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Predictors of help-seeking behavior in emerging adults

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DEDICATION

I would like to dedicate this work to Anna Franz, my wife. Her love, support and encouragement is what made this possible.

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Formal help-seeking. While specific estimates vary, it is clear that many people with psychological distress and diagnosed mental illness do not seek treatment through formal channels. A recent survey conducted by the World Health Organization found that only 15.3% of individuals meeting criteria for a DSM-IV diagnosis received treatment in the past year (WHO World Mental Health Survey Consortium, 2004), while a review by Andrews et al (2001) suggested that only a third of individuals expressing any kind of psychological distress received some form of treatment. As the majority of people who would benefit from help do not seek it, an important area of research is to identify the individual characteristics distinguishing between those who do and do not seek treatment (i.e., formal help-seeking).

There are a variety of models that have been used to explain help-seeking behavior. Although they have been primarily used within the traditional medical model, some research has been conducted examining the extent to which these models may be useful for predicting mental health treatment seeking. The Theory of Planned Behavior (Ajzen & Madden, 1986) states that individuals will engage in specific health behaviors based on their attitude towards the action, whether they believe that performing the behavior is good or bad, their subjective norms regarding the behavior, what they perceive the beliefs of others to be about the behavior and their motivation to comply with those norms, and their belief that they are able to carry out the action. This model has been explored in the mental health field, with studies suggesting that aspects of the model explain some of the variance in help-seeking intent in Asian-American

college students, Chinese community members, and male college students (Kim & Park, 2009; Mo & Mak, 2009; Smith, Tran, & Thompson, 2008). Specifically, subjective norms, or beliefs about stigma, appeared to have an influence on treatment-seeking intentions in these groups.

Although based on a medical model, one aspect of the Theory of Planned Behavior that is directly related to mental health treatment-seeking is the effect of stigma on seeking help. While this is not often discussed in medical literature, it can be clearly seen in the significant body of research on HIV-related stigma. There is strong evidence that at higher levels of reported HIV-related stigma, individuals are less likely to seek or follow-up with medical treatment for their HIV (Reece, 2003; Chesney & Smith, 1999). As will be discussed later, a similar process likely takes place for some individuals contemplating mental health treatment.

The Health Belief Model (Rosenstock, 1966) postulates that individuals are likely to engage in a health behavior if they believe they are at risk for developing the illness or problem in question, believe that the problem could interfere with their functioning, believe that an intervention or change in health behavior will reduce potential symptoms, and do not see significant barriers to engaging in the health behavior (Henshaw & Freedman-Doan, 2009). However, while some research has suggested a connection between the Health Belief Model and medication adherence (Sapra, Vahia, Reyes, Ramirez, & Cohen, 2008), no published research has been done on initial treatment-seeking behavior. The general difficulty with these models is that they presume that health behaviors are the result of a series of logical decisions based on specific cognitions – but if it were that simple, the question of why some individuals seek

treatment when they are distressed and why others do not would have been already answered. To identify the determinants of help-seeking behavior, it is important to examine individual difference variables, particularly in groups that are especially at risk for developing psychological distress, such as emerging adults (Perlick, Hofstein, & Michael, 2010).

Emerging Adulthood

A relatively new concept in the psychological literature is that of emerging adulthood, a time period between adolescence and young adulthood characterized by identity exploration, instability, and feeling "in-between" childhood and adulthood (Arnett, 2004). Typically considered to include individuals aged 18-25, one of the most distinguishing aspects of this time is the lack of a prototypical set of social roles and expectations (Arnett, 2000), which is unlike any other developmental period. As a group, they also appear to be at higher risk for developing psychological disorders. On one level this is not surprising, given the number of psychiatric disorders that begin to manifest during this time period. Perlick and colleagues (2010) describe one study that found emerging adults to have the highest rates of serious mental illness, lowest rates of mental health service utilization, and highest rates of perceived unmet need for services. As well, in a study by Collins and colleagues (2004), emerging adults were the largest uninsured group in their sample, and as will be discussed later, not having health insurance has a significant negative impact on treatment-seeking behavior. Thus, not only are emerging adults at a higher risk for developing psychological difficulties, they are less likely to have the external resources to cope with those problems. Yet while emerging adults may be at particular risk for psychological difficulties, this higher

risk often does not translate into help-seeking behavior. Therefore, other individual difference variables clearly must also be involved. Several such potential variables will be described below.

Independent Variables

Attachment. Attachment, as first described by Bowlby (1977), dealt with the interaction style between caregiver and child and the effect that had on the child's perception of others as a toddler or child. Since that time, the theory has been broadened to include attachment styles in adults and how that affects relationships with romantic partners and close friends, but remains focused on one's general perception of others and how that influences behavior (Simpson & Rholes, 1998). Doherty & Feeney (2004) noted a wide variety of relationships that met criteria for primary attachment figures, including parents, children, romantic relationships and friends, although the majority of attachment research continues to focus on parental or romantic relationships.

Attachment theory was initially conceived as a variable with discrete categories, with secure, ambivalent and avoidant attachment (Ainsworth, Blehar, Waters, & Wall, 1978), and disorganized attachment added as a later category (Main & Solomon, 1986). However, there has been discussion from relatively early on as to whether attachment would be better described using continuous variables (Fraley & Waller, 1998). More recent research has supported a conceptualization of two orthogonal dimensional variables, anxious and avoidant attachment (Brennan, Clark, & Shaver, 1998). There are a variety of reasons that the dimensional approach has generally supplanted the categorical, including the theoretical difficulties that are created with the percentage of

individuals who are unclassifiable by categorical measures or for whom attachment style categorization is not stable, despite the stability of the theoretical construct (Fraley & Waller, 1998). As well, in order to better describe individuals, the categorical models of attachment have become increasingly complex, with some systems using as many as 11 subgroups, which again suggests a more continuous underlying variable (Fraley & Waller, 1998).

As the dimensional model began to be more accepted, a number of self-report scales were created, all examining anxious and avoidant attachment with relatively similar results. Anxious attachment is defined as needing excessive approval from others while also being afraid of rejection and abandonment (Crowell, Fraley, & Shaver, 1999). The other dimension, avoidant attachment, is defined as having an excessive need for self-reliance and being afraid of depending on others (Bartholomew and Shaver, 1998). These dimensions can be combined to form four categories of secure (low anxiety, low avoidant), preoccupied (high anxiety, low avoidant), dismissing (low anxiety, high avoidant), and fearful (high anxiety, high avoidant), that match up moderately well with the previous categorical models (Bartholomew & Shaver, 1998).

Using a principal components analysis and items from fifteen published and non-published scales, Brennan and colleagues (1998) found two higher-order factors within the items that corresponded to the general concepts of anxious and avoidant attachment. From this data, they created the Experiences in Close Relationships scale, a scale that consists of the items with the strongest absolute-value correlations to the higher-order factors. The scale has since been revised to the Experiences in Close

Relationships – Revised scale, using item response theory to further develop the scale (Fraley, Waller, & Brennan, 2000).

There have been several studies that have examined the role of attachment in help-seeking intentions, and they have shown consistent findings that individuals with avoidant attachment are less willing to seek help (Vogel & Wei, 2005; J. A. Feeney & Ryan, 1994; Lopez, Melendez, Sauer, Berger, & Wyssmann, 1998). In Feeney and Ryan's (1994) study of visits to general health care practitioners and family history of illness in college students, avoidant attachment was related to significantly fewer visits. Lopez and colleagues (1998) found similar results when examining psychological help-seeking intention, with students high in avoidant attachment being significantly less willing to seek help than those low in avoidant attachment. Neither study, however, found a relationship between anxious attachment and help-seeking.

Vogel and Wei (2005) took a step beyond this and looked at the mediating role of distress and social support on help-seeking intent in college students using structural equation modeling. They found that individuals who were high on anxious attachment were also more likely to endorse the potential for seeking help, and that relationship was mediated by an increased willingness to acknowledge their psychological distress. Individuals with high levels of avoidant attachment, however, were less likely to seek help and endorsed low levels of psychological distress, yet were somewhat willing to acknowledge a lack of social support, which was in turn related to an increased level of help-seeking. Thus, while individuals with avoidant attachment were generally reluctant to seek help, having low levels of support and higher levels of distress appear to override some of that reluctance.

The mechanisms by which these processes take place are still somewhat unclear, with suggestions of avoidant attachment being related to decreased willingness to both acknowledge any psychological distress and to self-disclose to a therapist (Vogel & Wei, 2005), as well as to anticipation of higher risks and lower benefits to psychological treatment (Shaffer, Vogel, & Wei, 2006). Conversely, anxious attachment has been linked to an increased willingness to acknowledge distress and then act on that by seeking help (Vogel & Wei, 2005), as well as to anticipation of greater benefits to such treatment (Shaffer et al., 2006). Interestingly, Shaffer et al (2006) also noted a sense of increased risk of seeking help, which suggests an ambivalence regarding treatment for those higher in anxious attachment.

Attachment style has also been linked to measures of psychological distress. Specifically, individuals who are high on avoidant attachment, particularly those who are also low on anxious attachment, appear to be less likely to report distress (Vogel & Wei, 2005). There is also evidence that this lack of acknowledgement may reflect internal suppression of distress, not simply an unwillingness to report it to others (Fraley, Davis, & Shaver, 1998). Conversely, those with high levels of anxious attachment are more likely to focus on their negative emotions, and report significantly higher levels of distress (Lopez & Brennan, 2000).

Thus it is clear that there are relationships between attachment and help-seeking intentions. However, while ambivalent attachment appears to be relatively straight-forwardly related to decreased help-seeking intent, the research on avoidant attachment is much less clear. As well, there is a lack of research that examines attachment and psychological help-seeking behavior, not simply help-seeking intent.

Social support. Another individual difference variable that may impact help-seeking behavior is social support. The term "social support" is a broad one, covering a variety of related concepts. One of the ways it is often broken down is by type of support, and it is generally considered to consist of emotional concern, information and instrumental aid (Pillay & Rao, 2002). In psychological research, emotional support from one's social network is the type most often examined (B. R. Sarason et al., 1991; Cutrona & Russell, 1987). Instrumental aid is more often examined in medically-related research (Ziff, 1995), and when informational support is examined it is typically seen as being most helpful when it comes directly from a professional source as opposed to from one's social network (Helgeson & Cohen, 1996).

Another way social support can be examined is whether the support is actively received or merely perceived. While received social support can be thought of as being the recipient of actual aid, perceived support is the belief that support would be available if needed (B. R. Sarason et al., 1991). Both have been shown to be related to positive health outcomes (B. R. Sarason, Sarason, & Gurung, 2001), but perceived social support is more frequently used in research and may be more useful as it is based on the entirety of an individual's past experience (Hobfoll, 2009). Perceived emotional support has been frequently found to be related to decreased formal help-seeking (Pillay & Rao, 2002; Miville & Constantine, 2006; Burns et al., 2003), including across different cultures (Golding & Wells, 1990). Goodman and colleagues (1984) found that the level of perceived social support was lower in students who had sought counseling compared to a control group of college students, and Miville and Constantine (2006) found a similar relationship in Mexican-American college students.

The evidence is somewhat mixed, however, as some studies show no relationship – Sheffield and colleagues (2004) with adolescents, and Morgan and colleagues (2003) with college students. As well, Constantine and colleagues (2003) found a negative relationship between social support and help-seeking intent for African-American college students, but not for Latino students. Interestingly, one study that assessed individuals who previously met criteria for a depressive or anxiety disorder showed a negative relationship between social support and formal help-seeking at low to moderate levels of distress, while there was no relationship for individuals at higher levels of distress (Burns et al., 2003).

However, much of the research in this area has been done on community samples, whom we would expect to generally report lower levels of distress than identified patients. Thus, the relationship between social support and formal help-seeking may not be completely straight-forward. Individuals experiencing mild or moderate distress with strong social support may be able to utilize that informal network to cope with their distress, while individuals who either do not have such a network or who are experiencing more severe distress may be more likely to seek formal help.

Perception of social support levels has also been shown to be related to attachment style, with insecurely attached individuals generally perceiving the support that they receive to be less available when compared to securely attached individuals (Collins & Feeney, 2004). Whether this is a difference in perception or in actual support received is somewhat unclear, as there is also evidence that insecurely attached individuals may be more likely to be in less-supportive relationships (Rholes, Simpson, Campbell, & Grich, 2001).

While there is evidence that social support is related to both positive health outcomes and decreased formal help-seeking, those relationships are not seen as clearly in research on emerging adults. Examining social support in the context of differing levels of distress and types of attachment may help to elucidate this relationship.

Perceived need for help. Another important aspect to examine is the individual's belief about whether they need help or not, as according to the Health Belief Model we would expect such beliefs to be related to both help-seeing behavior and distress. In a review paper examining the impact of patient beliefs on treatment, the studies discussed found between 16% and 51% of individuals with significant symptoms of depression or anxiety believed that they did not need treatment (Prins, Verhaak, Bensing, & van der Meer, 2008). In a sample of college students, Eisenberg and colleagues (2007) found that nearly half of the participants who screened positive for a mood or anxiety disorder but had not sought treatment stated that one primary reason was they saw no need for treatment. Two years later, over half of those same students continued to report that they did not need treatment (Zivin, Eisenberg, Gollust, & Golberstein, 2009). Thus, beliefs about treatment needs may well have an impact on treatment-seeking over the long term as well as in the short term. Results from that survey also showed a clear impact of distress on beliefs about need for treatment, with 25% of college students without significant symptoms of depression or anxiety stating that they believed they needed treatment compared to 51-89% of those with such symptoms (Eisenberg et al., 2007). However, while it would be logical to assume a

significant relationship between perceived need for help and intent to seek formal help, this has not been directly examined in published research.

Awareness of resources. A potential barrier to treatment that may be related to a lack of informational social support is simply knowing what treatments are available. It seems logical that not knowing about available treatment options would lead to underutilization of such resources, and this concept is supported by research. Loo and colleagues (1989) found that low use of mental health resources was related to low awareness of such resources, and several studies have noted that a lack of knowledge about treatment options is an often-cited barrier to treatment (Thompson, Hunt, & Issakidis, 2004; Suurvali, Cordingley, Hodgins, & Cunningham, 2009; Sareen et al., 2007). If increasing awareness of treatment options is a key component of informational support for individuals in distress, but as stated above, people are most amenable to receiving such information from a professional, then a negative feedback cycle may be created. Without actively seeing treatment, individuals will not have access to professionals whom they would more likely trust with providing informational support about treatment, and thus will have less awareness of potential treatment options. This study will examine this particular aspect by not only directly measuring participants' awareness of resources, but also by providing resources to participants and then reassessing their treatment-seeking at a later date.

A related aspect influencing formal help-seeking behavior is the availability of such resources. Unsurprisingly, individuals who have access to private insurance are more likely to seek such help when compared to individuals without any insurance or with only public health care (Golding & Wells, 1990). However, particularly on college

campuses there are often free or low-cost help-seeking alternatives, but again, individuals have to be aware of such resources in order to take advantage of them.

Treatment effectiveness. Another aspect of the Health Belief Model suggests that even if individuals believe they are in need of services and are aware of potential treatment options, if they do not see treatment as a useful method of coping with their distress, they will be significantly less likely to seek services. Vogel and colleagues (Vogel, Wester, Wei, & Boysen, 2005; Vogel & Wester, 2003) found a strong relationship between positive beliefs about the usefulness of treatment and intent to seek treatment. A study by Eisenberg and colleagues (2007) found that a majority of college students stated that they believed treatment was only somewhat or not at helpful. In addition, 37% of participants who screened positively for mood or anxiety difficulties stated that they did not seek help specifically because of this belief that treatment would not be useful.

Stigma. As described above with the Theory of Planned Behavior, stigma regarding mental health can influence treatment-seeking decisions. Stigma can be defined in multiple ways, including negative attitudes that are based on prejudice and prompted by a marker of illness (Sartorius, 2007), a fear of negative judgments by others (Kushner & Sher, 1991), and a series of social-cognitive processes, including cues, stereotypes, prejudice and discrimination (Corrigan, 2004). While these definitions approach the concept of stigma from different perspectives, they have in common the idea of a negative impact that comes with identifying with a specific group. One common way that the potential for stigma is reduced is by simply not identifying with that group; for stigma related to mental illness, a simple way to avoid this stigma is by

not presenting for treatment (Corrigan, 2004). There is a significant body of research that does indeed indicate that a stronger perception of mental illness-related stigma is related to a decreased willingness to seek help (Belloch, del Valle, Morillo, Carrió, & Cabedo, 2009; Cooper, Corrigan, & Watson, 2003; Quinn, Wilson, MacIntyre, & Tinklin, 2009), although the relationship between stigma and actual help-seeking behavior is less clear (Golberstein, Eisenberg, & Gollust, 2008).

