2011

The Influence of Perceptual Accuracy on Willingness to Seek Help Among College Freshmen

Kathryn Conley
Virginia Commonwealth University

THE INFLUENCE OF PERCEPTUAL ACCURACY ON WILLINGNESS TO SEEK HELP AMONG COLLEGE FRESHMEN

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy at Virginia Commonwealth University

By Kathryn A. Conley
Master of Science, Virginia Commonwealth University, May 2009
Master of Arts, Teachers College Columbia University, February, 2007

Director: Steven J. Danish, Ph.D.
Professor of Psychology
Department of Psychology

Virginia Commonwealth University
Richmond, VA
May, 2012

Acknowledgements

Many individuals provided me with the support and guidance necessary to complete this dissertation. First, I would like to thank my graduate advisor, Steve Danish, for his interest in and excitement for my research ideas, as well as his thoughtfulness, patience, and encouragement. For the past four years you have simultaneously supported me and challenged me to grow and I feel lucky to have you as my advisor. I would like to thank Linda Hancock for her mentorship, enthusiasm, and tireless efforts to educate students about health and well being. I literally could not have done this project without you! I would like to thank Adrienne Keller for her generosity and the guidance she has so warmly provided me since the very beginning. Thank you to my committee members, Jim McCullough and Leticia Flores. Others along my journey have also been an incredible support: Courtney Smith, Aubrey Gartner, Nichole Kelly, Suzzette Chopin, and Alice Westerberg. Finally, I could not possibly have pursued a PhD in psychology without the love and support of my family – Mom, Dad, Andrea; I promise I will have a job soon. Dan thank you for your understanding, love, and support – we made it!

Table of Contents

List of Tables

Page

List of Figures

Page

Abstract

THE INFLUENCE OF PERCEPTUAL ACCURACY ON WILLINGNESS TO SEEK HELP AMONG COLLEGE FRESHMEN

By Kathryn A. Conley, M.S., M.A.

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy at Virginia Commonwealth University.

Virginia Commonwealth University, 2011

Major Director: Steven J. Danish, Ph.D.
Professor, Counseling Psychology

OBJECTIVE: The current study explored the applicability of the social norms approach to a new domain of study: psychological help-seeking. A number of questions that must be answered to determine whether the social norms model can be applied effectively to the help-seeking domain guided the study. METHOD: Data were collected from freshmen at five colleges and universities in the Mid-Atlantic region (N = 3021) during freshman orientation week. The study used a cross sectional design to examine personal attitudes and behaviors related to help-seeking as well as perceptions about others' attitudes and behaviors related to help-seeking. RESULTS: Most participants reported that they were willing to seek help and viewed seeking help as a personal strength rather than personal weakness. However, discrepancies between "reality" and perception indicate that most freshmen in this sample misperceived reality. Most participants underestimated the extent to which peers are accepting of seeking psychological help and most participants were not accurate in their perceptions of peer help seeking behaviors. This misperception significantly influenced personal willingness to seek help. CONCLUSIONS: The data indicate that the social norms method of intervention is applicable to the domain of help seeking and efforts to reduce

stigma. Implications, next steps for future research, and limitations of the current study are discussed.

The Influence of Perceptual Accuracy on Willingness to Seek Help among College Freshmen

Statement of the Problem

As individuals transition from adolescence to adulthood they are likely to experience a number of stressors. While many endure this transition with only a few bumps and bruises, others experience significant psychological distress and may consider seeking professional help. The decision to seek professional support is influenced by many factors including: demographic variables (e.g. race, gender, and ethnicity), access to services, and preconceptions about the therapy process. Among the most influential is the perception of stigma or the fear that others will perceive the act of seeking help negatively. One might be afraid that others will perceive the help-seeker to be "crazy," weak, or deficient if the decision is made to seek help. It is important to note that perceptions about others' attitudes and behaviors may not be accurate. If this is the case, then it is the misperception of social norms that influences personal attitudes and behaviors. The social norms approach posits that norms are often perceived as more negative than reality (Berkowitz, 2004). Therefore, correcting misperceptions about social norms, by highlighting the actual attitudes and behaviors of others, can function to promote and reinforce healthier norms. The promotion of healthy norms may then lead to more adaptive attitudes and behaviors, such as seeking professional help when in distress.

Given the abundance of stressors related to this developmental period and the increased risk of college students developing psychological disorders and substance abuse problems, normalizing the help-seeking process is critical. Not only is it important that students in distress are made aware of the counseling services available to them on-campus,

but that providers make efforts to reduce perceptions of stigma regarding such services as well. Interventions that take place on a college campus offer an opportunity to reach a large number of people during an important phase of their lives. There is surprising lack of evidence on how campus-level interventions affect help-seeking (Hunt & Eisenberg, 2010). The goal of the current project is to explore the applicability of the social norms approach to a new domain of study: help-seeking. To effectively apply the social norms model to help-seeking there are a number of questions that must be answered beforehand (Berkowitz, 2003). It is important that the "problem" is defined and put into context. For example, what misperceptions exist with respect to help-seeking? Are there over- or under-estimations of attitudes and/or behavior about the acceptability of seeking help? Do the majority of individuals in a group hold these misperceptions? Does the target group function as a reference group with respect to the behavior in question? That is, are the group norms salient and do they influence individual behavior or attitudes? What is the hypothesized effect of these misperceptions? And, finally, what changes are predicted if protective behaviors and attitudes that already exist in the population are supported and increased? The aim of this exploratory study is to answer these questions.

Review of the Literature

In the pages that follow, I will introduce the social norms approach and discuss the theory that guides this method of intervention. Next, I will present research evaluating various social norms interventions to demonstrate the utility of this approach. I will then discuss applying the social norms approach to a new domain: help-seeking. Literature about common barriers to seeking help, including stigma, will then be reviewed to highlight the fit between efforts to reduce perceptions of stigma and use of the social norms approach. I will then assert the need for interventions that normalize psychological help-seeking among the emerging adulthood population and end with a discussion of the aims for the current study.

Social Norms Approach

The social norms approach aims to correct misperception by highlighting the true norms of a community. To implement this type of intervention, one must gather credible information from a target population, identify misperceptions held my members of that target population, and then communicate the truth about actual norms. The hope and expectation is that more accurately perceived norms will influence behaviors and attitudes. When used in the domain of health, social norms interventions highlight the misperception of others' attitudes and behaviors in an effort to bring the prevalence of healthy attitudes and behaviors to awareness. The social norms approach can be used as a proactive intervention to highlight positive rather than problem behaviors. This approach takes into consideration the environmental, situational, and social contexts that may influence behaviors, beyond an individual's personality, attitudes, and values.

Social Norms Theory

Perkins and Berkowitz (1986) propose a framework for understanding social influence that builds upon Ajzen and Fishbein's Theory of Reasoned Action (1980). The Theory of Reasoned Action and Planned Behavior posits that a person's behavior is determined by his/her intentions to perform the behavior. Intentions are a function of 1) a person's attitude toward the given behavior and 2) subjective norms, or beliefs about how others will view or perceive the behavior. The concept of perceived behavioral control, or individuals' perceptions about their ability to perform a given behavior, is also important. This model can be extended to describe a general help-seeking framework where one's attitude and perception of social norms are primary determinants of one's intention to seek help.

Perkins and Berkowitz (1986) support the notion that social norms influence behavior, as proposed in the Azjen and Fishbein model (1980), and extend the model to consider the ways in which misperceptions of social norms influence behavior. Perkins and Berkowitz emphasize that individuals are influenced by their perceptions of norms as it is unlikely that individuals are aware of true norms. When the perceptions of what important others think and do is different from what important others actually think and do there is a "misperception" of social norms. These perceived norms are more important than actual norms in influencing behaviors and, often, perceived norms are misperceptions. Said another way, the social norms approach suggests that "behavior is influenced by incorrect perceptions of how other members of our social groups think and act" (Berkowitz, 2004, p. 12).

Injunctive and descriptive norms. The literature makes a distinction between injunctive (normative) and descriptive (informational) social influence. Injunctive norms reflect perceived social approval to perform or not perform certain behaviors. Descriptive norms reflect perceptions of other people's behavior and carry social information about behaviors to perform or not to perform. Norms are created by three sources of information: observable behaviors, explicit and implicit communication, and knowledge of the self (Miller & Prentice, 1996). Observable behaviors are the most accessible sources of information, yet can lead to biased information such as the fundamental attribution error. The fundamental attribution error is defined as the tendency for an individual to attribute others' behaviors to their personal characteristics, giving insufficient consideration to the possible situational or environmental influences (Ross, 1997). Messages communicated, either explicitly or implicitly, by others and by cultural media also introduce distortions that can bias the accuracy of norms. Finally, personal attitudes and behaviors influence the perception of norms.

Reference group and group saliency. It is important to consider the relative importance of others' attitudes and behaviors in influencing the individual. We identify more with some groups than others; accordingly, the influence of the "other" can vary with the saliency of different group norms. The process by which we categorize ourselves as a member of a particular group is described by self-categorization theory (SCT; Terry, Hogg, & White, 1999). This process of social influence happens in three stages: first, we identify with a certain group or category; second, we learn what the stereotypical attitudes and behaviors are in that group (norms); third, we internalize information from others and assign

those attitudes and behaviors to ourselves (Schofield, Pattison, Hill, & Borland, 2001). When we identify with a particular group, often, our social identity (vs. personal identity) is evoked and we act and think in ways that are consistent with the group norms rather than personal beliefs. The norms of the referent group influence intentions to engage in a behavior to the extent to which the group membership is a salient basis for self-definition. Social categorization theory assumes variability of social influences (Terry et al., 1999). In other words, intentions and behaviors are influenced by the situational levels of identification, which can change across contexts. In a given situation, those who identify highly with a particular group are more likely to act and think in ways that are consistent with that particular group norm.

Stangor and Jorst (2001) conducted two experiments to examine the effects of social norms on personal attitudes. The first experiment was designed to demonstrate that racial stereotypes can be changed by providing information about how other in-group members perceive a given target group. In one condition, European Americans were provided with information that a greater percentage of in-group members than estimated held favorable stereotypes about African Americans. In a second condition, European Americans were presented with information that a greater percentage of in-group members than expected held less favorable stereotypes about African Americans. As hypothesized, results revealed that personal endorsement of negative stereotypes decreased in the favorable information condition and increased in the unfavorable information condition. Endorsement of positive stereotypes increased in the favorable condition and did not decrease in the unfavorable information condition. The second experiment looked at the ways in which the source of

information, from in-group or out-group, influenced the relationship between normative information and personal attitudes. The authors hypothesized that individual beliefs would be more strongly influenced by information that came from a group with which the individual identifies than information that came from a group with which the individual does not identify with as strongly. Consistent with self-categorization theory, the results of this second experiment suggested that the influence of consensus feedback was greater when it came from an in-group source than an out-group source. The study presented supports the notion that individual attitudes can be shaped by others. Importantly, the degree to which an individual identifies with others influences the extent to which personal attitudes can be shaped by the attitudes of these others.

Social norms and behavior. Social norms influence personal attitudes and behaviors. Acock and DeFleur (1972) proposed the contingency-consistency hypothesis to help explain this relationship. The contingency-consistency hypothesis maintains that people are more likely to engage in behaviors that are consistent with their attitudes if the normative climate supports such attitudes. More simply, attitudes are more likely to predict behavior if accompanied by the support of others. Terry and Hodge (1996) found support for the contingency-consistency hypothesis with their study of exercise behavior. They found that the perceived norms of a behaviorally-relevant reference group (friends and peers at university) influenced intentions for those participants who identified strongly with the group. The results of this study were replicated in a study of females' reported sun-protective behavior where the perceived group norm was a stronger predictor of intentions than personal attitudes for those participants who highly identified with the group.

Misperception. Central to the social norms theory is the argument that individuals are influenced by their perceptions of social norms and, often, these perceptions do not reflect true norms. In his review of the social norms literature, Berkowitz (2004) outlines the different types of misperceptions. The most common type of misperception is pluralistic ignorance which occurs when the majority of individuals believe that their beliefs and attitudes are the minority – that the majority of others think and act differently from them (Miller & McFarland, 1987, 1991; Prentice & Miller, 1996; Toch & Klofas, 1984). For example, pluralistic ignorance occurs when students at a college or university perceive their moderate attitudes about alcohol use to be in the minority when, in fact, their attitudes represent the majority. A second type of misperception, false consensus, occurs when an individual believes that others' attitudes and behaviors are more similar to their own than reality. This type of misperception, also known as a "self-serving bias," helps an individual to believe that his or her behavior/attitude is more normative than reality. Students who believe that their heavy alcohol use and permissive attitudes towards drinking represent the norm engage in false consensus. Toch and Klofas (1984) note that the most vocally expressed views are from those who engage in false consensus. Interestingly, when those who falsely assume that their behavior/attitude is discrepant from the majority remain quiet whereas those who falsely believe that they represent the majority are more vocal, the misperception of normative attitudes and behaviors is reinforced. A third type of misperception is false uniqueness. This occurs when an individual in the minority assumes a greater difference between his/her own attitudes and behaviors and others' attitudes and behaviors. In other words, they falsely assume themselves to be more unique than they really

are. An example would be someone who abstains from alcohol use and perceives that he/she is alone in this decision. As a consequence of misperceptions, many people conform erroneously to perceived peer norms.

