯	◯	◯	◯

	Made me feel worse			Mixed Feelings or Neutral			Made me feel better	N/A
This made me feel:	◯	◯	◯	◯	◯	◯	◯	◯

	Did not change what I did			Somewhat changed what I did			Significantly changed what I did	N/A
This affected my actions:	◯	◯	◯	◯	◯	◯	◯	◯

8. Family members have told me to lower my expectations about work or not take certain jobs because of my mental illness.

	Never			Sometimes			Very Often	N/A
	◯	◯	◯	◯	◯	◯	◯	◯

	Not Strongly at all			Somewhat Strongly			Very Strongly	N/A
This was communicated:	◯	◯	◯	◯	◯	◯	◯	◯

	Made me feel worse			Mixed Feelings or Neutral			Made me feel better	N/A
This made me feel:	◯	◯	◯	◯	◯	◯	◯	◯

	Did not change what I did			Somewhat changed what I did			Significantly changed what I did	N/A
This affected my actions:	◯	◯	◯	◯	◯	◯	◯	◯

9. Mental health professionals have told me to lower my expectations about work or not take certain jobs because of my mental illness.

	Never			Sometimes			Very Often	N/A
	◯	◯	◯	◯	◯	◯	◯	◯

	Not Strongly at all			Somewhat Strongly			Very Strongly	N/A
This was communicated:	◯	◯	◯	◯	◯	◯	◯	◯

	Made me feel worse			Mixed Feelings or Neutral			Made me feel better	N/A
This made me feel:	◯	◯	◯	◯	◯	◯	◯	◯

	Did not change what I did			Somewhat changed what I did			Significantly changed what I did	N/A
This affected my actions:	◯	◯	◯	◯	◯	◯	◯	◯

ASRS-LE Relationships

10. People have told me to expect to have difficulties with roommates or people I live with because of my mental illness.

	Never			Sometimes			Very Often	N/A
	◯	◯	◯	◯	◯	◯	◯	◯
	Not Strongly at all			Somewhat Strongly			Very Strongly	N/A
This was communicated:	◯	◯	◯	◯	◯	◯	◯	◯
	Made me feel worse			Mixed Feelings or Neutral			Made me feel better	N/A
This made me feel:	◯	◯	◯	◯	◯	◯	◯	◯
	Did not change what I did			Somewhat changed what I did			Significantly changed what I did	N/A
This affected my actions:	◯	◯	◯	◯	◯	◯	◯	◯

11. People have told me expect to have difficulties with friends because of my mental illness.

	Never			Sometimes			Very Often	N/A
	◯	◯	◯	◯	◯	◯	◯	◯
	Not Strongly at all			Somewhat Strongly			Very Strongly	N/A
This was communicated:	◯	◯	◯	◯	◯	◯	◯	◯
	Made me feel worse			Mixed Feelings or Neutral			Made me feel better	N/A
This made me feel:	◯	◯	◯	◯	◯	◯	◯	◯
	Did not change what I did			Somewhat changed what I did			Significantly changed what I did	N/A
This affected my actions:	◯	◯	◯	◯	◯	◯	◯	◯

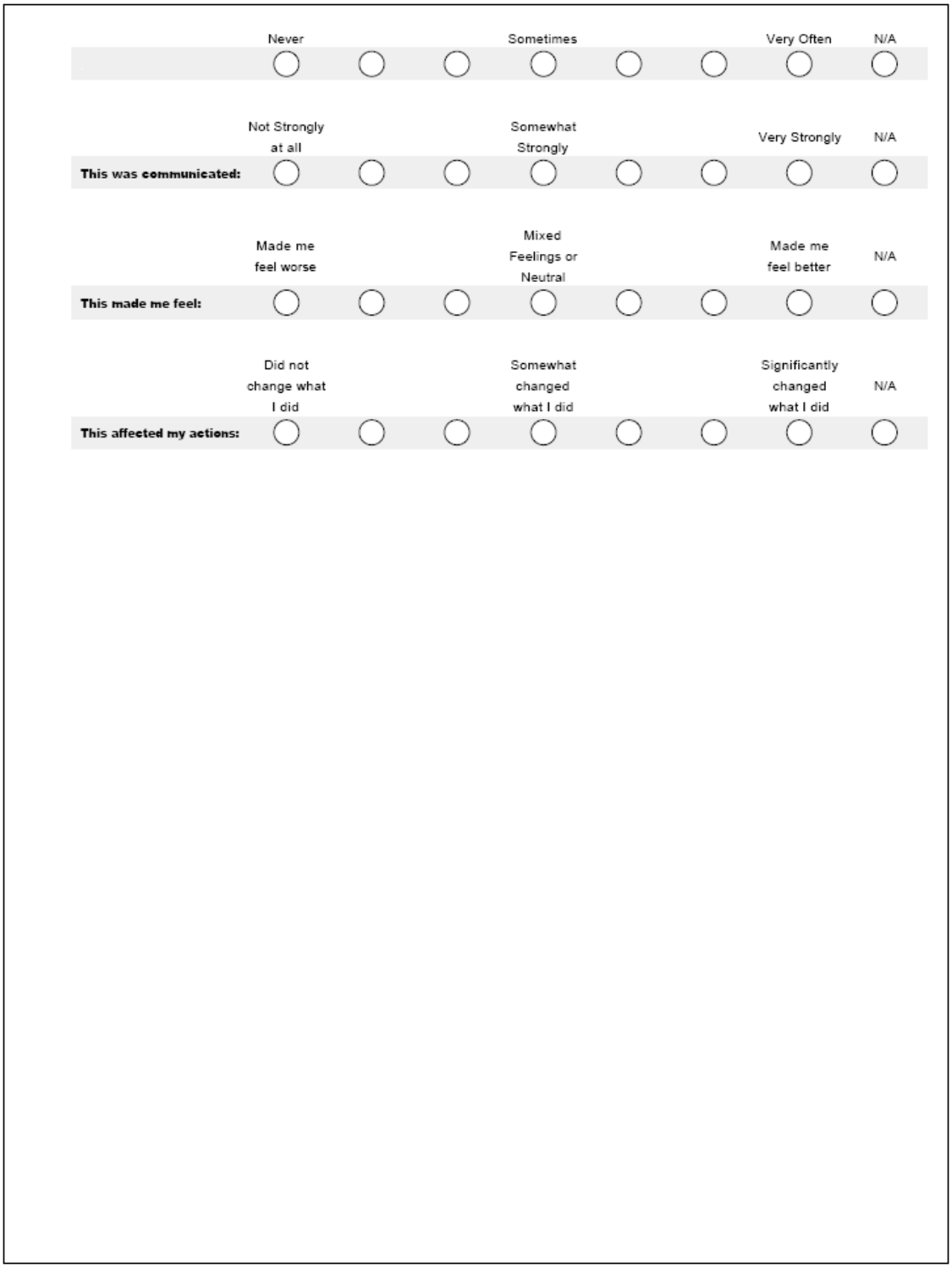
12. People have told me to expect to have difficulties with romantic relationships (e.g., boyfriends/girlfriends, partners, spouses) because of my mental illness.

