International Students' Intentions to Seek Group Therapy and Self-Stigma: Effects of Informational and Therapist Rapport Interventions

by

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Abstract

Literature supports that group therapy could be an advantageous treatment for international students because of its emphasis on relationships and concerns of loneliness, which are common in this population. However, group therapy tends to be underutilized among international students. First, the present study investigated how personal and vicarious (hearing about experience of a friend or a family member) experience with therapy, mental health concerns, and self-stigma predict willingness to seek group therapy (also referred to as *group willingness*) in international students. Second, effectiveness of two interventions (I-1 – providing group therapy information and I-2 – building rapport with international students) for reduction of self-stigma and improvement of group willingness was studied in comparison to the control condition (CC – providing an overview of counseling center services). Participants were 306 international undergraduate and graduate students in the U.S. They were randomly assigned to watch one of three videos (I-1, I-2, or CC) and completed a survey online that included the Self-Stigma of Seeking Help questionnaire and the Intentions to Seek Counseling Inventory adapted for group therapy. Students reported their mental health concerns and personal and vicarious experience with therapy. Having positive personal or vicarious experience did not predict group willingness. Higher mental health concerns were associated with higher group willingness, and lower self-stigma predicted higher group willingness for students who endorsed moderate or low levels of distress. I-1 lowered self-stigma compared to the CC for students with higher distress. It also lowered self-stigma and increased group willingness compared to the CC among students

who had positive vicarious experience with therapy. I-2 did not affect self-stigma or group willingness compared to the CC. Results suggest that international students' ability to recognize their distress may play an important part in their consideration to seek group therapy. Findings also indicate that providing information about group therapy could be an effective intervention for lowering self-stigma and increasing group willingness for some international students. Specifically, students who experience high distress or have heard positive feedback about counseling from a close person may be more receptive to the intervention and feel more positively about seeking group therapy as a result.

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Chapter 1: Introduction

Since 2011, the number of international students enrolled in higher educational institutions in the United States has grown by 29%, with over a million foreign students currently studying in the U.S. (Institute of International Education, 2017). Mental health concerns among university students have likewise been on the rise. Nationwide, about half of undergraduate and one third of graduate students report experiencing substantial depression or anxiety (American College Health Association, 2015). A majority of university counseling center directors also agree that student mental health issues have been increasing (Gallagher, 2014). Thus, researchers' and practitioners' efforts to encourage international students' use of professional psychological help when needed and to make university counseling services accessible to this population are likewise becoming increasingly important.

Although it is not clear how international students' psychological wellness compares to that of domestic students, students from abroad may frequently encounter additional issues related to cultural, language, social, academic, and legal system adjustment, which may contribute to stress and have an impact on psychological wellness (Chen, 1999; Hayes & Lin, 1994; Johnson & Sandhu, 2007; Mori, 2000; Olivas & Li, 2006). Importantly, relational difficulties are often among the concerns that international students most commonly experience while studying abroad. Researchers found that international students' mental health problems commonly include shyness, isolation, trouble making friends, and loneliness and that their struggles with social adjustment may be more significant than that of domestic students (Hechanova-Alampay, Beehr, Christiansen, & Horn, 2002; Nilsson, Berkel, Flores, & Lucas, 2004; Owie, 1982; Parr & Bradley, 1991; Zhuzha, 2016a [see Appendix A]). Furthermore,

having better social support and more connections with domestic students in particular was found to relate to better mental health and lower stress among international students (Atri, Sharma, & Cottrell, 2007; Hechanova-Alampay et al., 2002; Lee, Koeske, & Sales, 2004; Mallinckrodt & Leong, 1992; Wei, Liang, Du, Botello, & Li, 2015; Yeh & Inose, 2003).

As a result, scholars have argued that international students may particularly benefit from group psychotherapy as it is often well-equipped to provide interpersonal learning opportunities (Carr, Koyama, & Thiagarajan, 2003; Dipeolu, Kang, & Cooper, 2007; Walker & Conyne, 2007; Yakunina, Weigold, & McCarthy, 2011). In fact, interpersonal learning is a group therapeutic factor cited as one of the most helpful in facilitating change (e.g., Behenck, Wesner, Finkler, & Heldt, 2016; Butler & Fuhriman, 1983; Friedman, 2003; Holmes & Kivlighan, 2000; Liu et al., 2008; MacNair-Semands, Ogrodniczuk, & Joyce, 2010; Yalom & Leszcz, 2005). Group provides a safe and stable environment where members can work through interpersonal challenges, bring up difficult questions or topics that they may be afraid to ask or talk about with their friends and family, and practice new behaviors or ways of interacting (e.g., Yalom & Leszcz, 2005).

Overall, research has shown that group is an effective form of therapy for a variety of mental health disorders (Barlow, Burlingame, & Fuhriman, 2000; Burlingame, Fuhriman, & Mosier, 2003; Burlingame, Strauss, & Joyce, 2013; McDermut, Miller, & Brown, 2001; McRoberts, Burlingame, & Hoag, 1998; Oei & Dingle, 2008; Tillitski, 1990). Recent evidence also supports that group is equivalent to individual therapy in its effectiveness (Burlingame et al., 2003; Burlingame et al., 2013; Burlingame et al., 2016; McRoberts et al., 1998). Moreover, group has been referred to as a cost-effective form of treatment (Burlingame et al., 2016;

Hellinder, 2009). With rising demand for services, many university counseling centers have waitlists. For example, in 2016 maximum wait time for the first appointment ranged between 20 and 48 business days depending on the professional staff-to-student ratio (Reetz, Bershad, LeViness, & Whitlock, 2016). Nearly 36% of counseling centers reported having a waitlist, and, depending on the university size, average maximum number of clients on the waitlists ranged between 17 and 75. As more clients can be served in a group using the same amount of resources, some directors of counseling centers report that they are relying more on group therapy to address the increasing demand (Barr, Rando, Krylowicz, & Reetz, 2010).

Despite this evidence, group therapy appears to be an underutilized form of treatment in comparison to individual therapy (e.g., Piper, 2008). This also appears to be true for international students as studies have found that they report greater preference for individual over group therapy (Yoon & Jepsen, 2008; Zhuzha, Sun, Kluck, & Deaton, 2016). Research conducted abroad similarly supports the idea that individual therapy is a more preferred and trusted treatment option in comparison to group therapy (Shechtman & Kiezel, 2016; Strauss, Spangenberg, Brähler, & Bormann, 2015).

Stigma is also important to consider when discussing willingness to engage in group therapy among international students. For years, stigma has been recognized as a significant barrier to and a predictor of help-seeking (e.g., Clement, 2015; Corrigan, 2004; Vogel, Wade, & Haake, 2006). In fact, research findings suggest that international students may experience greater stigma related to mental illness and seeking mental health treatment than the general U.S. population (Golberstein, Eisenberg, & Gollust, 2008; Tedeschi & Willis, 1993). Corrigan also distinguished between public and self-stigma. He defined public stigma as negative stereotyping and discrimination done by the public to individuals who carry a label of mental

illness and self-stigma as person's attribution of negative characteristics to him- or herself because he or she has a mental illness. According to the *Modified Labeling Approach* theory, public stigma comes first, and then individuals internalize negative stereotypes if they believe the stigmatized label (e.g., mental illness) is applicable to them (Link, Cullen, Struening, Shrout, & Dohrenwend, 1989). To escape societal rejection and protect their own self-esteem, individuals may attempt to avoid the label of mental illness and therefore may refrain from obtaining psychological help. This theory has been supported empirically and studies have shown that perceived public stigma is associated with self-stigma which then predicts attitudes towards professional psychological help and intentions to seek treatment, including group therapy (Choi & Miller, 2014; Lee, Ditchman, Fong, Piper, & Feigon, 2014; Shechtman, Vogel, & Maman, 2010; Vogel, Wade, & Hackler, 2007a).

Since group therapy is a promising treatment modality for international students, it is very important for university counseling centers to employ strategies that are effective in introducing and discussing this therapy option as well addressing the related stigma. However, scholars have noted that, when it comes to marketing, outreach, and stigma reduction efforts, practice is often ahead of research (Eisenberg, Hunt, & Speer, 2012; Hejinders & Van Der Meiji, 2006). For example, a recent study systematically analyzed counseling centers' websites and found that most include a general description of group therapy, its benefits, and how to get connected with group therapy (Song et al., 2017). A number of counseling centers also include information specific to the groups they run and address some of the common misconceptions about group therapy on their websites. Previous studies with general population, ethnic minorities, and international students have shown that providing information about mental health concerns and services may improve attitudes toward mental health treatment, increase

intentions to seek therapy, and decrease stigma (Alvidrez, Snowden, Rao, & Boccellari, 2009; Chow, 2012; Christensen, Griffiths, & Jorm, 2004; Esters, Cooker, & Ittenbach, 1998; Griffiths, Christensen, Jorm, Evans, & Groves, 2004; Gulliver, Griffiths, Christensen, & Brewer, 2012; Form et al., 2003; Schomerus & Angermeyer, 2008; Sharp, Hargrove, Johnson, & Deal, 2006; Yamaguchi et al., 2013). Specific to group therapy, preliminary support was found for the idea that information may help increase intentions to seek this form of treatment (Stoyell, 2014; Suri, 2015). In addition, one study found that, among international students, higher self-reported knowledge about group therapy related to greater willingness to engage in group therapy (Zhuzha et al., 2016). Thus, it is reasonable to suspect that providing information about group therapy would help international students consider group as a treatment option. Furthermore, given the link between mental health psychoeducation and lower stigma, specifically providing information about concerns that can be addressed in group therapy may help reduce stigma as well. Nevertheless, effects of group therapy psychoeducation on international students' willingness to seek group therapy and their experience of stigma have not been empirically studied.

Furthermore, scholars who provided recommendations for facilitating group therapy with international students also noted the importance of making connections with international student organizations and speaking to students in settings outside of the university counseling center to help promote group therapy (Walker & Conyne, 2007; Yakunina, Weigold, & McCarthy, 2011; Yau, 2004). According to the social influence model (Strong, 1968), a message is more likely to make an impact on listeners' attitudes if the communicator is perceived as an expert, trustworthy, and attractive (Hovland, Janis, & Kelley, 1953, p. 21). Meeting international students outside of the counseling center could allow therapists to present

themselves as experts, demonstrate their knowledge about international students' concerns, convey care about their wellbeing, and express appreciation for cultures and cultural differences. Moreover, given that talking about psychological wellness has been shown to have an effect on stigma (e.g., Form et al., 2003), therapists who verbalize compassion for international students' concerns, thereby normalizing them, may also help reduce stigma in addition to establishing credibility and trust. In this context, therapist's message about group therapy may have stronger influence (Strong, 1968) and help international students begin considering group as a treatment option at their university counseling center. Nevertheless, effectiveness of building rapport with international students outside of a counseling center to increase their willingness to engage in group therapy and decrease their stigma also has not been studied empirically. Thus, the main purpose of this study is to examine whether information about group therapy or establishing a rapport with a group therapist would increase international students' willingness to attend group therapy and reduce their stigma associated with attending group treatment.

In studying effectiveness of similar interventions, severity of mental health concerns and pre-existing familiarity with therapy need to be considered. It makes sense that individuals would be more willing to seek help when they are in distress as opposed to when they are happy and stress-free. Research evidence also supports that greater distress is related to greater intentions to seek psychological help (Cepeda-Benito & Short, 1998; Cramer, 1999; Deane & Chamberlain, 1994; Kahn & Williams, 2003; Kim, Jang, Chiriboga, Ma, & Schonfeld, 2010; Li, Wong, & Toth, 2013; Nam, Choi, & Lee, 2015; Oliver, Reed, Katz, & Haugh, 1999; Park, Cho, Park, Bernstein, & Shin, 2013). Although little evidence is available specific to group therapy and international students, in one study, greater mental health concerns in international students

predicted their higher willingness to engage in group therapy (Zhuzha et al., 2016). By the same token, when a person has more concerns, interventions that promote group therapy may have greater personal relevance; and relevance, according to the social influence model, is one of the key determinants of a new message (about group therapy in this case) being persuasive (Strong, 1968). In other words, students who experience higher distress may be more receptive of interventions than students who are less distressed.

Although relatively few international students have experience with group therapy (e.g., 7.8% see Zhuzha, 2016b [see Appendix B]), evidence supports that students who have experience with any type of therapy, may know more about group therapy than students who have no prior therapy experience (Zhuzha, 2016a). Thus, having been in therapy in the past may be related to having better understanding of what group therapy is and having some trust in psychotherapy services prior to the intervention. In addition, humans are great at learning from experiences of others, in other words, learning vicariously (Berger & Lambert, 1968). Moreover, vicarious learning seems to be enhanced if a person learns from experience of another who is close to him or her (e.g., Feiring, Lewis, & Starr, 1984). Consequently, having a close friend or a family member who has been to therapy, especially if their experience was positive, may also mean greater familiarity with and trust in psychotherapy. As such, it is possible that international students' willingness to seek group therapy may be less affected by interventions that provide information about groups or opportunity to connect with a group therapist if they already have prior positive direct or vicarious experience with therapy.

Use of counseling services also has been shown to correlate with lower self-stigma (Downs & Eisenberg, 2012). Having close others who have been to therapy, especially if the

experience with therapy was positive, is generally related to lower stigma as well (e.g., Golberstein et al., 2008; Nam et al., 2015; Yamaguchi et al., 2013). Thus, international students' levels of stigma may likewise be affected less by interventions that provide information about groups or opportunity to connect with a group therapist if they already have prior positive direct or vicarious experience with therapy.

Present Study

The first purpose of the present study was to examine whether, consistent with theory and previous findings, having positive personal and vicarious experience with therapy, higher mental health concerns, and lower stigma would predict greater intentions to seek group therapy among international students. Although all these factors have been identified as important predictors of seeking mental health treatment, including group therapy, how they predict willingness to seek group therapy together has not been empirically tested. Given previous findings, stigma and mental health concerns together were expected to do better predicting intentions to seek group therapy than individually. However, previous experience with therapy, for example, has been found to no longer meaningfully predict willingness to seek group therapy once mental health concerns were also considered (Zhuzha et al., 2016). Thus, the present study examined if positive direct and vicarious experience would meaningfully predict group willingness only when stigma and mental health concerns were not accounted for.

International students' mental health was assessed by their self-report of the extent to which they were affected by a list of common concerns (including lack of social support) in the last month. Regarding stigma, it was previously discussed that scholars distinguish between public and self-stigma. Since public stigma has been shown to have an indirect effect on

intentions to seek services through self-stigma, the present study only looked at self-stigma. In other words, stigma was assessed by participants' self-report of their beliefs about their inadequacy associated with seeking group therapy. Previous experience with therapy was assessed by asking students whether or not they had been in therapy and had positive overall experience. Vicarious experience was assessed by asking students whether or not they knew of someone close to them having been in therapy and having had positive overall experience. Willingness to seek therapy was assessed by participants' report of how likely they are to seek group therapy at their university counseling center for a number of different mental health concerns.

The second and most important purpose of the present study was to examine effectiveness of two interventions in marketing group therapy to international students. Both interventions were intended to be programs that university counseling centers could easily employ in practice. Their effectiveness was evaluated by comparing intervention participants' willingness to seek group therapy and level of stigma to the willingness and stigma of participants in the control condition. The present study also examined whether interventions differed in their effectiveness depending on international students' levels of psychological distress and previous positive direct or vicarious experience with therapy.

Students taking part in the study were randomly assigned to watch one of the three videos*: intervention 1 (I-1), intervention 2 (I-2),* or the *control condition (CC).* The I-1 video depicted a therapist presenting information about group therapy. Its purpose was to help international students understand what group therapy is about, what mental health issues can be addressed in this treatment, and to address some of potential concerns they may have about

group therapy. The I-2 video depicted a therapist talking about her professional credentials, interest in cultures, and wish to work with international students, including in a group setting. She also expressed understanding of concerns specific to international students. This intervention was designed to resemble a rapport counseling center staff member can establish with international students during an outreach program and was aimed at helping students get to know the therapist and begin developing trust in her as a professional committed to serving international students in group therapy. The CC video depicted a therapist talking about services commonly available at counseling centers, including personal and couples counseling, group therapy, mental health workshops, and assessment.

Research question 1. Do lower self-stigma, greater mental health concerns, and having prior positive direct and vicarious experience predict greater intentions to seek group therapy?

Hypothesis 1.1. Having prior positive direct and vicarious experience with therapy will be associated with greater intentions to seek group therapy but will not explain unique variance in intentions when self-stigma and mental health concerns are also considered.

Hypothesis 1.2. Self-stigma and greater mental health concerns severity will uniquely predict intentions to seek group therapy. Self-stigma will have a negative and mental health concerns will have a positive association with intentions.

Research question 2. Are I-1 and I-2 effective in helping international students consider group therapy as a treatment option and in reducing their self-stigma?

Hypothesis 2.1. Willingness to attend group therapy will be higher and self-stigma will be lower in international students who participate in I-1 and I-2 than the willingness and self-stigma of international students who participate in the CC.

Research question 3. Is one intervention more effective than the other in helping international students consider group therapy as a treatment option and reducing their self-stigma? As there is no theoretical base suggesting that one intervention would be more effective than the other, this question was investigative in nature and no specific hypothesis was made.

Research question 4. Are the effects of I-1 and I-2 on willingness to seek therapy and self-stigma moderated by the severity of mental health concerns?

Hypothesis 4.1. I-1 will have a stronger effect on group willingness and self-stigma in comparison to the CC when severity of mental health concerns is higher vs. lower.

Hypothesis 4.2. I-2 will have a stronger effect on group willingness and self-stigma in comparison to the CC when severity of mental health concerns is higher vs. lower.

Research question 5. Are the effects of I-1 and I-2 on willingness to seek therapy and self-stigma moderated by positive direct and vicarious experience with therapy?

Hypothesis 5.1. I-1 and I-2 will have stronger effects on group willingness and self-stigma in comparison to the CC for participants who do not have prior positive therapy experience than for those who have prior direct positive experience with therapy.

Hypothesis 5.2. I-1 and I-2 will have stronger effects on group willingness and self-stigma in comparison to the CC for participants who do not know of anyone close to them

having positive therapy experience than for those who know of someone close to them having positive therapy experience.

Chapter 2: Literature Review

Predictors of Help-Seeking

Stigma and attitudes towards psychotherapy. Two prominent predictors of help-seeking appear to be stigma and attitudes towards psychological help. Unfortunately, individuals with mental illness in our society may be perceived as dangerous, inept, having deserved the illness, and unsociable, and people tend to distance themselves from those labeled mentally ill (Angermeyer & Dietrich, 2006; Brockington, Hall, Levings, & Murphy, 1993; Corrigan, 2000; Crisp, Gelder, Rix, Meltzer, & Rowlands, 2000; Hamre, Dahl, & Malt, 1994; Link, Phelan, Bresnahan, Stueve, & Pescosolido, 1999). *Modified Labeling Approach* theory is helpful in understanding how these stereotypes may affect one's willingness to seek mental health services. It proposes that, if a person perceives that the society regards individuals with mental illness as inferior (*public stigma*) and the label of mental illness is applicable to them, this person is then likely to see themselves having the negative characteristics associated with mental illness (*self-stigma*; Link et al., 1989). This leads to avoidance, withdrawal, diminished self-esteem, poorer social adjustment, and other unfavorable consequences (Link et al., 1989; Link, Struening, Neese-Todd, Asmussen, & Phelan, 2001; Perlick et al., 2001; Whal, 1999). In other words, individuals may hold back from seeking treatment in order to avoid the "mental illness" label thereby also escaping societal rejection and negative sense of self (Corrigan, 2004).

It should be noted that, although the labels of "mental illness" and "counseling services client" may overlap, they are not the same. Nevertheless, evidence suggests that stigma is likewise attached to being a therapy client and seeking services. For example, Sibicky and Dovidio (1986) studied how students perceive others who seek services at a university

counseling center and found that students had more negative initial impressions of clients vs. non-clients and exhibited more negative behaviors towards clients as opposed to non-clients. Ben-Porath (2002) also found that individuals who sought help for their depression were viewed as more emotionally unstable than those who did not receive therapy. Thus, besides the label of mental illness, the stigma likewise appears to be attached to being a counseling client. In fact, a recent systematic review of quantitative and qualitative studies concluded that higher stigma attached specifically to seeking treatment seems to consistently predict lower propensity to seek psychological help (Clement et al., 2015).

The modified labeling theory and stigma's proposed impact on help-seeking have been supported empirically. Using structural equation modeling, a few studies found that public stigma predicted self-stigma which then predicted attitudes towards professional psychological help and subsequent intentions to seek therapy (Choi & Miller, 2014; Vogel et al., 2007a). In addition, self-stigma and attitudes towards psychological help in these studies fully mediated the relationship between public stigma and intentions to seek treatment. In other words, the findings imply that the public stigma may negatively affect one's propensity to seek help by elevating their self-stigma, and willingness to seek help may be affected by stigma through negative attitudes towards psychological treatment. The links between self-stigma and attitudes towards psychotherapy and between attitudes and intentions to seek psychological services have been found in numerous other studies as well, including those conducted with ethnic minority populations (e.g., Chow, 2012; Cramer, 1999; Kahn & Williams, 2003; Kim & Omizo, 2003; Loya, Reddy, & Hinshaw, 2010; Pederson & Vogel, 2007; Shea & Yeh, 2008; Vogel, Wester, Wei, & Boysen, 2005). One study also found that university students' attitudes towards

professional psychological help predicted actual use of university counseling services (Kahn & Williams, 2003).

Social influence. Research supports that knowing people who have sought therapy or experienced mental illness is related to better attitudes toward treatment and lower stigma. For example, Vogel and colleagues (2007b) found that knowing someone who had sought therapy in the past was related to positive expectations of mental health services, better attitudes towards professional help, and greater intentions to seek psychological treatment. They also discovered that 94% of the participants who sought psychological treatment themselves knew of someone who had been in therapy. Having social contact with individuals who have some personal experience with mental illness is also predictive of lower stigma (Angermeyer & Dietrich, 2006; Golberstein et al., 2008; Schomerus & Angermeyer, 2008). A systematic review of interventions aimed at reduction of stigma in university students also concluded that social contact consistently yields positive outcomes (Yamaguchi et al., 2013). Thus, knowing someone who has struggled with psychological concerns or had been to treatment appears to play an important role in one's beliefs about social acceptability of using counseling services. However, not all social contact is created equal. For example, one's perception of stigma associated with seeking psychological help may be different if they have a good friend who sought therapy versus someone they dislike and if the experience was positive or negative. For example, Nam et al. (2015) found that students' intentions to seek therapy was higher after reading a scenario that included a classmate or an actor they admired disclosing having been to therapy (low-stigma condition) in comparison to a scenario that included a classmate they disliked seeking therapy or an actor who completed suicide despite seeing a counselor (high-stigma condition).

Knowledge and prior therapy. Mental health literacy and knowledge about psychotherapy also appear to play a role in one's inclination towards help-seeking. A number of studies found evidence that providing information about mental health concerns and therapy may improve attitudes towards mental health treatment, increase help-seeking, and reduce stigma (Alvidrez et al., 2009; Chow, 2012; Christensen et al., 2004; Esters et al., 1998; Griffiths et al., 2004; Gulliver et al., 2012; Form et al., 2003; Schomerus & Angermeyer, 2008; Sharp et al., 2006; Yamaguchi et al., 2013). Personal experience is also a great source of knowledge. Not surprisingly, studies find that individuals who had previous experience with therapy tend to have more positive attitudes towards professional psychological help (Kahn & Williams, 2003; Walter, Yon, & Skovholt, 2012).

Mental health and social support. State of one's mental health and extent of their social support are also related to attitudes and intentions toward treatment. When a person is distressed and has little support from others, it makes sense that they would be more likely to look for other sources of care, such as professional psychological help, to relieve the pain. As such, studies consistently find that more mental health concerns and little social support are associated with greater intentions to seek psychological help (Cepeda-Benito & Short, 1998; Cramer, 1999; Deane & Chamberlain, 1994; Kahn & Williams, 2003; Kim et al., 2010; Oliver et al., 1999; Park et al., 2013).

Gender. Research also finds that women generally are more likely to seek therapy than men (Eisenberg, et al. 2012). In the U.S. and in some other cultures, gender norms for men dictate or in the least, imply that being masculine means being in control and self-sufficient, that feeling and expressing sadness demonstrate weakness, and that it is not acceptable for men to cry (Mahalik et al., 2003; Newberger, 1999). As such, these norms are in conflict with seeking

mental health treatment for a man because such behavior implies that he needs help with his emotions (Pederson & Vogel, 2007; Vogel, Heimerdinger-Edwards, Hammer, & Hubbard, 2011). Thus, it is not surprising that attitudes towards therapy are often found to be poorer, help-seeking lower, and stigma higher among men in comparison to women (Clement et al., 2015; Golberstein, Eisenberg, & Gollust, 2008; Schomerus & Angermeyer, 2008; Kim et al., 2010; Shea & Yeh, 2008; Tedeschi & Willis, 1993).

In sum, several factors and characteristics may predict one's intentions to seek psychological help. Research indicates that individuals who are more willing to seek help are generally more likely to experience lower mental health stigma, have better attitudes towards professional psychological help, have prior experience with therapy, experience higher distress, have lower social support, and to be women than those who have lower willingness. Although knowledge about mental health and treatment have not been sufficiently studied in relationship to willingness, increasing knowledge has been shown to improve attitudes and reduce stigma, which are robust predictors of willingness to seek psychotherapy. Having social contact with individuals who have utilized therapy services or have mental health concerns likewise tends to be related to better attitudes towards psychological help, greater intentions to seek treatment, and lower stigma.

Group Therapy

Effectiveness and advantages of group therapy. From 1970s until now meta-analyses and reviews continue to provide evidence of effectiveness of group therapy with a variety of mental health disorders and conclude that individuals in group therapy on average do better than those not receiving treatment (Barlow et al., 2000; Burlingame et al., 2003; Burlingame et al., 2013; McDermut et al., 2001; McRoberts et al., 1998; Oei & Dingle, 2008; Tillitski, 1990). To

know whether group therapy is worth the investment one may also want to know how it fairs in comparison to individual treatment in therapeutic gains. Two meta-analyses from 1980s report superiority of individual therapy over group (Dush, Hirt, & Schroeder, 1983; Nietzel, Russell, Hemmings, & Gretter, 1987). However, lack of methodological rigor is a common criticism of studies that found this effect (Barlow et al., 2000). Lack of intention to include group therapeutic factors and not measuring gains common to group treatment are cited as common faults of the designs (Fuhriman & Burlingame, 1994; Horne & Rosenthal, 1997). Examining studies with more rigorous methodology that directly compared individual and group formats, more recent meta-analyses and reviews found compelling support for equivalency of individual and group modalities (Burlingame et al., 2003; Burlingame et al., 2013; McRoberts et al., 1998). A recent study that looked at client improvement in individual and group treatment, as measured by the well-researched Outcome Questionnaire (OQ-45), also concluded that the two modalities produced a comparable change in clients' symptoms (Burlingame et al., 2016).

Although the general conclusion is that group treatment is as effective as individual, two limitations are worth noting. First, although depression has been repeatedly shown to be successfully treated in a group setting (Burlingame, et al., 2013), evidence is contradictory when it comes to equivalence of group and individual therapy with some sources documenting superiority of individual treatment (Burlingame et al., 2016; Burlingame et al., 2013; McRoberts et al., 1998; Nietzel et al., 1987). Second, it is not clear how individual therapy compares to group in effectiveness when number of sessions is taken into account. Results of one meta-analysis suggest that group therapy is a more effective modality in short-term treatment (10 sessions or fewer; McRoberts et al., 1998). However, the recent study by Burlingame et al. (2016) found that 6 additional group sessions were needed for gains of group

to be equivalent to those of individual therapy. Another study found 14 sessions of group to be slightly more effective than a 7-session CBT individual therapy in treating panic with agoraphobia (Roberge, Marchand, Reinharz, & Savard, 2008).

Although a number of factors are responsible for client improvement in group therapy, interpersonal learning is a particularly salient therapeutic aspect of this mode of treatment (e.g., Friedman, 2003; Holmes & Kivlighan, 2000; Yalom & Leszcz, 2005). For example, in groups that include interpersonal process, the group creates a social environment where each client's behavior and style of interaction with time begin resembling how they act and communicate in the outside world (Yalom & Leszcz, 2005). However, a therapy group allows for a safe and stable environment where clients can seek and provide feedback about how they affect one another and can practice new behaviors. Groups that are more skill focused may likewise include interpersonal benefits. For example, clients can learn from others, learn of their ability to help others, and discover that they are not alone in their experience. Studies have found that learning through interpersonal interaction is among top group therapeutic factors identified as most helpful by group therapy clients and is predictive of clients' improved wellbeing (e.g., Behenck et al., 2016; Butler & Fuhriman, 1983; Holmes & Kivlighan, 2000; Liu et al., 2008; MacNair-Semands et al., 2010; Yalom & Leszcz, 2005).

