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Effectiveness of an outreach program designed to enhance college students' help-seeking attitudes, intentions, and to reduce stigmas

by

Wei-min Grace Blocher

A dissertation submitted to the graduate faculty in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

Major: Psychology (Counseling Psychology)

Program of Study Committee:

Nathaniel Wade, Major Professor Douglas Bonett Brenda Lohman David Vogel Mei-fen Wei

Iowa State University

Ames, Iowa

2011

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ABSTRACT

Two hundred and one college students from a large Midwest university were randomly assigned to attend an outreach program, an alternative outreach program, or a no-treatment control group. The outreach program was based on Ajzen and Fishbein's (1980) Theory of Reasoned Action and was designed to help reduce the stigma associated with seeking help and increase students' attitudes toward and intentions to seek counseling. The program included interventions to increase participants' positive attitudes toward counseling, perceived benefits of counseling, and implement interventions to decrease perceived public stigma and self-stigma. Only the theoretically-derived outreach program was found to be effective in increasing participants' anticipated benefits about counseling and in decreasing their perceived public stigma associated with seeking counseling. Both the theoretically-derived outreach program and the alternative program were effective in increasing participants' positive attitudes toward counseling and decrease their self-stigma associated with counseling immediately after the program. 1

CHAPTER ONE: INTRODUCTION

In developed countries, only one-third of people with mental illness receive professional mental health service. Among those whose concerns do not meet the criteria for a diagnosis, less than two percent seek counseling (Andrews, Issakidis, & Carter, 2001). The same issue exists on college campuses in the United States. A recent survey (Yorgason, Linville, & Zitzman, 2008) found that only a third of students report having adequate knowledge about on-campus mental health services. Even though mental distress is positively related to students' knowledge about services, many students who have mental health issues are not aware of the resources available to them. Another survey (Eisenberg, Golberstein, & Gollust, 2007) found that 37 to 84 percent (depending on the disorder) of college students who report psychological symptoms such as depression or anxiety are not receiving services. Additionally, Cranford and his colleagues found that only 38 percent of college students who report co-occurring substance abuse and mental health problems receiv service (Cranford, Eisenberg, & Serras, 2009). Even more troubling is the finding that only 20 percent of students who report suicidal ideation have ever sought assistance (Furr, Westefeld, McConnell, & Jenkins, 2001). There is a flood of unmet needs for treatment among students with mental health problems in the United States. It is important to understand the barriers that prevent college students from seeking mental health services and to develop outreach programs that can increase help-seeking behaviors.

Challenges of Researching Contemporary Outreach Programs

A challenge in investigating the effectiveness of outreach programs in universities and colleges lies in the heterogeneity of their topics. The complexity of college students' population and their challenges lead to a need for different topics of outreach programs. The differences

among topics and formats lead to difficulties to conduct outcome studies since different topics of outreach indicates different goals for their outcome. For example, an alcohol prevention outreach program will aim at decreasing students' drinking problems, whereas a program on grief and lost will intend to help students develop better cope with death or lost in their lives. Although the programs have different topics, common goals of these programs include increasing students' awareness of general or a specific mental health issues, increase students' awareness of the services available to them, and increasing students' help-seeking behaviors.

Another concern regarding outreach programming is the lack of theory-based interventions. In comparison to counseling services, in which there are many well-developed theories of counseling or therapy in the field (such as cognitive-behavioral therapy, emotionfocused therapy, interpersonal-process therapy), there has yet to be a theory for conducting outreach programs. The lack of theory also makes it difficult to conduct any outcome research on outreach programs, because there is not a consensus of common components, procedures, or interventions in a bona fide outreach program. A lack of theory also makes it difficult to understand why some programs succeed while others fail. There is a need to develop theorybased outreach programs for college students.

Barriers to Help-Seeking Behavior

In a recent study that included adults from Canada (N=6,261), the United States (N= 5,384), and the Netherlands (N = 6,031), public attitudes were identified as the main barrier to mental health services(Sareen et al., 2007). Some examples of such attitudinal barriers were the belief that the problem would go away on its own, the intention to solve the problem on one's own, skepticism of the effectiveness of professional help, and a fear of public stigma. Some

structural barriers were difficulty getting into an appointment, financial difficulty in paying for needed treatment, and the perception of inconvenience.

The main barriers to seeking help amongst college students in the U.S. have been identified as a lack of perceived need, being unaware of services or insurance coverage, and skepticism about treatment effectiveness (Eisenberg et al., 2007; Yorgason et al., 2008). In one study, most of the students surveyed were aware of the student counseling center but saw it as a crisis-intervention service (Kahn, Wood, & Wiesen, 1999). It appears that many students have an inaccurate understanding of the mental health services available on campus. Other factors such as an avoidant attachment style (Vogel & Wei, 2005), a fear of treatment (Deane & Todd, 1996), a desire to conceal distressing or personal information (Cepeda-Benito & Short, 1998), and the desire to avoid experiencing painful feelings during therapy (Komiya, Good, & Sherrod, 2000) can also contribute to students' unwillingness to seek counseling.

Researchers have attempted to apply Ajzen and Fishbein's (1980) Theory of Reasoned Action (TRA) to understand the process of help-seeking behavior (Vogel, Wade, Wester, Larson, & Hackler, 2007; Vogel, Wester, & Larson, 2007; Vogel, Wester, Wei, & Boysen, 2005). TRA provides a framework for explaining people's behaviors that are under the control of the individual, suggesting that people's social behaviors are closely predicted by their intention to perform such behavior (see Figure 1 for an illustration.) Behavioral intentions are guided by a reasoning process that reflects their attitudes toward the behavior and the perceived social norm of such behavior. For each behavior, the weighted importance of attitudes and subjective norms can varies. Some behaviors are more related to attitudes then subjective norms whereas some are more influenced by subjective norms and less by attitudes. According to TRA, there are two

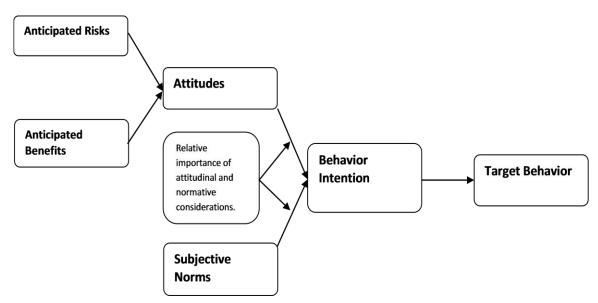


Figure 1. Theory or Reasoned Action

Note: Arrows indicate direction of theorized effect.

channels of change for a given behavioral intention: the change of attitudes and the change of subjective norms.

Previous studies have investigated the fitness of this framework in understanding an individual's help-seeking behaviors (Bayer & Peay, 1997; Vogel, Wade, & Hackler, 2008; Vogel et al., 2005). These studies focused on the attitudes toward seeking professional help, and the attitudes were found to be a mediator of multiple psychological factors to intention of seeking help (Vogel et al., 2005). These factors include social stigma, social norm, social support, previous therapy (Vogel et al., 2005), attachment style (Shaffer, Vogel, & Wei, 2006; Vogel & Wei, 2005), and emotional openness (Vogel et al., 2008; Vogel & Wester, 2003). Changing attitudes toward counseling may be helpful in increasing individual's help seeking behaviors.

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A Potential Topic for Outreach Programming: Forgiveness and Mental Health

The stigma associated with mental health issues and counseling may turn student off from attending an outreach program that directly addresses these issues. Therefore, it is important to design an outreach program with a topic that is favorable to students. Forgiveness, a growing area of research in the mental health field (Worthington, 2005), may be a potentially useful topic for two reasons: (a) this topic may be associated with less stigma in comparison to depression and anxiety, and (b) forgiveness is associated with one's mental health (Toussaint and Webb, 2005). This topic has the potential to benefit students' well-being and is selected to be incorporated into the outreach programs in the current study.

The Purpose of the Present Study

The current study will investigate the effectiveness of a theory-based outreach program in increasing student's intention to seek counseling for personal problems. The outreach program will be designed using TRA principles, and will be the first to apply TRA principles to change college students' intentions to seek mental health services. To examine the effect of the outreach program, participants in the present study will be randomly assigned to one of the three conditions: intervention, alternative intervention, and a no-treatment control group. Participants in the intervention group will attend the outreach program whereas those in the alternative group will attend an alternative program. The alternative program will be similar to the outreach program in its format and content except for the TRA intervention components. It will be designed to increase students' awareness of mental health issues but will not directly intervene with students' help-seeking attitudes and intentions.

The current study also identified a potential outreach topic, forgiveness and mental health. Both theory-based outreach program and the alternative program will include psychoeducational information on forgiveness and mental health to increase students' knowledge on this topic.

Hypotheses and Rationales

Hypothesis 1. Participants who attend the theory-based outreach program will report an increase in their intention to seek counseling for personal problems whereas participants in either the alternative or the control group will report no changes.

Rationale 1. Only the outreach program contains the TRA components that are designed to increase students' positive intention to seek counseling. Participants in both the alternative and the control condition will not be exposed to these TRA interventions and therefore it is hypothesized that only participants who attend the theory-based outreach program will report a change in the outcomes.

Hypothesis 2. Participants who attend the theory-based outreach program will report an increase in their positive attitudes toward counseling. They will also report a decrease in their perceived risks and an increase in their perceived benefits associated with seeking counseling for personal problems. On the other hand, participants in the alternative and the control group will not report such changes.

Rationale 2. According to the TRA model, one of the channels of behavioral change is through changing one's perceived risks and attitudes toward a given behavior. Therefore it is hypothesized that only participants who are exposed to the TRA interventions will report an increase in their positive attitudes toward seeking counseling.

Hypothesis 3. Participants who attend the theory-based outreach program will report a decrease in their perceived public stigma and self-stigma associated with seeking counseling for personal problems whereas participants in either the alternative program or the control condition will report no changes.

Rationale 3. The other channel of change in the TRA model is the channel of social norm. A person's intention to perform a certain behavior is influenced by his or her perceived social norm associated with the given behavior. Therefore it is hypothesized that only participants who are exposed to the TRA interventions will report a decrease in their perceived stigma.

Hypothesis 4. Participants who attend either the theory-based outreach program or the alternative program will report an increase in their knowledge of the concept of forgiveness.

Rationale 4. Psychoeducational information regarding forgiveness will be given in both the outreach program and the alternative program. Therefore it is hypothesized that participants who attend these programs will gain more knowledge about forgiveness.

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CHAPTER TWO: LITERATURE REVIEW

University counseling centers provide important services to their respective campus communities. Typically, providing direct psychotherapy services is one of the top priorities of these counseling agencies. However, providing outreach programs is also an important part of a typical counseling center's services. In addition, providing outreach programs is one requirement for accreditation used by the International Association of Counseling Services (IACS) for University and College Counseling Centers throughout the United States, Canada, and Australia (Boyd et al., 2003). In a survey of directors of college student counseling centers (Barr, Gregory, & Jones, Colbs, and Meyer, 2008), 99% of the participants reported that their agencies provide outreach programs to students, and 21.5% of them indicated that the center charges a fee for these services. Some counseling centers even have a designated staff member as the outreach coordinator. Although outreach programs are commonplace among college counseling centers, there is scant empirical evidence attesting to their effectiveness.

Furthermore, although some outreach strategies have been tested, such as different forms of anti-stigma interventions, there is still a lack of theory for outreach programming. The lack of theory-based intervention may have led to the mixed results in previous outcome studies of outreach programs. It is still unclear what constitutes a bona fide outreach program that can effectively obtain the goal of the program.

This chapter will first provide a definition of outreach programs and then focus on outcome studies of outreach programs designed to increase help-seeking behaviors. To address the lack of theory for outreach programs, this chapter will review the Theory of Reasoned Action for understanding and changing help-seeking behaviors. Finally, this chapter will review a potential outreach topic, forgiveness and mental health, for college students.

What are Outreach Programs?

Outreach programs on a college campus are intended to include preventative interventions to help students face their developmental challenges and maximize their potential to benefit from their educational experience. According to IACS, these programs "should be developed and provided that help students acquire new knowledge, skills, and behaviors; encourage positive and realistic self-appraisal; foster personal, academic, and career choices; enhance the ability to relate mutually and meaningfully with others; and increase the capacity to engage in a personally satisfying and effective style of living (p. 167, Boyd et al., 2003.)" These programs are sometimes called a workshop, a seminar, an outreach, or a program.

There are many different topics of outreach programs on college campuses. Although many student counseling centers have provided information about their outreach programs on their websites, there has not been a general report of the topics and their delivery frequency. The Association for University and College Counseling Center Directors (AUCCCD) has compiled a list of some outreach programs for public access on their website. Some examples of these outreach programs are "Student Orientation Information", "Helping College Students Understand Counseling", and "Dealing with Loss." Many universities and colleges provide opportunities for students, faculty, or staffs to request an outreach program with a desired topic of interest that are tailored to the audience.

Furthermore, the format of an outreach program varies greatly. Although the traditional outreach program of having a speaker delivering the program to students is still common,

colleges and universities have been developing innovative strategies to reach out to students. For example, in the 2009 AUCCCD Annual Survey report (Rando, & Barr, 2009), one university reported their effort of the development of a set of targeted brochures for diverse groups of students on campus. Another university reported using a systematic approach of partnering with other agencies to provide comprehensive outreach programs to students. Some others reported using the Internet, email, or blogging to reach out to students on their campus.

Effectiveness of Outreach Programs

Only until the recent years did researchers start to investigate the effectiveness of outreach programs in promoting college students' help-seeking behaviors (Gonzalez, Tinsley, & Kreuder, 2002; Guajardo & Anderson, 2007; Sharp, Hargrove, Johnson, & Deal, 2006). There are only a limited number of studies to date and they have been conducted on a written publication, a classroom presentation, and a multimedia program. Results suggesting the effectiveness of these few interventions are mixed and some suffer from serious methodological problems (see Table 1 for a list of these studies and their findings).

In the first of these studies, Gonzalez and colleagues (2002) developed two forms of a written intervention to increase college student's positive attitudes toward help seeking, positive opinions of mental illness, and accurate expectations of psychotherapy. To test these interventions' effectiveness, they randomly assigned 254 college students into two intervention groups and one control group. Students in the intervention groups were assigned to read information about mental illness or psychotherapy, taking about ten to 15 minutes. Gonzalez and colleagues found that the group who read information on mental illness demonstrated improved attitudes toward help seeking at a one month follow-up but not immediately after the intervention.

Oureome Shales of 1 rograms to improve help seeking humaes and whith	Studies of Programs to Improve Help-seeking Attitudes	s and Willingnes	S <i>S</i>
----------------------------------------------------------------------	-------------------------------------------------------	------------------	------------

Study	Sample (N;	Program Summary	Outcomes
	mean age,		
	population)		
Byaruhanga, Cantor-	None reported;	A training program for health	No statistical analysis.
Graae, Maling, &	communities in	care workers and volunteers on	Increased number of mental
Kabakyenga, (2008)	rural Uganda	mental health issues, treatment,	health patients in participating
		and stigma. The program	health units.
		lasted for a period of one year.	
Esters, Cooker, &	40; 14.7; high	A video designed for use with	Significant improvement of
Ittenbach (1998)	school students	adolescents, education on	participants' attitudes toward
	in rural	resources available in the	counseling (Cohen's $d = .56$)
	Mississippi	community, definition and	and decrease in stigma toward
		qualification of different types	the mentally ill (Cohen's d
		of helpers, and the reality	= .96). Improvement remained
		behind mental illness stigma.	at 12 week follow-up.
		The program lasted for a total	
		of 270 minutes.	
Han, Chen, Hwang,	299; 20.3;	Two forms of written	Biological information
& Wei (2006)	undergrads in	interventions: information	significantly improved
	Taiwan	about biological factors that	participant's willingness to seek
		lead to depression and stigma-	help. Stigma-reducing
		reducing information.	information produced no
			changes in participant's stigma
			associated with depression.

Study	Sample (N;	Program Summary	Outcomes
	mean age,		
	population)		
Gonzalez, Tinsley, &	254; 20;	Two forms of written	No base line data. In
Kreuder(2002)	undergrads	interventions: information	comparison to the control group,
		about mental illness and	the mental illness group
		information about	demonstrated better attitudes
		psychotherapy. Both	toward help seeking at a one
		interventions lasted for 15	month follow-up.
		minutes.	
Guajardo & Anderson	90; 20.34;	Two types of	Both interventions successfully
(2007)	undergrads	psychoeducational	reduced fears about therapy.
		interventions: a PowerPoint	The multimedia program
		presentation (10 minutes) and a	(Cohen's $d = 1.02$) was more
		multimedia program (20	effective than the information-
		minutes).	only program (Cohen's <i>d</i> =
			0.43).
Sharp, Hargrove,	123; 20;	A 40 minute classroom based	Students in the intervention
Johnson, & Deal	undergrads	psychoeducation program that	group improved their attitudes
(2006)		disputed stigma and provided	toward seeking professional
		information regarding the	psychological help (Cohen's d
		effectiveness of psychotherapy	= .36)
		and available resources.	
Tanaka, Ogawa,	384; mean age	Lecture designed to decrease	Significant changes in
Inadomi, Kikuchi, &	ranged from	stigma toward mental illness	participants' understanding of
Ohta (2003)	39.1 to 44.1		mental illness (Cohen's ds

Table 1 Continued

Study	Sample (N;	Program Summary	Outcomes
	mean age,		
	population)		
	across six		ranged from 0.67 to 2.34),
	different sites;		negative attitudes toward those
	community		with mental illness (Cohen's ds
	residence in		ranged from 0.22 to 0.75), and
	Japan.		psychiatric treatment-seeking
			behaviors (Cohen's ds ranged
			from 0.38 to 1.41.)

Table 1 Continued

Both intervention groups reported more positive expectations about their personal commitment to therapy compared to the control group both immediately after the intervention and at followup. A serious problem in this study was a lack of base-line information, the authors did not collect data on the outcome variables prior to the interventions. How much the intervention impacted participants' attitudes toward help-seeking, opinions of mental illness, and expectations about psychotherapy were therefore unknown. This study did not report effect size, although it did provide sufficient information for readers to calculate the Cohen's d (.04 for immediately after the intervention in comparison to the control group.) If it is assumed there were no differences between the control and intervention groups prior to the intervention and there were no placebo effects, the effect size of these interventions was at a low .02 in improving college students' personal commitment to therapy and had no effect in changing attitudes. Sharp and his colleagues (2006) utilized a classroom based psychoeducation program to promote awareness of mental health problems and college students' use of services. The intervention was a 40 minute program that disputed stigma and provided information regarding the effectiveness of psychotherapy and available resources. They conducted an independent sample *t* test to compare the outcome measure scores change (from before to after the intervention) for both the intervention and the control group. Students in the intervention group improved their attitudes toward seeking professional psychological help as well as their opinions about mental illness, whereas the control group did not. The pattern of results remained after a month period. They did not conduct an analysis of the interaction between time and intervention and there was not enough information to conduct a repeated ANOVA to examine the interaction effect. However, Sharp and colleagues provided enough information to calculate the effect size of the difference between pre and post test of the intervention group. The intervention appears to have a small to moderate effect (Cohen's d = .36) on the participants' attitudes toward seeking counseling.