	Never			Sometimes			Very Often	N/A
	◯	◯	◯	◯	◯	◯	◯	◯
	Not Strongly at all			Somewhat Strongly			Very Strongly	N/A
This was communicated:	◯	◯	◯	◯	◯	◯	◯	◯
	Made me feel worse			Mixed Feelings or Neutral			Made me feel better	N/A
This made me feel:	◯	◯	◯	◯	◯	◯	◯	◯
	Did not change what I did			Somewhat changed what I did			Significantly changed what I did	N/A
This affected my actions:	◯	◯	◯	◯	◯	◯	◯	◯

13. Family members have told me that I may have a hard time getting along with people because of my mental illness.

	Never			Sometimes			Very Often	N/A
	◯	◯	◯	◯	◯	◯	◯	◯
	Not Strongly at all			Somewhat Strongly			Very Strongly	N/A
This was communicated:	◯	◯	◯	◯	◯	◯	◯	◯
	Made me feel worse			Mixed Feelings or Neutral			Made me feel better	N/A
This made me feel:	◯	◯	◯	◯	◯	◯	◯	◯
	Did not change what I did			Somewhat changed what I did			Significantly changed what I did	N/A
This affected my actions:	◯	◯	◯	◯	◯	◯	◯	◯

14. Mental health professionals have me that I may have a hard time getting along with people because of my mental illness.


Never
Sometimes
Very Often
N/A
Not Strongly at all
Somewhat Strongly
Very Strongly
N/A
This was communicated:
Made me feel worse
Mixed Feelings or Neutral
Made me feel better
N/A
This made me feel:
Did not change what I did
Somewhat changed what I did
Significantly changed what I did
N/A
This affected my actions:

ASRS-LE School

15. I have been advised to postpone or avoid applying for college because of my mental illness.

	Never			Sometimes			Very Often	N/A
	◯	◯	◯	◯	◯	◯	◯	◯
	Not Strongly at all			Somewhat Strongly			Very Strongly	N/A
This was communicated:	◯	◯	◯	◯	◯	◯	◯	◯
	Made me feel worse			Mixed Feelings or Neutral			Made me feel better	N/A
This made me feel:	◯	◯	◯	◯	◯	◯	◯	◯
	Did not change what I did			Somewhat changed what I did			Significantly changed what I did	N/A
This affected my actions:	◯	◯	◯	◯	◯	◯	◯	◯

16. I have been advised to reduce my workload (e.g., take fewer classes, take a semester off) at school because of my mental illness.

	Never			Sometimes			Very Often	N/A
	◯	◯	◯	◯	◯	◯	◯	◯
	Not Strongly at all			Somewhat Strongly			Very Strongly	N/A
This was communicated:	◯	◯	◯	◯	◯	◯	◯	◯
	Made me feel worse			Mixed Feelings or Neutral			Made me feel better	N/A
This made me feel:	◯	◯	◯	◯	◯	◯	◯	◯
	Did not change what I did			Somewhat changed what I did			Significantly changed what I did	N/A
This affected my actions:	◯	◯	◯	◯	◯	◯	◯	◯

17. People have told me to expect to have difficulties with classes (e.g., problems paying attention, problems competing homework, lower grades) because of my mental illness.

	Never			Sometimes			Very Often	N/A
	◯	◯	◯	◯	◯	◯	◯	◯

	Not Strongly at all			Somewhat Strongly			Very Strongly	N/A
This was communicated:	◯	◯	◯	◯	◯	◯	◯	◯

	Made me feel worse			Mixed Feelings or Neutral			Made me feel better	N/A
This made me feel:	◯	◯	◯	◯	◯	◯	◯	◯

	Did not change what I did			Somewhat changed what I did			Significantly changed what I did	N/A
This affected my actions:	◯	◯	◯	◯	◯	◯	◯	◯

18. People in my family have told me to pursue a less challenging career/major or expect to have problems in school because of my mental illness.