Group therapy is also considered a cost-effective mode of treatment. Recently, the Wall Street Journal published an article about group therapy labeling this mode of psychological treatment as such (Helliker, 2009). In fact, even if additional 6 sessions of group therapy are needed to attain the therapeutic effects produced by individual therapy, taking into account the number of clients served and therapists' time, group therapy was still found to be more cost-

efficient than individual therapy (Burlingame et al., 2016). Cost-efficiency, in fact, is becoming increasingly important for university counseling centers as the demand for services continues to rise (e.g., Burlingame et al., 2016). According to the national data gathered in 2014, 94% of counseling center directors noted that severity of mental health concerns has been increasing in the last 5 years and on average reported having 52% of clients with severe psychological problems, which is 8% increase from 2013 (Gallagher, 2014). At the same time, in the last three years nearly 36% of counseling centers reported having a waitlist and the wait for the first appoint reaching 20 to 48 business days depending on the professional staff to student ratio (Reetz, et al., 2016; Reetz, Bershad, Lawrence, & Mistler, 2015). In 2016, large universities on average reported having up to 75 clients on their waitlist (Reetz et al., 2016). In response to rising demand, directors of counseling centers endorsed increased use of group counseling (Barr et al., 2010) and said that they were more likely to assign clients to group therapy at intake (Gallagher, 2009, 2010, 2011, 2012). Furthermore, group appears to be a more affordable psychotherapy option as well. Almost 6% of counseling centers reported charging fees for therapy groups while 15% reported charging for personal counseling (Reetz et al., 2016). Outside of university counseling centers, group therapy sessions cost about half of what individual sessions do (Helliker, 2009). Moreover, group therapy sessions often last 90 minutes while individual appointments run for 45-50 minutes.

Use of group therapy. Although group therapy appears to be gaining popularity, and in 2016 nearly 75% of counseling centers offered therapy groups (Reetz et al., 2015), it is no secret that group is less utilized and less preferred treatment than individual therapy. One of the earlier studies surveying 148 university counseling centers found that, for the majority of the centers, 20% or fewer of their clients were served in therapy groups (Golden, Corazzini, &

Grady, 1993). Even though this is the most recent published data on university counseling centers' group utilization to my knowledge, more recent studies found that consumers in the U.S. and abroad are more likely to prefer individual therapy over group when given the option (Kracen, Mastnak, Loaiza, & Matthieu, 2013; Sharp, Power, & Swanson, 2004; Shechtman & Kiezel, 2016). This is also reflected in self-reported therapy utilization rates among general and minority university students. For example, a study by Dilsworth and colleagues (2008), surveying 171 students who came to a university counseling center for intake, found that 39.8% of students reported previous experience with individual therapy while only 9.4% reported previous experience with group therapy. Similarly, only 7% of students said that they would be willing to participate in a group while 46.8% said they were not willing and 46.2% said they were not sure. In other two surveys of 81 Latino and 28 LGB-identifying university students, 45% and 68% respectively reported having had experience with individual counseling and 17% and 21% said they had been to group therapy (Peters, 2016; Stoyell, 2014).

Furthermore, group therapy appears to be one of the last support options that university students are willing to turn to for help. For example, based on Black students' ratings of how likely they were to seek help from different support systems, group therapy was 3rd to the lowest-rated option after faculty, physician, individual therapy, intimate partner, faith, facing problems on their own, and friends and family (Harris, 2013). Only doing nothing and turning to alcohol and drugs received lower ratings than group therapy. For White students, individual therapy was in the 5th place and group was in the 9th place out of 12 of support options (Suri, 2015). Similarly, for Latino students, individual therapy was in the 4th while group therapy was in the 8th place out of 10 support system options (Stoyell, 2014). Despite the above described trends, findings of one study suggest that individuals generally hold neutral or positive attitudes

towards group therapy (Carter, Mitchell, & Krautheim, 2001). It should be noted, however, that participants in this study reported their attitudes after talking to a mental health professional about group treatment. Thus, it is possible that their reported attitudes were more positive than those held by the general population as a result of the discussion with the mental health expert.

Predictors of intentions to seek group therapy. When it comes to predictors of intentions to seek group therapy, existing evidence supports that some trends may be similar to those found for intentions to seek psychological help in general. For example, studies demonstrated that self-stigma and attitudes towards group predicted university students' intentions to engage in group therapy and that public and self-stigma explained up to 52% of the variance in attitudes towards group therapy (Carter et al., 2001; Vogel, Shechtman, & Wade, 2010; Wade, Post, Cornish, Vogel, & Tucker, 2011). Furthermore, similar to the relationship between stigma and intentions to seek counseling discussed earlier, public stigma associated with group therapy was found to predict self-stigma, which then predicted attitudes towards group therapy and finally intentions to seek group treatment (Shechtman et al., 2010).

Some evidence supports that knowledge predicts intentions to engage in group treatment, but inconsistencies exist. Two studies found that, when participants had a brief description of the therapy group, they rated their willingness to attend the group as higher than when they were given no information about the group treatment (Stoyell, 2014; Suri, 2015). Similarly, having more knowledge about group therapy was found on average to be associated with better attitudes towards the treatment (Strauss et al., 2015). However, another study found that individuals who were given information about group therapy were no more willing to seek treatment than individuals who did not have the information (Dilsworth et al., 2008).

When it comes to prior experience with psychological treatment, a study by Marmarosh et al., (2009) found no relationship between prior group experience and attitudes, and Harris (2013) and Suri (2015) found that neither prior individual nor group therapy experiences predicted willingness to do group therapy among ethnic minorities. Nevertheless, for Caucasian students, Suri found that prior experience with individual therapy predicted their willingness to do group. Similarly, Stoyell (2014) found that among Latino university students, those who had prior experience with group therapy were more willing to consider group therapy than those who had no prior group experience. Authors propose that lack of relationship between prior group experience and current willingness to seek group therapy may be related to the level of satisfaction with group treatment, which was not assessed. Furthermore, Suri emphasized that the majority of participants seemed to have poor understanding of the group process. Overall, these results should be interpreted with caution because, in the latter three studies, the number of participants who had experience with group therapy was small and the measure of willingness used had very limited reliability and validity support.

Similarly, whether mental concerns may predict willingness to attend group therapy is not clear due to little empirical evidence. One study examining the relationship between general mental health and willingness to attend group therapy found that the two were unrelated (Dilsworth, et al., 2008). With respect to differences in attitudes and intentions towards group therapy by gender, the evidence is mixed. Some studies found that women reported lower self-stigma and more positive attitudes and greater intentions toward group therapy than men (Shechtman et al., 2010; Wade et al., 2011). However, public and self-stigma were found to predict attitudes towards group therapy equally well for both genders (Vogel et al., 2010). In

addition, one study found no differences in attitudes towards group therapy by gender (Marmarosh et al., 2009).

University counseling centers' efforts to promote group therapy. Researchers note that, even though organizations have implemented variety of strategies in attempt to reduce mental health stigma and help individuals seek mental health services, research evaluating these efforts is scarce or non-existent (Eisenberg et al. 2012; Hejinders & Van Der Meiji, 2006). This also appears to be true for marketing of group therapy by university counseling centers. From the systematic review of some university counseling centers' websites, it appears that most put up some information about group therapy (Song et al., 2017). Most commonly, websites discuss what happens in group therapy, list potential benefits of group, and explain how to get started with group counseling. Some also list groups they offer, discuss potential concerns and misconceptions about group therapy, and talk about group therapy structure and guidelines in detail. Besides written information, almost 21% of counseling centers included videos related to group therapy.

In short, group therapy is recognized as an effective mode of psychotherapy. Empirical evidence generally supports that therapeutic gains of group are comparable to those of personal counseling. Furthermore, given high present demand for psychological services on university campuses, group emerges as a cost-effective treatment for both counseling centers and students. Nevertheless, group appears to be less popular form of treatment among consumers than individual therapy. Among predictors of intentions to seek group treatment appear to be stigma and attitudes towards group therapy. The results are mixed regarding gender, knowledge, and prior group therapy experience as predictors. Severity of mental health concerns, on the other hand, do not seem to be related to willingness to attend group, but the available evidence is very

limited, thus preventing definite conclusions. In terms of effective methods of promotion of group therapy, empirical evidence is also absent. Nevertheless, it appears that many counseling centers post written or video information on their websites related to group therapy.

International Students

The number of international students enrolled in higher education in the United States has notably increased during the last few years. According to the most recent report of Institute of International Education (2017), in 2016-2017 record high number of 1,078,882 international students were enrolled in U.S. higher educational institutions, which is 29% increase over the 5 years. In total, international students made up 5.2% of student body in 2016-2017.

Mental health. Although national data is available on mental health in college students, data on psychological concerns in international students is more challenging to find. According to the National College Health Assessment of 2015 (American College Health Association, 2015), 56.9% of undergraduate and 34.5% of graduate students (9.5% of all were international) reported experiencing substantial anxiety and depression in the last year. In addition, 58.8% reported feeling very lonely and 45.1% reported considerable academic difficulties at least at some point in the last 12 months. Studies that looked specifically at international students' mental health issues also seem to find that depression, anxiety, academics, and relational issues are among top concerns along with financial difficulties. Recently, at a large technical university in the South, international students reported that anxiety, financial troubles, depression, career/academic concerns, shyness, and isolation were the top 6 concerns that affected them in the last year (Zhuzha, 2016a). An earlier study conducted at a university counseling center found similar results. Some common presenting concerns of international

students who sought services were depression, anxiety, communication with others, low self-esteem, academic concerns, trouble making friends, and loneliness (Nilsson et al., 2004). Overall, it appears that relational difficulties are among top concerns for international students. Many non-quantitative academic sources also discuss social adjustment, isolation, and loneliness as some of the prime issues that international students face studying in the U.S. (Aubrey, 1991; Johnson & Sandhu, 2007; Mori, 2000; Olivas & Li, 2006; Pederson, 1991; Poyrazli & Grahame, 2007). A few empirical studies also found evidence that international students experience greater difficulty in social adjustment and are more alienated than domestic students (Hechanova-Alampay et al., 2002; Owie, 1982; Parr & Bradley, 1991).

First, when a student comes to the U.S. to study, they often lose much of what is familiar to them, for example, their daily routine, food, community, and of course, support of family and friends. It is not difficult to imagine how one's sense of belonging, connectedness, and social identity could be shaken with a similar change (Hayes & Lin, 1994; Ishiyama, 1989; Johnson & Sandhu, 2007). However, it may also be difficult for international to form new intercultural connections because of cultural and language barriers. Even if a student speaks English fluently, accent and a lack of deep cultural knowledge on both sides may result in misunderstandings, frustration, and embarrassment in having to ask for or provide explanations (Johnson & Sandhu, 2007; Pedersen, 1991). Moreover, the concepts of friendship and casual conversation in the U.S. culture are different from those of many other cultures (Bulthuis, 1986; Mori, 2000). For example, the question "How are you?" or saying "We should hang out some time" in the U.S. do not necessarily mean that the speaker intends to get to know their companion better (Bulthuis, 1986). Similar nuances may make it difficult for international students to understand how to build meaningful relationship in the U.S. On the other hand, American phrases that are

solely intended to communicate friendliness, such as “You should come by,” could also be interpreted as inappropriate (Pedersen, 1991). Dissatisfaction with social encounters may then impact international student’s self-efficacy in relational context and discourage them from initiating further intercultural connections (Bulthuis, 1986; Johnson & Sandhu, 2007; Mori, 2000).

At the same time, it has been long known that social connections play an important role in one’s wellbeing (Flack, 1976; Steinglass, DeNour, & Shye, 1985). Evidence supports that it is also true for international students. For example, greater levels of social support were shown to relate to fewer stress symptoms and lower acculturation-related stress in this population (Lee, et al., 2004; Mallinckrodt & Leong, 1992). Likewise, satisfaction with social support, feeling connected, and sense of belonging were found to predict lower acculturation-related stress and better mental health (Atri et al., 2007; Yeh & Inose, 2003). Furthermore, research indicates that social connections with host nationals are especially important. As such, in Chinese internationals students, while social connections with both ethnic and American groups were found to buffer negative effects of perceived language discrimination, connections with Americans seemed to protect against a wider range of symptoms (Wei et al., 2015). Findings of another study also suggest that friendships with Americans, as opposed to social support in general, predict better adjustment and lower distress (Hechanova-Alampay et al., 2002).

Use of psychotherapy. Whether psychotherapy services are underutilized by international students is up for a debate. Most studies conducted between 8 and 15 years ago support that international students use services at a lower rate than domestic students (Raunic & Xenos, 2008). For example, one study reported that international students made up 8% of the

student body, but only 2.6% of clients at the counseling center were international (Nilsson, Berkel, Flores, & Lucas, 2004). Another study found that 4.4% of general student body received services annually, and only 1.8% of international students did (Yakushko, Davidson, & Sanford-Martens, 2008). Hyun and colleagues (2007) also found that 33% of international students considered using counseling services and 17% used them in comparison to 56% and 36% of domestic students respectively. Similarly, evidence from the same time period suggests that foreign students had less favorable attitudes towards therapy than domestic. As such, Tdeschi & Willis (1993) found that American Caucasian women on average had more confidence in therapy than Asian international students. American Caucasian men, however, did not differ from international students in attitudes towards treatment. Similarly, Korean students were found to have poorer attitudes towards professional psychological help than American students (Yoo & Skovholt, 2001), and Asian international students were discovered to perceive less need for counseling, have greater shame about seeking treatment, and have more concerns about therapy being right for them than domestic students (Yoon & Jepsen, 2008). It should be noted that the research discussed is restricted to international students from Asian countries, which is a limitation. However, Baysden (2003) provided evidence that these findings may be generalizable to the broader international student population by demonstrating that attitudes towards seeking professional psychological help in all international students predicted their lower use of counseling services in comparison to domestic students.

Unfortunately, in the current review of literature, no recent studies were found comparing attitudes towards psychotherapy of international and domestic students. Nevertheless, some evidence is available from service utilization statistics. Although the percentage of international students among counseling center clients continues to be smaller

than the percentage of international students in the student body, this discrepancy was rather small in the last 5 years, ranging between 1.4% and 2.14% (Barr, Krylowitcz, Reetz, Mistler, & Rando, 2011; Mistler, Reetz, Krylowitcz, & Barr, 2012; Reetz, Barr, & Krylowitcz, 2013; Reetz, Krylowicz, & Mistler, 2014, Reetz et al., 2015; Reetz et al., 2016). The biggest discrepancy was recorded in 2013 when 4.80% of counseling center clients were reported to be international students in comparison to 6.94% of international students in the student body. However, it should be noted that the number of international students served at a counseling center could vary from university to university.

Predictors of attitudes towards and willingness to seek psychotherapy. What determines international students' propensity to seek professional psychological help is not well researched. Evidence suggests that, similar to the general population, lower stigma, better attitudes towards psychotherapy, and having prior experience with counseling are among factors that are associated with greater willingness to seek counseling. As such, three studies found support that, in international and foreign students, public stigma predicted self-stigma, which then predicted attitudes towards professional psychological help, and the attitudes subsequently predicted willingness to seek psychotherapy (Choi & Miller, 2014; Lee et al., 2014; Topkaya, Vogel, & Brenner, 2017). Other studies with international students in the U.S. and college students abroad also found that higher stigma was linked to poorer attitudes towards professional psychological help (Baysden, 2003; Boafo-Arthur, 2015; Heath, Vogel, & Al-Darmaki, 2016). In fact, stigma may be particularly important to consider with international students because studies have demonstrated that perceived stigma is higher and tolerance of the stigma of being a client is lower in this population as compared to the U.S. domestic students (Golberstein et al., 2008; Tedeschi & Willis, 1993). Little published empirical work, however,

considers the role of social contact in international students' experience of stigma. In support of social contact being related to lower stigma in this population as well, one study that found this association included 464 international students in their sample (Golberstein et al., 2008).

With respect to knowledge, lack of familiarity with psychotherapy and its process has been proposed by many scholars as a reason for underutilization of counseling services by international students (Boyer & Sedlacek, 1989; Dadfar & Friedlander, 1982; Komiya & Eels, 2001; Mori, 2000; Raunic & Xenos, 2008; Scheel et al., 2008; Tedeschi & Willis, 1993). In support of the role of knowledge in attitudes, a study by Scheel et al. (2008) found that international students' expectations of counseling improved after watching a video with information about the purpose and process of counseling, common reasons for coming to counseling, and culturally relevant interventions. Furthermore, among international students in the U.S. and students abroad, having been in counseling before was found by several researchers to be associated with more positive attitudes, lower stigma, and greater intentions to seek therapy (Dadfar & Friedlander, 1982; Komiya & Eells, 2001; Nam et al., 2015; Tsega, 2014).

On the other hand, evidence is somewhat mixed regarding mental health symptoms predicting willingness to seek psychological services. Three studies found that higher dysfunction is associated with greater willingness to consider using psychological services (Li et al., 2013; Nam et al., 2015; Zhuzha, 2016a). Another earlier study found no association between the two factors (Komiya & Eells, 2001). Social support has not been uniquely examined, to my knowledge, as a correlate of international students' willingness to seek therapy. However, one of the above studies used a measure of mental health concerns that included items related to social support and loneliness. Furthermore, as discussed earlier,

international students who have lower social support tend to experience higher distress, which in turn could predict of willingness to seek treatment.

With respect to gender and international students' attitudes towards psychotherapy, the evidence is also mixed. Some studies find that among international students in the U.S. and students in foreign countries women on average tend to have more positive attitudes towards psychotherapy and lower levels of stigma than men (Health et al., 2016; Komiya & Eells; Shea & Yeh, 2008; Türküm, 2005; Yakunina & Weigold, 2011; Yoon & Jepsen, 2008). In contrast, several studies found no differences across gender for attitudes or intentions towards psychotherapy in international students (Dadfar & Friedlander, 1982; Tedeschi & Willis, 1993; Tsega, 2014; Zhang & Dixon, 2001; Zhuzha et al., 2016).

Lack of exposure to and familiarity with psychotherapy sometimes could also be a barrier to international students' help-seeking. Scholars have speculated that, as some international students are accustomed to seeking support from family and friends, rigid structure and relational boundaries that exist in therapy may seem unnatural, which may contribute to their limited openness to this service (Fouad, 1991; Yoon & Jepsen, 2008). In support that international students may be less familiar with the concept of therapy, Yoon and Jepsen found that only 15.3% of international students knew someone who has been in psychotherapy whereas 80.1% of domestic students did, which was a statistically significant difference.

Lastly, evidence suggests that personal contact with service providers may help increase international students' willingness to seek therapy. In one qualitative longitudinal study, researchers discovered that East Asian international students' attitudes towards therapy improved as they spent more time in the U.S. (Chen & Lewis, 2011). When examining possible reasons for change, personally knowing individuals who are therapists and knowing that the

therapist has experience working with international students seemed to be an important factor in participants' greater willingness to seek counseling. Yakunina et al. (2011) and Yau (2004) also discussed how disclosing therapists' multicultural background and experience working with international students may help to build a rapport with students and make them feel more comfortable about therapy. This can be explained by Festinger's (1957) *cognitive dissonance* theory and Strong's (1968) *social influence model*. Cognitive dissonance is a well-known empirically supported theory (e.g., Fiske, 2004) that states that, when people care about a subject, they experience discomfort with incongruity related to the subject and attempt to resolve it. For example, consider a student who is excited to take a certain history class and has already registered and purchased textbooks for it. Now this student hears negative feedback from other students about the professor teaching the class. This creates psychological discomfort because the information is inconsistent with the student's attitudes towards the class and the plan to take it. To reduce the dissonance and discomfort, the student must change how they feel about the class (even drop it) or discredit the information heard. The social influence model is based on the cognitive dissonance theory and research findings in social psychology (Strong, 1968). It states that people are more likely to change their opinions about a subject (vs. discredit the information) when the communicator, who delivers the message that is inconsistent with their current beliefs (i.e., creates cognitive dissonance), is perceived as having expertise and to be trustworthy and attractive. In other words, having contact with a therapist could increase students' willingness to participate in therapy if the therapist delivers a positive message about therapy and is perceived by the students as an expert, trustworthy, and attractive.

According to Strong (1968), counselor expertness could be determined by factors such as diplomas and behavioral evidence of expertise. Testament to therapist's trustworthiness could

be their social role of a helper, sincerity, and investment in client's wellbeing. Finally, attractiveness entails likability and compatibility, which can be achieved by communication of understanding of client's concerns. Furthermore, people tend to like those who like them as it enhances self-esteem and satisfies evolutionary drive to belong (Baumeister & Leary, 1995; Carnegie, 1936; Fiske, 2004). Thus, expression of interest in the client and client-relevant characteristics (e.g., culture) could also boost likability.

Research has in fact provided support for this model in the context of therapy. First, it has been found that expertness, trustworthiness, and attractiveness are in fact three different dimensions when it comes perceptions of a therapist (Barak & LaCrosse, 1975). Hoyt's (1996) meta-analysis study also showed that therapist's reputation and behavioral cues are generally related to therapist's perceived credibility and ability to influence client's attitudes or behavior. Credibility was likewise shown to be associated with influence. When it comes to therapy with international students, it was found that therapists who disclosed and displayed interest in client's culture were perceived to have greater expertise and to be more trustworthy and attractive than therapists who only focused on cultural factors impacting clients' wellbeing (Zhang & Dixon, 2001).

Scholars have recommended for counseling centers to participate in international student orientations and to reach out to this population outside of the counseling center to help students develop trust in mental health providers and help them seek services (Arthur 2004, 2008; Pedersen, 1991; Yoon & Portman, 2004). This recommendation makes sense in the context of the social influence model and the evidence discussed above. However, whether building a rapport with international students outside of the counseling center impacts students'

perceptions of therapists' expertise, trustworthiness, and approachability and increases students' willingness to seek therapy is yet to be investigated in quantitative studies.

Group therapy for international students. As discussed earlier, social support appears to play a crucial role in one's wellbeing, and loneliness and social isolation are some of the issues commonly faced by international students. Consequently, it has been repeatedly suggested that group therapy could be an advantageous form of treatment for international students as it will provide opportunities for interpersonal learning in American cultural environment in addition to acquisition of coping skills related to students' specific concerns (Carr et al., 2003; Dipeolu et al., 2007; Walker & Conyne, 2007; Yakunina et al., 2011). Evidence supports effectiveness of group counseling that utilizes non-verbal methods of expression with international students (Lee, 2007). Tavakoli and colleagues (2009) also provide support for potential of verbal therapy groups to be effective with this population. In their study international students were randomly assigned to group assertiveness training or control conditions. Students who received the group assertiveness training at the beginning of the semester, unlike students who did expressive writing or were in the wait-list control group, had lower negative affect at the end of the semester.

It is also important to note that literature continues to cite language as a barrier to seeking psychological services and as one of the main stressors for non-native English international student speakers (Aubrey, 1991; Church, 1982; Ishiyama, 1989; Johnson & Sandhu, 2007; Mori, 2000; Olivas & Li, 2006; Pederson, 1991; Poyrazli & Grahame, 2007; Yeh & Inose, 2003). This is not surprising as adequate English skills are necessary to carry out everyday tasks, succeed academically, and, in many cases, to socialize (Chen, 1999; Ishiyama, 1989; Stoynoff, 1997). Language can also be a significant barrier when it comes to therapy as

the treatment relies on expression of thoughts and emotions (e.g., Church, 1982). In the case of group therapy (assuming it is conducted in English), conversational skills are particularly important as members need to keep up with interactions between several people. Thus, if client's language skills are significantly less developed in comparison to those of group members, group therapy may not be the best treatment option. At the same time, for international students who have sufficient language skills but may feel embarrassed about their accent or making mistakes (Constantine, Kindaichi, Okazaki, Gainor, & Baden, 2005; Poyrazli & Grahame, 2007; Yau, 2004), group therapy could provide a great learning environment where they can gain confidence in their communication (Carr, Koyama, & Thiagarajan, 2003; Dipeolu, Kang, & Cooper, 2007). Confidence in English skills may in turn boost students' self-efficacy for coping with variety of situations, thereby reducing stress (Chen, 1999; Lazarus, 1990, 1993; Hechanova-Alampay et al., 2002).

Utilization of, attitudes towards, and intentions to seek group therapy. Although underutilization of counseling services by international students may no longer be an apparent problem for many universities, when it comes to group therapy, the trend is similar to that discussed earlier for the domestic population. Among international students too, this service seems to be less popular in comparison to individual counseling despite the evidence of comparable efficacy of both modalities. Thus, a survey of 243 internationals students found that 25.5% acknowledged having had individual therapy and 7.8% acknowledged having been in group treatment (Zhuzha, 2016b). Using the same data set, another study found that international students reported knowing more about individual than group therapy and were more willing to attend individual therapy in comparison to group for a variety of mental health concerns (Zhuzha et al., 2016). Yoon and Jepsen (2008) also found that Asian international

students report having preference for individual over group therapy. Other evidence comes from studies that were conducted in foreign countries. Shechtman and Kiezel (2016), for example, found that Israeli and Arab university students prefer individual therapy over group and have more reservations about group than individual therapy. Strauss et al. (2015), conducting a large-scale research in Germany, found that 73.4% of participants regarded individual treatment as useful while only 42.1% shared similar feelings about group therapy. In sum, similar to the U.S. domestic population, international students and individuals in other countries seem to have less favorable attitudes towards and seem less inclined to seek group therapy in comparison to one-on-one treatment.

Since group therapy is effective and accessible mode of treatment on university campuses and may be especially advantageous mode of treatment for international students because of its emphasis on relationships and social skills, it is important to understand what factors predict international students' willingness to seek group treatment and what interventions may be helpful in promoting group therapy to this population. Research on this topic is very limited, however. One recent study found that having prior therapy experience, greater self-reported knowledge about group therapy, and higher severity of mental health concerns were associated with higher willingness to seek group therapy among international students (Zhuzha et al., 2016). However, prior experience with therapy did not explain unique variance in willingness once knowledge and concern severity were considered. In the same dataset, men and women did not differ in their willingness to seek group treatment (Zhuzha, 2016a). In contrast, albeit not with international students, a study conducted in Germany found that women had more positive attitudes towards group than men (Strauss et al., 2015).

Importantly, the study by Zhuzha and colleagues (2016) also found that willingness to attend individual and group therapy were highly correlated. This finding suggests that considering predictors of intentions to seek psychotherapy in general may likewise be valuable in the study of international students' willingness to seek group treatment. In particular, stigma is worth considering since it has been shown to be especially pertinent to international students and to be a consistent predictor of intentions to seek counseling among domestic and international students.

Attitudes towards treatment was also found to be a consistent predictor of willingness to seek therapy and a mediator between the stigma and willingness. However, an argument could be made that the two constructs have a significant overlap because of how they are measured. Thus, willingness is often measured (e.g., Choi & Miller, 2014; Lee et al., 2014; Pederson & Vogel, 2007; Vogel et al., 2007a) using Intentions to Seek Counseling Inventory (ISCI; Cash, Begley, McCown, & Weise, 1975; Gim, Atkinson, & Whiteley, 1990), where a respondent indicates how willing they would be to seek therapy for each problem listed (e.g., depression, general anxiety, loneliness). In the same studies, attitudes were measured using the Attitudes Toward Seeking Professional Psychological Help Scale—Short Form (ATSPPHS-SF; Fischer & Farina, 1995), where respondents indicate their degree of agreement with 10 statements. Three out of the 10 items in this scale, however, resemble the willingness to seek therapy construct ("If I believed I was having a mental breakdown, my first inclination would be to get professional attention," "I would want to get psychological help if I were worried or upset for a long period of time," and "I might want to have psychological counseling in the future"). In fact, Mackenzie et al. (2004) and Ægisdóttir and Gerstein (2009) argued that intent to seek treatment is a dimension of attitudes towards professional psychological help. Consequently, the

constructs of attitudes and willingness to seek psychological services appear to overlap, and it could be argued that measuring attitudes is non-essential when studying the link between stigma and intentions to seek treatment.

Finally, limited literature on recommendations for conducting group therapy with international students suggests establishing relationships with international student organizations and conducting outreach that may help students connect with service providers in informal settings and see them as credible and personable professionals who can be trusted (Walker & Conyne, 2007; Yakunina et al., 2011; Yau, 2004). Once again, effectiveness of similar interventions for increasing international students' willingness to attend group therapy has not been studied empirically according to my knowledge.

Chapter 3: Method

Participants

The final sample consisted of 306 undergraduate and graduate international students completing their degree in the United States (see Table 1 for full description of sample characteristics). Only students who reported that they were 18 years of age or older and self-identified as being comfortable with spoken and written English were included in the study. Furthermore, only students who planned to be enrolled for at least one additional semester (not including the current term) at their institution were included in the study. Participants in the final sample were from 13 universities, most located in the Southern United States. The number of participants who identified as men and women was equivalent. A large majority of those who took part in the survey identified as graduate students, and most reported their area of study to be related to engineering, science, or mathematics. Participants were between 18 and 45 years old, with most participants falling in the 23-29 age range. Most indicated that they have lived in the U.S. between 1 and 4 years. A large majority of participants were from South or East Asia and identified as Asian/Pacific Islander. Finally, most of the participants did not have prior experience with psychotherapy[1].

Although 824 individuals began the study, 80 did not meet the inclusion criteria based on the screening questions (see Appendix C), 319 dropped out of the survey, and 119 were excluded from the data analyses by the researcher. Out of the 80 participants who did not meet the inclusion criteria, three indicated being 17 or younger, 30 said they were not comfortable with spoken or written English, 13 indicated that they were not students or were not enrolled in

[1] Two participants reported having previous negative experience with therapy. Removal of these cases did not affect any of the study findings. As a result, these cases were included in all analyses.

a degree program, 30 reported that they were in their last semester of studies, and 4 said that they were not international students in the U.S.