Misperceptions have been documented in a number of social contexts across a wide variety of populations. According to Berkowitz (2003), false consensus and pluralistic ignorance misperceptions have been documented in over 55 published studies. Bosari and Carey (2003) conducted a meta-analysis of 23 studies (N=53,825) to examine self-other discrepancies for perceptions related to college drinking norms. Of 102 tests for misperceptions conducted, 91% revealed positive self-other discrepancies. Misperceptions have been documented for gambling, bullying behavior, cigarette smoking, marijuana, and other illegal drug use (See Berkowitz, 2004 for a review).

Misperception and behavior. Just as behavior is influenced by perceptions of social norms, it is also influenced by misperceptions of social norms. It is argued that, individuals often over-estimate the occurrence of unhealthy behaviors and underestimate the frequency of healthy behaviors (Berkowitz, 2004). Influenced by the misperception of social norms, individuals are consequently more likely to engage in unhealthy behaviors and less likely to engage in the healthy behaviors that are more normative. The majority of studies assessing the relationship between misperceptions and behaviors have examined alcohol use. In his review, Berkowitz (2004) makes note of over twenty published studies in which misperceptions are positively correlated with drinking behavior or predict how much individuals drink. In a recent study, Perkins (2007) looked at predictors of college drinking for a sample of more than 76,000 students attending 130 colleges and universities throughout

the country. He found that students consistently overestimated the quantity of alcohol consumed by their peers and that their perceptions of campus drinking norms was the strongest predictor of the amount of alcohol personally consumed in comparison with all demographic variables. Additionally, perception of drinking norms was a much stronger predictor than the actual drinking norms.

Social Norms Interventions

The introduction to social norms theory and approach began with a study of college students' misperceptions of alcohol use (Perkins & Berkowitz, 1986). It was found that students consistently overestimated frequency and quantity of peer drinking and perceived that their peers had more permissive attitudes towards substance abuse than reality. In fact, most students reported moderate attitudes towards drinking; however, these modest norms were obscured because of misperceptions of the normative environment. The authors believed that correcting these misperceptions and providing information about actual norms might affect positive change in the rates of binge drinking among college students on this particular campus. Since this study, several researchers have used social norms interventions to bring about positive change related to rates of binge drinking on a number of college campuses. A number of federal funding agencies have supported such efforts including: U.S. Department of Education, U.S. Center for Substance Abuse Prevention, National Institute on Alcoholism and Alcohol Abuse, and the National Highway Traffic Safety Administration.

There are three levels of social norms interventions: universal, selective, and indicated (Berkowitz, 1997). Universal social norms interventions target all members of a population (i.e. mass media campaign that provides information about the true norms of a

given community). Selective interventions target members of a group who show risk for certain behaviors/attitudes (i.e. fraternity members who may be more likely to drink heavily). Finally, indicated interventions target individuals who have already exhibited behaviors/attitudes considered to be problematic. Because research suggests that peer influence has a greater impact on individual behavior than biological, personality, familial, religious, cultural and other influences, social norms interventions focus on peer influence (Borsari & Carey, 2001; Perkins, 2002).

Social norms interventions make use of social marketing approaches (advertisements, flyers, posters, and emails) to present actual norms to members of a community. Virginia Commonwealth University, for example, delivers social norms messages through the popular bathroom reader "The Stall Seat Journal" and other campus-wide print materials. This approach allows broad reach at a low cost. However, there are drawbacks to this method of delivery. It can be impersonal and one cannot be certain that students are considering these messages and linking them with their own behaviors.

Personalized normative feedback is another strategy utilized in social norms interventions to correct normative misperceptions. Two pieces of information are needed to provide personal normative feedback: information about one's personal behavior and/or attitudes and information about a person's perceptions about others' behaviors and/or attitudes. These personalized messages allow for the direct comparison of participants' personal behaviors and attitudes and the behaviors and attitudes of "most" others. This type of delivery is more salient as it reveals discrepancies in individual behaviors/attitudes, perceived "normal" behaviors/attitudes, and actual "normal" behaviors/attitudes. In a recent

study using personalized normative feedback, LaBrie and colleagues (2009) used wireless keypad technology ("clickers") to deliver normative messages about drinking to student athletes ($N = 660$). Data about the perceptions of normative group behaviors and attitudes as well as actual individual behavior and attitudes were gathered. These data were then presented immediately back to the participants in graphs to illustrate discrepancies between perceived and actual group norms. At one-month post-intervention (and retained at two-month post-intervention) perceived norms, behaviors, attitudes and consequences associated with drinking better matched reality when compared with baseline data. Furthermore, reductions in perceived norms and attitudes were associated with reductions in individual drinking behavior and negative consequences associated with drinking

The first campus-wide social norms intervention, funded by the U.S. Department of Education, was conducted at Northern Illinois University in 1989 (Haines, 1996). The goals of the intervention were to 1) evaluate whether perceptions about social norms related to alcohol use on campus could be changed and 2) evaluate whether these changes resulted in reductions of binge drinking and alcohol-related problems. The intervention targeted students who drank alcohol (90% of the student population) and used mass media campaigns to disseminate information about accurate norms related to drinking attitudes and behaviors. At the end of six years, there was an overall reported 35% reduction in binge drinking, 31% reduction in alcohol-related injuries to self, and 54% reduction in alcohol-related injuries to others. Following suit, the University of Arizona implemented a four-year project to reduce heavy drinking using a social norms approach. Their efforts achieved a 29.2% decrease in self-reports of heavy drinking (Johannessen et al., 1999). Similarly, William Smith Colleges'

Social Norms Project achieved a 30% reduction in high-risk drinking over 5 years (Perkins & Craig, 2002).

The social norms approach has been applied to other domains including sexual assault, HIV/AIDS, adolescent alcohol use, marijuana and cigarette use among college students, body image, sexual behavior, smoking, HPV vaccine, rumor spreading, and gambling (see National Social Norms Institute website www.nsni.org for a review).

Applying Social Norms Theory and Approach to a New Domain: Help-Seeking

As noted previously, the social norms theory and approach has been used to create change across a number of health-related domains. This approach to intervention, however, has not yet been applied to the domain of mental health. The purpose of the current study is to explore the applicability of the social norms approach to psychological help seeking. The negative relationship between perceptions of stigma and help-seeking is well documented (Corrigan, 2004). It is important to highlight that it is the perceptions of others' beliefs and attitudes that can influence personal attitudes and willingness to seek professional counseling. Because perception plays such a key role in the presence of stigma, it seems that a social norms approach would have value in normalizing help-seeking and reducing stigma. In the following section, a brief review of the psychological help-seeking and stigma literature is presented.

Help seeking. It has been reported that less than 40% of individuals seek any type of professional help within a year of the onset of a psychological disorder (Vogel, Wade, Wester, Larson, & Hackler, 2007). Similarly, research from the Epidemiologic Catchment Area (ECA) Study showed that less than 30% of people with psychiatric disorders seek

treatment (Regier et al., 1993). These data naturally lead to the question, why? Reasons why individuals do not seek professional help vary as there are several intrapersonal, social, and systemic/societal factors that likely contribute to this finding. Research on the barriers to psychological treatment is vast, thus only a brief review follows.

Demographic characteristics. Differences in various demographic characteristics, including sex and race/ethnicity, have been studied as potential moderating factors for seeking psychological help. Research suggests that gender influences help-seeking attitudes and behaviors. Specifically, women have more favorable attitudes toward seeking psychological help and using psychological services than men (Fischer & Farina, 1995; Moller-Leimkuhler, 2002; Rule & Gandy, 1994). Komiya and colleagues (2000) examined effects of emotional openness and other predictors on attitudes toward seeking psychological help in a sample of 311 college students. Compared with men, women endorsed more open attitudes towards expressing emotion, perceived less stigma associated with counseling, and reported more severe psychological symptoms. This finding is consistent with previous research about the influence of gender and gender roles with regard to use of health care services (e.g., Good & Wood, 1995). These authors posit that the gender differences found may be explained in part by male gender role expectations to be emotionally restricted, logical, and independent; qualities that generally inhibit help-seeking behavior (Good, Sherrod, & Dillon, 2000; Levant & Pollack, 1995). Other studies have also shown that men were more likely than women to perceive stigma associated with seeking psychological help (Martin, Wrisberg, Beitel, & Lounsbury, 1997).

Cultural norms, values, and beliefs. Cultural norms, values, and beliefs also influence one's attitudes and willingness to seek psychological help (Diala et al., 2000). Factors such as acculturation (Atkinson & Gim, 1989), cultural identity (Tata & Leong, 1994) and cultural mistrust (Nickerson, Helms, & Terrell, 1994) have been linked with willingness to seek help. For example, a study examining the help-seeking attitudes of Asian-American students (N = 557; 263 Chinese Americans, 185 Japanese Americans, and 109 Korean Americans) found that, compared with the less acculturated student, the most acculturated students were the most likely to identify a need for seeking professional psychological help. They were also the most tolerant of the stigma associated with seeking help and the most open to discussing their problems with a psychologist (Atkinson & Gim, 1989). In another study, Tata and Leong (1994) examined the effects of acculturation, individualism, and social-network orientation on attitudes towards seeking psychological help among a group of Chinese-American college students in the Midwestern United States. Results suggested that high levels of acculturation, positive social network orientation, defined as a willingness to seek support from others, and individualism were associated with positive attitudes towards seeking psychological help. Values of privacy, the importance of seeking help for emotional difficulties, self-control, and messages surrounding the expression of emotion shaped an individual's comfort with counseling.

As an alternative to counseling, many groups seek the support of family, friends, and other important members in their communities when in need of help (Vogel, 2007). Data from nationally representative samples indicate that most African Americans do not seek professional mental health services in response to emotional distress (Neighbors & Jackson,

1996). More specifically, the African Americans least likely to seek help were young (18–29 years), older (_>60 years), male, married, and unemployed (Neighbors & Jackson, 1996). Common barriers to treatment included: poverty, inadequate insurance coverage, limited access to transportation and childcare, cultural mistrust of mental health professionals and the medical establishment, insufficient understanding of the mental health profession, institutional racism, discrimination, and stigma associated with mental illness (Diala et al., 2001; Merritt-Davis & Keshavan, 2006; U. S. Department of Health and Human Services, 2001). In another study, African Americans in Chicago reported that the church was preferred to the mental health system (Matthews, Corrigan, Smith, & Rutherford, 2003). Similarly, Mexican American and African American youth are more likely than White American youth to rely on a family member when experiencing a problem (Offer, Howard, Schonert, & Ostriv, 1991). Finally, accessibility and the availability of resources affect an individual's ability to use the mental health system. Research suggests that low awareness of resources, concern for monetary cost, and low educational status influence the extent to which an individual makes use of mental health services (Leaf, Bruce, & Tischler, 1987).

Attitudes toward counseling. Beliefs, expectations, and fears about counseling all influence the likelihood that one will seek help. A person's reluctance to self-disclose (Hinson & Swanson, 1993), avoidance of discussing distressing or personal information (Vogel & Wester, 2003), and avoidance of experiencing painful feelings (Komiya, Good, & Sherrod, 2000) all play a role in shaping attitudes towards help-seeking. Concerns about what others will think and the desire to solve one's problems on one's own may also dissuade help-seeking (Kessler et al., 2001). Individuals' preconceptions about what therapy is, likely

shaped by popular media, may also influence whether they seek professional help. Fears about the counseling process can lead to the delay or avoidance of seeking help (Amato & Bradshaw, 1985). Finally, anticipated utility and risks have been found to influence a person's decision to seek counseling (Vogel & Wester, 2003; 2005). It is important to note that a large number of individuals experiencing distress seek help from other sources – including friends, family, teachers (Ciarrochi, Deane, Wilson, & Rickwood, 2002).

Stigma. The most cited reason for not seeking psychological help is stigma (Corrigan, 2004). Within the help-seeking literature, three different types of stigma are described: self-stigma, societal/public stigma, and structural stigma (Corrigan, 2004; Corrigan & O'Shaughnessy, 2007). Societal/public stigma associated with seeking mental health services has been defined as "the perception [held by others] that a person who seeks psychological treatment is undesirable or socially unacceptable" (Vogel, Wade, & Haake, 2006, p. 325). Self-stigma is the perception [held by the individual] that he or she is socially unacceptable (Vogel et al., 2006). Structural stigma, is defined as "the policies of private and governmental institutions that intentionally restrict opportunities of people with mental illness and that yield unintended consequences that hinder the options of people with mental illness"(Corrigan, 2007, p.91). Link and Phelan (2001) argue that people with mental illness often internalize society's stigmatizing messages about individuals with mental illness and, consequently, believe themselves to be of lesser value. This internalization can lead to low self-esteem, and a diminished sense of self-efficacy and shame. Individuals who experience self-stigma are less likely to ask for help from nonprofessional sources, such as friends or family, particularly if they fear embarrassment, feelings of inferiority or incompetence by

asking for help (Mayer & Timms, 1970; Nadler, 1991).