In a Taiwanese study conducted by Han, Chen, and Hwang (2006), undergraduate students were assigned to one of three groups: biological factors, stigma-reducing information, or a combination intervention group. Those in the biological factors group read five paragraphs of biological factors that may lead to depression. Participants in the stigma-reducing group read five paraphrases of information regarding facts of the stereotypes and stigmas related to those who struggle with depression. Those in the combined intervention group read all ten paraphrases mentioned above. Results indicated participants who read the biological information reported significant improvement in their willingness to seek help whereas no change was found in the stigma-reducing information group. No effect size was reported in this study. It is important to

note that the willingness to seek help measure used in this study included intentions to seek help from psychiatrists, physicians, family doctors, counselors, psychologists, and simply taking medication. It is unknown how much this intervention can increase participants' intention to seek mental health services.

The most informative study that involved college students was conducted by Guajardo and Anderson (2007). This study included two types of psychoeducational interventions and a no-treatment control-group. Both interventions were designed to provide realistic information and to reduce fears about psychotherapy. The information included roles of the client and therapist, the work expected of the client, the anticipated results of therapy, confidentiality, goal setting, reasons for seeking therapy, content of an initial counseling session, and the potential benefits of therapy. One of the psychoeducation interventions, the multimedia program, included video clips that represented a positive therapist-client interaction reenacted by actors. This intervention was approximately 20 minutes. The other intervention provided only a ten-minute PowerPoint presentation that included the same information. Results indicated both interventions successfully reduced fears about therapy, although the multimedia program (effect size = 1.02) was much more effective than the information-only program (effect size = 0.43). One limit of this study was a possible dose-effect between the two interventions that may have confounded the outcomes. The multimedia program lasted twice as long (20 minutes) as the other intervention (10 minutes), which may have produced more effect because it provided more information to the participants.

In addition to studies involving the college student population, two outcome studies with different populations provide some evidence of the effectiveness of these outreach programs in

changing participants' attitudes toward mental health services and intention to seek help (Esters et al., 1998; Tanaka et al., 2003). The first was an outreach program in rural Mississippi (Esters et al., 1998) that was designed to increase positive attitudes toward mental health services and decrease stigma toward mental illness. Participants were 40 high school students in a public high school assigned to treatment or control groups based on their health class assignments. The program delivered in this study included a video designed for use with adolescents, resources available in the community, the definition and qualifications of different types of helpers, and the reality behind mental-health stigma. The program lasted a total of 270 minutes. Attitudes toward counseling and stigma toward the mentally ill significantly decreased for students in the treatment group. These changes did not remain 12 weeks after the intervention, however. Another successful program was a part of a Japanese outcome study evaluating the effectiveness of a lecture program designed to decrease stigma toward mental illness (Tanaka et al., 2003). Participants were 384 community members from six different sites in Japan. The results indicated significant changes in participants' understanding of mental illness, negative attitudes toward those with mental illness, and psychiatric treatment-seeking behaviors. A limitation of this study was its lack of a control group.

Both Esters et al.'s and Tanaka et al.'s studies did not provide effect sizes, however, there was sufficient information in the articles that Cohen's *d*s can be calculated. The Esters et al.'s study demonstrated a medium effect on changing participants attitudes toward counseling (Cohen's d = .56) and a large effect on decreasing their stigma toward the mentally ill (Cohen's d = 0.96). Tanaka et al.'s study found a medium to large effect on improving participants' understanding of mental illness (Cohen's *d*s ranged from 0.67 to 2.34), a small to large effect on reducing negative attitudes toward those with mental illness (one site had no change and the five

others had a significant change with Cohen's *ds* ranging from 0.22 to 0.75), and small to large effect on increasing psychiatric treatment-seeking behaviors (Cohen's *ds* ranged from 0.38 to 1.41.)

Finally, a recent study in Uganda sheds some light on the importance of outreach programs in rural areas in the developing world (Byaruhanga, Cantor-Graae, Maling, & Kabakyenga, 2008). The program in this study was designed to train health care workers and volunteers on mental health issues and treatment and to reduce their stigma toward the mentallyill and those with HIV/AIDS and epilepsy. The training program staff consisted of a psychiatrist, a psychiatric clinical officer, a nurse, and an occupational therapist. Members of the training program visited 10 different health units periodically (once a month to once every three months) for a period of one year. The training program also extended service to traditional healers and refugee camps. Although no statistical analysis was conducted in the study, the attendance of mental health patients in these clinics increased in comparison to the base line data before the program launched. Focus groups were conducted in the community, and Byaruhanga and colleagues found that the stigma associated with mental illness, HIV, and epilepsy has decreased in the community. A strength of this study lies in its pioneering work in rural Uganda with limited resources, whereas its limitations include a lack of a control group, objective measures of stigma, and a lack of details in the procedures in the article.

There are only a few studies on the effectiveness of outreach programs that aim to change people's attitudes and intentions to seek counseling; most of these studies suffer from methodological issues. Furthermore, none of these programs were theory-based, which makes the comparison across these programs difficult. It is unclear why some programs are more

effective than others. The present state of research provides some justification for the expectation that a well-designed intervention can be effective, yet one cannot draw a general conclusion of the effectiveness of such outreach programs from the existing research. There is clearly a need to further investigate the effectiveness of outreach programs and to develop an effective program in changing students' help-seeking behaviors that is based on theory.

Help-Seeking Behaviors and Theory of Reasoned Action (TRA)

To develop an effective outreach program, one must first examine the process of the help-seeking behavior. The Theory or Reasoned Action (TRA) is one of the most well-studied theories that attempts to explain behavior. The TRA was initially introduced by Ajzen and Fishbein in 1967 (Fishbein, 1979) and has since been widely used in predicting and understanding people's behaviors. The TRA deals with the relations among beliefs, attitudes, intentions, and behavior (Fishbein, 1979). In this theory, behavioral intention is the best predictor of a given behavior. Although many factors may influence a behavioral intention, intentions are generally mediated by both the attitudes toward the behavior and the subjective norm for the behavior (see Figure 2 for an illustration.) The Theory of Reasoned Action provides a framework for understanding why people engage in a wide variety of behaviors, including alcohol and drug use (Budd, Bleiker, & Spencer, 1983; Budd & Spencer, 1984; Chassin & et al., 1981; Fishbein, 1979; Guo et al., 2007; Morrison, Golder, Keller, & Gillmore, 2002), health related behaviors such as wearing seat belts (Budd, North, & Spencer, 1984), exercise (Downs & Hausenblas, 2005; Godin & Shephard, 1986; Godin, Valois, Shephard, & Desharnais, 1987; Hagger, Chatzisarantis, & Biddle, 2002), attending screening programs (Cooke & French, 2008), condom use to prevent sexually-transmitted diseases (Beadnell et al.,

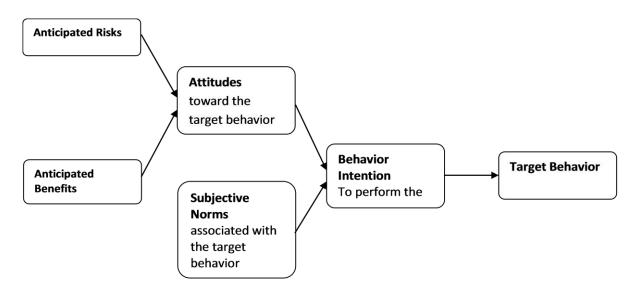


Figure 2. Theory or Reasoned Action: Factors determining a person's behavior. Note: Arrows indicate direction of influence.

2008), behaviors to prevent Acquired Immunodeficiency Syndrome (AIDS) (Latkin et al., 2009), and seeking prostate cancer information (Ross, Kohler, Grimley, & Anderson-Lewis, 2007). TRA has also been applied to understand and predict family-related behaviors such as using contraceptives for family planning (Davidson & Jaccard, 1975; Jaccard & Davidson, 1972) and breastfeeding (Manstead, Plevin, & Smart, 1984; Manstead, Proffitt, & Smart, 1983). Other behaviors explained using the TRA model include voting (Bowman & Fishbein, 1978), verbal and physical aggression (Roberto, Meyer, Boster, & Roberto, 2003), negative work place behaviors (Vardi & Weitz, 2002), choosing a career (Greenstein, Miller, & Weldon, 1979), adherence to athletic training (Anderson & Lavallee, 2008), becoming an organ donor (Weber, Martin, & Corrigan, 2007), teaching online courses (Chen & Chen, 2006), and engaging in premarital sex (Chitamun & Finchilescu, 2003). Previous studies have investigated the fitness of the TRA model in understanding an individual's help-seeking behaviors (Bayer & Peay, 1997; Vogel, Wade, & Hackler, 2008b; Vogel, Wester, Wei, & Boysen, 2005). Attitudes toward counseling was found to play an important role in mediating psychological factors (e.g. social stigma, self-disclosure, anticipated benefits, subjective social norm, social support, and previous therapy experience) that are relevant to the intention to seek mental health services (Vogel et al., 2005).

Based on the Theory of Reasoned Action (TRA), behavior is ultimately determined by one's underlying beliefs. Changing one's behavior is thus primarily a matter of changing one's underlying cognitive structure (Fishbein & Middlestadt, 1987). Different beliefs should underlie different behaviors even if the behaviors are related. For example, beliefs of continuing counseling will be different from beliefs of initiating help-seeking behaviors. Two people making the same decision can have different underlying beliefs. Beliefs underlying a behavior in one context can differ from the beliefs underlying the same behavior in a different context. For example, beliefs about seeking counseling at a student counseling center may be different from seeking counseling from a community mental health center that has been recommended by one's family physician. Although the beliefs can be very different based on the individual, behavior, context, and time frame, TRA argues that most behaviors can be understood in terms of the same small set of theoretical constructs and psychological processes. This section will discuss each construct of the TRA model and its application to changing help-seeking behaviors.

Constructs and Behavioral Change in TRA

Target Behavior. The first step in applying TRA to changing a behavior is identifying the target behavior. A full identification of a behavior includes identifying four components: action,

target, context, and time (Fishbein & Middlestadt, 1987). It is important to fully identify these components in order to pick up the relevant beliefs associated with the behavior. For example, making an initial appointment with a counselor and continuing attendance of counseling sessions are different behaviors that are related to different sets of beliefs. The context of a behavior refers to the social environment in which the behavior takes place. For example, seeking help from friends and seeking help from a professional are associated with different contexts and therefore very different sets of beliefs. Finally, as Fishbein and Middlestadt (1987) have pointed out, a person's intentions can differ depending on the time-frame of the behavior in question. A student may be interested in attending counseling when needed however their intention may decrease during midterm or finals week. Because underlying beliefs of a behavior differ based on their target behavior, its context, and its time frame, it is important to consider these elements in providing statements or arguments that aim at changing a behavior.

It is important to distinguish between a behavior and its outcomes. Sometimes these two concepts can become confusing (Fishbein, 1979). Feeling better is one of the possible outcomes of attending counseling but different behaviors can sometimes lead to the same outcome. Seeking counseling may lead to a sense of relief and talking to a close friend may also produce the same outcome. Furthermore, a person's intention to obtain a certain outcome may not be related to attainment of the outcome because he or she may not select the appropriate behavior to accomplish their goal (Fishbein, 1979). For example, some people may turn to drugs or alcohol to self-medicate painful feelings and to feel better. However, these behaviors may lead to long-term problems instead of actually solving the problem.

Alternative Behaviors. The Theory of Reasoned Action argues that the most salient predictor of behavior is intention (Ajzen & Fishbein, 1980; Fishbein & Middlestadt, 1987). It is important then to consider the intention to carry out alternative behaviors related to the target behavior. Sometimes, an individual may have the intention to perform a certain behavior yet they still do not do so. For example, a student struggling with emotional problems may report the intention to seek counseling within a month yet he or she still does not do so. This student may have a stronger intention to seek the alternatives of counseling, such as exercise, social support, or talking to friends on the internet. These alternative intentions may compete with the target behavioral intention and reduce the chance of actual behavior performance.

Two Channels of Change: Attitudes and Subjective Norms. From a TRA perspective, a person's intention to engage in any given behavior is a function of a weighted combination of two determinants: attitudes toward the behavior and subjective social norms. To change a behavior is to change the underlying cognitive beliefs, which can occur through two channels: changes in one's attitude toward the behavior or changes in one's perceived social norm for the behavior (Ajzen & Fishbein, 1980; Fishbein & Cappella, 2006). To change someone's attitude toward a behavior, one can present an argument that includes statements regarding the consequences of performing such a behavior. In these arguments, belief-targeted communication includes two components: (a) a set of arguments for a particular behavior, and (b) factual evidence to support the arguments. In delivering such an intervention, the assumptions are that (a) the acceptance of factual evidence leads to acceptance of the arguments will result in a change in beliefs. It is important to consider the difference between general attitudes toward a behavior and attitudes toward a behavior the difference between general attitudes toward a behavior and attitudes toward personally

performing a behavior (Ajzen & Fishbein, 1980). Sometimes people report a positive attitude toward a certain behavior and a negative attitude toward engaging in the behavior themselves. Effective belief-targeted communication must then focus on attitudes toward personal engagement in the target behavior (Fishbein, 1979).

In addition to affecting attitudes, changing subjective social norms is another channel for behavioral change. Generally speaking, when a person believes that most people who are in his or her social group think that a particular behavior should be performed, the person will experience a social pressure to do so. Conversely, when a person believes that most people who are in their social group will think that he or she should not perform a given behavior, the person will have a subjective pressure to avoid performing it. Corresponding with target behaviors, subjective social norms can also be defined in terms of their action, target, context, and time (Fishbein & Middlestadt, 1987). For example, one may perceive their significant others as supportive if they were to go to counseling once a month for a "check-up" but feel pressure from their parents to not attend counseling regularly.

Finally, relative weights of the attitudinal and normative components can vary based on the four elements of behavior (action, target, context, and time; Fishbein & Middlestadt, 1987). Fishbein and Middlestadt (1987) have pointed out that ignoring this key element may be why some campaigns fail to change people's behaviors. For example, normative components may have a higher weight than attitudinal components for drinking behaviors at a party, whereas attitudinal components may have a higher weight than normative components regarding drinking alone at home. Culture may play a further role in this as well. In a cross-cultural study comparing intervention strategies of college students in Thailand and those in the United States,

individual, behavioral-focused information was more effective in increasing help-seeking intentions among American students whereas relational, normative-focused information was more effective among Thai students (Christopher, Skillman, Kirkhart, & D'Souza, 2006). Another study conducted in Australia found that individuals' attitudes toward counseling were more important than the perceived approval or disapproval of others (Bayer & Peay, 1997). Another study found that social stigma does not have as much of an impact on help-seeking behaviors among younger college students (Golberstein, Eisenberg, and Gollust, 2008). Specifically, among students who report depression and anxiety symptoms, there is no evidence to support the idea that perceived stigma can decrease help-seeking behaviors. It seems that among college students in Western society, attitudes toward help-seeking are more important than subjective norms.

Outcome Studies of TRA Interventions. In comparison to the large body of research on applying TRA to understanding different human behaviors, only a few studies have been conducted that apply TRA to changing attitudes or behaviors. These studies include changing attitudes toward the controlled burn policy of National Parks (Bright et al., 1993), illegal drug usage (Fishbein & Middlestadt, 1987), AIDS prevention (Fishbein, 1990), and milk selection (Booth-Butterfield & Reger, 2004). Among these studies on behavior change utilizing TRA, even fewer have evaluated the effectiveness of the interventions (Booth-Butterfield & Reger, 2004; Bright et al., 1993).

In attempting to test the application of TRA, Bright and his colleagues (Bright et al., 1993) conducted a study at the Yellowstone National Park. They divided participants into two groups based on their initial attitude toward the controlled burn policy at the park (e.g. positive or

negative attitude). Participants in each group were then divided into intervention and control groups. Researchers gave those in the positive attitude intervention group belief-targeted information regarding the negative impact of a controlled burn policy, intending to change their attitudes in a negative direction. On the other hand, those in the negative attitude intervention group were given belief-targeted information regarding the positive benefits of the controlled burn policy, aiming to change their attitudes in a positive direction. Results indicated that those in the positive attitude intervention group showed significant changes in their attitudes toward the controlled burn policy in a negative direction. Individuals in the negative attitude intervention group, however, reported no significant change in their attitudes toward the policy. It is unclear why individuals with a negative attitude in this study were more resistant to change.

In an evaluation of a "1% or less" milk campaign using the TRA principle (Booth-Butterfield & Reger, 2004), high fat (2% or whole mike) milk users were randomly assigned to intervention or control groups. The campaign message targeted behavioral change but not the subjective norm for the behavior. Results indicated that the campaign was successful in changing participants' behavioral intention, attitudes, and beliefs, but not in changing subjective norm beliefs.

Criticism of TRA. Some critics have suggested that the TRA only predicts behavioral intentions but does not necessarily explain behavior changes. This may be a valid criticism, as many studies have only included self-reported intent while behavior and objective measures are missing. However, the gap in the research may be due to the general difficulty of conducting research on the application of theories. One apparent limit to this theory, however, is that it does not consider personality-related factors, cultural factors, and demographic variables that might

also shape behavior. Finally, TRA only focuses on rational thoughts and does not account for the roles that irrational thoughts or fears might play with behavior (De Wit, Victoir, & Van den Bergh, 1995; Sharma, 2007).

Summary. The Theory of Reasoned Action provides a framework for understanding people's health-related behaviors. Specifically, the intention to perform a certain behavior is influenced by attitudes toward and the social norms associated with the given behavior. Although TRA has been well documented in its utility of predicting behaviors, it is unclear whether this prediction can be applied to behavioral change. There is clearly a need for more research in testing the model in programs that are meant to change people's attitudes and behavioral intentions.

Attitudes toward Mental Health Services and Strategies for Change

In an Australian study applying TRA principles to understand and predict the general public's help-seeking intentions, several key beliefs that separate individuals who are more likely to seek mental health services from those who are less likely to do so were identified (Bayer & Peay, 1997). Likely help-seekers tend to believe that mental health services would actually help them whereas unlikely help-seekers tend to be uncertain about the effectiveness of services. Likely help-seekers also tend to believe that they will be accepted and understood in a confidential environment by the mental health professional whereas unlikely help-seekers are less likely to believe the same. Therefore, in attempts to increase the public's intention to seek counseling, providing information regarding the effectiveness of counseling and the process of counseling may be important in affecting attitude change. The overall goal would be to increase the anticipated benefits and decrease the anticipated risks of seeking mental health services. This

section will discuss related topics that can form one's attitudes toward counseling, including the effectiveness of counseling, fear of the counseling process, and misconceptions based on media influence.