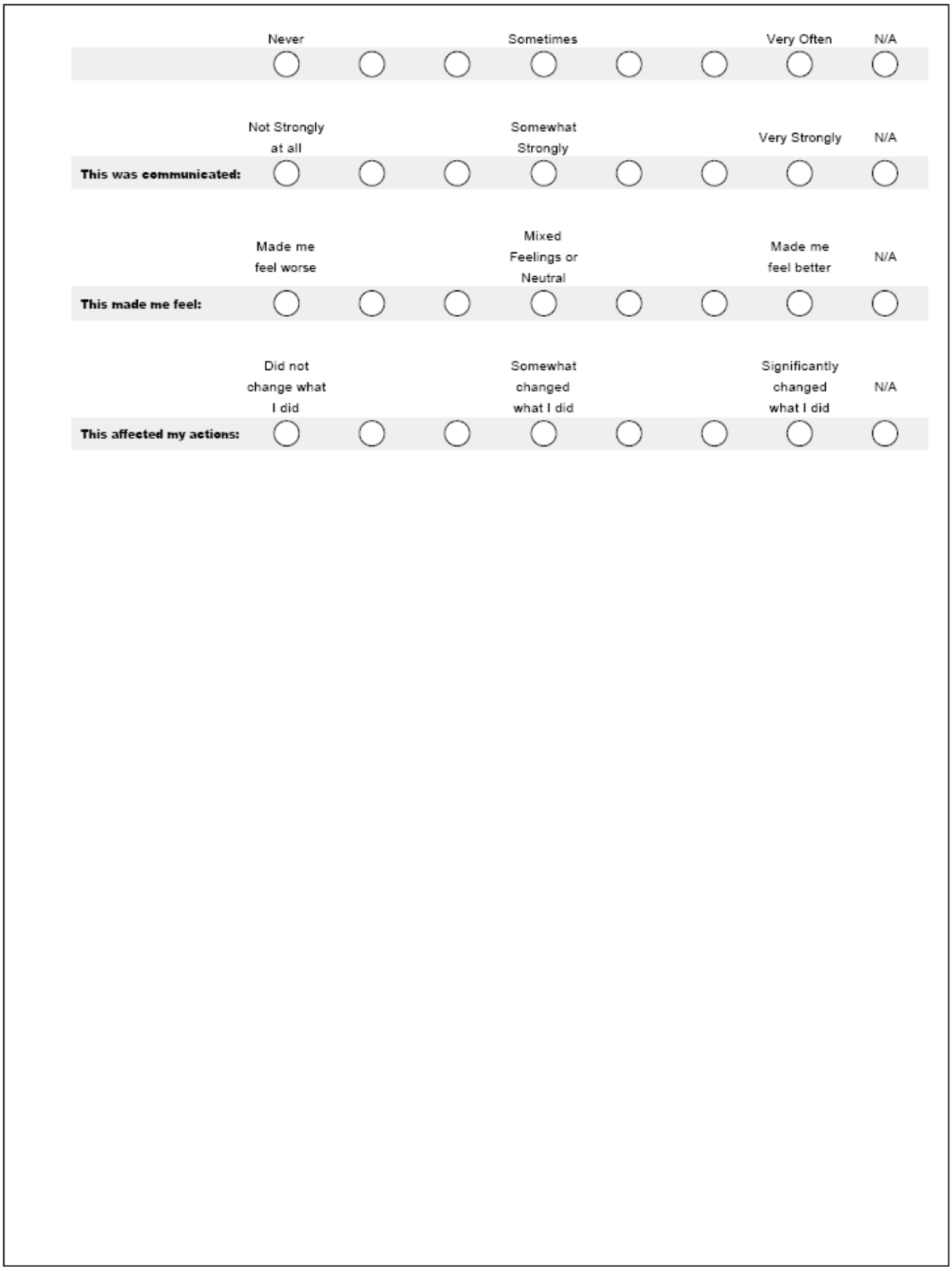
	Never			Sometimes			Very Often	N/A
	◯	◯	◯	◯	◯	◯	◯	◯

	Not Strongly at all			Somewhat Strongly			Very Strongly	N/A
This was communicated:	◯	◯	◯	◯	◯	◯	◯	◯

	Made me feel worse			Mixed Feelings or Neutral			Made me feel better	N/A
This made me feel:	◯	◯	◯	◯	◯	◯	◯	◯

	Did not change what I did			Somewhat changed what I did			Significantly changed what I did	N/A
This affected my actions:	◯	◯	◯	◯	◯	◯	◯	◯

19. Mental health professionals have told me to pursue a less challenging career/major or expect to have problems in school because of my mental illness.


Never
Sometimes
Very Often
N/A
Not Strongly at all
Somewhat Strongly
Very Strongly
N/A
This was communicated:
Made me feel worse
Mixed Feelings or Neutral
Made me feel better
N/A
This made me feel:
Did not change what I did
Somewhat changed what I did
Significantly changed what I did
N/A
This affected my actions:

CI

Please indicate the frequency with which each item occurs. If an item does not apply to you (e.g., you do not have siblings), please choose N/A (not applicable).

	Never			Sometimes			Very Often	N/A
1. I talk openly about my mental illness with my mother.	◯	◯	◯	◯	◯	◯	◯	◯
2. I talk openly about my mental illness with my father.	◯	◯	◯	◯	◯	◯	◯	◯
3. I talk openly about my mental illness with my siblings.	◯	◯	◯	◯	◯	◯	◯	◯
4. I conceal my mental illness from my work peers (co-workers).	◯	◯	◯	◯	◯	◯	◯	◯
5. I worry that people at work will find out about my mental illness.	◯	◯	◯	◯	◯	◯	◯	◯
6. I conceal my mental illness from my supervisor at work.	◯	◯	◯	◯	◯	◯	◯	◯
7. I conceal my mental illness from my professors/teachers.	◯	◯	◯	◯	◯	◯	◯	◯
8. I conceal my mental illness from my classmates.	◯	◯	◯	◯	◯	◯	◯	◯

	Never			Sometimes			Very Often	N/A
9. I conceal my mental illness from the people who I live with.	◯	◯	◯	◯	◯	◯	◯	◯
10. I worry that the people I live with will find out about my mental illness.	◯	◯	◯	◯	◯	◯	◯	◯
11. I conceal my mental illness from people I date or significant others.	◯	◯	◯	◯	◯	◯	◯	◯
12. I worry that people who I am in a romantic relationship with will find out about my mental illness.	◯	◯	◯	◯	◯	◯	◯	◯
13. I conceal my mental illness from new acquaintainces.	◯	◯	◯	◯	◯	◯	◯	◯
14. I conceal my mental illness from old friends.	◯	◯	◯	◯	◯	◯	◯	◯
15. I worry that friends will find out about my mental illness.	◯	◯	◯	◯	◯	◯	◯	◯
16. I lie (or would lie) about my mental illness on job applications.	◯	◯	◯	◯	◯	◯	◯	◯

	Never			Sometimes			Very Often	N/A
17. I lie (or would lie) about my mental illness in employment interviews.	◯	◯	◯	◯	◯	◯	◯	◯
18. I lie (or would lie) about gaps in my employment history or schooling that are attributable to my mental illness.	◯	◯	◯	◯	◯	◯	◯	◯
19. I lie (or would lie) about going to therapy.	◯	◯	◯	◯	◯	◯	◯	◯
20. I lie (or would lie) about taking medication.	◯	◯	◯	◯	◯	◯	◯	◯
21. I have created complicated stories in order to explain events or absences (e.g. gaps in school, loss of employment) because I did not want people attributing them to my mental illness.	◯	◯	◯	◯	◯	◯	◯	◯

SCQ

Please read each item and indicate whether you agree or disagree.

