How Are Perceived Stigma, Self-Stigma, and Self-Reliance Related to Treatment-Seeking? A Three-Path Model

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Objective: Many college students may experience mental health problems but do not seek treatment from mental health professionals. The present study examined how perceived stigma and self-stigma toward seeking mental health treatment, as well as perceptions of self-reliance for coping with mental health problems, relate to college student treatment-seeking. Method: In total, 246 students completed a self-report survey that included measures of perceived stigma and self-stigma for treatment-seeking, self-reliance for addressing mental health concerns, self-reported mental health problems, symptoms of depression and alcohol-related problems, attitudes toward treatment-seeking, and treatment-seeking behavior. Results: Regression analyses revealed that higher perceived stigma, self-stigma, and self-reliance were all related to a more negative attitude toward treatment-seeking. In a 3-path mediation model, bootstrapping results indicated an indirect effect where perceived stigma was related to attitude toward treatment-seeking and treatment-seeking behaviors through self-stigma and self-reliance. Specifically, higher perceived stigma was related to higher self-stigma, higher self-stigma was related to higher self-reliance, and higher self-reliance was associated with a more negative attitude toward treatment-seeking in the overall sample, and a decreased probability of having sought treatment among those who screened positive for a mental health problem. Conclusions and Implications for Practice: Perceived stigma may influence whether or not college students seek treatment for mental health problems by potentially increasing stigmatizing attitudes toward themselves and increasing preferences for handling problems on their own. Researchers and practitioners are recommended to seek a better understanding of the complex treatment barriers to reduce stigma and facilitate treatment-seeking.

Keywords: treatment-seeking, self-stigma, stigma perceptions, self-reliance, college students

Mental health problems are a concern in college-aged populations, as research has found that most lifetime mental health disorders first appear by age 24 (Kessler et al., 2005). Researchers have reported that almost half of college-aged individuals may experience mental health problems (Blanco et al., 2008); however, college students may not seek treatment when experiencing a problem. Blanco et al. (2008) reported that less than 25% of their sample, aged 19 to 25, who met the criteria for a psychiatric disorder had sought treatment within the past year. Further, the authors noted that college students were less likely to report getting treatment for alcohol or drug use than their nonstudent peers. Past studies indicated that mental health problems can lead to negative social, emotional, and educational outcomes (e.g., Kessler et al., 1995; Weitzman, 2004); however, there is yet a thorough understanding of why students do not seek treatment when they experience mental health problems. The current study sought to investigate the barriers that keep students from seeking treatment, in hope of providing practical recommendations to practitioners in facilitating treatment-seeking behaviors.

Individuals may feel reluctant to seek treatment because of the stigma associated with mental illness and preferences to cope with symptoms on their own (e.g., Eisenberg, Downs, Golberstein, & Zivin, 2009; Gulliver, Griffiths, & Christensen, 2010). Although these factors have both been established as barriers to care, no research to our knowledge has considered how the factors inter-relate to influence treatment-seeking. Drawing from the Theory of Help-Seeking, Rickwood and colleagues (2005) proposed that help-seeking decisions involve a process of awareness of symptoms, considering resources, and ultimately a willingness to disclose the problem and seek help. Barriers are likely brought to awareness during this process and can influence treatment-seeking. We propose that barriers such as stigma become first relevant when an individual experiences a problem and considers the social consequences associated with treatment. If high stigma for treatment-seeking is perceived, we expect that preferences for self-reliance will increase. Though this sequential relationship appears to be a logical connection, these relationships have not been empirically examined.