Effectiveness of Counseling. It is not uncommon for the public at large or for college students specifically to doubt the effectiveness of counseling (Eisenberg, Golberstein, & Gollust, 2007; Kahn, Wood, & Wiesen, 1999; Yorgason, Linville, & Zitzman, 2008). Initial negative outcome expectations can strongly influence an individual's decision about seeking counseling (Tinsley, de St. Aubin, & Brown, 1982). To change this attitude, belief-targeted communication can be adopted. Belief-targeted communication includes two components: (a) a set of arguments for a particular behavior and (b) factual evidence to support the arguments (Bright et al., 1993). To provide factual evidence to support the benefits of counseling, an outreach program can provide a summary of research evidence regarding the benefits of counseling and the effectiveness of psychotherapy. For example, meta-analyses have found that on average, therapy clients were better off than 75% of untreated individuals and the effect size ranged from of .68 to .85(Shadish et al., 1997; Smith and Glass, 1977; Smith & Glass, 1979). Furthermore, metaanalyses have confirmed the effectiveness of counseling in treating various clinical issues such as adult depression (Cuijpers, van Straten, Andersson, & van Oppen, 2008), obsessivecompulsive disorder (Abramowitz, 1997), social phobia (Taylor, 1996), and marital problems (Dunn & Schwebel, 1995). There are many different forms of psychotherapy that have been found to be effective through meta-analyses. Some examples are solution-focused therapy (Cuijpers et al., 2008), longterm psychoanalytic therapy (de Maat, de Jonghe, Schoevers, & Dekker, 2009), and cognitive-behavior therapy (Cuijpers et al., 2008). Because there are many

forms of psychotherapy or counseling that are effective, potential counseling clients have many options to choose from in terms of which therapy fits them best.

Fear of the Counseling Process. There are several avoidance factors that were found to be one of the major barriers to a person's intention to seek counseling when distressed. These include, the fear of treatment (Deane & Todd, 1996), the fear of self-disclosures (Cepeda-Benito & Short, 1998), and the fear of feeling sad in counseling (Komiya, Good, & Sherrod, 2000). Furthermore, those who reported less intention to seek mental health services when needed tend to report less confidence that they will be accepted and understood in therapy and that their issues will be kept in confidence (Bayer & Peay, 1997). Individuals who are considering seeking mental health services may believe that the therapist will force them to tell all of their deepest thoughts, feelings, and secrets. These fears may be more influential for those who are less comfortable with emotional expression and those with an avoidant attachment style (Vogel et al., 2008b; Vogel & Wei, 2005).

However, Vogel and Wester (2003) found that the avoidance factors are mediated by one's anticipated risks and benefits of counseling. Therefore, directly talking about the anticipated risks and concerns and educating the public about the benefits of discussing one's emotions may be helpful. Educating the public on the benefits of emotional expression may help outweigh the perceived risks for those who are less comfortable with self-disclosure. It may be helpful to teach potential clients that the expression of painful emotions is only encouraged in order to work through the emotions, which in turn can lead to the relief of distress and feelings of understanding and acceptance. Normalization of the self-disclosure process and providing an accurate picture of the therapy process can also be helpful in reducing anticipated risks. For example, most therapists do try to establish and maintain a safe, confidential environment in which self-disclosure is treated with care and respect. Most therapists are also sensitive to the timing of client's self-disclosure and will not exert unnecessary pressure on self-disclosure that clients are not ready for (Vogel et al., 2008b; Vogel, Wester, Larson, & Wade, 2006). One concern relating to the fear of emotional expression is a concern for confidentiality. In fact, this concern was found to be one of the major barriers to seeking mental health services in the general public (Sareen et al., 2007). Therefore, education on how confidentiality is handled by mental health professionals may help promote help-seeking behavior.

Misconceptions of Counseling. Some anticipated risks involve general perceptions of mental health services or mental illness. Unfortunately, these perceptions are often based on inaccurate information gathered from the media (Crisp, Gelder, Rix, Meltzer, & Rowlands, 2000; Jorm, 2000; Vogel, Gentile, & Kaplan, 2008a). A recent study has found that the influence of television on attitudes toward therapy is fully mediated by the perceived stigma and anticipated benefits associated with therapy. This finding provides some hope for outreach programs, for while mental health professionals cannot change the media at once, they can target individuals' perceived stigma and educate students about the benefits of counseling. In order to combat the misconceptions of mental illness, therapists, and therapy processes, it is important to provide accurate information about the role of therapists, the function and process of therapy, how to seek help, and an accurate expectations for what therapy can accomplish (Jorm, 2000; Vogel et al., 2008a; Vogel et al., 2008b; Vogel et al., 2005)

Changing the Stigma Associated with Mental Health Services

The inaccurate perceptions of or discrimination against people with mental illness also can lead to the fear of public stigma. In a survey of public opinion toward mental illness in Britain, researchers found that people with mental illness are perceived as dangerous, violent, and unstable (Crisp et al., 2000). These stereotypes are known to be obstacles to help-seeking behaviors in two ways (Komiya et al., 2000). First, individuals may not be aware of the severity of their own mental health problems because they themselves are not dangerous, violent, or unstable. Second, one may not seek help when needed due to a fear of discrimination from others (Vogel, Wade, & Hackler, 2007). Several strategies have been developed to combat stigma toward mentally-ill and mental health services such as public campaigns, comprehensive workshops, written materials, lectures, utilization of the biological attribution of mental illness, and normalization. This section will review each strategy and results of studies of their effectiveness. See Table 2 for a list of these studies and their findings.

Public Campaigns. Actions to address the stigma and discrimination against people with mental illness have been organized across the world. Delegators from 51 countries attended the first international conference on stigma and discrimination against mental illness in 2001 when the World Health Organization (WHO) reported the importance of attending to attitudes toward general social disability and called for countries to launch mental health campaigns to educate the public. Following the attempt, the World Psychiatric Association (WPA) developed active anti-stigma programs in 20 countries (Pinfold et al., 2003a; Tanaka, Ogawa, Inadomi, Kikuchi, & Ohta, 2003). Outcome studies on these campaigns are scarce and provided mixed results for the effectiveness of these campaigns in changing the public's attitudes toward mentally-ill

individuals. In England, one study investigated the effectiveness of an anti-stigma education program for police forces, finding some effectiveness in increasing the police force's knowledge of mental health but very little change in their attitudes toward people with mental illness. The stereotype linking people with mental health problems with violent behavior was not successfully challenged by this anti-stigma program (Pinfold et al., 2003a).

Comprehensive Training. The most successful intervention may be a series of mental health awareness workshops in England. Pinfold and her colleagues (Pinfold et al., 2003b) provided a mental health awareness workshop for students aged 14 to 15. The intervention included two phases. Phase one of the workshop was delivered by a mental health professional who focused on understanding mental health and mental illness. This phase included viewing video clips about people living with depression and schizophrenia, promoted a positive sense of well-being, and challenged the use of stereotypical language. This phase also emphasized removing the social distance between students and the mentally-ill. In phase two, a person who had personal experiences of living with mental health problems co-facilitated discussion with students about what they had learned in phase I. Additionally, these co-facilitators shared personal experiences with students through a question-and-answer session. Students who participated in these workshops reported significant changes in their attitudes toward people with mental health problems with changes remaining significant at a six-month follow-up. This study also identified the importance of experiential learning through personal contact. Students in this study who reported having personal contact with mentally-ill persons demonstrated more learning than those who did not have such contact.

Table 2Studies on Stigma-Reducing Strategies

Study	Sample (N; mean age,	Intervention Strategies	Outcomes
	population)		
Esters, Cooker, &	40; 14.7; high school	Comprehensive Training	Significant improvement of
Ittenbach (1998)	students in rural	(included lecturing)	participants' attitudes toward
	Mississippi		counseling (Cohen's $d = .56$)
			and decrease in stigma toward
			the mentally ill (Cohen's d
			= .96). Improvement
			remained at 12 week follow-
			up.
Han, Chen, Hwang, &	299; 20.3; undergrads in	Written materials and	Biological attribution
Wei (2006)	Taiwan	biological attribution	significantly improved
			participant's willingness to
			seek help. Stigma-reducing
			information produced no
			changes in participant's
			stigma associated with
			depression.
Luty, Umoh, Sessay, &	158; 47.2; general	Written materials	No improvement in reducing
Sarkhel (2007)	population		participants' stigma toward
			those with schizophrenia
			and/or alcohol problems.

Study	Sample (N; mean age,	Intervention Strategies	Outcomes
	population)		
Mann & Himelein	101; undergrads	Lecture	Diagnosis approach did not
(2004)			reduce stigma toward the
			mentally ill. Humanizing
			approach significantly reduce
			stigma associated with bipolar
			disorder and schizophrenia.
Mino, Yasuda, Tsuda,	91; med school students	Lecture	Significant decrease in stigma
& Shimodera (2001)			toward the mentally ill.
No. & Chan (2002)	210: and 12 21:	Commentancius Training	Significant degrades in stieme
Ng & Chan (2002)	219; age 13-21;	Comprehensive Training	Significant decrease in stigma
	secondary school	(included lecturing)	toward the mentally ill.
	students		
Pinfold et al. (2003a)	228; police officers in	Public Campaign	No significant change in
	the UK	(including lecturing)	stereotype associated with the
			mentally ill.
Pinfold et al. (2003b)	472; secondary school	Comprehensive Training	Significant improvement of
	students in the UK	(included lecturing)	participants' attitudes toward
			the mentally ill.

Table 2 Continued

Study	Sample (N; mean age,	Intervention Strategies	Outcomes
	population)		
Tanaka, Ogawa,	384; mean age ranged	Public Campaign	Significant changes in
Inadomi, Kikuchi, &	from 39.1 to 44.1 across	(including lecturing)	participants' understanding of
Ohta (2003)	six different sites;		mental illness (Cohen's ds
	community residence in		ranged from 0.67 to 2.34),
	Japan.		and negative attitudes toward
			those with mental illness
			(Cohen's ds ranged from 0.22
			to 0.75)

Table 2 Continued

Another study on a comprehensive workshop to reduce stigma toward mental illness was conducted in rural Mississippi (Esters, Cooker, & Ittenbach, 1998). High school students in health classes were assigned to either a control group or an intervention group that lasted for a total of 270 minutes. The intervention program included a video designed for use with adolescents, resources available in the community, definitions and qualifications of different types of helpers, and the realities behind the stigma associated with mental health. Results indicated significant decreases in participants' stigma toward the mentally-ill and improvement in their intention to seek counseling. These improvements remained significant at a twelve-week follow-up.

A similar study in Hong Kong demonstrated the effectiveness of a school-based mental health education program in reducing students' stigma of the mentally-ill (Ng & Chan, 2002). Students from 13 different secondary schools in Hong Kong voluntary enrolled in a mental health club founded by a non-governmental organization. The control group consisted of 102 students who did not participate in the club. There were no significant differences of demography or attitudes toward the mentally-ill between the control and intervention groups before the program began. The intervention program included four parts: a weekly one-hour mental health education program that met for a period of ten weeks, a joint-school mental health promotion day, peer-education talks and exhibitions given by the club members, and direct contact with mental health patients in hospitals. After the program was terminated, students who participated in the mental health club showed significant reductions in their stigma toward the mentally ill in comparison to those in the control group. A limitation of this study is its quasi-experimental design that students were self-selected to participate in the mental health club. Although the study claimed no significant differences between the two groups at baseline, there may have been differences in their willingness to learn about the mental health issues that may have confounded the results.

Although findings from these comprehensive workshops are encouraging, they are limited in their generalizability to other populations. Participants in these studies were teenagers and the process of changing their stereotypes may be different from that of a different age group. Furthermore, it may not be realistic to expect people in the general public to invest hours of their time in an outreach program. Outreach programs will need to strike a balance between effective strategies and limitation of time based on the targeted population.

Lecture. Lectures have also been found to be useful in previous research. In a one-hour educational program in Japan, Mino and colleagues (Mino, Yasuda, Tsuda, & Shimodera, 2001) demonstrated some effectiveness in improving medical students' attitudes toward the mentallyill. This study significantly improved 13 out of the 21 items of their measurements. However,

over half of the items on social distance, attitudes toward psychiatric services, and attitudes toward human rights of mentally ill patients did not change after the intervention. Another Japanese lecture intervention on mental health issues for the public demonstrated effectiveness in decreasing stigma toward mental illness and increasing intention for psychiatric treatmentseeking behaviors (Tanaka et al., 2003). Although only two studies specifically labeled their intervention as lectures, most outreach program do incorporate lecture in their intervention. It is possible that a combination of lecture and other strategies can lead to a better result than a lecture only intervention, although no direct comparison has been conducted in previous studies.

Reading Written Materials. Simply reading didactic written materials was found to be ineffective. For example, in Taiwan, Han and colleagues (Han, Chen, Hwang, & Wei, 2006) provided a biological attribution (of depression) intervention and a destigmatization intervention to college students. Students in the destigmatization group read five paragraphs of information in an attempt to reduce blaming those with depression. They found no effect for the destigmatization condition on students' willingness to seek help. Similarly, an outcome study on the effectiveness on didactic factsheets to change stigma toward those with mental illness was found to be ineffective (Luty, Umoh, Sessay, & Sarkhel, 2007).

Biological Etiology. Education on causes of mental health problems appears to be a helpful element in reducing negative attitudes toward the mentally ill (Pinfold et al., 2003b; Tanaka et al., 2003). One qualitative study conducted in Western Canada emphasized the importance of a biomedical attribution of depression in reducing stigma and increasing help-seeking behaviors (Schreiber & Hartrick, 2002). A limitation of this study was that most participants considered "treatment" as medical treatment, and only a part of the sample reported

going to counseling. It is unknown whether the biomedical attribution of depression can help increase one's intention to seek counseling.

There may then be some benefits of biological attribution of mental health in decreasing self-blame, stigma, and in promoting willingness to seek help. Still, one study suggested that biological attribution may actually increase stigma toward mental health problems (Mann & Himelein, 2004). One possible explanation is how stigma was operationally defined in these different studies. Mann and Himelein (2004) measured stigma with a social-distance scale which may not include the cognitive and affective aspects of stigma, whereas other studies included measures of cognitive understanding about mental illness that are more easily to be changed by educational interventions (Pinfold et al., 2003b; Tanaka et al., 2003).

Normalization. In mental health services, normalization is defined as the process of making a phenomenon or a behavior normal. This process may include providing information that indicates a phenomenon (such as mental health problem and seeking professional help) is common. Normalizing mental health concerns may help overcome the stigma of seeking mental health service (Vogel et al., 2006). Snyder and Ingram (1983) found that normalization can increase help-seeking behaviors among college students who suffer from anxiety. Normalization appears in most of the effectiveness studies on stigma-reducing strategies (Pinfold et al., 2003a; Pinfold et al., 2003b; Tanaka et al., 2003). According to the National Institute of Mental Health (2009c), an estimated 26.2 percent of Americans ages 18 and older, or about one in four adults, suffer from a diagnosable mental disorder in a given year. Table 3 provides a statistical breakdown of several of the most common mental disorders in the United States in 2008. These types of statistics are helpful in normalizing mental health concerns.

Similarly, normalizing mental health help-seeking processes may be helpful in reducing the stigma associated with seeking mental health services (Vogel et al., 2006). Reframing or relabeling services may help decrease stigma and increase the willingness to seek help. For example, reframing mental health services as education, consultation, or coaching may significantly reduce some individual's perceptions of the anticipated risks associated with talking to a therapist (Komiya et al., 2000), especially for men with more stereotypical masculine attitudes (Robertson & Fitzgerald, 1992). In a study conducted in a college classroom setting,

Table 3

Category	Diagnosis	Number of American	Percentage of the US
		adults who suffers from	population age 18 and
		the diagnosis in a given	older that suffers from the
		year.	diagnosis in a given year.
Mood Disorders		20.9 millions	9.5 %
	Major Depressive Disorder	14.8 millions	6.7%
	Dysthymic Disorder	3.3 millions	1.5%
	Bipolar Disorder	5.7 millions	2.6 %
Anxiety Disorders		40 millions	18.1 %
	Panic Disorder	6 millions	2.7%
	Obsessive-Compulsive Disorder	2.2 millions	1%
	Post-Traumatic Stress Disorder	7.7 millions	3.5%
	Generalized Anxiety Disorder	6.8 millions	3.1%
	Social Phobia	15 millions	6.8%
	Agoraphobia	1.8 millions	0.8%
	Specific Phobia	19.2 millions	8.7 %
Eating Disorders	norexia nervosa, bulimia nervosa,	4.4 millions -11 millions in	2-5% in a 6-month period
	and binge-eating disorder	a 6 –month period	
Attention Deficit			4.1 % in American adults
Hyperactivity			age 18 to 44.
Disorder			

Prevalence of Mental Health Disorders in the United States

Note. Information adopted form National Institute of Mental Health (2009b)

standard classroom procedures were described in the language of "growth," resulting in a more favorable evaluation of these procedures by students (Woolfolk & Woolfolk, 1979). With regard to mental health services, it is important that the reframing of service should focus on changing how the service is perceived rather than misleading students. For example, framing therapy as a type of empowerment rather than a sign of weakness might help people overcome their fears. In an outreach webpage hosted by NIMH (2009a), seeking professional help for depression was accompanied by the message "It takes courage to ask for help" and real stories of men who suffered from depression. A sense of empowerment may decrease stigma and increase service utilization.

Comparison of different destignation interventions. Along with varying levels of success, these destignation intervention programs vary in their approaches and time requirements for participants. It is still unclear what strategies are successful or how much time it takes for an intervention to be effective at reducing stigma. One study compared two methods of classroom intervention to reduce stigma toward mental illness (Mann & Himelein, 2004). One method involved a first-person narrative approach aimed at humanizing people who are mentally ill and building students' empathy toward them. The other method was a traditional classroom lecture on mental health diagnoses, symptoms, and an in-class exercise in diagnosis. Both interventions took place in an undergraduate abnormal psychology class over two weeks. The first-person narrative approach was found to significantly reduce social distance toward the mentally-ill. On the other hand, the traditional diagnosis approach actually increased students' social distance toward the mentally ill.

Forgiveness: A Potential Topic for Outreach Programming

The connection between forgiveness and mental health or well-being has received more research attention in the past decade. Forgiveness of others may help people to cope with the negative consequences of interpersonal conflicts and help facilitate meaningful social relationships and well-being. Forgiveness is generally defined as a process that involves changes in cognition, emotions, and behaviors toward an offender of an interpersonal transgression (Worthington, 2005). This change includes (a) a reduction of negative thoughts, emotions, and behaviors including the pain, hurt, anger, bitterness, and/or desires for revenge that result from the hurt, and (b) an increase in positive thoughts, feelings, and prosocial behaviors toward the offender that may include compassion, understanding, love, mercy, or simply a feeling of pity (Worthington, 2005; Worthington, Witvliet, Pietrini, & Miller, 2007). Forgiveness does not imply reconciliation (Freedman, 1998), forgetting, condoning, accepting, justifying, excusing, overlooking the event, releasing the offender from legal accountability (Rye, Folck, Heim, Olszewski, & Traina, 2004; Toussaint & Webb, 2005; Wade, Worthington, & Meyer, 2005; Worthington, 2005; Worthington et al., 2007) or forbearing (McCullough, Fincham, & Tsang, 2003). Forgiveness may involve different targets (i.e. others, self, or God) and different methods (i.e. offering, feeling, or seeking forgiveness; Toussaint & Webb, 2005). There is also a distinction between trait (dispositional) and state forgiveness. Trait forgiveness refers to a person's tendency to forgive or not forgive across time and situations (Berry, Worthington, O'Connor, Parrott, & Wade, 2005) whereas state forgiveness refers to forgiveness after a specific transgression or at a specific point in time (Baskin & Enright, 2004).