	1 Strongly disagree	2	3	4 Neither agree nor disagree	5	6	7 Strongly agree
1. Stereotypes about people with a mental illness have not affected me personally.	◯	◯	◯	◯	◯	◯	◯
2. I never worry that my behaviors will be viewed as stereotypical of someone with a mental illness.	◯	◯	◯	◯	◯	◯	◯
3. When interacting with people who know about my mental illness, I feel like they interpret all my behaviors in terms of the fact that I have (had) a mental illness.	◯	◯	◯	◯	◯	◯	◯
4. Most people without a mental illness do *not* judge someone with a mental illness on the basis of their mental illness status.	◯	◯	◯	◯	◯	◯	◯
5. My having (having had) a mental illness does not influence how other people act with me.	◯	◯	◯	◯	◯	◯	◯
6. I almost never think about the fact that I have (had) a mental illness when I interact with people without a mental illness.	◯	◯	◯	◯	◯	◯	◯
7. My history of a mental illness does not influence how people act with me.	◯	◯	◯	◯	◯	◯	◯
8. Many people have a lot more stigmatizing thoughts about mental illness than they actually express.	◯	◯	◯	◯	◯	◯	◯
9. I often think that people are unfairly accused of being prejudiced toward people with mental illness.	◯	◯	◯	◯	◯	◯	◯
10. Many people have a problem viewing people with a mental illness as equals.	◯	◯	◯	◯	◯	◯	◯

ISMI

Please indicate whether you (1) strongly disagree, (2) disagree, (3) agree, or (4) strongly agree with each statement.

	(1) **strongly disagree**	(2) **disagree**	(3) **agree**	(4) **strongly agree**
I can have a good, fulfilling life, despite my mental illness.	◯	◯	◯	◯
Negative stereotypes about mental illness keep me isolated from the 'normal' World.	◯	◯	◯	◯
I feel out of place in the world because I have a mental illness.	◯	◯	◯	◯
I avoid getting close to people who don't have a mental illness to avoid rejection.	◯	◯	◯	◯
Others think that I can't achieve much in life because I have a mental illness.	◯	◯	◯	◯
I don't socialize as much as I used to because my mental illness might make me look or behave 'weird'.	◯	◯	◯	◯
In general, I am able to live life the way I want to.	◯	◯	◯	◯
Living with mental illness has made me a tough survivor.	◯	◯	◯	◯
Because I have a mental illness, I need others to make most decisions for me.	◯	◯	◯	◯
People often patronize me, or treat me like a child, just because I have a mental illness.	◯	◯	◯	◯
People with mental illness make important contributions to society.	◯	◯	◯	◯
Stereotypes about the mentally ill apply to me.	◯	◯	◯	◯
People with mental illness cannot live a good, rewarding life.	◯	◯	◯	◯
I feel comfortable being seen in public with an obviously mentally ill person.	◯	◯	◯	◯
People can tell that I have a mental illness by the way I look.	◯	◯	◯	◯
People without mental illness could not possibly understand me.	◯	◯	◯	◯
People ignore me or take me less seriously just because I have a mental illness.	◯	◯	◯	◯
Having a mental illness has spoiled my life.	◯	◯	◯	◯
Nobody would be interested in getting close to me because I have a mental illness.	◯	◯	◯	◯
I don't talk about myself much because I don't want to burden others with my mental illness.	◯	◯	◯	◯
People discriminate against me because I have a mental illness.	◯	◯	◯	◯
I can't contribute anything to society because I have a mental illness.	◯	◯	◯	◯
I stay away from social situations in order to protect my family or friends from embarrassment.	◯	◯	◯	◯
Being around people who don't have a mental illness makes me feel out of place or inadequate.	◯	◯	◯	◯
I am disappointed in myself for having a mental illness.	◯	◯	◯	◯
Mentally ill people tend to be violent.	◯	◯	◯	◯
Mentally ill people shouldn't get married.	◯	◯	◯	◯
	◯	◯	◯	◯

I am embarrassed or ashamed that I have a mental illness.	◯	◯	◯	◯
I feel inferior to others who don't have a mental illness.	◯	◯	◯	◯

SES

Please indicate whether you (1) strongly disagree, (2) disagree, (3) agree, (4) strongly agree with each statement.

	(1) **Strongly Disagree**	(2) **Disagree**	(3) **Agree**	(4) **Strongly Agree**
All in all, I am inclined to feel that I am a failure.	◯	◯	◯	◯
I feel that I'm a person of worth, at least on an equal plane with others.	◯	◯	◯	◯
I feel that I have a number of good qualities.	◯	◯	◯	◯
At times I think I am no good at all.	◯	◯	◯	◯
I am able to do things as well as most other people.	◯	◯	◯	◯
I certainly feel useless at times.	◯	◯	◯	◯
I take a positive attitude toward myself.	◯	◯	◯	◯
I wish I could have more respect for myself.	◯	◯	◯	◯
On the whole, I am satisfied with myself.	◯	◯	◯	◯
I feel I do not have much to be proud of.	◯	◯	◯	◯

ATSPPH-SF

Please indicate whether you (0) strongly disagree, (1) disagree, (2) agree, or (3) strongly agree with each statement.