Of the 319 participants who dropped out at some point during the survey, the largest number (n = 152) stopped their participation when they were asked to watch one of the videos (see Table 2). Undergraduate students were more likely to drop out from the study than graduate students (see Table 3 for all statistics assessing differences between the participants who dropped out vs. completed the survey). How much participants learned about group therapy from the video, how well they felt they got to know the therapist in the video, the extent to which they believed she might understand them, and participants' perception of her as an expert, trustworthy, and likable did not predict participants' latter dropout from the study.

Of the 425 participants who met the inclusion criteria and finished the survey, 119 were excluded by the researcher from the hypotheses testing data analyses (see Table 4). Seven participants were excluded because they said that they completed the study before. Eighteen participants were removed because they did not finish watching the video as assessed by the time spent on the survey page containing the video. Fifty-three participants were excluded because they responded incorrectly to the question about the content of the video they watched, and 41 more were excluded because they provided incorrect responses to the attention check questions embedded in the questionnaires. Participants who were excluded for reasons other than having participated in the study before and those who were retained were similar in their age, number of years they have lived in the U.S., and their reported self-stigma and willingness to seek group therapy (see Table 5 for all statistics assessing differences between the excluded and retained participants). They were also similar in how much they learned about group therapy from the video, how well they felt they got to know the therapist in the video, the extent

to which they believed she might understand them, and in their perceptions of her as an expert, trustworthy, and likable. Furthermore, participants who were excluded did not significantly differ from those who were retained as a function of gender, prior therapy experience, or degree level (i.e., graduate, undergraduate). However, the excluded participants reported higher levels of mental health concerns in comparison to those retained[2]. Nevertheless, it should be noted that the found differences or lack thereof in self-stigma, group willingness, self-reported learning about group therapy, perceptions of the therapist, and mental health concerns may be unreliable since the excluded participants' data suggested inattention. Demographic characteristics of the participants excluded because they did not finish the video or did not pass the attention checks can be found in Table 1.

Measures and Materials

Screening questions. Screening questions were used to determine if the person met study inclusion criteria. They included participants' age, student status in the U.S., if they are in their last semester of studies, degree program, and comfort with spoken and written English (see Appendix C).

Videos. Three videos were created for the purposes of the study. Two were interventions, and the third was the control condition. All videos depicted a biracial (Caucasian and East Asian) adult woman who was a native English speaker. She was introduced as Rhea, a therapist working at a university counseling center. In all videos, she was interviewed by a White man in his early 20s. At the end of each video, the therapist said that she hopes the viewers will consider using counseling services in the future, and the interviewer advised

[2] Differences by mental health, self-stigma, group willingness, gender, age, years lived in the U.S., and prior therapy experience between the participants who dropped out and those who finished the survey could not be assessed because most of the dropped-out participants left the study prior to responding to the respective questions.

viewers to consult their university counseling center to find out what services are available to them. Each video was about 3 minutes and 16 seconds in length and included closed captions. Scripts for all three videos can be found in Appendix D.

Intervention 1 (I-1) – group therapy information. The goal of this intervention was to increase participants' knowledge of group therapy because knowledge has been shown to relate to better attitudes towards group therapy among international students (Zhuzha et al., 2016). Parts of the script for this video were created by adapting information from university counseling center websites[3] and from the video script by Campinha-Bacote (2012)[4].

In the I-1 video, the therapist provided information about group therapy. Specifically, she discussed general information about and benefits of group therapy and common concerns that can be addressed in groups (Auburn University Student Counseling Services, n.d.; Campinha-Bacote, 2012; University of Florida Counseling & Wellness Center, n.d.; University of Illinois at Urbana-Champaign Counseling Center, 2015), including concerns specific to international students (Dipeolu et al., 2007; Mori, 2000; Walker & Conyne, 2007). Results of a pilot study conducted in 2016 (see Appendix B) also indicated that international students may especially worry about confidentiality in group therapy and feeling uncomfortable disclosing personal problems and/or expressing emotions in a group of people (Zhuzha, 2016b). Thus, the therapist in the video discussed expectations of confidentiality in group therapy and normalized anxiety related to talking about personal problems in a group of people (University of Florida Counseling & Wellness Center, n.d.).

[3] Copyright by Auburn University; Copyright by University of Florida; Copyright 2015 by University of Illinois at Urbana-Champaign. Adapted with permission.
[4] Copyright 2012 by Darius D. Campinha-Bacote. Adapted with permission.

Intervention 2 (I-2) – therapist rapport. Strong's (1968) social influence model applied to the context of therapy states that therapists may have more influence on the client if they are perceived as an expert, trustworthy, and likable. Thus, the aim of I-2 was to deliver a message that group therapy is a great treatment option and to help students see the therapist delivering the message as having all three attributes. According to the social influence model, Rhea disclosing her professional credentials and demonstrating her knowledge about international students' concerns may contribute to her expertise and trustworthiness as perceived by the students. Furthermore, expression of passion for helping international students and understanding of their struggles may help students see Rhea as trustworthy and likable. Students' reciprocal liking of the therapist may also be evoked by the therapist's disclosure of her interest in international students and different cultures (e.g., Fiske, 2004).

Thus, in the I-2 video, the therapist talked about her credentials and passion for working with students. She then communicated her understanding of concerns specific to international students (Mori, 2000; Olivas & Li, 2006) and disclosed having interest in working with this population and learning about other countries and cultures (Zhang & Dixon, 2001). She was also identified as a group therapist, briefly described group therapy, and communicated her conviction that group is a valuable treatment, including for international students (Walker & Conyne, 2007).

Control condition (CC) – counseling center services. The purpose of the CC was to provide general information about counseling services, withholding details about group therapy or information about the therapist. In the CC video, the therapist was asked to speak about services that are commonly available at counseling centers and briefly describe them. Specifically, she talked about one-on-one, group, and couples therapy, mental health

workshops, and assessment services. She also informed viewers that these services are typically available to international students.

Video attention check. To assess whether participants attended to the videos, they were asked what the therapist talked about. They were asked to choose from a range of options, and there was only one correct answer. The response options were randomized. Participants who responded incorrectly were able to proceed with the study but were not included in the final data analysis. To ensure that participants would understand response options as intended, a pilot study was conducted and changes were made accordingly (See Appendix E).

Manipulation check. To check whether the manipulation worked, participants were asked how much they learned about group therapy, how well they got to know the therapist, if they thought she would understand them, and to what extent they perceived the therapist to be an expert, trustworthy, and likable. The manipulation check questions were presented in random order. To ensure that the manipulation check questions had the potential to function as intended, they were also tested prior to the study (see Appendix E).

The manipulation check was hypothesized to produce a particular pattern of results across the three videos. First, participants in I-1 were expected to report learning more about group therapy than participants in the other two conditions. Second, participants in I-2 were expected to report having learned more about the therapist and believing that she is more trustworthy and likable and would understand them better in comparison to participants in I-1 and the CC. Participants in I-1 and I-2 were expected to rate the therapist as having more expertise than participants in the CC.

Mental health concerns. Mental health concerns were measured using the Personal Problems Inventory. It consists of the original 15 items (Cash, Begley, McCown, & Weise,

1975) and the 9 items added later to capture common problems faced by minority college students (Gim, Atkinson, & Whiteley, 1990; Ponce & Atkinson, 1989). The PPI, as the name suggests, is a list of concerns commonly encountered by college students (e.g., “Depression”, “Ethnic or Racial Discrimination”). Gim et al. (1990) were the first to use this inventory to measure mental health concerns by asking participants to rate the severity with which each problem has affected them on a 4-point Likert scale anchored with 1 (*not a problem*) and 4 (*major problem*).

Furthermore, in the present study the scale was used with adaptation made by Zhuzha et al. (2016), in which they developed example statements for each problem in the PPI to ensure understanding of items by international students. For example, for the item “General Anxiety” example statements are “I worry a lot; I feel uneasy about many things; I have nerves.” Furthermore, researchers modified the Likert scale anchors to *did not affect me at all* and *affected me very much*. This was done to better match the question/instructions of the inventory. Furthermore, asking about the extent to which a problem has affected a person aligns with DSM diagnostic criteria language and clarifies from whose reference point significance of the problem is assessed. In the present study, participants were asked about severity of concerns in the last month to assess recent state of participants’ mental health. The adapted scale produced an excellent estimate of internal consistency (Cronbach’s $\alpha = .91$), supporting reliability (Zhuzha et al., 2016). Gim et al. identified three factors in the PPI using exploratory factory analysis (EFA). However, the researchers used orthogonal rotation in their analysis, which may have led to less accurate results (Costello & Osborne, 2005) because mental health concerns are likely to have some correlation, and their factors were not well-defined. On the other hand, Zhuzha et al. found only one factor through EFA with oblique rotation in a sample of

international students (see Appendix F). However, items of alcohol and drug use loaded less than .30 on the scale and therefore were dropped for the purposes of the present study. Because evidence supports that the scale measures a single construct in the population of interest, it was used in its entirety in the present study. Validity of the measure is supported by the finding that international students who were in therapy at the time of taking the survey or in the past had higher mental health severity scores than students who had never been in therapy (Zhuzha, 2016a). Although evidence for reliability and validity of the PPI as a measurement of mental health severity is limited, it was chosen for the present study because it contains the same items (i.e., the same list of mental health concerns) as the Intentions to Seek Counseling Inventory (ISCI) that was used to assess willingness to attend group therapy in the present study.

In the original PPI, participants were asked to respond to items using a 4-point scale. Research on Likert scales, however, supports that having more points is better. Although measures' reliability and validity are likely to be independent of the number of points (Leung, 2011; Matell & Jacoby, 1971), Leung found that, out of the 4-, 5-, 6-, and 11-point scales, the 11-point scale produced the distribution closest to normal. In addition, scholars have argued that the 10-, 11-, or 100-point scales may be more desirable as they may be better able to capture the continuous nature of constructs (Allen & Seaman, 2007; Leung, 2011). Severity of mental health concerns is thought to be a continuous variable, and it tends to be positively skewed in a non-clinical population (Gim et al, 1990; Zhuzha, 2016a). For these reasons, the present study utilized track bars with anchors 0 (*not at all*) and 100 (*very much*) to record responses to each item of the PPI (see Appendix G). The mental health index was calculated by taking the average of 22 responses, with higher scores indicating greater severity of mental health concerns. The items of the PPI were presented in random order. One attention check question was embedded.

In the present sample, the adapted PPI with 22 items produced an excellent estimates of internal consistency with Cronbach's α = .90 and item-scale correlations ranging from *r* = .34 for "Roommate Problems" to *r* =.71 for "Alienation."

Intentions to seek group therapy. Intentions or willingness to seek group therapy was measured using the Intentions to Seek Counseling Inventory (ISCI), adapted as described below. The ISCI contains the same items as the PPI but asks participants to indicate how likely they would be to seek psychotherapy for each problem listed using a 4-point Likert scale anchored with 1 (*very unlikely*) and 4 (*very likely*). Shechtman et al. (2010) adapted the question to ask how likely participants would be to seek group therapy for each problem. The ISCI, even when using versions that differ in the number of items included, has produced good estimates of internal consistency, with Cronbach's alpha ranging between .82 and .97, supporting measure's reliability (Kim & Omizo, 2003; Lee et al., 2014; Vogel et al., 2006; Vogel et al., 2007a; Zhuzha et al., 2016). Furthermore, the ISCI (including versions with different number of items) has been found to positively correlate with attitudes towards seeking professional psychological help in different populations, supporting its construct validity (Lee et al., 2014; Shechtman et al., 2010; Vogel et al., 2007a). Kim and Omizo (2003), by conducting an EFA and a confirmatory factor analysis, found that the ISCI had a 3-factor structure: Personal Problems (11 items; Cronbach's α = .91), Academic/Career Problems (6 items; Cronbach's α = .86), and Health Problems (4 items; Cronbach's α = .73). Five items were dropped from their factor solution. Only the Personal Problems (PP) subscale was used in the present study to reduce participant fatigue (e.g., Vogel et al., 2007a). The PP factor includes items such as "Loneliness and Isolation" and "General Anxiety," which is consistent with top concerns experienced by international students (Zhuzha, 2016a). The subscale produced excellent internal consistency

and had a positive correlation with attitudes towards professional psychological help, supporting its reliability and validity.

Similar to the PPI, in the present study the PP subscale of the ISCI was used with the item adaptations by Zhuzha et al. (2016) for international students (see Appendix H). In addition, participants indicated their willingness to seek group therapy for each listed concern using a track bar anchored with 0 (*very unlikely*) and 100 (*very likely*). The group willingness index was calculated by taking the average of 9 responses, with higher scores indicating greater intentions to seek group therapy. The items of the PP subscale were presented in random order. One attention check question was embedded. In the present sample, the adapted PP subscale produced good internal consistency with Cronbach's $\alpha = .85$ and item-scale correlations ranging from $r = .39$ for "Dating or Relationship Problems" to $r = .71$ for "Alienation."

Self-stigma. Self-Stigma was measured using the Self-Stigma of Seeking Help (SSOSH) scale (Vogel et al., 2006) with modifications by Shechtman et al. (2010). The SSOSH consists of ten statements (e.g., "I would feel inadequate if I went to a therapist for psychological help"), and participants are asked to indicate the extent of their agreement with each using a partly anchored 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*) with the middle point 3 (*agree and disagree equally*). The self-stigma index is calculated by taking the average or the sum of all responses with higher scores indicating higher stigma. The average was used in the present study. The scale has produced acceptable to excellent internal consistency with Cronbach's alpha ranging from .72 to .90 (Lee et al., 2014; Shechtman et al., 2010; Vogel et al., 2006; Vogel et al., 2007a) and good test-retest reliability, $r = .72$ (Vogel et al., 2006). The construct and criterion validity of the SSOSH scale have been also supported. The measure has been shown to have a single factor that has positive

associations with anticipated risks, public stigma, and the tendency to conceal information (Lee et al., 2014; Shechtman et al., 2010; Vogel et al., 2006; Vogel et al., 2007a). It has negative associations with anticipated benefits of emotional disclosure, attitudes towards professional psychological help, and intentions to seek counseling (Lee et al., 2014; Shechtman et al., 2010; Vogel et al., 2006). Support for the scale's predictive validity was found in that the SSOSH scores were significantly lower in students who went on to seek therapy during the subsequent 2 months than in students who did not (Vogel et al., 2006). Robust estimates of internal consistency and the single factor structure of the SSOSH were also replicated in 6 different countries, supporting measure's cross-cultural validity and reliability (Vogel et al., 2013).

In the present study, the measure was used with modifications for group therapy made by Shechtman et al. (2010). For example, the original item "I would feel inadequate if I went to a therapist for a psychological help" reads "I would feel inadequate if I went to group therapy for a psychological help" in the modified version. The items of the SSOSH were presented in random order. One attention check question was embedded. In the present sample, the SSOSH with modifications for group therapy produced good internal consistency with Cronbach's α = .83 and item-scale correlations ranging from r = .30 to r =.64.

Direct and vicarious experience with therapy. Prior direct experience with therapy was assessed by asking participants if they had ever been to therapy and had positive overall experience. Vicarious experience was assessed by asking participants if they knew of someone close to them (e.g., good friend, family member, teacher/mentor) having been to therapy and having positive overall experience (see Appendix I).

Demographics. Optional demographic questions included age, gender, home country, racial background, number of years spent in the U.S., discipline of study, current university, and number of years they expected to be enrolled as a student at their university (see Appendix J).

Procedure

International students were mainly recruited for participation through emails. A total of 47 universities throughout the U.S. were contacted by the researcher requesting permission to send a study invitation to their international students. Seven institutions in the states of Alabama, Georgia, and Florida were chosen because of the researcher's affiliation. Six of the universities granted their permission, and their students were recruited via individual or a mass emails. The emails were sent by the international student offices or the offices of institutional research. In one case, the office of institutional research provided researcher with email addresses, and the researcher sent the study invitation. Forty other universities throughout the U.S. were chosen at random from the list of universities with the most international students (U.S. News & World Report's, 2017) and contacted by the researcher requesting permission to send the study invitation to their international students. Four of the 40 universities granted their permission. In three of these four universities, students were recruited via mass email sent by their international student offices. In one university, the invitation was sent through a mass email system hosted by the university for international students. Students join this email list voluntarily, and it is open to public access. Participants were also recruited through Facebook, using timeline and group posts (see Appendix K). Although it is not possible to identify participants who were recruited via Facebook with certainty, based on the timing of responses and participants' reported home institutions, it is likely that 14-18 participants in the final sample were recruited via social media.

The study was conducted online using a survey hosted in Qualtrics. Interested individuals were presented with the information letter informing them of the study's purpose, inclusion criteria, potential risks, and compensation. Those who decided to take part were directed to screening questions. Participants who did not meet the inclusion criteria based on their responses to the screening questions were informed that they could not proceed with their participation. If the participant met the inclusion criteria, they were directed to the two sliding scale training items. These items simply helped participants become acquainted with how to use a similar scale.

Participants were then randomly assigned to watch one of the three videos and were asked to imagine that the therapist in the video works at their university counseling center. After watching the video, participants completed the video attention check and the manipulation check questions. These were followed by the PP subscale of the ISCI and the SSOSH. The order of the ISCI and the SSOSH was randomized. In other words, some participants completed the ISCI first and then the SSOSH while others completed the SSOSH and then the ISCI. Before completing the ISCI participants were presented with a short definition of group therapy, were asked to presume that counseling services and group therapy are available and free of charge on their campus, and were directed to imagine that the therapist from the video works there. Then participants completed the PPI. The PPI was presented as the last instrument to avoid the possibility of it influencing participants' perceptions of the intervention videos and their responses to the measures that the interventions were expected to affect. Next, participants answered questions about direct therapy experience, vicarious therapy experience, and their demographic characteristic in the respective order (see Appendix K). Because these questions assessed stable characteristics, they appeared last to avoid influencing participants' responses to

other measures. Finally, participants were asked if they participated in this study before and whether they watched the video with the sound on or not (see Appendix K). They also had the option to leave an anonymous comment for the researcher (see Appendix L for comments summary). After this, participants saw a statement that the therapist in the video was an actress, were thanked for their participation, and were directed to a separate Qualtrics survey, where they were able to enter their email address for a chance to receive one of ten $15 Amazon gift cards. Participants' email addresses were not linked to their survey responses.

Table 1. *Characteristics of participants retained in the final sample and of participants excluded because their response pattern suggested inattention*.

Characteristic		Retained (*n* = 306)		Excluded (*n* = 112)	
		#	%	#	%
Gender	Man	151	48.69	62	55.36
	Woman	151	49.35	48	42.86
	Gender queer/fluid	1	0.33	0	0.00
	Other	1	0.33	0	0.00
	Not reported	2	0.65	2	1.79
Age	18-22	77	25.16	28	25.00
	23-29	169	55.23	54	48.21
	30-45	54	17.65	22	19.64
	Not reported	6	1.96	8	7.14
Years lived in the U.S.	< 1	59	19.28	17	15.18
	1 - 4	182	59.48	63	56.35
	> 4	56	18.30	26	23.21
	Not reported	9	2.94	6	5.36
Degree	Undergrad	71	23.20	29	25.89
	Grad	235	76.80	83	74.11
Discipline	Science/Engineering/Math	194	63.40	67	59.82
	Social/Humanities/Arts	73	23.86	26	23.21

(continued)

Characteristic		Retained|(n = 306)		Excluded (n = 112)	
		#	%	#	%
Discipline	Undecided	1	0.33	0	0.00
	Not Reported	38	12.42	19	16.96
Location of the university in the U.S.	South	245	80.06	97	86.61
	Midwest	38	12.42	11	9.82
	West	11	3.59	1	0.89
	North	3	0.98	0	0.00
	Not reported	9	2.94	3	2.68
Region of origin	South Asia	95	31.04	25	26.32
	East Asia	80	26.14	45	47.37
	Europe	31	10.13	7	7.37
	Latin America/Caribbean	31	10.13	4	3.57
	Africa	17	5.56	3	2.68
	Middle East	15	4.90	9	8.04
	Canada	4	1.63	1	0.89
	Australasia	3	0.98	1	0.89
	Not reported	30	9.80	17	15.18
Race	Asian/Pacific Islander	180	58.82	76	67.86
	White	55	17.97	19	18.27
	Hispanic/Latino(a)	20	6.54	4	3.57

(continued)

Characteristic		Retained|(*n* = 306)		Excluded (*n* = 112)	
		#	%	#	%
Race	Black	18	5.88	3	2.68
	Multiracial	17	5.56	2	1.79
	Not reported	16	.23	8	7.14
Prior therapy experience[a]	Individual	62	20.26	15	13.39
	Group	11	3.59	5	4.46
	Family	3	0.33	1	0.89
	Couples	2	0.65	1	0.89
	None	241	78.76	94	84.68
	Not reported	0	0.00	1	0.89
Watched the video with sound	Yes	302	98.69	106	94.64
	No	4[b]	1.31	6	5.36

[a]Participants who endorsed having therapy experience could select more than one type of therapy they had experience with. As such, the total number of participants in this category adds up to more than 100%.

[b]All videos included closed captions.

Table 2. *Survey dropout at each part of the survey after screening for inclusion criteria.*

Survey Part	# dropped out	# continued
Screening & Slider Practice	19	725
Video	152	573
Video Attention Check	62	511
Manipulation Check	17	494
Group Will, Stigma	37	457
MH Severity	21	436
Demographics	11	425
Total	319	425

Note. The table reflects the order of the tasks within the survey. As such, the number of participants retained can only decrease.

Table 3. *Differences between the participants who dropped out and the participants who finished the survey*.

Variable	*n*	*t*	χ^2	*df*	*p*
Degree (undergrad vs. grad)	624	-	10.43	1	<.001
Group learning	494	-1.18	-	492	.237
I got to know the therapist	492	-0.18	-	87.70[a]	.846
Therapist would understand me	484	0.72	-	482	.473
Therapist is an expert	493	-0.49	-	491	.624
Therapist is trustworthy	493	0.81	-	491	.419
Therapist is likeable	494	-0.03	-	492	.974

[a]Equal variances could not be assumed ($F = 4.30$, $p = .039$).

Table 4. *Exclusion of complete cases from the hypotheses testing data analyses*.

Reason	# excluded	# retained
Reported completing the study before	7	418
Did not finish the video	18	400
Failed video attention check	53	347
Failed questionnaire attention check	41	306
Total	119	306

Note. The table reflects the order of steps in which cases were excluded. As such, the number of cases retained can only decrease.

Table 5. *Differences between the participants excluded due to inattention and the participants retained for the hypotheses testing data analyses.*

Variable	*t*	χ^2	*df*	*p*
Gender	-	1.31	1	.253
Degree (undergrad vs. grad)	-	0.33	1	.568
Prior therapy (yes vs. no)	-	1.81	1	.178
Age	0.44	-	402	.661
Years lived in the U.S.	0.55	-	401	.584
Group learning	-1.54	-	416	.786
I got to know the therapist	-1.97	-	414	.050
Therapist would understand me	-0.71	-	410	.475
Therapist is an expert	0.47	-	415	.640
Therapist is trustworthy	0.11	-	414	.911
Therapist is likeable	0.27	-	415	.786
Mental health	2.39	-	167.97[a]	.030
Self-stigma	-1.79	-	415	.075
Group willingness	0.11	-	415	.912

Note. $N = 418$.

[a]Equal variances could not be assumed ($F = 6.64$, $p = .010$).

Chapter 4: Results

Research question 1. Do lower self-stigma, greater mental health concerns, and having prior positive direct and vicarious experience predict greater intentions to seek group therapy?

Hypothesis 1.1. Having prior positive direct and vicarious experience with therapy will be associated with greater intentions to seek group therapy but will not explain unique variance in intentions when self-stigma and mental health concerns are also considered.

Hypothesis 1.2. Self-stigma and greater mental health concerns severity will uniquely predict intentions to seek group therapy. Self-stigma will have a negative and mental health concerns will have a positive association with intentions.

Research question 2. Are I-1 and I-2 effective in helping international students consider group therapy as a treatment option and in reducing their self-stigma?

Hypothesis 2.1. Willingness to attend group therapy will be higher and self-stigma will be lower in international students who participate in I-1 and I-2 than the willingness and self-stigma of international students who participate in the CC.

Research question 3. Is one intervention more effective than the other in helping international students consider group therapy as a treatment option and reducing their self-stigma? As there is no theoretical base suggesting that one intervention would be more effective than the other, this question was investigative in nature and no specific hypothesis was made.

Research question 4. Are the effects of I-1 and I-2 on willingness to seek therapy and self-stigma moderated by the severity of mental health concerns?

Hypothesis 4.1. I-1 will have a stronger effect on group willingness and self-stigma in comparison to the CC when severity of mental health concerns is higher vs. lower.

Hypothesis 4.2. I-2 will have a stronger effect on group willingness and self-stigma in comparison to the CC when severity of mental health concerns is higher vs. lower.

Research question 5. Are the effects of I-1 and I-2 on willingness to seek therapy and self-stigma moderated by positive direct and vicarious experience with therapy?

Hypothesis 5.1. I-1 and I-2 will have stronger effects on group willingness and self-stigma in comparison to the CC for participants who do not have prior positive therapy experience than for those who have prior direct positive experience with therapy.

Hypothesis 5.2. I-1 and I-2 will have stronger effects on group willingness and self-stigma in comparison to the CC for participants who do not know of anyone close to them having positive therapy experience than for those who know of someone close to them having positive therapy experience.

Manipulation Check

To test whether the first video helped participants learn more about group therapy as intended, I conducted a one-way ANOVA. The intervention with three levels (I-1, I-2, CC) was the independent variable and self-reported learning was the outcome. Type of intervention influenced self-reported learning about group therapy, $F(2, 303) = 20.39$, $p < .001$, and the size of this effect was medium, $\eta^2 = .119$, 90% CI [.064, .173]. Because equal variances could not be assumed according to the Levene's test, $F(2,303) = 7.13$, $p = .001$, a Games-Howell post-hoc test was conducted. Participants in the I-1 condition indicated that they learned more about

group therapy than did participants in I-2 ($p < .001$) or the CC ($p < .001$). Participants in the I-2 condition and the CC did not differ in their self-reported learning, $p = .884$. Thus, as intended, the first video was successful in helping participants learn new information about group therapy in comparison to the other two videos. Manipulation check variables' means and standard deviations by video can be found in Table 6, and the summary of intercorrelations can be found in Table 7.

To test whether the first and second videos helped participants see the therapist as more of an expert in comparison to the control video and whether the second video helped participants get to know the therapist better and helped them see her as more understanding, trustworthy, and likable in comparison to the other two videos, a MANOVA was conducted. The intervention with 3 levels (I-1, I-2, CC) was the independent variable and participants' ratings of how well they got to know the therapist, feel that she would understand them, and their perceptions of her as trustworthy, and likable were the outcomes. All mean and standard deviation statistics by intervention video can be found in Table 6. First, the effect of the intervention on the outcome variables was significant, $F(10, 592) = 2.63$, $\Lambda = .92$, $p = .004$, $\eta^2 = .043$. Univariate analysis further revealed that the intervention influenced how well participants felt they got to know the therapist $F(2, 300) = 4.66$, $p = .010$, and the size of this effect was small, $\eta^2 = .030$, 90% CI [.004, .064]. Because equal variances could not be assumed according to the Levene's test, $F(2,300) = 3.65$, $p = .027$, a Games-Howell post-hoc test was conducted. Results revealed that participants in the I-2 condition felt that they got to know Rhea better than the participants in the I-1 condition ($p = .044$) and the CC ($p = .009$). Participants in the I-1 condition and the CC did not differ in how well they felt they got to know the therapist ($p = .833$). However, there was no effect of the intervention on how well participants felt Rhea

would understand them (F[2, 300] = 0.64, p = .530, η^2 = .004, 90% CI [.000, .020]) or the extent to which they perceived her to be trustworthy (F[2, 300] = 2.72, p = .068, η^2 = .018, 90% CI [.000, .046]) or likable (F[2, 300] = 2.52, p = .082, η^2 = .017, 90% CI [.000, .044]). On the other hand, the intervention condition appeared to influence the extent to which participants perceived Rhea as an expert, F(2, 300) = 3.36, p = .036, and the size of this effect was small, η^2 = .022, 90% [CI .001, .052]. However, the Bonferroni post-hoc test revealed no significant differences between the CC and I-1 (p = .055) or I-2 (p = 1.000). Likewise, there were no significant differences between I-1 and I-2. (p = .122). Thus, I-2 was effective in helping participants feel like they got to know Rhea better in comparison to I-1 and the CC. However, it was not effective in helping participants feel like Rhea might understand them better or helping them see her as trustworthy or likable in comparison to I-1 and the CC. In addition, neither I-1 or I-2 were effective in helping participants see Rhea as more of an expert in comparison to the CC. It should be noted that two participants left optional comments at the end of the survey about the I-2 video. One wrote that they did not understand the importance of the video, and the other wrote that the video was too short for them to know whether the therapist would understand them, if she could be helpful, or if she is truly committed to issues of multiculturalism (see Appendix L).

Effects of Therapy Experience, Self-Stigma, and Mental Health on Group Willingness

All continuous variables' means and standard deviations by video can be found in Table 6. Table 7 contains the summary of interrolations and internal consistency estimates.

To answer Research Question 1 (i.e., will self-stigma, mental health concerns, positive direct and vicarious therapy experience predict group willingness) and test its respective

hypotheses (i.e., all variables will predict willingness, but only self-stigma and mental health concerns will explain unique variance), hierarchical multiple regression was fitted to the data. Because higher mental health concerns were associated with higher self-stigma, $r = .22$, $p < .001$, these predictors and the outcome variable were standardized for the analysis to address the violation of assumptions around multicollinearity.