Empirical studies have provided evidence for the association between forgiveness and mental health (mostly measured by depression and anxiety symptoms; see Table 4 for a list of these studies and their findings). Toussaint and Webb (2005) reviewed 13 studies that directly examined the relations between forgiveness and mental health or well-being. Among these studies, seven utilized undergraduate samples and six relied on participants from the community. All of these studies included measures of forgiveness of others and most studies assessed forgiveness at the trait level. Only three studies assessed forgiveness as a state. Findings across these studies were consistent: there is a clear correlation between forgiveness and depression, forgiveness and anxiety, and forgiveness and mental health and/or well-being. In addition to Toussaint and Webb's review, other studies have documented similar findings of the relations between forgiveness and well-being. For example, in a study involving college students, higher forgiveness was associated with lower depressive symptoms and higher life satisfaction (Ysseldyk, Matheson, & Anisman, 2007). Maltby, Day, and Barber (2004) found a negative correlation between forgiveness (in combination with a low neurotic coping style) and mental health variables, including depression, anxiety, somatic symptoms, social dysfunction, and perceived stress. Although most studies agree on the positive association between forgiveness and mental health, two studies have found no significant relation between forgiveness and life satisfaction (McCullough, Bellah, Kilpatrick, & Johnson, 2001; Sastre, Vinsonneau, Neto, Girard, & Mullet, 2003). Sastre and colleagues suggested that other factors such as loneliness and selfesteem may have a stronger association with life satisfaction than forgiveness does. It is also possible that life satisfaction is a different construct than other mental health variables such as depression or anxiety. Research on mental health usually measures psychological symptoms whereas these two studies on forgiveness and life satisfaction used the Satisfaction With Life

Table 4

Studies on Forgiveness and Mental Health/Well-being

Study	Sample (N; mean	Findings
	age; population)	
Berry & Worthington	39; 23; undergrads	For giveness positively related to global mental health ($r = .52$)
(2001) ^a		
Bono, McCullough, &	115 and 165; 19.76	Forgiveness positively related to psychological well-being
Root (2008)	and 19.61;	
	undergrads	
Brown (2003) ^a	70; 22.6; undergrads	For giveness negatively related to depression ($r =34$)
Exline et al. (1999) ^a	200; 19.7;	Difficulty forgiving God and self positively related to
	undergrads	depression and anxiety (r's ranged from .21 to .31). Difficulty
		forgiving others positively related to anxiety $(r = .16)$
Kendler et al. (2003) ^a	2,621 twin pairs	Forgiveness related to less nicotine dependence and less drug
	from Virginia Twin	abuse or dependence. Low vengefulness related to less major
	Registry	depression, generalized anxiety, phobia, and bulimia nervosa.
Krause & Ellison	1,316; 74.5; older	Forgiveness of others negatively related to depressive affect,
(2003) ^a	adults	depressive somatic symptoms, and death anxiety, and positively
		to life satisfaction. Forgiveness by God negatively related to
		depressive affect and positively to life satisfaction.
Maltby, Day, and	320; 33.7;	Forgiveness positively related to better mental health
Barber (2004)	community	
	residence	
Maltby, Macaskill, &	324; 22; undergrads	Unforgiveness of self and others positively related to depression
Day (2001) ^a		and anxiety (r 's ranged from .16 to .27)
Mauger et al. (1992) ^a	237; outpatient	Unforgiveness of self and others positively related to depression

Study	Sample (N; mean	Findings
	age; population)	
	clients in counseling	and anxiety (r's ranged from .16 to .56)
McCullough et al.	91; undergrads	State unforgiveness not related to life satisfaction cross-
(2001) ^a		sectionally or longitudinally
Paleari, Regalia, and	119 husbands and	Forgiveness predicts martial quality. Reciprocal directions
Fincham (2005)	124 wifes from	between forgiveness and marital quality emerges over time.
	North Italy	
Rye et al. (2001) ^a	328; 19.2;	State forgiveness (r's ranged from .21 to .40) but not trait
	undergrads	forgiveness positively related to existential well-being.
Rye, Folck, Heim,	199; not reported;	Forgiveness of an ex-spouse was positively related to existential
Olszewski, & Traina	divorcees	well-being and religious well-being and negatively correlated
(2004)		with depression, state anger, and trait anger (r's ranged from .21
		to .51)
Sastre, Vinsonneau,	812 adolescents and	Forgiveness not related to life satisfaction
Neto, Girard, & Mullet	adults living in	
(2003)	France and 192	
	undergrads living in	
	Purtugal	
Seybold, Hill,	68; 46; community	Unforgiveness of self and others positively related to depression,
Neumann, & Chi (2001)	residents	state anxiety, and trait anxiety (r's ranged from .49 to .77)
a		
Subkoviak et al. (1995)	394; 22.1	State forgiveness negatively related to stated anxiety (r's ranged
a	(undergrads) and	from28 to60)
	49.6 (same-gender	
	parent)	

Table 4 Continued

Study	Sample (N; mean	Findings
	age; population)	
Toussaint et al. (2001) ^a	1.423; nationally	Forgiveness of oneself and others negatively related to
	representative	psychological distress and positively related to life satisfaction.
	probability sample	Seeking forgiveness positively related to distress and negatively
	of U.S. adults	related to life satisfaction.
Tse & Yip (2009)	39; community	Forgiveness positively related to interpersonal adjustment (r
	residents	= .28) and psychological well-being ($r = .17$). Interpersonal
		adjustment mediates the relation between forgiveness and
		psychological well-being.
Witvliet et al. (2004)	213; 50.8; veterans	Unforgiveness of oneself positively related to PTSD, depression
	with PTSD	and anxiety. Unforgiveness of others positively related to PTSD
		and depression.
Ysseldyk, Matheson, &	183; 20.13;	Forgiveness predicts lower depressive symptoms and higher life
Anisman (2007)	undergrads	satisfaction

Table 4 Continued

^a Studies reviewed by Toussaint & Webb, (2005).

Scale as their measure, which is a five-item instrument that does not measure psychological symptoms (Diener, Emmons, Larsen, & Griffin, 1985).

Forgiveness is also associated with relationship quality. In a longitudinal study in Italy, Paleari and colleagues (Paleari, Regalia, & Fincham, 2005) found a reciprocal effect between forgiveness and marital quality in married couples over a period of six months. Specifically, forgiveness predicts better marital quality and vice versa. Over time, a couple may engage in a positive cycle whereby forgiveness enhances marital quality, which in terms leads to easier forgiveness in the marriage. Some studies have suggested that forgiveness is associated with adjustment following an interpersonal transgression. For example, Rye and colleagues (Rye et al., 2004) found that forgiveness of an ex-spouse significantly predicted post-divorce adjustment but not vice versa, and that forgiveness was negatively correlated with depression and anger. In a study involving undergrads who experienced significant interpersonal transgression within seven days of the data collection (Bono, McCullough, & Root, 2008), forgiveness was found to be associated with an increase in psychological well-being (i.e. higher life satisfaction, a more positive mood, a less negative mood, and fewer physical symptoms). Finally, Tse and Yip (2009) found that forgiveness of others can improve interpersonal adjustment, which mediates one's psychological well-being in adults (age ranged from 19 to 50).

Furthermore, there has also been evidence of the effectiveness of forgiveness interventions or treatments to help people forgive. The first meta-analysis of forgiveness intervention studies was conducted by Worthington, Sandage, and Berry (2000) and they found that forgiveness group interventions in general were effective in helping people to become more forgiving over time. Following this meta-analysis, Wade, Worthington, and Meyer (2005) conducted another meta-analysis that examined studies of group interventions that explicitly promoted forgiveness. A total of 39 forgiveness interventions, 10 alternate treatments, and 16 notreatment control groups from 27 studies were included in the analysis. The largest effect size was found for explicit forgiveness treatments, followed by alternative treatments, with both treatments significantly more effective than no treatment conditions in promoting forgiveness. Wade and his colleagues suggested that explicit forgiveness treatments may be better than general treatments (alternative treatments) when helping clients to achieve forgiveness.

Forgiveness may be a potential topic of outreach programs to address common mental health concerns among college students including depression, anxiety, and relationship issues with less stigma than is usually associated with mental heal issues. The evidence that supports the effectiveness of forgiveness interventions can be incorporated into the outreach program to increase students' positive attitudes toward seeking help.

Conclusion

The underutilization of mental health services of college students, the lack of outcome studies of outreach programs, and the lack of theory for outreach programming leads to the need for researchers to develop effective theory-based outreach programs to increase students' helpseeking behaviors. The Theory of Reasoned Action provides a framework for understanding people's help-seeking behaviors and the barriers to help seeking, such as a low outcome expectation, a fear of self-disclosure, a fear of the counseling process, misconceptions based on public media, and a fear of stigmatization. There are two channels for changing a person's behavioral intention to seek counseling: change in attitude and change in perceived stigma or social norm. See Figure 3 for an illustration.

Education on the effectiveness of psychotherapy and counseling, the role of a therapist, and the process of counseling may help improve a person's attitudes toward counseling. On the other hand, the normalization of mental health concerns and the help-seeking process, the education on etiology of mental illness, and the framing of help-seeking behaviors in a language of growth and empowerment may help reduce the stigma associated with seeking counseling. These interventions may be combined to promote people's help-seeking behaviors, although there have only been a limited number of outcome studies of these intervention strategies in

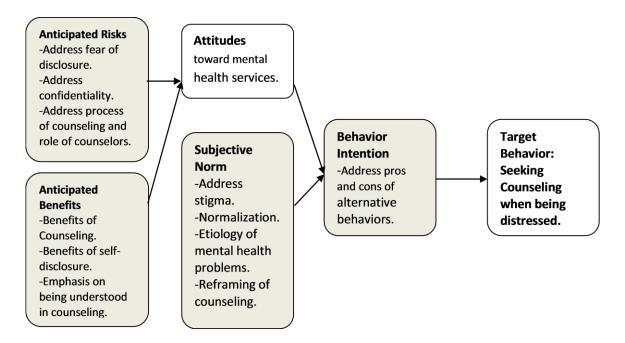


Figure 3. Application of Theory of Reasoned Action in increasing help-seeking behaviors.Note. Arrows indicate direction of influence. Shaded boxes indicate interventions strategies for outreach programming.

outreach programming. There is clearly a need to further investigation of the outcome of these strategies in increasing college students' intentions to seek mental health services.

In addition to addressing help-seeking behaviors, an outreach program should address college students' common concerns in order to attract attendance (Marks & McLaughlin, 2005). Forgiveness may be an appropriate topic to address depression, anxiety, and relationship issues at once in a positive light and without the common stigmas associated with mental health problems. A combination of forgiveness and strategies based on TRA may help promote the program, increase students' attendance, and increase positive outcomes of the program.

CHAPTER THREE: METHODS

Participants

Two hundreds and one students signed up for the study and completed the pre-test questionnaire. Among these students, there were 138 females (68.1%), 61 males (30.3%), and 1 indicated gender as "other" (0.5%). The average age of the sample was 19.2 (SD=1.84), with most (45.7%) being first year students, and 32.7 percent being second year students, 17 percent being third year, 4 percent being fourth year students and beyond. Twenty-three participants (11.5%) were psychology majors, many other majors were represented, such as kinesiology (7.5%), business (5.5%), accounting (3%), communication (3%), and criminal justice (3%). The majority of the sample was Caucasian (n= 166, 82.6%), followed by International Students (n=16, 8%), African Americans (n=4, 2%), Asian Americans (n=4, 2%), Others (n=4, 2%), Hispanic American (n=3, 2%), Multiracial Americans (n=2, 1%), and Native American (n=1, 0.5%). Of the participants, 78 (38.8%) reported having prior counseling experiences that were on average somewhat positive (M = 1.25, SD = 2.5 on a scale from -5, extremely negative experience, to +5, extremely positive experience).

Outcome Measures

Intention to seek counseling. The Intention to Seek Counseling Inventory (ISCI) was used to measure students' intentions to seek counseling (Cash, Kehr, & Salzbach, 1978) This scale includes 17 items that ask participants how likely, ranging from 1 (*very unlikely*) to 4 (*very likely*) they would be to seek counseling for the listed problems, which include a wide variety of problems such as relationship difficulties, depression, personal worries, and drug problems. Items on ISCI can be divided into three subscales: interpersonal problems (ten items), academic

problems (four items), and drug/alcohol problems (two items). Scores on the items are summed up with a higher score indicating a higher intention to seek counseling for personal problems. Internal consistency was estimated to be adequate for the total score (Cronbach's α ranged from .84 to .90; Cepeda-Benito & Short, 1998; Vogel & Wei, 2005) and the interpersonal problems subscale (ranging from .88 to 90; Shaffer, Vogel, & Wei, 2006; Vogel, Gentile, & Kaplan, 2008; Vogel, Wade, & Hackler, 2008; Vogel & Wei, 2005). The total scores on the ISCI were found to be positively correlated with attitudes toward seeking help (Vogel, Gentile et al., 2008). In the present study, the reliability of the total score was found to be adequate (Cronbach's α ranged from .85 to .91). Table 5 provides the Cronbach's α for measures used in the present study

Attitudes toward seeking help. The Attitudes toward Seeking Professional Psychological Help Scale (ATSPPHS) was used to measure participants' attitudes toward seeking mental health services. This measure originally included 29 items (Fischer & Turner, 1970) but was later revised and shortened by Fischer and Farina (1995) to ten items. This shorter version has been found to be strongly correlated with the original scale (r = .87). Items are rated from 1 (*disagree*) to 4 (*agree*) on a Likert-type scale. There are five items with reversed scores, and a higher score indicates a more positive attitude toward mental health services. An example item is "If I believed I was having a mental breakdown, my first inclination would be to get professional attention." Factor analysis revealed that the revised ATSPPHS measures one single construct Fischer & Farina, 1995). Both internal consistency (Cronbach's α ranged from .80 to .84; Fischer & Farina, 1995; Shaffer et al., 2006; Vogel, Gentile et al., 2008; Vogel, Wade et al.,

	_	_	2 Months
Measures	Pre-test	Post-test	Follow-up
Intention to seek counseling inventory(ISCI)	0.85	0.89	0.91
Attitudes toward seeking help scale			
(ATSPPHS)	0.82	0.84	0.86
Disclosure Expectations Scale (DES)			
Anticipated risks subscale (DES_AR)	0.82	0.84	0.86
Anticipated benefits subscale(DES_AB)	0.78	0.89	0.76
Self-Stigma of Seeking Help scale (SSOSH)	0.90	0.89	0.90
Perceptions of Stigmatization by Others for			
Seeking Help scale (PSOSH)	0.91	0.84	0.85
Understanding Forgiveness (UF)	0.32	0.35	0.35

Internal Consistency Reliability of the Outcome Measures in the Present Study

2008; Vogel, Wade, Wester, Larson, & Hackler, 2007; Vogel, Wester, Wei, & Boysen, 2005) and the one-month test-retest reliability have been found to be adequate (r = .80; Fischer & Farina, 1995). The revision scale has been found to also correlate with previous use of professional help for a problem (r = .39; Fischer & Farina, 1995) and willingness to seek counseling (Vogel, Gentile et al., 2008). In the present study, the reliability of the total score was found to be adequate (Cronbach's α ranged from .82 to .96, see table 5 for details).

Anticipated risks and benefits. The Disclosure Expectations Scale (DES; Vogel & Wester, 2003) was developed to measure the risks and benefits a person anticipates will result from talking to a therapist about personal problems. The eight items on the DES are rated on a 5-point Likert-type scale ranging from 1 (*not at all*) to 5 (*very*). There are two subscales of the DES, anticipated risks (four items) and anticipated benefits (four items). A sample item for anticipated risks is "How worried about what the other person is thinking would you be if you disclosed negative emotions to a counselor?" A sample item for anticipated benefits is "If you were dealing with an emotional problem, how beneficial for yourself would it be to self-disclose personal information about the problem to a counselor?" Scores are summed up in each subscale and then totaled, with higher scores indicating greater anticipated benefits for counseling. The internal consistency of this scale was originally estimated to be .74 for anticipated risks and .83 for anticipated benefits (Vogel & Wester, 2003). Other studies following the initial development of the scale found the internal consistency to range from .75 to .82 for anticipated risks and .81 to .87 for anticipated benefits (Vogel, Gentile et al., 2008; Vogel, Wade et al., 2008; Vogel et al., 2005). In the present study, the internal consistency was found to be adequate for anticipated risks (Cronbach's α ranged from .82 to .85) as well as anticipated benefits (Cronbach's α ranged from .76 to .89). Validity of the scale has been established through correlation with related constructs. For example, anticipated risks was found to be negatively correlated with the tendency to self-disclose distressing information, and the intention to seek therapy (Vogel et al., 2005). On the other hand, anticipated benefits have demonstrated a positive correlation with the tendency to self-disclose distressing information (Vogel et al., 2005) and the intention to seek counseling (Vogel, Gentile et al., 2008; Vogel et al., 2005).

Self-stigma associated with seeking psychological help. The ten-item Self-Stigma of Seeking Help (SSOSH; Vogel, Wade, & Haake, 2006) was developed to measure individual's self-stigma associated with seeking psychological help. Self-stigma was defined as "the fear that by seeking help or going to therapy, a person will reduce their self-regard, their satisfaction with themselves, their confidence in themselves and their abilities, and that their overall worth as a person will be diminished" (Vogel, Wade, & Haake, 2006, p. 326). An example of the items in SSOSH is "Seeking psychological help would make me feel less intelligent." Participants respond to items using a five-point, partly anchored, Likert-type scale ranging from 1 (not at all) to 3 (agree and disagree equally) to 5 (strongly agree). The SSOSH has adequate reliability (Cronbach's α ranged from .88 to .91) and two month test-retest reliability (r = .72). In the present study, the reliability of SSOSH was found to be adequate (Cronbach's α ranged from .89 to .90). Factor analysis has revealed that the SSOSH measures a single construct. The SSOSH has also been found to be significantly related to other measures of related constructs, such as Anticipated Risks (r's ranged from .30 to .47), Anticipated Benefits (r's ranged from -.45 to -.32), public stigma (r's ranged from .46 to .48), attitudes toward seeking help (r's ranged from -.53 to -.63), and intention to seek help (r's ranged from -.32 to -.38). Scores on the SSOSH can also predict attitudes toward seeking help and intentions to seek help. Furthermore, the SSOSH was found to be able to discriminate between college students who seek help and those who do not (Vogel, Wade et al., 2006).

