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Individual's Self Awareness of Mental Illness: The Effects on Implicit Bias, Microaggressions, and Racial Discrimination

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Abstract

The purpose of the current study is to understand the factors that impact how persons experiencing subclinical psychological symptoms or an undiagnosed but clinically significant psychological problem perceive individuals who been diagnosed with mental illness. Previous literature has investigated the experiences of discrimination among those with mental health problems, but not their attitudes and behavior towards individuals among their in-group. It was hypothesized that individuals with an emerging mental health problem will have higher rates of implicit bias and perpetrate more microaggressions towards those with a mental illness in order to remove themselves from a group that is associated with a great deal of public stigma. Researchers also investigated self-awareness of a mental health problem arising and experiences of racial discrimination as mediators of the relationship. Results indicated that individuals with an emerging mental illness perceived public stigma to be greater than those individuals with no emerging mental illness, but did not have more self-stigma, implicit bias, or perpetrate more microaggressions. Self-awareness moderated the relationship between an emerging mental illness and the perception of public stigma. Individuals with an emerging mental illness reported experiencing more racial microaggressions and discrimination than those individuals without an emerging mental illness.

Keywords: mental illness, self-awareness, stigma, implicit bias, microaggressions, racial discrimination

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and Racial Discrimination

Stigma has been defined as a power situation in which elements of labeling, stereotyping,

separation, status loss, and discrimination are all at play (Link & Phelan, 2001). Stigma can vary

in its degree -- an individual can have one or more labels and one label may be more prominent

than others. The label placed on a person is typically associated with passive, powerless, and

helpless characteristics. People may assume that individuals who are stigmatized may not

endorse the label or stereotypes that are placed on them, but this is not always the case.

Stigmatized groups often engage in the same type of thinking, whether it be toward individuals

with the same label or individuals who are given another discriminatory label. For example, gay

men often experience internalized homophobia, particularly in instances where they are part of a

religion that does not accept homosexual relationships, there is concern of the public stigma

surrounding their relationships, or they have not self-disclosed their identity (Ross & Rosser,

1996).

Stigma-related thinking processes creates an "us" and "them" mentality that allows

society as a whole to group people based on stereotypical labels (Link & Phelan, 2001). The "us"

versus "them" distinction becomes predominantly clear through language. When people label an

individual, that person is placing the individual in their outgroup or "them", such as a

"schizophrenic," "epileptic," or "illegal." However, when people engage in person first

language, that person may recognize that person may be in their ingroup or "us," such as "a

person with cancer" or "a person with the flu." as opposed to "a person with schizophrenia," "a

person with epilepsy," or "undocumented person." The use of this type of language creates the

distinction between "us" and "them."

Socialization teaches individuals to develop a theory of what it means to have a stigmatizing label (Aribi et al., 2016). Link et al. (1989) developed the modified labeling theory which states that having the label will have negative outcomes for the individual. For example, people with mental illness are seen as inferior dangerous, impulsive, unintelligent, or unworthy compared to nonclinical populations, therefore, when individuals develop a mental illness, they feel devalued, discriminated against, or threatened by social interactions. This may lead them to stop engaging in social interactions or keep their illness and treatment a secret to avoid potential experiences of discrimination. Previous literature has investigated the experiences of discrimination among those with a mental illness and what it means to have that label (Gonzales et al., 2015; Aribi et al., 2016; Link et al., 1989), but little has investigated individual's attitudes and behavior towards individuals with the same stigmatizing label.

Since many believe mental health exists on a continuum, we cannot truly separate "us" from "them," especially in the context of mental illness (Link & Phelan, 2001), which makes the question of how attitudes and behaviors change when an individual begins experiencing symptoms of a mental illness a difficult one to answer. If an individual begins experiencing symptoms of a mental illness, how does the "us" (ingroup; without a diagnosable mental illness) behavior change as they are becoming part of the "them" (outgroup; with a diagnosable mental illness) label? Additionally, how does their level of awareness of their own emerging mental illness affect this change in behavior towards those individuals who are now in their potential "in-group"? Lastly, how does the presence of more than one label interact with an individual's behavior and attitudes towards those individuals with a mental illness? Previous literature has examined mental health stigma and discrimination, alongside racial stigma and discrimination (Holley et al., 2016). Research has also has been conducted investigating the role of implicit bias

and microaggressions on discrimination of stigmatized groups (Nadal et al., 2015). However, there has been a lack of research examining the role of emerging mental illness and self-awareness on implicit bias and microaggressions among perpetrators of the discrimination.

Mental Health Stigma

Stigma towards individuals with a mental illness can come in two forms: public and self. Public stigma are the stereotypes, attitudes, and behaviors by the general public against those with mental illness. The general public believes mental illness is characteristic of a lack of self-control, unpredictable behavior, occasional violent and aggressive behavior, and a lack of intelligence. Self-stigma occurs when individuals believe the stereotypes that the public holds against them to be true (Peters et al., 2017). Those individuals who self-stigmatize are more likely to have poorer mental health, be socially withdrawn and isolated, less likely to attend treatment or adhere to treatment (Abiri et al., 2016). People with a severe mental illness (i.e., schizophrenia, bipolar disorder, major depression) experience more internalized stigma than those with a less serious mental illness (i.e., anxiety, adjustment disorder), consequently affecting their psychological well-being (West et al., 2011). The existing literature on self-stigma has focused on populations who have formally diagnosed and is lacking on populations who are labeling themselves with a mental illness with no formal diagnosis.