While considerable attention has been devoted to understanding the impact of stigma on treatment-seeking in college students (e.g., Bathe & Pryor, 2011; Eisenberg et al., 2009), less attention has been given to self-reliance as a treatment barrier and the relationship between stigma and self-reliance (Adler, Britt, Kim, Riviere,
& Thomas, in press). Self-reliance is, however, a highly pertinent barrier to understand because efforts to reduce stigma may still be unsuccessful if students are unaware of when a problem warrants professional help. Furthermore, self-reliance may be a key mediator of the relationship between stigma and treatment-seeking, where those who perceive high stigma may not seek treatment because they feel they can handle the problem on their own rather than experience negative social consequences. To further disentangle these potential relationships, we will first review the available literature on stigma, and then turn to preferences for self-reliance for a more comprehensive understanding of why college students do not seek treatment.

Distinctions in types of stigma have been made in regards to the source of negative evaluation (e.g., society as a whole, important others, and oneself) and the target characteristic or behavior (e.g., having a mental health disorder or seeking help for a mental health disorder; Corrigan, 2004; Vogel, Wade, & Haake, 2006; Vogel, Wade, & Ascherman, 2009). The present study used conceptualizations of stigma as self-stigma for treatment-seeking (self-stigma-TS) and perceived stigma from close others for treatment-seeking (perceived stigma-TS). Self-stigma-TS is an internalized evaluation, which leads individuals to label themselves as unacceptable for seeking treatment (Vogel et al., 2006). Perceived stigma-TS is the perception that persons in one social group would view someone who seeks treatment as less socially acceptable (Vogel et al., 2006).

In the present study, we examined the referent behavior of seeking treatment in light of evidence that assessments of stigma targeted toward treatment-seeking may be more strongly related to intentions to seek help than stigma toward mental illness, likely because treatment-seeking is more within an individual’s control than the experience of symptoms (Tucker et al., 2013; Vogel et al., 2006; Vogel & Wade, 2009). Further, we referenced perceived stigma-TS, rather than using broad assessments of public stigma, because individuals intentions to seek treatment may be more affected by those they interact with more closely than society as a whole (Vogel et al., 2007, 2009). Therefore, the present study focused on the influence of these individuals in a student’s close network (peers, family, or professors).

While evidence exists that self-stigma-TS and perceived stigma-TS can predict whether or not individuals seek treatment for mental health problems (Corrigan, 2004), less is known about how the two types of stigma are related to one another, and further how the two types of stigma are related to other treatment barriers. Recent findings suggested that self-stigma-TS might develop from public stigma associated with seeking treatment at the societal level (Bathje & Pryor, 2011; Vogel et al., 2013). Bathje and Pryor (2011) proposed that, like a domino effect, high levels of public stigma associated with seeking help could increase internalized perceptions of stigma. They found that the relationship between awareness of public stigma associated with seeking treatment and attitudes toward treatment-seeking was mediated by self-stigma-TS. The current study sought to extend this finding by examining perceived stigma-TS, rather than public stigma, and by examining actual treatment-seeking behaviors as outcomes for those with mental health problems. Examining treatment-seeking behaviors is a particularly important contribution, as few studies have related stigma perceptions to actual treatment-seeking among college students experiencing a mental health concern (e.g., Eisenberg et al., 2009).

While research has supported that stigma is a prominent barrier to treatment-seeking, more complex relationships between stigma and other barriers have not been thoroughly examined. To address this gap, we further hypothesized that stigma would affect treatment-seeking attitudes and behaviors through increasing preferences for self-reliance. Self-reliance for coping with mental health problems (self-reliance-MHP) is a tendency to feel that one can handle problems on one’s own, and has been found to be a barrier to help-seeking in the general population, military personnel, and specifically for young adults (Adler et al., in press; Andrade et al., 2014; Gulliver, Griffiths, Christensen, 2010). In fact, Ortega and Alegria (2002) found that individuals experiencing a mental health concern were more than 50% less likely to use professional services when they had a self-reliant attitude. Self-reliance-MHP may be strongly rooted in individualistic cultural values, where individuals are reluctant to look to others for help in coping with personal concerns (Taylor et al., 2004). Concerns about not being able to cope with problems on one’s own may be prominent among college students, who frequently have perfectionistic tendencies that could promote self-reliance-MHP (Ey, Heming, & Shaw, 2000).