Perceived public stigma. The five-item Perceptions of Stigmatization by Others for Seeking Help (PSOSH) scale was developed to measures one's perceptions of other's reaction to mental health seeking behaviors (Vogel, 2009). This scale is administrated with one instruction: "Imagine you had a problem that needed to be treated by a mental health professional. If you

sought mental health services, to what degree do you believe that the people you interact with would ______." A sample item is "React negatively to you." Participants rate each item on a 5 point Likert-scale ranging from 1 (*not at all*) to 5 (*a great deal*). The items are summed so that higher scores reflect greater perceptions of stigma. The internal consistency for the measure was originally found to be .73. Factor analysis revealed that the scale measures one single construct in Caucasian as well as ethnic minority groups. Internal consistency (Cronbach's $\alpha = .88$) and test-retest reliability across a 3-week period was adequate (r = .77). In the present study, the reliability of the total score was found to be adequate (Cronbach's α ranged from .85 to .90). Concurrent validation was supported through the association between PSOSH and other stigma measures, including public stigma toward counseling, public stigma toward mental illness, and self-stigma (Vogel, 2009).

Forgiveness knowledge. The Forgiveness Concept Survey (FCS) was used to measure participants' understanding of forgiveness. The present version of the FCS was adapted from Rye et al. (2005). The FCS includes 7 items that assess knowledge of forgiveness with filler items "assessing" beliefs about anger and relationships. The items assessing forgiveness knowledge were conceptualized from the forgiveness literature and published definitions of forgiveness. Participants were asked to rate each item on a 5 point Likert-scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Forgiveness is defined as a free gift and it is not the same as forgetting, reconciliation, continuing the relationship, minimizing the hurt, or condoning the transgression. Scores of the items are summed and a higher total score indicates greater adherence to the conceptualization of forgiveness in research. An example of the items is "forgiveness is a gift that is freely given." In previous studies, the internal consistency was adequate (Cronbach's *α* ranged from .55 to .80; Rye et al., 2005; Rye & Pargament, 2002). The

internal consistency (Cronbach's α) was found to range from 0.32 to 0.35 in the current sample. Because the reliability is low in this study, this outcome measure is not used for the main analysis.

Behavioral measure. To measure participant's actual help-seeking behavior, a question "Since you completed the previous questionnaire in Phase II, have you attended at least one meeting with a mental health professional such as a counselor, psychologist, or a marriage and family therapist?" was included to measure participant's behavioral change. Participants answered yes or no to the question and the response was used to count the number of participants who sought counseling during the period of the study.

Covariates

Psychological symptoms. The Clinical Outcome in Routine Evaluation (CORE; Core System Group, 1998) was used to assess participants' psychological symptoms. The items are summed so that higher scores reflect greater global psychological distress. Items on this measure can be divided into four dimensions/subscales: Subjective Well-being (4 items),

Problems/symptoms (12 items), Life Functioning (12 items), and Risk/harm (6 items). Because the nature of the present outreach program was to raise awareness instead of providing therapy, the Risk/harm subscale was not be included in the program. An example of the items is "I have felt like crying" and each item is scored on a five-point Likert-type scale ranging from 0 (*not at all*) to 4 (*most of all the time*.) Previous studies have documented the reliability (Cronbach's α ranging from .90 to .98) and validity of using the CORE across large samples in the health care systems to distinguish clinical and non-clinical groups (Branney & Barkham, 2006; Evans et al., 2002; Evans et al., 2000). Internal consistencies for each subscales were also appropriate

(Cronbach's α ranged from .75 to .94). Concurrent validity with other related measures was found. For example, the CORE is correlated with the Beck Depression Inventory (r = .86; Evans et al., 2002). Internal consistency in the present study was found to be adequate (Cronbach's α ranged from .95 to .96, see table 5 for details).

Prior counseling experience. Participants were asked to answer the question, "Have you ever received any form of mental health services such as individual counseling, couple's counseling, family counseling, or group counseling?" Those who have had counseling experience will then be asked to rate their prior experience on a 11-point Likert-type scale ranging from -5 (*Extremely Negative*) to 5 (*Extremely Positive*) with 0 being a neutral response.

Participants' Perception of the Outreach Program

Program feedback form. A program feedback form was included in the procedure to assess participants' perception of the program. This form was created for the present study and it includes 7 items. An example of the items is "I learned something valuable about mental health concerns in this program." Participants rated each questions on a 5-point Likert-type scale ranging from 1 (*Strongly Disagree*) to 5 (*Strongly Agree*). Internal consistency in the present study was found to be adequate (Cronbach's α was .90).

Counselor Rating Form-Short version (CRF-S). The CRF-S includes 12 items assessing participant's perception of a counselor (Corrigan & Schmidt, 1983). Some examples of the items include friendliness, honesty, and trustworthiness. Participants rated each item on a 57-point Liker-type scale ranging from 1 (*Not Very*) to 7 (*Very*). Factor analysis revealed three scales: attractiveness, expertness, and trustworthiness and split-half reliabilities of these scales were .85, .87, and .91 respectively (Corrigan & Schmidt). The CRF-S was used in the present

study to assess participants' perception of the outreach personnel. Internal consistency in the present study was found to be adequate (Cronbach's α was .94).

Procedures

Appendix A provides a flow-chart outlining the study procedures. Participants completed outcome measures at three different time points of the study: pre-test (before the program), post-test (immediately after the program), and at two-month follow-up.

Before the program. The study was advertised through an online participant recruitment system used by the psychology department (SONA system). The advertisement provided information of the nature of the study, the time it would take participants to complete the study and tasks involved, compensation, and their rights to withdrawal at anytime during the study (see Appendix B for advertisement).

All participants completed pre-test questionnaires online. The first page of the online questionnaire was the informed consent document (see Appendix C). Continuing with the study served as the consent to participate in the study. Pre-test questionnaires include the outcome measures (ISCI, ATSPPHS, DES, SSOSH, PSOSH, and FCS), demographic information, and prior counseling experience (see Appendix D for the questionnaires). These scores served as baseline data for participants. Participants provided their email addresses so that the researcher can contact them for the later part of the study and so that their responses can be tracked over time. There will be no other identifying information used. The majority of the communication (except for the program delivery) were conducted via email. Participants were randomly assigned to three different conditions: TRA outreach group, alternative outreach group, and notreatment control group.

The outreach programs. There were three parts for each program. The first part consisted of completing an assessment, the second part included education on forgiveness and mental health. The last part included education or discussion on mental health services (see Appendix E for a summary of the powerpoint presentation of the outreach programs). The programs were provided by three Caucasian doctoral students with prior training and experience in outreach programming. These outreach personnel include two males (age 26 and 25) and one female (age 25). They received training from the author on both TRA program and the alternative program and they were blind to the hypotheses. Each student provided two programs on a two weekday evenings, one of each condition, and they flipped a coin to determine the order of the two conditions they provided.

Both programs began with the assessment of one's well-being (measured with the CORE). Participants completed the CORE and outreach personnel assisted students in scoring their results. A brief interpretation of the results was given to participants and they were told not share their results with others. During part of the interpretation, outreach personnel stated that those who meet the clinical cut-off point on the CORE might especially benefit from counseling. In the second part of the programs, both groups learned about a definition of forgiveness. Participants in both programs learned about research findings of the connection between forgiveness and mental health and the benefits of forgiveness. The third part of the programs involved discussion or education on mental health services. Participants in both groups were asked to generate resources that can help cope with life issues and relationship issues. When participants did not come up with counseling as a resource, the outreach personnel would add it to the list of resources. They then were divided into small groups in which they discussed pros and cons of each resource.

In the alternative program, participants continued an in-depth discussion on these resources and share their personal experiences with them. Outreach personnel did not correct any misconceptions of mental health services nor did they provide any active education about counseling. Outreach personnel will only facilitate group discussion on this topic. To ensure that both programs last the same amount of time, participants were educated on different communication styles.

Outreach personnel in the TRA program, on the other hand, first reviewed common concerns about counseling and proceeded to give students information regarding mental health services. They delivered information regarding outcome expectations including (a) the effectiveness of psychotherapy, (b) the role of therapists, (c) the function and process of therapy, (d) the concerns and benefits of self-disclosure in therapy, and (e) campus resources. They also delivered stigma-reducing interventions including (a) the etiology of mental illness and (b) the normalization of mental health problems and seeking mental health services. Finally, a question and answer section was included to address remaining concerns regarding seeking counseling.

Immediately after the programs, participants completed the program feedback form, Counselor Rating Form-Short version, and outcome measures (ISCI, ATSPPHS, DES, SSOSH, PSOSH, and FCS). The CORE was also collected by a research assistant to include in data analysis.

Participants in the control group completed the post-test outcome measures (ISCI, ATSPPHS, DES, SSOSH, PSOSH, and FCS) online and CORE at the same period of time when the programs were delivered. They did not complete any program feedback forms.

Two-month follow-up. Two months following the programs, all participants received emails with a website link to complete follow-up questionnaires including ISCI, ATSPPHS, DES, SSOSH, PSOSH, FCS, and CORE. These follow-up questionnaires also included the onequestion behavioral measure (i.e., "Since you completed the previous questionnaire in Phase II, have you attended at least one meeting with a mental health professional such as a counselor, psychologist, or a marriage and family therapist?"). On the last page of the follow-up questionnaires, participants read the debriefing form (see Appendix F). All participants were offered the materials used in the TRA program via an internet webpage and were offered the opportunity to talk to the author regarding the material.

Design

Participants were randomly assigned to one of three conditions: TRA program, alternative program, and no-treatment control group. They completed measures before the programs, immediately after the programs, and at approximately two months follow-up. This yields a 3 (condition) x 3 (time) design.

Power Analysis

In the current study, a power analysis was completed by using the power analysis software, G*Power 3 (Faul, Erdfelder, Lang, & Buchner, 2007). See Table 6 for the results of power analysis of the current study with a power of .80 or higher at $\alpha < .05$.

To perform power analysis of repeated measured ANOVA, nonsphericity correction (ϵ), correlation among repeated measures (*r*), significant criterion (α), population effect size (ES),

Table 6

Estimated Total Sample Size at Power of .80 or Higher ($\alpha \le .05$)

Analysis	Small effect size (sample size)	Medium effect size (sample size)
Repeated measures	f = .10	<i>f</i> = .25
ANOVA, interaction		
effect (condition x	Attitudes toward seeking	help scale (ATSPPHS)
time)	(n=26 per condition, N=84)	(n=3 per condition, N=18)
-	Self-Stigma of Seeking	g Help scale (SSOSH)
	(n=36 per condition, N=114)	(n=7 per condition, N=21)
-	Perceptions of Stigmatiza	tion by Others (PSOSH)
	(n=32 per condition, N=96)	(n=3 per condition, N=18)
One tail paired-	<i>d</i> = .20	<i>d</i> = .50
sample t-test (pre-	(n=78 per condition, N=234)	(n=14 per condition, N=42)
post)		
Chi-square for	<i>w</i> = .10	<i>w</i> = .25
goodness of fit	(964 distressed participants)	(108 distressed participants)

and statistical power (β) will be taken into consideration. Because the test-retest reliability varies across the outcome measures, when all variables are constant ($\varepsilon = 1$, $\beta = .80$, and $\alpha < .05$), the minimum sample size to obtain the same effect size changes (as *r* increases, sample size decreases). Among the five outcome measures, three were found to have documented test-retest reliability. Fischer and Farina (1995) reported a .80 for one-month rest-retest reliability of ATSSPPHS; Vogel, Wade, and Haake (2006) reported a .72 of two-month test-retest reliability for SSOSH, and Vogel (2009).reported a .77 of three-week test-retest reliability for PSOSH. If using the lowest r (.72) for analysis, the minimum sample size to obtain a small effect range from 84 to 114. To obtain a medium effect size, the minimum sample size range from 18 to 21.

A small and medium effect size for a t-test is .20 and .50 respectively (Cohen, 1992). To obtain these effects with the paired-sample t-test that compares the scores of the outcome measures between pre and post test, the minimum sample size are 234 and 42, respectively. Finally, in order to detect a small or medium effect size of the frequency difference of selfreported help-seeking behaviors of distressed students among the three groups at the time of follow-up, the total number of distressed participants is estimated to be a minimum of 964 and 108, respectively.

Effect sizes calculated from previous effectiveness studies varied from no effects to large effects (Esters, Cooker, & Ittenbach, 1998; Guajardo & Anderson, 2007; Tanaka, Ogawa, Inadomi, Kikuchi, & Ohta, 2003). Due to the limited resource, a total minimum sample size of 99 students (33 for each condition) is chosen to detect: (a) a medium effect for the time by treatment condition interaction of the repeated measures ANOVAs and (b) a medium effect size of the paired-sample t-test. As a result of this decision, detecting a small effect size of the paired-sample t-test would be difficult. However, a program that can only produce a small effect may not be of much value clinically. Additionally, the decision on a sample size of 99 also made it difficult to detect a medium effect on the chi-square analysis because it is not very likely that all of the participants are distressed (chi-square analysis requires 108 distressed individuals to find a medium effect). Due to the limitation of resources and because the chi-square analysis is not the main focus of the study, we proceeded with the minimum number of participants at 99.

In the present study, there were a total of 63 participants that completed the study, which ensured that any medium interaction effects of the repeated measures ANOVAs and the pairedsample t-tests could be detected. However, this sample size is not enough to detect small effect sizes in these analyses.

CHAPTER FOUR: RESULTS

Data Cleaning

Retention. Figure 4 illustrates a flow chart of retention in each condition. Out of the 201 participants who started the study, a total of 135 participants completed the post-test questionnaire (retention rate of 67.2%). There were 42, 43, and 50 participants for the TRA, alternative, and control group, respectively. A series of one way ANOVAs showed that there were no significant differences in the outcome variables at pre-test, between those who dropped out and those who completed the post-test questionnaires.

Among the 135 participants who completed the post-test questionnaire, 63 completed the two-month follow-up questionnaire, resulted in a 46.7% retention rate from post test to follow-up and a 31.3 % retention rate from pre-test to follow-up. There were significant differences between those who dropped out and those who completed the follow-up. Specifically, participants who dropped out reported significantly less anticipated benefits of counseling at post-test (t (130) = 3.20, p = 0.002), less positive attitudes toward counseling at post test (t (130) = 2.19, p = 0.03), and higher self-stigma at both pre (t (200) = 2.10, p = 0.04) and post test (t (130) = 2.37, p = 0.02).

Two Chi-square tests for independence were computed to explore the relation between drop out status (completed, dropped out after pre-test, and dropped out after post-test), gender, and previous counseling experience (yes or no). No significant relations were found, which indicates participants who dropped out and who completed the study are not different in their gender and whether they have any previous counseling experience.

Pre-test: 201 participants out of the 2701 potential participants in the participant pool completed online questionnaires.

TRA program:	Alternative program:	Control group:
75 participants assigned, 43	63 participants assigned, 42	64 participants assigned, 50
attended the program and	attended the program and	completed the online post-
completed post-test	completed post-test	test questionnaire. Retention
questionnaire. Retention	questionnaire. Retention	rate: 78%.
rate: 57%.	rate: 67%.	

28 completed the follow-up	19 completed the follow-up	16 completed the follow-up
questionnaire. Retention	questionnaire. Retention	questionnaire. Retention
rate: 65%	rate: 45%	rate: 32%

Figure 4. Flow chart of retention through phases of the study

One one-way analyses of variance (ANOVAs) was computed to compare the average age among those who completed the study, who dropped out after pre-test, and dropped out after post-test. One outlier (a 36 year-old) was excluded from the analysis and no significant differences were found in average age. *Missing data.* In the present study, the available case analysis method was used to analyze the data (Schlomer, Bauman, and Card, 2010). Although Schlomer and colleagues suggested several imputation methods, the drop out at the present study is believed to be not missing at random. Therefore, when a participant dropped out from the study, only his or her questionnaires before the drop out were included in the study. One participant who completed the study only completed 4 out of 6 scales at post-test and therefore, only the 4 completed scales at this time point were included in the analyses for this participant.

Among the questionnaires that were included in the analysis, missing data ranged from a low of 0% for most items of the questionnaires to a high of 1.45% on item 7 of the ATSPPHS at post test ("A person with an emotional problem is not likely to solve it alone; he or she *is* likely to solve it with professional help") and item 8 of the FCS at post test ("Forgiveness should only happen after the offender apologizes"). For other missing items, because so few items were missing, a mean substitution was conducted (Pallant, 2007). Values were imputed with the average response of the participant on the other items of the instrument where the missing item is found.

Outliers. Two types of outliers were identified: univariate outliers and multivariate outliers (Tabachinick & Fidell, 2001). Univariate outliers were identified by inspecting the boxplot of each outcome variables at each time point. When a score is located far away (at least more than 1.5 box-lengths) from the box, it is defined as an outlier. Twenty participants were identified as outliers in at least one outcome measure and their scores were checked back with the questionnaire record to see if there was a mistake in entering the data. There was no evidence of mistake in entering the data. One participant responded to the questionnaires in a biased

manner (e.g. answered all 1s to DES and all 3s to SSOSH, etc.) and was removed from the data for analysis. The multivariate outliers were checked by using SPSS to calculate Mahalanobis distances of the outcome variables. One more participant's data was removed due to response bias and other outliers were checked back with the questionnaire records and no evidence of errors or biases were found. Analyses were computed with and without the outliers to examine whether the outliers affect the results. Outliers did not affect the results in the present study and therefore are included in the analyses.

Preliminary Analyses

Means and standard deviations of all the outcome variables at each time point are listed in Table 7. A series of independent t-tests were conducted between men and women on all the outcome variables at pre-test to determine if there is any gender differences on the measures. No significant gender differences on the outcome variables were found. Because there were a limited number of minority students in the current sample, it is impossible to explore any differences in the outcome variables by ethnicity in a way that would preserve the cultural or ethnic identities of the different groups. Therefore, these analyses were not conducted.

A Chi-square for independence was computed to examine the frequency differences across conditions (i.e. TRA program, alternative program, and control group) of participants who reported having previous counseling experience. No significant differences were found. Participant's outcome measures at pretest were compared between those who reported having prior counseling experience and those who reported not having that experience. Seven

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Table 7

	TI	RA Progra	m	Alter	native Pro	gram	Co	ontrol Gro	up
		Post-	Follow-		Post-	Follow-		Post-	Follow-
	Pre-test	test	up	Pre-test	test	up	Pre-test	test	up
	M	М	М	М	М	М	М	М	М
	(SD.)	(SD.)	(<i>SD</i> .)	(SD.)	(SD.)	(SD.)	(SD.)	(SD.)	(SD.)
ISCI	38.05	37.24	38.64	37.21	36.20	38.32	36.06	36.21	41.40
	(7.10)	(10.43)	(9.90)	(7.60)	(7.49)	(7.54)	(6.74)	(7.58)	(8)
ATSPPHS	28.26	29.61	29.75	25.23	27.11	26.58	26.19	25.96	27.13
	(6.07)	(5.82)	(6.03)	(3.96)	(5.10)	(5.59)	(5.88)	(5.71)	(5.62)
DES_AR	11.98	11.26	10.07	12.00	11.16	12.05	12.02	11.25	10.93
	(4.38)	(4.33)	(4.34)	(3.62)	(3.67)	(2.99)	(3.24)	(3.55)	(3.53)
DES_AB	13.67	14.79	13.57	13.12	13.77	12.68	13.58	13.00	14.07
	(3.59)	(3.69)	(3.95)	(2.86)	(3.49)	(2.50)	(3.35)	(3.80)	(2.49)
PSOSH	8.76	8.79	6.57	8.72	8.33	9.16	9.25	8.53	7.60
	(4.19)	(4.19)	(2.41)	(3.81)	(3.12)	(3.08)	(4.52)	(3.06)	(2.87)
SSOSH	24.45	22.29	20.89	24.79	22.86	26.21	27.56	27.27	24.40
	(8.23)	(7.47)	(7.54)	(5.19)	(5.79)	(6.38)	(7.35)	(6.70)	(7.17)
FCS	25.00	26.74	26.68	24.88	24.91	24.21	24.83	25.09	25.00
	(2.60)	(2.79)	(3.13)	(3.34)	(4.06)	(2.88)	(3.32)	(2.47)	(2.51)

Means and Standard Deviations of the Outcome Variables

Note: ISCI: Intention to seek counseling. ATSPPHS: Attitudes toward seeking help. DES_AR: Anticipate risks associated with counseling. DES_AB: Anticipate benefits associated with counseling. PSOSH: Perceived public stigma. SSOSH: Self-stigma. FCS: Knowledge of forgiveness.

independent-samples t-tests were computed for this comparison and two were found to be significant (Table 8). Specifically, those who reported having prior counseling experience also reported higher anticipated benefits and lower self-stigma. However, when the same comparisons were computed using post-test data, only self-stigma remained different between the two groups; those who reported prior counseling experience reported significantly lower selfstigma then those who did not report having such experience. Finally, at two-month follow-up, no significant differences were found between the two groups on any of the outcome variables.