For emerging adults in particular, stigma appears to be a significant deterrent to seeking treatment. Perlick and colleagues (2010) see this as one of the primary reasons that treatment-seeking in emerging adults is low. They describe a National Survey on Drug Use and Health, where 29.7% of emerging adults who believed that they needed treatment said the primary reason they did not seek help was because of potential stigma, which was significantly higher than any other age group (Substance Abuse and Mental Health Services Administration, 2007). They explain this finding by noting that emerging adults are still establishing themselves in multiple settings, such as occupational and adult social groups, so the potential effects of stigma would be likely to have a more profound impact on their current and future interactions with others. As well, the norms for coping with stress in this age group are more likely to involve substance use and less likely to involve active discussion of psychological difficulties, so they are less likely to see adaptive coping strategies modeled by their peers. And thus, by examining these treatment-related beliefs, I am hoping to gain a more full understanding of the circumstances under which emerging adults are likely to seek formal treatment.

Stressful life events. There is evidence that stressful life events are related to lower mood (G. W. Brown & Harris, 1989). One review highlighted the significant finding that a recent history of stressful events is more common in individuals experiencing major depressive episodes when compared to those in control groups (Paykel, 2003). This relationship appears to be particularly true for severe events, such as the death of a loved one, as compared to less severe events, such as failing an exam (Monroe, Harkness, Simons, & Thase, 2001). This pattern holds true for emerging adults as well, as Jordanova and colleagues (2007) found a significant relationship between a diagnosis of depression or anxiety and the number of events reported in this age group. In terms of treatment-seeking, research seems to support the idea that an increase in distress because of life events is likely to increase the likelihood that an individual will seek treatment (Solomon, 1989; Rubio & Lubin, 1986). As well as having a direct effect on help-seeking, life events could also act as a confounding variable in this study, if some individuals experience such events between the baseline and follow-up periods and others do not. In order to control for this potential effect, the follow-up life events questionnaire will specifically assess events experienced since baseline.

Demographic characteristics. One aspect of help-seeking that has received a significant amount of research attention is that of who is most likely, or least likely, to seek formal help for mental health concerns. There is a long history of literature indicating that women are more likely to both report emotional difficulties and seek treatment for them (Kessler, Brown, & Broman, 1981; Narrow et al., 2000). There is also mixed evidence that gender may be related to attachment style, as Brennan and colleagues (Brennan, Shaver, & Tobey, 1991) found a gender difference in individuals

high in avoidance, with men being more likely to be dismissing (low in anxious attachment) and women more likely to be fearful (high in anxious attachment), while other studies have found no gender differences (J. Feeney & Noller, 1996).

Another area that has received attention is the effect of race and ethnicity in rates of help-seeking behavior. Research suggests that Caucasians are more likely to receive help for mental health concerns than are African Americans (Bender et al., 2007; Alegría et al., 2002), although the evidence is somewhat mixed, with some studies suggesting that African Americans have a higher likelihood of seeking services (Sue, Fujino, Hu, Takeuchi, & Zane, 1991). The research on Hispanics and Asian Americans is more clear-cut, with lower rates of mental health care utilization generally found when compared to other groups (Sue et al., 1991; Bender et al., 2007).

However, some of the findings on ethnicity and help-seeking may be due to differences in socio-economic status. As stated earlier, Golding and Wells (1990) found higher rates of mental health service utilization in individuals with private health insurance, which individuals with higher incomes are more likely to have. A review paper by Brown and colleagues (2003) also highlighted the finding that ethnic differences in symptoms and help-seeking often disappear when socio-economic status is taken into account.

Research on age and help-seeking generally supports the concept that increased age is associated with increased mental health, even within the restricted range of emerging adults (Stead, Shanahan, & Neufel, 2010). In Gonzalez et al's (2011) study, they found that young adults (18-34) who were comfortable with the concept of help-seeking were more likely to seek help. While this is perhaps not surprising, it does

contrast with their finding that such comfort was not associated with help-seeking for the other age groups. One explanation for this is that younger individuals are generally less likely to have previous contact with mental health professionals, and thus may need that increased comfort level to overcome the reluctance that stems from that lack of experience.

Ridge and Feeney's (1998) research suggests attachment style patterns are similar in heterosexual and homosexual individuals, and other research supports the general conclusion that there are no significant differences between these groups (Kurdek, 2004). However, homosexuals have historically been at higher risk for psychological disorders, likely because of the increased levels of stigma, which is likely to lead to increased help-seeking (Cochran, Sullivan, & Mays, 2003).

Hypotheses

The goal of this project is to identify the determinants of mental health help-seeking among emerging adults. The central hypothesis is that greater distress will be associated with greater help-seeking intent and behavior in this sample of emerging adults, with several factors modifying this relationship. The first hypothesis (Hypothesis #1) directly examines the basic relationship between distress and help-seeking. According to this hypothesis, distress will be positively related to help-seeking intent at baseline assessment and help-seeking behavior at follow-up.

The second hypothesis (Hypothesis #2) is that other characteristics, besides distress, will also be independently related to help-seeking. Anxious attachment, perceived need for help, awareness of treatment resources, belief that treatment would be effective, and life events experienced are expected to be related to higher levels of

treatment-seeking. Conversely, avoidant attachment, social support, and mental health-related perceived stigma are expected to be related to lower levels of treatment-seeking.

The third hypothesis (Hypothesis #3) will examine the moderating influence of the characteristics described in Hypothesis #2 on the relationship between distress and help-seeking. Specifically, the effect of distress on help-seeking is expected to be stronger at higher levels of anxious attachment and lower levels of avoidant attachment. The greater of a perceived need for help, awareness of treatment resources, belief that treatment would be effective and life events experienced are all expected to strengthen the relationship between distress and treatment-seeking. In contrast, higher reported levels of social support and mental health-related perceived stigma are anticipated to weaken that relationship.

All of these analyses will first be conducted in a cross-sectional method, examining the relationships between these individual difference variables and help-seeking intent at the baseline assessment. They will then examine the relationships in a prospective fashion. That is, baseline distress, attachment, social support, etc., are expected to be associated with self-reported help-seeking behavior measured two months later in a follow-up assessment.

Given past research discussed above, exploratory analyses will be conducted to investigate the extent to which demographic variables such as gender, race and ethnicity, socio-economic status and sexual orientation moderate the relationship between distress and help-seeking. Gender is expected to have both a main and moderating effect, such that women will be overall more likely to endorse help-seeking

intent, and that specifically among individuals experiencing distress, the relationship between distress and help-seeking will be stronger for women. With the mixed results and minimal research described above, no specific hypotheses are put forth for the other demographic variables, but potential effects will be examined. The number of life events experienced is expected to be related to help-seeking behavior, so I will control for life events experienced during the study period in the follow-up analyses.

Methods

Power Analysis

An a priori power analysis was performed using G*Power 3.1 (Faul, Erdfelder, Buchner, & Lang, 2009), which suggested an appropriate sample size of 107 participants, given a small-to-medium effect size and linear regression analyses. A feasibility study was then conducted, indicating that approximately 10% of undergraduate students sought help for mental health concerns within the past two months. This finding, along with the anticipated effect sizes and the expected 20% drop-out rate between the baseline and follow-up periods, suggested that a larger sample size of 250 participants would be more appropriate.

Participants

Baseline data was collected from 1025 undergraduate students at Wayne State University that were enrolled in a psychology class. They were compensated for their involvement with extra credit in their class. The primary inclusion criterion was being an emerging adult (18-25 years old). The exclusion criterion was currently being in psychological treatment, as having already sought formal treatment would clearly impact one's plan to seek additional help within the next two months. Because of this criterion, individuals who reported being in treatment at the baseline assessment (n = 35) were excluded from the analyses.

Of those individuals who completed the baseline assessment, 714 did not complete the follow-up measures. Some of those individuals (5%, n = 35) were not asked to complete the follow-up measures because they did not report valid data at

baseline (e.g., answered everything with a "2", or when contacted because of reported suicidality or homicidality admitted that they had filled answers out at random). The remainder (n = 679) were invited via e-mail to participate in the follow-up, but chose not to take part. A small minority of these individuals (n = 11) responded to the follow-up invitation with the reason they were not participating, which included that they had been "locked out" of the on-line research system, they had completed the research hours they needed for the semester, or that the follow-up was in a different semester and they were no longer taking a class that allowed for extra credit through research participation.

T-tests and chi-square analyses were used to compare the valid non-participating individuals to those who completed the follow-up study. Non-completers were more likely to be male ($t(933) = -3.08$, $p < .01$), and reported less social support ($t(885) = 4.00$, $p < .001$) and more life events ($t(931) = -2.77$, $p < .01$) than completers. There were also significant differences in racial groups and work status. When those differences were examined using t-tests, African Americans were less likely to complete the follow-up than Caucasians ($t(583) = -3.16$, $p < .01$) or Asian American/Pacific Islanders ($t(329) = 2.84$, $p < .01$). Individuals in the Other ethnicity group were less likely to complete the follow-up than Caucasians ($t(439) = -3.33$, $p < .01$) or Asian American/Pacific Islanders ($t(185) = -3.29$, $p < .01$). Lastly, Asian American/Pacific Islanders were more likely to complete the follow-up than those that declined to provide their racial group ($t(110) = -2.03$, $p < .05$). Individuals who reported working full-time were less likely to complete the follow-up than those not working at all ($t(394) = 2.66$, $p < .01$) or who reported an "other" work status ($t(104) = 2.79$, $p < .01$). Those individuals

who reported working part-time were less likely to complete the follow-up than those not working at all ($t(824) = 2.24$, $p < .05$) or who reported an "other" work status ($t(534) = 2.09$, $p < .05$). See Tables 1 and 2 for details.

Participants were asked to complete the follow-up assessment approximately two months after the baseline was completed (M = 66.18 days, SD = 8.40). There was a subset of individuals ($n = 13$) that did complete the follow-up measures, but did so either too early (less than two months after the baseline assessment) or too late (more than one month after the follow-up assessment was scheduled), and were thus not included in the analyses. When compared to those individuals who completed the follow-up assessment at the requested time, this group had lower rates of distress ($t(264) = 3.22$, $p < .01$) and avoidant attachment ($t(247) = 6.50$, $p < .001$) and greater social support ($t(256) = -10.99$, $p < .001$). None of the other comparisons were significant, p-values ranged from .08-.84. Five participants were removed from the data set because they were multivariate outliers when examined using Mahalanobis distance. The final total of participants who were included in the analyses was 258. A chart displaying participant flow can be seen in Figure 1.

Participants were predominantly female (79.1%, $n = 204$), and the sample was racially diverse (44.6% Caucasian, 18.7% African American, 13.6% Asian, 12.8% Middle Eastern, 5.1% Other racial group, 3.5% Mixed race, 1.6% Hispanic). Due to low numbers, the Mixed race, Other and Hispanic groups were combined into a single Other group. Given the inclusion criteria, all participants were between the ages of 18-25, with the mean age being 20.1 years old (SD = 1.75). Reported household income varied from the $0-24,999 range to over $150,000 (details can be seen in Table 3); it is

important to note that participants were instructed to include their parents' income if they were being financially supported by their family. Most participants reported having no children (95.3%, *n* = 246), with the remainder reporting one (1.9%), two (1.2%), three (1.2%), or five (0.4%) children. Other demographic information can also be seen in Table 3.

Measures

A list of all measures given at each assessment can be found in Table 4. Means and standard deviations can be seen in Table 5. Copies of the measures themselves can be found in Appendix B.

Outcome variables. The *intent to seek help* in the near future was measured at baseline by a single investigator-written question, “In the next two months, how likely are you to seek formal help for emotional or mental health problems?” A range of 1 (*not at all likely*) to 5 (*very likely*) was used for the answer instead of a yes/no response in order to provide a more nuanced result. Whether individuals had sought formal help for mental health concerns in the recent past was also measured by a single investigator-written question, with a follow-up question of whether they were currently in treatment. “In the past six months, have you sought formal help for emotional or mental health problems? If yes, are you currently in treatment?" As stated earlier, individuals who reported being currently in treatment were excluded from the analyses.

At the follow-up assessment, *help-seeking behavior* occurring since the baseline assessment was measured with another investigator-written question, “In the past two months, have you sought help from a professional for stress-related, mental health, or emotional problems? These problems could include but are not limited to anxiety,

depression, relationship problems, and problems coping with stressful situations in your life." Participants were also provided with a list of potential resources that they could have made use of, and asked to indicate which, if any, they had used in the past two months (the list was the same list of resources that they had seen at baseline to measure their resource awareness, see Appendix B, page 84). If they reported using any of those resources for mental health concerns, even if they did not report seeking professional help in the earlier question, they were considered to have sought help.

Individual difference variables. *Psychological distress* was assessed by the Counseling Center Assessment of Psychological Symptoms (CCAPS; Soet & Sevig, 2006), a 62-item scale. It was designed for use with college students, and has been well-validated in this population (Soet & Sevig, 2006; Cheng, Mallinckrodt, Soet, & Sevig, 2010). The CCAPS showed high reliability with this sample at baseline (α=.95) and at follow-up (α=.95).

The levels of *anxious* and *avoidant attachment* were assessed using the Experiences in Close Relationships-Revised Questionnaire (ECR-R; Fraley et al., 2000), a 36-item scale. This measure has two subscales consisting of 18 questions each, measuring attachment-related anxiety and attachment-related avoidance. The ECR-R has been well-researched in student populations, and has demonstrated good reliability and validity (Fraley et al., 2000; Sibley, Fischer, & Liu, 2005). Both subscales demonstrated good inter-item reliability at baseline (anxiety: α=.93; avoidance: α=.94) and at follow-up (anxiety: α=.94; avoidance: α=.95).

The Social Provisions Scale is a 24-item scale that assesses *perceived social support* (SPS; Cutrona & Russell, 1987). It has been tested in college students and

community samples, and has demonstrated good reliability and validity (Cutrona & Russell, 1987; Ammerman et al., 2009). Unfortunately, due to a clerical error only the first 14 items were used in this study. However, these items still showed good reliability at baseline (α=.87) and at follow-up (α=.88).

As has been done in previous studies (Eisenberg et al., 2007; Zivin et al., 2009), a single investigator-written question was used at baseline to determine if individuals *believed they had needed formal treatment for mental health concerns* in the past six months. "In the past 6 months, to what extent did you think you needed help for emotional or mental health problems, such as feeling sad, blue, anxious or nervous?" Again, a range of 1 (*did not need at all*) to 5 (*very much needed*) was used for the answer instead of a yes/no response in order to provide a more nuanced result.

Participants' *awareness of available mental health resources* was measured at baseline using an investigator-created checklist. This included both services available to all participants (e.g., the university's Counseling and Psychological Services, crisis telephone lines), as well as services that were applicable only to certain participants (e.g., private health insurance, Employee Assistance Programs).

The Attitudes Towards Seeking Professional Psychological Help Scale (ATSPPHS; Fischer & Farina, 1995), was used to assess general *beliefs about the usefulness of psychological treatment*. It is a 10-item scale that has been tested in undergraduate and community samples, and has demonstrated good reliability and validity (Fischer & Farina, 1995; Thurston & Phares, 2008; Vogel et al., 2005). With this sample the scale showed good reliability (α=.80) at baseline, but only moderate reliability (α=.76) at follow-up.

The Perceptions of Stigmatization by Others for Seeking Help scale (PSOSH; Vogel, Wade, & Ascheman, 2009) is a 5-item scale that measures the perception of *stigma* related to seeking help for mental health concerns. It has demonstrated reasonable reliability and validity in both distressed and non-distressed college students (Vogel et al., 2009). It displayed good reliability within this sample, both at baseline (α=.91) and at follow-up (α=.93).

Life events experienced were assessed both at baseline and follow-up by the Life Experiences Survey (LES; I. G. Sarason, Johnson, & Siegel, 1978), a 56-item checklist that asked participants to indicate which events they have experienced. The baseline assessment included events experienced in the past 6 months, while the follow-up assessment included events experienced since baseline. Six months was chosen as it is considered to be the most important time period for predicting distress (G. W. Brown & Harris, 1989). As life events may be related to help-seeking behavior, as discussed earlier, events measured at follow-up were used to control for the potential differential impact of events on help-seeking behavior measured at the follow-up assessment. This scale has been tested in undergraduate and community samples, and has demonstrated reasonable reliability and validity (I. G. Sarason et al., 1978; Kale & Stenmark, 1983).