The purpose of the present study was to examine two primary research questions. First, we sought to understand how perceived stigma-TS, self-stigma-TS, and self-reliance-MHP relate to attitudes toward treatment-seeking and actual treatment-seeking behaviors for students experiencing a mental health problem. We predicted that self-stigma-TS, perceived stigma-TS, and self-reliance-MHP would be positively correlated with one another, and that all would be negatively related to attitudes toward treatment-seeking and actual treatment-seeking.

Second, we examined these variables within the context of a three-path mediation model. While many studies have recognized the influence of stigma on decisions to seek treatment, few have sought to determine the underlying pathways by which stigma may affect individuals’ treatment-seeking attitudes and behaviors. In the present study, we examined self-stigma-TS and self-reliance-MHP as mediators of the relationship between perceived stigma-TS and treatment-seeking behaviors.

Method

Participants and Procedure

Undergraduate students (N = 246) from a Southeastern university were recruited from an online research participant pool to participate in our study for a research participation requirement or extra credit in psychology courses. Participants reported to an on-campus research lab at a prearranged time to complete the survey. The measures used in the present study included perceptions of mental health treatment, perceived stigma-TS and self-stigma-TS, self-reliance-MHP, self-reported mental health problems, attitudes toward treatment-seeking, depression and alcohol-related problem inventories, and questions regarding treatment-seeking behaviors. The measures included in the present manuscript were part of a larger study on perceptions of students who develop mental health problems in college.
All participants were aged 18–19 (73.3%) or 20–24 (26.3%). The majority were female (74.7%), White (81.4%), and freshman (63%) or sophomores (19.3%) in class rank. The subsample of those who self-reported a problem or screened positive for an alcohol problem or major depressive disorder (MDD; N = 95) was demographically similar: age 18–19 (66.3%) or 20–24 (33.7%), female (78.9%), White (77.9%), freshman (51.6%) or sophomores (27.4%).

Measures

Attitudes toward treatment-seeking. Attitudes toward treatment-seeking were assessed using a one-item measure of overall attitude toward treatment-seeking. This item has been used in past research on the stigma of mental illness using military samples (Britt et al., 2011). This item asked, “Overall, what is your current attitude toward seeking treatment from a mental health professional were you to develop a problem?” Response options ranged from 1 = very negative to 7 = very positive.

Perceived stigma-TS. Perceived stigma-TS (α = .83) was assessed through a seven-item measure adapted from Britt et al.’s (2008, 2014) measure used in military samples, which has been significantly associated with treatment seeking in this population. The items assessed how the individual thought specific others would feel if he or she sought treatment for a mental health problem. Sample items included “My fellow students might have less confidence in me if I received mental health treatment” and “My close friends would treat me differently if I received mental health treatment.” Response options ranged from 1 = strongly disagree to 5 = strongly agree.

Self-stigma-TS. Self-stigma-TS (α = .89) was assessed using the Self-Stigma of Seeking Help scale (SSOSH; Vogel et al., 2006). Vogel et al., (2006) found support for the validity of this measure, where it was significantly associated with treatment seeking in a student sample. The 10-item measure asked participants to indicate their extent of agreement with statements about seeking mental health treatment. Sample items included “My fellow students might have less confidence in me if I received mental health treatment” and “My close friends would treat me differently if I received mental health treatment.” Response options ranged from 1 = strongly disagree to 5 = strongly agree.

Self-reliance-MHP. Self-reliance-MHP (α = .70) was assessed through a three-item measure from Britt et al., (2011, 2014), which was adapted from Mackenzie et al.’s (2004) attitudes toward seeking professional help scale. This measure has been shown to differentiate individuals who had sought treatment from those who had not in a military context (Britt et al., 2014). These items assessed preferences for dealing with mental health problems oneself. Sample items included “I would feel inadequate if I went to a therapist for psychological help” and “Seeking psychological help would make me feel less intelligent.” Response options ranged from 1 = strongly disagree to 5 = strongly agree.