Program feedback. An independent t-test was computed to compare the mean differences of the program feedback between the TRA program group and the alternative program group. No significant difference was found between the two conditions (TRA program: M = 28.88 SD = 5.08; alternative program: M = 26.56 SD = 5.86), indicating that on average the participants viewed the programs as equally valuable.

Perceptions of the outreach facilitators. One independent t-test for each outreach facilitator was computed to compare the mean differences of the counselor rating form-short version between the TRA program group and the alternative program group conducted by the same facilitator. No significant difference was found between the two conditions for all three outreach facilitators, indicating each facilitator was perceived similarly in the two different programs they each provided.

Correlations. Bivariate correlations were computed between all of the outcome measures for each time point and psychological symptoms at post-test and follow-up. See table 9 for details.

Table 8

Differences Between	ı Those	With and	Without	Previous	Counseling
---------------------	---------	----------	---------	----------	------------

	With prior	No Prior									
Variables	counseling	counseling	Difference	t	df	р					
Pre-test											
DES_AB	14.24	13.07	1.17	2.56*	199	0.01					
SSOSH	23.79	26.03	-2.24	2.13*	199	0.03					
			Post-test								
DES_AB	14.25	13.49	0.76	1.12	133	0.26					
SSOSH	22.83	25.31	-2.48	2.03*	133	0.04					
Follow-up											
DES_AB	13.7	13.17	0.53	0.65	61	0.52					
SSOSH	21.89	24.64	-2.75	1.48	61	0.14					

Note: DES_AB: Anticipate benefits associated with counseling. SSOSH: Self-stigma.

Table 9

		1	2	3	4	5	6	7	8	9	10	11	12
1. ISCI	r	-	.66*	.66*	.35*	.41*	.42*	04	07	14	.23*	.29*	.26*
(Pre-test)	Ν		134	62	199	134	62	199	134	62	199	134	62
2. ISCI	r		-	.71*	.43*	.53*	.40*	09	02	8	.29*	.38*	.28*
(Post-test)	Ν			62	134	134	62	134	134	62	134	134	62
3. ISCI	r			-	.43*	.53*	.55*	32*	21	22	.40*	.35*	.33*
(Follow-up)	Ν				62	62	62	62	62	62	62	62	62
4. ATSPPHS	r				-	.83*	.69*	29*	23*	28*	.54*	.61*	.49*
(Pre-test)	Ν					134	62	199	134	62	199	134	62
5. ATSPPHS	r					-	.77*	24*	20*	26*	.55*	.66*	.52*
(Post-test)	Ν						62	134	134	62	134	134	62
6. ATSPPHS	r						-	30	22	28	.55*	.53*	.61*
(Follow-up)	Ν							62	62	62	62	62	62
7. DES_AR	r							-	.76*	.73*	08	20*	38*
(Pre-test)	Ν								134	62	199	134	62
8. DES_AR	r								-	.74*	06	15	33*
(Post-test)	Ν									62	134	134	62
9. DES_AR	r									-	15	32	14
(Follow-up)	Ν										62	62	62
10. DES_AB	r										-	.64*	.53*
(Pre-test)	Ν											134	62
11. DES_AB	r											-	.60*
(Post-test)	Ν												62
12. DES_AB	r												-
(Follow-up)	Ν												

Pearson Correlations among Study Variables.

Table 9 Continued

		13	14	15	16	17	18	19	20	21	22	23
1. ISCI	r	13	17*	20	21*	33*	32*	.13	.07	01	.03	.05
(Pre-test)	Ν	199	133	62	199	134	62	199	133	62	131	62
2. ISCI	r	14	14	28*	37*	39*	30*	.17*	.12	.10	.05	03
(Post-test)	Ν	134	133	62	134	134	62	134	133	62	131	62
3. ISCI	r	18	24	22	40*	27*	34*	.20	.28*	.09	.03	16
(Follow-up)	Ν	62	62	62	62	62	62	62	62	62	60	62
4. ATSPPHS	r	23*	32*	28*	57*	56*	54*	.14*	.12	.02	.09	07
(Pre-test)	Ν	199	133	62	199	134	62	199	133	62	131	62
5. ATSPPHS	r	20*	29*	34*	55*	61*	54*	.17*	.26*	.04	01	05
(Post-test)	Ν	134	133	62	134	134	62	134	133	62	131	62
6. ATSPPHS	r	27*	32*	41*	46*	50*	57*	.32*	.25	.18	04	09
(Follow-up)	Ν	62	62	62	62	62	62	62	62	62	60	62
7. DES_AR	r	.25*	.28*	.26*	.45*	.40*	.55*	08	01	.00	.23*	.42*
(Pre-test)	Ν	199	133	62	199	134	62	199	133	62	131	62
8. DES_AR	r	.22*	.27*	.24	.35*	.35*	.45*	.01	.03	.12	.23*	.28*
(Post-test)	Ν	134	133	62	134	134	62	134	133	62	131	62
9. DES_AR	r	.29*	.39*	.44*	.49*	.40*	.60*	05	10	.02	.28*	.41*
(Follow-up)	Ν	62	62	62	62	62	62	62	62	62	60	62
10. DES_AB	r	07	15	.03	35*	25*	40*	.08	.08	13	.11	.02
(Pre-test)	Ν	199	133	62	199	134	62	199	133	62	131	62
11. DES_AB	r	15	16	28*	43*	52*	53*	.11	22*	07	07	15
(Post-test)	Ν	134	133	62	134	134	62	134	133	62	131	62
12. DES_AB	r	08	10	16	32*	30*	46*	.15	.17	.13	.00	15
(Follow-up)	Ν	62	62	62	62	62	62	62	62	62	60	62

-	2
1	-
'	-

		13	14	15	16	17	18	19	20	21	22	23
13. PSOSH	r	-	.63*	.53*	.37*	.37*	.25*	22*	18*	03	.27*	.32*
(Pre-test)	Ν		133	62	199	134	62	199	133	62	131	62
14. PSOSH	r		-	.48*	.43*	.38*	.35*	27*	20*	02	.16	.17
(Post-test)	Ν			62	133	133	62	133	133	62	131	62
15. PSOSH	r			-	.34*	.50*	.58*	34*	31*	35*	.13	.33*
(Follow-up)	Ν				62	62	62	62	62	62	60	62
16. SSOSH	r				-	.80*	.72*	16*	13	06	.22*	.20
(Pre-test)	Ν					134	62	199	133	62	131	62
17. SSOSH	r					-	.79*	19*	20*	18	.31*	.28*
(Post-test)	Ν						62	134	133	62	131	62
18. SSOSH	r						-	21	30*	16	.18	.32*
(Follow-up)	Ν							62	62	62	60	62
19. FCS	r							-	.67*	.40*	11	22
(Pre-test)	Ν								133	62	131	62
20. FCS	r								-	.50*	20	36*
(Post-test)	Ν									62	131	62
21. FCS	r									-	26	39*
(Follow-up)	Ν										60	62
22. CORE	r										-	.52*
(Post-test)	Ν											60
23. CORE	r											-
(Follow-up)	Ν											

Table 9 Continued

Note: ISCI: Intention to seek counseling. ATSPPHS: Attitudes toward seeking help. DES_AR: Anticipate risks associated with counseling. DES_AB: Anticipate benefits associated with counseling. PSOSH: Perceived public stigma. SSOSH: Self-stigma. FCS: Knowledge of forgiveness. CORE: Psychological symptoms.

Main Analyses

Hypothesis 1. Hypothesis 1 stated that participants who attend the theory-based outreach program would report an increase in their intention to seek counseling for personal problems whereas participants in the control group would report no changes in their intention to seek counseling.

One 3 (condition: TRA program, alternative program, and control) x 3 (time: pre-test, post-test, and follow-up) repeated measures ANOVA was computed to examine the time by condition interaction effect on intention to seek counseling. No significant interaction was found, F(4, 116) = 1.19, p = 0.32. A significant time effect was found, F(2, 58) = 3.79, p = 0.03, indicating that intentions to seek help changed across time in all three conditions. Three paired-sample t-tests were performed to compare intention to seeking counseling from pre to post (t (133) = 0.95, p = .34, Cohen's d = 0.07, 95% CI of difference ranged from -0.58 to 1.67), from post to follow-up (t (61) = 2.73, p = .008, Cohen's d = 0.26, 95% CI of difference ranged from 0.62 to 4.04), and from pre-test to follow-up (t (61) = 1.31, p = .20, Cohen's d = 0.26, 95% CI of difference ranged from -2.81 to 0.59). Participants in the study reported a significant increase in their intention to seek counseling from post-test to follow-up (see Figure 5).

Hypothesis 2. Hypothesis 2 stated that participants who attend the theory-based outreach program would report an increase in their positive attitudes toward seeking counseling, and a decrease in their perceived risks of seeking counseling, and an increased perceived benefit of counseling whereas the control group would report no changes.

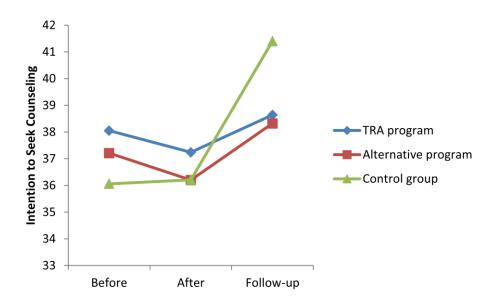


Figure 5. Intention to seek counseling before, after, and at two-months following the programs.

Three 3 (condition: TRA program, alternative program, and control) x 3 (Time: pre-test, post-test, and follow-up) univariate repeated measures ANOVAs were computed for attitudes toward seeking counseling, anticipated risks, and anticipated benefits of counseling. A significant time by condition interaction effect was found for attitudes toward counseling, (*F*(4, 116) = 2.76, *p* = 0.03) but not for anticipated benefits (*F*(4, 116) = 0.66, *p* = 0.62) or anticipated risks (*F*(4, 116) = 0.90, *p* = 0.47).

Attitudes follow-up analyses. Because participants who dropped out of the study after post-test reported significantly lower attitudes toward counseling at post-test than those who completed the program, a 3 (condition) x 2 (time: pre-test and post-test) univariate repeated measured ANOVA was computed for attitudes toward counseling. A Levene's test of equality of error variances was also computed to examine whether the data violated the assumption of

equality of variance for each outcome measure. Attitudes toward seeking counseling at pre-test violated the assumption of equality of variance, and therefore, a more conservative alpha level (.025) for determining significance for attitudes toward seeking counseling was used in examining the time by condition interaction (Pallant, 2007). There was a significant time by condition interaction effect for attitudes toward counseling (F(2, 130) = 5.43, p = 0.005).

Three paired-sample t-tests were performed to compare attitudes toward seeking counseling from pre to post treatment within each condition (see Figure 5). Attitudes toward seeking counseling significantly improved from before the program to after the program among the TRA program group (t (41) = 2.65, p =.01, Cohen's d = 0.23, 95% confidence interval of difference ranged from 2.37 to 0.32) and the alternative program group (t (42) = 3.78, p = .0004, Cohen's d = 0.41, 95% confidence interval of difference ranged from 2.87 to 0.87). There were no significant changes in attitudes in the control group (t (47) = .525, p = .0004, Cohen's d = 0.04, 95% confidence interval of difference ranged from -0.65 to 1.11; Figure 6).

Anticipated benefits follow-up analyses. Because participants who dropped out of the study after post-test reported significantly lower anticipated benefits toward counseling at post-test than those who completed the program, a 3 (condition) x 2 (time: pre-test and post-test) repeated measured ANOVA was computed for anticipated benefits. There was a significant time by condition interaction effect for anticipated benefits (F(2, 130) = 4.07, p = 0.02).

Three paired-sample t-tests examined the changes in anticipated benefits of counseling from pre to post treatment. The analyses revealed a significant increase in participant's anticipated benefits from pre to post test (t (41) = 2.41, p =0.02, Cohen's d = 0.31, 95% confidence interval of difference ranged from 2.06 to 0.18) in the TRA program group, whereas

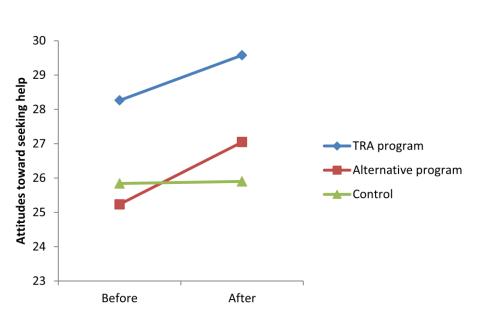


Figure 6. Attitudes toward seeking help before and after the programs.

no significant changes were found in both the alternative program group (t (42) = 1.34, p =0.19, Cohen's d = 0.20, 95% confidence interval of difference ranged from -1.63 to 0.33) and the control group (t (47) = 1.53, p =0.13, Cohen's d = 0.16, 95% confidence interval of difference ranged from -0.18 to 1.35; Figure 7). These results partially support hypothesis 2.

Hypothesis 3. The third hypothesis stated that participants who attend the theory-based outreach program would report a decrease in their perceived stigma associated with seeking counseling for personal problems whereas participants in the control group would report no changes. The outcome measures included to test this hypothesis were the Self-Stigma of Seeking Help scale (SSOSH) and Perceptions of Stigmatization by Others for Seeking Help scale (PSOSH).

Two 3 (condition) x 3 (time) repeated measured ANOVAs were computed for each outcome variables (self-stigma and perceived public stigma). A Levene's Test of equality of

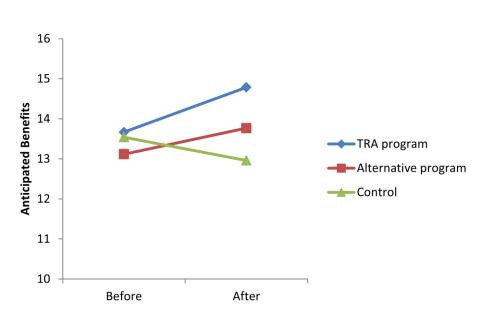


Figure 7. Anticipate benefits before and after the programs.

Note: Only the change in the TRA program was found to be statically significant for anticipated benefits. error variances found that SSOSH scores at pre-test and PSOSH scores at follow-up both violated the assumption of equality of error variances; therefore, a more conservative alpha level (.025) is used to determine whether the interaction effects are significant (Pallant, 2007). Significant time by condition interaction effects were found for self stigma, F(4, 118) = 3.28, p =0.01, and public stigma, F(4, 118) = 3.48, p = 0.01.

Self stigma follow-up analyses. A one-way repeated measures ANOVA for self-stigma was computed for each condition and a significant time effect was only found for the TRA program group, F(2, 26) = 5.40, p = 0.11, and not for either the alternative program, F(2, 17) = 3.18, p = 0.07, or the control group, F(2, 13) = 0.26, p = 0.78. Three paired-samples t-tests were computed to examine the changes in self-stigma in the TRA program group at the three different time points. Significant differences were found between pre and post-test (t(27) = 3.25, p = 0.003, Cohen's d = 0.35, 95% confidence interval of difference ranged from 3.52 to 0.82)and between

pre-test and follow-up (t(27) = 2.64, p = 0.01, Cohen's d = 0.45, 95% confidence interval of difference ranged from 5.01 to 0.63). No significant difference was found between post-test and follow-up (t(27) = 0.042, p = 0.97, Cohen's d = 0.005, 95% confidence interval of difference ranged from -1.73 to 1.80). These results indicated that participants in the TRA program group reported a significant decrease in their self-stigma and this decrease maintained at the two-month follow-up (Figure 8).

Because participants who dropped out of the study after post-test reported significantly higher self-stigma at both pre- and post-test than those who completed the program, a 3 (condition) x 2 (time: pre-test and post-test) repeated measured ANOVAs was computed for self-stigma. A significant time effect was found, F(1, 130) = 14.57, p = 0.0002. The time by condition interaction effect was not significant, F(2, 130) = 2.46, p = 0.09. Three paired-samples t-tests were computed to examine the changes in self-stigma in each condition. Significant decrease of self-stigma was found in both the TRA program (t(41) = 3.24, p = 0.02, Cohen's d = 0.27, 95% confidence interval of difference ranged from 0.82 to 3.51) and the alternative program (t(42)=2.74, p = 0.009, Cohen's d = 0.35, 95% confidence interval of difference ranged from 0.51 to 3.35) but not in the control group (t(47) = 0.47, p = 0.64, Cohen's d = 0.04, 95% confidence interval of difference ranged from -0.95 to 1.53; Figure 9).

Public stigma follow-up analyses. A one-way repeated measured ANOVA for perceived public stigma was computed for each condition. A significant time effect was only found for the TRA program group, F(2, 26) = 4.37, p = 0.02, and not for either the alternative program, F(2, 17) = 1.15, p = 0.34, or the control group, F(2, 13) = 0.11, p = 0.90. Furthermore, three paired t-test were computed to examine the changes in perceived public stigma in the TRA program

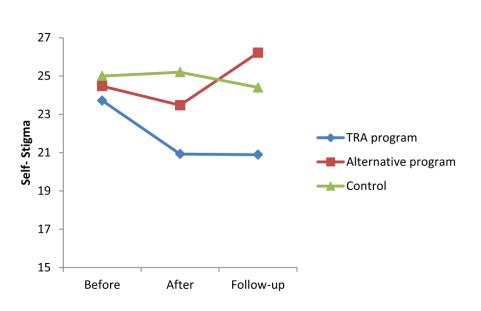


Figure 8. Self- stigma associated with seeking psychological help.

Note: N = 62. The sample includes participants who completed the whole study.