Perceptions of stigma related to seeking psychological help have been found to predict both attitudes towards seeking counseling (Komiya, Good, & Sherrod, 2000; Vogel, Wester, Wei, & Boysen, 2005) and willingness to seek counseling (Rochlen, Mohr, & Hargrove, 1999). Specifically, perceived public stigma has been linked to personal negative attitudes about seeking psychological help (Komiya et al 2000; Vogel, Wester, Wei, & Boysen, 2005). The 1999 Surgeon General's report on mental health (Satcher, 1999) concluded that individuals attributed fear of stigma to their denial of illness, avoidance of seeking help, and poor compliance with treatment. When individuals perceive that they will experience negative consequences associated with seeking psychological help they avoid seeking such help. The multifaceted relationship among self- and public-stigma and help-seeking attitudes and intentions continues to be the focus of research. Vogel and colleagues (2007) explored the mediating effects of self-stigma and attitudes toward seeking counseling on the link between perceived public stigma and willingness to seek counseling for psychological and interpersonal concerns. Their results suggest that perceived public stigma is positively related to the experience of self-stigma. Further, the presence of self-stigma contributes to the negative attitudes individuals have toward counseling. These negative attitudes then influence one's reluctance to seek help for psychological and interpersonal concerns.

Given the clear negative relationship between help-seeking and perceptions of stigma, the influence of an individual's social network has been identified as a key factor in the decision to seek psychological treatment (Angermeyer, Matschinger, & Riede-Heller, 2001;

Vogel, Wade, Wester, Larson, & Hackler, 2007). Camerson, Leventhal, and Leventhal (1993) found that, most individuals (92%) talked to at least one person about their problem prior to seeking psychological help**.** Thus having a social network that accepts and encourages seeking help for a problem is important. By cultivating a social environment that views seeking help, from professionals or others, as an acceptable mode of action, individuals may perceive fewer negative consequences associated with seeking the support they need.

Emerging Adulthood

As the current study focuses on college students it is important to study the developmental period for individuals aged 18-25. Emerging adulthood has been characterized by five main characteristics: 1) identity explorations, especially in love and work; 2) instability; 3) being very self-focused; 4) feeling in-between, neither adolescent nor adult; and 5) of possibilities (Arnett, 2005). Because these transitions are often happening simultaneously in a number of domains, the result can lead to psychological stress. For example, based on data from the 2005 National Survey on Drug Use and Health (NSDUH; Substance Abuse and Mental Health Service Administration [SAMHSA]) the estimated prevalence of serious psychological distress for individuals18 to 25 year-old is high (19%) when compared to prevalence rates for all adults (11%). The World Health Organization (2004) reports that mental disorders account for nearly one-half of the disease burden for young adults in the United States.

In recent years, concerns about the changing nature of psychological distress among students who seek services from college or university counseling centers have increased. A

study examining archival data across 13 years from a university counseling service at large Midwestern University found a steady increase in the percentage of students experiencing problems (Sagun, 2007). The number of students each year with depression doubled, the number who reported feeling suicidal tripled, and the number seen after a sexual assault quadrupled. In 2008 the National College Health Assessment found that more than one in three undergraduates reported "feeling so depressed it was difficult to function" at least once in the previous year, and nearly one in 10 reported "seriously considering attempting suicide" in the previous year. In a similar vein, Sharpe and colleagues (2006) reference a large body of research that indicates undergraduates may be at an increased risk for developing psychological disorders and alcohol tobacco and other drug (ATOD) problems in comparison to the general population of same aged peers (Adlaf, Gliksman, Demers, & Newton-Taylor, 2001; Leeman & Wapner, 2001; Oliver, Reed, & Smith, 1998; Roberts, Golding, Towell, & Weinreb, 1999). College students suffer social and academic consequences related to the experience of significant distress (Sharpe, 2006). A major cause of attrition in first-year college students may be emotional in nature (Pritchard & Wilson, 2003). These data are somewhat surprising when one considers that emerging adults are the least likely to receive mental health care and demonstrate the lowest rates of help-seeking behaviors (SAMSHA, 2005). Additionally, multiple studies indicate that untreated mental disorders are highly prevalent in student populations (Hunt & Eisenberg, 2010).

Current Study

Given the importance of promoting help-seeking behaviors among individuals of the emerging adulthood developmental period and the promising work using the social norms

approach, the aim of the current study is to extend social norms theory and approach to the domain of help-seeking. The negative relationship between the perceptions of stigma and help-seeking is well documented (Corrigan, 2004). When individuals perceive that others do not seek help when experiencing distress, or that others may evaluate them negatively for seeking psychological help, they are less likely to seek out help. It is important to note that it is the perceptions of others' beliefs and attitudes that influence personal attitudes and willingness to seek professional counseling. But, are these perceptions accurate? And, can willingness to seek help be increased by changing the perception of the acceptability of seeking help?

To apply effectively the social norms model to help-seeking there are a number of questions that must be answered beforehand (Berkowitz, 2003). It is important that the "problem" is defined and put into context. For example, what misperceptions exist with respect to help-seeking? Are there over- or under-estimations of attitudes and/or behavior about the acceptability of seeking help? Do the majority of individuals in a group hold these misperceptions? Is being a student a salient aspect of identity? In other words, do peer norms influence individual attitudes and behaviors? What is the hypothesized effect of these misperceptions? And, finally, what changes are predicted if protective behaviors that already exist in the population are supported and increased? The goal of this exploratory study is to answer the research questions presented.

Research question 1: What misperceptions exist with respect to help-seeking? Do the majority of individuals in a group or community hold these misperceptions?

Hypothesis 1: Freshmen will misperceive peers' attitudes towards seeking psychological help as more negative than reality.

Hypothesis 1a: Freshmen men will have greater misperceptions in a negative direction about other men's help-seeking behaviors than women will have about other women's help-seeking behaviors.

Hypothesis 1b: Women will have greater misperceptions in a negative direction about men's help-seeking behaviors than women will have about women's help-seeking behaviors.

Research question 2. Do these misperceptions influence one's attitude or willingness to seek help? What is the meaning and function of misperceptions for individuals and groups? What is the hypothesized effect of these misperceptions?

Hypothesis 2: Misperceptions of normative attitudes about the acceptability of seeking psychological help will influence personal willingness to seek help.

Hypothesis 2a: Misperceptions of normative behaviors related to seeking help will influence personal willingness to seek help.

Research question 3. Are other college students a salient reference group for college freshmen?

Hypothesis 3: The majority of freshmen will rate that they strongly identify with other college students.

Methods

Participants

Participants ($N = 3021$) included freshmen from five colleges and universities in the Mid-Atlantic region (School A, $n = 596$ of approximately 731 total freshmen; School B, $n =$

260 of 344 total freshmen; School C, *n* = 1,273 of 3,615 total freshmen; School D, *n* = 470 of 552 total freshmen; School E, *n* = 422 of 562 total freshmen). See Table 1 for a summary of participant demographic data and participant characteristics.

Comparability of Schools. The different samples across schools were very comparable with regard to demographic characteristics; only minor differences were observed. At four of the schools, the majority of the sample (>50%) were female; however, at a fifth school, males were the majority at 54%. There were minor differences with regard to racial composition of the samples as well. At two of the schools, approximately half of the participants were White with African Americans comprising 20 and 32% of the sample. At the other three schools, 74% of the participants were White with African Americans comprising less than 13% of the participants. Students reporting that they have had three or more close friends or family members seek help ranged from 17% to 32% across schools. With regard to religiosity, at three schools over 20% of the sample endorsed that they were not at all religious while at the other two schools 12 and 16% endorsed that they were not at all religious.

Table 1.

Participant Demographics and Characteristics

Demographic Variables	***n***	**%**
Age		
18	2,631	87
19	257	9
20+	133	4
Sex		
Male	1248	45
Female	1673	55
Race/Ethnicity		
African American	486	17
Asian American	214	7
Hispanic, Latino	137	5
Am. Indian/Pac. Islander	43	1
Arab/Middle Eastern	62	2
White/Non Hispanic	1829	62
Other	166	6
International Status		
International Student	111	4
Religiosity		
Not at All	667	23
Somewhat	862	30
Moderately	1020	35
Very	341	12
Friends/Family Help		
None	1035	35
1-2	1207	41
3+	682	23
Interest in Helping Profession	1213	42
Have Sought Help		
Total	702	24
Male	243	19
Female	459	29

When comparing independent and dependent variables across groups, again, there were minor differences for only a few of the variables. For perception of friends and family who have sought help, two schools deviated slightly from the mean, which was roughly 20%; one school was at the low end with 12% of participants answering "none" and another school at the high end with 32% of the participants answering "none." At one school, fewer students answered in the negative direction on items assessing perceptions of male and female help seeking behavior, perceptions of willingness to seek help and perception of help seeking as a strength or weakness. At all schools but one, over 75% of the freshmen class participated in the survey; therefore, the sample closely matches the demographics for the entire freshmen class. At one school, School C, the percent participation was 35% (the rest did not have the opportunity to participate due to technical difficulties). Table 2 presents the demographic comparison of the sample to the entire freshmen class. As can be seen, there are no significant demographic differences between those who had the opportunity to participate and the entire freshmen class. In summary, although there were minor differences in the samples across schools these differences are not of clinical significance and therefore do not preclude combining the samples into one larger sample for further analysis.

Table 2.

A Demographic Comparison of the School C Sample and the Entire Freshman Class

	School C Freshman Class (N = 3, 615) %	Sample (n = 1,273)
Sex		
Male	40	39
Female	58	61
Race/Ethnicity		
African American	18	20
Asian American	15	13
Hispanic, Latino	7	6
Am. Indian/Pac. Islander*	N/A	1
Arab/Middle Eastern	N/A	3
White/Non Hispanic	50	50
Other	4	6
International Status		
International Student	2	4

*Note: School C demographic data for the freshman class was obtained from the university's admissions website; percent of students who identified as Native American was less than 1% and percent of students who identified as Hawaiian or Pacific Islander was less than 1%

Data Collection

Data was collected using TurningPoint audience response system ("clickers"). Clickers are compatible with PowerPoint and allow for the collection of real-time audience responses. There are three basic elements that make up a typical audience response system: polling software, response keypads, and a response receiver. Questions are presented to the audience through the use of Powerpoint, answers are keyed using small handheld wireless devices ("clickers"), and data is transmitted to Excel and stored by clicker id number. Personal responses can be immediately displayed. Using clickers to collect data presents several advantages. This methodology allows for easy storage and retrieval of information, provides a non-judgmental and non-threatening format for self-report, is relatively quick, easy, and inexpensive, reduces margin for data entry error, and allows one to access large

amounts of data collected within a group context (LaBrie, Earlywine, Lamb, & Shelanksy, 2006). Although participants read questions and respond in a group setting, the use of handheld devices allows participants to respond relatively privately and confidentially. In a study comparing electronic-keypad responses to paper-and-pencil questionnaires in group assessments of alcohol consumption and related attitudes ($N = 107$), LaBrie and colleagues (2006) found that responses from both methodologies were highly correlated and not significantly different. Correlations ranged from .76 to .98 and were all significant at $p < .001$. Several social norms interventions have made use of this technology (Hancock, Hill, & Barber, 2009; LaBrie, Hummer, Huchting, & Neighbors, 2009; LaBrie, Hummer, Neighbors, & Pederson, 2008).

Design and Procedure

This study employed a cross-sectional research design to assess misperceptions about the social norms related to seeking psychological help. Prior to the first week of classes during the fall semester, students in their first year participated in a talk presented by Linda Hancock, F.P.N. Ph.D.; the wellness talk was sponsored by each respective college or university. The content of these wellness orientation sessions included information about substance use and safe sex practices. At the start of this talk (before the wellness content was covered), students were asked questions about their personal attitudes and behaviors towards seeking psychological help and their perceptions of peers' attitudes and behaviors towards seeking psychological help. Participants were told that their responses to the questions were anonymous and would be used in a research study examining perceptions about help-seeking. Participation was voluntary and if students chose not to participate, they were told to refrain

from keying in their answer. Students under the age of 18 were asked not to participate. Responses were collected through the use of a student response system, "clickers," that stored data in Excel by clicker ID. At the end of the assessment, students were provided with brief educational information about the counseling services available to them on campus. The study was approved by the necessary Institutional Review Boards.