Mahalanobis distance, Cook's distance, and Leverage statistics were examined for data points that are outliers in the distribution, represented high influence, or reflected high leverage respectively. No case seemed to have high influence according to the Cook's D = 1 cutoff. One case appeared to have dangerous leverage of .06 according to the Leverage = .05 cutoff. The same case was also determined to be an outlier with the Mahalanobis distance of 19.80 (cutoff: $\chi^2 [4] = 18.47$, $p < .001$) and fell 3 standard deviations above the mean on self-stigma and 2 standard deviations below the mean on group willingness. As a result, this case was removed from the regression analysis. Regression assumptions of normality and linearity were met based on the visual inspection of the histogram of the standardized residuals and the P-P plot. Upon visual inspection of the scatterplot of predicted values plotted against standardized residuals, data points appeared to be mostly randomly scattered and evenly spread. Thus, assumptions of homogeneity and homoscedasticity were also met.

Results of the regression (see Table 8) revealed that positive therapy experience predictors did not explain significant amount of variance in group willingness, $\Delta F(2,300) = 0.92$, $p = .399$, $R^2_{adj.} < .001$. Neither positive direct ($\beta = .05$, $p = .383$) nor vicarious ($\beta = .05$, $p = .396$) experience with therapy predicted willingness to seek group counseling. Thus, Hypothesis 1.1 was not supported. Adding self-stigma to the model resulted in only 1% of variance in group willingness explained, which was not statistically significant, $\Delta F(1,299) = 3.42$, $p = .065$.

However, the final model with mental health concerns added as the last predictor explained 18% of variance in group willingness, which was significant, $\Delta F(1,298) = 64.38$, $p < .001$. In this model, self-stigma emerged as a negative predictor of group willingness ($\beta = -.23$, $p < .001$), and mental health concerns had positive association with willingness to seek group therapy ($\beta = .44$, $p < .001$). Previous positive direct ($\beta = -.01$, $p = .801$) and vicarious ($\beta = .00$, $p = .962$) experience with therapy remained to be non-significant predictors of group willingness. Thus, both self-stigma and mental health concerns were significant predictors of group willingness when previous experience with therapy was controlled for, making them unique predictors and supporting Hypothesis 1.2.

Interestingly, self-stigma predicted participants' willingness to engage in group therapy once severity of mental health concerns was considered. In other words, accounting for mental health concerns clarified and enhanced the relationship between self-stigma and group willingness, which is sometimes referred to as a suppression effect. To study this effect further, consistent with Thompson and Levine's (1997) recommendation, the relationship between self-stigma and group willingness at different levels of mental health concerns was examined. This was accomplished by testing the self-stigma and mental health concerns interaction effect on group willingness using a hierarchical multiple regression analysis. Because self-stigma and mental health were correlated ($r = .22$, $p < .001$; see Table 7 for bivariate correlations), all variables were standardized to address the violation of assumptions around multicollinearity. Thus, standardized group willingness was regressed onto standardized mental health concern, self-stigma, and the interaction between the mental health and self-stigma.

Mahalanobis distance, Cook's distance, and Leverage statistics were examined for data points that are outliers in the distribution, represented high influence, or reflected high leverage respectively. No case seemed to have high influence according to the Cook's D = 1 cutoff. The same case as in the first regression analysis had dangerous leverage of .064 according to the Leverage = .05 cutoff. It was also determined to be an outlier with the Mahalanobis distance of 19.74 (cutoff: $\chi^2[2] = 13.82$, $p < .001$), and it fell 3 standard deviations above the mean on self-stigma and 2 standard deviations below the mean on group willingness. As a result, this case was removed from the regression analysis. Regression assumption of normality and linearity were met based on the visual inspection of the histogram of the standardized residuals and the P-P plot. Upon visual inspection of the scatterplot of predicted values plotted against standardized residuals, data points appeared to be mostly randomly scattered and evenly spread. Thus, assumptions of homogeneity and homoscedasticity were also met.

Regression analysis revealed that mental health ($M = 34.96$, $SD = 18.55$) and self-stigma ($M = 2.43$, $SD = .73$) together explained 19% of variance in willingness to seek group therapy ($M = 46.00$, $SD = 22.20$). Including the interaction as a third predictor significantly added to the model and explained additional 2% of variance in group willingness, $\Delta F(1, 301) = 9.16$, $p = .003$. In the full model, there were significant main effects of mental health concerns ($\beta = .44$, $p < .001$) and self-stigma ($\beta = -.27$, $p < .001$) and a significant interaction effect ($\beta = .16$, $p = .003$) on group willingness. Test of simple slopes, conducted with bias corrected 1000-sample Bootstrapping, revealed that self-stigma was associated with lower willingness to attend group therapy when mental health concerns were one standard deviation below the mean ($PPI_{-1SD} = 16.41$; $\beta_{-1SD} = -.43$, $p < .001$), average ($PPI_{avg} = 34.96$; $\beta_{avg} = -.27$, $p < .001$), and one standard deviation above the mean ($PPI_{+1SD} = 53.52$; $\beta_{+1SD} = -.11$, $p = .036$). However, when using the

Johnson-Newman Technique, self-stigma did not predict willingness to seek group therapy for participants who reported their mental health concerns to be 1.03 standard deviations above the mean or had an average score of 54 or higher on the PPI, $\beta_{+1.03} = -.09$, $p = .050$. Overall, self-stigma predicted group willingness for 84% of participants in the current sample. Furthermore, visual examination of the *Beta* coefficients produced by the same technique revealed that the slope of the relationship between self-stigma and group willingness is steeper for participants who reported lower mental health concerns and vice versa for participants who reported higher mental health concerns. In other words, the relationship between self-stigma and group willingness was stronger at low levels of mental health concerns vs. at high levels (see Figure 1).

Intervention Effects on Group Willingness and Self-Stigma

To answer Research Questions 2 (i.e., will the interventions be effective) and 3 (i.e., which intervention will be more effective) and test the respective hypothesis (i.e., both interventions will be effective), I conducted a one-way MANOVA. The intervention with 3 levels (I-1, I-2, CC) was the independent variable and group willingness and self-stigma were the outcomes.

The model revealed no significant effects, $F(4,604) = 0.81$, $\Lambda = .99$, $p = .517$, $\eta^2 = .005$, 90% CI [.000, .012]. Participants were similarly willing to seek group therapy ($F[2, 303] = 0.53$, $p = .587$, $\eta^2 = .004$, 90% CI [.000, .017]) and were comparable in their self-stigma ($F[2, 303] = 1.09$, $p = .337$, $\eta^2 = .007$, 90% CI [.000, .026]) across all three conditions. For mean and standard deviation statistics, see Table 6. Thus, Hypothesis 2.1 was not supported, and the two intervention videos were not effective in increasing participants' willingness to do group

therapy or decreasing their self-stigma in comparison to the control video. Similarly, neither intervention was more effective than the other.

Moderation by mental health concerns. To answer Research Question 4 (i.e., will mental health concerns moderate the effect of the interventions) and test its hypotheses (i.e., the interventions will be more effective for students with more concerns), I conducted two multivariate regression analyses. In the first model effects of I-1 were examined, and group willingness and self-stigma were regressed on the 1st intervention dummy-coded variable (I-1=1 and CC=0), mental health severity, and the interaction between the intervention and mental health. In the second model, effects of I-2 were examined, and group willingness and self-stigma were regressed on the 2nd intervention dummy-coded variable (I-2=1 and CC=0), mental health severity, and the interaction between them.

Mahalanobis distance, Cook's distance, and Leverage statistics were examined for potential outliers. No cases were identified as outliers on the distribution (Mahalanobis D cutoff: $\chi^2[1] = 10.83$, $p < .001$) or as having high influence (Cook's D cutoff: 1) or dangerously high leverage (Leverage cutoff: .05) for either outcome (i.e., group willingness, self-stigma). For group willingness, regression assumptions of normality and linearity were met based on the visual inspection of the histogram of the standardized residuals and the P-P plot. Visual inspection of the scatterplot of predicted values plotted against standardized residuals revealed that the spread of the residuals is not perfectly random and vaguely resembles a cone, suggesting that homogeneity and homoscedasticity assumptions may be violated. For self-stigma, homogeneity and homoscedasticity assumptions were met based on the visual inspection of the analogous scatterplot as data points appeared to be mostly randomly scattered

and evenly spread. However, histogram of the residuals revealed a positive skew in the distribution, suggesting that normality assumption may have been violated. Nevertheless, visual examination of the P-P plot revealed that the data points were fairly aligned along the diagonal line, which is another indicator of normality and linearity. Because homoscedasticity and homogeneity regression assumptions for group willingness may have been violated, 1000-sample Bootstrapping with bias correction was performed for a more robust regression analysis.

The results of the first model revealed a marginally significant interaction between I-1 and mental health concerns on group willingness and self-stigma with small effect size, $F(2, 201) = 2.43$, $\Lambda = .98$, $p = .091$, $\eta^2 = .024$, 90% CI [.000, .062]. Power analysis revealed $1-\beta = .54$ or 46% probability of Type II error, which means that the achieved power may have been insufficient to detect existing significant effect given that the size of the effect was small. Because of this and because the model was marginally significant, univariate interaction effects were further explored.

There was no significant interaction effect for group willingness, $\beta = -.10$, $p = .510$. Thus, effectiveness of I-1 for group willingness did not change depending on the severity of mental concerns. However, there was a significant interaction effect for self-stigma, $\beta = .32$, $p = .034$ (see Figure 2). In other words, effectiveness of I-1 for self-stigma was different depending on the severity of participants' mental health concerns. Test of simple slopes with bias corrected 1000-sample Bootstrapping was performed to further understand this interaction effect on self-stigma. Results of the Johnson-Newman Technique revealed that watching group therapy information video decreased self-stigma associated with group therapy as compared to the CC for participants who reported their mental health concerns to be 1.32 standard deviations above the mean or had an average score of 60 or higher on the PPI, $\beta_{+1.32} = -.53$, $p = .044$. Overall, I-1

influenced self-stigma for 14% of the participants. As such, Hypothesis 4.1 was partially supported.

Results of the second model revealed that there was no significant interaction between I-2 and mental health concerns on group willingness and self-stigma $F(2,193) = 1.86$, $\Lambda = .98$, $p = .159$, $\eta^2 = .019$, 90% CI [.000, .055]. Power analysis revealed $1\text{-}\beta = .49$ or 51% probability of Type II error, which means that the achieved power may have been insufficient to detect existing significant effect given that the size of the effect was small. However, because *p*-value did not approach significance, results of the univariate analyses for self-stigma and group willingness were not interpreted (see Table 9). In sum, Hypothesis 4.2 was not supported. Effectiveness of I-2 for group willingness and self-stigma did not change depending on the participants' severity of mental health concerns.

Moderation by therapy experience. To test Research Question 5 (i.e., will prior direct and vicarious therapy experience moderate the effect of the interventions) and its respective hypotheses (i.e., the interventions will be more effective for students with no prior positive direct or vicarious therapy experience), two 3x2 MANOVAs were conducted. In both, the first independent variable was the intervention with 3 levels (I-1, I-2, CC). In the first MANOVA model, the second predictor[5] was direct positive experience with 2 levels (yes or no). In the second model, the second predictor was vicarious positive experience with 2 levels (yes or no). Outcome variables were group willingness and self-stigma for both MANOVAs. See Table 10 for group willingness and self-stigma means and standard deviations by intervention and positive direct and vicarious experience with therapy.

[5] Predictor is used to differentiate between manipulated and descriptive variables

Results of the first model revealed that Hypothesis 5.1 was not supported. The interaction between the video intervention and previous direct positive experience with therapy on group willingness and self-stigma was not significant, $F(4,598) = 0.96$, $\Lambda = .99$, $p = .426$, $\eta^2 = .006$, 90% CI [.000, .014]. For univariate statistics see Table 11. In other words, the effectiveness of the two video interventions for international students' willingness to seek group therapy and their self-stigma did not change depending on whether they had prior positive experience with therapy.

In the second model, interaction between the video intervention and having vicarious positive experience with therapy on group willingness and self-stigma was significant and the effect size was small, $F(4,598) = 3.26$, $\Lambda = .96$, $p = .012$, $\eta^2 = .021$, 90% CI [.003, .038]. According to the univariate analysis, the interaction of the intervention and vicarious experience on group willingness was significant, and the effect size was small, $F(2,300) = 3.34$, $p = .037$, $\eta^2 = .022$, 90% CI [.001, .052] (see Table 11). Thus, the effect of the video interventions on group willingness was different depending on whether participants knew someone close to them who had a positive experience with therapy (see Figure 3). To further understand the interaction effect, two one-way ANOVAs were conducted examining effects of video interventions on group willingness separately for participants who had and did not have positive vicarious experience with therapy. For participants who did not have positive vicarious experience with therapy, the intervention did not influence group willingness, $F(2,231) = 0.13$, $p = .881$, $\eta^2 = .001$, 90% CI [.000, .008]. On the other hand, for participants who had positive vicarious experience with therapy, the type of the intervention influenced group willingness, and the size of this effect was medium $F(2,69) = 3.66$, $p = .031$, $\eta^2 = .096$, 90% CI [.234, .518]. Bonferroni post-hoc analysis revealed that watching the group information video (I-1) resulted in increased

group willingness in comparison to watching the control condition (CC) video, $p = .035$ (see Table 10). Group willingness scores of participants who watched the therapist rapport video (I-2) did not differ from those of participants who watched the group information video ($p = .181$) or the control condition video ($p = 1.000$).

The interaction of the intervention and vicarious experience also had a significant effect on self-stigma, and the effect size was small, $F(2,300) = 4.08$, $p = .018$, $\eta^2 = .027$, 90% CI [.002, .059] (see Table 11). In other words, how the video interventions affected participants' self-stigma differed based on whether they knew someone close to them who had a positive experience with therapy (see Figure 4). To further understand the interaction effect, two one-way ANOVAs were conducted examining effects of video interventions on self-stigma separately for participants who had and did not have positive vicarious experience with therapy. For participants who did not have positive vicarious experience with therapy, the intervention did not influence self-stigma, and the size of the effect was negligible $F(2,231) = 0.96$, $p = .386$, $\eta^2 = .008$, 90% CI [.000, .032]. On the other hand, for participants who had positive vicarious experience with therapy, type of the intervention influenced self-stigma, and the size of this effect was medium $F(2,69) = 4.51$, $p = .014$, $\eta^2 = .116$, 90% CI [.014, .224]. Games-Howell test was used as a post-hoc because Levene's test showed that equal variances could not be assumed in the present sample $F(2,69) = 3.91$, $p = .025$. Post-hoc analysis revealed that watching group information video resulted in decreased self-stigma in comparison to watching the control condition video $p = .011$, (see Table 10). Self-stigma level of participants who watched the therapist rapport video did not differ from that of participants who watched the group information video ($p = .340$) or the control condition video ($p = .329$).

It should be noted that the found interactions are in the opposite direction than what was expected. It was hypothesized that I-1 and I-2 would be more effective in increasing group willingness and decreasing self-stigma for participants who do not have positive vicarious experience with therapy. Present findings showed that I-1 was more effective in comparison to the CC in increasing group willingness and reducing self-stigma for participants who know of someone close to them having had a positive experience with therapy. As such, Hypothesis 5.2 was not supported.

Table 6. *Means and standard deviations of continuous variables by video condition.*

Variable	Video	*n*	*M*	*SD*
Group Learning	I-1	108	72.70	20.80
	I-2	100	53.32	24.58
	CC	98	55.07	27.44
	All	306	60.72	25.82
I got to know Rhea	I-1	107	51.56	29.22
	I-2	100	60.49	23.99
	CC	96	49.21	27.81
	All	303	53.76	27.81
Rhea would understand me	I-1	107	71.87	25.16
	I-2	100	72.19	23.19
	CC	96	71.19	22.57
	All	303	70.97	23.88
Rhea is an expert	I-1	107	84.75	16.83
	I-2	100	79.40	20.53
	CC	96	78.51	18.78
	All	303	81.01	18.88

(continued)

Variable	Video	*n*	*M*	*SD*
Rhea is likable	I-1	107	83.23	18.08
	I-2	100	82.93	20.08
	CC	96	77.82	18.91
	All	303	81.42	19.12
Rhea is trustworthy	I-1	107	82.58	18.47
	I-2	100	78.92	20.75
	CC	96	76.21	19.48
	All	303	79.35	19.78
Mental Health Concerns	I-1	108	34.44	19.99
	I-2	100	34.70	18.50
	CC	98	35.81	17.07
	All	306	34.96	18.55
Group Willingness	I-1	108	47.79	23.80
	I-2	100	45.00	22.26
	CC	98	45.08	20.32
	All	306	46.01	22.20
Self-Stigma	I-1	108	2.42	0.82
	I-2	100	2.36	0.63
	CC	98	2.51	0.73
	All	306	2.43	0.73

Table 7. *Summary of intercorrelations and internal consistency estimates for the manipulation check variables, mental health, self-stigma, and group willingness.*

Parameter	1	2	3	4	5	6	7	8	9
1. Group Learning	-								
2. I got to know Rhea	.43***	-							
3. Rhea would understand me	.45***	.50***	-						
4. Rhea is an expert	.54***	.44***	.62***	-					
5. Rhea is trustworthy	.51***	.50***	.67***	.76***	-				
6. Rhea is likable	.43***	.47***	.64***	.65***	.76***	-			
7. Mental Health	-.09	-.07	-.15*	-.09	-.15**	-.10	-		
8. Self-Stigma	-.14*	-.13*	-.28***	-.20***	-.25***	-.23***	.22***	-	
9. Group Willingness	.09	.12*	.19**	.17**	.12*	.18**	.38***	-.15**	-
Cronbach's α	-	-	-	-	-	-	.90	.83	.85

Note. $N = 306$.

* $p < .05$, ** $p < .01$, *** $p < .001$.

Table 8. *Group willingness regressed on prior positive direct and vicarious experience with therapy, self-stigma, and severity of mental health concerns in a hierarchical multiple regression model*.

Parameter	Model 1	Model 2	Model 3
Adj. R^2	< .01	.01	.18
ΔF (*df*1, *df*2)	0.92 (2, 300)	3.42 (1, 299)	64.38*** (1, 298)
Intercept	-0.03	-0.02	0.01
Direct			
β	.05	.05	-.01
sr	.33	.30	-.02
Vicarious			
β	.05	.04	.00
sr	.41	.23	.00
Self-Stigma			
β	-	-.11	-.23***
sr		-.14	-.24
Mental Health			
β	-	-	.44***
sr			.42

Note. N = 305. Self-stigma, mental health, and group willingness scores were standardized.

*** $p < .001$.

Table 9. *Video intervention effects, mental health concerns, and their interactions regressed on group willingness and self-stigma in two multivariate regression models.*

	I-1 vs. CC		I-2 vs. CC	
Parameter	Group Will	Self-Stigma	Group Will	Self-Stigma
n	206	206	198	198
Intercept	30.74	2.26	28.30	-2.11
Intervention β	-.15	.11	.02	.18
Mental Health β	.41**	.11	.40**	.18*
Interv*MH β	-.10	.32*	.09	.25†
Interv*MH η^2	.003	.023	.019	.002

Note. Bootstrap parameter estimates are reported. I-1 and I-2 were coded as 1, and the CC was coded as 0.

†$p < .10$, *$p < .05$, **$p < .01$.

Table 10. *Means and standard deviations of group willingness and self-stigma by intervention and having positive direct and vicarious experience with therapy*.

Outcome	Positive Therapy Exp.	Intervention	*n*	*M*	*SD*
Group Willingness	Yes Direct	I-1	16	56.41	18.53
		I-2	13	40.05	21.05
		CC	11	46.80	25.22
	No Direct	I-1	92	46.29	24.38
		I-2	87	45.74	22.46
		CC	87	44.86	19.78
	Yes Vicarious	I-1	26	57.15	21.69
		I-2	23	44.95	25.38
		CC	23	40.60	19.59
	No Vicarious	I-1	82	44.82	23.80
		I-2	77	45.01	21.43
		CC	75	46.45	20.46
Self-Stigma	Yes Direct	I-1	16	3.64	0.48
		I-2	13	3.54	0.61
		CC	11	3.79	0.42
	No Direct	I-1	92	3.55	0.52
		I-2	87	3.67	0.43
		CC	87	3.69	0.50

(continued)

Outcome	Positive Therapy Exp.	Intervention	*n*	*M*	*SD*
Self-Stigma	Yes Vicarious	I-1	26	1.98	0.51
		I-2	23	2.25	0.76
		CC	23	2.59	0.81
	No Vicarious	I-1	82	2.55	0.85
		I-2	77	2.39	0.59
		CC	75	2.49	0.71

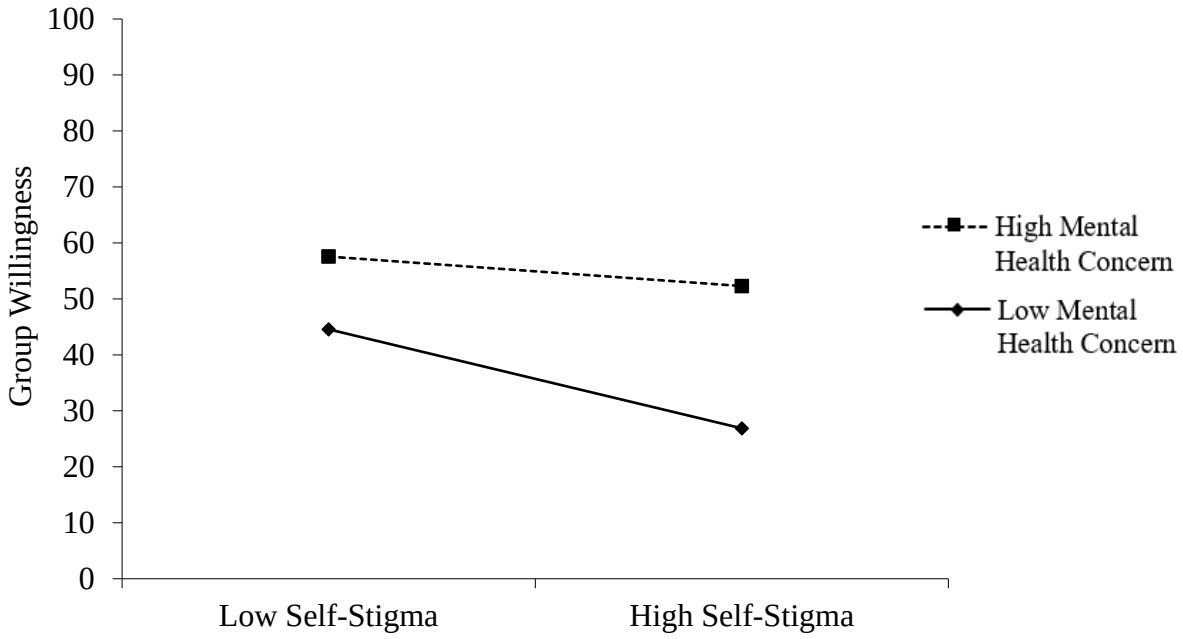
Note. $N = 306$.

Table 11. *Univariate results of the intervention effects on group willingness and self-stigma moderated by positive direct and vicarious experience with therapy*.

Outcome	Source	*F*	*df*	*p*	η^2
Group Willingness	Corr. Model	0.94	5, 300	.453	.015
	Intervention	1.87	2, 300	.156	.012
	Direct Exp.	0.31	1, 300	.577	.001
	Interv*DE	1.57	2, 300	.209	.010
Group Willingness	Corr. Model	1.70	5, 300	.135	.028
	Intervention	2.43	2, 300	.090	.016
	Vicarious Exp.	0.52	1, 300	.473	.002
	Interv*VE	3.34	2, 300	.037	.022
Self-Stigma	Corr. Model	0.94	5, 300	.617	.015
	Intervention	1.17	2, 300	.312	.008
	Direct Exp.	0.40	1, 300	.525	.001
	Interv*DE	0.40	2, 300	.671	.003
Self-Stigma	Corr. Model	3.09	5, 300	.010	.049
	Intervention	2.85	2, 300	.059	.019
	Vicarious Exp.	4.39	1, 300	.037	.014
	Interv*VE	4.08	2, 300	.018	.027

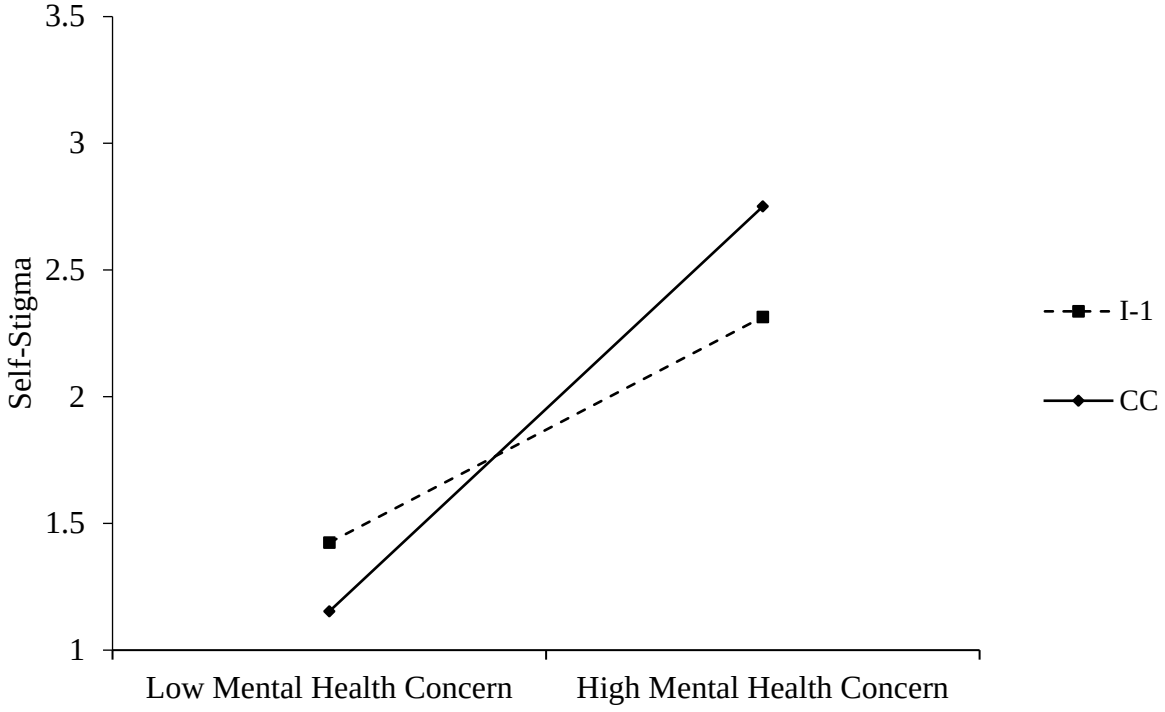
Note. N = 306. DE = positive direct experience with therapy; VE = positive vicarious experience with therapy.

Figure 1. *Group willingness predicted by self-stigma at high and low levels of mental health concerns.*



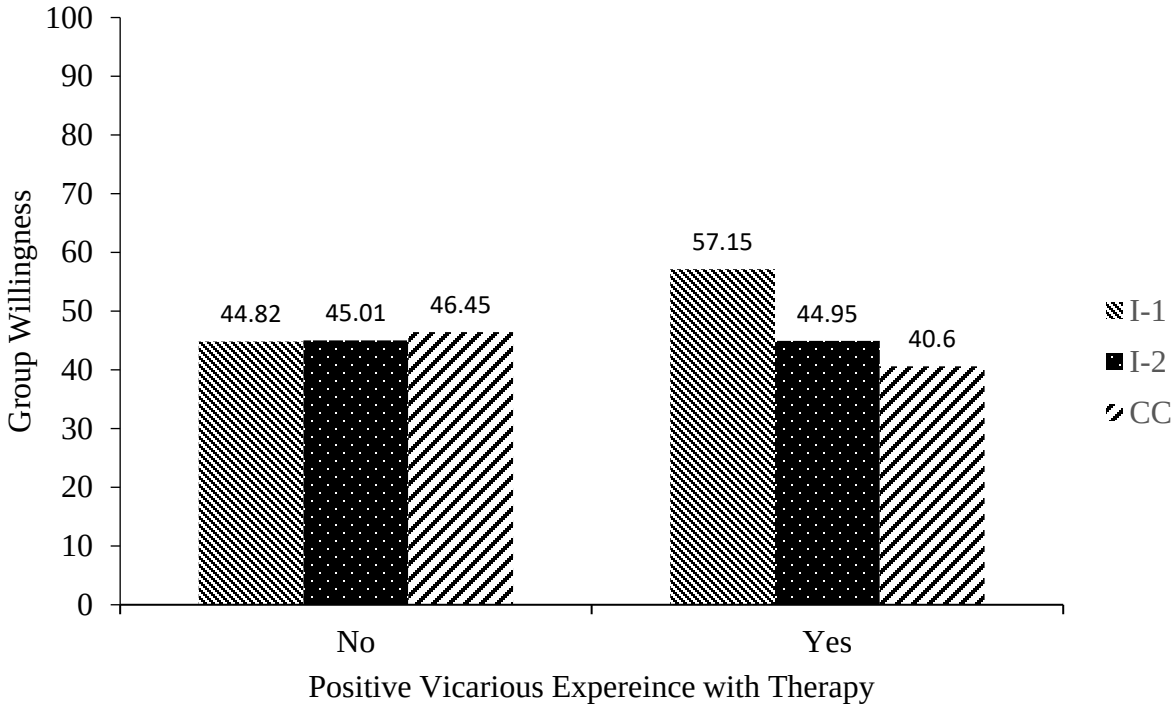
Note. N = 305. Self-stigma and mental health concerns measures were standardized.