General intentions on whether one would seek counseling if it proved necessary was assessed by the Intentions to Seek Counseling Inventory (ISCI; Cash, Begley, McCown, & Weise, 1975). This is a 17-item measure that assesses the potential likelihood of an individual to seek counseling for a variety of concerns, such as depression, relationship difficulties and substance problems. It has demonstrated good

reliability and validity in student, community and psychiatric patient samples (Cash et al., 1975; Vogel et al., 2005). In this sample the reliability was good at both baseline (α=.88) and follow-up (α=.89)

A basic demographics questionnaire at baseline asked about gender, race, ethnicity, household socio-economic status, sexual orientation, work status and number of children.

Procedure

Participant eligibility was determined through the completion of a general screening questionnaire provided to all students interested in participating in research projects. Again, the inclusion criterion was being an emerging adult (18-25 years old), while the exclusion criterion was currently being in psychological treatment. Those eligible were invited to complete the measures through an on-line system, after which they were provided with a list of potential resources for help-seeking. Students who completed the baseline assessment were then contacted via e-mail after 2 months and asked to fill out the follow-up questionnaires. Participants were given 1/2 hour extra credit towards a psychology class for completing the baseline assessment, and another 1/2 hour credit for completing the follow-up assessment.

Analyses

Most of the variables in the database had occasional missing items, but the two variables with significant proportion of missing responses were the demographic variables of household income (13% missing) and sexual orientation (11% missing). For analyses involving these variables, those not responding were included as a separate group. For participants who were missing individual items on a scale within the study, that item was substituted using the mean of that participant's scale total if they had answered at least 90% of the items. If they were missing more than 10% of the items, their data were not used for that analysis.

As stated earlier, five participants were removed from the data set because they were multivariate outliers. According to z-score analysis, there were also five univariate outliers on the life events scale reported at baseline, and four univariate outliers on the life events scale reported at follow-up. Two of the participants at each time point had already been deleted from the analyses because they were multivariate outliers. The other participants were not included in the appropriate analyses. None of the other primary continuous variables showed any outliers.

Analyses for homoscedasticity did not show any problems with the primary variables. As well, the coefficient of variation was normal for all of the consolidated variables.

A number of the variables examined were significantly skewed. Number of children was positively skewed, with most participants reporting having no children. As conceptually there is a significant difference between having no children and having any children, participants were placed into groups based on whether they reported having

no children or at least one child. The other skewed variables were age, plan on seeking help, stigma, life events and life events reported at follow-up, all of which were positively skewed. Social support was negatively skewed. All of these variables were transformed, which did lead to them being normally distributed. However, when the analyses were run with both the transformed data and the raw data, there were no differences in the results; thus for ease of interpretation the raw data will be used for all following analyses.

Preliminary Analyses

Interestingly, while the preliminary study suggested that the rate of help-seeking behavior in this population was approximately 10% over a two-month period, the actual help-seeking rate in this sample was 34% (n = 87). This rate was based on the answers to two questions. First was the clear yes-or-no question, "Did you seek help for mental health concerns within the past two months?" However, individuals who responded 'no' to that question were included in the help-seeking group if they responded 'yes' when asked about using specific resources for mental health-related help-seeking (e.g., a mental health clinic).

Correlations. In order to examine the bivariate relationships between the observed variables, zero-order correlations were performed. These included both cross-sectional analyses (comparing baseline data to itself) and longitudinal analyses (comparing baseline data to follow-up data). Given the previous research on these variables, significant relationships were expected. Due to the number of correlations that were performed, a more stringent criterion of $p < .01$ was used in order to decrease the likelihood of Type I error. As expected, intent to seek help and help-seeking

behavior were significantly and positively related, $r(258) = .20$, $p < .01$. There were a number of other significant correlations, which are shown in Tables 6 and 7. However, while some of the correlations were moderately strong (e.g., the relationship between anxious and avoidant attachment, $r(251) = .31$, $p < .001$), each variable appeared to measure a distinct enough construct that combining variables, and thus having a reduced number of analyses, did not seem logical.

Covariate testing. Demographic variables were examined as potential covariates. T-tests were used to examine the relationships between gender and having children to the continuous dependent variable of self-reported help-seeking intent. To examine the relationships between help-seeking intent and race, sexual orientation, socio-economic status, and work status, Omnibus ANOVAs were used, and correlations were used to assess age and length of time between baseline and follow-up assessments. Age was significantly positively related to help-seeking intent, $r(258) = .137$, $p < .05$, and thus was included in those analyses. None of the other analyses were significant.

To examine the relationships between the categorical demographic variables and the categorical dependent variable of help-seeking behavior, chi-squares were used. Logistic regressions were used to assess age and length of time between baseline and follow-up assessments. Race was significantly related to help-seeking behavior at follow-up, $\chi^2(4, N = 257) = 11.50$, $p < .05$, and was included in the appropriate analyses. The other group comparisons were not significant. Based on past research, post-hoc chi-squares were done first comparing African Americans to those reporting any other racial group, and then Asian Americans compared to all others. African Americans

showed significantly higher rates of help-seeking compared to other racial groups, $\chi^2(1, N = 257) = 9.19$, $p < .01$, while there was no such difference for Asian Americans.

As described in the introduction, I expected that life events occurring between baseline and follow-up would be related to help-seeking behavior at follow-up. A logistic regression was used to examine this relationship, which was found to be significant. As expected, a larger numbers of life events at follow-up was related to a increased likelihood of seeking help, Wald = 22.17, OR = 1.21, $p < .001$.

Hypothesis 1: Distress and help-seeking

The first hypothesis stated that greater distress would be related to higher rates of help-seeking intent and behavior. According to Baron and Kenny (1986), linear regressions are preferred to correlations, particularly when moderating influences will be examined. Therefore, a linear regression was used to examine the relationship between distress and help-seeking intent, both measured at baseline, while a binary logistic regression was used to measure the relationship between baseline distress and self-reported help-seeking behavior measured at follow-up.

As described above, age was used as a covariate for intent to seek help, and race and life events reported at follow-up were both used as covariates for help-seeking behavior. There was a significant positive relationship between distress and help-seeking intent, both measured at baseline, $\beta = .38$, $t(225) = 6.70$, $p < .01$. The model as a whole also explained a significant proportion of variance in help-seeking intent, $R^2 = .17$, $F(2, 255) = 25.26$, $p < .01$. However, there was no significant relationship between baseline distress and actual help-seeking behavior reported at follow-up, Wald = 0.22, OR = 1.00, $p = .64$.

The relationship between help-seeking intent at baseline and behavior at follow-up was also examined. Note that these variables were positively and significantly correlated, $r(258) = .20$, $p < .01$, but this relationship was not significant once the race and life events covariates were taken into account, Wald = 2.87, OR = 0.75, $p = .09$.

Hypothesis 2: Other individual characteristics and help-seeking

The next hypothesis was that individual characteristics other than distress would be independently related to help-seeking intent and behavior. Linear and binary logistic regressions were used for each characteristic to test these relationships. Higher levels of anxious attachment and more favorable attitudes towards help-seeking were related to higher levels of intention to seek treatment. Also related to higher levels of intention to seek help were higher levels of stigma and belief in need for treatment, and a greater number of life events. Social support was related to lower levels of intention to seek help. The other analyses, avoidant attachment and resource awareness, were nonsignificant. See Table 8 for details.

As well, a regression with all of the predictor variables entered simultaneously was run to determine which variables might uniquely predict help-seeking intent. Attitudes towards help-seeking, belief in need for treatment and life events reported at baseline all continued to be significantly related to higher levels of help-seeking intent. Avoidant attachment was nearing significance ($p = .06$). Anxious attachment, stigma and social support were no longer significantly related to help-seeking intent. Resource awareness continued to be unrelated to intent. This model accounted for 34% of the variance (R^2) in help seeking intent, $p < .001$. See Table 9 for details.

Exploratory analyses were conducted to further examine the relationship between the individual characteristic variables and intent. When anxious and avoidant attachment were used to predict help-seeking intent, they were both significant. When only attitudes towards help-seeking, belief in need for treatment and life events reported at baseline (the three variables that were significant in the larger equation) were included in the equation, all three were still significant. That model accounted for 31% of the variance (R^2) in help-seeking intent, $p < .001$. When distress was added to that model, it explained nearly the same variance (R^2), 32%, $p < .001$. See Table 10 for details.

For help-seeking behavior reported at follow-up, none of the independent variables were significant predictors. When the regression with help-seeking behavior and all of the predictor variables was run, none of the variables were significant. Overall the model accounted for 20% of the variance (Nagelkerke R^2) in help-seeking behavior.

Hypothesis 3: Moderator analyses

The last hypothesis stated that the individual characteristics described in the second hypothesis would also have a moderating influence on the relationship between distress and help-seeking intent and behavior. In order to test these possible moderating relationships, eight hierarchical regressions were conducted, one for each moderator. The first step of the equation included distress and the potential moderating variable (e.g., anxious attachment), which tested the main effects of these variables. The two-way interaction between distress and the moderating variable was then tested in the second step of the equation. These eight equations were completed twice, once

with a hierarchical linear regression for help-seeking intent at baseline, and once with a binary logistic regression for reported help-seeking behavior at follow-up.

Several of the interactions between distress and moderator variables were significant, all predicting the intent to seek treatment at baseline. The significant moderators included avoidant attachment, attitudes towards help-seeking, stigma, life events, intent to seek help if necessary, and belief in need for treatment. See Table 11 for details. No other significant moderation effects were found. As well, none of the moderation equations for actual help-seeking behavior at follow-up were significant.

The significant moderators were then analyzed as described in Holmbeck (2002). Distress and the moderator variables were first centered, to reduce problems of multicollinearity. Each of these relationships were then graphed, using high (one standard deviation above the mean) and low (one standard deviation below the mean) levels of distress, along with the high and low levels of the moderating variables, and the constant given in the regression equations.

These analyses showed that at low and high levels of avoidant attachment, greater distress was associated with greater intent to seek help (low avoidant: B = .02, SE = .00, β = .62, t = 7.43, p < .001; high avoidant: B = .01, SE = .00, β = .29, t = 3.67, p < .01). The significant interaction term indicated that the association between distress and help-seeking intent was stronger for those with low avoidant attachment. This relationship can be seen in Figure 2.

For attitudes towards help-seeking behavior, distress was associated with a greater intent to seek help at both the high level and the low level (low attitudes: B = .01, SE = .00, β = .22, t = 2.55, p < .05; high attitudes: B = .01, SE = .00, β = .53, t = 6.44, p

< .001), but here the association between distress and help-seeking intent was stronger for those individuals with higher (more positive) levels of attitudes towards help-seeking. This can be seen in Figure 3. At high and low levels of stigma, distress was also associated with greater intent to seek help. The interaction suggested that at higher levels of stigma, there was a stronger relationship between distress and help-seeking intent (low stigma: B = .01, SE = .00, β = .20, t = 2.19, p < .05; high stigma: B = .01, SE = .00, β = .51, t = 6.29, p < .001). Figure 4 shows this relationship.

Distress was associated with greater intent to seek help at high levels of life events, while the analysis of low levels of life events was nearing significance (low life events: B = .00, SE = .00, β = .15, t = 1.76, p = .08; high life events: B = .01, SE = .00, β = .52, t = 6.39, p < .001). This suggests that for individuals with a high number of life events, increased distress was related to increased help-seeking intent, but for individuals with a low number of life events, distress was not related to intent. This relationship can be seen in Figure 5.

Distress was also associated with greater intent to seek help at high levels of intent to seek help if necessary, but had no relationship at low levels. (Low intent to seek help if necessary: B = .00, SE = .00, β = .15, t = 1.57, p = .12; high intent to seek help if necessary: B = .01, SE = .00, β = .48, t = 6.51, p < .001) This indicates that individuals who reported strongly feeling that they would seek help if they were distressed did indeed show an association between distress and planning on seeking help, but those individuals who reported low feelings that they would seek help if needed, did not show such a relationship. This can be seen in Figure 6.

For belief in need for treatment, distress was related to greater intent to seek help at the high level, but not the low level, again suggesting that the association between distress and help-seeking intent exists for individuals with high levels of believing they need treatment, but does not exist for individuals with low levels of believing they need treatment (low belief in need for treatment: B = .00, SE = .00, β = .01, t = 0.12, p = .91 ; high belief in need for treatment: B = .01, SE = .00, β = .28, t = 3.42, p < .01). This graph can be seen in Figure 7.

With the previously mentioned correlational relationship between help-seeking intent and behavior, moderation analyses were run to determine whether help-seeking intent interacted with any of the individual difference variables to predict help-seeking behavior at follow-up. None of the analyses were significant.

Additional and Exploratory Analyses

As discussed in the Introduction, anxious attachment has been hypothesized to be positively related to self-reported distress, while avoidant attachment was expected to have a negative relationship with self-reported distress. Interestingly, in this sample both anxious attachment, β = .57, t(253) = 11.00, p < .001, and avoidant attachment, β = .29, t(250) = 4.76, p < .001, were positively related to distress.

To explore the possible moderating effects of the demographic variables (gender, race, socio-economic status, sexual orientation, age, work status and having children), hierarchical regressions were conducted, with distress and the demographic variable in the first step, and the interaction between them in the second step, and intent to seek help or help-seeking behavior as the dependent variable. Due to the low numbers of

students reporting non-straight sexual orientations, all of these individuals were placed in a single group for analysis. None of the moderation analyses were significant.

Analyses were also run to test the moderating effects of the demographic (e.g., gender, race) and individual difference variables listed in hypothesis 2 (e.g., anxious attachment, stigma) on the relationship *between* intent to seek treatment and treatment-seeking behavior, where the main effects of intention to seek treatment and the demographic or individual difference variable were in the first step, and the interaction between them was in the second step. Work status moderated that relationship between intent to seek treatment and treatment-seeking behavior, Wald = 6.70, OR = 1.20, $p < .01$. Specifically, there was a significant positive correlation between intent to seek help and help-seeking behavior for individuals who did not work, $r(102) = .48$, $p < .001$, while there was no significant relationship for individuals who worked full-time, $r(15) = .02$, $p = .94$, or part-time, $r(131) = -.05$, $p = .60$. Note that the fourth group, "other" work status, was not included in the analyses because all 10 individuals reported the same level of help-seeking intent, 1 on a scale of 1-5. None of the other demographic moderator analyses were significant.

Further examination of help-seeking behavior at follow-up. With the examination of the help-seeking variable, it became clear that there were two distinct groups, one that responded 'yes' to the direct question of "Did you seek help in the past two months", and one that responded 'no' to the direct question but responded 'yes' when asked about using specific resources for help-seeking (e.g., a mental health clinic). In the analyses described above, both groups were combined in order to provide the most comprehensive picture of help-seeking behavior. Both groups were also used

because of the concern that participants may have misunderstood the question "did you seek help" to only include a very strict definition of seeking help, which was not intended.

When these two help-seeking groups were examined more closely, another difference appeared, specifically what type of help each group sought. Those individuals who responded 'yes' to the initial help-seeking question were more likely to also report using a traditional mental health resource (e.g., mental health clinic), while those individuals who responded 'no' to the help-seeking question were more likely to report seeking help from a source that might not always be associated with mental health treatment (e.g., general physician), $\chi^2(1, N = 87) = 39.76$, $p < .001$.

When only the first group is examined (i.e., those that directly reported that they sought help), the rate of help-seeking behavior decreases dramatically, from 34% to 5% of the sample. These groups were then further examined to determine if there were other differences between them. There were no significant differences in the demographic variables of gender, age or household income. The other demographic variables could not be examined due to the low number of expected values in a large proportion of the cells in the chi-square analyses. When the other variables were examined, participants who reported 'yes' to the direct help-seeking behavior question reported more positive levels of attitudes towards help-seeking behavior, $t(83) = 2.42$, $p < .05$, and stronger belief in their need for treatment, $t(87) = 2.78$, $p < .01$. None of the other analyses were significant.

When the original hypotheses regarding help-seeking behavior were re-examined with only that 5% that directly reported seeking help, the results were slightly

different. Specifically, attitudes towards help-seeking behavior, Wald = 5.91, OR = 0.84, $p < .05$, and belief in need for treatment, Wald = 7.23, OR = 0.53, $p < .01$, were both significantly related to greater help-seeking behavior. All other results were nonsignificant, which is the same pattern of results that was presented earlier.