Self-reported current problem. All participants were asked to indicate if they were currently experiencing a stress, emotional, alcohol, or family problem. Response options were 1 = yes or 0 = no.

Depression. Depression (α = .85) symptoms were assessed using the nine-item Patient Health Questionnaire (PHQ; Kroenke, Spitzer, & Williams, 2001). The PHQ has been cited as a reliable and valid measure of depressive disorders in general populations, as well as among university samples (e.g., Adebuya, Ola, & Afolabi, 2006; Kroenke et al., 2001). Participants indicated how often they had been bothered by each item in the past 2 weeks. Response options ranged from 1 = not at all to 4 = nearly every day. Sample items included “little interest or pleasure in doing things” and “feeling tired or having little energy.” On an additional item, participants also indicated how difficult the problem made it to do work, take care of things at home, or get along with others. Response options ranged from 1 = not difficult at all to 4 = extremely difficult.

Participants were considered as having MDD if they reported “little interest or pleasure in doing things” or “feeling down, depressed, or hopeless” at least more than half the days, reported on 5 or more of the nine items that they experienced the symptom at least more than half of the days, and reported at least somewhat difficult on the additional item (Kroenke et al., 2001).

Alcohol problems (α = .71). A problem with excessive alcohol use was assessed using the Two Item Conjoint Screen, which has demonstrated acceptable sensitivity in young adult populations (TICS; Brown, Leonard, Saunders, & Papasouliotis, 2001). Participants were asked to indicate if they had used alcohol in the past 4 weeks, and if they responded yes, they were to answer the TICS items. Those items were “Have you ever felt you wanted or needed to cut down on your drinking?” and “Have you ever used alcohol more than you meant to?” Response options were 1 = yes or 0 = no. Participants were considered to have an alcohol problem if they responded yes to at least one of the two items.

Treatment-seeking. Treatment-seeking was assessed in two ways. Participants were asked if they had received mental health services from any of the four listed sources within the past 12 months. Sources included a mental health professional, a general medical doctor, a spiritual advisor, or another source. Response options were 1 = yes or 0 = no. An additional item asked participants how many mental health visits they had attended in the past 12 months. Response options were 0, 1–2, 3–7, 8–12, and more than 12. Participants were considered as treatment-seeking if they attended at least one mental health visit and/or reported seeking treatment from at least one of the sources.

Data Analysis

All analyses were conducted using SPSS version 22. First, relationships between the predictor variables (perceived stigma-TS, self-stigma-TS, and self-reliance-MHP) and the outcome of attitude toward treatment-seeking were examined with a series of hierarchical linear regressions. Control variables of age and gender were included in Step 1, and each predictor was entered in a separate regression at Step 2. Predictors that were significant when entered independently were all entered into one final regression. Second, relationships between the predictors and the outcome of treatment-seeking behaviors were examined in a series of logistic regressions. Again, each predictor was entered independently, and then significant predictors were entered into a final logistic regression.

After initial regression analyses, tests for mediation were examined using Hayes (2012) PROCESS Macro for SPSS. PROCESS is a modeling tool that allows for the integration of
complex moderation and mediation analyses. Bootstrapping is used in the PROCESS script, which provides a resampling method to test the indirect effect more accurately (MacKinnon, Lockwood, & Williams, 2004).

**Results**

For research questions regarding treatment-seeking behaviors, the sample was restricted to students who either self-reported a current problem, or screened positive for an alcohol problem or major depressive disorder (MDD; N = 95). Of those participants, 67 self-reported a current problem (11 also met criteria for an alcohol problem, 11 met criteria for MDD, and 2 met criteria for both). In addition, three participants screened positive for MDD and 25 screened positive for an alcohol problem but did not self-report a problem. Of those experiencing a problem, 65 (68%) reported having sought treatment within the past 12 months. Most sought treatment from a spiritual advisor (17.9%), a primary care provider (14.7%), or an off-campus mental health provider (13.7%). The most common type of treatment received was individual therapy or counseling (17.9%) or medication for a mental health problem (12.6%).