Figure 2. *Effects of I-1 on self-stigma at high and low levels of mental health concerns.*



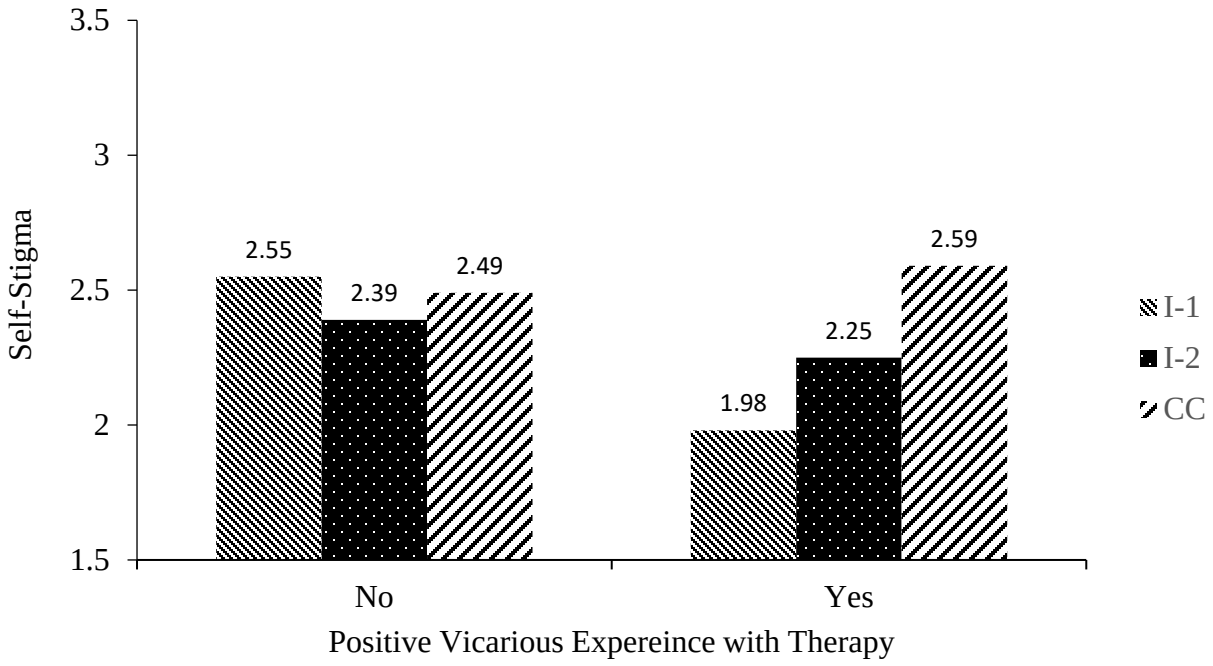
Note. N = 205. Mental health concerns measure was standardized. Self-stigma is measured on the scale from 1 to 5.

Figure 3. *Effects of the video interventions on group willingness for participants who had and did not have positive vicarious experience with therapy*.



Note. $N = 306$.

Figure 4. *Effects of the video interventions on self-stigma for participants who had and did not have positive vicarious experience with therapy*.



Note. N = 306. Self-stigma is measured on the scale from 1 to 5.

Chapter 5: Discussion

The first purpose of the present study was to extend existing research by examining how therapy familiarity, mental health concerns, and self-stigma together predict group willingness in international students. The second purpose was to test whether providing information about group therapy (i.e., Intervention 1 [I-1] or group information condition) and allowing students to get to know the therapist who leads groups (i.e., Intervention 2 [I-2] or therapist rapport condition) are successful interventions in increasing international students' willingness to seek group therapy and reducing their self-stigma associated with seeking group counseling in comparison to providing general information about services available at university counseling centers (i.e., Control Condition [CC]).

Addressing the first purpose of the study, neither having positive personal experience with therapy (i.e., direct experience) nor knowing someone who had a positive experience with therapy (i.e., vicarious experience) predicted international students' intentions to seek group therapy. Thus, Hypothesis 1.1 was not supported. Firstly, even though, contrary to the expectation, having had positive experience with therapy on average did not predict international students' intentions to seek group therapy, this finding was not completely surprising. Previous research that looked at the relationship between these two variables showed mixed results with two out of four studies having found no significant association (Marmarosh et al., 2009; Stoyell, 2014; Suri, 2015; Zhuzha et al., 2016). The lack of significant relationship could also be explained by the fact that, in the present study, most international students' experiences with therapy were in one-on-one counseling, which may have not oriented them to other types of therapy. Nevertheless, one prior study found that having had previous experience with any therapy related to willingness to seek group therapy in international students (Zhuzha

et al., 2016). However, this study also found that, when the severity of mental health concerns was taken into consideration, having had previous experience with therapy no longer predicted students' current intentions to seek group treatment. In other words, severity of mental health concerns could be a much more important predictor of group willingness than having a previous experience in therapy.

Results of the present study also showed that knowing of someone close, such as a good friend or a family member, having had a positive experience in therapy on average did not predict international students' intentions to seek group counseling. This finding was also contrary to hypothesis, which was based on previous research findings that suggested that knowing someone who had experience with mental illness predicts lower stigma and greater intentions to seek treatment (e.g., Nam et al., 2015; Yamaguchi et al., 2013). However, the relationship between vicarious experience with therapy and willingness to seek group counseling in particular had not been explored prior to the present study. It is possible that, similar to having prior positive direct experience with therapy, having positive vicarious experience is not a potent predictor of international students' intentions to seek group treatment, and other factors may explain group willingness more substantially.

One such factor appears to be severity of mental health concerns. In the present study, the more mental health concerns students said they experienced in the last month, the greater intentions to seek group therapy they endorsed. This was expected as prior research has demonstrated similar relationships between mental health concerns and intentions to seek professional services, including group counseling (e.g., Park et al., 2013; Zhuzha et al., 2016). Lower self-stigma was also related to greater intentions to seek group therapy but only when severity of mental health concerns was accounted for. In other words, in the present sample,

only the aspect of self-stigma that is independent of mental health concerns was predictive of intentions to seek group therapy. This was not surprising, however, considering the results from bivariate correlations that revealed that higher mental health concerns were associated with higher stigma and greater intentions, but higher stigma was associated with lower intentions. Thus, how self-stigma was associated with intentions to seek group therapy at different levels of mental health concerns was also investigated even though it was not a part of the original hypotheses. Findings further indicated that, for most international students, lower self-stigma was associated with higher willingness to seek group therapy. However, for students who indicated their distress level to be in the top 16% of the current non-clinical sample, self-stigma was not predictive of their willingness to seek group therapy. In other words, self-stigma did not seem to play a meaningful role for students' willingness to seek group therapy when their mental health concerns were relatively high. Thus, it seems that international students who report experiencing high distress, in comparison to those who report lower distress, may be more inclined to seek group treatment regardless of their stigma and perhaps in spite of it. This is a good sign and suggests that international student who recognize having mental health needs generally have some willingness to consider group therapy.

Previous studies have consistently found a negative association between self-stigma and willingness to seek treatment (e.g., Choi & Miller, 2014; Vogel et al., 2007a; Vogel et al., 2010), and a recent study found that mental health severity could be an important moderator of the effects of stigma (Lannin, Vogel, Brenner, Abraham, & Heath, 2016). The present study demonstrated that self-stigma predicted group willingness better when mental health severity was considered, and mental health, self-stigma, and their interaction together explained 21% of variance in international students' group willingness. These findings confirm that considering

level of distress may also be very important in understanding how stigma relates to help-seeking in international student population. Overall, both mental health concerns and self-stigma in the present study were found to be unique predictors of international students' willingness to seek group therapy, supporting Hypothesis 1.2.

To address the second purpose of the study, the interventions and the control condition were delivered in the form of videos. I-1 was a video depicting a therapist providing information about group therapy. The intention of I-2 was to simulate rapport building that could take place when a therapist has contact with international students outside of a counseling center, such as at a campus event. Thus, I-2 depicted the same therapist talking about her professional credentials and her experience and interest in working with international students and leading groups. CC was a video depicting the same therapist talking about different services, including group counseling, commonly available at university counseling centers. It was hypothesized that I-1 would help students learn more about group therapy vs. I-2 and the CC and that I-2 would help students get to know the therapist better and see her in a more positive light (i.e., as understanding, trustworthy, likable) vs. I-1 and the CC. It was also hypothesized that both I-1 and I-2 would help students see the therapist as more of an expert in comparison to the CC. Results of the manipulation check confirmed that I-1 was mostly successful and I-2 was partially successful. Telling international students about general structure of group therapy, group's effectiveness, and its potential to help international students as well as addressing common concerns students have about group was effective in helping international students learn about group therapy in comparison to I-2 and the CC. Furthermore, I-2 was effective in helping students feel that they got to know the therapist better in comparison to I-1 and the CC.

However, all videos were equivalent in their ability to help students feel like the therapist would understand them or see her as an expert, trustworthy, and likable. According to the social influence theory, a message has a higher chance of being effective in changing one's attitudes towards a subject matter when the communicator delivering it is perceived as having expertise and as trustworthy and attractive (Strong, 1968). Strong also proposed that, in the context of therapy, characteristics important for social influence (i.e., favorability) could be achieved by disclosure of therapist's credentials and expression of concern and curiosity about the client. Furthermore, expression of liking and interest towards a person has the potential to stimulate reciprocal positive feelings as it satisfies evolutionary drive to belong and increases self-esteem (Baumeister & Leary, 1995; Carnegie, 1936; Fiske, 2004). In support of this, Zhang and Dixon (2001) found that taking interest in client's culture of origin may be particularly important when working with international students. In their study, therapists who expressed interest in the student's home country and language were perceived more favorably than therapists who only focused on how cultural factors impact client's wellbeing. Finally, perceived similarity has also been linked to likability (Strong, 1968), including in the therapy context. For example, evidence has been documented that therapist's self-disclosure of some similarities with the client may be related to the client's favorable perception of them (Henretty, Currier, Berman, & Levitt, 2014). In the present study, I-2 included recommended techniques to increase favorable perceptions of the therapist, such as disclosure of professional credentials and disclosure of therapist's interests in cultures and in the participant's identity and concerns as an international student. I-1 did not mention therapist's credentials explicitly, but the therapist provided in-depth information about group therapy, which could be indicative of professional knowledge and could thereby affect perceptions of expertise. The distinguishing factor between

the intervention videos and the control was that the CC did not include in-depth information about any particular service or discussion of therapist's interests, expertise, or credentials. However, the therapist was perceived as equally expert, trustworthy, and likable across all conditions, suggesting that it may be challenging to purposefully manipulate positive impressions of a therapist.

However, it is important to note that, to simulate building rapport with a therapist, the present study used a 3-mintue video, which is a one-way communication very limited in time. The therapist in the study spoke about her general interest in cultures and international student concerns and was not able to adjust her response based on viewers' feedback. It is possible that more personalized approach is needed to make an impact on favorable perceptions. The fact that participants across all conditions on average reported feeling that the therapist would understand them moderately well also suggests that there is room for improving the rapport. For example, it may be important for the therapist to express interest in client's specific culture and communicate their understanding of struggles specific to the client, which likely go beyond concerns associated with being an international student. Consistent with this idea, one of the participants left an optional comment for the researcher at the end of the survey stating that the short video was insufficient for them to know whether the therapist could truly understand them and their culture-related concerns. Thus, therapists who do real-life outreach with international students or meet with them one-on-one could be better equipped to leave favorable impressions by using the recommend strategies as they are able to listen and respond to their audience and use audience-specific characteristics to scaffold the information they deliver.

Furthermore, even though it was difficult to manipulate favorable perceptions of the therapist by using a specific approach, the therapist in all videos on average seemed to be

perceived as having expertise and being trustworthy and likable. This is consistent with the theory that public may have positive expectations and attitudes toward a person labeled as a counselor because of their socially sanctioned role of a professional helper, the phenomenon sometimes referred to as *legitimate power* or *legitimate influence* (Corrigan, Dell, & Lewis, 1980; Raven, 1965). In this study, the speaker in all three videos identified as a therapist working in a university counseling center and was willing to speak to students, albeit on video, about the respective subject matter. These factors alone may have been sufficient to establish her credibility, trustworthiness, and attractiveness. Similar findings were documented by Heppner and Heesacker (1982) who found that clients tended to rate all counselors positively, despite their diverse presentation (e.g., office décor and physical appearance), after the first session while acknowledging that it was early to draw conclusions. In other words, counselors who do outreach, including with international students, may easily establish their credibility and may be readily seen as trustworthy and likable regardless of what they are talking about because their position and social role inherently grant them these characteristics. At the same, the present findings do not propose that preparation, professional presentation, and caring are unimportant. These standards should continue to be upheld by counselors in all professional situations as it is crucial that the public continues to perceive mental health professionals as worthy of their trust.

Regarding video interventions' effectiveness, results showed that, on average, receiving information about group therapy (I-1) and getting to know the therapist better (I-2) did not increase international students' intentions to seek group therapy and did not decrease their self-stigma associated with seeking group counseling in comparison to receiving general information about counseling center services (CC). As such, Hypothesis 2.1 that I-1 and I-2

would increase international students' group willingness and decrease their self-stigma in comparison to the CC was not supported. In addition, the video allowing international students to learn about group therapy did not affect their self-stigma and willingness to seek group counseling any differently than the video allowing students to get to know the therapist.

However, results also showed that the effectiveness of the interventions may depend on other factors. International students' mental health was the first significant moderator. Specifically, for students who reported mental health concerns in the top 14% of the present sample, receiving information about group therapy (vs. the CC) appeared to decrease their self-stigma associated with seeking group counseling. At the same time, self-stigma did not seem to decrease as a result of the intervention for the remaining 86% of international students who reported lower levels of distress. Unlike self-stigma, willingness to seek group counseling was not affected by the learning about group therapy regardless of international students' state of mental health. As such, Hypothesis 4.1 was partially supported. In sum, it appears that learning about group therapy may help international students in distress feel that engagement in group therapy would not reflect negatively on their character. It is possible that the intervention made a difference specifically for students with higher mental health concerns because consideration to seek mental health treatment is more relevant to them and because they on average reported experiencing higher self-stigma in the first place. At the same time, the size of the effect was small, which means that it is not clear whether the difference in self-stigma between I-1 and the CC is practically meaningful.

In light of the findings described earlier, it is not surprising that the intervention made no difference for international students' intentions to seek group therapy even though it reduced their self-stigma. As discussed previously, international students with relatively high mental

health concerns indicated that they had greater intentions to seek group therapy regardless of their self-stigma. Since self-stigma did not predict their intentions, it makes sense that, even though the intervention reduced students' self-stigma, it did not help them feel more inclined to seek group therapy. Despite this, I argue that reducing self-stigma in students who have higher mental health needs remains important. Even though students may express positive intentions toward seeking group therapy, it does not guarantee that they will actively look for appropriate information or services. For example, one systematic review concluded that having more knowledge about mental health is associated with more positive attitude around help-seeking but does not necessarily translate into help-seeking behavior (Gulliver et al., 2012). On the other hand, Vogel et al. (2006) demonstrated that lower self-stigma may predict actual use of psychological services. Next, attesting to the importance of reducing self-stigma, a recent study demonstrated that, among university students who experience higher level of distress, those with higher self-stigma may be far less likely to seek information about mental health and counseling in comparison to those who have lower self-stigma (Lannin et al., 2016). In addition, there is evidence that self-stigma may have a negative effect on treatment adherence (e.g., Yılmaz & Okanlı, 2015). Consequently, even though among international students with higher distress self-stigma is not predictive of intentions to seek group therapy, lowering stigma still has the potential to enable them to seek group treatment and to engage in the process of group therapy. According to the results of the present study, information about group therapy and addressing of common concerns about group is one example of an intervention that could lower self-stigma in international students with higher levels of distress.

When it comes to I-2, results showed that getting to know the therapist better (vs. the CC) did seem to increase international students' intentions to seek group therapy or decrease

their self-stigma across different levels of mental health concerns. As such, Hypothesis 4.2 was not supported. In other words, having more information about the group therapist may not be a meaningful intervention for improving international students' group therapy help-seeking. This conclusion is also consistent with the findings by Wade et al. (2011). Researchers showed that self-disclosure by group therapist in the first group session did not impact participants' self-stigma or their intention to continue group therapy. One of their explanations for the finding was that the size of the effect was small to medium and difficult to detect given their sample size. However, in this study the estimated effect size was very small, which puts into question whether it would be clinically meaningful even if it was found to be significant with a larger sample size.

Another significant moderator of the I-1 effect on group willingness and self-stigma was positive vicarious experience with therapy. In other words, effectiveness of the group information intervention for international students' intentions to seek group therapy and self-stigma depended on whether students had positive vicarious experience with psychotherapy. Specifically, for international students who knew of someone close to them having had a positive experience with therapy, learning about group counseling vs. hearing about services available at university counseling centers seemed to result in higher willingness to do group therapy and lower self-stigma associated with seeking group treatment. The size of this effect was medium, indicating that the effect of I-1 for international students with positive vicarious experience could be practically meaningful. In contrast, information about group therapy and overview of counseling center services appeared to produce similar levels of group willingness and self-stigma for international students who did not know of anyone close to them having had a positive experience with psychotherapy. As such, the moderation effect was in the opposite

direction from what was proposed in Hypothesis 5.2. Regarding the effect of I-2 on group willingness and self-stigma, it was not moderated by positive vicarious experience with therapy. Thus, relative to the CC, getting to know the therapist better did seem to help increase willingness to seek group therapy or reduce self-stigma for international students regardless of whether they knew of someone close to them having had a positive experience with therapy. Therefore, Hypothesis 5.2 was not supported.

Although the found moderation of the I-1 effect on group willingness and self-stigma by vicarious experience was different from what was expected, it also makes sense. It seems that neither message (i.e., positive feedback from a loved one or information about group therapy) alone is sufficient to change international students' self-stigma or intentions about group therapy. However, together these messages appear to be effective, which is consistent with the *mere exposure* effect (Zajonc, 1968). Research has shown that moderate amount of exposure to a similar message is likely to affect attitude change (e.g., Cacioppo & Petty, 1979; Miller, 1976). In fact, mere exposure effects can be detected even when the person is unaware of the exposure (e.g., Bornstein, Leone, & Galley, 1987). In the present study, participants were asked if they knew of someone close to them having been in therapy at the end of the survey. Thus, this question did not explicitly prime them to think more positively about psychotherapy. However, having received a positive message about psychotherapy before could have subliminally predisposed participants to be more receptive to the message about group therapy delivered via the video intervention, which then could have led to decreased self-stigma and increased intentions to seek group treatment relative to the CC.

Personal positive experience with therapy, on the other hand, did not moderate the effects of either I-1 or I-2 on international students' intentions to seek group therapy or their

self-stigma. Thus, both interventions were similarly ineffective in comparison to the control condition for increasing group willingness and decreasing self-stigma associated with seeking group treatment regardless of whether international students had a good experience in therapy before. This finding is contrary to Hypothesis 5.1 and may be counterintuitive because vicarious positive experience was found to be a significant moderator for I-1. Three explanations for absence of the moderation by direct experience are possible. First, only 40 international students in the present sample reported having personal positive experience with therapy, which means that the statistical power to detect the moderation effect, even if such exists, was very small. The found effect size (which is independent of the sample size) was negligible, but the effect size confidence interval suggests that a small effect is possible in the population. Overall, there is a possibility that, with a larger sample, significant results could emerge.

Second, vicarious experience could in fact have a more potent effect on international students' attitudes towards group therapy because social pressure to conform may be at play. For example, a famous study by Asch (1955) demonstrated that individuals frequently conform with opinions of a group even when it is obvious that the group is incorrect. Thus, knowing of someone close having had positive experience with therapy may create a perception that seeking counseling services is acceptable and is a norm in one's social circle. Vogel et al. (2007b), for example, found that 92-95% of the participants who sought therapy knew of someone else having been to therapy as well (vs. 53-59% of the participants who never sought therapy). Moreover, knowing someone who had been in treatment was associated with one's perception that people in their lives would approve of them seeking a similar service, which authors suggest is an indicator of a social norm. In addition, pressure to conform may be reduced if there is a justifiable reason for a disagreement (e.g., Ross, Bierbrauer, & Hoffman, 1976).

Hearing about effectiveness of group therapy and having common concerns about group therapy addressed in the current study may have removed the justifiable reason for participants to depart from the social norm. In sum, unlike having personal experience with therapy, in the case of vicarious experience, pressure to socially conform may play a role in addition to the mere exposure effect. This could be the reason close other's positive feedback about therapy combined with learning about group therapy resulted in increased intentions to seek group therapy and reduced self-stigma while direct experience combined with learning about group was ineffective.

Third, it is worth noting that most international students in the present sample were from non-Western cultures, which tend to be collectivistic (Triandis, 1995). Collectivistic cultures tend to place welfare of family or community (i.e., collective) above personal goals and interests. In other words, values of close others may have a greater significance than personal opinions for students who come from similar cultures. Consequently, hearing positive feedback about therapy from a close person could have been more impactful for group willingness and self-stigma than having positive personal experience with therapy when combined with the group therapy informational intervention. It is likewise possible that how the same intervention affects self-stigma and group willingness depending on the presence of positive personal and vicarious experience with therapy is different for international students who come from more individualistic cultures. In other words, collectivistic and individualistic values could be moderators that were not measured in the present study.

It is worth noting that I-2 remained ineffective in increasing group willingness or reducing self-stigma in international students in comparison to the CC even with consideration of the proposed moderators. One explanation for this could be that therapist's disclosure of her

credentials, understanding of concerns specific to international students, and her interests in cultures, international students, and group therapy is not a potent enough intervention to prompt a change in attitudes in comparison to the control condition. Several scholars have recommended making connections with international students outside of university counseling centers to increase students' familiarity with and trust in counseling center staff and to help students seek mental health treatment as well as group therapy (Walker & Conyne, 2007; Yakunina, Weigold, & McCarthy, 2011; Yau, 2004). Present findings suggest that discussing therapists' credentials and their interest in or concern for international students may be no more effective in helping students feel more positively about therapists or group therapy than talking to students about services available at the counseling center. Nevertheless, the presence of other moderators of the intervention effect that were not considered in the study is also possible. In other words, international students with certain characteristics could be more receptive to this type of intervention and, for them, it could make a difference in how they view group therapy. For example, research has shown that, in close relationships, women on average self-disclose more than men (Dindia & Allen, 1992). As women may tend to associate self-disclosure with intimacy more than men, it is possible that they may be more receptive to interventions that involve self-disclosure too. Furthermore, international students who have not had much exposure to the concept therapy in their home countries may see a mental health professional as a "stranger" (Chen & Lewis, 2011) and find it uncomfortable talking to them about their struggles, let alone talking about their issues to a whole group of strangers (such as in group counseling). For these students, therapist's self-disclosure may in fact be important and may affect their attitudes towards professional psychological services, such as group therapy. At the same time, knowing someone who has been to therapy could be representative of how much

exposure to therapy a student has had, and this variable was not a significant moderator of the I-2 effect on group willingness and self-stigma in the present study.

Limitations and Future Directions

There are several limitations in the present study. First, it is important to note that group willingness and self-stigma were measured only subsequent to the interventions, which means that the initial levels of these constructs were unknown. Consequently, the degree of change in willingness and self-stigma as a result of the interventions cannot be inferred. In addition, even though the present study involved random assignment to the video conditions, there was no way to verify that it worked as intended and that the initial levels of group willingness and self-stigma were similar between participants in each condition. The risk of having different initial levels of willingness and stigma between groups compared was higher in the analyses of moderation by direct and vicarious therapy experience. In both analyses, participants in each video condition were further divided into two groups (by whether they had positive direct or vicarious experience with therapy or not), resulting in 6 total groups that were compared and small numbers of participants in each group.

Next, the videos were meant to approximate interventions that counseling centers can carry out to promote group counseling to international students. They may do well simulating video materials that can be posted on counseling center websites or other platforms. However, as mentioned earlier, videos are a one-way communication and do not allow for interaction or tailoring of what is said to the person or public. Thus, real-life outreach programs, for example, may have somewhat different effects. Another limitation of the study is that the videos depicted only one therapist who was interviewed by one student, and it is unclear if therapist's or interviewer's characteristics may play a role in effectiveness of the interventions. It is likewise

unknown whether the same information about group therapy presented in a written format would have comparable effects. Next, although the video with information about group therapy appears to have decreased self-stigma and increased group willingness for some participants, it is not clear what component of the intervention was effective: information about group in general, discussion of group's effectiveness or its potential benefits to international students, or addressing of common concerns about group therapy. Future research could address these questions by testing different variations of the intervention. As mentioned earlier, other potential moderators of the intervention effects, such as gender and cultural views of therapy, may also be important to study to know how to tailor similar interventions to a given student or a group of students most effectively.

The current study also assessed participants' self-reported intentions to seek group counseling. However, intentions do not always translate into help-seeking behaviors (Gulliver et al., 2012). As such, similar to the recent study by Lannin et al. (2016), future research could investigate if group therapy informational interventions lead international students to look for information on how they can access group treatment. A longitudinal study, tracking whether students who receive information about group therapy are more likely to seek group counseling services in the future would also be of great value.

Regarding the measure of mental health, the present study assessed mental health concerns of which students were aware. However, research suggests that individuals may have mental health symptoms and not appraise them as problematic or needing professional assistance (e.g., Schomerus et al., 2012). Thus, future studies should also consider including assessments of problem appraisal and perceived need for professional help. In addition, the measure of mental health used in this study was analogous to the measure of group willingness.

They both listed areas of potential concern. The mental health measure asked students about the extent to which they had been affected by each of the 22 concerns in the last month while the intentions measure asked students about their willingness to seek group therapy for 9 of the concerns. Thus, correlation between the two constructs may be exaggerated due to similarities in assessment. To minimize this threat to validity, items in each measure were randomized, and half of the participants completed the self-stigma questionnaire between responding to the group willingness and the mental health concerns measures. Nevertheless, future studies should consider including additional measures of mental health to ensure that the found effect is reliable and valid.

Findings of the present study also should be generalized with caution. First, the present sample consisted mostly of graduate students and students completing their education in Southern United States. This means that the results may not be as generalizable to international undergraduate students and students in other parts of the country. Next, most international students in the present sample (57%) were from countries of East and South Asia. According to the most recent report by the Institute of International Education, Inc. (2017), 63% of international students in the U.S. are from countries of this region, which means that the current sample could be representative of the general international student population in this regard. However, it is not clear whether present results are equally generalizable to international students from all countries. Two past studies, for example, found differences in attitudes towards therapy by region of origin (Dadfar & Friedlander, 1982; Zhuzha et al., 2016). However, one of these studies was conducted more than 30 years ago, and there was no sound conceptual reason for the trend found in the second study. Studying differences by country or region of origin could be very challenging because of difficulties in accessing smaller

populations and because of great variability in individual characteristics within each country and, even more so, a region (e.g., SES, religion, personality, etc.). However, as discussed earlier, it may important for future studies to include a measure of individualism and collectivism to assess aspects of cultural values. For example, students prioritizing their own opinions (i.e., individualistic orientation) vs. opinions of those around them (i.e., collectivistic orientation) or vice versa may determine how direct and vicarious experiences with therapy moderate effects of interventions aimed at improving how students feel about seeking group therapy or other mental health services. Similarly, the present study only looked at the construct of self-stigma as measured by the SSOSH (Vogel et al., 2006). Studying this measure outside of the U.S., researchers found that, even though it functions similarly in other countries, the SSOSH may do better representing individualistic vs. collectivistic values (Vogel et al, 2013). Because of this and based on the found importance of opinions of close others about therapy, it may be pertinent for future studies with international students to examine perceived stigma from one's social network (Vogel, Wade, & Ascheman, 2009). This construct appears to be distinct from self-stigma and public stigma and may be especially relevant to cultures with collectivistic orientations (Vogel et al., 2017).

Recruitment method was also limiting in terms of generalizability of the study results. In multiple universities, students were sent the study invitation through international student offices, and most participants were recruited via email. Not all international students may have been on the email lists receiving the invitation, and some students may not read similar emails. Students also self-selected to participate in the study, which means that the sample is not random or representative of the general international student population. Furthermore, only students who self-identified being comfortable with written and spoken English were able to

partake in the study, which means that the results cannot be generalized to students who are learning English or who express little confidence in their English skills for one reason or another. Moreover, many students did not finish the survey (42%) or did not accurately respond to attention check questions (15%) and were not included in the analysis as a result. The present study identified that undergraduate students were more likely to drop out early than graduate students. In addition, participants who were excluded reported higher mental health concerns than those who were retained. Although excluded participants' ratings of their mental health issues may be unreliable because they did not pass attention checks, it is possible that they did not attend to all questions because they experienced higher distress. It is also possible that retained participants were systematically different from participants who dropped out or were excluded in characteristics that were not measured.

For example, retained participants may have been more attentive, conscientious, or have more free time. Thus, it may be useful for future studies to use a methodology other than online questionnaires (e.g., paper surveys distributed at international student events) and to ensure that all participants receive compensation to increase the incentive for start-to-finish participation.