Discussion

The primary purpose of this study was to examine the relationships between individual difference variables and help-seeking intent and behavior. This is an important question because we know that many individuals who could potentially benefit from psychological services do not seek them out. However, our understanding of who seeks help and who does not is still in development, which makes this topic of research an important area to explore.

Rates of Help-Seeking

For help-seeking intent within this sample, 10.5% of participants reported at the baseline assessment that they were moderately to very likely to seek help in the next two months. Interestingly, this is very similar to the reported rate of help-seeking behavior that was found in the feasibility study (11%). It is also similar to the rate of help-seeking behavior found in a recent epidemiological study looking at treatment in young adults (10.8%; Perlick, Hofstein, & Michael, 2010). However, it is quite different from the rates of actual help-seeking behavior in the main study – whether we consider the full rates of help-seeking of 34% (those who endorsed any mental health help-seeking behavior) or the more limited rate of 5% (those who directly reported seeking psychological help). That help-seeking intent is lower than the full rates of help-seeking is likely explained by the broader definition of help-seeking used to define help-seeking behavior – that of using both traditional and non-traditional sources of mental health support, compared to only traditional sources. Research in this area typically focuses on traditional sources of mental health care, such as therapists at a mental health clinic (Gonzalez et al, 2011; Vogel, Wester, Wei, & Boysen, 2005), although that is not always

the case (Sheffield, Fiorenza, & Sofronoff, 2004). While the question about help-seeking intent was worded in such a way to encourage participants to include non-traditional sources, it seems likely that most individuals simply thought of those traditional sources, such as a mental health clinic.

That only 5% of participants directly reported help-seeking behavior, a definite drop from the approximately 10% seen in other sources, is perhaps more interesting. One possibility is that there is simply something different about this sample, such as that they have less distress and thus less need to seek help. As the feasibility study did not include a measure of distress, that possible explanation is unable to be specifically examined at this time. However, it does seem somewhat unlikely, as the participants for both studies were drawn from very similar subject pools (students taking psychology classes in the summer vs. in the fall). As well, there is no reason to believe that this sample would be significantly less distressed than participants from other colleges. However, while a significant percentage of other studies do examine distress (often as a factor that moderates the relationship between other variables and help-seeking intent), they do not typically provide the actual level of distress reported by their participants. Thus here again, it is impossible to specifically examine this explanation.

Distress and Help-Seeking Intent and Behavior

The next point of discussion is the primary hypotheses in this study. All other factors being equal, I expected that increased psychological distress would be positively related to both help-seeking intent and behavior (Cepeda-Benito & Short, 1998). Distress is often conceived of as being a motivating factor in leading people to consider seeking help (Offer, Howard, Schonert, & Ostrov, 1991). As anticipated, there was a

significantly positive relationship between levels of distress and intent to seek help, such that those individuals who reported higher levels of distress were more likely to report that they were planning on seeking help. As discussed below, this association was moderated by several individual difference variables.

In contrast, there was no relationship between baseline distress and actual help-seeking behavior at follow-up. This suggests one of two possibilities – either a relationship between these two variables does not exist, or for some reason it was not captured in this study. Supporting the idea that this relationship does not exist, there is research contrasting with that cited above that suggests that the relationship between distress and help-seeking may be minimal, particularly when compared to other factors, such as attitudes towards help-seeking (Deane, Wilson, & Ciarrochi, 2001). Then again, it may not be an overall level of distress that leads to people actually seeking help, but rather that they do so when there is a crisis of some kind. This is supported by the finding that stressful life events were positively associated with help-seeking behavior, as will be discussed in more detail below. However, given that this only explains a small amount of the variance, individual difference variables other than those studied here may be important to consider.

Alternatively, it may be that there is a relationship between distress and help-seeking behavior, but it was simply not measured in this study. While the measure of distress has been well-validated in multiple samples, the scale used to measure help-seeking behavior was investigator-constructed and a single item. This seems less likely given that the question used to measure help-seeking intent was also created by the investigator, and in fact was nearly identical to the question measuring help-seeking

behavior. However, it is still possible that a multi-item measure could more accurately capture this behavior. Another explanation is that there is, in fact, a relationship between these variables but it is a non-linear one, and not captured by these analyses.

The relationship between help-seeking intent and behavior, on the other hand, was as predicted. The significant positive relationship was expected given both theory and research in the area of intent and behavior. The Theory of Planned Behavior (Ajzen & Madden, 1986) suggests that people will engage in a behavior if they have motivation to engage in that behavior, positive attitudes and beliefs about that behavior, and strong self-perceptions about their ability to carry it out. From that, we can consider behavior to stem from a generally positive set of intentions about that behavior. The findings in this sample support this theory in the area of mental health treatment-seeking.

Individual Difference Characteristics and Help-Seeking Intent

A variety of other individual difference variables that had the potential to contribute to help-seeking intent were also examined. These variables were chosen based on a review of the help-seeking literature and anecdotal experience in an attempt to create a cohesive theory of help-seeking. Both direct and moderating effects were examined to more fully examine the effects of each variable. Most of the variables that were examined can be grouped into two overarching categories – beliefs the individual has about other people, and beliefs they have about themselves.

Beliefs about other people include the measured constructs of attachment style (are people as a whole trustworthy or reliable), social support (to what extent do I have others that I can depend upon), and stigma (what will other people believe about me if I seek mental health support). The analyses that examined the relationship between

help-seeking intent and beliefs individuals have about other people were all significant, although the relationships were not all as expected.

The findings on the relationship between attachment styles and help-seeking intent were interesting. Past research typically found a strong relationship between avoidant attachment and a lack of willingness to seek help (Vogel & Wei, 2005) while the relationship between anxious attachment and help-seeking was often less clear (Shaffer et al., 2006). In contrast, the findings in this study were that there was a moderately strong relationship between anxious attachment and intent to seek help, while the relationship between avoidant attachment and help-seeking intent was completely nonsignificant. This supports the argument that there is a relationship between higher levels of anxious attachment and increased help-seeking. That there was no moderating effect indicates that within this sample, anxious attachment does not interact with distress in its effect on help-seeking.

While there was no direct effect of avoidant attachment on help-seeking intent, it did moderate the relationship between distress and help-seeking intent. There was a relationship between distress and intent at both high and low levels of avoidant attachment, but the relationship was stronger at low levels of avoidant attachment. This concurs with previous research (Vogel & Wei, 2005) that individuals with high levels of avoidant attachment are less likely to report a willingness to seek help, even if they are experiencing distress.

The direct relationships between attachment and distress were also interesting, and somewhat unexpected. Distress was expected to be positively related to anxious attachment (Lopez & Brennan, 2000) and negatively related to avoidant attachment

(Vogel & Wei, 2005), yet the actual results showed positive relationships between distress and both forms of attachment. This finding may reflect the influence of a more general construct, such as negative affectivity. One series of studies by Barry, Lakey and Orehek (2007) found that negative affectivity was related to avoidant attachment when the attachment measure assessed a specific attachment bond (e.g., relationship with mother), but not when it measured an overall attachment style. As this study asked participants to consider a romantic partner when answering the attachment questionnaire, it is certainly possible that the implicit effects of negative affectivity influenced the measured relationship between distress and avoidant attachment.

Beliefs about others also include beliefs about social support, or the extent to which an individual can rely on others when needed. The finding that social support had a negative relationship to intent to seek help is generally in line with research in other populations. This has not been clearly seen in samples of emerging adults, so this result suggests that emerging adults are like others in this respect. The reasoning behind this relationship is that individuals who have the support of others in their life and are able to acknowledge that support are less likely to feel that they need to turn to more formal sources of support, such as mental health services. The lack of moderating effects could be simply that such effects do not exist. However, given that the entire scale was not administered to the participants because of a clerical error, it is also possible that such a relationship exists but was not able to be measured in this study.

One aspect of stigma is also a belief about others, or how one feels he or she will be perceived by others if that individual seeks help. The positive relationship between stigma regarding seeking help for mental health and intent to seek such help was

surprising. This unexpected result was also seen in the moderator analyses. While the relationship between distress and intent to seek help was moderated by both high and low levels of stigma, that relationship was stronger at the high level. Thus not only were higher levels of stigma associated with greater intent to seek help, but those higher levels also strengthened the relationship between distress and help-seeking intent. This contradicts findings both in the medical literature and in other mental health research, which generally suggests that this relationship should be negative (Belloch, del Valle, Morillo, Carrió, & Cabedo, 2009). One potential explanation is that individuals who are considering seeking help may be more aware of the existing stigma that could be harmful to them, and thus are more likely to report such stigma. Related to that, individuals planning to seek help could be especially primed to notice potentially stigma-related stimuli in their environment, and thus believe that there is more stigma. Alternatively, intent may simply be that much stronger than the perceived stigma – that individual's intent to seek help may override the stigma they believe they will face. One recent study highlighted the possibility that this relationship between stigma and help-seeking may be more complex than previously believed. Mojtabai's (2010) findings suggested that the type of negative thoughts people have about individuals who are mentally ill matter more than the existence of the thoughts themselves. Specifically, individuals who believed that people with a mental illness were inherently dangerous were more likely to be willing to seek help than those who believed that individuals with a mental illness were inherently unpredictable. While this distinction cannot be made with the scale used in this study, it does point to a potential avenue of future research.

Beliefs about oneself include the measured constructs of belief in need for treatment (do I, personally, need psychological help) and intention to seek counseling (would I seek professional services if I experienced emotional difficulties in the future). Distress, while it has already been examined, could also be seen as fitting here – the measure examines self-focused thoughts and behaviors. The other belief-focused construct is attitudes towards help-seeking (to what extent do I think that seeking mental health services would be useful for me), which could be considered to be a belief about the abstract concept of help-seeking (e.g., "The idea of talking about problems with a psychologist strikes me as a poor way to get rid of emotional conflicts").

Individuals who expressed a stronger belief that they were in need of treatment also expressed that they were more likely to seek such treatment. The moderating influence of belief in need for treatment also highlighted this pattern, such that it moderated the relationship between distress and help-seeking intent at high levels but not at low levels. While these findings are perhaps unsurprising, it supports the concept of a connection between these two constructs. It corroborates the assertion by the Health Belief Model that such beliefs are important when considering help-seeking. It also expands upon the findings by Eisenberg et al. (2007), who found a significant positive relationship between belief in the need for treatment and help-seeking behavior, as well as a relationship between belief in the need for treatment and distress. The finding in this study, that belief in need for treatment moderates the relationship between distress and help-seeking intent, connects those two results. This indicates that not only do those direct relationships exist, but that belief in need for treatment can serve as a link between distress and help-seeking.

A variable that was examined only in the moderator analyses (due to its similarity to help-seeking intent) was the intent of an individual to seek help if it became necessary in his or her life. At high levels of intent to seek help if necessary, distress was related to greater actual intent to seek help, while there was no relationship between distress and intent to seek help at low levels. This, perhaps, is one of the less surprising findings; this scale is commonly used as a proxy for help-seeking in other research.

Moving to an examination of beliefs about abstract concepts, individuals who reported stronger positive beliefs about the usefulness of treatment were also more likely to endorse the likelihood of seeking treatment. This is in line with previous research on this construct, both in general and within this population. While attitudes towards help-seeking moderated the relationship between distress and help-seeking intent at both high and low levels, when individuals reported more positive attitudes towards help-seeking behavior there was a stronger relationship between distress and help-seeking intent when compared to the relationship between distress and help-seeking intent at lower levels of attitudes towards help-seeking. From a theoretical perspective, this supports the Health Belief Theory that belief in the effectiveness of treatment is an important aspect of help-seeking. There is little applied research in this area, but these results do support previous findings (see Vogel, Wester, Wei, & Boysen, 2005).

The last two measured constructs are not belief-focused, but were included in the study for other reasons. Stressful life events have been shown in many studies to be implicated in help-seeking behavior (c.f., I. G. Sarason et al., 1978), and thus were

included for the sake of a more complete theory of help-seeking. Awareness of resources for psychological support was a construct measured because of anecdotal experiences of the investigator, that seemed to indicate it had a relationship to help-seeking behavior.

The positive relationship between the number of life events reported and the intent to seek help is another relationship that was in line with past research. This finding suggests that the more stressful life events in an individual's life, the more likely they are to consider seeking mental health services. Life events also moderated the relationship between distress and help-seeking intent. Specifically, at high levels of events, increased distress was related to increased help-seeking intent. For those participants with fewer events, there was no such relationship. This result concurs with past research that individuals who are experiencing a higher number of life events and have significant distress are more likely to consider seeking mental health-related help (Solomon, 1989).

Consistent with these findings, the relationship between life events occurring during the study period and help-seeking behavior measured at follow-up was also significant and positive. This directly supports previous research in this area (Solomon, 1989; Rubio & Lubin, 1986). Interestingly, this is one of the only analyses with help-seeking behavior that was significant. One potential reason for this difference between life events and the other variables measured is that while life events are the reporting of something concrete that happened in a person's life (e.g., failing a course), the majority of the other variables are descriptions of internal attributes or beliefs (e.g., There are people I can depend on to help me if I really need it). It is perhaps not surprising that

internal beliefs would more strongly influence internal plans (i.e., intention to seek help), while external events would more strongly influence external actions (i.e., actual help-seeking behavior). As well, much of the life events literature cited earlier examined help-seeking behavior, while most of the research on the other variables typically examined only intent to seek help. It is unclear whether this difference in the published research is simply a result of where the research has focused, or if it is a sign that previous research has not found significant relationships between help-seeking behavior and the other individual difference variables. This contrast between the relationships to help-seeking intent vs. behavior will be discussed further below.

The lack of a significant relationship between awareness of help-seeking resources and intent to seek help is another interesting finding. This suggests that the extent to which an individual is considering seeking help is not related to the extent to which they are aware of potential resources in the community at which they could seek help. This is an interesting finding, as anecdotally we would expect such a relationship to exist, that individuals unaware of places they could seek help would be less likely to be actively considering seeking help. One possibility is that awareness of resources may be more related to actual help-seeking behavior, as opposed to intent. That distinction cannot be made in this study, as all participants were provided with help-seeking resources after participating in the baseline assessment. This lack of significant findings could also be due to a measurement issue – that is, this was a broad investigator-created scale of resources awareness and may not have been able to truly tap the construct. However, as this topic is not well-researched, there were no already-

created options available. There also may have been a floor effect, as there were only 3 participants who reported being unaware of any resources.

When all of the individual difference variables were examined concurrently, the model explained 34% of the variance in help-seeking intentions. Given the complexity of behavioral intentions and the number of variables related to help-seeking that were not measured in this study, this is a reasonable amount of variance to explain. Of the variables examined, attitudes towards help-seeking, belief in need for treatment and life events were all significant correlates of help-seeking intention. When only these three variables were used, 31% of the variance was explained. As a 3% difference in variance is quite minimal, it would seem logical that further research into help-seeking intent could use this 3-variable model, compared to using the nine individual difference variables that were analyzed in this study. This would not only simplify the administration of the scales, but the analyses as well. Interestingly, the two beliefs that were significant correlates belong to different categories – belief in need for treatment is a self-focused belief, while attitudes towards help-seeking is an abstract belief. When distress was added to the three significant individual difference variables, the equation explained 32% of the variance, again a minimal addition. This suggests that while distress is useful for independently predicting help-seeking intent, it is less useful when used in conjunction with other variables.

Interestingly, several variables that were significant when entered on their own were not significant when other variables were included in the equation, specifically anxious attachment, stigma and social support. These three variables are also the only ones in this study that assess beliefs individuals have about other people. This suggests

that despite the significant research on the importance of other-focused beliefs on intentions to seek help, when those beliefs are examined in the context of the individual as a whole, they are less influential on the actual level of intent. This finding also suggests that a productive area for future research is to focus on other types of beliefs, as those appear to be more influential.

When only anxious and avoidant attachment were used to predict help-seeking intent, they were both significant. As avoidant attachment was not significant when it was examined independently, this suggests that suppression is occurring. Specifically, that anxious attachment minimizes some of the variance in avoidant attachment that is irrelevant in predicting help-seeking intent. This suggests that the relationship between avoidant attachment and help-seeking intent is best understood in the context of anxious attachment. That is, it is less useful to examine them independently. This fits with Brennan and colleagues' dimensional theory of attachment (1998), where both dimensions are needed in order to determine an individual's attachment style.