Tables 1 and 2 provide means, SDs, and correlations for all the measured variables. Initial correlations provided preliminary support for our hypothesized relationships. Overall, perceived stigma-TS and self-stigma-TS were positively related to self-reliance-MHP, and negatively related to attitudes toward treatment-seeking. Similar trends were also observed in the restricted sample with only individuals who self-reported or screened positive for mental health problems. In addition, only self-reliance-MHP and attitudes toward treatment-seeking had significant relationships with treatment-seeking behaviors. Before analyzing our research questions, we examined potential mean differences in perceived stigma-TS, self-stigma-TS, and self-reliance-MHP between those who did and did not self-report or screen positive for mental health problems, but no differences were found.

We first examined the relationships among perceived stigma-TS, self-stigma-TS, and self-reliance-MHP. As hypothesized, perceived stigma-TS was positively related to self-stigma-TS for both the full sample, \( r = .67, p < .01 \) and the sample restricted to only individuals who self-reported or screened positive for mental health problems, \( r = .64, p < .01 \); thus, suggesting that individuals who perceived greater stigma toward treatment-seeking from others were more likely to endorse similar perceptions about themselves. Both perceived stigma-TS (full: \( r = .32, p < .01 \); restricted: \( r = .32, p < .01 \)) and self-stigma-TS (full: \( r = .41, p < .01 \); restricted: \( r = .41, p < .01 \)) had significant positive relationships with self-reliance-MHP, thus, supporting our predictions that individuals with higher levels of stigma toward seeking treatment are more likely to feel that they can handle the symptoms on their own.

When each predictor was entered into a separate regression, perceived stigma-TS (\( \beta = -.48, p < .01 \)), self-stigma-TS (\( \beta = -.66, p < .01 \)), and self-reliance-MHP (\( \beta = -.55, p < .01 \)) were all negatively related to attitudes toward treatment-seeking. As hypothesized, these results suggest that individuals who perceived stigma from others and toward the self or those who reported greater levels of self-reliance-MHP were more likely to hold negative attitudes toward seeking treatment. When entered into a full model, self-stigma-TS (\( \beta = -.50, p < .01 \)) and self-reliance-MHP (\( \beta = -.33, p < .01 \)) remained significant unique predictors, whereas perceived stigma-TS did not.

A three-path mediation model was conducted to test our hypothesized model of the relationships among perceived stigma-TS, self-stigma-TS, self-reliance-MHP, and attitudes toward treatment-seeking (see Figure 1). The results of our analysis indicated that the three predictors accounted for 55% of the variance in attitudes toward treatment-seeking. As predicted, self-stigma-TS and self-reliance-MHP fully mediated the relationship between perceived stigma-TS and attitudes toward treatment-seeking, such that the direct effect between perceived stigma-TS and attitudes toward treatment-seeking was no longer significant after accounting for the mediators (Bootstrap 95% CI [confidence interval]: \( -.24, .09 \)).

Results of the logistic regressions predicting treatment-seeking revealed that only self-reliance-MHP (\( \beta = -.80, OR = .44, p < .05 \)) differentiated those who had sought treatment from those who had not. Thus, our hypothesis that those individuals who were more self-reliant-MHP were less likely to have sought treatment was supported; however, our hypotheses that perceived stigma-TS and self-stigma-TS would be directly related to treatment-seeking were not supported.