Finally, research on interventions that encourage international students to seek group therapy is novel, and the present findings provide an important basis for continued scholarly work in this area. For example, in the present study, learning about group therapy seemed to have an effect on self-stigma and group willingness for some students, and self-stigma has also been shown to predict group willingness. Thus, testing whether self-stigma mediates the effect of the intervention on group willingness could be an important next step in understanding how the intervention functions. Knowing someone close who has had a positive experience with therapy in conjunction with receiving information about group therapy also emerged as a

significant factor for international students' self-stigma and group willingness. This suggests that it may be important for future studies to test effectiveness of interventions that include peer messages about group therapy. These can be written statements or verbal feedback from other students. It would be also interesting to know if the feedback provided by other international students or students from the same country of origin carries more value than feedback provided by domestic students or students from other cultures.

Practical Implications

First, results of the current study indicate that international students who experience more mental health concerns may be more willing to seek group therapy than international students who experience fewer concerns. Even though causality in the relationship was not established, it is possible that recognition of mental health concerns plays an important role in international students' willingness to seek group therapy. Some students may not be aware that their experiences are not normal or are indicative of a mental health concern and may not seek help as a result (e.g., Epstein et al., 2010). Thus, it may be crucial for university staff to have conversations with international students about their mental health when they appear to display signs of distress. Moreover, outreach programs and events that allow international students learn about symptoms of mental health concerns may be of great value in that they could assist students with identifying their own struggles and helping their friends do the same. At the same time, service providers delivering a similar education should be knowledgeable about multicultural concerns as they relate to mental health and should avoid pathologizing adjustment and acculturative stress.

Regarding group therapy self-stigma, results of this study suggest that lower sense of self-worth connected to being in group therapy (i.e., higher self-stigma) may be associated with

lower group willingness only for international students with moderate and low severity of concerns. Because self-stigma is not predictive of students' intentions to seek group therapy when they report high distress, helping them recognize that they are experiencing a mental health issue may the first order of priority over normalizing seeking group counseling for example. Nevertheless, helping international students think of group counseling as a socially acceptable option for treatment may still be important regardless of students' current distress level. For example, one study showed that individuals who have lower self-stigma do better recognizing that their symptoms are a sign of mental health difficulty (Schomerus et al., 2012), which in turn is associated with higher help-seeking behavior (Bonabi et al., 2016). Next, as previously mentioned, lower self-stigma is also related to higher likelihood of seeking services and information about mental health and treatment and to higher adherence to treatment (Lannin et al., 2016; Vogel et al., 2006; Yılmaz & Okanlı, 2015).

One method that the present study found to be successful in reducing group therapy self-stigma in international students was information about group therapy provided by a therapist. Specifically, therapist addressing common concerns about group therapy, describing what group therapy may look like, and discussing group's effectiveness and the potential to help international students was successful in reducing self-stigma in students who had relatively high mental health concerns and in those who reported having previously received positive feedback about psychotherapy from someone close to them. In addition, for the international students who had received positive feedback, the group therapy information intervention was likewise effective for increasing their intentions to seek group therapy.

First, these findings suggest that speaking to international students specifically about group therapy, as opposed to only informing them that group is one of the services offered at the

counseling center, may be one way to encourage them to engage in this form of treatment. This can be done by counseling center staff at orientations and outreach events. Moreover, because the intervention was particularly effective for students who reported relatively high levels of distress, it may be especially crucial that group counseling is well explained in clinical settings, such as during consultations and intakes at a counseling center (where students are more likely to present with a high level of distress in comparison to the general population). Second, the finding that the group information intervention was more effective for students who already knew of someone close to them having had a good experience in therapy also has implications. First, hearing repeated positive messages about therapy may be important. As such, talking to international students about counseling and group therapy throughout the academic year, as opposed to only at the orientation, could be a good strategy. Next, positive messages from peers may be especially effective. Thus, it may be important for counseling centers to collaborate with student-led organizations when organizing outreach programs. Furthermore, counseling center staff and/or faculty advisors of student organizations that focus on promoting mental health should be encouraging of the organization's efforts to recruit diverse members, including international students. It could also be important to educate similar student organizations about group therapy and benefits of this treatment and to ensure that group counseling is discussed along with other counseling center services. Finally, it is important that mental health professionals, international student offices, and university officials engage in efforts to create a campus culture where international and other students feel comfortable talking about their mental health and experiences with counseling services.

Lastly, when it comes to methods of service promotion, high dropout rate in this study at the stage when participants were asked to watch a video (48% of all dropped-out participants)

may indicate that videos have limitations in terms of their accessibility. Although the reason for the dropout is unclear, it is possible that, because university students browse internet all throughout the day (Jones, Johnson-Yale, Millermaier, & Perez, 2009), some environments are not conducive to watching videos, which could have prevented students from continuing with their study participation. Thus, it is possible that, unless a student has a specific intention to watch videos at a given time, a video embedded in another type of promotional material (e.g., a website) may have a limited utility. In addition, for individuals whose first language is not English, it may be easier to read information because they do not have to expend effort to understand a speaker's pronunciation and can go at their own pace, taking time to translate words if needed. Therefore, if a counseling center includes a video as a part of their promotional materials, it may be prudent to also provide a summary of the information in the video in another form, such as in writing and images. It may be also very important to include captions or subtitles to allow students to watch the video without sound. Finally, it could be advisable to post videos on platforms where they are generally more expected, such as on a counseling center or university YouTube or Snapchat channels.

Conclusions

First, the present study found that self-stigma, mental health, and their interaction explained 21% of variance in international students' intentions to seek group counseling. Having more mental health concerns was associated with greater intentions to seek treatment. Lower self-stigma predicted higher group willingness in international students only when the severity of mental health was accounted for. However, self-stigma did not predict intentions to seek therapy among international students whose level of mental health concerns was in the top 16% of this sample. Thus, the results suggest that having the ability to recognize their distress

and signs of mental health concerns may be important for international students' propensity to seek group therapy. Next, it appears that, when considering effects of self-stigma on intentions to seek group therapy in international students, it is crucial to account for students' severity of mental health concerns because whether and how self-stigma is related to group willingness may depend on the distress level. Although self-stigma was not predictive of group willingness for students with higher mental health concerns (i.e., students who are more likely to have the need for professional psychological help), research suggests that self-stigma can play an important role in how students appraise their mental health symptoms and can predict actual help-seeking behaviors. For these reasons, experience of self-stigma in international students continues to be important to address.

Second, the results suggest that providing information about group therapy may help reduce group therapy self-stigma and increase intentions to seek group treatment for some international students. Specifically, this intervention may be effective in reducing self-stigma for international students who experience higher levels of distress. This means that, for these students, it is especially relevant to take time to explain how group therapy works and how the international student can benefit from it and to address their concerns about the treatment. Next, the group therapy information intervention may be effective in reducing self-stigma and increasing willingness to seek group therapy for students who have heard positive things about counseling from someone who is close to them. This means that hearing repeated positive messages about therapy could be central for improving attitudes towards group treatment. In particular, it could be important that at least one of these positive messages comes from someone who is close to the student, such as a friend or a family member. It is also important that information specific to group therapy is present (e.g., description of what a group may look

like, examples of how it could be helpful or effective, and discussion of potential concerns about group therapy).

References

Ægisdóttir, S., & Gerstein, L. H. (2009). Beliefs About Psychological Services (BAPS): Development and psychometric properties. *Counselling Psychology Quarterly*, *22*(2), 197–219. doi:10.1080/09515070903157347

Allen, I. E., & Seaman, C. A. (2007). Likert scales and data analyses. *Quality Progress*, *40*(7), 64–65. doi:

Alvidrez, J., Snowden, L. R., Rao, S. M., & Boccellari, A. (2009). Psychoeducation to address stigma in black adults referred for mental health treatment: A randomized pilot study. *Community Mental Health Journal*, *45*(2), 127–136. doi:10.1007/s10597-008-9169-0

American College Health Association (2015). *National College Health Assessment II: Spring 2015 reference group executive summary*. Retrieved from http://www.acha-ncha.org/reports_ACHA-NCHAIIb.html

Angermeyer, M. C., & Dietrich, S. (2006). Public beliefs about and attitudes towards people with mental illness: A review of population studies. *Acta Psychiatrica Scandinavica*, *113*(3), 163–179. doi:10.1111/j.1600-0447.2005.00699.x

Appalachian State University Counseling & Psychological Services (2015). *Group counseling* [webpage]. Retrieved from https://counseling.appstate.edu/pagesmith/13

Arthur, N. (2004). *Counseling international students: Clients from around the worlds.* New York: Kluwer Academic/Plenum Publishers.

Arthur, N. (2008). Counseling international students. In P. B. Pedersen, J. G. Draguns, W. J. Lonner, J. E. Trimble, P. B. (Ed) Pedersen, J. G. (Ed) Draguns, … J. E. (Ed) Trimble (Eds.), *Counseling across cultures (6th ed.).* (pp. 275–290). Thousand Oaks, CA, US: Sage Publications, Inc.

Asch, S. E. (1955). Opinions and social pressure. *Scientific American, 193*(5), 31–35. doi:10.1038/scientificamerican1155-31

Atkinson, D. R., & Gim, R. H. (1989). Asian-American cultural identity and attitudes toward mental health services. *Journal of Counseling Psychology, 36*(2), 209–212. doi:10.1037/0022-0167.36.2.209

Atri, A., Sharma, M., & Cottrell, R. (2007). Role of social support, hardiness, and acculturation as predictors of mental health among international students of Asian Indian origin. *International Quarterly of Community Health Education, 27*(1), 59–73. doi:10.2190/IQ.27.1.e

Aubrey, R. (1991). International students on campus: A challenge for counselors, medical providers, and clinicians. *Smith College Studies in Social Work, 62*(1), 20–33. doi:10.1080/00377319109516697

Auburn University Student Counseling Services (n.d.). *Counseling* [webpage]. Retrieved from http://wp.auburn.edu/scs/counseling/

Barak, A., & LaCrosse, M. B. (1975). Multidimensional perception of counselor behavior. *Journal of Counseling Psychology, 22*(6), 471–476. doi:10.1037/0022-0167.22.6.471

Barlow, S. H., Burlingame, G. M., & Fuhriman, A. (2000). Therapeutic applications of groups: From Pratt's "thought control classes" to modern group psychotherapy. *Group Dynamics: Theory, Research, and Practice, 4*(1), 115–134. doi:10.1037/1089-2699.4.1.115

Barr, V., Krylowitcz, B., Reetz, D. R., Mistler, B., & Rando, R. (2011). *The Association for University and College Counseling Center Directors annual survey.* Retrieved from

Association for University and College Counseling Center Directors website: http://www.aucccd.org/director-surveys-public

Baumeister, R. F. & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as fundamental human motivation. *Psychological Bulletin, 117,* 497-529. doi:10.1037/0033-2909.117.3.497

Baysden, M. F. (2003). International and United States citizen student adaptation to college, opinions about mental illness, and attitudes toward seeking professional counseling help. *Dissertation Abstracts International: Section A. Humanities and Social Sciences, 64*(2-A), 393.

Behenck, A., Wesner, A. C., Finkler, D., & Heldt, E. (2016). Contribution of group therapeutic factors to the outcome of cognitive–behavioral therapy for patients with panic disorder. *Archives of Psychiatric Nursing*. doi:10.1016/j.apnu.2016.09.001

Ben-Porath, D. D. (2002). Stigmatization of individuals who receive psychotherapy: An interaction between help-seeking behavior and the presence of depression. *Journal of Social and Clinical Psychology, 21*(4), 400–413. doi:10.1521/jscp.21.4.400.22594

Berger, S. M. & Lambert, W. W. (1968). Stimulus response theory in contemporary social psychology. In G. Lindzey & E. Aronson (Eds.), *The handbook of social psychology* (2nd ed., Vol. 1, pp. 81-178). Reading, MA: Addison-Wesley.

Boafo-Arthur, S. (2015). *Self-stigma, social stigma, and attitudes towards seeking professional counseling: International students at Mississippi State University*. (Doctoral Dissertation, Mississippi State University). Retrieved from http://search.proquest.com.spot.lib.auburn.edu/docview/1566477966

Bonabi, H., Müller, M., Ajdacic-Gross, V., Eisele, J., Rodgers, S., Seifritz, E., Rössler, W., & Rüsch, N. (2016). Mental health literacy, attitudes to help seeking, and perceived need as predictors of mental health service use: A longitudinal study. *Journal of Nervous & Mental Disease*, *204*(4), 321–324. doi:10.1097/NMD.0000000000000488

Bornstein, R. F., Leone, D. R., & Galley, D. J. (1987). The generalizability of subliminal mere exposure effects: Influence of stimuli perceived without awareness on social behavior. *Journal of Personality and Social Psychology, 53*(6), 1070–1079. doi:10.1037/0022-3514.53.6.1070

Boyer, S. P., & Sedlacek, W. E. (1989). Noncognitive predictors of counseling center use by international students. *Journal of Counseling and Development, 67*(7), 404-407. doi:10.1002/j.1556-6676.1989.tb02101.x

Brockington, I. F., Hall, P., Levings, J., & Murphy, C. (1993). The community's tolerance of the mentally ill. *The British Journal of Psychiatry, 162*, 93–99. doi:10.1192/bjp.162.1.93

Bulthuis, J. D. (1986). The foreign student today: A profile. *New Directions for Student Services*, *36*, 19–27. doi:10.1002/ss.37119863604

Burlingame, G. M., Gleave, R., Erekson, D., Nelson, P. L., Olsen, J., Thayer, S., & Beecher, M. (2016). Differential effectiveness of group, individual, and conjoint treatments: An archival analysis of OQ-45 change trajectories. *Psychotherapy Research*, *26*(5), 556–572. doi:10.1080/10503307.2015.1044583

Burlingame, G. M., Strauss, B., & Joyce, A. S. (2013). Change mechanisms and effectiveness of small group treatments. In M. J. Lambert (Ed.), *Bergin and Garfield's Handbook of Psychotherapy and Behavior Change* (6th ed., pp. 640–689). Hoboken, NJ: Wiley.

Butler, T., & Fuhriman, A. (1983). Curative factors in group therapy: A review of the recent literature. *Small Group Behavior*, *14*(2), 131–142. doi:10.1177/104649648301400201

Cacioppo, J. T., & Petty, R. E. (1979). Effects of message repetition and position on cognitive response, recall, and persuasion. *Journal of Personality and Social Psychology*, *37*(1), 97–109. doi:10.1037/0022-3514.37.1.97

Campinha-Bacote, D. D. (2012). *Pre-group preparation in college counseling centers: Through the use of an audio-visual aid* (Doctoral dissertation, Wright State University). Retrieved from http://corescholar.libraries.wright.edu/cgi/viewcontent.cgi?article=2249&context=etd_all

Carnegie, D. (1936). *How to win friends and influence people.* New York: Simon & Schuster.

Carr, J. L., Koyama, M. M., & Thiagarajan, M. (2003). A women's support group for Asian international students. *Journal of American College Health*, *52*(3), 131–134. doi:10.1080/07448480309595735

Carter, E. F., Mitchell, S. L., & Krautheim, M. D. (2001). Understanding and addressingcClients' resistance to group counseling. *The Journal for Specialists in Group Work*, *26*(1), 66–80. doi:10.1080/01933920108413778

Cash, T. F., Begley, P. J., McCown, D. A., & Weise, B. C. (1975). When counselors are heard but not seen: Initial impact of physical attractiveness. *Journal of Counseling Psychology*, *22*(4), 273–279. doi:10.1037/h0076730

Cepeda-Benito, A., & Short, P. (1998). Self-concealment, avoidance of psychological services, and perceived likelihood of seeking professional help. *Journal of Counseling Psychology*, *45*(1), 58. doi:10.1037/0022-0167.45.1.58

Chen, C. P. (1999). Common stressors among international college students: Research and counseling implications. *Journal of College Counseling, 2*(1), 49. doi:10.1002/j.2161-1882.1999.tb00142.x

Chen, H.-M., & Lewis, D. C. (2011). Approaching the "resistant:" Exploring East Asian international students' perceptions of therapy and help-seeking behavior before and after they arrived in the United States. *Contemporary Family Therapy*, *33*(3), 310–323. doi:10.1007/s10591-011-9154-6

Choi, N.-Y., & Miller, M. J. (2014). AAPI college students' willingness to seek counseling: The role of culture, stigma, and attitudes. *Journal of Counseling Psychology*, *61*(3), 340–351. doi:10.1037/cou0000027

Chow, L. (2012). *Examining East Asian American college students' mental health help-seeking*. (Doctoral Dissertation, Georgia State University). Retrieved from http://scholarworks.gsu.edu/psych_diss/109

Christensen, H., Griffiths, K. M., & Jorm, A. F. (2004). Delivering interventions for depression by using the internet: Randomised controlled trial. *BMJ*, *328*(7434), 265. doi:10.1136/bmj.37945.566632.EE

Church, A. T. (1982). Sojourner adjustment. *Psychological Bulletin*, *91*(3), 540–572. doi:10.1037/0033-2909.91.3.540

Clement, S., Schauman, O., Graham, T., Maggioni, F., Evans-Lacko, S., Bezborodovs, N., … Thornicroft, G. (2015). What is the impact of mental health-related stigma on help-seeking? A systematic review of quantitative and qualitative studies. *Psychological Medicine*, *45*(1), 11–27. doi:10.1017/S0033291714000129

Constantine, M. G., Kindaichi, M., Okazaki, S., Gainor, K. A., & Baden, A. L. (2005). A Qualitative investigation of the cultural adjustment experiences of Asian international college women. *Cultural Diversity and Ethnic Minority Psychology, 11*(2), 162–175. doi:10.1037/1099-9809.11.2.162

Corrigan, J. D., Dell, D. M., Lewis, K. N., & Schmidt, L. D. (1980). Counseling as a social influence process: A review. *Journal of Counseling Psychology, 27,* 395-441. doi:10.1037/0022-0167.27.4.395

Corrigan, P. W. (2000). Mental health stigma as social attribution: Implications for research methods and attitude change. *Clinical Psychology: Science and Practice*, *7*(1), 48–67. doi:10.1093/clipsy/7.1.48

Corrigan, P. W. (2004). How stigma interferes with mental health care. *American Psychologist, 59*(7), 614–625. doi:10.1037/0003-066X.59.7.614

Costello, A. B., & Osborne, J. W. (2005). Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. *Practical Assessment, Research & Evaluation*, *10*(7), 1–9.

Cramer, K. M. (1999). Psychological antecedents to help-seeking behavior: A reanalysis using path modeling structures. *Journal of Counseling Psychology*, *46*(3), 381–387. doi:10.1037/0022-0167.46.3.381

Crisp, A. H., Gelder, M. G., Rix, S., Meltzer, H. I., & Rowlands, O. J. (2000). Stigmatisation of people with mental illnesses. *The British Journal of Psychiatry*, *177*, 4–7. doi:10.1192/bjp.177.1.4

Dadfar, S., & Friedlander, M. L. (1982). Differential attitudes of international students toward seeking professional psychological help. *Journal of Counseling Psychology*, *29*(3), 335–338. doi:10.1037/0022-0167.29.3.335

Deane, F. P., & Chamberlain, K. (1994). Treatment fearfulness and distress as predictors of professional psychological help-seeking. *British Journal of Guidance & Counselling*, *22*(2), 207–217. doi:10.1080/03069889400760211

Dilsworth, S. M., Bossick, B. E., Roberts, A., Bakht, M. S., & Gildner, J. L. (2008). Willingness of college students to participate in general therapy groups. *Michigan Journal College Student Development, 13*(1), pp. 8-18.

Dindia, K. and Allen, M. (1992). Sex differences in self-disclosure: a meta-analysis. *Psychological Bulletin, 112,* 106-124. doi:10.1037/0033-2909.112.1.106

Dipeolu, A., Kang, J., & Cooper, C. (2007). Support group for international students: A counseling center's experience. *Journal of College Student Psychotherapy*, *22*(1), 63–74. doi:10.1300/J035v22n01_05

Downs, M. F., & Eisenberg, D. (2012). Help seeking and treatment use among suicidal college students. *Journal of American College Health*, *60*(2), 104–114. doi:10.1080/07448481.2011.619611

Dush, D. M., Hirt, M. L., & Schroeder, H. E. (1983). Self-statement modification with adults: A meta-analysis. *Psychological Bulletin*, *94*(3), 408–422. doi:10.1037/0033-2909.94.3.408

Eisenberg, D., Hunt, J., & Speer, N. (2012). Help seeking for mental health on college campuses: Review of evidence and next steps for research and practice. *Harvard Review of Psychiatry (Taylor & Francis Ltd)*, *20*(4), 222–232. doi:10.3109/10673229.2012.712839

Epstein, R. M., Duberstein, P. R., Feldman, M. D., Rochlen, A. B., Bell, R. A., Kravitz, R. L., Cipri, C., Becker, J. D., Bamonti, P. M., & Paterniti, D. A. (2010). "I didn't know what was wrong:" How people with undiagnosed depression recognize, name and explain their distress. *Journal of General Internal Medicine*, *25*(9), 954–961. doi:10.1007/s11606-010-1367-0

Esters, I. G., Cooker, P. G., & Ittenbach, R. F. (1998). Effects of a unit of instruction in mental health on rural adolescents' conceptions of mental illness and attitudes about seeking help. *Adolescence*, *33*(130), 469–476.

Feiring, C., Lewis, M., & Starr, M. D. (1984). Indirect effects and infants' reaction to strangers. *Developmental Psychology*, *20*(3), 485–491. doi:10.1037/0012-1649.20.3.485

Fischer, E. H., & Farina, A. (1995). Attitudes toward seeking professional psychological help: A shortened form and considerations for research. *Journal of College Student Development*, *36*(4), 368–373.

Fischer, E. H., & Turner, J. I. (1970). Orientations to seeking professional help: Development and research utility of an attitude scale. *Journal of Consulting and Clinical Psychology*, *35*(1, Pt.1), 79–90. doi:10.1037/h0029636

Fiske, S. T. (2004). *Social beings: Core motives in social psychology* (2nd ed.). Hoboken, NJ: John Wiley & Sons, Inc.

Form, A. F., Griffiths, K. M., Christensen, H., Korten, A. E., Parslow, R. A., & Rodgers, B. (2003). Providing information about the effectiveness of treatment options to depressed people in the community: A randomized controlled trial of effects on mental health literacy, help-seeking and symptoms. *Psychological Medicine*, *33*(6), 1071–1079. doi:10.1017/S0033291703008079

Fouad, N. A. (1991). Training counselors to counsel international students: Are we ready? *The Counseling Psychologist, 19*(1), 66-71. doi:10.1177/0011000091191005

Freiman, J. A., Chalmers, T. C., Smith, H., & Kuebler, R. R. (1978). The importance of beta, the Type II error, and sample size in the design and interpretation of the randomized control trial. *New England Journal of Medicine*, *299*, 690-694. doi:10.1056/NEJM197809282991304

Friedman, R. (2013). Individual or group therapy? Indications for optimal therapy. *Group Analysis*, 533316413483691. doi:10.1177/0533316413483691

Fuhriman, A., & Burlingame, G. (Eds.). (1994). *Handbook of group psychotherapy: An empirical and clinical synthesis.* New York: Wiley

Gallagher, R. P. (2009). *National survey of counseling center directors*. The International Association of Counseling Services, Inc. Retrieved from http://www.collegecounseling.org/surveys

Gallagher, R. P. (2010). *National survey of counseling center directors*. The International Association of Counseling Services, Inc. Retrieved from http://www.collegecounseling.org/surveys

Gallagher, R. P. (2011). *National survey of counseling center directors*. The International Association of Counseling Services, Inc. Retrieved from http://www.collegecounseling.org/surveys

Gallagher, R. P. (2012). *National survey of counseling center directors*. The International Association of Counseling Services, Inc. Retrieved from http://www.collegecounseling.org/surveys

Gallagher, R. P. (2014). *National survey of counseling center directors*. The International Association of Counseling Services, Inc. Retrieved from http://www.collegecounseling.org/surveys

Gim, R. H., Atkinson, D. R., & Whiteley, S. (1990). Asian-American acculturation, severity of concerns, and willingness to see a counselor. *Journal of Counseling Psychology, 37*(3), 281–285. doi:10.1037/0022-0167.37.3.281

Golberstein, E., Eisenberg, D., & Gollust, S. E. (2008). Perceived stigma and mental health care seeking. *Psychiatric Services*, *59*(4), 392–399. doi:10.1176/appi.ps.59.4.392

Griffiths, K. M., Christensen, H., Jorm, A. F., Evans, K., & Groves, C. (2004). Effect of web-based depression literacy and cognitive-behavioural therapy interventions on stigmatizing attitudes to depression. *The British Journal of Psychiatry, 185*(4), 342–349. doi:10.1192/bjp.185.4.342

Gulliver, A., Griffiths, K. M., Christensen, H., & Brewer, J. L. (2012). A systematic review of help-seeking interventions for depression, anxiety and general psychological distress. *BMC Psychiatry, 12*. doi:10.1186/1471-244X-12-81

Hamre, P., Dahl, A. A., & Malt, U. F. (1994). Public attitudes to the quality of psychiatric treatment, psychiatric patients, and prevalence of mental disorders. *Nordic Journal of Psychiatry, 48*(4), 275–281. doi:10.3109/08039489409078149

Harris, A. L. (2013). *Barriers to group psychotherapy for African-American college students* (Doctoral dissertation, Wright State University). Retrieved from https://etd.ohiolink.edu/rws_etd/document/get/wsupsych1342396118/inline

Heath, P. J., Vogel, D. L., & Al-Darmaki, F. R. (2016). Help-seeking attitudes of United Arab Emirates students examining loss of face, stigma, and self-disclosure. *The Counseling Psychologist, 44*(3), 331–352. doi:10.1177/0011000015621149

Hechanova-Alampay, R., Beehr, T. A., Christiansen, N. D., & Horn, R. K. V. (2002). Adjustment and strain among domestic and international student sojourners: A longitudinal study. *School Psychology International, 23*(4), 458–474. doi:10.1177/0143034302234007

Heijnders, M., & Van Der Meij, S. (2006). The fight against stigma: An overview of stigma-reduction strategies and interventions. *Psychology, Health & Medicine*, *11*(3), 353–363. doi:10.1080/13548500600595327

Helliker, K. (2009, March 24). No joke: Group therapy offers savings in numbers. *The Wall Street Journal*. Retrieved from http://online.wsj.com/article/SB123785686766020551.html

Henretty, J. R., Currier, J. M., Berman, J. S., & Levitt, H. M. (2014). The impact of counselor self-disclosure on clients: a meta-analytic review of experimental and quasi-experimental research. *Journal of Counseling Psychology*, *61*(2), 191–207. doi: 10.1037/a0036189

Heppner, P. P., & Heesacker, M. (1982). Interpersonal influence process in real-life counseling: Investigating client perceptions, counselor experience level, and counselor power over time. *Journal of Counseling Psychology*, *29*(3), 215–223. doi:10.1037/0022-0167.29.3.215

Holmes, S. E., & Kivlighan, D. M. J. (2000). Comparison of therapeutic factors in group and individual treatment processes. *Journal of Counseling Psychology, 47*(4), 478–484. doi:10.1037/0022-0167.47.4.478

Horne, A. M., & Rosenthal, R. (1997). Research in group work: How did we get where we are? *Journal for Specialists in Group Work, 22*(4), 228-240. doi:10.1080/01933929708415527

Hovland, C. I., Janis, I. L., & Kelley, H. H. (1953). *Communication and persuasion: Psychological studies of opinion change.* New Haven, CT: Yale University Press.

Hoyt, W. T. (1996). Antecedents and effects of perceived therapist credibility: A meta-analysis. *Journal of Counseling Psychology, 43*(4), 430–447. doi:10.1037/0022-0167.43.4.430

Hyun, J., Quinn, B., Madon, T., & Lustig, S. (2007). Mental health need, awareness, and use of counseling services among international graduate students. *Journal of American College Health*, *56*(2), 109–118. doi:10.3200/JACH.56.2.109-118

Institute of International Education, Inc. (2017). *Open Doors 2015 "fast facts."* Retrieved from https://www.iie.org/Research-and-Insights/Open-Doors/Fact-Sheets-and-Infographics/Fast-Facts

Ishiyama, F. I. (1989). Understanding foreign adolescents' difficulties in cross-cultural adjustment: A self-validation model. *Canadian Journal of School Psychology, 5*(1), 41–56. doi:10.1177/082957358900500105

Johnson, L., R., & Sandhu, D. S. (2007). Isolation, adjustment, and acculturation issues of international students: Intervention strategies for counselors. In H. D. Singaravelu & M. Pope (Eds.), *A Handbook for counseling international students in the United States* (pp. 13–35). Alexandria, VA: American Counseling Association.