	(0) Strongly disagree	(1) Disagree	(2) Agree	(3) Strongly agree
A person with an emotional problem is likely to solve it with professional help.	◯	◯	◯	◯
I would find relief in psychotherapy if in emotional crisis.	◯	◯	◯	◯
Psychotherapy would not have value for me.	◯	◯	◯	◯
I would obtain professional help if having a mental breakdown.	◯	◯	◯	◯
I might want counseling in the future.	◯	◯	◯	◯
A person should work out his/her problems without counseling.	◯	◯	◯	◯
A person coping without professional help is admirable.	◯	◯	◯	◯
Talking about psychological problems is a poor way to solve emotional problems.	◯	◯	◯	◯
I would obtain psychological help if upset for a long time.	◯	◯	◯	◯
Emotional problems resolve by themselves.	◯	◯	◯	◯

Debriefing

DEBRIEFING FORM

Advice from Social Referents to Mental Health Consumers

The purpose of this study was to investigate the advice

Thank you for your participation in this research.

PURPOSE

that individuals with a history of mental illness receive about revealing or concealing their mental illness and/or lowering their expectations. Researchers were also interested in how this advice may affect emotional outcomes (e.g. felt better), action outcomes, and anticipated stigma. This research may be used in educating mental health professionals about the impact of the advice they give clients, as well as in counseling family members about the impact their advice may have on their mental health consumer relatives. As mental illness stigma is a prevalent problem, this research may also provide another aspect that professionals can use in combating the root causes of mental illness stigma.

As data collection for this study is ongoing, please do not talk about the content or design of this study with your classmates.

CREDIT

The researcher will credit your account for completion of this study in about a week or so. If you have not received credit in about a week, please feel free to email the researcher Brittany at bmann@gmu.edu.

FINAL REPORT

If you are interested in obtaining a copy of the final report of this study, contact Brittany Mann, M.A. at bmann@gmu.edu.

CONTACT

If you have any questions regarding this study, its purpose or procedures, please feel free to contact the primary investigator Dr. Linda Chrosniak, at lchrosni@gmu.edu or (703) 993-4139. You may also reach George Mason University Office of Research Subject Protections at 703-993-4121 if you have questions or comments. If you would like to talk to someone at the George Mason Counseling and Psychological Services about this survey or something else, you can reach them at the information below: **Counseling and Psychological Services** http://counseling.gmu.edu/ 703-993-2380 or come to SUB I, Suite 364 Thank you!

SEE NEXT PAGE FOR RESEARCH RESPONSE FORM.

Lecture Option Continuation

Thank you for your participation so far. The research portion of this study was specifically interested in the advice that people with a mental illness receive. For the purposes of this study only, we defined mental health consumer as someone who answered yes to the first 2 questions and indicated some sort of treatment in the third question. Because you were not identified as a mental health consumer (according to this definition), we will not be collecting any more data from your responses to use for this research. Instead, you may complete the lecture portion of this study by watching a short video about the stigma of mental illness and completing a few short questions about this video. You will be asked factual questions about the video (e.g., what happened). Your answers will not be scored or used in research in any way, but are simply to help you think about the film and to verify that you watched it. You will receive the same credit (1 hour) for this non-research option.

Lecture Option BEGIN

You will complete this lecture by watching a short video about the stigma of mental illness and completing a few short questions about this video. You will be asked factual questions about the video (e.g., what happened). Your answers will not be scored or used in research in any way, but are simply to help you think about the film and to verify that you watched it. You will receive the same credit (1 hour) for this lecture option.

Lecture Option VIDEO

Below you will find a link to the online video. This video about stigma and mental illness is a symposoium and rountable discussion from the Stigma in Mental Health and Addiction group. Different researchers and individuals with mental illnesses will discuss stigma from a personal and research persepective. When you are done with the film, come back to answer the questions below. When you complete the questions you will be done with this non-research lecture option. To start the film, please click on the following link. Please note, that you only have to watch the first 2 videos (the "Summary" and "Otto Wahl" to answer the questions on the following page Watch the Video

I completed watching the video.

- ◯ Yes
- ◯ No
- ◯ Was not able to watch the video because of technical difficulties.

Lecture Option Questions

1. Stigma is:

- ◯ imposed from the outside
- ◯ an internal, lifelong condition
- ◯ usually brought on by specific behaviors
- ◯ a variable that is applied very differently from person to person

According to Dr. Wahl, which group was the most stigmatized

- ◯ high school drop-outs
- ◯ psychiatrists
- ◯ individuals with a mental illness
- ◯ criminals

What is a major reason that mental illness stigma persists?

- ◯ negative mass media portrayals
- ◯ Direct contact with someone with a mental illness
- ◯ Medical professional's misconceptions

What is an impact of stigma?

- ◯ reduced seeking of treatment
- ◯ increased anxiety
- ◯ sense of shame
- ◯ all of the above

What is the fundamental attribution error?

- ◯ the tendency to attribute other's behavior to internal rather than external causes
- ◯ the tendency to rush to judgment without examining evidence
- ◯ the tendency to blame others for your own errors
- ◯ the tendency to overestimate other's dangerousness

Lecture Closing Page

Thank you for your participation in this non-research lecture option:

Mental Illness Stigma Awareness Video and Questions

In this video you watched researchers discuss mental illness and mental illness stigma. You then answered questions about the video content.

CREDIT

The researcher will credit your account for completion of this lecture in about a week or so. You will earn 1 hour of research credit. If you have not received credit in about a week, please feel free to email the researcher Brittany at bmann@gmu.edu.

CONTACT

If you have any questions regarding this lecture, its purpose or procedures, please feel free to contact the primary investigator Dr. Linda Chrosniak, at lchrosni@gmu.edu or (703) 993-4139. You may also reach George Mason University Office of Research Subject Protections at 703-993-4121 if you have questions or comments. If you would like to talk to someone at the George Mason Counseling and Psychological Services about this lecture or something else, you can reach them at the information below: Counseling and Psychological Services http://counseling.gmu.edu/ 703-993-2380 or come to SUB I, Suite 364 Thank you!

SEE NEXT PAGE FOR RESEARCH RESPONSE FORM.