Individual Difference Characteristics and Help-Seeking Behavior

The hypotheses regarding help-seeking behavior were much the same as those regarding help-seeking intent. That is, help-seeking behavior was expected to be related to the individual difference characteristics described above. However, none of the findings (either direct or moderator analyses) were significant, which directly contradicts the published research in this area.

There are a number of potential reasons why there were no significant findings between the measured individual characteristics and reported help-seeking behavior. The simplest one, of course, is that there are simply no relationships to be measured.

That is, the measured variables are not related in any way to actual help-seeking behavior. This is likely to explain at least some of the nonsignificant findings, particularly those (like resource awareness) that did not have a significant relationship with help-seeking intent. It also supports the earlier-discussed finding of a lack of relationship between distress and help-seeking behavior.

Another aspect to consider is that much of the research on psychological help-seeking has been done on intention to seek help, not help-seeking behavior itself. Research in health psychology has highlighted the distinction between an intention to engage in a behavior, and actually completing that action. For instance, in reviews of the Health Action Process Approach model researchers specifically describe an intention-behavior gap that exists between planning and executing an action (Sutton, 2008). When that gap is noted, the focus then shifts from the intention to finding the other variables that also influence behavior. If we accept the premise that intention does not necessarily directly predict behavior (though they are certainly likely to be related), it is certainly plausible that the constructs that explain intention to seek help are different than those predicting help-seeking behavior. However, given past research showing significant relationships to help-seeking, other possibilities must be explored.

One such possibility is a simple measurement issue, that the dichotomous 'did you seek help in the last two months' question was insufficiently nuanced. Yet when only this question is used to assess help-seeking, several variables become significantly related to help-seeking behavior, as will be discussed in more detail below. This suggests that the issue may instead be that the original definition of help-seeking was too broad. However, the wide range of potential resources was used in part to account

for the research that suggests that an emerging adult sample is less likely to use traditional mental health resources when they are experiencing mental health concerns (Perlick et al., 2010).

There are two ways to define help-seeking behavior in this study – direct reporting and indirect reporting. Direct reporting includes those individuals who responded 'yes' to the direct question of "Did you seek help in the past two months". Indirect reporting includes those individuals who responded 'no' to the direct question but responded 'yes' when asked about using specific resources for help-seeking (e.g., a mental health clinic). When the individuals who reported help-seeking behavior are divided into two groups based on whether they directly or indirectly reported such behavior, interesting findings emerge. First, those that directly reported help-seeking were more likely to use traditional mental health resources, such as a mental health clinic. This suggests that individuals indirectly reporting help-seeking may not perceive themselves as actually having sought help with mental health concerns, since it was more likely to be from a non-traditional source, such as a residence hall advisor. Related to that, they may simply be unwilling to fully acknowledge, even on an anonymous survey, that they did seek help for psychological concerns.

As well, when the analyses for help-seeking behavior were run with only those that directly reported help-seeking, attitudes towards help-seeking and belief in their need for treatment were both significantly related to help-seeking behavior. This suggests that for those individuals who both recognize and acknowledge their help-seeking behavior and those individuals who did not seek help at all, the relationships between help-seeking behavior and attitudes towards help-seeking and belief in need

for treatment exist, while it does not exist for those individuals who sought help but did not directly report it. This may further support the idea that those individuals who sought help from nontraditional sources (i.e., many of those that sought help but did not directly report it) did not actually see themselves as seeking help at all. One interesting concept for future research is to examine this group specifically. Conducting an interview after having them complete a similar set of surveys could help elucidate the actual thoughts behind this seemingly contradictory set of responses.

Alternatively, the time span of two months may not have been long enough to capture everyone who would seek help for mental health concerns. Particularly with college students needing to manage classes and other responsibilities, self-care may often become secondary to other concerns. This is a difficult supposition to assess by examining other research, however, as most research (as will be discussed further later) does not examine prospective help-seeking behavior, but rather uses help-seeking intent as a proxy for behavior. Thus one avenue for future research could be to design a similar prospective study, but instead of one two-month follow-up, use multiple follow-ups with differing lengths of time (e.g., one month, two months, three months, six months). This could answer the question of whether a longer follow-up period is necessary to see the true relationships between these variables and help-seeking behavior.

Another possibility is that these relationships may exist in other populations, but not for emerging adults. Supporting this potential explanation is the research on social support, as discussed in the Introduction. While the research generally shows a clear relationship between lower support and higher rates of help-seeking, that relationship is

more ambiguous in research utilizing emerging adult samples. This would be relatively straightforward to test by simply repeating the study with a sample with a more varied age range. If the issue is the age of the participants, it would likely be easy to see.

Given the lack of associations between the individual difference variables and help-seeking behavior, it is not particularly surprising that none of those variables were significantly related to help-seeking behavior when they were all entered into the equation at once. This finding does further support the lack of relationships between these constructs, although whether those findings are due to structural or design issues or an actual lack of relationships is unclear.

Intent to Seek Help vs. Help-Seeking Behavior

An interesting overall finding was the difference in the analyses of intent to seek help and help actually sought. Variables that were significantly related to help-seeking intent were not related at all to actual reported help-seeking behavior. The current study makes a contribution to the existing literature because even published research that examines help-seeking behavior typically does not also measure intent. One statistical aspect that may have come into play is that the intent to seek help variable was a range between one and five, while help-seeking behavior was a dichotomous yes/no. However, given that a significant minority of the sample did report seeking help, this likely had less of an effect than if the help-seeking proportion had been closer to the estimated 10%.

Another interesting finding was the significant association between help-seeking behavior and life events reported at follow-up. When life events were taken into account as a covariate, none of the individual difference variables were significantly related to

help-seeking behavior. However, when life events were not taken into account, several of the variables (anxious attachment and belief in need for treatment, specifically) were significantly related to help-seeking behavior. This difference in findings suggests that it was actually the relationship between life events and help-seeking that was driving the significant findings. Again, this points to a difficulty with past research, as none of the previously cited studies included an evaluation of life events in their measures. Although, as most of those studies were examining help-seeking intent, not behavior, it may have less of an impact on their results than one would assume.

A problem with the majority of research on help-seeking is that many of these studies specifically examine intention to seek help, typically even intention to seek help *if it becomes necessary*, not even an actual plan to seek help. Yet these studies often make that leap that their findings are applicable to help-seeking behavior, while this study suggests that that supposition does not necessarily follow. This, however, does potentially explain why the results of the help-seeking intent analyses generally followed previous research on help-seeking, because those past studies were actually examining intent, not behavior.

If we follow the supposition that intent to seek mental health help if necessary does not necessarily equate with actual help-seeking behavior, the next question to be posed is: How should help-seeking behavior be measured? One potential future research idea is to develop multiple measures of help-seeking behavior and compare them to one another. These could include different types of direct questions (e.g., have you sought help from a professional for emotional problems; how many visits to a mental health care practitioner did you make) as well as more indirect inquiries (e.g.,

what steps have you taken to support yourself emotionally). If we were to utilize participants from a specific health system (e.g., a Veterans Affairs Medical Center) these self-report measures could then be compared to actual help-seeking within the system to gauge the accuracy of the measures. The difficulty of this method would be that it would not account for individuals who sought services outside of the system, whether those be traditional or non-traditional. However, there would at least be some method of external corroboration, unlike most studies examining self-reports.

Additional Findings

In addition to the above hypotheses, the influence of demographic variables was also examined. While age has been shown to relate to help-seeking behavior (Perlick et al, 2010), it was unclear whether it would be a relevant covariate in this study, due to the restricted age range. However, there was a significantly positive relationship, indicating that the older an individual was, the higher they rated their intention to seek help. This finding does fit with previous work in this area, both that examining the general population and young adults in particular (Stead, Shanahan, & Neufel, 2010; Gonzalez, Alegria, Prihoda, Copeland & Zeber, 2011).

That race was a predictor for help-seeking behavior fits with past research suggesting that there are differences in help-seeking behavior across racial groups (e.g., Bender et al., 2007). Within this sample, African Americans showed higher rates of help-seeking than individuals reporting other racial identities, while there was no such difference for Asian Americans (the two measured groups expected to have differing rates of help-seeking). What is perhaps more interesting is that race was *not* related to help-seeking intent, another indication that these two constructs of intent and behavior

do in fact behave in different ways. This somewhat supports past research on racial differences in help-seeking behavior, as much as the other findings in this study suggests that differences can be found in help-seeking intent, but not necessarily help-seeking behavior.

Interestingly, gender was not related to either help-seeking intent or behavior, despite significant past research suggesting that women are more likely to both report and seek help for mental health difficulties (Narrow et al., 2000). While this lack of findings could be because of the disproportionate ratio of women to men in this sample (n = 204 vs. n = 54), the nonsignificant p-values (p = .94, .95) of the comparisons instead suggests that a gender difference simply does not exist in this sample. One possible explanation is that given the young age of this sample, the existing social norms for males, that they are discouraged from expressing emotional distress or a need for help, may be shifting. Alternatively, it may be related to the fact that all of the individuals in this study were enrolled in a psychology class; this could have a normalizing influence on help-seeking, or perhaps the type of males who are likely to take a psychology classes are more likely to be willing to consider seeking help.

For individuals who did not work, intent to seek help at baseline was related to an increased likelihood of actually seeking help at follow-up, whereas there was no such relationship for the other groups (those that worked full-time or part-time). The existence of a relationship between intent to seek help and help-seeking behavior was expected, given the theory and research in this area. What was not expected was the group differences that can be seen here. One possibility is simply that individuals who do not work are more likely to have time available in their schedules to seek help. As well,

individuals in this age group who do not work at all are more likely to be supported by their parents, when compared to those individuals working full- or part-time. Adults who are firmly settled in their careers (e.g., parents able to fully support their college-attending child) are more likely to have access to multiple mental health services (e.g., private health insurance, Employee Assistance Programs). Thus, participants who were not working may have been able to utilize a greater variety of mental health services, when compared to those participants who were themselves working and less likely to have a job that enabled access to such services.

Limitations

One obvious limitation to this study is the use of only college students as participants. While this is virtually uniform across research examining emerging adults (Arnett, 2000), it significantly limits the generalizability to those individuals within this age group that are not actively enrolled in higher education. Related to that, the sample utilized students who were taking a psychology class during a specific semester. While a significant proportion of those taking such classes are not necessarily psychology majors, it does skew the sample.

There is also the issue of the form of the questionnaires themselves. By using an on-line format, the survey became more accessible to students, particularly those with busier schedules who would have been unable to schedule an in-person time to complete the surveys. However, that meant that the participants were filling out the surveys independently, with no ability to inquire about the meaning of the questions or any oversight to encourage accurate answering. This was somewhat remedied by removing the 35 participants who filled out the survey much more quickly than the norm,

which suggests random answering, or who used a specific answer set (e.g., all "2"s), but cannot be eliminated entirely. As well, although participants were encouraged to complete the survey in private and with all of their attention focused on the questions, given the format it is entirely likely that some individuals completed the survey in the presence of others (which could hinder true responding) or while distracted by other stimuli (e.g., television).

The other potentially problematic aspect of the form of the questionnaires is that the data is entirely based on self-report. Due to this, the results of the study are completely dependent on what participants are willing to disclose on the surveys. Some of the questionnaires are not as personally intimate (such as those questions asking about social support, or employment status), and this is less likely to be an issue. However, there are obviously many questions that ask about mental health concerns or usage of mental health resources, and those are more likely to be considered invasive. With questionnaires that involve reading there is also the issue of an individual's ability to understand what they are being asked. This is likely to be less of an issue with this sample, as they are all enrolled in college, but may have an impact for some individuals. Another concern is the retrospective reporting of help-seeking behavior and life events. While many of the variables in this study were focused on the here-and-now (e.g., the CCAPS asks individuals to describe how they have been feeling in the past two weeks), these two variables by their nature are focused on the past. The passage of time can lead to inaccurate recollections, which could influence the results of the study. As well, the mood of the participants at the time of assessment could affect what types of events

they remember – individuals with depressed mood are more likely to recall negative events.

As with many longitudinal studies, this study had the problem that a solid majority of participants did not complete both phases of the study. Non-completers were more likely to be male, African American or indicate an Other racial group, be employed part-time or full-time, and reported less social support and more life events. As there were no gender differences found in those that completed the study, the larger proportion of males would seem to not be an issue. However, the two primary independent variables that were different, less social support and a greater number of life events, were both related to an increased level of intent to seek help. Of the demographic variables, being African American was related to an increased level of help-seeking behavior, while the other variables had no measured influence on help-seeking intent or behavior. Thus in looking at the overall effect of these variables, we would expect that this group would be more likely to indicate that they were intending to seek help than those that completed the study. Interestingly, this was not the case, there was no difference in help-seeking intent between the two groups. This suggests that there was something different about the non-completers, that their levels of social support and life events did not have the same impact on their level of help-seeking intent. One possibility is that gender did play a role, that the non-completer males were less likely than completer males to admit to considering seeking help. However, given the still low percentage of males in the non-completer sample (31.0%), it is likely that this would have had only a minimal impact. Regardless, it is clear that some variable, measured or unmeasured, influenced the level of help-seeking intent in the non-completer group differently than in the group that

completed the study. Thus, this is a subset of individuals who should be examined in future research. Whether there was a difference in actual help-seeking behavior, of course cannot be assessed with this data.

Implications for Research and Practice

The primary results of this study are two-fold. First, they suggest that predicting intent to seek help is reasonably straight-forward from the constructs we are aware of and able to measure. Second, predicting actual help-seeking behavior is another thing entirely. A significant proportion of the existing research on help-seeking has used help-seeking intent, not behavior. Thus any practical application of such research must be assessed using that knowledge.

It also highlights the importance of considering both internally- and externally-focused beliefs, as the Health Belief Model suggests. Given the nonsignificant findings for other-focused beliefs (e.g., stigma) when all of the variables were examined together, focusing on self-related beliefs (e.g., belief in need for treatment) and other beliefs (e.g., treatment efficacy) is likely to be a more productive avenue for future research. This shift in focus is especially important because the other-focused beliefs were significant when they were examined independently, as much of research tends to do. Thus they may at first glance seem to be important, but if the findings of this study are replicable, these beliefs are not as important as internally-focused beliefs in the larger scheme of understanding help-seeking intentions.

Life events are also clearly important when examining help-seeking. This is the case both when they are examined independently as well as in conjunction with other variables. They were one of the three variables that were distinctly important in creating

a model for help-seeking, along with attitudes towards help-seeking and belief in need for treatment. As well, life events were shown to account for a significant portion of the variance in help-seeking behavior that seemed to be explained by other variables (e.g., anxious attachment). Thus, while this variable is often ignored in the help-seeking literature in favor of concentrating on beliefs, this study provides evidence that they should be included, even if they are not the primary focus of a research study.

As help-seeking intent and behavior are clearly influenced by different factors, in order for future help-seeking research to make a practical contribution to the field, it will need to focus specifically on behavior. The first question then becomes how do we measure this behavior? This is clearly an area that has not been thoroughly examined, as much of the existing research uses help-seeking intent as a direct proxy for behavior. There are obvious difficulties in developing an accurate assessment tool, not least that it is difficult to determine the true accuracy of self-reports, and obtaining direct (i.e., non-self report) measurements of help-seeking behavior is even more difficult. Examples of potential studies were described above, but creativity will be needed to obtain accurate assessments of behavior.

As well, what sorts of help-seeking should be included? There does appear to be some difference when traditional help-seeking resources are distinguished from non-traditional resources, so the utility of including such non-traditional resources should be investigated. It may be useful in some situations in order to capture the entirety of help-seeking behavior, particularly in populations that may be more resistant to utilizing traditional methods of help-seeking. Yet it could also create a fuzzy category of individuals who do not fit neatly into either help-seeking or non-help-seeking groups.

While this would make clear-cut analyses more difficult, it would be a more accurate reflection of actual behavior.

There are also clearly other factors that influence help-seeking behavior that were not examined in this study. These may include past experiences with mental health care, the direct impact of statements made by friends or family either supporting or denigrating mental health care, and the actual (vs. perceived) awareness of resources, along with numerous others.

There are multiple implications specifically for counseling centers that serve an emerging adult population. One is that some of the groups traditionally perceived to be at higher risk for not seeking help (e.g., males, African Americans) may not in fact have a higher risk. This could influence how outreach activities are designed, if such groups are not in need of more intensive outreach activities, as has been frequently assumed. These findings would need to be replicated before suggesting such significant modifications to existing practice.