Jones, S., Johnson-Yale, C., Millermaier, S., & Perez, F. S. (2009). Everyday life, online: U.S. college students' use of the Internet. *First Monday*, *14*(10). Retrieved from http://firstmonday.org/ojs/index.php/fm/article/view/2649

Kahn, J. H., & Williams, M. N. (2003). The impact of prior counseling on predictors of college counseling center use. *Journal of College Counseling, 6*(2), 144–154. doi:10.1002/j.2161-1882.2003.tb00235.x

Kim, B. S. K., & Omizo, M. M. (2003). Asian cultural values, attitudes toward seeking professional psychological help, and willingness to see a counselor. *The Counseling Psychologist, 31*(3), 343–361. doi:10.1177/0011000003031003008

Kim, G., Jang, Y., Chiriboga, D. A., Ma, G. X., & Schonfeld, L. (2010). Factors associated with mental health service use in Latino and Asian immigrant elders. *Aging & Mental Health, 14*(5), 535–542. doi:10.1080/13607860903311758

Kracen, A. C., Mastnak, J. M., Loaiza, K. A., & Matthieu, M. M. (2013). Group therapy among OEF/OIF veterans: Treatment barriers and preferences. *Military Medicine, 178,* e146-e149. doi:10.7205/MILMED-D-12-00213

Lannin, D. G., Vogel, D. L., Brenner, R. E., Abraham, W. T., & Heath, P. J. (2016). Does self-stigma reduce the probability of seeking mental health information? *Journal of Counseling Psychology, 63*(3), 351. doi:10.1037/t00524-000

Lazarus, R. S. (1990). Theory-based stress measurement. *Psychological Inquiry, 1*(1), 3-13. doi:10.1207/s15327965pli0101_1

Lazarus, R. S. (1993). From psychological stress to the emotions: A history of changing outlooks. *Annual Review of Psychology, 44,* 1-21. doi:10.1146/annurev.ps.44.020193.000245

Lee, E. K. (2007). *Effects of three interventions with international college students referred for adjustment and language difficulties: A preliminary study* (Doctoral dissertation). Retrieved from http://digital.library.unt.edu/explore/collections/UNTETD/

Lee, E., Ditchman, N., Fong, M. W. M., Piper, L., & Feigon, M. (2014). Mental health service seeking among Korean international students in the United States: A path analysis. *Journal of Community Psychology*, *42*(6), 639–655. doi:10.1002/jcop.21643

Lee, J. (2014). Asian international students' barriers to joining group counseling. *International Journal of Group Psychotherapy*, *64*(4), 445–464. doi:10.1521/ijgp.2014.64.4.444

Lee, J.-S., Koeske, G. F., & Sales, E. (2004). Social support buffering of acculturative stress: a study of mental health symptoms among Korean international students. *International Journal of Intercultural Relations*, *28*(5), 399–414. doi:10.1016/j.ijintrel.2004.08.005

Leung, S.-O. (2011). A Comparison of Psychometric Properties and Normality in 4-, 5-, 6-, and 11-Point Likert Scales. *Journal of Social Service Research*, *37*(4), 412–421. doi:10.1080/01488376.2011.580697

Li, P., Wong, Y. J., & Toth, P. (2013). Asian international students' willingness to seek counseling: A mixed-methods study. *International Journal for the Advancement of Counselling*, *35*(1), 1–15. doi:10.1007/s10447-012-9163-7

Link, B. G., Cullen, F. T., Struening, E. L., Shrout, P. E., & Dohrenwend, B. P. (1989). A modified labeling theory approach to mental disorders: An empirical assessment. *American Sociological Review*, *54*(3), 400–423. doi:10.2307/2095613

Link, B. G., Phelan, J. C., Bresnahan, M., Stueve, A., & Pescosolido, B. A. (1999). Public conceptions of mental illness: Labels, causes, dangerousness, and social distance. *American Journal of Public Health*, *89*(9), 1328–1333. doi:10.2105/AJPH.89.9.1328

Link, B. G., Struening, E. L., Neese-Todd, S., Asmussen, S., & Phelan, J. C. (2001). Stigma as a barrier to recovery: The consequences of stigma for the self-esteem of people with mental illnesses. *Psychiatric Services*, *52*(12), 1621–1626. doi:10.1176/appi.ps.52.12.1621

Liu, C.-J., Hsiung, P.-C., Chang, K.-J., Liu, Y.-F., Wang, K.-C., Hsiao, F.-H., … Chan, C. L. W. (2008). A study on the efficacy of body-mind-spirit group therapy for patients with breast cancer. *Journal of Clinical Nursing*, *17*(19), 2539–2549. doi:10.1111/j.1365-2702.2008.02296.x

Loya, F., Reddy, R., & Hinshaw, S. P. (2010). Mental illness stigma as a mediator of differences in Caucasian and South Asian college students' attitudes toward psychological counseling. *Journal of Counseling Psychology*, *57*(4), 484–490. doi:10.1037/a0021113

Mackenzie, C. S., Knox, V. J., Gekoski, W. L., & Macaulay, H. L. (2004). An adaptation and extension of the Attitudes Toward Seeking Professional Psychological Help Scale. *Journal of Applied Social Psychology*, *34*(11), 2410–2433. doi:10.1111/j.1559-1816.2004.tb01984.x

MacNair-Semands, R. R., Ogrodniczuk, J. S., & Joyce, A. S. (2010). Structure and initial validation of a short form of the Therapeutic Factors Inventory. *International Journal of Group Psychotherapy*, *60*(2), 245–281. doi:10.1521/ijgp.2010.60.2.245

Mahalik, J. R., Locke, B. D., Ludlow, L. H., Diemer, M. A., Scott, R. P. J., Gottfried, M., & Freitas, G. (2003). Development of the conformity to masculine norms inventory. *Psychology of Men & Masculinity*, *4*(1), 3–25. doi:10.1037/1524-9220.4.1.3

Mallinckrodt, B., & Leong, F. T. (1992). International graduate students, stress, and social support. *Journal of College Student Development*, *33*(1), 71–78.

Marmarosh, C. L., Whipple, R., Schettler, M., Pinhas, S., Wolf, J., & Sayit, S. (2009). Adult attachment styles and group psychotherapy attitudes. *Group Dynamics: Theory, Research, and Practice*, *13*(4), 255–264. doi:10.1037/a0015957

McDermut, W., Miller, I. W., & Brown, R. A. (2001). The Efficacy of Group Psychotherapy for Depression: A Meta-analysis and Review of the Empirical Research. *Clinical Psychology: Science and Practice*, *8*(1), 98–116. doi:10.1093/clipsy.8.1.98

McRoberts, C., Burlingame, G. M., & Hoag, M. J. (1998). Comparative efficacy of individual and group psychotherapy: A meta-analytic perspective. *Group Dynamics: Theory, Research, and Practice*, *2*(2), 101–117. doi:10.1037/1089-2699.2.2.101

Miller, R. L. (1976). Mere exposure, psychological reactance and attitude change. *Public Opinion Quarterly*, *40*(2), 229–233. doi:10.1086/268290

Mistler, B., Reetz, D. R., Krylowitcz, B., & Barr, V. (2012). *The Association for University and College Counseling Center Directors annual survey.* Retrieved from Association for University and College Counseling Center Directors website: http://www.aucccd.org/director-surveys-public

Mori, S. C. (2000). Addressing the mental health concerns of international students. *Journal of Counseling & Development*, *78*(2), 137–144. doi:10.1002/j.1556-6676.2000.tb02571.x

Nam, S. K., Choi, S. I., & Lee, S. M. (2015). Effects of stigma-reducing conditions on intention to seek psychological help among Korean college students with anxious-ambivalent attachment. *Psychological Services*. doi:10.1037/a0038713

Nietzel, M. T., Russell, R. L., Hemmings, K. A., & Gretter, M. L. (1987). Clinical significance of psychotherapy for unipolar depression: A meta-analytic approach to social comparison. *Journal of Consulting and Clinical Psychology, 55*(2), 156–161. doi:10.1037/0022-006X.55.2.156

Nilsson, J. E., Berkel, L. A., Flores, L. Y., & Lucas, M. S. (2004). Utilization rate and presenting concerns of international students at a university counseling center. *Journal of College Student Psychotherapy, 19*(2), 49–59. doi:10.1300/J035v19n02_05

Oei, T. P. S., & Dingle, G. (2008). The effectiveness of group cognitive 127ehavior therapy for unipolar depressive disorders. *Journal of Affective Disorders, 107*(1–3), 5–21. doi:10.1016/j.jad.2007.07.018

Olivas, M., & Li, C. (2006). Understanding stressors of international students in higher education: What college counselors and personnel need to know. *Journal of Instructional Psychology, 33*(3), 217.

Oliver, J. M., Reed, C. K. S., Katz, B. M., & Haugh, J. A. (1999). Students' self-reports of help-seeking: The impact of psychological problems, stress, and demographic variables on utilization of formal and informal support. *Social Behavior and Personality, 27*(2), 109–128. doi:10.2224/sbp.1999.27.2.109

Owie, I. (1982). Social alienation among foreign students. *College Student Journal, 16*(2), 163–165.

Parcover, J. A., Dunton, E. C., Gehlert, K. M., & Mitchell, S. L. (2006). Getting the most from group counseling in college counseling centers. *The Journal for Specialists in Group Work, 31*(1), 37–49. doi:10.1080/01933920500341671

Park, S. Y., Cho, S., Park, Y., Bernstein, K. S., & Shin, J. K. (2013). Factors associated with mental health service utilization among Korean American immigrants. *Community Mental Health Journal*, *49*(6), 765–73. doi:10.1007/s10597-013-9604-8

Parr, G., Bradley, L., & Bingi, R. (1991). Directors' perceptions of the concerns and feelings of international students. *College Student Journal*, *25*(3), 370–376.

Pedersen, P. B. (1991). Counseling international students. *The Counseling Psychologist*, *19*(1), 10–58. doi:10.1177/0011000091191002

Pederson, E. L., & Vogel, D. L. (2007). Male gender role conflict and willingness to seek counseling: Testing a mediation model on college-aged men. *Journal of Counseling Psychology*, *54*(4), 373–384. doi:10.1037/0022-0167.54.4.373

Perlick, D. A., Rosenheck, R. A., Clarkin, J. F., Sirey, J. A., Salahi, J., Struening, E. L., & Link, B. G. (2001). Stigma as a barrier to recovery: Adverse effects of perceived stigma on social adaptation of persons diagnosed with bipolar affective disorder. *Psychiatric Services*, *52*(12), 1627–1632. doi:10.1176/appi.ps.52.12.1627

Peters, S. (2016). *Barriers to group psychotherapy for lesbian, gay, and bisexual college students*. (Doctoral dissertation, Wright State University). Retrieved from https://etd.ohiolink.edu/!etd.send_file?accession=wsupsych1434388016&disposition=attachment

Piper, W. E. (2008). Underutilization of short-term group therapy: Enigmatic or understandable? *Psychotherapy Research*, *18*(2), 127–138. doi:10.1080/10503300701867512

Ponce, F. Q., & Atkinson, D. R. (1989). Mexican-American acculturation, counselor ethnicity, counseling style, and perceived counselor credibility. *Journal of Counseling Psychology*, *36*(2), 203–208. doi:10.1037/0022-0167.36.2.203

Poyrazli, S., & Grahame, K. M. (2007). Barriers to adjustment: Needs of international students within a semi-urban campus community. *Journal of Instructional Psychology*, *34*(1), 28–45.

Raunic, A., & Xenos, S. (2008). University counselling service 129ehavior129on by local and international students and user characteristics: A review. *International Journal for the Advancement of Counselling*, *30*(4), 262–267. doi:10.1007/s10447-008-9062-0

Raven, B. H. (1965). Social influence and power. In I.D. Steiner & M. Fishbein (Eds.), *Current studies in social psychology.* New York, NY: Hold, Rinehart & Winston.

Reetz, D. R., Barr, V., & Krylowitcz, B. (2013). *The Association for University and College Counseling Center Directors annual survey.* Retrieved from Association for University and College Counseling Center Directors website: http://www.aucccd.org/director-surveys-public

Reetz, D. R., Krylowitcz, B., & Mistler, B. (2014). *The Association for University and College Counseling Center Directors annual survey.* Retrieved from Association for University and College Counseling Center Directors website: http://www.aucccd.org/director-surveys-public

Reetz, D. R., Krylowitcz, B., Bershad, C., Lawrence, J. M., & Mistler, B. (2015). *The Association for University and College Counseling Center Directors annual survey.* Retrieved from Association for University and College Counseling Center Directors website: http://www.aucccd.org/director-surveys-public

Reetz, D. R., Bershad, C., LeViness, P., & Whitlock, M. (2016). *The Association for University and College Counseling Center Directors annual survey*. Retrieved from Association for University and College Counseling Center Directors website: http://www.aucccd.org/director-surveys-public

Roberge, P., Marchand, A., Reinharz, D., & Savard, P. (2008). Cognitive-behavioral treatment for panic disorder with agoraphobia: A randomized, controlled trial and cost-effectiveness analysis. *Behavior Modification, 32*(3), 333–351. doi:10.1177/0145445507309025

Ross, L., Bierbrauer, G., & Hoffman, S. (1976). The role of attribution processes in conformity and dissent: Revisiting the Asch situation. *American Psychologist, 31*(2), 148–157. doi:10.1037/0003-066X.31.2.148

Scheel, M. J., Razzhavaikina, T. I., Allen-Portsche, S., Backhaus, A., Madabhushi, S., & Rudy, M. (2008). International students' expectations and Knowledge of counseling after viewing a multicultural counseling video. *Asian Journal of Counselling, 15*(1), 33–55.

Schomerus, G., & Angermeyer, M. C. (2008). Stigma and its impact on help-seeking for mental disorders: What do we know? *Epidemiologia E Psichiatria Sociale, 17*(1), 31–37. doi:10.1017/S1121189X00002669

Schomerus, G., Auer, C., Rhode, D., Luppa, M., Freyberger, H. J., & Schmidt, S. (2012). Personal stigma, problem appraisal and perceived need for professional help in currently untreated depressed persons. *Journal of Affective Disorders, 139*(1), 94–97. doi:10.1016/j.jad.2012.02.022

Sharp, D. M., Power, K. G., & Swanson, V. (2004). A Comparison of the efficacy and acceptability of group versus individual cognitive behavior therapy in the treatment of

panic disorder and agoraphobia in primary care. *Clinical Psychology & Psychotherapy*, *11*(2), 73–82. doi:10.1002/cpp.393

Sharp, W., Hargrove, D. S., Johnson, L., & Deal, W. P. (2006). Mental health education: An evaluation of a classroom based strategy to modify help seeking for mental health problems. *Journal of College Student Development*, *47*(4), 419–438. doi:10.1353/csd.2006.0051

Shea, M., & Yeh, C. J. (2008). Asian American students' cultural values, stigma, and relational self-construal: Correlates and attitudes toward professional help seeking. *Journal of Mental Health Counseling*, *30*(2), 157–172. doi:10.17744/mehc.30.2.g662g5l2r1352198

Shechtman, Z., & Kiezel, A. (2016). Why do people prefer individual therapy over group therapy? *International Journal of Group Psychotherapy*, *66*(4), 571–591. doi:10.1080/00207284.2016.1180042

Shechtman, Z., Vogel, D., & Maman, N. (2010). Seeking psychological help: A comparison of individual and group treatment. *Psychotherapy Research*, *20*(1), 30–36.

Sibicky, M., & Dovidio, J. F. (1986). Stigma of psychological therapy: Stereotypes, interpersonal reactions, and the self-fulfilling prophecy. *Journal of Counseling Psychology*, *33*(2), 148–154. doi:10.1037/0022-0167.33.2.148

Sodowsky, G. R. (1991). Effects of culturally consistent counseling tasks on American and international student observers' perception of counselor credibility: A preliminary investigation. *Journal of Counseling & Development*, *69*(3), 253–256. doi:10.1002/j.1556-6676.1991.tb01498.x

Song, H., Sun, Y., Zhuzha, K., Hayes, D., Kluck, A. S., & Cornish, M. (2017, August). *Mechanisms used through university counseling centers' websites to encourage group*

counseling. Poster presented at the annual meeting of the American Psychological Association, Washington, D. C.

Stoyell, M. C. (2014). *Barriers to group psychotherapy for Latino students in the United States* (Doctoral dissertation, Wright State University). Retrieved from https://etd.ohiolink.edu/rws_etd/document/get/wsupsych1375742364/inline

Stoynoff, S. (1997). Factors associated with international students' academic achievement. *Journal of Instructional Psychology, 24*(1), 56–68.

Strauss, B., Spangenberg, L., Brähler, E., & Bormann, B. (2015). Attitudes towards (psychotherapy) groups: Results of a survey in a representative sample. *International Journal of Group Psychotherapy*, *65*(3), 410–430. doi:10.1521/ijgp_2014_64_001

Strong, S. R. (1968). Counseling: An Interpersonal Influence Process. *Journal of Counseling Psychology*, *15*(3), 215–224. doi:10.1037/h0020229

Suri, R. (2015). *Barriers to group psychotherapy among racially and ethnically diverse college students* (Doctoral dissertation, Wright State University). Retrieved from https://etd.ohiolink.edu/!etd.send_file?accession=wsupsych1433117171&disposition=inline

Tavakoli, S., Lumley, M. A., Hijazi, A. M., Slavin-Spenny, O. M., & Parris, G. P. (2009). Effects of assertiveness training and expressive writing on acculturative stress in international students: A randomized trial. *Journal of Counseling Psychology, 56*(4), 590–596. doi:10.1037/a0016634

Tedeschi, G. J., & Willis, F. N. (1993). Attitudes toward counseling among Asian international and native Caucasian students. *Journal of College Student Psychotherapy, 7*(4), 43–54. doi:10.1300/J035v07n04_04

Thompson, F. T., & Levine, D. U. (1997). Examples of easily explainable suppressor variables in multiple regression research. *Multiple Linear Regression Viewpoints, 24,* 11–13.

Topkaya, N., Vogel, D. L., & Brenner, R. E. (2017). Examination of the stigmas toward help seeking among Turkish college students. *Journal of Counseling & Development*, *95*(2), 213–225. doi:10.1002/jcad.12133

Triandis, H. C. (1995). *Individualism & collectivism.* Boulder, CO, US: Westview Press.

Tsega, T. W. (2014). *Psychological and personal variables as predictors of the willingness of international students to seek formal and informal counseling help.* (Doctoral Dissertation, University of Wyoming). Retrieved from http://search.proquest.com.spot.lib.auburn.edu/docview/1541537227

Türküm, A. S. (2005). Who seeks help? Examining the differences in attitude of Turkish university students toward seeking psychological help by gender, gender roles, and help-seeking experiences. *Journal of Men's Studies*, *13*(3), 389–401.

U.S. News & World Report (2017). *Higher education rankings: Most international students.* Retrieved from http://colleges.usnews.rankingsandreviews.com/best-colleges/rankings/national-universities/most-international

University of Florida Counseling & Wellness Center (n.d.). *Common questions about group therapy and workshops* [webpage]. Retrieved from http://www.counseling.ufl.edu/cwc/common-questions-about-group

University of Illinois at Urbana-Champaign Counseling Center (2015). *Group counseling* [webpage]. Retrieved from https://counselingcenter.illinois.edu/counseling/services/group-counseling

Vogel, D. L., Armstrong, P. I., Tsai, P.-C., Wade, N. G., Hammer, J. H., Efstathiou, G., Holtham, E., Kouvaraki, E., Kiao, H-Y., Shechtman, Z., & Topkaya, N. (2013). Cross-cultural validity of the Self-Stigma of Seeking Help (SSOSH) scale: Examination across six nations. *Journal of Counseling Psychology*, *60*(2), 303–310. doi:10.1037/a0032055

Vogel, D. L., Heath, P. J., Engel, K. E., Brenner, R. E., Strass, H. A., Al-Darmaki, F. R., Armstrong, P. I., Galbraith, N., Galbraith, V., Baptista, M. N., Gonçalves, M., Liao, H-Y., Mackenzie, C., Mak, W. W. S., Rubin, M., Topkaya, N., Wang, Y-F., & Zlati, A. (2017). Cross-cultural validation of the Perceptions of Stigmatization by Others for Seeking Help (PSOSH) Scale. *Stigma and Health*. doi:10.1037/sah0000119

Vogel, D. L., Heimerdinger-Edwards, S. R., Hammer, J. H., & Hubbard, A. (2011). "Boys don't cry": Examination of the links between endorsement of masculine norms, self-stigma, and help-seeking attitudes for men from diverse backgrounds. *Journal of Counseling Psychology*, *58*(3), 368. doi:10.1037/a0023688

Vogel, D. L., Shechtman, Z., & Wade, N. G. (2010). The role of public and self-stigma in predicting attitudes toward group counseling. *The Counseling Psychologist*, *38*(7), 904–922. doi:10.1177/0011000010368297

Vogel, D. L., Wade, N. G., & Ascheman, P. L. (2009). Measuring perceptions of stigmatization by others for seeking psychological help: Reliability and validity of a new stigma scale with college students. *Journal of Counseling Psychology*, *56*(2), 301–308. doi:10.1037/a0014903

Vogel, D. L., Wade, N. G., & Haake, S. (2006). Measuring the self-stigma associated with seeking psychological help. *Journal of Counseling Psychology*, *53*(3), 325–337. doi:10.1037/0022-0167.53.3.325

Vogel, D. L., Wade, N. G., & Hackler, A. H. (2007a). Perceived public stigma and the willingness to seek counseling: The mediating roles of self-stigma and attitudes toward counseling. *Journal of Counseling Psychology*, *54*(1), 40–50. doi:10.1037/0022-0167.54.1.40

Vogel, D. L., Wade, N. G., Wester, S. R., Larson, L., & Hackler, A. H. (2007b). Seeking help from a mental health professional: The influence of one's social network. *Journal of Clinical Psychology*, *63*(3), 233–245. doi:10.1002/jclp.20345

Vogel, D. L., Wester, S. R., Wei, M., & Boysen, G. A. (2005). The role of outcome expectations and attitudes on decisions to seek professional help. *Journal of Counseling Psychology*, *52*(4), 459–470. doi:10.1037/0022-0167.52.4.459

Wade, N. G., Post, B. C., Cornish, M. A., Vogel, D. L., & Tucker, J. R. (2011). Predictors of the change in self-stigma following a single session of group counseling. *Journal of Counseling Psychology*, *58*(2), 170. doi:10.1037/a0022630

Wahl, O. F. (1999). Mental health consumers' experience of stigma. *Schizophrenia Bulletin*, *25*(3), 467–478. doi:10.1093/oxfordjournals.schbul.a033394

Walker, L., A., & Conyne, R., K. (2007). Group work with international students. In *H. D. Singaravelu & M. Pope (Eds.), A Handbook for Counseling International Students in the United States* (pp. 299–309). Alexandria, VA: American Counseling Association.

Walter, J. P., Yon, K. J., & Skovholt, T. M. (2012). Differences in beliefs about psychological services in the relationship between sociorace and one's social network. *Journal of Counseling & Development*, *90*(2), 191–199. doi:10.1111/j.1556-6676.2012.00024.x

Wei, M., Liang, Y.-S., Du, Y., Botello, R., & Li, C.-I. (2015). Moderating effects of perceived language discrimination on mental health outcomes among Chinese international

students. *Asian American Journal of Psychology*, *6*(3), 213–222. doi:10.1037/aap0000021

Yakunina, E. S., Weigold, I. K., & McCarthy, A. S. (2011). Group counseling with international students: Practical, ethical, and cultural considerations. *Journal of College Student Psychotherapy*, *25*(1), 67–78. doi:10.1080/87568225.2011.532672

Yakushko, O., Davidson, M. M., & Sanford-Martens, T. C. (2008). Seeking help in a foreign land: International students' use patterns for a U.S. university counseling center. *Journal of College Counseling*, *11*(1), 6–18. doi:10.1002/j.2161-1882.2008.tb00020.x

Yalom, I. D., & Leszcz, M. (2005). *The theory and practice of group psychotherapy* (5th ed.). New York, NY: Basic Books.

Yamaguchi, S., Wu, S.-I., Biswas, M., Yate, M., Aoki, Y., Barley, E. A., & Thornicroft, G. (2013). Effects of short-term interventions to reduce mental health–related stigma in university or college students: A systematic review. *The Journal of Nervous and Mental Disease*, *201*(6), 490–503. doi:10.1097/NMD.0b013e31829480df

Yau, T. Y. (2004). Guidelines for facilitating groups with international college students. In J. L. DeLucia-Waack, D. A. Gerrity, C. R. Kalodner, & M. T. Riva (Eds.), *Handbook of group counseling and psychotherapy.* (pp. 253–264). Thousand Oaks, CA: Sage Publications Ltd.

Yeh, C. J., & Inose, M. (2003). International students' reported English fluency, social support satisfaction, and social connectedness as predictors of acculturative stress. *Counselling Psychology Quarterly*, *16*(1), 15–28. doi:10.1080/0951507031000114058

Yılmaz, E., & Okanlı, A. (2015). The effect of internalized stigma on the adherence to treatment in patients with schizophrenia. *Archives of Psychiatric Nursing, 29*(5), 297–301. doi:10.1016/j.apnu.2015.05.006

Yoo, S.-K., & Skovholt, T. M. (2001). Cross-cultural examination of depression expression and help-seeking behavior: A comparative study of American and Korean college students. *Journal of College Counseling, 4*(1), 10. doi:10.1002/j.2161-1882.2001.tb00179.x

Yoon, E., & Jepsen, D. A. (2008). Expectations of and attitudes toward counseling: A comparison of Asian international and U.S. graduate students. *International Journal for the Advancement of Counselling, 30*(2), 116–127. doi:10.1007/s10447-008-9050-4

Yoon, E., & Portman, T. A. A. (2004). Critical issues of literature on counseling international students. *Journal of Multicultural Counseling and Development, 32*(1), 33–44. doi:10.1002/j.2161-1912.2004.tb00359.x

Yorgason, J. B., Linville, D., & Zitzman, B. (2008). Mental health among college students: Do those who need services know about and use them? *Journal of American College Health, 57*(2), 173–181. doi:10.3200/JACH.57.2.173-182

Zajonc, R. B. (1968). Attitudinal effects of mere exposure. *Journal of Personality and Social Psychology, 9*(2, Pt.2), 1–27. doi:10.1037/h0025848

Zhang, N., & Dixon, D. N. (2001). Acculturation and attitudes of Asian international students toward seeking psychological help. *Journal of Multicultural Counseling and Development, 31*(3), 205–222. doi:10.1002/j.2161-1912.2003.tb00544.x

Zhuzha, K. (2016a). *International students' thoughts about counseling services: Georgia Institute of Technology sample*. Unpublished report. See Appendix A.

Zhuzha, K. (2016b). *Barriers to group therapy identified by international students: A pilot study*. Unpublished manuscript, Department of Education, Auburn University, Auburn, AL. See Appendix B.

Zhuzha, K., Sun, Y., Kluck, A. S., & Deaton, L. V. (2016, August). *Why not group therapy? Predictors of international students' attitudes towards group treatment.* Poster presented at the annual meeting of the American Psychological Association, Denver, CO.

Appendix A

International Students' Thoughts about Counseling Services: Georgia Institute of Technology Sample

by

Kseniya Zhuzha

Research study report prepared for
Georgia Institute of Technology International Student Office
and Counseling Services

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August 1st, 2016

Present study investigated:

- International students' general knowledge about individual and group therapy and their knowledge about counseling services available on campus.
- International students' mental health concerns.
- International students' intentions to seek individual and group therapy.

Method

Participants

Participants at Georgia Institute of Technology were recruited via university emails and completed the survey online, hosted in Qualtrics. As an incentive, participants had the choice to enter a drawing for $10 and $15 Starbucks gift cards. One hundred sixty-two international students from Georgia Institute of Technology participated in the study. See Table A1 for demographics.

Measures

Knowledge about individual and group therapy and counseling services. Knowledge about individual and group therapy was measured using two questions (1 for each type of therapy) modeled after Yogarson, Linville, & Zitzman (2008). Participants reported their knowledge using a 5-point Likert scale anchored with "I have never heard of individual/group therapy before" and "I could easily explain what individual/group therapy is to others."

In addition, participants were asked whether, to their knowledge, counseling services were available on campus and if they were free of charge to them as international students. For both questions response options were "Yes", "No," and "I don't know."

Mental health concerns and intentions to seek individual and group therapy.

Personal Problems Inventory (PPI) and Intentions to Seek Counseling Inventory (ISCI; adopted by Schechtman, Vogel, & Maman [2010] to have individual and group therapy subscales) with 24 items (Cash, et al., 1975; Gim, Atkinson, & Whiteley, 1990; Ponce & Atkinson, 1989) were modified by researchers to ensure understanding of the items by international students and were tested in a pilot study. In the PPI and ISCI participants were presented with 24 problems commonly faced by college students. For the PPI, participants were asked to rate the severity with which each problem had affected them in the last year, and for the ISCI they reported how willing they were to seek individual and group therapy for each concern (all 5-point Likert scales). Participants were asked to presume that counseling services are available and free of charge on their campus when answering these questions.

Results and Discussion

Knowledge about Therapy and Counseling Services

On average, students reported that they were somewhat knowledgeable about individual therapy and knew slightly less about group therapy, $t(161) = 2.93$, $p = .004$, $d = .18$. Students who have had therapy in the past, were more knowledgeable about individual, $t(160) = 6.70$, $p < .001$ and group therapy than students with no prior therapy experience, $t(160) = 5.31$, $p < .001$. Students who were more knowledgeable about one type of therapy also on average knew more about the other type, $r = .67$, $p < .001$.

While majority of the students knew that counseling services are available at GT for them as international students ($n = 117$ or 72.2%), 2 students erroneously thought that counseling services were not available (1.2%), and 43 (36.5%) did not know if they were available to them. A little less than half of the students participating in the study knew that

counseling services at GT were free (n = 73 or 45.1%), 12 erroneously thought that they must pay for the services (7.4%), and 71 said that they did not know whether the services were free (43.8%).

Severity of Mental Health Concerns

Composite mental health severity score was calculated by taking the mean of participants' responses to 24 items. Thus, possible range for the mental health severity score was 1 to 5.