Assessment/Measures

Demographic information (See items 1-4, 16 and 17 in Appendix A). Participants were asked to provide relevant demographic information including: age, sex, race/ethnicity, international status, religiosity, and interest in helping profession (e.g. Social Work, Psychology, Nurse, or Counseling). Students who identified as Hispanic/Latino, American Indian/Pacific Islander, Arab/Middle Eastern, and Other were combined into an "Other" race/ethnicity category for statistical analyses.

Reality and perception questions about seeking psychological help (See Appendix B). To assess differences between perceptions and reality about attitudes and behaviors related to seeking psychological help, participants were asked to answer questions related to their views about help-seeking. Specifically, participants were asked a number of "reality" questions which were paired with "perception" questions. "Reality" questions assessed personal attitudes and behaviors related to seeking psychological help. "Perception" questions assessed the participant's perceptions about others' attitudes and behaviors related to seeking psychological help. For example, a reality question was "If 1 is a sign of personal weakness and 8 a sign of personal strength, how do YOU rate getting help from a mental health professional." The paired perception question stated "If 1 is a sign of personal

weakness and 8 a sign of personal strength, how would MOST [University] freshmen rate getting help from a mental health professional." Participants were asked to choose a number along the continuum from 1 "weakness" to 8 "strength."

Willingness to seek psychological help (See item 11 in Appendix A). To assess an individual's willingness to seek psychological help, the participant was asked to indicate the degree to which they agreed with the statement "If I had an emotional, relational, or psychological problem I'd seek help from a mental health professional." Responses ranged from 1 "Strongly Disagree" to 6 "Strongly Agree."

Saliency of referent norms (See item 18 in Appendix A). Saliency of referent norms was assessed by asking participants to rate the extent to which they identified as a [University] student. Responses ranged from 1 "Not at all/Never" to 5 "Completely/Always."

Misperception. In order to assess attitude and behavior misperceptions, responses to the "reality" questions were graphed to determine the "actual" or "true" attitudes and behaviors of most freshmen within the sample; this is referred to hereafter as the "reality." Next, misperception values were assigned to each participant based on the deviation of his or her perception of reality score from the "reality" score. Students who underestimated attitudes and behaviors were assigned negative misperception scores based on the magnitude of the discrepancy. Students who accurately perceived the attitudes and behaviors of others' received a misperception score of zero. Students who overestimated attitudes and behaviors were assigned positive misperception score based on the magnitude of the discrepancy. When the phrase "negatively misperceived" is used in the sections that follow, this means that participants perceive others' attitudes and behaviors as less widespread and accepting

than what is true for most. Reality and perception questions about having sought help were gender specific. To answer Hypothesis 1, an additive attitude misperception scale was created by combining scores on the misperception of others' willingness to seek help and misperception of others' perceptions of seeking help as a strength or weakness variables.

The item that assessed participants' beliefs about how they might interact with someone who had sought help from a mental health professional, a measure of attitude towards seeking help, was not used in the analyses. There was not a clear response endorsed by "most" students; in other words, 28% of students responded that they would be more careful in how they related, 36% reported that knowing that a peer had sought help from a mental health professional would not affect how they interact with that peer, and 36% responded that they would be more willing to share with another student who had sought help. The three responses to this item did not offer enough variance to determine how "most" students would respond.

Results

Data Cleaning

The data were first checked for normality, missing data, and outliers. Participants who reported that they were under the age of 18 were removed from subsequent analyses. Cases that were missing sex and cases missing scores on more than 50% of the items were deleted.

Hypothesis Testing

Hypothesis 1. It was hypothesized that freshmen will misperceive peers' attitudes towards seeking psychological help as more negative than reality. A one-sample t-test, with a

test value of negative two, confirmed this hypothesis. A test value of negative two allowed for some degree of misperception. The number of freshmen who negatively misperceived others' attitudes towards seeking help was significantly greater than the number of freshmen who only slightly negatively misperceived or accurately perceived others' attitudes towards seeking help (M = -2.93, SD = 2.02), t (2768) = -24.12, $p < .001$. In other words, the number of participants who misperceived at -3 or higher was significantly greater than those who misperceived at -2, -1 or 0. None of the participants overestimated the acceptability of seeking help. See Figure 1 for an illustration of the extent to which participants negatively misperceived others' attitudes towards seeking psychological help.

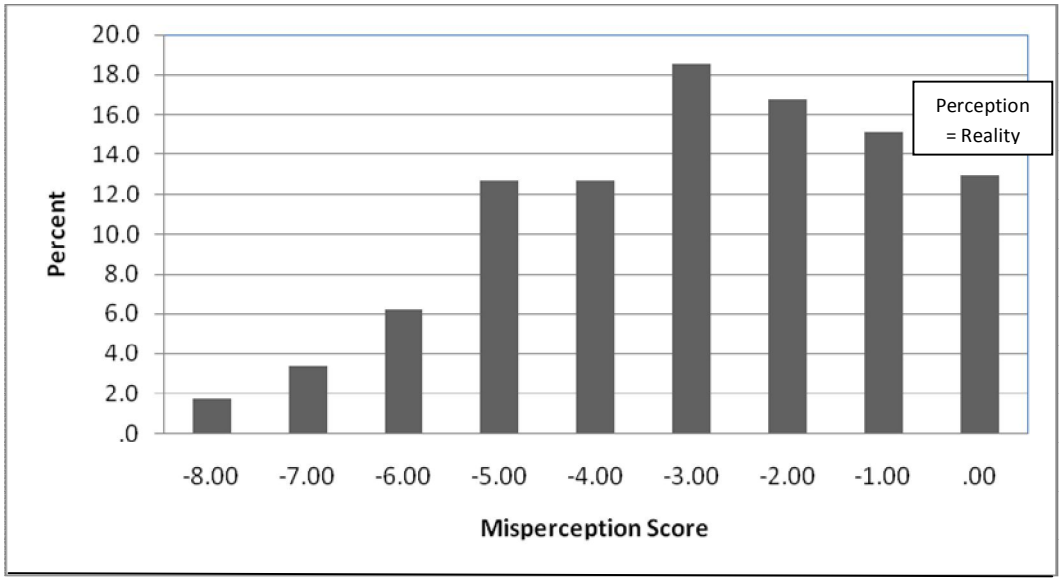

Figure 1. Misperception of attitudes. This figure illustrates the extent to which participants negatively misperceived others' attitudes; the negative values represent negative misperception and zero represents correct perception of reality.

Hypothesis 1a. It was hypothesized that freshmen men will have greater misperceptions in a negative direction about other men's help-seeking behaviors than women will have about other women's help-seeking behaviors. An independent-samples t-test

confirmed that men had greater misperceptions in a negative direction about other men's help seeking behaviors (M = -0.56, SD = 1.63) than women had about women's help seeking behaviors (M = -0.12, SD = 1.76), t (2948) = -7.03, $p < .001$. See Figures 2 and 3 for an illustration of misperceptions about behavior for men and women.

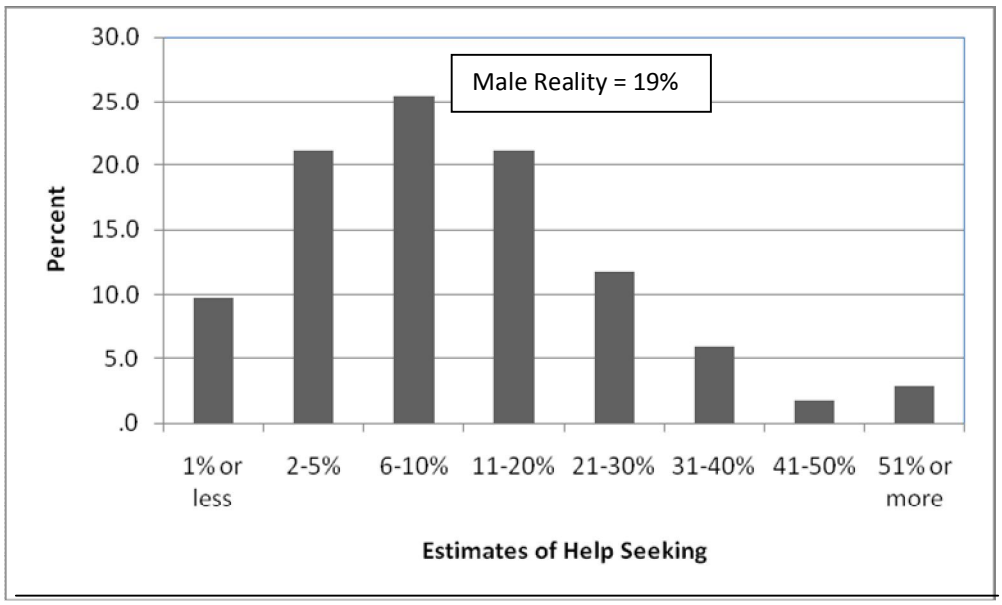

Figure 2. Male misperception of other male help seeking behaviors. This figure illustrates the degree to which men underestimated and overestimated the rate of help seeking behavior for other men; 19% of males from the sample had sought help, most participants underestimated this value.

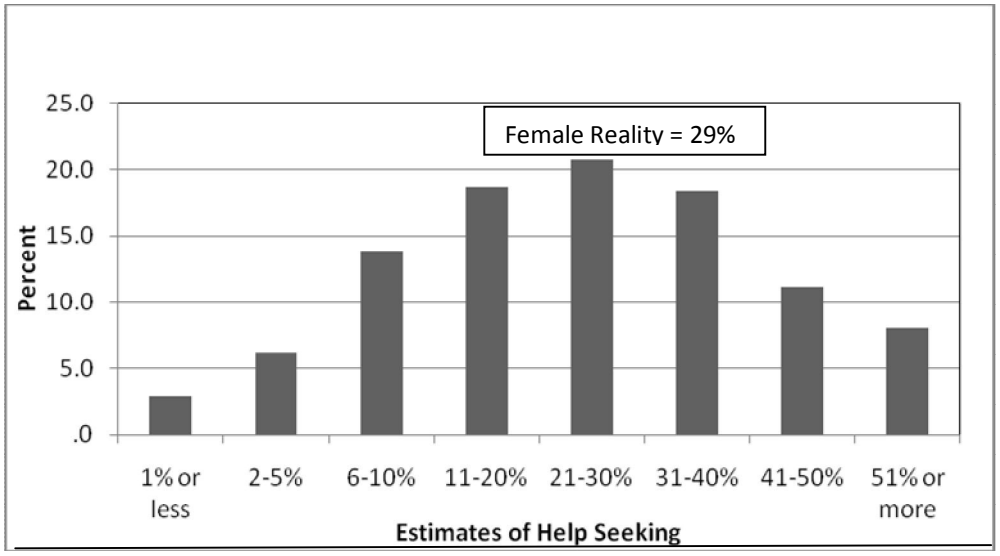

Figure 3. Female misperception of other female help seeking behaviors. This figure illustrates the degree to which women underestimated and overestimated the rate of help seeking behavior for women; 29% of women from the sample had sought help, there were both underestimations and overestimations of this value.

Hypothesis 1b. It was hypothesized that women will have greater misperceptions in a negative direction about men's help-seeking behaviors than women will have about women's help-seeking behaviors. A paired samples t-test confirmed that women misperceived men's help seeking behaviors more negatively (M = -0.75, SD = 1.55) than they misperceived women's help seeking behaviors (M = -0.12, SD = 1.55), t (1592) = 14.19, p < .001. See figures 3 and 4 for illustrations of women's misperceptions about female and male help seeking behaviors respectively.

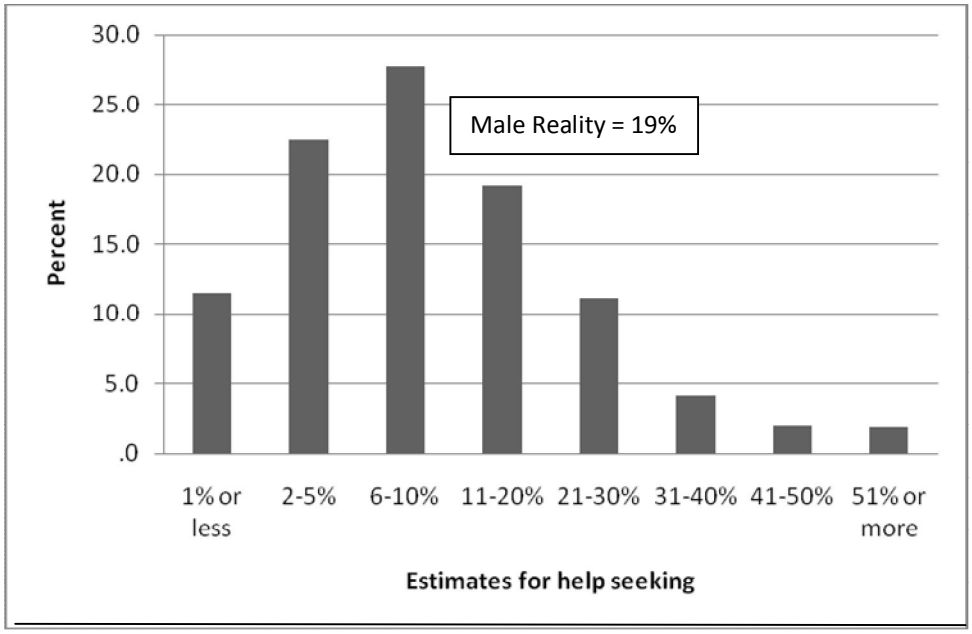

Figure 4. Female misperception of male help seeking behaviors. This figure illustrates the degree to which women underestimated and overestimated the rate of help seeking behavior for men; 19% of men from the sample had sought help, most women underestimated this value.