Self-Labeling and Self-Awareness

Labeling oneself as having a mental illness can induce the self-stigmatization by endorsing those publicly held views. Thoits' (1985) model of self-labeling in mental illness suggests that individuals can self-label by categorizing their behavior, thoughts, and feelings from the perspective of the society. To avoid stigma, a person with signs of a mental health

problem may dismiss those symptoms by not labeling them, which in turn protects them from

self-stigma (Stolzenburg et al., 2017). Stolzenburg et al. (2017) identified four steps in the self-

labeling process:

> Recognize that they have a problem at all or that there is something wrong with them
>
> (symptom awareness), consider that their symptoms or problems could be part of an
>
> illness (symptom appraisal), contemplate specifically whether their symptoms could be
>
> part of a mental illness (self-identification as having a mental illness), and conclude that
>
> they have a mental illness and decide to self-label as being mentally ill (self-labeling)" (p.
>
> 903).

> Self-stigma slows the process of self-labeling, deterring them from their present mental

health concern. Stigma was most closely associated with the steps of the labeling process that

involved symptom appraisal, self-identification, and self-labeling. This suggests that people may

be aware of their own mental illness, but are unable to identify themselves as such (Stolzenburg

et al. 2017).

> It is unclear how the failure to recognize symptoms as a sign of having a mental illness

impacts stigmatizing attitudes and behavior toward other mentally ill individuals. A recent study

sought to investigate whether personal stigma decreases self-identification as having a mental

illness in individuals with untreated mental health problems (Stolzenburg et al., 2017). Results

indicated that support for discrimination and implicit attitudes were associated with a lower

likelihood of self-identification.

> A related finding emerged in a study of the e relationship between PTSD, stigma, and

help-seeking behaviors among police officers (Soomro & Yanos, in press). Police officers

experience more traumatic events compared to the general population due to their line of work,

and therefore are more likely to develop PTSD. Results of this study found that police officers who had met criteria for likely PTSD paradoxically endorsed more stigma towards mental illness and were less willing to seek help than officers without PTSD. Although the study did not investigate whether officers meeting criteria for PTSD were aware of their mental illness, a plausible explanation of these findings is that officers with PTSD were not consciously aware of their mental health problem but endorsed more stigma in a defensive process.

Implicit Bias

Implicit biases are attitudes a person holds that are outside the realm of conscious control. People may not endorse negative explicit attitudes towards a group of people, but they may have unconscious attitudes against that group. In a recent study, researchers examined attitudes toward mental health treatment among college students, who represent an at-risk population for mental health concerns (Peters et al. 2017). Participants reported that mental health treatment was less effective than medical treatment. Both implicit and explicit attitudes were identified, but there was a stronger association for explicit attitudes against mental health treatment. Those individuals who endorsed more negative explicit attitudes towards mental health treatment also had higher levels of implicit bias. Interestingly, more positive explicit attitudes were not associated with higher rates of seeking treatment. This suggests that no matter the level of explicit attitudes one holds implicit attitudes may have more control over an individual's behavior. Implications of these findings are of great importance because young adults who may have an emerging mental health concern may not be seeking help due to their own implicit biases surrounding mental illness and mental health treatment. Furthermore, the stigma associated with receiving treatment deters many individuals, as that stigmatization is a significant barrier in deciding to attend mental health treatment.

One of the most well-known measures of implicit attitudes is the Implicit Association Task (IAT) developed by Project Implicit at Harvard University (Meade, 2009). Rüsch et al. (2009) utilized the brief IAT to assess implicit attitudes toward psychiatric medication within 85 participants diagnosed with schizophrenia-spectrum or affective disorders. Results indicated that implicit, but not explicit, positive attitudes toward psychiatric medications were associated with an increased awareness of need for treatment. This provides further support indicating that implicit attitudes have more power over an individual's thoughts and behaviors.

Another study also used the brief IAT to measure implicit self-stigma using a sample of individuals diagnosed with a mental illness (Rüsch et al., 2010). Implicit self-stigma represented a combination of implicit self-esteem and attitudes toward mental illness and was found to predict lowered explicit quality of life ratings when controlling for demographics, depressive symptoms, and mental disorders. Results identified both negative implicit and explicit self-stigma among persons with mental illness. These results indicate that being a part of a stigmatized group does not prevent a person from holding those negative attitudes that are associated with that group.

Microaggressions

Microaggressions can be defined as "brief and commonplace daily verbal, behavioral, or environmental indignities, whether intentional or unintentional, which lie beneath visibility or consciousness and which communicate hostile, derogatory, or negative slights and insults toward targeted groups, persons, and/or systems" (Nadal et al., 2015). Microaggressions have typically been studied among racial or ethnic minorities and the LGBTQ population and can be causally related to minority stress in that the experiences of discrimination can lead to psychological distress and other mental health problems (Sue, 2010). People with mental illness have not often

been studied in regards to experiencing microaggressions, but they often report feelings of social

rejection and having negative social interactions, similar to typical experiences of

microaggressions (Nadal et al., 2015).