Response Form

RESEARCH PARTICIPATION REACTION FORM (print to complete)

PART A - TO BE GIVEN TO YOUR COURSE INSTRUCTOR

Name: _____ GMU G#:_____

Name of Study/Lecture: _____
Date: _____Credits: _____

1. Briefly describe what you did in the experiment or what you learned in the lecture:

2. How does this experience reflect what you have learned about research in Psychology course?

PART B - TO BE RETURNED TO THE BROWN BOX NEXT TO THE UNDERGRADUATE PSYCHOLOGY OFFICE (ROOM 2086) IN DAVID KING HALL.

Title of Experiment/Lecture: _____

Name of Researcher/ Lecturer:_____

1.Did your course instructor distribute information at the beginning of the semester explaining research participation guidelines and lecture alternatives? (circle answer)
Yes_____ No (If no, please explain)

2.Did the researcher/lecturer follow the research participation guidelines?
Yes_____ No (If no, please explain)

3. Did the researcher/lecturer provide you with a clear description of the research project and its purposes following your participation?
Yes_____ No (If no, please explain)

4.Were you treated with respect and courtesy?
Yes_____ No (If no, please explain)

(Please use the back of this form for additional comments)

Exit Page

Thank you! If you have any questions or comments about this research or lecture please contact Brittany Mann, M.A. at bmann@gmu.edu or Dr. Linda Chrosniak lchrosni@gmu.edu

Email for Parental Consent

Please email the researcher at bmann@gmu.edu to receive your parental consent form via email. All participants under the age of 18 must have their parents complete a parental consent form.

- [ ] Click here to exit the survey until you return the parental consent form.
- [ ] I made this choice in error and would like to return to the beginning of the survey.

FINISH

Please close this window. You have completed the research/lecture.

APPENDIX B

Measurement Evaluation

Since many of the measures in this study were newly created/adapted scales, I conducted several analyses to evaluate their validity and reliability. To assess these criteria, I created an evaluation plan based on measurement design/factor analysis literature and prior research studies in related fields (Fabrigar, Wegener, MacCallum, & Strahan, 1999). Specifically, I used as a model strategies implemented by Pinel in developing her scale, the Stigma Consciousness Questionnaire (1999), and Mohr & Kendra's analysis of the Lesbian, Gay, & Bisexual Identity Scale (2011).

The current research does not conduct all of the analyses outlined in Pinel's and Mohr & Kenda's research examples due to limitations in the scope of the project and number of subjects. Overall, I attempted to strike a balance between statistical rigor and practicality. The goal of this study was not primarily to develop measures for future use, but to provide an initial snapshot/assessment of a relatively untested stigma component, advice from social referents. Therefore, these analyses are designed to provide preliminary evidence that the measures can be used in a valid fashion with the current population and to provide some understanding of the measures' structure. However, the way that these initial analyses are structured leaves open the option for continued scale

and item-level analyses. Therefore, if the scales are identified as suitable for future use, additional examination can be conducted in subsequent studies.

Factor analyses

Analysis Process

Many of the scales utilized in this study had never been factor analyzed. Therefore, even though I had formed some tentative a priori hypotheses about the factors during scale development, I conducted exploratory factor analyses (EFA) to gain more information about the emergent underlying structure of the items. This strategy allowed for an unconstrained examination of the best structure to explain the relationships in these untested scales. The sample size of 272 indicated that the sample would have adequate participants. While not achieving the optimal level of 20 participants per variable discussed in some factor analysis literature, the current sample still fell within the 5-10 participants per variable ratio commonly accepted in EFA research (Costello & Osborne, 2005; Floyd & Widaman, 1995).

Preliminary analyses

The first step in the process was to determine whether the dataset was a suitable candidate for EFA. EFA is derived from Thurstone's (1947) common factor model, which postulates that each variable is a function of one unique factor and one or more common factors (unobservable latent variables) (Fabrigar, Wegner, MacCallum, & Strahan, 1999). Therefore, I examined the current dataset to see if common factors were

likely to occur. For both the ASRS-D and ASRS-LE, I examined the Pearson correlation matrix to determine if adequate relationships existed between the variables. If few correlations occur between variables, it is unlikely that they will unify into discrete factors because no common variance exists.

Two tests, the Kaiser Meyer-Olkin (KMO) measure of sampling adequacy and the Bartlett's test of sphericity were performed to assess the dataset for factorability. The KMO, which measures the sampling adequacy, was satisfactory in both cases (ASRS-D = .90, ASRS-LE = .92). Larger KMO values suggest that factor analysis is appropriate. Minimum suggested KMO values are typically set at .5 and values considered above .8 considered "meritorious" (Kaiser, 1974). Bartlett's test of sphericity, which tests the null hypothesis that the variables are uncorrelated, was also significant ($p < .001$ in both cases), providing further support of the matrices' adequacy. Therefore, the current evaluation of factorability suggests that the strength of the relationships among variables is strong and it is appropriate to proceed with factor analysis.

Preliminary analyses were also conducted to assess the normality of the variables' distributions. Using criteria established by West, Finch, and Curran (1995) to define non-normality, indicated by skew > 2, kurtosis > 7. On the ASRS-D scale, 3 items (out of 22) had skewness greater than 2, while the ASRS-LE had 6 skewed items (out of 19). Only 1 item on the ASRS-LE had kurtosis greater than 7. While the bulk of the items met criteria for normality, analyses involved procedures that were selected because they would be robust to non-normality.

Choice of Model Fitting Procedure

Since it was that decided that EFA would be possible with the given data, the next step was to decide which model fitting strategy (i.e., factor-extraction procedures) would be most appropriate. Each factor extraction technique has benefits and limitations (Fabrigar et al., 1999). I considered using the Maximum Likelihood procedure for extraction, as it provides the opportunity to review many goodness of fit indexes. However, this procedure has an assumption of multivariate normality, which when violated can lead to inaccurate/distorted findings (Fabrigar et al., 1999; Hu, Bentler, & Kano, 1992). Given the non-normality of several items in this study (with additional items approaching non-normality), I decided to start with an extraction procedure more robust to non-normality, and to save Maximum Likelihood extraction for later in the procedure to assess the fit of the model. Therefore, I performed an initial extraction with principal axis factors. I chose principal axis factors because it is a true factor analysis procedure and makes no distributional assumptions (Fabrigar et al., 1999). In addition, to allow for the fact that the items within each scale would likely be related, I chose an oblique rotation procedure, direct oblimin. Research on best practices in extraction suggests that a true factor analysis extraction method with an oblique rotation will be most likely to lead to "optimal results (i.e., results that generalize to other samples and reflect the nature of the population)" (Costello & Osborne, 2005, p. 7).