One interesting aspect of these findings is the lack of relationship between help-seeking intent or behavior and resource awareness. A significant proportion of outreach activities in a college counseling center consists of creating awareness of the resources that such a center offers. While it seems unlikely that there is no positive effect of such outreach, the findings of this study suggest that the effects may be limited in scope.

The difference between intent to seek help and actual help-seeking behavior also has specific implications for counseling centers. This suggests that centers should be cautious when examining research on how to influence help-seeking behavior, to be certain that the study was assessing actual behavior, and not simply intent. These

differences also highlight the difficulty in using the results of this study to make direct recommendations for a counseling center. Such centers are focused on the actual behavior, individuals physically coming in for services, while this study only found significant results for intent to seek services.

APPENDIX A

Table 1

T-Tests Comparing Participants Who Completed Both Assessments to those who completed Baseline Only, Continuous Variables

	Baseline only		Completed T2				
	Mean	SD	*Mean*	SD	*df*	*t*	*p*
Intent to seek treatment	1.49[a]	0.98	1.42[b]	0.83	925	-0.97	.33
Distress	64.74[a]	34.70	65.36[c]	33.93	934	0.25	.80
Anxious attachment	53.35[d]	23.47	54.05[e]	23.29	849	0.39	.70
Avoidant attachment	54.28[f]	22.40	52.46[g]	22.70	858	-1.06	.29
Attitudes towards help-seeking	16.59[h]	5.32	17.29[i]	5.46	883	1.72	.09
Stigma	9.86[j]	4.92	9.61[k]	4.78	924	-0.70	.49
Social support	44.61[l]	6.36	46.49[m]	6.33	885	3.96	.00
Belief in need for treatment	2.15[a]	1.27	2.10[n]	1.24	932	-0.62	.53
Resource awareness	7.03[a]	3.19	7.02[c]	2.97	934	-0.01	.99
Life events	9.98[o]	9.47	8.25[c]	5.00	931	-2.77	.01
Intention to seek help if necessary	35.32[p]	10.60	36.17[q]	10.10	899	1.09	.28
Age	20.09[a]	1.85	20.14[c]	1.74	934	0.34	.73

Note. [a]*n* = 258. [b]*n* = 669. [c]*n* = 678. [d]*n* = 233. [e]*n* = 618. [f]*n* = 237. [g]*n* = 623. [h]*n* = 245. [i]*n* = 640. [j]*n* = 256. [k]*n* = 670. [l]*n* = 246. [m]*n* = 641. [n]*n* = 676. [o]*n* = 255. [p]*n* = 247. [q]*n* = 654.

Table 2

Chi-Squares Comparing Participants Who Completed Both Assessments to those who completed Baseline Only, Categorical Variables

	Baseline only	Completed T2	*df*	χ^2	*p*
Gender[a]			1	9.31	.00
Female	69.0%	79.1%			
Male	31.0%	20.9%			
Race/ethnicity[b]			4	14.02	.01
Caucasian	35.7%	44.7%			
African American	27.6%	18.7%			
Asian/Pacific Islander	9.6%	13.6%			
Middle Eastern	15.9%	12.8%			
Other	11.2%	10.1%			
Employment status[c]			3	12.67	.01
Not working	31.2%	39.5%			
Part-time	56.8%	50.8%			
Full-time	10.2%	5.8%			
Other	1.8%	3.9%			
Household income[d]			5	3.01	.70
$0-24,999	31.2%	26.5%			
$25,000-49,999	21.8%	23.3%			
$50,000-74,999	19.5%	20.2%			
$75,000-99,999	11.0%	14.3%			
$100,000-149,999	11.0%	10.3%			
$150,000+	5.7%	5.4%			
Marital status[e]			3	0.39	.94
Single	61.1%	60.3%			
Dating	31.9%	33.5%			
Living with partner	1.9%	1.9%			
Married	5.0%	4.3%			
Sexual orientation[f]			2	2.30	.32
Heterosexual	95.1%	95.2%			
Bisexual	1.4%	2.6%			
Homosexual	3.5%	2.2%			

Note. [a]*n* = 937. [b]*n* = 924. [c]*n* = 932. [d]*n* = 788. [e]*n* = 931. [f]*n* = 800.

Table 3

Demographic Information

	Not working	Part-time	Full-time	Other			
Employed	39.5%	50.8%	5.8%	3.9%			
	$0-24,999	$25,000-49,999	$50,000-74,999	$75,000-99,999	$100,000-149,999	$150,000+	Declined to answer
Household Income	22.9%	20.2%	17.4%	12.4%	8.9$	4.7%	13.6%
	Single	Dating	Living with partner		Married		
Marital Status	60.1%	33.5%	4.3%		1.9%		
	Heterosexual		Bisexual	Homosexual		Declined to answer	
Sexual Orientation	84.1%		2.3%	1.9%		11.6%	

Table 4

List of Measures Given at Each Assessment

Baseline Assessment
Demographic Measures
Currently In Treatment
Intent to Seek Treatment
Counseling Center Assessment of Psychological Symptoms
Experiences in Close Relationships – Revised Questionnaire
Attitudes Towards Seeking Professional Psychological Help Scale – short form
Perceptions of Stigmatization by Others for Seeking Help
Belief in Need for Treatment
Social Provisions Scale
Awareness of Resources
Life Experiences Survey
Intentions to Seek Counseling Inventory
Follow-up Assessment
Treatment Sought Since Baseline Assessment
Resources Used Since Baseline Assessment
Counseling Center Assessment of Psychological Symptoms
Experiences in Close Relationships – Revised Questionnaire
Attitudes Towards Seeking Professional Psychological Help Scale – short form
Perceptions of Stigmatization by Others for Seeking Help
Social Provisions Scale
Life Experiences Survey
Intentions to Seek Counseling Inventory

Table 5

Means and Standard Deviations of All Scales, only Participants who Completed Study

	Baseline Assessment		Follow-up Assessment	
	Mean	SD	Mean	SD
Intent to seek treatment	1.42	0.84	---	---
Distress	65.36	33.93	65.20	32.57
Anxious attachment	53.65	23.02	51.46	22.22
Avoidant attachment	53.50	23.49	50.85	21.78
Attitudes towards help-seeking	17.22	5.43	17.03	5.08
Stigma	9.61	4.78	9.79	4.88
Belief in need for treatment	2.10	1.24	---	---
Social support	46.41	6.32	46.65	6.40
Resource awareness	7.02	2.97	---	---
Life events	8.25	5.01	4.72	3.71
Intention to seek help if necessary	36.32	10.14	34.81	10.04

Table 6

Bivariate Correlations of Dependent Variables and Individual Difference Variables

	Plan to seek help at baseline	Help-seeking behavior at follow-up
Distress[a]	.39***	.12
Anxious attachment[b]	.32***	.16*
Avoidant attachment[c]	-.07	.02
Attitudes towards help-seeking[d]	.27***	.08
Stigma[e]	.18**	.01
Social support[a]	-.13	-.05
Resource awareness[a]	.12	.10
Life events[f]	.24***	.18**
Life events at follow-up[f]	.26***	.32**

Note. [a]*n* = 258. [b]*n = 254.* [c]*n =251.* [d]*n = 252.* [e]*n = 256.* [f]*n = 255.*
*$p < .05$, **$p < .01$, ***$p < .001$

Table 7

Bivariate Correlations of Individual Difference Variables

	Anxious attachment	Avoidant attachment	Attitudes towards help-seeking	Stigma	Social support	Resource awareness	Life events	Life events at follow-up
Distress	.57**[a]	.28**[b]	.05[c]	.32**[d]	-.45**[e]	.06[e]	.30**[f]	.23**[f]
Anxious attachment	---	.31**[b]	-.01[g]	.37**[c]	-.47**[a]	.06[a]	.32**[b]	.20**[b]
Avoidant attachment		---	-.17**[h]	.26**[i]	-.43**[b]	-.04[b]	.13[g]	.08[g]
Attitudes towards help-seeking			---	-.14[j]	.07[c]	.12[c]	-.05[j]	.16**[i]
Stigma				---	-.27**[d]	-.07[d]	.14[k]	.04[k]
Social support					---	-.02[e]	-.16[f]	-.14[f]
Resource awareness						---	.09[f]	.09[f]
Life events							---	.47**[k]

Note. [a]*n* = 254. [b]*n* = 251. [c]*n* = 252. [d]*n* = 256. [e]*n* = 258. [f]*n* = 255. [g]*n* = 248. [h]*n* = 245. [i]*n* = 249. [j]*n* = 250. [k]*n* = 253.

***p* < .01

Table 8

Effects of Individual Difference Variables on Intention to Seek Help, when Variables were Analyzed Independently

Variable	B	SE	β	t
Anxious attachment[a]	.01	.00	.32	5.41***
Avoidant attachment[b]	-.00	.00	-.05	-0.73
Attitudes towards help-seeking[c]	.04	.01	.26	4.21***
Stigma[d]	.03	.01	.19	3.07**
Social support[e]	-.02	.01	-.15	-2.36*
Belief in need for treatment[e]	.33	.04	.49	8.95***
Resource awareness[e]	.03	.02	.10	1.59
Life events[f]	.04	.01	.25	4.18***

Note. Age was entered into the analyses as a covariate, but was not included in the table for ease of reading.
[a]n = 254. [b]n = 251. [c]n = 252. [d]n = 256. [e]n = 258. [f]n = 255.
*p < .05, **p < .01, ***p < .001

Table 9

Effect of Individual Difference Variables on Intention to Seek Help, when Variables were Analyzed as a Group

Variable	B	SE	β	t
Age	.04	.03	.09	1.51
Anxious attachment	.00	.00	.10	1.41
Avoidant attachment	-.00	.00	-.12	-1.83
Attitudes towards help-seeking	.02	.01	.13	2.09*
Stigma	.02	.01	.09	1.51
Social support	.01	.01	.04	0.53
Belief in need for treatment	.25	.05	.37	5.35***
Resource awareness	.00	.02	.01	0.22
Life events	.03	.01	.16	2.75**
Intention to seek help if necessary	.01	.01	.06	0.92

Note. Age was entered into the analysis as a covariate, but was not included in the table for ease of reading.
N = 241
* $p < .05$, ** $p < .01$, *** $p < .001$

Table 10

Effects of Individual Difference Variables on Intention to Seek Help, Analyzed In Groups

	B	SE	β	t
Anxious and avoidant attachment only[a]				
Anxious attachment	.01	.00	.37	5.97***
Avoidant attachment	-.01	.00	-.17	-2.63**
Significant variables only[b]				
Attitudes towards help-seeking	.02	.01	.14	2.46**
Belief in need for treatment	.29	.04	.42	7.28***
Life events	.03	.01	.17	3.13**
Distress and significant variables[b]				
Distress	.00	.00	.15	2.31*
Attitudes towards help-seeking	.02	.01	.16	2.77**
Belief in need for treatment	.23	.05	.34	4.95***
Life events	.02	.01	.14	2.59*

Note. Age was entered into the analyses as a covariate, but was not included in the table for ease of reading.
[a]n = 251. [b]n = 250.
*p < .05, **p < .01, ***p < .001

Table 11

Variables Moderating the Association Between Distress and Intent to Seek Treatment, Both at Baseline

Variable	B	SE	β	t
Anxious attachment[a]	.00	.00	.30	1.25
Avoidant attachment[b]	.00	.00	-.57	-2.87**
Attitudes towards help-seeking[c]	.00	.00	.66	2.74**
Stigma[d]	.00	.00	.54	2.66**
Social support[e]	.00	.00	-.42	-1.12
Belief in need for treatment[e]	.00	.00	.48	2.29*
Resource awareness[e]	.00	.00	.31	1.58
Life events[f]	.00	.00	.56	3.08**
Intention to seek help if necessary[e]	.00	.00	.74	2.77**

Note. The data presented are from the interaction term.
[a]n = 254. [b]n = 251. [c]n = 252. [d]n = 256. [e]n = 258. [f]n = 255.
*p < .05, **p < .01

Figure 1. Participant Flow.

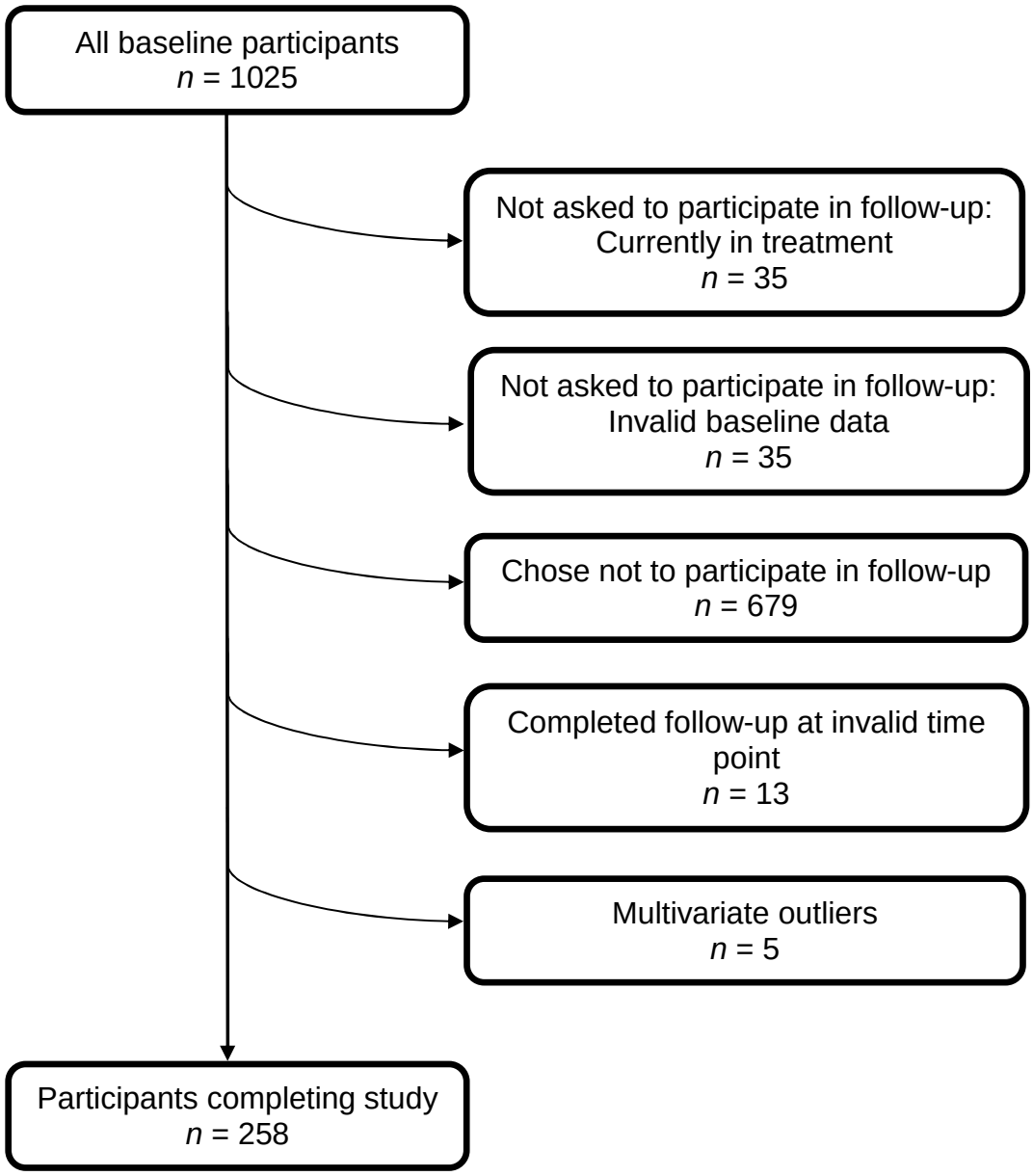
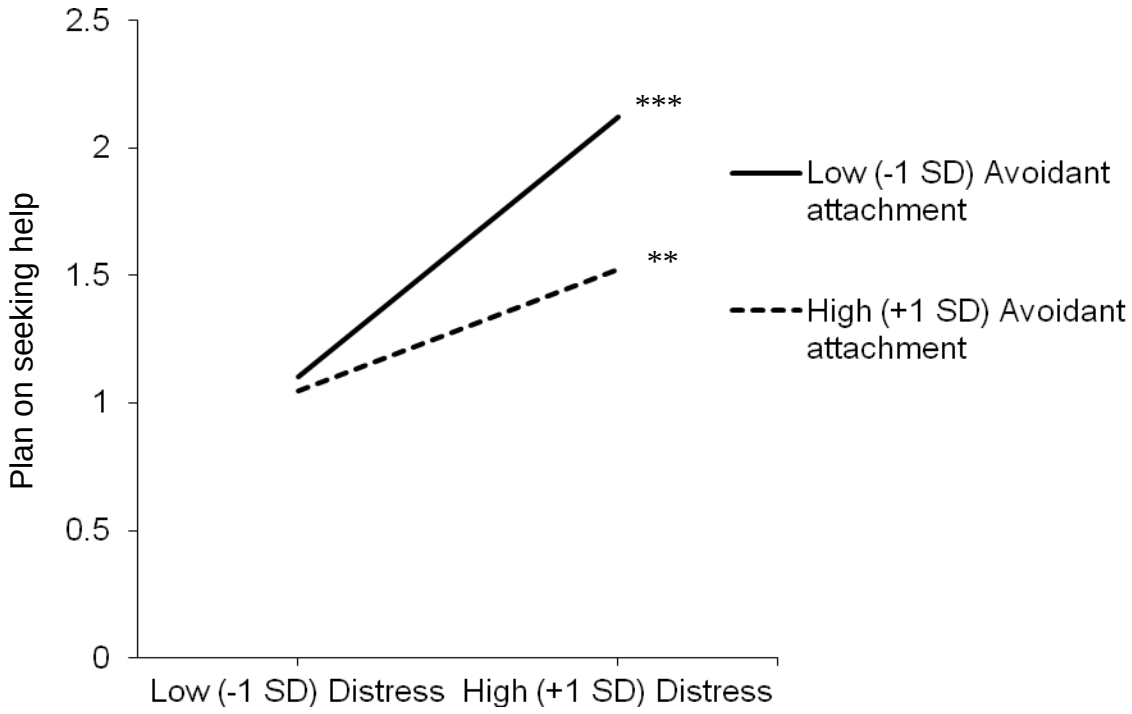
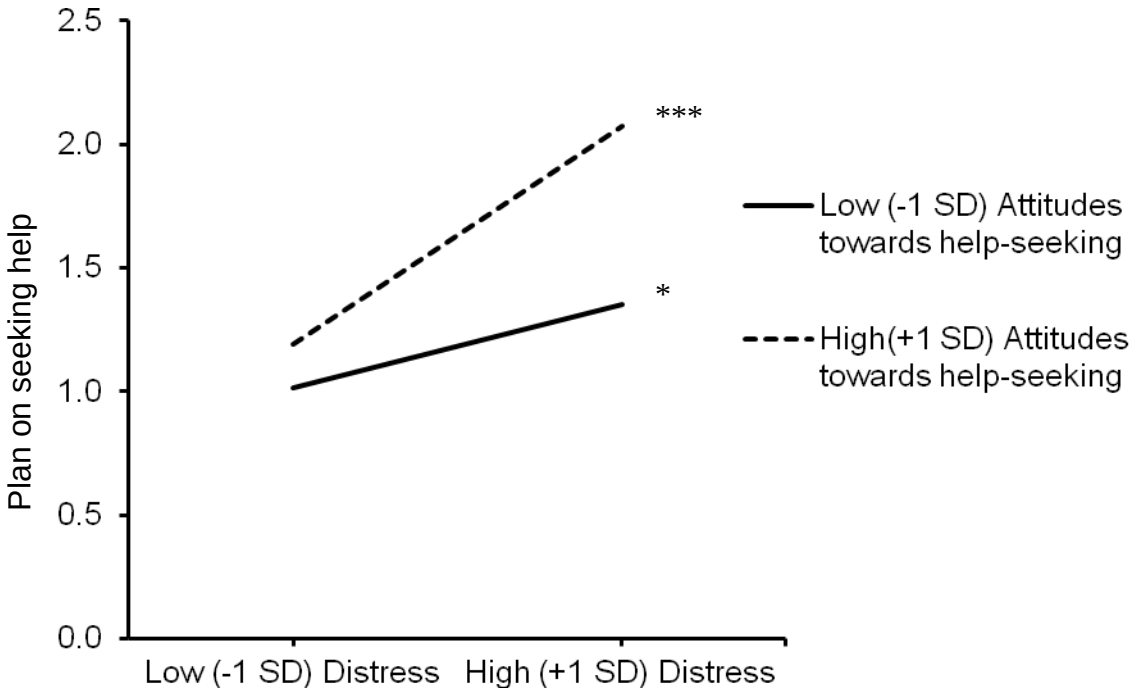