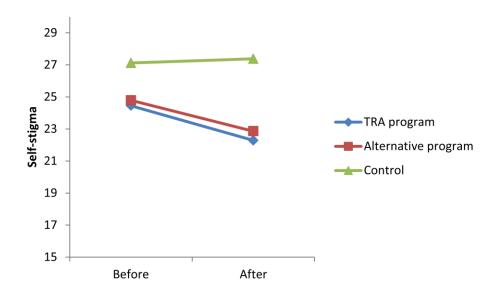
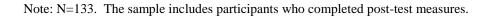


Figure 9. Self- stigma associated with seeking psychological help.



group at the three different time points (Figure 10). Significant differences were found between pre-test and follow-up (t(27) = 2.72, p = 0.01, Cohen's d = 0.64, 95% confidence interval of difference ranged from 0.52 to 3.69) and between post-test and follow-up (t(27) = 2.87, p =0.008, Cohen's d = 0.65, 95% confidence interval of difference ranged from 0.60 to 3.61), whereas there was no significant difference between pre-test and post-test (t(41) = 0.045, p =0.96, Cohen's d = 0.006, 95% confidence interval of difference ranged from -1.04 to 1.09). These results indicated that on average, the participants in the TRA program group did not report a significant decrease in their perceived public stigma from pre-test to post-test. However, participants did report a significant decrease from post-test to follow-up.

Results from the analyses support hypothesis 3. Participants in the TRA program group reported a significant decrease in both self-stigma and perceived public stigma associated with seeking counseling. These changes were not found in either the alternative group or the control group. Participants in both the TRA program and the alternative program reported significant decrease in their self-stigma associated with seeking counseling immediately after the programs and this change was not found in the control group.

Hypothesis 4. Hypothesis 4 stated that participants who attend either the theory-based outreach program or the alternative program will report a significant increase in their knowledge of the concept of forgiveness whereas those in the control group will report no change. The reliability of the measure for this hypothesis (Forgiveness Concept Scale) was low (Cronbach's α ranged from 0.32 to 0.35). When deleting one item (number 16) from the scale, Cronbach's α was increased to .4, .57, and .61 at pre-test, post-test, and follow-up. Because the reliability of this scale was inadequate in the present study, analyses were not conducted for this hypothesis.

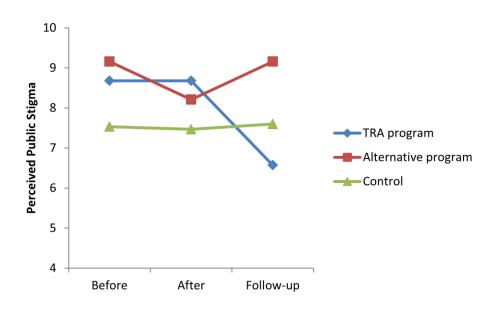


Figure 10. Perceived public stigma associated with seeking psychological help.

CHAPTER FIVE: DISCUSSIONS

General Discussions

The present student provided evidenced to the effectiveness of a theory-based outreach program and an alternative program in changing factors that are theoretically related to helpseeking behaviors. Both programs were effective in increasing positive attitudes toward counseling and reducing self-stigma. The theory based program provided additional changes increasing participants' anticipated benefits and decreasing their perceived public stigma.

Changing attitudes. A main finding in the present study is the effectiveness of both theory-based and alternative outreach program in increasing college students' positive attitudes toward counseling. These changes are likely to be caused by factors shared by both conditions contributed to this change.

Previous studies have documented the importance of anticipated risks and benefits in impacting attitudes toward counseling (Vogel & Wester, 2003; Shaffer, Vogel, and Wei 2006). However, in the present study, interventions designed to increase anticipated benefits and decrease anticipated risks do not seems to have a direct impact on one's attitudes toward counseling. Specifically, although the theory-based program significantly increased participants' anticipated benefits of counseling, both the theory-based and the alternative programs reported significant increase in their positive attitudes toward counseling. Additionally, both program failed to decrease participants' anticipated risks of counseling, and yet both increased their positive attitudes. This result supports the importance of providing outreach programs to students on campus, even if they are not specifically designed for improving help-seeking behaviors. Specific intervention to increase anticipated benefits and to reduce anticipated risks may not be necessary to increase students' positive attitudes toward counseling. This finding

does not support the Theory of Reasoned Action model in which attitudes is predicted by one's anticipated benefits and risks.

Changing stigmas. According to Vogel, Wade, and Hackler (2007), self-stigma fully mediates the relationship between perceived public-stigma and attitudes toward counseling. This mediator role makes self-stigma an important predictor of help-seeking attitudes and intention to seek counseling. They suggested that self-stigma is a more proximal indicator than perceived public-stigma. Vogel and colleagues also suggested that public stigma may be more difficult to change, so clinician should focus on reducing potential client's self-stigma.

Self-stigma was also found be a factor that undermines treatment compliance (Fung, Tsang, Corrigan, Lam, and Cheung, 2007) and attendance among people with schizophrenia in Hong Kong (Fung, Tsang, Corrigan, 2008). In the present study, participants who dropped out from the study reported a significantly higher self-stigma than those who completed the study. It is possible that self-stigma not only is a barrier to treatment compliance but also a barrier for attending mental health related programs or workshops.

The present study successfully demonstrated interventions that can reduce college students' self-stigma associated with counseling. Similar to the findings of attitude changes, participants in both the theory-based program and the alternative program reported a significant reduction in their self-stigma immediately after the program. These changes may likely be caused by the factors shared by the two groups.

Previous stigma interventions focused on changing perceived public stigma toward the mentally ill (Esters, Cooker, & Ittenbach, 1998; Han, Chen, Hwang, & Wei, 2006; Luty, Umoh, Sessay, & Sarkhel, 2007; Mann & Himelein, 2004; Mino, Yasuda, Tsuda, & Shimodera, 2001; Ng & Chan, 2002; Pinfold et al., 2003a; Pinfold et al., 2003b; and Tanaka, Ogawa, Inadomi,

Kikuchi, & Ohta, 2003). MacInnes and Lewis (2008) conducted a 6-week group program for twenty users of mental health services and found evidence of success in reducing self-stigma. The present study is different from MacInnes and Lewis' study in several ways: first, participants in the present study were well-adjusted college students at the time of the intervention. Second, the present study included a large sample size (n = 201). Third, the intervention in the current study is similar to most of the outreach programs on college campuses (i.e., one time 90 minute interventions). The present study is believed to be the first to provide evidence of changing well adjusted college students' self-stigma through an outreach program.

Although public-stigma is suggested to be more difficult to change (Vogel, Wade, and Hackler, 2007), the present study demonstrated effectiveness in reducing colleges students' perceived public stigma through an outreach program that was designed to tackle this issue. Intervention to reduce public stigma appeared to be effective although the changes of this outcome was not observed immediately after the program. The reduction of perceived public stigma was found at two months after the program. It is possible that the changes of public stigma is not only more difficult but also requires more time to occur. Students may need more time to evaluate the actual public stigma of mental health services before they reduce their perception of it.

Common factors for outreach programming. Wampold (2001) proposed a common factors hypothesis that those commonalities of psychotherapies are more important than the differences among them. This hypothesis suggested that it is the common factors among bona fide therapies that make them effective. Similar to this hypothesis, the current study found that both TRA and the alternative program was effective in increasing participants' positive attitudes toward counseling and reducing their self-stigma. It is possible that there are common factors

among outreach programming that contributes to the effectiveness of these programs. Several common factors are identified in the present study: (a) contact with a counselor, (b) in an outreach program for 90 minutes with a (c) discussion of mental health issues in a classroom setting and (d) psychoeducational information. All three outreach facilitators in the study introduced themselves as a counselor to participants and it is possible that students who have contact with a counselor will gain a better attitude toward mental health services, regardless if there were specific interventions designed to shape their attitudes toward counseling. Because participants in both conditions discussed mental health issues, resources to help with life problems, and pros and cons of each resource, it is possible that by facilitating a discussion on mental health related topics can help increase students' attitudes toward counseling. Finally, the topic of an outreach program may not be a critical factor of changing students' attitudes toward counseling. Both programs included information about forgiveness and mental health. The alternative program included discussions of healthy communication styles whereas the theorybased program provided specific invitations to shape participants' attitudes toward counseling. Having multiple topics (forgiveness, communication, and specific attitudes interventions) in the two programs provide good generalizability of this result to other outreach programs delivered on an university campus.

Intentions to Seek Counseling. The outreach programs in the current study did not change participants' intention to seek counseling, which is the most proximal predictor of help-seeking behavior, according to Ajzen and Fishbein (1980). From pre to post test, there was no change for any of the treatment conditions. From post to follow-up however, there was a significant change on average for all participants regardless of treatment condition. The changes in participants' intentions to seek counseling from post-test to follow-up may have been caused

by environmental factors such as the time of the semester. Follow-up data were collected during the week prior to students' final exams, which may have had an impact on the stress they were feeling and their desires to intentions to seek counseling.

Although there were significant changes in participant's attitudes toward counseling and their subjective norm (stigmas), their intention to seek counseling did not change during the study. This result may be related to the fact that participants in the study were well-adjusted college students. Only five out of 85 students who attended the outreach programs met the clinical cut-off point for psychological symptoms (CORE). Although at two-month follow-up, all but two participants met the clinical cut-off point for psychological symptoms (CORE), it was the time before their final exams and their psychological symptoms could reflect a normal reaction toward the stress at the end of the semester. Well-adjusted students may neither need nor have the intention to seek counseling within two months. Furthermore, it is unclear if there will be changes in one's intention to seek counseling among students who attended the program when they encounter more serious mental health problems in the future. The semester after the outreach programs were delivered, both the author and one of the outreach facilitator encountered students from the present study seeking mental health services at the counseling center on campus. One student mentioned that although the program was not the determining factor for the person to seek professional help, it did make "enough impact" to push this person to seek counseling.

Another possible explanation for the lack of change in participants' intention to seek counseling is that there may be other deterring factors to one's intention to seek counseling. According to the theory of reasoned action, there are two channels of changes: attitudes and

subjective norms. Some other important factors may include knowing someone who had sought help (Vogel et al., 2007), perceived social support, and distress (Vogel & Wei, 2005).

Previous critics of TRA have suggested that although this theory explains an individual's decision making process, it does not account for behavioral change (De Wit, Victoir, & Van den Bergh, 1995; Sharma, 2007). From the present study, changes in attitudes and subjective norms did not produce changes in intention to change one's help-seeking behavior, which may stem from the limitation of this theory in predicting changes in one's intentions and behaviors. Another critic is the lack of emotional factors in the TRA model. Sharma (2007) suggested that irrational fear is an important factor that is not considered by TRA, and this fear may be an important factor to overcome in changing certain behaviors, such as help-seeking. The lack of change in anticipated risks may indicate an irrational fear that is associated with seeking professional help, and that this irrational fear can be more resistant to change than other factors in TRA.

Application

With respect to mental health outreach services on college campuses, the results of this study are important because they provide an example of interventions that are effective in changing college students' self-stigma associated with and attitudes toward counseling. An outreach program that is given by a counselor for 90 minutes in a class room setting that includes discussion of mental issues and/or psychoeducation information may be sufficient to make the changes (increase positive attitudes and decrease self-stigma). The psychoeducation information may varies in its topic although more research is needed to verify the scope of the generalizability of the present study.

To reduce college students' perceived public stigma, interventions designed specifically for this purpose may be needed in addition to a general outreach program. Specifically, outreach facilitators can facilitate a discussion of students' perceived public stigma about counseling and provide more accurate information. In the present study, outreach facilitator in the theory-based program validated participants' perceived public stigma but provided a balance reality: school authorities tend to view help-seeking behaviors in a positive light. When is student is struggling with mental health issues, others such as professors/lecturers/teaching assistants are more likely to be supportive and lenient to the student if they know that he or she is seeking professional help with their mental health issues.

Limitations

There are limitations to the present research that should be noted. First, the retention rate from post-test to the two-month follow up was 46.7%. Follow-up questionnaires were sent out to students during the week before their final exams. Prior to that week, multiple students had contacted the author asking for the questionnaire in order for them to receive their credits. It is possible that the late timing of the follow-up questionnaires swayed some students to participate in other studies to gain their credits. Furthermore, because participants who dropped out after post-test reported significantly higher self-stigma at both pre- and post-test and a lower anticipated benefits of counseling, the follow-up data should be considered tentative until further research can corroborate these findings.

Second, the sample was 82.6% Caucasian, and different cultural backgrounds may lead to differences in the effectiveness of outreach programs with a different student body. Although 16.4% of the sample were minorities, they are from different cultural groups that make it

impossible to examine any differences in response to the programs based on cultural differences. It is unclear when an outreach program is targeted toward a specific minority group that the elements found effective in the current study will still be appropriate.

Finally, there is a potential mono-method bias of only using one method to assess change (self report) in the present study. The study would be stronger if multiple methods of assessment could have been used, such as expert raters, observer reports, and behavioral data. However, the main study outcomes (e.g., attitudes, stigma, etc.) are difficult to assess outside of self report. Although the present study attempted to assess for self-reported behavioral change (i.e. actual help-seeking behaviors), no significant differences in frequencies of such behavior was found. This result, however, is strongly affected by the small sample size. Power analyses revealed a minimum of 108 distressed participants were needed to obtain a medium effect of frequency differences, and there were only 63 students at the time when help-seeking behavior was assessed (at follow-up).

Future Research

Future research can focus on interventions that can increase participants' intentions to seek counseling and/or other factors that are related to the actual help-seeking behaviors. Potential factors to be investigated include knowing someone who had sought help (Vogel et al., 2007), perceived social support, distress (Vogel & Wei, 2005), and emotional factors such as fear of seeking help (Deane & Todd, 1996; Sharma, 2007). Studies investigating actual help-seeking behaviors are also important for the field.

Future study may also focus on help-seeking behaviors among distressed students and interventions to increase their intention to seek counseling. An important goal of outreach

programs on university and college campuses is to encourage students who are in need of service to seek counseling at the counseling centers. Studies demonstrating how to be effective in such interventions will be crucial for counseling centers.

Due to the general low service utilization rate among minority students (Duncan, 2003, 2005; Duncan & Johnson, 2007), many counseling centers have developed specific outreach programs targeting at a specific students population. For example, Counseling Center at University of Illinois (2007) provides specific outreach for different minority groups (African Americans, Native Americans, Asian Americans, etc.) It is important to investigate the effectiveness of these programs in increasing minority students' counseling service utilization.

Finally, it is important to investigate the role of the outreach facilitators in providing outreach services. It is unclear if there will be differences in the outcome of outreach programming provided by a licensed professional, a doctoral student or student-counselor, or an undergraduate trained peer-educator. Understanding the role of the facilitator can help counseling centers in planning these programs in the most cost-effective way.

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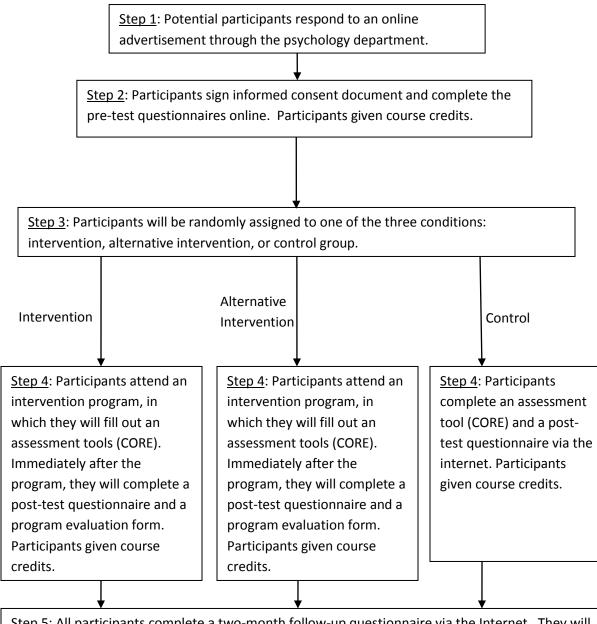
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APPENDIX A: FLOW CHART OF STUDY PROCEDURES



<u>Step 5</u>: All participants complete a two-month follow-up questionnaire via the Internet. They will be debriefed immediately after the completion of the follow-up questionnaire. Materials used in the intervention group will be available on the Internet for participants' access. All participants are given the opportunity to talk to the author about the materials used in the intervention group. Participants given course credits.

APPENDIX B: POSTING ADVERTISEMENT

STUDY NAME & NUMBER: <Insert study number here> Enhancing Mental Health and Wellbeing: Options and Information

BRIEF ABSTRACT:

This is an outcome study of a program that helps students explore resources to enhance their wellbeing. A free psychological assessment will be included in the program.

STUDY DESCRIPTION (Must be exactly as approved by IRB):

We are seeking undergraduate students to participate in a program study. If you agree to participate, you will receive research credits toward your eligible courses in the Fall of 2009. Participation in any part of the study is voluntary, and you may withdraw at any point. You must be 18 years of age to participate in this study.

Participants will either be assigned to attend a program or to a quesitonnaire group. If you are assigned to the control group, you will complete 3 online questionnaires during the fall semester of 2009. You will receive 1 credit for each questionnaire you complete.

If you are assigned to attend a program, you will attend a workshop lasting 1½ hours and receive 2 credits for your attendance. You will complete an assessment tool of your well-being during the workshop and you will have the opportunity to learn about forgiveness, mental health, and campus resources. You will also complete questionnaires before, after, and two-month following the workshop. Each questionnaire will take approximately 10 to 15 minutes to fill out and you will also receive 1 credit for each completed questionnaire.

Please note that all records identifying participants will be kept confidential to the extent permitted by applicable laws and regulations and will not be made publicly available.

You are encouraged to ask questions at any time during this study. For further information about the study, contact the principal investigator, Grace Blocher, at <u>wmwang@iastate.edu</u> or 515-294-1898. If you have any questions about the rights of research subjects or research-related injury, please contact the IRB Administrator (515)294-4566, <u>IRB@iastate.edu</u>, or Director, (515) 294-3115, Office of Responsible Research, Iowa State University, Ames, Iowa 50011..

Thanks for your interest!

ELIGIBILITY REQUIREMENTS: 18 or older. Completion of an earlier phase is required to participate in a later phase.

APPENDIX C: INFORMED CONSENT DOCUMENT

Title of Study: Enhancing Mental Health and Wholeness: Options and Information.

Investigators:Principal Investigator: Wei-min Grace Blocher, MS.Major Professor: Nathaniel Wade, Ph.DFacilitators: Paul Ascheman, LeAnn Mills, MS, and Scott Young, MSResearch Assistants: Jeritt Tucker, Ryan Day, Marilyn Cornish, BS, Brian
Post, MCS, Kaitlin Budnik, Annie Foster, and Analisa Ortiz

This is a research study. Please take your time in deciding if you would like to participate. Please feel free to ask questions at any time.

INTRODUCTION

The purpose of this study is to provide a more complete understanding of how effectiveness programs are in increasing students' knowledge of factors relating to mental health and how to get help for personal problems.

DESCRIPTION OF PROCEDURES

There are three phases of this study. Completion of an earlier phase is required to continue in a later phase.

Phase I: You will complete an online questionnaire about yourself and your thoughts and feelings toward mental health services. This questionnaire will take approximately 5 to 10 minutes to complete.