Hypothesis 2 and 2a. It was hypothesized that misperceptions of normative attitudes (2) and normative behaviors (2a) about the acceptability of seeking psychological help would influence personal willingness to seek help. Hierarchical regression was used to determine the influence of attitude and behavior misperception on willingness to seek help. Participants' willingness to seek help was entered as the criterion variable (see Table 3 for betas and coefficients for each step). Sex was entered at step 1. As expected, sex accounted for a significant proportion of the variance of one's willingness to seek help, $R^2 = .03$, F (1, 2552) = 77.35, $p < .001$. Previous help-seeking status, yes or no, was entered at step 2. The addition of the help-seeking status variable accounted for a significant proportion of the variance, $\Delta R^2 = .04$, F (2, 2551) = 95.69, $p < .001$. At step 3, the behavior misperception variable was entered. The addition of the misperception variable accounted for a significant,

though small, proportion of the variance, $\Delta R^2 = .005$, F (3, 2550) = 70.19, $p < .001$. In step four, the attitude misperception variables (misperception of strength/weakness and misperception of willingness to seek help) were entered. These attitude misperception variables accounted for a significant proportion of the variance in willingness to seek help, $\Delta R^2 = .23$, F (5, 2548) = 220.63, $p < .001$; misperception of others' willingness beta value (beta = .465) was larger than the beta value for misperception of strength/weakness variable (beta = .054). In sum, the variables entered into the model accounted for approximately 30% of the variance in willingness to seek help. In the final model, the attitude misperception variable accounted for the most variance in one's willingness to seek help, thus confirming hypothesis two. The behavior misperception variable was also statistically significant, confirming hypothesis 2a; however, this variable contributed very little to the total variance in willingness to seek help and, thus, is of little clinical value.

Table 3.

Summary of Hierarchical Multiple Regression Analysis for Variables Predicting Willingness to Seek Help (N = 2554)

	B	*SE B*	*ß*
Step 1			
Sex	.50	.06	.172**
Step 2			
Sex	.44	.06	.149**
Help	.68	.07	.202**
Step 3			
Sex	.41	.06	.140**
Help	.62	.07	.183**
Behavior Misp.	.07	.02	.083**
Step 4			
Sex	.26	.05	.089**
Help	.50	.06	.148**
Behavior Misp.	.04	.02	.048*
Misp. Strength/Weakness	.05	.02	.059*
Misp. Willingness	.71	.03	.465**

Note: R^2= .029 for Step 1, F (1, 2552) = 77.35; ΔR^2= .040 for Step 2, F (2, 2551) = 95.69*; ΔR^2= .006 for Step 3, F (3, 2550) = 70.19*; ΔR^2= .226 for Step 4, F (5, 2548) = 70.19*; Misp. = Misperception

*p < .05, **p < .001

Hypothesis 3. It was hypothesized that most participants would identify as a student from their respective universities. Participants were asked to rate the extent to which they identified as a [University] student, with responses ranging from 1 "Not at all/Never" to 5 "Completely/Always." A one sample t-test, with a test value of 3 ("Somewhat/Sometimes"), revealed that most students identify as a college or university student ($M = 3.69$, $SD = 1.03$). Said another way, the number of participants who reported identifying "somewhat", "quite a bit", or "completely" as a college or university student was significantly greater than those students who reported identifying "not very much" or "not at all" as a college or university student, $t\ (2821) = 35.85$, $p < .001$.

Exploratory Analyses

Willingness to seek help. To more fully understand the way that negative misperceptions influence willingness to seek help, a second model was explored. In this model, individuals with positive misperception and accurate perception scores were removed from the analysis, thus only a subset of the sample was used. Hierarchical regression was used to determine the influence of each negative misperception of attitude variable (entered separately) and the negative misperception of behavior on personal willingness to seek help. Participants' willingness to seek help was entered as the criterion variable (see Table 4 for betas and coefficients for each step). Sex was entered at step 1. As expected, sex accounted for a significant proportion of the variance of one's willingness to seek help, $R^2 = .04$, $F\ (1, 592) = 24.89$, $p < .001$. Previous help-seeking status, yes or no, was entered at step 2. The addition of the help-seeking status variable accounted for a significant proportion of the variance, $\Delta R^2 = .04$, $F\ (2, 591) = 27.14$, $p < .001$. At step 3, the negative misperception of

behavior variable was entered. The addition of the negative misperception variable accounted for a significant, though small, proportion of the variance, $\Delta R^2 = .01$, $F\ (3, 590) = 20.11$, $p < .001$. In step four, the negative misperception of strength/weakness variable was entered. The addition of this variable accounted for a significant proportion of the variance in willingness to seek help, $\Delta R^2 = .002$, $F\ (4, 589) = 15.39$, $p < .001$. Finally, in step 5, negative misperception of others' willingness to seek help was entered. The addition of this misperception variable accounted for the most variance, $\Delta R^2 = .09$ $F\ (5, 588) = 26.48$, $p < .001$. In sum, the variables entered into the model accounted for approximately 18% of the variance in willingness to seek help. In the final model, the negative misperception of others' willingness to seek help variable accounted for the most variance (9%), in one's personal willingness to seek help; the negative misperception of behavior and negative misperception of strength/weakness variables were not significant in the final model.

Table 4.

Summary of Exploratory Hierarchical Multiple Regression Analysis for Variables Predicting Willingness to Seek Help (N = 593)

	B	*SE B*	*ß*
Step 1			
Sex	.55	.11	.201**
Step 2			
Sex	.51	.11	.187**
Help	.80	.15	.210**
Step 3			
Sex	.53	.11	.194**
Help	.76	.15	.201**
Negative Misp. Behavior	.15	.06	.094*
Step 4			
Sex	.53	.11	.194**
Help	.77	.15	.203**
Negative Misp. Behavior	.15	.06	.091*
Neg. Misp. Str./Wk.	.04	.04	.043
Step 5			
Sex	.41	.10	.152**
Help	.71	.14	.186**
Negative Misp. Behavior	.09	.06	.055
Neg. Misp. Str./Wk.	-.001	.04	-.001
Neg. Misp. Willingness	.62	.08	.307**

Note: R^2 = .04 for Step 1, F (1, 592) = 24.89*; ΔR^2 = .04 for Step 2, F (2, 591) = 27.14*; ΔR^2 = .01 for Step 3, F (3, 590) = 20.13*; ΔR^2 = .002 for Step 4, F (4, 589) = 15.39 *; ΔR^2 = .089 for Step 5, F (5, 588) = 26.48*; Misp. = Misperception

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

Differences between participants who reported that they were more willing to seek help and participants who were less willing or not willing to seek help were examined. For the purposes of this analysis, participants who reported that they "somewhat agree," "agree," or "strongly agree" when asked if they would be willing to seek help were grouped together as "willing to seek help" (n = 1752). Participants who reported that they "somewhat disagree," "disagree," or "strongly disagree" were grouped together as "not willing to seek help" (n = 1131). Participants who reported that they were not willing to seek help endorsed significantly greater negative misperceptions of others' willingness to seek help (M = -1.39, SD = .92) when compared with those who were willing to seek help (M = -.49, SD = .78), t (2071.46) = -26.64, p < .001. Similarly, those who reported that they were not willing to seek help (M = -2.38, SD = 1.59) had significantly greater negative misperception on the perception of seeking help as a strength or weakness variable than those who reported that they were willing to seek help (M = -1.90, SD = 1.54), t (2727) = -7.79, p < .001. Finally, those who reported that they were not willing to seek help (M = -.60, SD = 1.72) had significantly greater negative misperceptions about rates of help seeking behavior when compared with participants who reported that they were willing to seek help (M = -.13, SD = 1.68), t (2819) = -7.191, p < .001. In summary, those participants who reported that they were not willing to seek help had greater negative misperceptions about others' attitudes and behaviors related to help seeking than participants who reported that they were willing to seek help.

Differences by sex. Independent samples t-tests were conducted to compare willingness to seek help and perception of seeking help as a strength or weakness for men

and women (see table 5 for means and standard deviations). Women scored significantly higher on the willingness to seek help variable when compared to men, t (2552.73) = -9.2, p < .001. Similarly, there was a significant difference in scores for perception of seeking help as a strength or weakness with women scoring higher than men, t (2454.452) = -8.944; p < .001. Misperceptions about others' willingness to seek help and misperceptions about seeking help as a strength or weakness were also examined using independent samples t-tests. Scores for misperception of strength/weakness were significantly different; men endorsed greater misperception in the negative direction than women, t (2673.937) = -2.721, p = .007. Finally, the scores for misperception of others' willingness to seek help were significantly different; men endorsed greater misperception in the negative direction than women, t (2611.526) = -6.696, p < .001. A Chi square test for independence (with Yates Continuity Correction) was used to examine differences in help seeking for men and women. There was a significant association between sex and help seeking, X^2 (1, n = 2914) = 38.638, p < .001, phi = 0.116; 29% of women and 19% of men reported that they had sought help from a mental health professional.

Table 5.

Differences by Sex

	Female *M (SD)*	Male *M (SD)*
Willingness**	3.93 (1.34)	3.43 (1.53)
Strength Weakness**	5.70 (2.09)	4.92 (2.41)
Misperception of Willingness**	-0.74 (0.88)	-0.97 (1.00)
Misperception of Strength/Weakness*	-2.02 (1.57)	-2.19 (1.62)

Note: For willingness to seek help higher scores indicate greater willingness to seek help; for perceptions of seeking help as a strength or weakness, higher scores indicate strength; for misperception scores, higher negative scores reflect greater misperception.
* p < .05, ** p < .001

Differences by help-seeking status. Participants who reported that they had sought help in the past from a mental health professional scored significantly higher on the willingness to seek help variable, t (1261.595) = -12.586, $p < .001$, and the perception of seeking help as a strength/weakness variable, t (1203.265) = -7.448, $p < .001$, than those participants who had not sought help. Help seekers endorsed significantly less negative misperception of others' willingness to seek help, t (1266.04) = -6.272, $p < .001$. There was no significant difference between help seeking status for scores on the misperception of others' perception of seeking help as a strength or weakness variable, t (1200.981) = -.899, $p = .369$. See Table 6 for means and standard deviations. There were significant differences between male and female help seekers. Female help seekers scored higher on the willingness to seek help, t (675) = -2.496, $p = .013$, and the perception of seeking help as a strength/weakness variables, t (412.37) = -3.76, $p < .001$, and lower on the misperception of willingness variable, t (425.349) = -2.344, $p = .020$, than male help seekers. There were no significant differences in scores on the misperception of strength/weakness variable between male and female help seekers, t (448.10) = -.682, $p = .496$. See Table 7 for means and standard deviations.

Table 6.

Differences by Help Seeking Status

	Yes (n = 702) *M (SD)*	No (n = 2212) *M (SD)*
Willingness**	4.27 (1.30)	3.53 (1.45)
Strength Weakness**	5.90 (2.09)	5.18 (2.29)
Misperception of Willingness**	-0.66 (0.86)	-0.90 (0.97)
Misperception of Strength/Weakness	-2.06 (1.53)	-2.12 (1.61)

Note: For willingness to seek help, higher scores indicate greater willingness to seek help; for perceptions of seeking help as a strength or weakness, higher scores indicate strength; for misperception scores, higher negative scores reflect greater negative misperception.
** $p < .001$

Table 7.