Figure 2. Moderating Effect of Avoidant Attachment on the Relationship between Distress and Help-Seeking Intent.



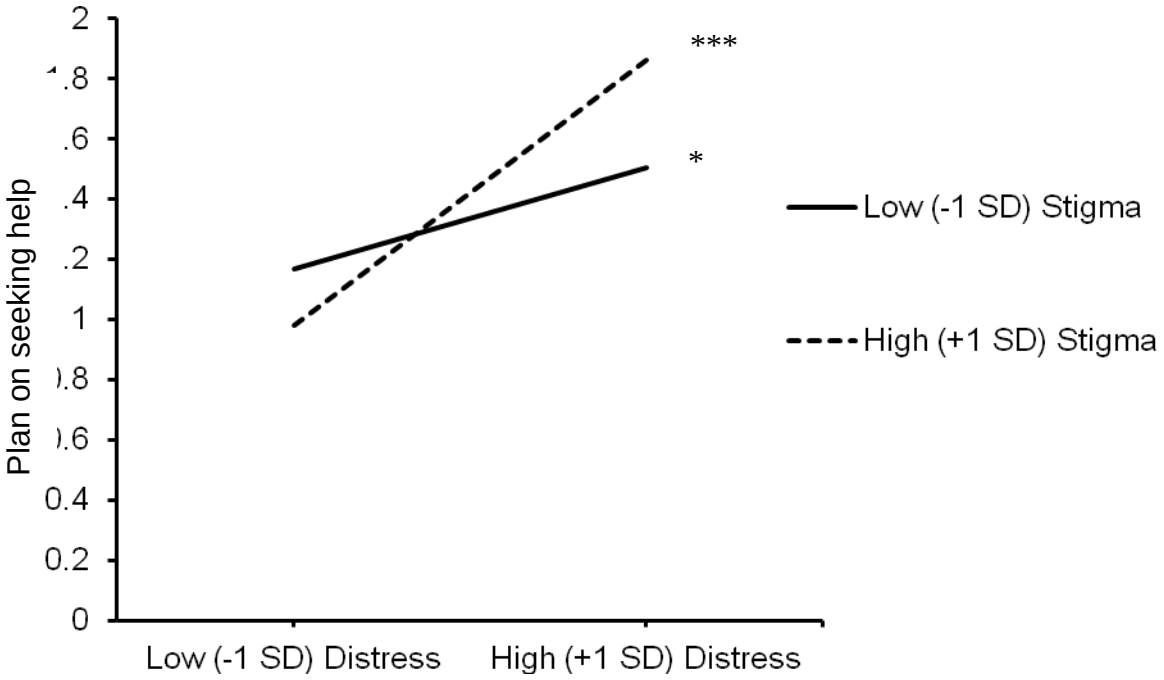
Note. $^{**}p < .01$, $^{***}p < .001$

Figure 3. Moderating Effect of Attitudes towards Help-Seeking on the Relationship between Distress and Help-Seeking Intent.



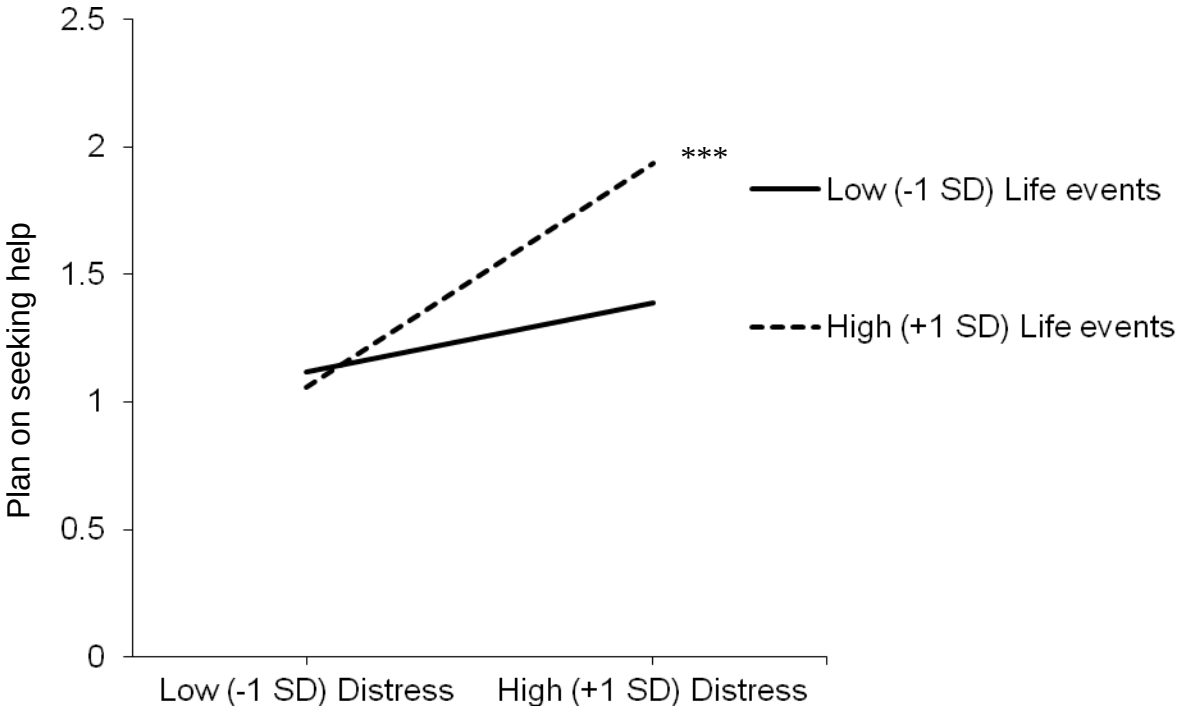
Note. * $p < .05$, *** $p < .001$

Figure 4. Moderating Effect of Stigma on the Relationship between Distress and Help-Seeking Intent.



Note. * $p < .05$, *** $p < .001$

Figure 5. Moderating Effect of Life Events on the Relationship between Distress and Help-Seeking Intent.

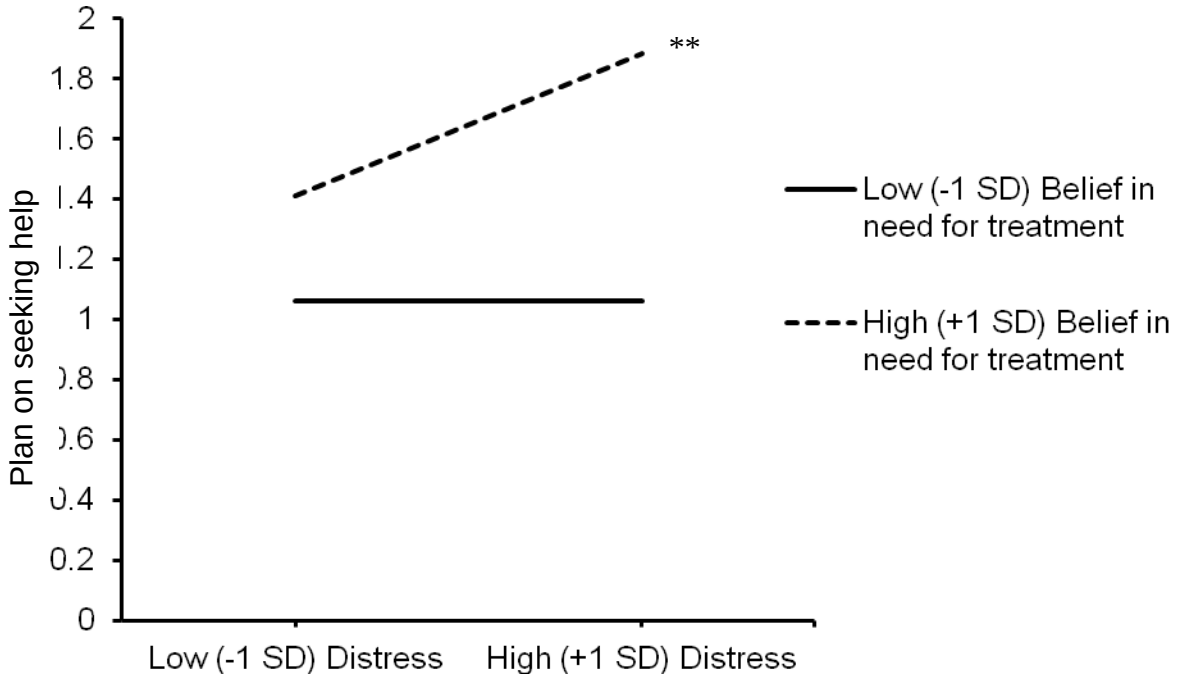


Note. ***$p < .001$

Figure 6. Moderating Effect of Intention to Seek Help If Necessary on the Relationship between Distress and Help-Seeking Intent.

Note. ***$p < .001$

Figure 7. Moderating Effect of Belief in Need for Treatment on the Relationship between Distress and Help-Seeking Intent.



Note. $^{**}p < .01$

APPENDIX B

Counseling Center Assessment of Psychological Symptoms

The following statements describe thoughts, feelings, and experiences that people may have. Please indicate how well each statement describes you, during the past two weeks, from "not at all like me" (0) to "extremely like me" (4), by marking the correct number.

	Not at all like me				Extremely like me
1. I get sad or angry when I think of my family	0	1	2	3	4
2. I am shy around others	0	1	2	3	4
3. There are many things I am afraid of	0	1	2	3	4
4. My heart races for no good reason	0	1	2	3	4
5. I feel out of control when I eat	0	1	2	3	4
6. I enjoy my classes	0	1	2	3	4
7. I feel that my family loves me	0	1	2	3	4
8. I feel disconnected from myself	0	1	2	3	4
9. I don't enjoy being around people as much as I used to	0	1	2	3	4
10. I feel isolated and alone	0	1	2	3	4
11. My family gets on my nerves	0	1	2	3	4
12. I lose touch with reality	0	1	2	3	4
13. I think about food more than I would like to	0	1	2	3	4
14. I am anxious that I might have a panic attack while in public	0	1	2	3	4
15. I feel confident that I can succeed academically	0	1	2	3	4
16. I become anxious when I have to speak in front of audiences	0	1	2	3	4
17. I have sleep difficulties	0	1	2	3	4
18. My thoughts are racing	0	1	2	3	4
19. I am satisfied with my body shape	0	1	2	3	4
20. I feel worthless	0	1	2	3	4
21. My family is basically a happy one	0	1	2	3	4
22. I am dissatisfied with my weight	0	1	2	3	4
23. I feel helpless	0	1	2	3	4
24. I use drugs more than I should	0	1	2	3	4
25. I eat too much	0	1	2	3	4
26. I drink alcohol frequently	0	1	2	3	4

27. I have spells of terror or panic	0	1	2	3	4
28. I am enthusiastic about life	0	1	2	3	4
29. When I drink alcohol I can't remember what happened	0	1	2	3	4
30. I feel tense	0	1	2	3	4
31. When I start eating I can't stop	0	1	2	3	4
32. I have difficulty controlling my temper	0	1	2	3	4
33. I am easily frightened or startled	0	1	2	3	4
34. I diet frequently	0	1	2	3	4
35. I make friends easily	0	1	2	3	4
36. I sometimes feel like breaking or smashing things	0	1	2	3	4
37. I have unwanted thoughts I can't control	0	1	2	3	4
38. There is a history of abuse in my family	0	1	2	3	4
39. I experience nightmares or flashbacks	0	1	2	3	4
40. I feel sad all the time	0	1	2	3	4
41. I am concerned that other people do not like me	0	1	2	3	4
42. I wish my family got along better	0	1	2	3	4
43. I get angry easily	0	1	2	3	4
44. I feel uncomfortable around people I don't know	0	1	2	3	4
45. I feel irritable	0	1	2	3	4
46. I have thoughts of ending my life	0	1	2	3	4
47. I feel self conscious around others	0	1	2	3	4
48. I purge to control my weight	0	1	2	3	4
49. I drink more than I should	0	1	2	3	4
50. I enjoy getting drunk	0	1	2	3	4
51. I am not able to concentrate as well as usual	0	1	2	3	4
52. I am afraid I may lose control and act violently	0	1	2	3	4
53. It’s hard to stay motivated for my classes	0	1	2	3	4
54. I feel comfortable around other people	0	1	2	3	4
55. I like myself	0	1	2	3	4
56. I have done something I have regretted because of drinking	0	1	2	3	4
57. I frequently get into arguments	0	1	2	3	4
58. I find that I cry frequently	0	1	2	3	4
59. I am unable to keep up with my schoolwork	0	1	2	3	4
60. I have thoughts of hurting others	0	1	2	3	4
61. The less I eat, the better I feel about myself	0	1	2	3	4
62. I feel that I have no one who understands me	0	1	2	3	4

Intentions to Seek Counseling Inventory

Below is a list of issues people commonly bring to counseling. How likely would you be to seek counseling if you were experiencing these problems? Please circle the corresponding answer.