Through interviews and qualitative analysis, Gonzales et al. (2015) identified 7 themes of

microaggressions individuals with mental illness experienced: invalidation, assumption of

inferiority, fear of mental illness, shaming of mental illness, second class citizen, experiences of

overt discrimination, negative outcomes. Many of these themes were similar with

microaggressions experienced by those individuals of color, but shaming of mental illness was

specific to those with mental illness (Gonzales et al., 2015). Peters et al. (2017) identified a

smaller number or types, but similar in content: conveying stereotypes about people with mental

illness, invalidating the experience of having a mental illness, defining a person by their disorder,

and misuse of terminology.

Although the experience of microaggressions among individuals with mental illness are

similar to those experiences of racial and ethnic minorities, there is one glaring difference.

Individuals with mental illness have indicated that those who perpetrated the most

microaggressions were those who were closest to them -- friends, family, coworkers, etc. (Peters

et al., 2017). This finding is contradictory to most findings on perpetrators of microaggressions

in other marginalized groups. People who are close to those with mental illness "may not

espouse overt prejudicial attitudes toward individuals with mental illness, but hold covert and

implicit biases that result in microaggressions" (p.105).

The research on microaggressions has been growing, especially among individuals with

mental illness. However, there is little research examining the perpetrators of microaggressions

towards people with mental illness. However, theorists have defined psychological dilemmas

between the perpetrators and targets. There is a clash of realities in which targets of

microaggressions may view these experiences as being related to a person's biases or

assumptions, whereas perpetrators may view their behaviors as harmless or well-intentioned

(Sue, 2010). As these biases are not chosen by an individual, there is also an invisibility of

unintentional bias. Most people are socialized to learn bias due to systematic oppression as

opposed to direct and individual discrimination (Sue, 2010). People of privileged groups may

view these behaviors as unimportant or unworthy of discussion, but those who are targets

experience these microaggressions often experience negative mental health outcomes as a result.

Not all individuals will view any given interaction in the same way, so there is an additional

challenge when responding to microaggressions. These dilemmas demonstrate a more clear

distinction between the perpetrator and the target, but it does not the understanding of the

transition from perpetrator to target when one begins to develop a mental illness or psychiatric

symptoms.

Multiple Marginalized Groups

Few studies have focused on the intersection of multiple stigmatized identities and their

experienced microaggressions, but results have demonstrated that people who have multiple

marginalized identities may experience types of microaggressions that are not reported when

investigating a singular identity (Nadal et al., 2015). People who have multiple marginalized

identities may experience types of microaggressions and discrimination that are not reported

when investigating a singular identity. Individuals of color with a mental illness also describe

greater rates of racial discrimination compared to individuals without a mental illness (Holley et

al., 2016; West et al., 2015), making it important to better understand how the intersection of

multiple marginalized identities may affect mental health (Nadal et al., 2015).

Not only does the intersection of multiple marginalized identities affect individuals experience with discrimination, but also their help-seeking behavior and mental health treatment. People with mental illness who are also people of color receive more serious diagnoses, less effective treatments, and less providers compared to whites (Holley et al., 2016). Moreover, individuals of color have been found to endorse more internalized stigma and hold fewer positive attitudes towards mental health treatment compared to whites (Conner et al., 2010). These findings may suggest that individuals who have a marginalized identity may respond differently to the possibility of developing a new marginalized identity, such as mental illness.

Study Overview

This study investigated both the individuals' attitudes and behaviors to better understand implicit and explicit views of their own identity or label. More specifically, the purpose of this study was to understand how persons experiencing symptoms of a mental illness perceive and behave towards those individuals who have a diagnosed mental illness. It was hypothesized that individuals with an emerging mental health problem will have higher rates of implicit bias and perpetrate more microaggressions towards those with a mental illness in order to protect from self-stigmatization and keep the "us" from "them" distinction. Additionally, it was hypothesized that a moderator of this relationship would be their self-awareness or self-identification of a mental health problem arising in themselves. Thus, individuals who are experiencing psychological symptoms and are aware of them will have more implicit bias, self-stigma, and perpetrate more microaggressions towards individuals with a diagnosed mental illness. Furthermore, the study examined if and how experiences of racial/ethnic discrimination may impact one's mental health, as well as one's biases and behaviors toward those with a mental illness. It was hypothesized that those individuals who experience racial discrimination will

report more psychological symptoms, have more implicit bias and perpetrate more

microaggressions towards those with a diagnosed mental illness.

Method

Design

The present study used a cross-sectional design to examine the relationship between

subclinical mental health symptoms, self-awareness, experience of racial/ethnic discrimination

and endorsement of stigma. Measures were administered using the Qualtrics survey platform.