Number of Factors & Item Retention

Prior research suggests that using multiple methods such as Scree plots, the Kaiser criterion, parallel analysis, and indicators of goodness of fit help to categorize the

variables into the optimal factor structure. Consequently, the number of factors to extract was determined by a combination of these strategies. The Scree plots were examined following a procedure first outlined by Cattell (1966), which involves plotting the eigenvalues in order of their numeric value and looking for the last substantial drop/elbow in this graph. The Kaiser criterion involves a simple strategy of selecting all eigenvalues with an absolute value greater than one, but can have significant limitations. Parallel analysis is a more meaningful approach to examining the minimum eigenvalues for retention. Parallel analysis is based on the idea that for an eigenvalue to be retained, it should be larger than an eigenvalue that would be obtained by chance. Therefore, I followed Mohr & Kendra's (2011) strategy and used a coding procedure outlined by O'Connor (2000) that generated eigenvalues from numerous sets of random data, using matched sample size and variable number criteria. Using parallel analysis, I then compared these eigenvalues generated from by chance from the random datasets to the eigenvalues obtained in the current study, with only eigenvalues higher than the values obtained by chance retained. Parallel analysis indicated that for both principal axis factor extraction and principal components extraction, 3 factors for ASRS-D and 2 factors for ASRS-LE were the most appropriate choices. Goodness of fit statistics associated with a Maximum Likelihood (ML) extraction method provide additional guidelines for the number of factors. One such measure, the Root Mean Square Error Approximation (RMSEA) fit index, estimates the discrepancy between model and observed data per degree of freedom. RMSEA values for both models suggested by the parallel analysis

were borderline adequate (ASRS-D: 0.10, ASRS-LE: 0.10) and preferable to RMSEA values for alternate models.

After setting the initial number of factors for each scale, I turned to the question of item retention. To determine which items to retain, I considered primarily the structure matrix loadings and the following criteria: 1) a minimum in absolute value of .4, with 2) the next closest absolute loading approximately at least .2 less. This strategy was designed to reduce overlap and allow for maximum independence between factors. In most cases, the structure and pattern matrices resulted in the elimination of the same items. In a small number of cases they differed, and because the literature offers competing views on how to reconcile the interpretation of pattern and structure matrix loadings, I considered these on a case-by-case basis. In several cases where the pattern matrix showed a strong distinction between factor loadings for the two competing factors on the given item, I retained the item even when criterion 2) above was marginally violated (Dowdy et al., 2011). Following the procedure of Dowdy et al. (2011), I performed a new EFA after each item was removed, since removing an item can alter the factor structure (Worthington & Whittaker, 1995). All items in the final factor structures met the minimal loading criteria mentioned above, even though some may have marginally violated them during an intermediate stage in the item elimination process.

Item elimination resulted in 14 items split into 3 factors for ASRS-D, and 9 items split into 2 factors for ASRS-LE. The resulting factor structures are summarized in Tables 1 and 2. The RMSEA values based on ML extraction for the final factor structures indicated a tolerable fit between model and data for the ASRS-D (RMSEA = .09) and an

excellent fit for the ASRS-LE (RMSEA = .04). For both the ASRS-D and the ASRS-LE, a general pattern emerged of work vs. other category. Inspection of the factor items suggests characterization of the ASRS-D factors as: Work Domain, Family Referent, and Mental Health Professional Referent, and of the ASRS-LE factors as: Work Domain and Relationship Domain.

These patterns reflect some aspects of our a priori expectations but not others. In particular, our original scale designs contained two distinct dimensions: "Domain" (i.e. general, work, relationship, school) and "Referent" (i.e. generic "people", family members, mental health professionals). Each item could be coded according to either of these dimensions. For example, the item "Family members have advised me to keep my mental illness a secret at work" contains the Domain: Work and the Referent: Family Member dimensions. In theory, factor analysis should be able to separate items into the most relevant dimension, but items based on multiple possible dimensions would be less likely to load well, resulting in a greater number of eliminated items. After the ambiguous items were eliminated, the remaining items were not always adequate to "fill out" all of the a priori subscales we expected. However, those factors that were filled out did fall neatly into the categories defined by our original dimensions and their possible values.

Table 1

ASRS-D Final EFA (principal axis factoring, direct oblimin rotation): Pattern and Structure Coefficients

Item	Factor 1		Factor 2		Factor 3	
	P	S	P	S	P	S
People have advised me not to mention that I have (or had) a mental illness on job applications or in interviews.	.94	**.89**	-.11	.38	.01	.49
People have told me that I would be less able to get a job if employers found out about my mental illness.	.85	**.83**	-.01	.42	-.02	.46
People have advised me not to talk about the fact that I have (or had) a mental illness in work environments/at a job.	.91	**.86**	.03	.45	-.11	.42
Family members have told me not to talk about my mental illness on job applications or in work settings.	.64	**.80**	.22	.59	.09	.56
People have suggested that co-workers at a job would not be accepting of me if they found out that I had a mental illness.	.67	**.79**	.02	.47	.20	.59
I have been told that if people at a job/work know about my mental illness, they may treat me differently (e.g., give me less responsibility, doubt my ability to do the work, etc.).	.64	**.74**	.10	.48	.09	.50
People in my family seem to worry that others will find out about my mental illness.	.00	.44	.86	**.85**	-.01	.42
People in my family have told me that they worry knowledge of my mental illness will spread around town and embarrass us or cause others to distance themselves.	.07	.40	.65	**.68**	.00	.36
People in my family have led me to believe that others would not be understanding of my mental illness (if) when I revealed it.	.02	.42	.80	**.80**	-.03	.37
People in my family have implied that they would rather not to talk about my mental illness.	-.05	.34	.69	**.69**	.05	.36
Mental health professionals have told me that it is better if others do not know about my mental illness.	.00	.43	-.02	.36	.77	**.76**
Mental health professionals have advised me not to talk about my mental illness on job applications or in work settings.	.12	.54	.00	.42	.73	**.80**
Mental health professionals have suggested that I should not talk about my mental illness at college.	-.04	.36	.01	.33	.68	**.66**
Mental health professionals have told me that I should not talk about my mental illness with peers (e.g., friends or people that I am involved with romantically).	.00	.38	.03	.34	.65	**.66**

P = Pattern matrix, S = Structure matrix. Shaded areas represent factors.