Differences by Sex and Help Seeking Status

	Help Seeking		Not Help Seeking	
	Male (n =243) *M* (*SD*)	Female (n =459) *M* (*SD*)	Male (n =1064) *M* (*SD*)	Female (n =1148) *M* (*SD*)
Willingness*	**4.10 (1.39)**	**4.36 (1.24)**	3.28 (1.52)	3.75 (1.35)
Strength/Weakness**	**5.47 (2.20)**	**6.13 (1.99)**	4.84 (2.43)	5.51 (2.12)
Misp.of Willingness*	**-.77 (.937)**	**-.60 (.82)**	-1.03 (1.02)	-.79 (.90)
Misp. of Strength/Weakness	-2.11(1.62)	-2.03 (1.49)	-2.20 (1.61)	-2.04 (1.61)

Note: For willingness to seek help higher scores indicate greater willingness to seek help; for perceptions of seeking help as a strength or weakness, higher scores indicate strength; for misperception scores, higher negative scores reflect greater negative misperception.
** $p < .001$; * $p < .05$

Differences by race/ethnicity. A one way ANOVA was conducted to examine the influence of race/ethnicity on willingness to seek help, perceptions of seeking help as a strength or weakness, misperceptions of others' willingness to seek help, and misperceptions of others' perceptions of seeking help as a strength or weakness (See Table 8 for means and standard deviations). There were no significant differences in scores on the willingness to seek help, F (3, 2804) = .53, p = .665, or perceptions of help as a strength or weakness variables, F (3, 2679) = .28, p = .840. There were statistically significant differences on the misperception of willingness, F (3, 2847) = 6.63, p < .001, and misperception of strength/weakness variables, F (3, 2759) = 2.691, p = .045. Post hoc comparison using the Hochburg post hoc test indicated that the mean scores for students who identified as White (M = -.79, SD= .92) was significantly different from those who identified as African American (M = -.99, SD = 1.00) on the misperception of willingness variable. Post hoc comparison using the Games Howell test did not reveal significant differences in scores on the misperception of strength/weakness variable, despite the statistically significant F statistic reported by the ANOVA. This failure to detect significant differences in scores is likely the result of unequal group size as well as differences in population variance; further, examination of the mean scores reveals minimal differences. A Chi square test for independence was used to examine differences in help seeking for the different race/ethnicity groups. There was a significant association between race/ethnicity and help seeking, X^2 (3, n = 2840) = 63.79, p < .001, phi = 0.15; 29% of those who identified as White reported that they had previously sought help, 14% of African American, 12% of Asian American, and 23% of those who identified as Other reported that they had previously sought help.

Table 8.

Differences by Race/Ethnicity

	White (n = 1829)	African American (n = 486)	Asian American (n = 214)	Other (n = 408)
	M (*SD*)	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)
Willingness	3.74 (1.42)	3.70 (1.52)	3.68 (1.32)	3.65 (1.54)
Strength/Weakness	5.34 (2.24)	5.43 (2.35)	5.27 (2.07)	5.37 (2.43)
Misp. Willingness**	**-.79 (.92)**	**-.99 (1.00)**	-.80 (.88)	-.91 (.99)
Misp.Strength/Weakness	-2.03 (1.52)	-2.23 (1.74)	-2.17 (1.59)	-2.20 (1.69)

***p* = .05

Discussion

The purpose of this study was to assess the applicability of the social norms model to the domain of psychological help seeking. To do this, several questions had to be answered (Berkowitz, 2003), including: (1) What misperceptions exist with respect to help-seeking? Do the majority of individuals in a group hold these misperceptions? (2) Is being a student a salient aspect of identity? In other words, do peer norms influence individual attitudes and behaviors? (3) What is the hypothesized effect of these misperceptions? What changes are predicted if protective behaviors that already exist in the population are supported and increased?

The pages that follow will answer these guiding questions by summarizing the findings. Next steps for using the data to create social norm messages will be presented as well as considerations for extending the social norms method of intervention for help seeking to benefit other communities. Finally, limitations of the study will be addressed.

What misperceptions exist with respect to help-seeking? Do the majority of individuals in a group hold these misperceptions?

It was hypothesized that: (1) freshmen will misperceive peers' attitudes towards seeking psychological help as more negative than reality, (1a) freshmen men will have greater misperceptions in a negative direction about other men's help-seeking behaviors than women will have about other women's help-seeking behaviors, and (1b) women will have greater misperceptions in a negative direction about men's help-seeking behaviors than women will have about women's help-seeking behaviors. All three hypotheses were confirmed.

Students significantly misperceived others' attitudes and behaviors related to help-seeking. The "reality" for this sample was that most students reported that they were willing to seek help; 61% of freshmen answered somewhat agree, agree, or strongly agree on the willingness to seek help item. Also, most students perceived seeking help as a personal strength; on a scale ranging from 1 "weakness" to 8 "strength," 67% of freshmen scored 5, 6, 7, or 8 and 52% endorsed a score of 6, 7, or 8. Interestingly, not one person over estimated others' attitudes related to help-seeking as more accepting that reality. Many students accurately perceived others' willingness to seek help (48%) and fewer accurately perceived others' perceptions of seeking help as a strength or weakness (21%), but few (13%) accurately perceived both. Most participants negatively misperceived others' attitudes towards seeking help. In other words, students perceived others' attitudes towards seeking help as more negative, or less accepting, than reality.

Students were asked to estimate the percent of male and female freshmen who they thought had sought help in the past. Misperceptions about help seeking behaviors were observed for both men and women. The "reality" for this sample was that 19% of men and

29% of women reported that they had previously sought help from a mental health professional. Men more negatively misperceived, or underestimated, the help seeking behaviors of other male freshmen, when compared with women's perceptions of female help seeking behaviors; 56 % of males under-estimated the number of males who had previously sought help (negative misperception), 22% over-estimated the number of males who had sought help, and 21% of males had accurate perceptions of other male's help seeking behaviors. For women, 41% negatively misperceived the rate of help seeking behaviors for other female freshmen, 37% overestimated the help seeking behaviors of other women, and, similar to male freshmen, only 21% accurately perceived reality. Women also had greater misperceptions in a negative direction about men's help-seeking behaviors than they had about other women's help-seeking behaviors. Implications for these differences will be discussed in a later section.

In summary, most students in this sample reported a willingness to seek help and viewed seeking help as a personal strength as opposed to a personal weakness. Most students, however, misperceived others' attitudes about help seeking and rates of help-seeking behavior. Importantly, most students negatively misperceived reality, underestimating the extent to which their peers are accepting of seeking psychological help and the rates of help seeking behavior. Misperception was more common than accurate perception. The perceived stigma regarding seeking psychological help is well documented (See Corrigan, 2004 for a review). The more that seeking help is perceived as stigmatizing, the less willing individuals are to share their experiences with seeking help or positive attitudes about help. The quieter individuals are about their personal views, the greater room for misperception.

Is being a student a salient aspect of identity? In other words, do peer norms influence individual attitudes and behaviors?

It is clear that freshmen misperceive others' attitudes and behaviors related to help seeking; however, to make use of the social norms method of intervention it is important to determine that peers are a salient referent group for freshmen. Said another way, if the target group is not a salient aspect of personal identity then correcting norms will be of little utility as we cannot assume that these norms will influence personal behavior and/or attitudes. This is a difficult question to assess given that students may have limited awareness about the relative influence others have on their personal attitudes and behaviors. In the present study, referent group saliency was assessed by asking students to rate the extent to which they identified as a student at their respective universities. Saliency increases as level of identification increases (Terry et al., 1999). It was hypothesized that most participants would identify as a student from their respective universities and this hypothesis was confirmed. The number of participants who reported identifying "somewhat", "quite a bit", or "completely" as a college or university student was significantly greater than those students who reported identifying "not very much" or "not at all." Students identified with other students, suggesting that peer norms likely influence personal attitudes and behaviors. This lends further support to the use of social norms interventions on college and university campuses.

What is the hypothesized effect of these misperceptions? And, finally, what changes are predicted if protective behaviors that already exist in the population are supported and increased?

This is perhaps the most critical question to answer. For a social norms campaign to work, there needs to be a relationship between misperception and the healthy/adaptive attitudes you want to promote. In this case, there must be a relationship between the misperception of others' attitudes and behaviors related to help seeking and personal willingness to seek help. A model was tested to examine the relative influence of a number of variables on willingness to seek help. In the first model, sex, previous help-seeking status, behavior misperception, and attitude misperception were all statistically significant predictors of willingness to seek help and accounted for approximately 30% of total variance in willingness to seek help; hypotheses 2 and 2a were confirmed. Misperception of others' attitudes towards seeking help accounted for the most variance at 23%. Although the misperception of behavior variable was statistically significant, it accounted for less than one percent of the total variance and thus has little clinical significance. In the second model, only negative misperception variables were entered to examine the effects of negative misperception on willingness to seek help; the model only included those participants who underestimated the acceptability of seeking help. Individuals who perceived accurately or who overestimated (positive misperception) the acceptability of seeking help were not included in the model. Attitude variables were also entered separately to learn more about the relative influence of each variable. As expected, sex and help seeking status accounted for a significant proportion of the variance in willingness to seek help. Negative misperception of behavior accounted for only a very small proportion of the variance, less than one percent, and was not significant in the final model. Interestingly, when entered separately, negative misperception of strength/weakness accounted for less than one percent of the variance and

negative misperception of willingness to seek help accounted for 9% of the variance. Both models indicate a significant relationship between willingness to seek help and misperception. It appears that misperceptions about others' willingness to seek help most influences personal willingness to seek help, above and beyond sex, previous help seeking status, and misperception of others' perceptions of seeking help as a strength or weakness.

The relationship between misperception and willingness to seek help is critical and lends strong support to the applicability of the social norms approach to help seeking. There are two hypothesized effects of misperception about help seeking. Students who reported that they were less willing or not willing to seek help had greater misperceptions of reality in the negative direction, for both attitude and behavior, than students who accurately perceived reality. For these students, negative misperceptions might function to maintain and/or support their less accepting attitudes towards seeking help. For example, if I perceive that others are not willing (or less willing) to seek help if needed, then I may view help seeking as an option that is not supported by others and report less personal willingness to seek help. I might also think that I will be judged negatively because of my choice to seek help, which would reduce the likelihood that I seek help. Students who reported that they were willing to seek help (the majority of the sample) also negatively misperceived reality. Misperception among these students contributes to a general culture of misperception , also referred to as pluralistic ignorance. In addition, these students may be less willing to encourage others to seek help or to talk about reaching out for help if they believe that their accepting views of help seeking are not supported by others. The reality for this sample is that most are willing to seek help. By highlighting this reality, this healthy norm, we can correct the misperception that exists

and potentially increase willingness to seek help among those who are less willing and reinforce the healthy attitudes held by others who are willing to seek help.

Next Steps and Implications

The data have demonstrated that, for this sample, misperception exists and has a negative relationship with willingness to seek help. The data have also demonstrated that students claim being a student as part of their identity. Thus, one can make a strong argument for the applicability of the social norms approach to the domain of psychological help seeking and efforts to normalize positive help seeking behaviors and attitudes.

Next steps involve the creation and dissemination of social norm messages derived from the data. It is not enough to simply gather data and describe relationships among variables. It is essential that the data collected is used to reach out and engage students, hopefully encouraging them to really think about what they believe or assume to be true. Social norm messages will be used to reflect back to students the "reality" about freshmen attitudes towards help seeking, thereby correcting misperception. It is important to note that the questions included in this study were chosen with the intention of determining whether or not the social norms approach could be used as a way to minimize barriers to seeking help; therefore, the number of campaigning messages that can be created is limited, but still possible. For example, in the freshmen dorms at each college or university, using the norms of that particular college or university, we can produce messages that read "*Most* freshmen reported that they would be willing to seek help if they were experiencing an emotional, relational, or psychological problem" or "*Most* freshmen view seeking help as a personal strength." Information about services available on campus would be paired with these

messages as well as information about the sample and date of collection, an effort to add credibility to the information presented.

As expected, there were significant differences between males and females with regard to misperception, as well as willingness to seek help and perception of seeking help as a strength or weakness. Men more negatively misperceived reality, underestimating the extent to which seeking help was seen as acceptable. Men also reported lower rates of help seeking and scored lower on the willingness to seek help and the perception of seeking help as personal strength or weakness variables. Furthermore, male help-seekers scored significantly lower than female help-seekers on willingness to seek help and perception of seeking help as strength or weakness and endorsed greater negative misperception about others' willingness to seek help. Nonetheless, misperceptions were still greater and more negative than reality. In fact, the reality for this sample was that most men (53%) reported that they would be willing to seek help and most men (59%) scored a 5, 6, 7, or 8 on the seeking help as a personal strength scale (where 1 = personal weakness and 8 = personal strength). Creating a campaign targeting men and sharing messages to men about men would be in line with other national efforts to reduce stigma among men (National Institute of Mental Health [NIMH], 2003). Women held similar misperceptions about men, underestimating the extent to which men were accepting of help seeking. These misperceptions about men perhaps reflect the cultural gender role stereotypes that influence our perceptions (Good, Sherrod, & Dillon, 2000). A campaign for men about men might also help to correct the misperceptions women have about men.