Undergraduate students were recruited through introductory psychology courses to earn credit

towards their Research Experience Program. Students earned 2 points toward their 15 point

minimum of research credit. The survey was approximately 45 minutes in length. Students were

asked general demographic questions regarding race, gender, and age. Additionally, students

were asked about their previous contact with mental illness. Students responded to three

questions -- "Have you ever been diagnosed with a mental illness?," "Has someone in your

family been diagnosed with a mental illness?," and "Has a close friend of yours been diagnosed

with a mental illness?" Finally, students completed eleven questionnaires regarding the

participants' mental health symptoms, implicit and explicit attitudes, and experiences of

discrimination.

Participants

College students were chosen from a large, northeastern, urban university, as they

represented a racially and ethnically diverse group, and are at an age during which they are likely

to develop or witness peers develop mental health problems. The final sample included 159 John

Jay College undergraduate students. Participants had an age range of 18-40 years old with a

median age of 19 years old. The sample was 81% female and 19% male. Further demographic

information is listed in Table 1 below.

Table 1.
Summary of Participant Demographics (N=159).

Participant Demographics		N	%
Gender	Male	30	18.9
	Female	129	81.1
Year in School	Freshman	15	9.4
	Sophomore	22	13.8
	Junior	41	25.8
	Senior	77	48.4
	Other	4	2.5
Race/Ethnicity	Hispanic	84	52.8
	Black	14	8.9
	White	28	17.6
	Asian	21	13.2
	Other	12	7.6

Measures

    Psychological Symptom Measures. Four measures were used to assess symptoms of

depression, anxiety, psychosis and impulsivity.

    The BDI (Beck et al., 1961) is a 21 item measure in which the participant chooses one

out of four options for each question based on their present feelings. For example, one question

reads "I don't feel particularly guilty;" "I feel guilty a good part of the time;" "I feel quite guilty

most of the time;" "I feel guilty all of the time." Another questions reads "I don't have any

thoughts of killing myself;" "I have thoughts of killing myself, but I would not carry them out;"

"I would like to kill myself;" "I would kill myself if I had the chance." The respondent must

choose one of the four options for each item. Cronbach's alpha for this measure in the current

study was .92.

The BAI (Beck et al., 1988) describes 21 feelings a person may experience during a panic

attack or common symptoms of anxiety. The respondent must rate how often they have

experiences these symptoms in the past month on a scale of 0 - 3 (not at all to severely, it

bothered me a lot). Examples of symptoms include heart pounding/racing, fear of dying, or

hot/cold sweats. The BAI has shown moderate correlation with the revised Hamilton Anxiety

Rating Scale (.51), and a mild correlation with the Hamilton Depression Rating Scale (.25) (Beck

et al., 1988). Cronbach's alpha for this measure in the current study was .95.

The Prodromal Questionnaire (PQ-16) (Loewy et al., 2005) is a 16 item measure of

prodromal (subclinical) psychotic symptoms. It was developed as a short form to the original

Prodromal Questionnaire which had 92 items. Respondents were presented with 16 statements

(e.g., "I feel that parts of my body have change in some way, or that parts of my body are

working differently than before;" "I have seen things that other people apparently can't see;" "I

feel uninterested in the things I used to enjoy"). First, participants answered if this statement is

true or false. Then, if true, participants stated how distressing it is to them on 4 point scale (0 =

none - 4 = severe). A recent study examined the validity and reliability of the PQ-16 with a

diagnosis from the Comprehensive Assessment of At-Risk Mental States (CAARMS) using a

help-seeking population (Ising et al., 2012). The total score on the PQ-16 was moderately

correlated with the CAARMS diagnosis (r=.572). The internal consistency of the measure was

reported at α=.774 (Ising et al., 2012). This measure in the current study demonstrated high

reliability with an alpha level of .84.

The Barratt Impulsiveness Scale (BIS-11) (Patton, Stanford & Barratt, 1995) is a 32 item

measure of an individual's impulsivity. Respondents read a set of statements ("I am a steady

thinker;" "I change hobbies;" "I spend or charge more than I earn;" "I say things without

thinking;" "I am a careful thinker") and rated how often this applies to them on a scale of 1 to 4

(1 = rarely/never - 4 = almost always/always). In a recent study examining the three subdomains

of the measure (attention, motor, and nonplanning), researchers found that there were some

redundancies in a few of the items and suggested a two subdomain model instead (inability to

wait for a reward and rapid response style). Although some of their results were not favorable for

each item, they did report high internal consistency with a Cronbach's alpha level at .80 (Reise et

al., 2013). This measure in the current study demonstrated similar internal consistency with a

Cronbach's alpha of .81.

Measures of Self-Identification. The self-identification as having a mental illness - scale

(SELF-I) (Schomerus et al., 2012), is a 5 item measure that examines to what extent respondents

regard present personal complaints as evidence for an emerging mental illness. Items include

"Current issues I am facing could be the first signs of a mental illness;" "The thought of myself

having a mental illness seems doubtful to me" (reverse coded); "I could be the type of person

that is likely to have a mental illness;" "I see myself as a person that is mentally healthy and

emotionally stable" (reverse coded); and "I am mentally stable, I do not have a mental health

problem" (reverse coded). Each item is rated on a 5-point likert scale (1 = don't agree at all - 5 =

agree completely). In a recent study by Stolzenburg et al. (2007), the effect of self-stigma on

self-identifying as having a mental illness was examined. In their sample, the SELF-I had high

internal consistency (Cronbach's α = .84) (Stolzenburg et al. 2017). In the current study, this

measure demonstrated good internal consistency with a Cronbach's alpha level of .75.