	Very unlikely	Unlikely	Likely	Very likely
1. Weight control	1	2	3	4
2. Excessive alcohol use	1	2	3	4
3. Relationship differences	1	2	3	4
4. Concerns about sexuality	1	2	3	4
5. Depression	1	2	3	4
6. Conflict with parents	1	2	3	4
7. Speech anxiety	1	2	3	4
8. Difficulties dating	1	2	3	4
9. Choosing a major	1	2	3	4
10. Difficulty in sleeping	1	2	3	4
11. Drug problems	1	2	3	4
12. Inferiority feelings	1	2	3	4
13. Test anxiety	1	2	3	4
14. Difficulty with friends	1	2	3	4
15. Academic work procrastination	1	2	3	4
16. Self-understanding	1	2	3	4
17. Loneliness	1	2	3	4

Experiences in Close Relationships-Revised Questionnaire

The statements below concern how you feel in emotionally intimate relationships. We are interested in how you generally experience relationships, not just in what is happening in a current relationship. Respond to each statement by circling a number to indicate how much you agree or disagree with the statement.

	strongly disagree						strongly agree
1. I'm afraid that I will lose my partner's love.	1	2	3	4	5	6	7
2. I often worry that my partner will not want to stay with me.	1	2	3	4	5	6	7
3. I often worry that my partner doesn't really love me.	1	2	3	4	5	6	7
4. I worry that romantic partners won’t care about me as much as I care about them.	1	2	3	4	5	6	7
5. I often wish that my partner's feelings for me were as strong as my feelings for him or her.	1	2	3	4	5	6	7
6. I worry a lot about my relationships.	1	2	3	4	5	6	7
7. When my partner is out of sight, I worry that he or she might become interested in someone else.	1	2	3	4	5	6	7
8. When I show my feelings for romantic partners, I'm afraid they will not feel the same about me.	1	2	3	4	5	6	7
9. I rarely worry about my partner leaving me.	1	2	3	4	5	6	7
10. My romantic partner makes me doubt myself.	1	2	3	4	5	6	7
11. I do not often worry about being abandoned.	1	2	3	4	5	6	7
12. I find that my partner(s) don't want to get as close as I would like.	1	2	3	4	5	6	7
13. Sometimes romantic partners change their feelings about me for no apparent reason.	1	2	3	4	5	6	7
14. My desire to be very close sometimes scares people away.	1	2	3	4	5	6	7
15. I'm afraid that once a romantic partner gets to know me, he or she won't like who I really am.	1	2	3	4	5	6	7
16. It makes me mad that I don't get the affection and support I need from my partner.	1	2	3	4	5	6	7
17. I worry that I won't measure up to other people.	1	2	3	4	5	6	7
18. My partner only seems to notice me when I’m angry.	1	2	3	4	5	6	7
19. I prefer not to show a partner how I feel deep down.	1	2	3	4	5	6	7
20. I feel comfortable sharing my private thoughts and feelings with my partner.	1	2	3	4	5	6	7
21. I find it difficult to allow myself to depend on	1	2	3	4	5	6	7

romantic partners.							
22. I am very comfortable being close to romantic partners.	1	2	3	4	5	6	7
23. I don't feel comfortable opening up to romantic partners.	1	2	3	4	5	6	7
24. I prefer not to be too close to romantic partners.	1	2	3	4	5	6	7
25. I get uncomfortable when a romantic partner wants to be very close.	1	2	3	4	5	6	7
26. I find it relatively easy to get close to my partner.	1	2	3	4	5	6	7
27. It's not difficult for me to get close to my partner.	1	2	3	4	5	6	7
28. I usually discuss my problems and concerns with my partner.	1	2	3	4	5	6	7
29. It helps to turn to my romantic partner in times of need.	1	2	3	4	5	6	7
30. I tell my partner just about everything.	1	2	3	4	5	6	7
31. I talk things over with my partner.	1	2	3	4	5	6	7
32. I am nervous when partners get too close to me.	1	2	3	4	5	6	7
33. I feel comfortable depending on romantic partners.	1	2	3	4	5	6	7
34. I find it easy to depend on romantic partners.	1	2	3	4	5	6	7
35. It's easy for me to be affectionate with my partner.	1	2	3	4	5	6	7
36. My partner really understands me and my needs.	1	2	3	4	5	6	7

Attitudes towards seeking professional psychological help scale – short form

Please read each statement carefully and indicate the degree to which you agree or disagree with the statements below. Please remember that the scale ranges from 0 (disagree) to 3 (totally agree).

Disagree	Partly Disagree	Partly Agree	Totally Agree
0	1	2	3

1. If I believed I was having a mental breakdown, my first inclination would be to get professional attention. ___

2. The idea of talking about problems with a psychologist strikes me as a poor way to get rid of emotional conflicts. ___

3. If I were experiencing a serious emotional crisis at this point in my life, I would be confident that I could find relief in psychotherapy. ___

4. There is something admirable in the attitude of a person who is willing to cope with his or her conflicts and fears without resorting to professional help. ___

5. I would want to get psychological help if I were worried or upset for a long period of time. ___

6. I might want to have psychological counseling in the future. ___

7. A person with an emotional problem is not likely to solve it alone; he or she is likely to solve it with professional help. ___

8. Considering the time and expense involved in psychotherapy, it would have doubtful value for a person like me. ___

9. A person should work out his or her own problems; getting psychological counseling would be a last resort. ___

10. Personal and emotional troubles, like many things, tend to work out by themselves. ___

Perceptions of Stigmatization by Others for Seeking Help

Imagine you had a problem that needed to be treated by a mental health professional. If you sought mental health services, to what degree do you believe that the people you interact with would _____.

	Not at all				A great deal
1. Think of you in a less favorable way	1	2	3	4	5
2. Think bad things of you	1	2	3	4	5
3. React negatively to you	1	2	3	4	5
4. See you as seriously disturbed	1	2	3	4	5
5. Think you posed a threat to others	1	2	3	4	5

Social Provisions Scale

Instructions: In answering the following questions, think about your current relationships with friends, family members, co-workers, community members, and so on. Please indicate to what extent each statement describes your current relationships with other people. Use the following scale to indicate your opinion.

STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE
1	2	3	4

So, for example, if you feel a statement is very true of your current relationships, you would respond with a 4 (strongly agree). If you feel a statement clearly does not describe your relationships, you would respond with a 1 (strongly disagree).

	Rating
1. There are people I can depend on to help me if I really need it.	_____
2. I feel that I do not have close personal relationships with other people.	_____
3. There is no one I can turn to for guidance in times of stress.	_____
4. There are people who depend on me for help.	_____
5. There are people who enjoy the same social activities I do.	_____
6. Other people do not view me as competent.	_____
7. I feel personally responsible for the well-being of another person.	_____
8. I feel part of a group of people who share my attitudes and beliefs.	_____
9. I do not think other people respect my skills and abilities.	_____
10. If something went wrong, no one would come to my assistance.	_____
11. I have close relationships that provide me with a sense of emotional security and well-being.	_____
12. There is someone I could talk to about important decisions in my life.	_____
13. I have relationships where my competence and skill are recognized.	_____
14. There is no one who shares my interests and concerns.	_____

Awareness of Resources

Listed below are potential resources for seeking mental health care. Please check those resources that you are aware of, where you could seek treatment if necessary. *Please check only those resources you were aware of before completing this survey.*

Wayne State's Counseling & Psychological Services (CAPS)	_____
Crisis telephone lines	_____
Wayne State's health clinic	_____
Health insurance	_____
Employee assistance services (EAS/EAP) (typically through workplace)	_____
Residence hall advisors (if living on-campus)	_____
Wayne State's Psychology Clinic	_____
Other mental health clinic	_____
Clergy (through place of worship)	_____
Internet support groups	_____
In-person support groups	_____
Other: _____	_____

Life Experiences Survey

Listed below are a number of events which sometimes bring about change in the lives of those who experience them and which necessitate social adjustment. *Please check those events which you have experienced in the PAST 6 MONTHS.* Be sure that all of your answers are directly across from the items they correspond to.

Life Experiences	Occurred?	
1. Marriage	Yes	No
2. Detention in jail or comparable institution	Yes	No
3. Death of spouse	Yes	No
4. Major change in sleeping habits (much more or much less sleep)	Yes	No
5. Death of a close family member:		
a. mother	Yes	No
b. father	Yes	No
c. brother	Yes	No
d. sister	Yes	No
e. grandmother	Yes	No
f. grandfather	Yes	No
g. other (specify):_____	Yes	No
6. Major change in eating habits (much more or much less food intake)	Yes	No
7. Foreclosure on mortgage or loan	Yes	No
8. Death of a close friend	Yes	No
9. Outstanding personal achievement	Yes	No
10. Minor law violations (traffic tickets, disturbing the peace, etc.)	Yes	No
11. Male: Wife/girlfriend's pregnancy	Yes	No
12. Female: Pregnancy.	Yes	No
13. Changed work situation (different work responsibility, major change in working conditions, working hours, etc.)	Yes	No
14. New job	Yes	No
15. Serious illness or injury of close family member:		
a. mother	Yes	No
b. father	Yes	No
c. brother	Yes	No
d. sister	Yes	No
e. grandmother	Yes	No
f. grandfather	Yes	No
g. spouse	Yes	No
h. other (specify):_____	Yes	No
16. Sexual difficulties	Yes	No
17. Trouble with employer (in danger of losing job, being suspended, demoted, etc.)	Yes	No
18. Trouble with in-laws	Yes	No
19. Major change in financial status (a lot better off or a lot worse off)	Yes	No
20. Major change in closeness of family members (increased or decreased		

closeness) ..... Yes No
21. Gaining a new family member (through birth, adoption, family member moving in, etc.)..... Yes No
22. Change in residence..... Yes No
23. Marital separation from mate (due to conflict)..... Yes No
24. Major change in church activities (increased or decreased attendance)..... Yes No
25. Marital reconciliation with mate..... Yes No
26. Major change in number of arguments with spouse (a lot more or a lot less) ..... Yes No
27. Change in spouse or live-in partner's work outside the home (beginning work, loss of job, changing to a new job, retirement, etc.) ..... Yes No
28. Major change in usual type and/or amount of recreation ..... Yes No
29. Borrowing more than $10,000 (buying a home, business, etc.) ..... Yes No
30. Borrowing less than $10,000 (buying a car, TV, getting school loan, etc.).. Yes No
31. Being fired from a job..... Yes No
32. Male: Wife/girlfriend having an abortion or miscarriage ..... Yes No
33. Female: Having an abortion or miscarriage ..... Yes No
34. Major personal illness or injury ..... Yes No
35. Major change in social activities, e.g., parties, movies, visiting (increased or decreased participation)..... Yes No
36. Major change in living conditions of family (building a new home, remodeling, deterioration of home, neighborhood, etc.)..... Yes No
37. Divorce..... Yes No
38. Serious illness/injury of close friend ..... Yes No
39. Retirement from work..... Yes No
40. Son or daughter leaving home (due to marriage, college, etc.) ..... Yes No
41. Ending of formal schooling..... Yes No
42. Separation from spouse (due to work, travel, etc.)..... Yes No
43. Engagement ..... Yes No
44. Break-up with girlfriend/boyfriend..... Yes No
45. Leaving home for the first time..... Yes No
46. Reconciliation with boyfriend/girlfriend..... Yes No
47. Beginning a new school experience at a higher academic level (college, graduate school, professional school, etc.)..... Yes No
48. Changing to a new school at same academic level (undergraduate, graduate, etc.)..... Yes No
49. Academic probation ..... Yes No
50. Being dismissed from dormitory or other residence ..... Yes No
51. Failing an important exam..... Yes No
52. Changing a major..... Yes No
53. Failing a course..... Yes No
54. Dropping a course..... Yes No
55. Joining a fraternity/sorority..... Yes No
56. Financial problems concerning school (in danger of not having sufficient money to continue) ..... Yes No

Mental Health Resource List

Wayne State University's Counseling and Psychological Center
free short-term therapy for eligible students
(313) 577-3398

Wayne State University's Psychology Clinic
therapy and assessments, sliding scale fee
(313) 577-2840

Wayne State University's College of Education Counseling Center
free short-term therapy
(313) 577-1681

24-hour crisis hotlines
1-800-SUICIDE
1-800- 241-4949

University Psychiatric Center
medication evaluations
takes health insurance, some free services
(313) 833-2500

Wayne State University's Health Center
(313) 577-5041

Life Stress Center, Detroit Receiving Hospital
therapy, sliding scale fee
(313) 745-4811

Other resources to consider that you may have access to:

Health insurance

Employee Assistance Services
typically through workplace or parent's workplace

Residence Hall Advisors
if living on-campus

Clergy
at place of worship

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ABSTRACT

PREDICTORS OF HELP-SEEKING BEHAVIOR IN EMERGING ADULTS

by

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Degree: Doctor of Philosophy

Many people with psychological difficulties do not seek help for these problems, especially in the emerging adult population. While research has been done on the effect of individual variables (e.g., attachment style) on help-seeking, there is no published research that attempts to create a larger, overarching model to predict help-seeking. In this study, multiple factors were examined to predict help-seeking intent and behavior. Psychological distress was expected to be related to increased help-seeking. As well, anxious attachment, perceived need for treatment, resource awareness, belief in treatment efficacy, life events, and intent to seek help if necessary were also expected to increase help-seeking, while avoidant attachment, mental health-related stigma, and social support were expected to decrease help-seeking. These variables were also anticipated to moderate the relationship between distress and help-seeking. Participants in this study were between the ages of 18-25 (M = 20.1, SD = 1.8) and predominantly female (79.1%). This was a racially diverse sample: 44.6% Caucasian, 18.7% African American, 13.6% Asian, 12.8% Middle Eastern, and 10.2% Other ethnicity. Participants

completed a baseline assessment as well as a follow-up assessment two months after the baseline. Results showed that many of the measured variables were independently related to help-seeking intent (including anxious attachment, stigma, and others). When all of the variables were examined concurrently, life events, belief in treatment efficacy, and perceived need for treatment were found to be uniquely related to help-seeking intent. The results of this study also suggest that the measured variables do not predict help-seeking behavior in emerging adults, as none of the analyses were significant. While help-seeking intent and behavior were initially found to be correlated, they were not significantly related once the covariates for help-seeking behavior were taken into account. The research and clinical implications of these findings are discussed, particularly the implications for research that assumes help-seeking intent can be used as a direct proxy for help-seeking behavior.

AUTOBIOGRAPHICAL STATEMENT

Aleda Franz was born and raised in the Metro Detroit area of Michigan. She attended The Roeper School, graduating in 1996. Upon graduation she attended Smith College, receiving a STRIDE scholarship, which is given to incoming students who demonstrate significant potential for academic and research success. While there she was active in Residential Life and worked with professors in the Psychology and Education departments on several research projects. Aleda was on the Dean's List for four years, and graduated in 2000 with a Bachelor of Arts in Psychology. After graduation she was employed in several clinical research settings, including the Genetics & Teratology department at Massachusetts General Hospital and the Mood and Anxiety division at the Centre for Addiction and Mental Health in Toronto, Ontario.

In the fall of 2004, Aleda entered the clinical psychology graduate program at Wayne State University, where she was awarded the Rumble Fellowship, given to students with strong academic qualifications and capacity for independent study. At that point she began working with Dr. Annmarie Cano in the Health and Relationships Lab, working on several research projects studying couples' overall functioning and health issues. She completed her master's degree in that lab, examining the relationship between life events and depression in couples with chronic pain. At this time she is working at an APA-accredited internship at the John D. Dingell VA Medical Center, specializing in Health Psychology.

In her spare time, Aleda enjoys spending time with her family and friends. She currently lives with her wife Anna in the Metro Detroit area.