We proposed that perceived stigma-TS would be related to treatment-seeking through self-stigma-TS and self-reliance-MHP. We did not find evidence of a direct relationship between perceived stigma and treatment-seeking. However, researchers have argued a significant direct effect is not a necessary precondition to

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**Table 1**

Means, SDs, and Bivariate Correlations of Study Variables With Full Sample (N = 243)

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
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<td>2. Gender</td>
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<td>3. Perceived stigma-TS</td>
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<td>.78</td>
<td>-.05</td>
<td>-.10</td>
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<td>4. Self-stigma-TS</td>
<td>2.70</td>
<td>.71</td>
<td>-.08</td>
<td>-.09</td>
<td>.67**</td>
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<td>5. Self-reliance-MHP</td>
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<td>.73</td>
<td>-.08</td>
<td>-.11</td>
<td>.35**</td>
<td>.43**</td>
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<tr>
<td>6. Attitudes toward treatment seeking</td>
<td>4.63</td>
<td>1.53</td>
<td>.14*</td>
<td>.17**</td>
<td>-.49**</td>
<td>-.67**</td>
<td>-.57**</td>
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<td>7. Depression symptoms</td>
<td>5.65</td>
<td>4.72</td>
<td>.04</td>
<td>.10</td>
<td>.16*</td>
<td>.12</td>
<td>.11</td>
<td>.05</td>
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<td>8. Alcohol problems</td>
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<td>.36</td>
<td>.08</td>
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<td>-.06</td>
<td>-.07</td>
<td>-.05</td>
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*Note.* Gender: 1 = male, 2 = female. Alcohol problems: 1 = yes, 0 = no. 
* * * p < .05 (two-tailed). ** * * * p < .01.
treatment-seeking behaviors. MHP, which in turn related to a lower likelihood of engaging in stigma-TS, which was positively associated with self-reliance—levels of perceived stigma-TS were associated with higher self-reported for a mediated model, such that perceived stigma-TS was related to attitudes toward treatment-seeking through self-stigma-TS and self-reliance-MHP. Individuals with higher levels of perceived stigma-TS were more likely to endorse higher levels of self-stigma-TS, and report a greater preference for self-reliance-MHP, which in turn related to more negative attitudes toward treatment-seeking.

We also found evidence of an indirect pathway that may link perceived stigma-TS to actual treatment-seeking behaviors through self-stigma-TS and self-reliance-MHP. Thus, we conclude that when individuals perceive that others would view them negatively for seeking treatment, they may endorse similar stigmatizing beliefs toward themselves, and subsequently prefer handling problems on their own rather than seek treatment. These results have both theoretical and practical implications.

First, our results indicated that the relationship between stigma and treatment-seeking is complex. We found evidence that perceived stigma-TS may not be directly related to attitudes toward treatment-seeking, but may affect those outcomes when an individual holds stigmatizing beliefs about themselves and prefers to handle the problem themselves. Bathje and Pryor (2011) previously found the relationship between public stigma awareness and attitudes toward help-seeking was mediated by self-stigma-TS. Our results extend their findings with evidence of an indirect relationship between perceived stigma-TS (from those close to an individual, rather than society at large) and actual treatment-seeking behaviors, in addition to attitudes toward treatment-seeking, through self-stigma-TS and self-reliance-MHP. This is an important extension to focus on students who are actually experi

### Table 2

**Means, SDs, and Bivariate Correlations of Study Variable With Restricted Sample (Only Individuals Self-Reported or Screened Positive for Mental Health Problems, N = 95)**

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<th>Variable</th>
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<td>2. Gender</td>
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<td>.01</td>
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<tr>
<td>3. Perceived stigma-TS</td>
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<td>4. Self-stigma-TS</td>
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<td>5. Self-reliance-MHP</td>
<td>2.99</td>
<td>.74</td>
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<td>6. Attitudes toward treatment seeking</td>
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*p < .05 (two-tailed). **p < .01.

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**Discussion**

As mental health symptoms commonly appear in early adulthood, college students may be susceptible to developing mental health problems, yet many do not seek treatment (Blanco et al., 2008; Kessler et al., 2005). Thus, it is important to understand factors that may impact students’ decisions to seek help. The results of our study suggested a pathway by which stigma from important others related to an individual’s attitudes toward treatment-seeking and treatment-seeking behaviors. We found support for a mediated model, such that perceived stigma-TS was related to attitudes toward treatment-seeking through self-stigma-TS and self-reliance-MHP. Individuals with higher levels of perceived stigma-TS were more likely to endorse higher levels of self-stigma-TS, and report a greater preference for self-reliance-MHP, which in turn related to more negative attitudes toward treatment-seeking.