     Discrimination and Microaggression Measures. The Racial and Ethnic Microaggressions

Scale (REMS) (Nadal, 2011) consists of 45 items regarding experiences of racial and ethnic

microaggressions. Respondents were presented with life events ("I observed that someone of my

race is a government official in my state;" "Someone told me that people should not think about

race anymore;" "I was told that people of color do not experience racism anymore;" "Someone

acted surprised at my scholastic or professional success because of my race") and then were

asked to state how often they experienced this on a scale of 0 to 5 (0 = I did not experience this

event - 5 = I experienced this event 5 or more times). During the development of the REMS, the

primary developer Nadal (2011) conducted a study to test the reliability and validity of the

measure using a college and internet based sample. Results indicated high internal consistency

with a Cronbach's alpha of .912 for the overall model. Further analyses indicated that the REMS

has high internal validity, as evidenced by high correlations with existing measures of racism and

participants' feedback (r = .698) (Nadal, 2011). This measure indicated high internal consistency

with a Cronbach's alpha level of .95.

     The Experience of Discrimination (EOD) (Krieger, 2005) measured the personal

experiences of racial and ethnic discrimination using a variety of question formats. For example,

in one portion, participants were asked how they responded to the discrimination ("How did you

respond to this/these experience(s)?" "Please tell me if you did each of the following things."

"Accepted it as a fact of life;" "Tried to do something about it"). Another section asked "Have

you ever experienced discrimination, been prevented from doing something, or being hassled or

made to feel inferior in any of the following situations because of your race, ethnicity, or color?",

then lists life events, such as "getting medical care" or "getting housing". Respondents first answered yes or no, then reported how many times this happened to them in their life. Krieger et al. (2005) examined the reliability and validity of this measure by comparing constructs and scores to other widely used measures of discrimination. Researchers found good internal consistency with a Cronbach's alpha of .74, and high test retest reliability coefficients of .70 (Krieger et al., 2005). This measure in the current study indicated high internal consistency with a Cronbach's alpha of .86.

     Self-Stigma and Attitudes Measures. The Self-Stigma of Mental Illness Scale - Short Form (SSMIS-SF) (Corrigan et al., 2006) is a 20 item measure that examines the attitudes that a person holds towards mental illness. Respondents are given a set of statements where they must rate the extent to which they agree with the statement using a 9 point likert scale (1 = completely disagree - 9 = completely agree). There are four different subscales to the measure in which the respondent is given five statements for each category. For the purposes of this study, only two of the subscales were used. In the first subscale, the respondent is presented with the statement "I think the public believes…", followed by 5 other statements (i.e. "Most persons with mental illness are to blame for their problems") to which they rate how much they agree, capturing the amount of perceived public stigma. The second subscale the respondent sees the statement "I think…" with finishing statements such as "most persons with mental illness are unpredictable" capturing self endorsing stigma. A recent study examined the validity of the SSMIS-SF using data from three previous studies. Cronbach's alpha for the SSMIS-SF were reported in a range from .72 to .92, demonstrating a high internal consistency (Corrigan et al., 2012). In the current study, the public and self-subscales reported high internal consistency with alpha levels of .91 and .88 respectively.

The Mental Health Implicit Association Test (Mental Health IAT; Meade, 2009)

measures the implicit attitudes respondents hold towards people diagnosed with mental illness,

specifically whether or not they implicitly believe people with a mental illness are dangerous.

The IAT is a timed sorting task in which participants categorize words as quickly as possible

without error. The beginning of the task starts with categorizing mental illness and physical

illness -- depression, schizophrenia, appendicitis, multiple sclerosis. The next task is to

categorize words such as violent, unsafe, gentle, peaceful into dangerous or harmless. The next

task pairs mentally ill and dangerous words together and physically ill and harmless together.

The four categories then appear in a new configuration in which mentally ill people and harmless

words are paired and physically ill and dangerous words are paired. The goal is to make as little

errors as possible. The psychometric properties of the Mental Health Implicit Association Test

have yet to be reported on. Researchers have reported on similar IAT tasks, such as the Self-

Esteem Implicit Association Test, in which they found good internal consistency Cronbach's

alpha of .89 (Bluemke & Friese, 2012).