Phase II: You will either be assigned to attend a program or to a control group. Assignments will be made randomly. If you are assigned to the control group, you will complete questionnaires online, which will take approximately 5 to 10 minutes to complete.

If you are assigned to attend a program, you will attend, along with 10 to 20 other participants, a program lasting for 1.5 hours. The program will be delivered by an advanced counseling psychology doctoral student, who will be supervised by a licensed psychologist. During this program, you will be given the opportunity to evaluate your well-being, to learn factors relating to mental health, and to learn about resources to cope with life problems. You will also have the opportunity to participate in discussion on these topics, however, you are not required to discuss or disclose any particular information during the program. What you say during the program is entirely up to you. At the end of the program, you will be asked to complete a questionnaire

about yourself, your evaluation of the program, and your thoughts and feelings toward mental health services. These questionnaires take approximately 5 to 10 minutes to complete.

Phase III: Approximately two months after the program, all participants will receive an email that will ask you to complete another set of questionnaires via the Internet. This follow-up questionnaire will take approximately 5 to 10 minutes to complete.

RISKS

Participation in this study may raise sensitive issues that could be uncomfortable for some individuals. There is an additional risk that participation could stimulate feelings or experiences that might be uncomfortable. If this occurs, please be aware that there are free counseling services through the Student Counseling Service at Iowa State University (294-5056).

BENEFITS

Information given during the program may be beneficial for your knowledge regarding mental health and campus resources. It is hoped that the information gained from this study will benefit society by helping practitioners and researchers better understand factors related to effective outreach interventions.

COSTS AND COMPENSATION

There are no costs associated with participating in this study. You will be receive course credits. Compensation for the completion of phase I and III is one credit for each phase, and compensation for the completion of phase II is three credits for those that are assigned to attend the program and one credit for those assigned to the control group. You must complete an earlier phase in order to participate in a later phase of the study.

PARTICIPANT RIGHTS

Your participation in this study is completely voluntary and you may refuse to participate or leave the study at any time. If you decide to not participate in the study or leave the study early, it will not result in any penalty. However, you may not, be entitled to the additional course credits for additional phases of this study. If you participate in phase II program and decide to leave early, you will receive one credit for your participation).

CONFIDENTIALITY

Records identifying participants will be kept confidential to the extent permitted by applicable laws and regulations and will not be made publicly available. However, the Institutional Review Board (a committee that reviews and approves human subject research studies) may inspect and/or copy your records for quality assurance and data analysis. These records may contain private information. To ensure confidentiality to the extent permitted by law, the following measures will be taken. You will provide your email address for contact purposes. You will not need to provide other identifying information. Any record of email addresses will be destroyed after the study has been completed. Although your email address will not be connected with questionnaire response, you will need to provide the middle nine digits of your student ID number in order for researchers to match up your responses from different time points. In addition, all data will be secured in password protected computers in locked offices. Access to the data will be limited to those research assistants who are being directly supervised by the PI. If the results are published, your identity will remain confidential.

QUESTIONS OR PROBLEMS

You are encouraged to ask questions at any time during this study.

- For further information about the study, contact Wei-min Grace Blocher, MS (515-294-1898 or <u>wmwang@iastate.edu</u>) or Dr. Nathaniel Wade (515-294-1455 or nwade@iastate.edu).
- If you have any questions about the rights of research subjects or research-related injury, please contact the IRB Administrator(515)294-4566, <u>IRB@iastate.edu</u>, or Director, (515) 294-3115, Office of Responsible Research, Iowa State University, Ames, Iowa 50011.

INSTRUCTIONS

A progress bar at the bottom of each page will indicate how much of the survey you have completed.

If you would like to participate in this study, please click the 'next' button at the bottom of this page. By clicking the 'next' button and answering the survey questions, this indicates that you voluntarily agree to participate in this study, that the study has been explained to you, that you have been given the time to read the document[,] and that your questions have been satisfactorily answered. If you decide at any point that you would not like to continue in the study, you can use the 'exit survey' button at the top of each page of the survey to end your participation.

APPENDIX D: MEASURES

Outcome Measures

These questionnaires were administrated before, after, and at a two month follow-up of the program.

<u>ISCI</u>

Below is a list of issues people commonly bring to counseling. How <u>likely</u> would you be to seek counseling if you were experiencing these problems?

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

14.	Difficulty with friends	1	2	3	4
15.	Academic work procrasting	1	2	3	4
16.	Self-understanding	1	2	3	4
17.	Loneliness	1	2	3	4

ATSPPHS

To what extent do you agree or disagree with the statements below:

	Disagree	Partly	Partly	Agree
		Disagree	Agree	
1. If I believed I was having a mental breakdown, my first inclination	1	2	3	4
would be to get professional attention.				
2. The idea of talking about problems with a psychologist strikes me	1	2	3	4
as a poor way to get rid of emotional conflicts.				
3. If I were experiencing a serious emotional crisis at this point in my	1	2	3	4
life. I would be confident that I could find relief in psychotherapy.				
4. There is something admirable in the attitude of a person who is	1	2	3	4
willing to cope with his or her conflicts and fears without resorting to				
professional help.				
5. I would want to get psychological help if I were worried or upset	1	2	3	4
for a long period of time.				
6. I might want to have psychological counseling in the future.	1	2	3	4
7. A person with an emotional problem is not likely to solve it alone;	1	2	3	4
he or she <i>is</i> likely to solve it with professional help.				
8. Considering the time and expense involved in psychotherapy, it	1	2	3	4
would have doubtful value for a person like me.				
9. A person should work out his or her own problems; getting	1	2	3	4
psychological counseling would be a last resort.				
10. Personal and emotional troubles, like many things, tend to work out	1	2	3	4
by themselves.				

DES

Please answer the following using the scale:

	ease answer the following using the s	Not at all	Slightly	Somewhat	Moderately	Very
1	How difficult would it be for you to		_	_	_	_
	disclose personal information to a	1	2	3	4	5
	counselor?					
2	How vulnerable would you feel if you					
	disclosed something very personal you	1	2	3	4	5
	had never told anyone before to a	1	2	5		5
	counselor?					
3	If you were dealing with an emotional					
	problem, how beneficial for yourself					
	would it be to self-disclose personal	1	2	3	4	5
	information about the problem to a					
	counselor?					
4	How risky would it feel to disclose	1	2	3	4	5
	your hidden feelings to a counselor?	1	2	5	4	5
5	How worried about what the other					
	person is thinking would you be if you	1	2	3	4	5
	disclosed negative emotions to a	1	2	5	4	5
	counselor?					
6	How helpful would be to self-disclose	1	2	3	4	5
	a personal problem to a counselor?	1	2	5	4	5
7	Would you feel better if you disclosed					
	feelings of sadness or anxiety to a	1	2	3	4	5
	counselor?					
8	How likely would you get a useful					
	response if you disclosed an emotional	1	2	3	4	5
	problem you were struggling with to a	1	Z	5	4	3
	counselor?					

SSOSH

People at times find that they face problems that they consider seeking help for. This can bring up reactions about what seeking help would mean. Please use the 5-point scale to rate the degree to which each item describes how you might react in this situation.

1	2	3	4	5
Strongly	Disagree	Agree & Disagree	Agree	Strongly
Disagree		Equally		Agree

1. I would feel inadequate if I went to a therapist for psychological help.

- ______2. My self-confidence would NOT be threatened if I sought professional help.
- ______ 3. Seeking psychological help would make me feel less intelligent.
- 4. My self-esteem would increase if I talked to a therapist.
- _____5. My view of myself would not change just because I made the choice to see a therapist.
- _____6. It would make me feel inferior to ask a therapist for help.
- _____7. I would feel okay about myself if I made the choice to seek professional help.
- ______8. If I went to a therapist, I would be less satisfied with myself.
- 9. My self-confidence would remain the same if I sought professional help for a problem I could not solve.
- 10. I would feel worse about myself if I could not solve my own problems.

PSOSH

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

1 = Not at all 2 = A little 3 = Some 4 = A lot 5 = A great deal

_____1. React negatively to you

_____2. Think bad things of you

_____3. See you as seriously disturbed

_____4. Think of you in a less favorable way

_____5. Think you posed a risk to others

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We are interested in your attitudes and ideas about anger, forgiveness, and hurts in relationships. Below are several statements about these topics. Please rate your agreement or disagreement with these statements.

1=strongly disagree, 2 = disagree, 3 = neutral, 4 = agree 5 = strongly agree

1. In almost all cases being angry with another person is unhealthy.	1	2	3	4	5
2. Forgiveness means forgetting that the hurt ever occurred.	1	2	3	4	5
3. People who hurt others rarely get hurt themselves.	1	2	3	4	5
4. Talking about your anger just makes you angrier.	1	2	3	4	5
5. Forgiveness is not the same thing as reconciliation.	1	2	3	4	5
6. Being in close relationships means you will get hurt.	1	2	3	4	5
7. Anger is often just a cover-up for feelings of sadness or hurt.	1	2	3	4	5
8. Forgiveness should only happen after the offender apologizes.	1	2	3	4	5
9. Hurt once, shame on you; hurt twice, shame on me.	1	2	3	4	5
10. It is possible to forgive but still end the relationship with the offender.	1	2	3	4	5
11. Staying angry is a good way to keep from getting hurt by others.	1	2	3	4	5
12. Forgiveness happens when someone acknowledges that they weren't really hurt in the first place.	1	2	3	4	5
13. Anger is a normal response when others cross our boundaries.	1	2	3	4	5
14. Forgiving is risky because the person is more likely to get hurt in the same way again.	1	2	3	4	5
15. Miscommunication is a common cause of hurts in relationships.	1	2	3	4	5
16. Forgiveness is a gift that is freely given.	1	2	3	4	5

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FCS

DEMOGRAPHIC INFORMATION and PRIOR COUNSELING EXPERIENCE

Participants will only fill out this form once during pre-test.

Please fill in or select the appropriate information.

- 1. Age:_____
- 2. Year in College:

1 = freshman	4 = senior
2 = sophomore	5 = graduate
3 = junior	6 = other

- 3. Gender:
 - 1 =female 2 =male 3 =other
- 4. Ethnic Identification that Best Describes You:

1 = African American	5 = International students (Nationality:)
2 = Asian American	6 = Multi-racial American
3 = Caucasian American	7 = Native American
4 = Hispanic American	8 = Other:

- 5. Major: _____
- 6. Have you ever received any form of mental health services such as individual counseling, couple's counseling, family counseling, or group counseling?

1 = Yes 2 = No

 If you answer "Yes" in question 6., how was your previous counseling experience? (please circle one)

-5	-4	-3	-2	-1	0	1	2	3	4	5
Extremely	Very	Negative	Somewhat	Slightly	Neutral	Slightly	Somewhat	Positive	Very	Extremely
negative	negative		Negative	Positive		Positive	Positive		Positive	Positive

ASSESSMENT FOR PSYCHOLOGICAL SYMPTOMS

This questionnaire was administrated during the interventions. Participants in the control group will complete this measure the same time when they complete the post-test questionnaires. All participants will complete CORE at two month follow-up.

CORE

Please read each statement and think how often you felt that way last week. Then check the box which is closest to this.

		Not At All	Only Occasionally	Sometimes	Often	Most of All the Time
1	I have felt terribly alone and isolated	0				4
2	I have felt tense, anxious, and nervous	0	1	2	3	4
3	I have felt that I have someone to turn to for support when needed	4	3	2	1	0
4	I have felt O.K. about myself	4	3	2	\Box_1	0
5	I have felt totally lacking in energy and enthusiasm	0	1	2	3	4
6	I have felt able to cope when things go wrong	4	3	2	\Box_1	0
7	I have been troubled by aches, pains, or other physical problems	0	□ 1	2	3	4
8	Talking to people has felt too much for me	0	1	2	3	4
9	Tension and anxiety have prevented me from doing important things	0	□ 1	2	□3	4
10	I have been happy with the things I have done	4	3	2	1	0
11	I have been disturbed by unwanted thoughts and feelings	0	□ 1	2	3	4
12	I have felt like crying	0	□ 1	2	3	4
13	I have felt panic or terror	0	□ 1	2	3	4
14	I have felt overwhelmed by my problems	0	□ 1	2	3	4
15	I have had difficulty getting to sleep or staying asleep	0	□ 1	2	3	4
16	I have felt warmth or affection for someone	4	3	2	□ 1	0
17	My problems have been impossible to put to one side	0	□ 1	2	3	4
18	I have been able to do most of the things that I needed to	4	3	2	\Box_1	0
19	I have felt despairing or hopeless	0	□ 1	2	3	4
20	I have felt criticized by other people	0	1	2	3	4

21	I have thought I have no friends	0		\Box_2		4
22	I have felt unhappy	0	\Box_1	\Box_2	3	4
23	Unwanted images or memories have been distressing me	0		\Box_2	3	4
24	I have been irritable when with other people	0	1	2	3	4
25	I have thought I am to blame for my problems and difficulties	0	□ 1	\Box_2	3	4
26	I have felt optimistic about my future	4		\Box_2	1	0
27	I have achieved the things I wanted to	4		\Box_2	□ 1	0
28	I have felt humiliated or shamed by other people	0	□ 1	\Box_2	3	4

PROGRAM FEEDBACK FORM

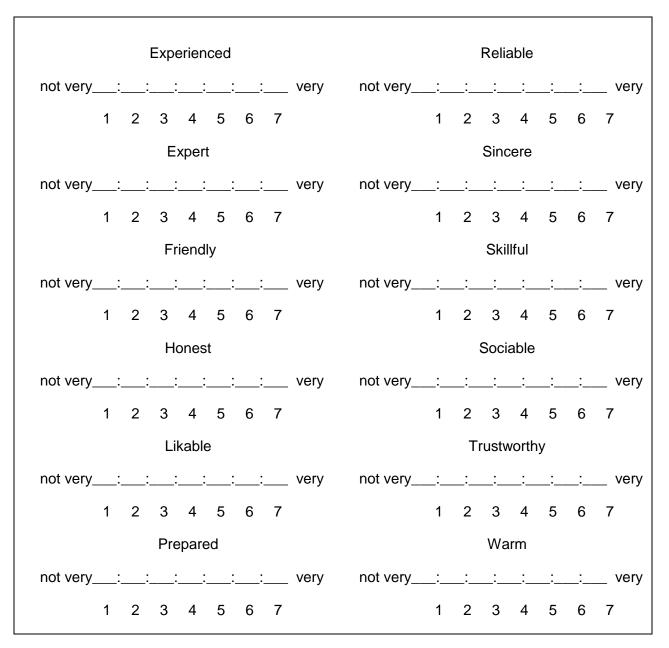
This form was administrated immediately after the interventions.

Please use the 5-point scale to rate the in which you agree or disagree with the following items.

1	2	3	4	5
Strongly	Disagree	Agree & Disagree	Agree	Strongly
Disagree		Equally		Agree

1. The program presenter communicated his or her ideas effectively.
2. I learned something valuable about forgiveness in this program.
3. I learned something valuable about mental health concerns in this program.
 4. The program raised my awareness about the importance of forgiveness in my life. 5. The program raised my awareness about the importance of mental health in my
life. 6. The self-assessment helped me better understand my well-being.
7. The program helped me see where on campus I can get some extra help with personal problems if I need that help.

CRF-S: Below, each characteristic is followed by a seven point scale that ranges from "not very" to "very". Please mark an "X" at the point on the scale that best represents how <u>you view your group</u> <u>leader</u>. Though all of the following characteristics we ask you to rate are desirable, leaders might differ in their strengths. We are interested in knowing how you view these differences.



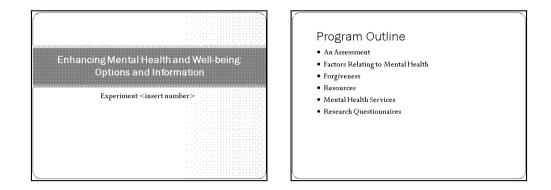
ASSESSMENT FOR HELP-SEEKING BEHAVIORS

This item was administered at the two-month follow-up.

Since you completed the previous questionnaire in Phase II, have you attended at least one meeting with a mental health professional such as a counselor, psychologist, or a marriage and family therapist? ____Yes ____No

APPENDIX E: PROGRAM OUTLINES FOR THE OUTREACH PROGRAMS

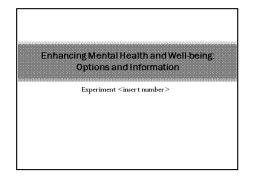
The Intervention

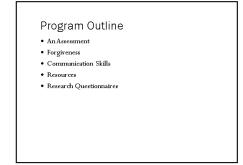


- An Assessment: Participants take the CORE and receive a brief feedback of the results.
- Factors Relating to Mental Health: Introduction of the Bio-Social-Psychological approach to understand mental health. (Normalization to reduce self-stigma.)
- Forgiveness: Definition of forgiveness, association between forgiveness and mental health.
- Resources: Participants generate a list of discuss different resources to help them cope with life challenges and problems. If students do now come up with professional help as a resource, the outreach personnel provides this option during the discussion. They also discuss pros and cons of each resource.
- Mental Health Services:
 - Common concerns about counseling (Increase perceived benefits and decrease perceived risks)
 - o Normalization of mental illness
 - Function of counseling/psychotherapy (Increase perceived benefits and decrease perceived risks)
 - Effectiveness of counseling/psychotherapy (Increase perceived benefits)
 - The therapy process (decrease perceived risks)

- Role of the therapist (Increase perceived benefits and decrease perceived risks)
- Perception of seeking counseling (Reduce public-stigma)
- Potential risks of counseling (Decrease perceived risks)
- Campus resources

Alternative Intervention





- An Assessment: Participants take the CORE and receive a brief feedback of the results.
- Forgiveness: Definition of forgiveness. Participants discuss pros and cons of forgiveness.
- Communication Skills: an assertiveness training that addresses nonverbal and verbal communication, You message and I message, and steps for an assertive communication. (Alternative intervention)
- Campus resources

APPENDIX F: DEBRIEFING FORMS

We would like to thank you for your participation in our research project. The goal of this study is to develop an outreach program that is effective in increasing college students' positive attitudes toward counseling and their intention to seek mental health services when needed. Most researchers have studied the process of help-seeking, yet there is a lack of outcome studies that focus on whether the programs that apply the findings of help-seeking research are actually effective in promoting a change in attitude and behavior.

The materials used in the intervention group are available at <website link>. If you are interested in learning more about this material, please contact Network (515)294-1898 to schedule an appointment to speak with someone who may be able to help you. You can also contact the principal investigator, Grace Blocher, <u>wmwang@iastate.edu</u>.

Although the risk associated with participating in the study is assumed to be minimal, it is possible that persons who have experienced mental health problems or negative experiences with mental health services may have experience some feelings of distress during the study. If you experience any personal distress, there are free counseling services available at ISU's Student Counseling Services, located on the third floor of the Student Services Building (515-294-5056).

If you have concerns or complaints about this research, please contact: Dr. Nathaniel Wade (515-294-1455). If you have any questions about the rights of research subjects or research-related injury, please contact please contact Office of Responsible Research, 1138 Pearson Hall, 515-294-4566 (IRB@iastate.edu).

Thank you for participating in our study.