We also found evidence of an indirect pathway that may link perceived stigma-TS to actual treatment-seeking behaviors through self-stigma-TS and self-reliance-MHP. Thus, we conclude that when individuals perceive that others would view them negatively for seeking treatment, they may endorse similar stigmatizing beliefs toward themselves, and subsequently prefer handling problems on their own rather than seek treatment. These results have both theoretical and practical implications.

First, our results indicated that the relationship between stigma and treatment-seeking is complex. We found evidence that perceived stigma-TS may not be directly related to attitudes toward treatment-seeking, but may affect those outcomes when an individual holds stigmatizing beliefs about themselves and prefers to handle the problem themselves. Bathje and Pryor (2011) previously found the relationship between public stigma awareness and attitudes toward help-seeking was mediated by self-stigma-TS. Our results extend their findings with evidence of an indirect relationship between perceived stigma-TS (from those close to an individual, rather than society at large) and actual treatment-seeking behaviors, in addition to attitudes toward treatment-seeking, through self-stigma-TS and self-reliance-MHP. This is an important extension to focus on students who are actually experi-

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**Figure 1.** Model predicting attitudes toward treatment seeking.
Acknowledging mental health concerns and have or have not sought treatment, as they are the population practitioners seek to help.

These findings have important implications for clinicians and university officials who should work together to increase awareness about mental health treatment and the associated benefits in efforts to reduce stigma. Individuals must first understand that they would not be viewed negatively by those important to them (such as peers, parents, and professors) if they sought treatment. More open dialogue through university-organized programs about the reality of mental health problems and the benefits of treatment among faculty, students, and on-campus providers could promote more positive norms. An indirect strategy of encouraging students to support others in seeking help for mental health problems may also be promising for changing student attitudes about seeking treatment (Siegel, Lienemann, & Tan, 2014). These methods may be especially valuable if incorporated into programs early in students’ college career, as emotional concerns and difficulty coping with stress can majorly impact college student success (DeBerard, Spielberg, & Julka, 2004; Rickinson & Rutherford, 1995).

Second, we found that both forms of stigma were related to preferences for self-reliance-MHP, and that self-reliance-MHP was a mediator of the relationship between perceived stigma-TS, self-stigma-TS, and treatment-seeking. Thus, heightened stigma may make individuals feel that they should handle problems themselves rather than seeking professional help. To our knowledge, this study was one of the first attempts to examine the relationships of stigma with self-reliance and treatment-seeking outcomes. Our finding could be especially helpful in designing interventions that are not only related to reducing stigma, but also to reducing self-reliance-MHP. School officials and on-campus providers may need to offer educational training to all students on signs that a problem warrants professional help. This may be especially critical in college student populations, where students may first be encountering mental health symptoms (Kessler et al., 2005) and feel they should be able to handle common stressors themselves. Such interventions may involve presenting practical examples of problems that warrant professional help, or perhaps analogous comparisons to when one seeks help for physical problems that are significantly interfering with daily life. Information about treatment itself may also be necessary to help students understand that therapy should not necessarily be viewed as relying on someone else to “fix” his or her problem, but a way for the individual to grow stronger themselves and be able to fix the problem using skills acquired in treatment.

Finally, our results support previous findings that self-reliance-MHP is a barrier to care (Andrade et al., 2014; Gulliver, Griffiths, & Christensen, 2010; Ortega & Alegria, 2002). Self-reliance may be a major obstacle because of individualistic cultural values that discourage dependence on others and perfectionistic tendencies of highly motivated college students (Ey et al., 2000; Taylor et al., 2004). Future studies may consider measuring perfectionism and self-reliance to better understand this potential psychological mechanism among college students. Further, studies may benefit from examining cultural differences, and whether individualistic cultural values heighten self-reliance-MHP. Such countries that value independence may need more intensive education on when seeking help is necessary.