The Mental Illness Microaggressions - Perpetrator Scale (MIMS-P) (Gonzales et al.,

2015) is a 14 item measure examining microaggression behaviors towards individuals with

mental illness, including subscales of assumption of inferiority, patronization, and fear of mental

illness. Respondents rated how much they agree with a statement (i.e. "If I saw a person who I

thought had a mental illness in public, I would be careful in case they 'snap';" "If someone I'm

close to told me that they had a mental illness diagnosis, I would look out for specific symptoms

and behaviors;" "If someone I'm close to told me that they had a mental illness diagnosis, I

would frequently remind them that they need to take their medication") on a scale of 1 to 4 (1 =

strongly disagree - 4 = strongly agree). In the development of the measure, researchers reported

on the measure's reliability with a Cronbach's alpha of .85. There was some variability with the

internal consistency of the three subscales, with assumption of inferiority (α=0.81) and

patronization (α=0.78) showing good internal consistency, while fear of mental illness had a

lower but acceptable level of internal consistency (α=0.63) (Gonzales et al., 2015). In the current

study, this measure indicated a much higher level of internal consistency with a Cronbach's

alpha level of .87.

Data Analysis

To begin analysis, a variable was created to capture an emerging mental illness among

the participants. Four measures were used to create the variable to represent emerging mental

illness: Beck Depression Inventory, Beck Anxiety Inventory, Prodromal Questionnaire, and

Barratt Impulsiveness Scale. If participants had a score above the threshold of normal levels on

any of the previously stated measures (PQ >= 6; BIS >= 72; BAI >= 16; BDI >= 20), they were

identified as having an emerging mental illness. When asked if they had ever been diagnosed

with a mental illness, only 6.9% of the sample said yes, however, 78% of the sample met criteria

for an emerging mental illness. A second variable was created to capture the level of self-

identification or awareness of mental health symptoms among the participants. If participants

scored above a 2.5 on the SELF-I, they were deemed as having high awareness and vice versa.

Therefore, the variable identified four groups -- high self-awareness and mental illness, low self-

awareness and mental illness, high self-awareness and no mental illness, and low self-awareness

and mental illness.

Correlations were used to determine the relationship between psychological symptoms,

discrimination and microaggressions, and self-stigma and attitudes. One-way ANOVAS were

used to examine whether having symptoms of an emerging mental illness increased stigma in those individuals and whether self-identifying as having a mental illness moderated the relationship. Additionally, Pearson correlation coefficients were also used to examine the relationship between emerging mental illness and racial microaggressions and experiences of discrimination. Lastly, chi-square analyses were used to identify differences in gender and race among the created variables. Table 5 located in Appendix A outlines gender and racial differences in all study measures for reference. These analyses were completed using SPSS.

Results

This study investigated both the individuals' attitudes and behaviors to better understand implicit and explicit views of this marginalized population. The sample size originally included 225, but 66 responses were excluded leaving a final sample of 168 participants. Responses were excluded if the length of time spent on the survey was less than 5 minutes, if the participant only answered the attention check questions, if they did not complete the Implicit Association Task, if there were duplicate responses, and if they completed less than 50% of the items.

The first hypothesis stated that individuals with an emerging mental health problem will have higher rates of implicit bias and perpetrate more microaggressions towards those with a mental illness in order to protect from self-stigmatization and keep the "us" from "them" distinction. Overall, the hypothesis was not supported. One-way ANOVAs were used to test the effect of mental illness on the four stigma measures used – means and standard deviations outlined in Table 2 and analysis of variance findings outlined in Table 3. There was no significant effect of mental illness on implicit bias, self-stigmatization, and perpetration of microaggressions. There was one significant effect found, although it was not specifically

expected – individuals with an emerging mental illness perceived public stigma to be greater

than those individuals with no emerging mental illness.

Table 2.
Means and Standard Deviations for Mental Illness and Stigma Variables (N= 159).

	Mental Illness	*n*	*M*	*SD*
IAT	Yes	35	.00	.53
	No	124	.05	.44
SSMISP	Yes	35	6.25	1.84
	No	124	5.23	2.11
SSMIS	Yes	35	3.53	1.62
	No	124	3.47	1.43
MIMS	Yes	35	2.31	.49
	No	124	2.33	.55

Table 3.
Analysis of Variance Between Mental Illness and Stigma Variables (N=159).

	df	*MS*	*F*	*p*
IAT	1	.056	.215	.643
SSMISP	1	28.362	7.817	.006
SSMIS	1	.100	.040	.842
MIMS	1	.007	.027	.870

The second hypothesis stated that a moderator of this relationship would be the

awareness of a mental health problem in themselves. Thus, individuals with an emerging mental

illness and identify the symptoms will have more implicit bias, self-stigma, and perpetrate more

microaggressions towards the overtly mentally ill. Although the hypothesis was not supported, the findings presented with a significant finding that self-awareness moderated the relationship between an emerging mental illness and the perception of public stigma [$F(3,155) = 4.229$, $p = .007$]. Post hoc comparisons using the Tukey HSD test indicated the mean score for individuals with mental illness and high self-awareness ($M = 6.05$, $SD = 1.91$) was significantly different than individuals with no mental illness and high self-awareness ($M = 4.32$, $SD = 2.57$) and that group was also significantly different than those individuals with mental illness and low self-awareness ($M = 6.46$, $SD = 1.76$). However, there were no significant differences found between individuals with no mental illness and low self-awareness ($M = 5.60$, $SD = 1.84$) and any of the groups.