The social norm approach operates under the assumption that most individuals within a community are healthier than perceived (Berkowitz, 2004). Accordingly, only the minority engage in behaviors that are risky or endorse attitudes that are unhealthy or problematic. Social norms interventions communicate information about the healthy norms of a community to the entire community with three main goals: 1) correct misperception that exists within the community, 2) by correcting misperception, encourage more healthy attitudes and behaviors among the minority of the population who endorse unhealthy attitudes and/or behaviors, and 3) for those who do adopt the healthier attitudes and/or behaviors held by the majority, minimize the negative consequences associated with previous unhealthy/problematic attitudes or behaviors. Because social norms messages are delivered to an entire community, there will likely be differing effects based on personal attitudes and behaviors. For the majority of individuals who already endorse healthy attitudes and behaviors, social norms interventions will correct misperceptions that exist and will reinforce their healthy attitudes and behaviors. According to the contingency-consistency hypothesis (Acock & DeFleur, 1972) described previously, individuals are more likely to act in accordance with their attitudes when these attitudes are supported by the normative climate. Thus, correcting misperceptions will likely increase the probability that individuals act in line with their healthy views about help seeking. In summary, by correcting misperceptions about help seeking norms, those who were previously less willing to seek help may endorse greater willingness to seek help and will therefore be less likely to experience the negative effects mental health issues left untreated. Individuals who are willing to seek help will also benefit

by corrected misperception as their positive attitudes and behaviors will be highlighted as common to most students and reinforced (A. Keller, personal communication, April 1, 2011).

The social norm method of intervention is a data driven process. Thus, to extend the model to other schools and communities the perceptions and potential misperceptions of members within that particular community must be explored. It is possible, and probable, that misperceptions generalize across different communities. However, it is also possible that the misperceptions of one community do not generalize to other communities. One of the strengths of this type of intervention is that it is a data driven process. Learning about the community and understanding the problem before deciding upon the intervention message is imperative because the message has to be relevant in order to connect with members of the community. Not learning about the perceptions and misperceptions that exist within a particular community introduces the risk of creating a campaign that does not reflect or resonate with the target community, diminishing the effectiveness of this type of campaign.

Counseling centers on college campuses are often responsible for outreach efforts. Many times, these outreach efforts take the shape of a special talk or presentation of information in "high traffic" areas of campus. These outreach efforts have great value; however, it seems that the presentation of information does not always bring outreach into the personal sphere. While it is important for students to learn to recognize when they are in distress, it is arguably more important that students feel that they can reach out for help. This help can come from a friend, trusted other, or a mental health professional. The social norms approach to intervention offers a way to strengthen outreach efforts on university and college campuses by presenting information, highlighting the positive help seeking attitudes and

behaviors that exist within the community, and engaging students in a more personal way. Social norms campaigns typically use print media to disseminate information about healthy norms to the entire community. In addition to print media, this information can be brought into the classroom for a brief live interactive normative group intervention (BLING; LaBrie et al., 2008). Research supports the use of small group social norming as an effective way to reduce misperception (Hancock, Vatalaro Hill, & Barber, 2010; LaBrie et al., 2009; LaBrie et al., 2008). In a small group, we can first explore reality and perception using clickers and then create an opportunity for a dialogue to take place about perceptions of stigma. Encouraging discussion lessens silence that often surrounds the topic of help seeking and may help students to more accurately perceive others' attitudes towards help seeking. In other words, this type of intervention creates opportunity for more than just the dissemination of information. Furthermore, by pointing out that misperceptions exist students may begin to wonder about other areas where their assumptions guide their thinking/behaviors and the accuracy of those perceptions.

This social norms method of intervention has historically been used to promote safer drinking on college campuses. This study provides support to the applicability of this approach to the domain of help seeking. Future studies are needed to more fully explore the misperceptions that exist with regard to stigma and help seeking and then use the data to take the next step of creating and evaluating a social norms campaign. There may be culturally specific misperceptions that exist about help seeking and are best explored within in that cultural group. For example, there are likely misperceptions that are unique the military community or other ethnic, racial, or religious groups. This study did not provide large

enough samples of various racial and ethnic groups to explore the effects of race and ethnicity on attitudes and behaviors related to help seeking. It is important that future studies make efforts to better understand the perceptions and misperceptions that might exist within these groups. In order to gain a better sense of the perceptions and misperceptions that exist within a particular community, one might begin by speaking with members of the community about their views to gain an idea of the right types of questions to ask about help seeking. When gathering data, it is important to ask reality and perception questions to determine if a gap between reality and perception, or misperception, exists. If misperceptions exist, the goal is to then find ways to communicate accurate norms. Future research might also explore other domains where the social norms approach might be relevant – where it is the misperception of norms that guide attitudes and behaviors. Finally, the use of newer technologies, such as the audience response system used in this study, allows researchers to collect data from a large number of study participants. In addition, this type of technology can be used to engage participants by reflecting back the data collected "in vivo" which increases the saliency of information presented and creates opportunity for discussion. Future studies should continue to use this technology to collect data and influence change.

Limitations

There are several limitations to the present study worth discussing. The first is the issue of generalizability. As previously described, the social norms approach is a data driven process. The data were collected from a very large sample of freshmen attending five Mid-Atlantic colleges and universities. It is therefore likely that the results from this sample will generalize to the population from which the sample was collected. Although, data were

strikingly similar across the five universities, this does not mean that the results will necessarily generalize to other schools or universities that may be more or less liberal or conservative, urban or rural, private or public or in different regions of the country. A second limitation is representativeness of the sample with regard to race and ethnicity. The various racial/ethnic groups were not well represented in the sample, thus the ability to examine the influence of race was limited. It is important that future studies include a more balanced representation. Data for this study was collected using Turningpoint technology ("clickers"). Using this technology to gather data presented several advantages. These advantages included easy collection and storage of data, minimization of error related to data entry, and the ability to obtain data from a very large number of study participants. However, there were limitations for using this method of data collection as well. The number of items asked had to be limited, which in many ways sacrificed the depth and breadth of questions asked. Several single item measures assessed important and likely complex constructs. Future studies should address this limitation by using validated and/or multi-item scales to assess attitudes towards seeking help, willingness to seek help, and perception of stigma because single item measures introduce error and the reliability of such measures cannot be determined. This data could be enhanced by including qualitative data to further explore and describe misperceptions about help seeking, the influence of peers on attitudes and behaviors, and additional barriers to seeking help.

Final Thoughts

Reducing stigma and perceptions of stigma will lessen a significant barrier that prevents individuals from receiving support from professionals within the mental health

community. Destigmatizing psychological help seeking will likely require many forms of intervention, from interventions designed to target a specified at-risk population to interventions designed to reach and educate entire communities. The social norms approach to intervention offers one creative and engaging way to normalize help seeking attitudes and behaviors through highlighting the healthy norms within a community, thereby reducing perceived stigma.

List of References

List of References

Acock, A. C., & DeFleur, M. L. (1972). A configurational approach to contingent consistency in attitude–behaviour relationship. *American Sociological Review, 37,* 714–726.

Adlaf, E. M., Gliksman, L., Demers, A., & Newton-Taylor, B. (2001). The prevalence of elevated psychological distress among Canadian undergraduates: Findings from the 1998 Canadian Campus Survey. *Journal of American College Health*, *50*(2), 67-72.

American College Health Association. American College Health Association National College Health Assessment: Reference Group Data Report, Spring 2008. Baltimore, MD: American College Health Association, 2008.

Ajzen, I., & Fishbein. (1980). Understanding attitudes and predicting social behavior preferences of the lay public.

Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist, 55*(5), 469-480.

Angermeyer, M. C., Matschinger, H., & Riedel-Heller, S. G. (2001). What to do about mental disorder help-seeking recommendations of the lay public. *Acta Psychiatrica Scandinavica, 103,* 220–225.

Atkinson, D. R., & Gim, R. H. (1989). Asian-American cultural identity and attitudes toward mental health services. *Journal of Counseling Psychology, 36*(2), 209–212.

Berkowitz, A. (2004). An overview of the social norms approach. In L. Lederman, L. Stewart, F. Goodhart & L, Laitman (Eds.), *Changing the culture of college drinking: A socially situated prevention campaign*, Hampton Press.

Berkowitz, AD (2003). Editor, The Social Norms Resource Book, Little Falls, NJ: PaperClip Communications.

Berkowitz, AD (1997). From Reactive to Proactive Prevention: Promoting an Ecology of Health on Campus. Chapter 6 in P.C. Rivers and E. Shore (Eds.): A Handbook on Substance Abuse for College and University Personnel, Westport, CT: Greenwood Press.

Borsari, B., & Carey, K. B. (2003). Descriptive and injunctive norms in college drinking: A meta-analytic integration. *Journal of Studies on Alcohol, 64*(3), 331-341.

Cameron, L., Leventhal, E. A., & Leventhal, H. (1993). Symptom representations and affect as determinants of care seeking in a community-dwelling, adult sample population. *Health Psychology, 12,* 171–179.

Cialdini, R. B., & R. (1990). A focus theory of normative conduct: Recycling the concept of norms to reduce littering in public places. *Journal of Personality and Social Psychology, 58*, 1015-1026.

Ciarrochi, J., Deane, F. P., Wilson, C. J., & Rickwood, D. (2002). Adolescents who need the most are the least likely to seek it: The relationship between low emotional competence and low intention to seek help. *British Journal of Guidance and Counseling, 30*(2), 173-188.

Corrigan, P. (2004). How stigma interferes with mental health care. *American Psychologist, 59*(7), 614-625.

Corrigan, P., & O'Shaughnessy, J. (2007). Changing mental illness stigma as it exists in the real world. *Australian Psychologist, 42,* 90-97.

Diala, C. C., Muntaner, C., Walrath, C., Nickerson, K., LaVeist, T., & Leaf, P. (2001). Racial/ethnic differences in attitudes toward seeking professional mental health services. *American Journal of Public Health, 91*(5), 805–807.

Fisher, E. H., & Farina, A. (1995). Attitudes toward seeking professional psychological help: A shortened form and considerations for research. *Journal of College StudentDevelopment*, *36*, 368-373.

Good, G. E., & Wood, P. K. (1995). Male gender role conflict, depression, and help seeking: Do college men face double jeopardy? *Journal of Counseling and Development, 74,* 70-74.

Good, G. E., Sherrod, N. B., *&* Dillon, M. (2000). Masculine gender role stressors and men's health. In R. Eisler & M. Hersen (Eds.), *Handbook of gender, culture, and health.* Mahwah, NJ: Erlbaum.

Hancock, L., Vatalaro Hill, K. and Barber, J. (2010). Using audience response technology in brief live interactive normative group (BLING) sessions to reduce high-risk drinking in first year college students. *College Health in Action,* 49 (3), 14-15.

Haines, M., & S. (1996). Changing the perception of the norm: A strategy to decrease binge drinking among college students. *Journal of American College Health, 45*, 134-140.

Hinson, J. A., & Swanson, J. L. (1993). Willingness to seek help as a function of self-disclosure and problem severity. *Journal of Counseling & Development, 71,* 465–470.

Hunt, J. & Eisenberg, D. (2010). Mental health problems and help-seeking behavior among college-students. *Journal of Adolescent Health, 46,* 3-10.

Johannessen, K.J., Collins, C., Mills-Novoa, B.M., & Glider, P. (1999). A Practical Guide to Alcohol Abuse Prevention: A Campus Case Study in Implementing Social Norms and Environmental Management Approaches. Available from The Higher Education Center for Alcohol and Other Drug Prevention (www.edc.org/hec) or www.socialnorms.CampusHealth.net.

Kessler, R. C., Berglund, P. A., Bruce, M. L., Koch, R., Laska, E. M., Leaf, P. J., et al. (2001). The prevalence and correlates of untreated serious mental illness. *Health Services Research, 36,* 987–1007.

Komiya, N., Good, G. E., & Sherrod, N. B. (2000). Emotional openness as a predictor of college students' attitudes toward seeking psychological help. *Journal of Counseling Psychology, 47*(1), 138-143.

LaBrie, J.W., Hummer, J.F., Huchting, K.K., & Neighbors, C. (2009). A brief live interactive normative group intervention using wireless keypads to reduce drinking and alcohol consequences in college student athletes. *Drug and Alcohol Review*, 28, 40-47

LaBrie, J.W., Hummer, J.F., Neighbors, C., & Rederson, E.R. (2008). Live interactive group specific normative feedback reduces misperceptions about drinking in college students: A randomized cluster trial. *Psychology of Addictive Beahvior, 22 (1),* 141-148.

LaBrie, J.W., Earleywine, M., Lamb, T., Shelesky, K. (2006). Comparing electronic keypad responses to paper-and-pencil questionnaires in group assessments of alcohol consumption and related attitudes. *Addictive Behaviors, 31,* 2334-2338.

Leaf, P. J., Bruce, M. L., & Tischler, G. L. (1986). The differential effect of attitudes on the use of mental health services. *Social Psychiatry, 21,* 187–192.

Leeman, R. F., & Wapner, S. (2001). Some factors involved in alcohol consumption of first-year undergraduates. *Journal of Drug Education*, *31*(3), 249-262.