Table 2

ASRS-LE Final EFA (principal axis factoring, direct oblimin rotation): Pattern and Structure Coefficients

Item	Factor 1		Factor 2	
	P	S	P	S
People have told me expect to have difficulties with friends because of my mental illness.	.92	**.88**	.07	-.45
People have told me to expect to have difficulties with romantic relationships (e.g., boyfriends/girlfriends, partners, spouses) because of my mental illness.	.86	**.85**	.02	-.47
People have told me to expect to have difficulties with roommates or people I live with because of my mental illness.	.80	**.78**	.03	-.42
Family members have told me that I may have a hard time getting along with people because of my mental illness.	.59	**.71**	-.21	-.54
People have told me that I may have a harder time getting things accomplished in life because of my mental illness.	.51	**.52**	-.03	-.32
People have told me to reduce expectations of success at a job (e.g., don't expect to be promoted, or being told that you may not be able to "handle" job) because of my mental illness.	.01	.50	-.87	**-.87**
Mental health professionals have told me to lower my expectations about work or not take certain jobs because of my mental illness.	-.03	.44	-.82	**-.81**
Mental health professionals have told me to pursue a less challenging career/major or expect to have problems in school because of my mental illness.	-.04	.42	-.81	**-.79**
Family members have told me to lower my expectations about work or not take certain jobs because of my mental illness.	.10	.50	-.70	**-.76**

P = Pattern matrix, S = Structure matrix. Shaded areas represent factors.

In addition to factor analyzing the ASRS-D and ASRS-LE scales, we conducted an examination of the adapted Concealment Inventory (CI) scale using the same procedure. The CI scale resulted in 18 retained items (from an original 21) with 4 factors that closely reflect the item category phrasings, and an acceptable RMSEA value of .08 (see Table 3). Factor 1 items concerned lying about one's mental illness; Factor 2 items

dealt with concealment from casual social acquaintances; Factor 3 items related to openness with/concealment from family members; and Factor 4 items pertained to anxiety/concealment concerning close non-family relations.

Table 3

CI EFA (principal axis factoring, direct oblimin rotation): Pattern and Structure Coefficients

Item	Factor 1		Factor 2		Factor 3		Factor 4	
	P	S	P	S	P	S	P	S
I lie (or would lie) about my mental illness in employment interviews.	.90	**.87**	-.14	-.43	-.06	.03	-.12	.38
I lie (or would lie) about taking medication.	.86	**.86**	.08	-.23	.10	.20	.03	.48
I lie (or would lie) about gaps in my employment history or schooling that are attributable to my mental illness.	.83	**.84**	-.01	-.30	-.02	.08	.01	.45
I lie (or would lie) about going to therapy.	.83	**.86**	.06	-.25	.05	.16	.08	.52
I lie (or would lie) about my mental illness on job applications.	.81	**.84**	-.12	-.41	-.06	.03	-.01	.44
I have created complicated stories in order to explain events or absences (e.g. gaps in school, loss of employment) because I did not want people attributing them to my mental illness.	.62	**.70**	.01	-.25	-.05	.05	.16	.48
I conceal my mental illness from my professors/teachers.	-.05	.30	-.89	**-.88**	.15	.14	.04	.26
I conceal my mental illness from my supervisor at work.	.06	.34	-.84	**-.84**	.16	.16	-.05	.21
I conceal my mental illness from my classmates.	.07	.38	-.80	**-.84**	-.08	-.07	.07	.30
I conceal my mental illness from my work peers (co-workers).	.08	.25	-.67	**-.67**	-.05	-.06	-.11	.09
I conceal my mental illness from new acquaintances.	-.02	.36	-.63	**-.71**	-.15	-.12	.33	.46
I talk openly about my mental illness with my siblings.	-.05	.05	-.06	-.03	.75	**.74**	-.02	.06
I talk openly about my mental illness with my father.	-.08	.04	-.04	-.02	.74	**.74**	.03	.09
I talk openly about my mental illness with my mother.	.11	.18	.04	.00	.67	**.68**	.01	.14
I worry that people who I am in a romantic relationship with will find out about my mental illness.	-.01	.44	.04	-.18	-.05	.06	.89	**.87**
I conceal my mental illness from people I date or significant others.	.01	.48	-.17	-.37	-.08	.01	.78	**.82**
I worry that friends will find out about my mental illness.	.15	.51	-.09	-.29	.18	.27	.58	**.70**
I worry that the people I live with will find out about my mental illness.	.21	.48	.11	-.10	.17	.26	.54	**.65**

P = Pattern matrix, S = Structure matrix. Shaded areas represent factors.

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CURRICULUM VITAE

Brittany Mann Lindon attended George Mason University in Fairfax, Virginia, where she participated in the psychology Honors program and obtained her undergraduate degree. In 2002, Brittany was accepted into George Mason University's Clinical Psychology Doctoral Program. Since entering the program, Brittany has provided therapeutic services and assessment at the George Mason University Psychological Clinic, University of Maryland Parent and Child Evaluation Center, and provided school-based services at Duval High School. Brittany is currently completing her full-time pre-doctoral internship at Community Counseling Services, Inc. in Hot Springs, Arkansas with a focus on providing services in rural areas. She received her Master of Arts in Clinical Psychology from George Mason University in May 2004 and will be awarded her Ph.D. in Clinical Psychology from George Mason University in December 2011. Following the completion of her degree, Brittany will pursue a post-doctoral position at a university or community mental health center that addresses the needs of underserved children and families.