Table 4.
Means and Standard Deviations for Mental Illness and Self-Awareness and Stigma Variables
(N= 159).

	Group	n	M	SD
IAT	1	62	.02	.55
	2	10	.21	.37
	3	62	-.01	.51
	4	25	-.00	.45
SSMISP	1	62	6.05	1.91
	2	10	4.32	2.57
	3	62	6.46	1.76
	4	25	5.60	1.84
SSMIS	1	62	3.45	1.65
	2	10	3.30	1.99

	3	62	3.61	1.60
	4	25	3.54	1.17
MIMS	1	62	2.28	.52
	2	10	2.24	.76
	3	62	2.34	.47
	4	25	2.36	.46

Note. 1 = High self-awareness and emerging mental illness. 2 = High self-awareness and no emerging mental illness. 3 = Low self-awareness and emerging mental illness. 4 = Low self-awareness and no emerging mental illness.

Further analysis was conducted to determine if specific demographic characteristics were associated with these groups. A chi-square test was performed to examine the relationship between gender and the groups of mental illness and self-awareness, but the test was not significant [X^2 (3, N = 159) = 5.455, p = .141]. However, it should be noted that all the individuals in the group that were not experiencing mental illness and had high self-awareness were all female. Another chi-square test was performed to examine the relationship between race and the groups of mental illness and self-awareness which was significant [X^2 (18, N = 159) = 30.273, p = .035]. All of the individuals who were not experiencing mental health symptoms but had high self-awareness identified as Hispanic or Latino (100%). Almost half of the individuals who were experiencing mental health symptoms but had low self-awareness identified as White (27.4%) or Asian/Pacific Islander (21.0%), which is twice as many White and Asian/Pacific Islander who were experiencing mental health symptoms and were aware of them (11.3%).

The third hypothesis stated that those individuals who experience racial discrimination will report more psychological symptoms, have increased rates of stigma and perpetrate more microaggressions towards those with an overt mental illness. Results partially supported this

hypothesis. Pearson correlation coefficients were computed to assess the relationship between racial discrimination, emerging mental illness, stigma, and perpetration of microaggressions. First, there was a positive correlation between emerging mental illness and the Racial and Ethnic Microaggressions Scale [r = .243, n = 159, p = .002] and emerging mental illness and the Experiences of Discrimination Scale [r = .241, n = 159, p = .002]. Individuals with an emerging mental illness reported experiencing more racial microaggressions and discrimination than those individuals without an emerging mental illness. The racial subscale of the Experiences of Discrimination Scale was also significantly, though modestly, correlated with the Mental Illness Microaggressions - Perpetrator Scale [r = .245, n = 159, p = .002] and self-endorsed stigma [r = .196, n = 159, p = .013]. This suggests that individuals who experience racial discrimination are more likely to perpetrate microaggressions towards those individuals with a mental illness, which supports the hypothesis. Lastly, a positive correlation was found between perception of public stigma and the Experiences of Discrimination Scale [r = .162, n = 159, p = .041], which is similar to the previous findings. Individuals who have an emerging mental illness and experience discrimination perceived greater rates of public stigma, but did not self-endorse stigma.

Discussion

The purpose of this study was to understand how persons who are at risk of developing a mental illness perceive and behave towards those individuals who have a diagnosed mental illness. Although our results did not support the original hypothesis that individuals with an emerging mental illness would endorse more self-stigma, have higher rates of implicit bias, and perpetrate more microaggression, results did show that those individuals with an emerging mental illness perceived more stigma among the public. It was expected that those individuals with an emerging mental illness would endorse more stigma to create an "us" versus "them"

mentality, however, it appears that a different thought process is occurring. Those individuals believe that the public endorsing higher rates of stigma against mental illness than those individuals who are not experiencing mental health symptoms. As stated in previous findings, one explanation for this could be that the sample did not have as serious mental health diagnoses as those who were found to more likely self-stigmatize.

Moreover, this belief was moderated by self-awareness of mental health symptoms in those individuals. Individuals who had an emerging mental illness but had lower self-awareness of those symptoms perceived more public stigma than those individuals who had an emerging mental illness and had high self-awareness of those symptoms. Additionally, both of those groups perceived more public stigma than individuals who were not experiencing an emerging mental illness but believed they may be experiencing symptoms of a mental illness had the lowest perception of public stigma. This may indicate that being aware of a mental health problem arising in yourself or being able to self-identify as having a mental illness reduces your perception of public stigma.

Further analysis did find that racial identity also had an impact on self-awareness of mental health symptoms. All of the participants who were not experiencing a mental health problem but believed they may be identified as Hispanic. About half of the participants who identified as White or Asian had signs of a mental health problem but were not aware, which was double the amount of people who identified. This demonstrates the potential importance of cultural and ethnic differences in mental health and awareness. Rao, Feinglass, and Corrigan (2007) examined these racial differences in stigmatizing attitudes towards individuals with mental illness in a similar college sample. They found that African Americans and Asians believed that individuals with mental illnesses were more dangerous and wanted s more

segregation than Caucasians. Furthermore, Latinos perceived individuals with mental illness as less dangerous and wanted less segregation than Caucasians. These findings may provide some explanation for these differences in cultural and ethnic differences in self-identification of having a mental illness.