Link, B. G., & Phelan, J. C. (2001). Conceptualizing stigma. *Annual Review of Sociology, 27,* 363–385.

Martin, S. B., Wrisberg, C. A., Beitel, P. A., & Lounsbury, J. (1997). NCAA Division I athletes' attitudes toward seeking sport psychology consultation: The development of an objective instrument. *Sport Counselor, 11,* 201–218.

Matthews, A. K., Corrigan, P. W., Smith, B. M., & Rutherford, J. L. (2003). *Use of supportive resources among African Americans*.

Mayer, J. E., & Timms, N. (1970). *The client speaks: Working class impressions of casework*. Oxford, England: Atherton Press.

Merritt-Davis, O. B., & Keshavan, M. S. (2006). Pathways to care for African Americans with early psychosis. *Psychiatric Services, 57,* 1043–1044.

Miller, D.T. & McFarland, C. (1987). Pluralistic Ignorance: When similarity is interpreted as dissimilarity. *Journal of Personality and Social Psychology, 53(2),*298-305.

Miller, D.T. & McFarland, C. (1991). When social comparison goes awry: The case of pluralistic ignorance. In J. Suls, & T. Wills, T (Eds.) *Social Comparison: Contemporary Theory and Research*, Hillsdale, NJ: Erlbaum.

Moller-Leimkuhler, A. M. (2002). Barriers to help-seeking by men: A review of sociocultural and clinical literature with particular reference to depression. *Journal of Affective Disorders, 71,* 1–9.

Nadler, A. (1991). Help-seeking behavior: Psychological costs and instrumental benefits. In M. S. Clark (Ed.), *Prosocial behavior. Review of personality and social psychology* (Vol. 12, pp. 290–311). Thousand Oaks, CA: Sage.

National Institute of Mental Health (2003). *Real Men Real Depression*. Retrieved from http://www.nimh.nih.gov/health/publications/real-men-real-depression-easy-to-read/index.shtml

Neighbors, C., Lostutter, T. W., Whiteside, U., Fossos, N., Walker, D. D., & Larimer, M. E. (2007). Injunctive norms and problem gambling among college students. *Journal of Gambling Studies, 23*(3), 259-273.

Neighbors, H. W., & Jackson, J. S. (Eds.). (1996). *Mental health in Black America.* Thousand Oaks, CA: Sage.

Obasi, E. M., & Leong, F. T. L. (2009). Psychological distress, acculturation, and mental health-seeking attitudes among people of African descent in the united states: A preliminary investigation. *Journal of Counseling Psychology, 56*(2), 227-238.

Offer, D., Howard, K. I., Schonert, K. A., & Ostriv, E. (1991). To whom do adolescents turn for help? Differences between disturbed and non-disturbed adolescents. *Journal of American Academy of Child and Adolescent Psychiatry, 30,* 623–630.

Perkins, H.W. (2007). Misperceptions of peer drinking norms in Canada: Another look at the 'Reign of Error' and its consequences among college students. *Addictive Behaviors, 32,* 2645-2656.

Perkins, H. W. (2002). Social norms and the prevention of alcohol misuse in collegiate contexts. *Journal of Studies on Alcohol,17*, 164-172.

Perkins, HW and Berkowitz, AD (1986). Perceiving the community norms of alcohol use among students: Some research implications for campus alcohol education programming. *International Journal of the Addictions, 21*, 961-976.

Perkins. HW & Craig, DA (2002). *A Multi-faceted Social Norms Approach to Reduce High-Risk Drinking: Lessons from Hobart and William Smith Colleges*. Newton, MA: The Higher Education Center for Alcohol and Other Drug Prevention.

Prentice, D.A., & Miller, D.T. (1996) Pluralistic ignorance and the perpetuation of social norms by unwitting actors. *Advances in Experimental Social Psychology, 28*,161-209.

Pritchard, M. E., & Wilson, G. S. (2003). Using emotional and social factors to predict student success. *Journal of College Student Development*, *44*(1), 18-28.

Rickwood, D., Deane, F. P., Wilson, C. J., & Ciarrochi, J. (2005). Young people's help-seeking for mental health problems. *Australian e-Journal for the Advancement of Mental Health, 4*(3)

Rochlen, A. B., Mohr, J. J., & Hargrove, B. K. (1999). Development of the attitudes toward career counseling scale. *Journal of Counseling Psychology, 46,* 196–206.

Sagun, K. A. (2007). Changes in counseling center clients' psychological distress over eight years. ProQuest Information & Learning. *Dissertation Abstracts International: Section B: The Sciences and Engineering, 68* (1), 634-634.

Satcher, D. (1999). *Mental health: A report of the surgeon general*. Retrieved February 5, 2010, from http://www.surgeongeneral.gov/ library/mentalhealth/home.html

Schofield, P. E., Pattison P. E., Hill, D. J., & Borland, R. (2001). The influence of group identification on the adoption of peer group smoking norms. *Psychology & Health, 16,* 1–16.

Sharp, W., Hargrove, D., Johnson, L., & Deal, W. (2006). Mental health education: An evaluation of a classroom based strategy to modify help seeking for mental health problems. *Journal of College Student Development, 47,* 419-437.

Stangor, C., Sechrist, G., Jost, J. (2001). Changing racial beliefs by providing consensus information. *Personality and Social Psychology Bulletin, 27,* 486.

Tata, S. P., & Leong, F. T. L. (1994). Individualism-collectivism, social network orientation, and acculturation as predictors of attitudes toward seeking professional psychological help among Chinese Americans. *Journal of Counseling Psychology, 41*(3), 280–287.

Terry, D. J., Hogg, M. A., & White, K. M. (1999). The theory of planned behaviour: Self-identity, social identity, and group norms. *British Journal of Social Psychology, 38*(3), 225–244.

Terry, D. J., & Hogg, M. A. (1996). Group norms and the attitude–behaviour relationship: A role of group identification. *Personality and Social Psychology Bulletin, 22,* 776–793

Toch, H & Klofas, J (1984). Pluralistic ignorance, revisited. In G.M. Stephenson & J.H. Davis (Eds.), *Progress in Applied Social Psychology, Vol 2*, New York: Wiley.

U. S. Department of Health and Human Services. (2001). *Mental health: Culture, race, and ethnicity—A supplement to mental health: A report of the Surgeon General.* Rockville, MD: Author.

Vogel, D., Wade, N., Haake, S. (2006). Measuring the self-stigma associated with seeking psychological help. Jounrla of Counseling Psychology, 53, 325-337.

Vogel, D. L., Wade, N. G., & Hackler, A. H. (2008). Emotional expression and the decision to seek therapy: The mediating roles of the anticipated benefits and risks. *Journal of Social & Clinical Psychology, 27*(3), 254-278.

Vogel, D. L., Wade, N. G., & Hackler, A. H. (2007). Perceived public stigma and the willingness to seek counseling: The mediating roles of self-stigma and attitudes toward counseling. *Journal of Counseling Psychology, 54*(1), 40-50.

Vogel, D. L., & Wester, S. R. (2005). The role of outcome expectations and attitudes on decisions to seek professional help. *Journal of Counseling Psychology, 52*, 459-470.

Vogel, D. L., & Wester, S.R. (2003). To seek help or not to seek help: The risks of self-disclosure. *Journal of Counseling Psychology, 50*, 351-361.

Vogel, D. L., Wade, N. G., Wester, S. R., Larson, L., & Hackler, A. H. (2007). Seeking help from a mental health professional: The influence of one's social network. *Journal of Clinical Psychology, 63*(3), 233-245.

Vogel, D. L., Wester, S. R., & Larson, L. M. (2007). Avoidance of counseling: Psychological factors that inhibit seeking help. *Journal of Counseling & Development, 85*(4), 410-422.

Vogel, D. L., Wester, S. R., Wei, M., & Boysen, G. A. (2005). The role of outcome expectations and attitudes on decisions to seek professional help. *Journal o Counseling Psychology, 52,* 459–470.

World Health Organization. Global Burden of Disease: 2004 Update. Geneva: World Health Organization, 2008.

Appendix A

List of Questions for Participants

1. What is your Age? {Under 18, 18, 19, 20, 21, 22, 23+}

2. What is your sex? {Male, Female}

3. How do you identify yourself? {Black/African-American, Asian/Asian-American, Hispanic/Latino, American Indian, Arab/Middle Eastern, White, non-Hispanic, Pacific Islander, Other}

4. What best describes you? {International Student, US Citizen/Resident}

5**. For MOST [University] freshmen, how many of their close friends or family do you think have sought help from a mental health professional?** {None, 1-2, 3 or more}

6. What percent of MALE [University] freshmen do you think have ever sought help from a mental health professional? {1% or less, 2-5%, 6-10%, 11-20%, 21-30%, 31-40%, 41-50%, 51% or more}

7. What percent of [FEMALE] University freshmen do you think have ever sought help from a mental health professional? {1% or less, 2-5%, 6-10%, 11-20%, 21-30%, 31-40%, 41-50%, 51% or more}

8. How many of YOUR close friends or family have sought help from a mental health professional? {None, 1-2, 3 or more}

9. Have YOU ever sought help from a mental health professional? {Yes, No}

10. How do you think MOST [University] freshmen would respond to this statement? ***If I had an emotional, relational, or psychological problem, I'd seek help from a mental health professional.*** **{**Strongly Disagree, Disagree, Somewhat Disagree, Somewhat Agree, Agree, Strongly Agree}

11. What is YOUR response to the following statement? ***If I had an emotional, relational, or psychological problem, I'd seek help from a mental health professional.***

{Strongly Disagree, Disagree, Somewhat Disagree, Somewhat Agree, Agree, Strongly Agree}

12. If 1 is a sign of personal weakness and 8 is a sign of personal strength, how would MOST [University] freshmen rate getting help from a mental health professional? *Choose a number along the continuum. {1 = Weakness, 2, 3, 4, 5, 6, 7, 8 = Strength}

13. If 1 is a sign of personal weakness and 8 is a sign of personal strength, how do YOU rate getting help from a mental health professional? *Choose a number along the continuum. {1 = Weakness, 2, 3, 4, 5, 6, 7, 8 = Strength}

14. Knowing that a peer has sought help from a mental health professional MOST [University] Freshmen: {1 = More careful in how relate, 2 = Does not affect how relate, 3 = More willing to share}

15. What is YOUR response to this statement? Knowing that a peer has sought help from a mental health professional: {1 = More careful in how relate, 2 = Does not affect how relate, 3 = More willing to share}

16. How religious are you? {1 = Not religious at all, 2 = Somewhat religious, 3 = Moderately religious, 4 = Very religious}

17. Are you interested in pursuing a helping profession (e.g. Social Work, Psychology, Nurse, Physician, Counseling)? {Yes, No}

18. Rate the extent to which you identify as a [University] student. {1 = Not at all/Never, 2 = Not very much/Very seldom, 3 = Somewhat/Sometimes, 4 = Quite a bit/Often, 5 = Completely/Always}

Appendix B

Reality and Perception Questions

Reality	Perception	Response Options
How many of YOUR close friends or family have sought help from a mental health professional?	For the MOST [University] freshman, how many of their close friends or family have sought help from a mental health professional?	None 1-2 3+ Don't Know
Have YOU ever sought help from a mental health professional?	What percent of MALE [University] freshmen do you think have ever sought help from a mental health professional? What percent of FEMALE [University] freshmen do you think have ever sought help from a mental health professional?	Reality: Yes or No Perception: 1% or less, 2-5%, 6-10%, 11-20%, 21-30%, 31-40%, 41-50%, 51% or more
What is YOUR response to the following statement? If I had an emotional, relational, or psychological problem I'd seek help from a mental health professional.	How do you think MOST [University] Freshmen would respond to this statement? If I had an emotional, relational, or psychological problem I'd seek help from a mental health professional.	Strongly Disagree, Disagree, Somewhat Disagree, Somewhat Agree, Agree, Strongly Agree
If 1 is a sign of personal weakness and 8 a sign of personal strength, how do YOU rate getting help from a mental health professional	If 1 is a sign of personal weakness and 8 a sign of personal strength, how would MOST [University} freshmen rate getting help from a mental health professional	1 Personal Weakness, 2, 3, 4, 5, 6, 7, 8 Personal Strength
What is YOUR response to this statement? Knowing that a person has sought mental health treatment:	Knowing that a peer has sought help from a mental help professional MOST [University] freshmen:	More careful in how relate Does not affect how relate More willing to share

Vita

Kathryn Allison Conley was born on September 17, 1982, in Hartford, Connecticut, and is an American citizen. She graduated from Menlo High School, Menlo Park, California, in 2001. She received her Bachelor of Arts in Psychology from Emory University, Atlanta, Georgia. She received a Master of Arts in Psychology from Teachers College Columbia University, New York, New York in 2007 and a Master of Science Degree from Virginia Commonwealth University, Richmond, Virginia, in 2009.