Limitations and Directions for Future Research

Our study has a few limitations that should be noted. First, our data were collected cross-sectionally; therefore, conclusions about causality cannot be confirmed. While our results support that stigma perceptions-TS and self-reliance-MHP differentiate those who had sought treatment from those who had not, future studies should examine our model with longitudinal data to better understand the pathways and causal relationships. It would be especially interesting to capture changes in the constructs over time to determine if changes in perceived stigma-TS increases self-stigma-TS, and in turn increases self-reliance-MHP. Longitudinal studies could also examine alternative sequential orderings of our variables over time. Although our model proceeds in a logical fashion, that perceived stigma-TS impacts an individuals’ personal attitudes, which leads to behavioral preferences, alternative models are possible. For example, self-stigma-TS may alter how one perceives his or her environment, or those who are self-reliant may perceive higher stigma associated with getting treatment.

Second, our sample was composed of college students, most of whom were enrolled in psychology courses. It could be that psychology students may respond differently than students from other backgrounds because of their increased knowledge of psychological disorders. However, this limitation could also be viewed as a strength such that our study was a conservative test of the effects of stigma using a more knowledgeable sample. Future studies using samples from the general population or other student samples may find different effects.

Lastly, our study utilized all self-report measures, which has been critiqued for common method variance issues. However, Spector (2006) argued that common method variance likely does not inflate correlations significantly. Further, our constructs of interest are primarily focused on individual perceptions, and are best captured by self-report measures. In reference to our assessment of psychological problems, self-reported assessments of health symptoms have been criticized in past research as suscep-
tible to social desirability and faking effects. Thus, more objective measures of symptoms of mental health problems and treatment-seeking behaviors could potentially be used in future studies if clinical records are accessible.

We offer several additional suggestions for future research. First, we encourage future researchers to test our three-path model of stigma using larger and more demographically diverse samples, as well as samples with more severe mental illnesses. Demographic factors such as race, education, and gender have been related to treatment-seeking patterns and attitudes toward treatment (e.g., Blanco et al., 2008; Gonzalez, Alegría, & Prihoda, 2005); however, our sample was predominantly White, female college students. Future studies could determine whether this model functions similarly in other populations. Additionally, our study included those who self-reported a problem or met criteria for depression or an alcohol problem. Individuals with other types of mental illnesses may have different experiences of stigma. Further, self-reliance-MHP may operate in different ways for those with more severe illnesses, where handling symptoms oneself seems much less feasible. Researchers could also examine the interplay of various personality characteristics, such as self-esteem, self-compassion, or perfectionism, with stigma and self-reliant tendencies. Perhaps certain personality characteristics differentially affect the extent to which perceived stigma from others is internalized and may lead to more or less self-reliant behaviors.

Lastly, as treatment retention is critical for overcoming mental health disorders, we encourage researchers to further consider the effects of stigma on retention. Fung, Tsang, and Corrigan (2008) found that self-stigma is associated with treatment adherence in schizophrenic patients. Additional research should examine how our three-path model could be applied to predict treatment retention. Examining both treatment-seeking and treatment retention outcomes in more detail could be exceptionally informative for designing interventions to reduce stigma and self-reliance.

In conclusion, the relationship between stigma and seeking treatment is complex. We found evidence of three-path mediation where perceived stigma-TS is related to increased self-stigma-TS, which is then related to higher self-reliance-MHP, and self-reliance-MHP is related to a more negative attitude toward treatment-seeking and a lower likelihood of seeking treatment. Better understanding of these factors that affect treatment-seeking is critical in ensuring that college students get professional help when experiencing mental health symptoms. It is our hope that these findings from our study would be informative for future researchers, as well as mental health practitioners, to inform efforts in reducing stigma and encouraging students to seek needed treatment.

References