Experiences of discrimination had an interesting effect on stigma and behavior towards individuals with a mental illness that partially aligned with expectations. Individuals with a mental illness reported more experiences of racial discrimination than those individuals with no signs of a mental illness. At the same time, individuals who reported more experiences of racial discrimination perpetrated more microaggressions towards individuals with a mental illness and had higher rates of self-endorsed stigma towards mental illness. These findings demonstrate the impact of being part of multiple marginalized groups. Individuals who are experiencing discrimination may experience greater rates of mental health problems due to this discrimination. For example, individuals who are experiencing racial discrimination in the workplace may also have greater rates of anxiety as a result. Furthermore, individuals who may be a part of one stigmatized group, may be more likely to engage in stigmatizing behaviors towards another group in order to belong to a so-called "in-group" in other aspects of their identity.

Although the results may not have fully supported the original hypotheses, results demonstrated a different process that may be occurring. Individuals who are experiencing an emerging mental health problem perceive more public stigma particularly when the individual may not be aware of the mental health problems arising. Furthermore, having an emerging mental illness may increase an individual's experiences of racial discrimination.

For the purposes of the current study, a college population was used as they are more likely to be experiencing an emerging mental illness and may not be aware yet. Future research

should examine these relationships in a different population potentially using Amazon Turk to capture a community sample. It may also be interesting to examine these relationships in a clinical population who make lack insight into their mental illness. Lastly, more research should explore the differences in self-awareness discovered in the racial and ethnic groups.

Limitations

The present study does have limitations. First, the study used an online self-report design, which could have allowed some students to over or under report. Additionally, the survey was about 45 minutes, therefore, some participants may have lost interest by the end of the study. In an attempt to filter those respondents who may have been choosing random answer, attention checks were included that required a response. Although the self-report measures were randomized for each participant, the Mental Health IAT was always administered at the end, so, participants may have lost focus as there is some evidence of incomplete data. The present findings may not be generalizable to the general population as the sample here was college students. This may also not be generalizable to all college populations as they may not be as diverse or at as high of a risk for developing mental health problems as John Jay students seem to be. Lastly, some elements of mental illness were not capture by this study, such as post-traumatic stress and personality disturbances.

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Appendix A

Table 5.
Descriptive Statistics and ANOVA of Gender, Ethnicity, and Measures

	Male M (SD)	Female M (SD)	T (p-value)	Hispanic/ Latino M (SD)	Caucasian M (SD)	Black/African American M (SD)	Asian/Pacific Islander M (SD)	Bi/ Multiracial M (SD)	Other M (SD)	Ethnicity ANOVA (F-value)
Stigma										
SSMIS	3.58 (1.20)	3.50 (1.65)	.25 (.81)	3.60 (1.69)	3.19 (1.18)	3.64 (2.06)	3.68 (1.53)	3.50 (.71)	3.38 (.93)	.54
SSMISP	5.62 (1.53)	6.12 (2.02)	-1.28 (.20)	6.00 (2.18)	6.01 (1.28)	5.37 (2.72)	6.24 (1.01)	8.80 (.28)	6.22 (1.55)	1.07
MIMS-P	2.53 (.46)	2.26 (.50)	2.70 (.01)**	2.33 (.56)	2.08 (.44)	2.48 (.13)	2.41 (.38)	2.07 (.10)	2.50 (.28)	1.68
Psychological Symptoms										
BDI	.29 (.27)	.41 (.46)	-1.41 (.16)	.41 (.46)	.33 (.45)	.45 (.39)	.34 (.24)	.98 (1.04)	.29 (.36)	.92
BAI	.43 (.44)	.61 (.63)	-1.47 (.14)	.60 (.71)	.43 (.34)	.55 (.49)	.63 (.51)	1.27 (1.38)	.50 (.38)	.79
PQ16	.19 (.18)	.20 (.22)	-.27 (.79)	.21 (.24)	.12 (.16)	.24 (.19)	.16 (.11)	47 (.31)	.30 (.20)	1.86
BIS11	1.98 (.35)	2.03 (.34)	-.75 (.46)	2.03 (.32)	1.95 (.44)	2.25 (.34)	2.01 (.27)	1.90 (.40)	1.91 (.27)	1.72
Discrimination										
EOD	.69 (.80)	.66 (.48)	.34 (.73)	.61 (.48)	.48 (.47)	1.06 (.62)	.60 (.51)	1.42 (.60)	1.12 (.85)	4.00**
REMS	.79 (.91)	.71 (.68)	.53 (.60)	.68 (.62)	.64 (.59)	1.16 (1.24)	.58 (.45)	1.27 (1.38)	.99 (1.22)	1.57
Self Identification										
SELFI	2.11 (.85)	2.45 (.87)	-1.95 (.05)	2.48 (.88)	2.09 (.92)	2.51 (.83)	2.22 (.77)	2.70 (2.12)	2.61 (.73)	1.04

Note. *p<.05 **p<.01