When all mental health concerns were considered together, students on average reported that they were slightly affected by the concerns (M = 2.01, SD = .64) in the last year. Seventeen students (10.5%) reported that they were not at all or slightly affected by all of the concerns, 33 students (20.4%) reported that they were somewhat affected by at least 1 concern but were not significantly affected by any, and 112 students (69.1%) said that they were significantly or very significantly affected by at least 1 mental health concern in the last year.

Top 6 mental health concerns endorsed by international students were general anxiety, financial problems, career problems, depression, shyness, and isolation while bottom 6 concerns were drug use problems, alcohol use problems, sexual functioning problems, ethnic identity confusion, conflicts with parents, and general health issues.

Men and women reported experiencing similar levels of distress, $t(160) = -1.83$, p = .072. Undergraduate students on average reported being slightly more affected by mental health concerns than graduate students, $t(159) = 2.45$, p = .015, d = .44. Students who had been to therapy in the past reported more mental health concerns than students who have never been to therapy, $t(160) = 4.83$, $p < .001$. This could indicate that students seek help when they

experience the need. However, it is also possible that students who have been in therapy before are more aware of their mental health needs.

Intentions to Seek Individual and Group Therapy

Composite score for intentions to seek individual as well as group therapy was computed by taking the mean of participants' responses to 24 items. Possible ranges for the intentions to seek individual and group therapy scores were 1 to 5.

General trends. International students at GT on average said that they were somewhat willing to seek individual therapy for mental health concerns (M = 2.71, SD = .99). Nine students (4.6%) said that they were not willing to attend individual therapy for any mental health concern. Twenty-two (13.6%) said that they were at most somewhat willing to seek individual therapy. One hundred thirty-one students (80.9%) said that they were willing to seek individual therapy for at least 1 mental health concern. Students' willingness to seek group therapy was on average slightly lower than their willingness to seek individual therapy $t(161) = 8.49$, $p < .001$, $d = .32$. On average students said that they were not really willing or somewhat willing to seek group therapy (M = 2.40, SD = .98). Twenty-seven students (16.7%) said that they were not willing to attend group therapy for any mental health concern. Twenty-three (14.2%) said that they were at most somewhat willing to seek group therapy. One hundred twelve students (69.1%) said that they were willing to seek group therapy for at least 1 mental health concern.

Willingness to seek therapy and mental health concerns. International students were most willing to attend individual therapy for career problems, depression, general anxiety, and speech anxiety. Students were least willing to attend individual therapy for drug use problems, alcohol use problems, ethnic identity confusion, and sexual functioning problems. In regard to

group therapy, international students were most willing to seek this treatment for career problems, speech anxiety, general anxiety, and problems with making friends. Students were least willing to attend group therapy for sexual functioning problems, drug use problems, alcohol use problems, and problems with parents.

Note that many of the concerns for which students were most and least willing to attend individual or group therapy match the concerns students reported affecting them most and least in the first place. In fact, no matter students' knowledge about or having prior experience with individual or group therapy, as students reported more mental health concerns, they were also more willing to seek both types of therapy, $\beta_{indiv.} = .17$, $p = .020$; $\beta_{group} = .17$, $p = .025$. Moreover, it appears that for GT international students, presence and recognition of mental health concerns is more important for their willingness to seek mental health treatment (individual or group) than their prior experience with therapy or their knowledge about therapy.

Interesting to note that trouble making friends was among top concerns students said they would seek group therapy for but was not among top concerns they said affected them in the last year. Since group therapy is very suitable for treatment of relational concerns, this finding may reflect international students' ability to recognize the utility of this mode of treatment.

Willingness to seek therapy and other factors. Men and women had similar intentions to seek individual and group therapy, $t_{indiv}(160) = .419$, $p = .683$; $t_{group}(160) = .65$, $p = .524$. Age also was not related to students' willingness to seek either form of therapy treatment, $r_{indiv.} = .05$, $p = .528$; $r_{group} = .04$, $p = .622$. On the other hand, as students spent more time on U.S. college campuses, they were more willing to seek individual and group therapy, $r_{indiv.} = .17$, $p = .028$; $r_{group} = .19$, $p = .014$. It is possible that with increased time on campus, students hear more

about counseling services, which could in turn normalize seeking therapy. Acculturation, which was not measured in the present study, can also increase with years spent in the U.S. and has been previously shown to relate to better attitudes towards professional psychological help (Atkinson & Gim, 1989).

Important to note that intentions to seek individual and group therapy were highly correlated, $r = .88$, $p < .001$. This is the reason for very similar results for intentions to seek individual and group therapy you saw above. This may mean that, when students' willingness to seek one form of therapy increases, they also become more open to other types of therapy. Another reason that likely contributed to such high correlation is the way questions were presented in the survey. Questions about willingness to attend each type of therapy appeared side by side and their wording was very similar. Thus, in the real world, intentions to seek individual and group therapy may diverge more than what was reflected in the present study.

Conclusions and Implications

Results of the study indicate that international students at GT on average are moderately knowledgeable about individual therapy and slightly less so about group therapy. A limitation to this finding is that knowledge was assessed using 1 question for each type of therapy. Although researchers found support for validity of the assessment, participants' responses are naturally biased by the wording of the question.

Next, results demonstrated that most international students know that counseling services are available to them as international students at GT, but it seems that many students don't know if they are free, and few erroneously believe that they are not. Current study did not investigate whether this knowledge affects students' propensity to schedule an appointment

with counseling services or to refer a peer. Nevertheless, continuing to emphasize that counseling services are available and free to international students may be important.

On average students reported low mental health concerns, but most said that they were affected significantly at least by 1 concern in the last year. Undergraduate students reported slightly more mental health concerns than graduate students. It should be noted that the survey was taken at the end of May. As it was the beginning of the summer semester and some students may have been taking the summer off, stress could have been lower than at other times of the year. It is possible that feeling low stress level at the time of the study led students to underestimate their mental health concerns throughout the year. Furthermore, the results reflect only 24 mental health concerns listed in the assessment.

Most students said that they were willing to seek individual therapy for at least 1 mental health concern, which is a very good sign, and were slightly less willing to consider group therapy. A limitation to the latter finding is that, in the current study, questions about intentions to seek individual and group therapy were presented next to each other. It is possible that it led participants to think in terms of choice of one form of therapy over another. Nevertheless, it could be argued that it is representative of some real-world situations when individual and group therapy are both presented as treatment options. Further research into students' willingness to seek group therapy and what may affect it is needed.

Problems related to career was the concern for which students said they would be most willing to seek group therapy and was among top concerns that students said affected them in the last year. Thus, when referring students to the international student support group, for example, it may be worth emphasizing that career concerns are among common issues that can be discussed in the group. Instituting a group for international students that focuses specifically

on career issues (from picking a major to applying for graduate schools or jobs) may also be of consideration. Further research into the need for such a group on campus may be warranted.

Findings also suggest that students who experience and recognize experiencing more mental health issues are more open to individual and group therapy. Thus, when referring students to counseling, taking time to discuss their concerns and how individual or group therapy can address those may be beneficial. The finding also underscores the importance of outreach interventions that help students recognize mental health needs in themselves and their peers. A limitation of this finding is not being able to account for mental health stigma which can affect both, students' disclosure of concerns and their willingness to seek therapy.

Table A1. *Characteristics of the sample*.

Characteristic	#	%
Gender		
Man	95	58.64
Woman	67	41.36
Age		
19-23	55	33.95
24-29	86	53.09
30-40	21	12.96
Years at U.S. Universities		
1 or less	38	23.46
1.5-4	78	48.15
4-11	46	28.40
Degree		
Undergrad	45	28.40
Grad	116	71.60
Discipline		
Science/Engineering/Math	146	90.12
Social/Humanities/Arts	14	8.64
Region of origin		
1 – East Asia	66	40.74
2 – South Asia/Africa	64	39.51
3 – Middle East/Eastern & Southern Europe	15	9.26
4 – EU/Canada/New Zealand/Central & South America/Caribbean	13	8.02
Race		
Asian/Pacific Islander	137	84.57
White	15	9.26
Hispanic/Latino(a)	5	3.09
Black	4	2.47
Multiracial	0	0.00

(continued)

Characteristic	#	%
Individual Therapy Exp.		
Yes	38	24.07
No	124	76.54
Group Therapy Exp.		
Yes	14	8.64
No	148	91.36

Note. $N = 162$.

Appendix B

Barriers to Group Therapy Identified by International Students: A Pilot Study

by

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December 1st, 2016

Barriers to Group Therapy Identified by International Students: A Pilot Study

One of the psychological services commonly available at university counseling centers is group therapy. Meta-analyses show that group therapy is an effective form of therapy and is at least as effective as individual therapy (e.g., McRoberts, Burlingame, & Hoag, 1998). This makes group therapy a cost-effective mode of treatment, which has become increasingly important since 31% of counseling centers reported having a waitlist during the 2013-2014 school year (Reetz, Krylowitcz, & Mistler, 2014). Since loneliness and social isolation are some of the issues commonly faced by international students, it has been repeatedly suggested that group therapy could be advantageous for this population as it could provide opportunities for interpersonal learning and acquisition of coping skills in a new cultural environment (e.g., Walker & Conyne, 2007; Yakunina, Weigold, & McCarthy, 2011). However, literature suggests that consumers may experience resistance towards group treatment and that groups are underutilized in comparison to individual therapy (Parcover, Dunton, Gehlert, & Mitchell, 2006, 2006; Piper, 2008). Little is known about international students' attitudes towards group treatment. Although literature discusses theoretical barriers to group treatment in this population, to my knowledge, no study has empirically examined whether these barriers in fact exist. The purpose of the present study was to create a checklist of barriers based on the existing literature and examine the extent to which they may prevent international students from joining group therapy.

Method

Participants

Participants were recruited via Facebook posts, fliers, and university emails. Participants completed the study online, which was hosted in Qualtrics. As an incentive, participants had the choice to enter a drawing for $10 and $15 Starbucks gift cards.

One hundred seventy-two participants dropped out at some point during the survey, and 243 undergraduate and graduate international students completed the study. Only individuals who self-reported being 19 years of age or older, being current international students working towards a degree in the U.S., and being comfortable with written and spoken English participated in the study. Majority of participants came from 2 large public institutions in the Southern United States. A total of 47 different countries were represented in the sample. See Table B1 for demographic characteristics of the sample.

Measure

Fourteen-item Group Therapy Barriers Checklist (GTBC) was created to explore factors that may prevent international students from considering group therapy as treatment. Some items were adopted from Group Therapy Survey-Revised (GTS-R; Carter, Mitchell, & Krautheim, 2001) and others were written based on the barriers outlined in theoretical literature (Lee, 2014; Parcover et al., 2006; Piper, 2008; Walker & Conyne, 2007; Yakunina et al., 2011; Yau, 2003). Each item stated a potential concern about group therapy (e.g., “I will feel uncomfortable disclosing personal problems and/or expressing emotions in a group of people,” “There may be another international student in the group whom I know directly or through my other friends”), and participants were asked to indicate the extent to which it would prevent

them from seeking group therapy (5-point Likert scale). Participants also had an option to say that they do not have a given concern.

Results and Discussion

First, the results indicated that the majority of international students could relate to 13 out of 14 barriers on the checklist at least to some extent (see Table B2). The only concern about group therapy that more than 50% of participants reported not having was being embarrassed about their English (item #6). Given that only international students who self-reported being comfortable with written and spoken English were included in the study, this finding is not surprising.

Participants who endorsed having concerns about group therapy reported that, on average, these concerns somewhat affected their willingness to try group therapy (M = 3.04, SD = 1.02). In other words, considered all together, concerns that international students endorsed about group therapy appear to be a moderate barrier to their seeking of group treatment. One-sample t-tests were then conducted to determine how prevalent some barriers were among international students. Results indicated that worry about not being able to understand what is going in the group (item #14; M = 2.65, SD = 1.21) and feeling embarrassed about English (item #6; M = 2.88, SD = 1.31) were less significant barriers in the current sample, $t_{14}(127) = -3.75$, $p < .001$; $t_6(112) = -2.89$, $p = .005$. Once again, this is not surprising given that all participants in the study said that they were comfortable with spoken and written English.

Furthermore, fear that they may be the only person of their race or culture in the group (item #1; M = 2.72, SD = 1.26) and fear that there may be another group member from their home culture in the group (item #4; M = 2.68, SD = 1.30) were less meaningful barriers among the rest, $t_1(129) = -2.84$, $p = .005$; $t_4(149) = -3.37$, $p = .001$. Limited literature is available on

clients' preferences regarding other members of their ethnicity being present in a therapy group. One study found that Black students were more willing to do group therapy when they expected other Black students to be in the group (Harris, 2013), and another study found a similar effect for Latino students (Stoyell, 2014). Yet, another study found that expectations of students identifying as White and as ethnic minorities other than Black were equally willing to attend group therapy regardless of their expectations about other members of their ethnicity being present in the group (Suri, 2015). It should be noted that few participants in the present study identified as Black or Latinos (see Table B1), which could explain discrepancies between current findings and those of the above cited studies. Therefore, inference that international students differ from domestic students in their preference to have other members of their ethnicity be present in a therapy group cannot be drawn.

On the other hand, a recent study found that Asian international students were less likely to self-disclose but felt more comfortable with providing feedback when another member from their home country was present (Lee, 2014). However, how this discomfort for self-disclosure and comfort providing feedback may translate into students' willingness to attend group therapy is not clear. To further examine if East Asian international students in the present sample differed from other international students in perceiving members from their home culture being in their therapy group as a barrier, ANCOVA analysis was conducted. Results suggest that region of origin had no significant effect on students' ratings of items 1 and 4 as barriers to group therapy, $F(4, 460) = 1.29$, $p = .271$. In other words, East Asian students were no more likely to think of other students from their home culture participating in a therapy group as a barrier than international students from other regions of the world. Thus, it can be concluded that being the only person of their race or culture in the group and having another member from

their home culture in the group are perceived as less impactful barriers to group therapy by international students in the current sample, including students from East Asia.

When it comes to more prominent barriers (see Table B2), feeling uncomfortable disclosing personal information or expressing emotions in a group (item# 12; $M = 3.37$, $SD = 1.25$) and fear that group members would talk about their problems outside of the group (item# 9; $M = 3.39$, $SD = 1.28$) were rated as more salient concerns among the rest, $t_{12}(191) = 3.72$, $p < .001$; $t_9(176) = 3.71$, $p < .001$. When it comes to the item 12, several authors cited this as a potential concern for international students (Lee, 2014; Walker & Conyne, 2007; Yakunina et al., 2011; Yau, 2003), and the present study provides empirical support for this hypothesis. Item 9, on the other hand, is discussed as a common concern for any individual considering group therapy (Carter et al., 2001), and the present finding confirms that international students are likely to share it as well.

Several limitations of the present study should be noted. There was a sizable drop-out rate throughout the study, and the resulting sample may not be fully representative of the international student population. Furthermore, GTBC is a newly constructed measure, and a couple of participants commented that the way questions were phrased was confusing, posing a threat to reliability and validity of the scale. Further study of reliability and validity of the present measure is warranted.

Conclusion

The purpose of the present pilot study was to gather preliminary evidence regarding barriers towards group therapy that international students endorse. Fourteen-item Group Therapy Barriers Checklist (GTBC) was created using available literature on concerns that may prevent international students from considering group therapy as a treatment. Participants were

243 international students who reported being comfortable with spoken and written English. Results suggest that language barrier was not a concern for international students in the present study. Students were also not as concerned about ethnicity or culture of other group members. On the other hand, feeling uncomfortable with disclosing personal information or expressing emotion in a group and fear that other members may discuss their problems outside of the group were reported as more prominent barriers to group therapy.

Table B1. *Characteristics of the sample.*

Characteristic	#	%
Gender		
Man	131	53.91
Woman	109	44.86
Queer	1	<0.01
Otherkin	2	0.01
Age		
19-23	78	32.01
24-29	132	54.32
30-40	32	13.17
Years at U.S. Universities		
1 or less	56	23.04
1.5-4	120	49.38
4-11	66	27.16
Degree		
Undergrad	62	25.51
Grad	179	73.66
Discipline		
Science/Engineering/Math	195	80.25
Social/Humanities/Arts	43	17.70
University		
Auburn	55	22.63
Georgia Tech	162	66.67
Other	25	10.29
Region of origin		
1 – East Asia	91	37.45
2 – South Asia/Africa	84	34.57
3 – Middle East/Eastern & Southern Europe	30	13.17
4 – EU/Canada/New Zealand/Central & South America/Caribbean	30	12.34

(continued)

Characteristic	#	%
Race		
Asian/Pacific Islander	183	75.31
White	41	16.87
Hispanic/Latino(a)	6	2.47
Black	4	1.65
Multiracial	5	2.06
Individual Therapy Exp.		
Yes	62	25.51
No	181	74.49
Group Therapy Exp.		
Yes	19	7.82
No	224	92.18

Note. $N = 243$.

Table B2. *Clients' endorsement of barriers to group therapy as measured by GTBC.*

Item	I don't have this concern		This concern is true for me	
	#	%	#	%
1 – I may be the only person of my own race or culture in the group	113	46.50	130	53.50
2 – I think group counseling is less effective than individual counseling	67	27.76	175	72.02
3 – I believe that group counseling is where you get "dumped" when you cannot be seen by an individual counselor	91	37.45	151	62.14
4 – There may be another member in the group from my home country or culture	92	37.86	150	61.73
5 – There may be a member in the group from a country or culture that my own country or culture has a conflict with	117	48.13	125	51.44
6 – I feel uncomfortable or embarrassed about my English because it is not my first language	130	53.50	113	46.50
7 – I will feel uncomfortable using direct communication in the group, such as outwardly stating my opinions and preferences or confronting and interrupting others	81	33.33	161	66.26
8 – There may be another international student in the group whom I know directly or through my other friends	67	27.57	174	71.60
9 – I fear that others would talk about my problems outside of the counseling group	64	26.34	177	72.84
10 – I do not really want to listen to other group members' problems or share my therapist with others	80	32.92	162	66.67
11 – I am afraid that others will not understand me or problems I am dealing with because of cultural differences	75	30.86	167	68.72

(continued)

Item	I don't have this concern		This concern is true for me	
	#	%	#	%
12 – I will feel uncomfortable disclosing personal problems and/or expressing emotions in a group of people	50	20.58	192	79.01
13 – I am worried that group therapy is too unpredictable	84	34.57	158	65.02
14 – I am worried that I will not understand what is going on in the group	114	46.91	128	52.67

Note. $N = 243$.

Appendix C:

Screening Questions

[Responses that allowed participants to proceed to the survey are marked in bold]

1. How old are you?
    - 17 or younger
    - **18 or older**
2. Are you comfortable with spoken and written English (e.g., able to sustain a conversation in English with a native speaker; able to read and understand a class syllabus in English)?
    - **Yes**
    - No
3. What degree program are you currently enrolled in?
    - **Undergraduate (e.g., Associates, Bachelors)**
    - **Graduate (e.g., Masters, Doctorate)**
    - I am taking classes, but I am not enrolled in a program that will result in a degree
    - I am not a student
4. Will you be enrolled as a *student* at your current university at least through the end of the Fall semester of 2017?
    - **Yes**
    - No
5. What type of a student are you?
    - **International student enrolled in a U.S. college or university**

- **Exchange student enrolled in a U.S. college or university**
- Domestic student enrolled in a U.S. college or university
- Student at a university outside of the U.S.
- I am not a student

If 2nd option is selected, participants will be directed to the follow-up question:

6. How long is your exchange program?
    - Less than 2 academic years
    - **2 academic years or longer**

[Participants who did not meet all of the criteria for participation saw the following message:] Thank you for your interest in the study. Unfortunately, you are not able to participate at this time because you do not meet the criteria listed in the information letter.

Appendix D:

Video Scripts

I-1: Group Information

Elliot: Hello and thank you for watching. My name is Elliot, and, in a moment, I would like to introduce you to Rhea, who is a therapist at a university counseling center. I am hoping she can talk to us today a little bit about group therapy.

Rhea: Hi, I am Rhea. Thank you, Elliot for the introduction. I am glad to be with you all today.

Elliot: Rhea, could you begin by telling us what group therapy is and what concerns can be addressed in group therapy?

Rhea: Yes! So therapy groups are typically facilitated by 1 or 2 therapists and include 5 to 10 students. Generally, groups meet weekly for an hour to an hour and a half. Some groups are focused on particular topics or communities like stress management or graduate school, while others are more general and focus on resolving a range of issues, such as depression, anxiety, or relationship problems. Throughout group therapy, members get to discuss issues that are concerning them, practice new skills, and offer each other support and feedback.

Elliot: And is group therapy effective and what could be some of the unique benefits of group?

Rhea: Great question! Yes, group therapy is an effective treatment. Actually, we know from research that overall group therapy is as effective as individual therapy. Groups are especially helpful in learning to build trust, self-acceptance, and communication skills, which are some of common concerns among university students.

Elliot: And is group therapy a good option for international students?

Rhea: Group therapy could also be a great option for international students as well. As you can imagine, building relationships in a new culture and navigating new social and academic systems can be very challenging. Group is a great place to learn more about how you relate to others in this culture and how to address cross-cultural barriers.

Elliot: Thank you. I assume that in group therapy, as in any other, you have to talk about issues that bother you. But here you have to tell this to a whole group of people, which can be very uncomfortable.

Rhea: Yes, your assumption is correct, sharing is a part of group therapy. It is very common at first to feel anxiety about sharing, and the anxiety is okay. Sharing is accomplished within your personal time frame, and members are encouraged to share at the level that feels comfortable for them. In the process of group therapy members learn to care for and develop trust in one another. As this happens, students frequently find they feel more connected to others in the group, their sense of safety increases, and they share more.

Elliot: Since we are talking about sharing, how does confidentiality work in group therapy?

Rhea: Confidentiality is an extremely important part of any type of therapy and is expected of all group participants. All members commit to upholding confidentiality by not discussing any group members outside of the group. What happens in group stays in group.

Elliot: Thank you, Rhea, so much for this information and for your time.

Rhea: Yes, and thank you. I hope that the viewers will consider using counseling services in the future.

Elliot: Thank you for watching. As counseling services vary between universities, please consult your university counseling center about group counseling options available to you.

I-2: Therapist Rapport

Elliot: Hello and thank you for watching. My name is Elliot, and, in a moment, I would like to introduce you to Rhea, who is a therapist at a university counseling center. I am hoping we can get to know her and what she does a little better today through this short interview.

Rhea: Hi, I am Rhea. Thank you, Elliot for the introduction. I am glad to be with you all today.

Elliot: Rhea, could you begin telling us in a few words about your professional background and what you enjoy about working at the counseling center?

Rhea: Sure. I have a Ph.D. in counseling psychology, and most of my clinical experience is in working with university students. What I like about my work is seeing how much students grow and change during their academic journey, and I love that I get to be a part of their growth, especially when they face really big obstacles.

Elliot: I also heard that you like working with international students. Is that so, and can you tell us about that?

Rhea: You are right, I do enjoy working with international students. For one, I admire these students' courage. Coming to a foreign country is an extraordinary adjustment. In addition to struggles that all students face, international students have to figure out how to live in a place where everything is new, from food and cold medicine to the academic system. Plus, making friends or dating in the U.S. can be difficult. How people view and develop relationships differs from culture to culture. Add to that differences in music you grew up with, TV shows you watch, and maybe even a language barrier. It is very rewarding to me that I get to help international students with these issues and many others.

Elliot: Hearing you talk about this makes me wonder if you have personal interests that involve culture?

Rhea: Yes, I find cultures fascinating and enjoy traveling abroad. When I travel, I like to really explore and get to know local culture and people. And I absolutely love having conversations with others who have lived outside of the U.S. and hearing about their experiences and perspectives.

Elliot: Back to the professional side, I know that being a therapist at a university counseling center you have to do a lot of different things. What is your most favorite aspect of the job?

Rhea: That's a great question… and tough to answer because I enjoy doing a lot of things! Leading therapy groups is probably one of my favorites. For those who may not know, groups typically include 5 to 10 students are led by 1 or 2 therapists. In other words, I usually have another therapist co-lead a group with me.

Elliot: Earlier we talked about your interest in working with international students. Is having international students in your therapy groups also something that you value?

Rhea: Yes, absolutely! First of all, I find groups to be a really valuable and beneficial form of counseling in general. And no matter which group I lead, I enjoy having international students in there. I've found that they bring fresh and valuable input into groups and definitely grow and benefit throughout group therapy.

Elliot: Thank you, Rhea, so much for your time and for what you've shared with us today.

Rhea: Thank you! I hope that the viewers will consider using counseling services in the future.

Elliot: Thank you for watching. As services vary between universities, please make sure to consult your university counseling center about options available to you.

CC: Control

Elliot: Hello and thank you for watching. My name is Elliot, and, in a moment, I would like to introduce you to Rhea, who is a therapist at a university counseling center. I am hoping she can talk to us today a little bit about different services counseling centers offer.

Rhea: Hi, I am Rhea. Thank you, Elliot for the introduction. I am glad to be with you all today.

Elliot: Rhea, could you begin by telling us about most common therapy services that students would often find at counseling centers?

Rhea: Yes! So probably most common counseling services are individual or one-on-one therapy, group therapy, and couples therapy. Individual therapy is when you meet one-on-one with a therapist on a regular basis to discuss your concerns and to work on your goals. Group counseling is a form of therapy where 1 or 2 therapists work with 5 to 10 students as a group. And couples therapy, as the name suggests, is when you and your significant other meet with a therapist together. It is important to keep in mind that some universities require for both members of the couple to be students at the university to receive couples counseling. Others will only require one person in the couple to be a student.

Elliot: Thank you, Rhea. And if a student is struggling academically and doesn't know why, would the counseling center have the tools to determine what is going on?

Rhea: Yes, many counseling centers have assessment instruments that help figure that out. Assessments can help determine if the likely cause is depression, anxiety, learning disability, or attention deficit hyperactivity disorder for example. Some centers have extensive assessment tools and will provide official diagnosis while others do preliminary evaluations and refer to other services for more formal assessment if needed.

Elliot: Do you have to pay for assessments?

Rhea: It depends on the assessment. You usually have to pay for more extensive assessment batteries, such as those used to formally diagnose attention deficit hyperactivity disorder.

Elliot: Do counseling centers offer workshops for students to learn about stress management, coping skills, time management, or other topics?

Rhea: Yes, but who the workshops are offered to varies among counseling centers. Some centers will hold workshops, like the ones you mentioned, open to all students. Others will come talk to classes and student organizations if requested. And still others will have workshops for students who are clients at the counseling center.

To be a client you do not necessarily have to be in therapy, but you have to have had an initial appointment. This is where a counselor helps you figure out what services could be best suited for you and the concern you are coming in with. Of course some counseling centers will have all three options. They could offer workshops open to all students, workshops for the counseling center clients, and workshops upon request.

Elliot: And are international students eligible for counseling services?

Rhea: Great question! In majority of the cases, yes, international students can receive counseling services just like all students.

Elliot: Thank you, Rhea, so much for this information and for your time.

Rhea: Yes, and thank you. I hope that the viewers will consider using counseling services in the future.

Elliot: Thank you for watching. As counseling services vary between universities, please consult your university counseling center about services available to you.

Appendix E:

Attention and Manipulation Check Pilot Study

The first purpose of the pilot study was to determine if lay persons who have studied abroad in the U.S. can understand video attention check questions and choose the correct response option after watching each video. The second purpose of the pilot study was to ensure that there are no ceiling or floor effects for the manipulation check questions. When it comes to the manipulation check, individuals who watched the 1st video were expected to say that they learned more about the group than individuals who watched the other two videos. In contrast, individuals who watched the 2nd video were expected to say that they got to know Rhea better and think she is more trustworthy and likable than individuals who watch the 1st or the 3rd videos. Finally, individuals watching the 1st and 2nd videos were expected to rate Rhea as more of an expert than individuals watching the 3rd video. However, significant effects were not expected in the pilot study because of the very small sample size.

Method

Participants and Procedure

Twenty-two participants who studied abroad in the U.S. and did not have expertise in psychology participated in the study. They were recruited from researcher's social network on Facebook. Participants were between ages of 26 and 35. Thirteen identified as women and 9 as men. Nineteen out of 22 reported that their native language was not English. Participants were randomly assigned to one of the three conditions: video 1 – information about group therapy, video 2 – therapist rapport, and video 3 – overview of university counseling center services. They watched the assigned video and answered attention check and manipulation check

questions. As a result, 5 participants watched the 1st video, 9 watched the 2nd, and 8 watched the 3rd video.

Measures

For the attention check, participants were asked what Rhea (therapist in the video) talked about in the video and were given 5 response options. Correct responses for each video were as follows: 1 – "Confidentiality in group therapy", 2 – "What she likes about her job", and 3 – "Assessment services at counseling centers." Two response options that were incorrect for every video were "International Student Office" and "Activities for international students to teach U.S. history."

For the manipulation check, participants were asked how much they learned about group therapy, how well they got to know the therapist and to what extent they perceived the therapist to be an expert, trustworthy, and likable. Participants used a slider anchored with 0 and 100 to provide their responses.

Results

In each condition, all but one participant responded correctly to the attention check questions. In the 1st and the 2nd conditions, "Assessment services at counseling centers" was the incorrectly endorsed response. In the 3rd condition, "What she likes about her job" was the incorrectly endorsed response.

Responses to all manipulation check questions seemed to have a sizable range (see Table E1). However, responses to the first two questions appeared evenly distributed on the 0-100 scale while responses to the last three questions appeared to be on the higher end of the scale as evidenced by the mean and median statistics (see Table E1). As such, on average, participants in all conditions said that they learned moderately from the video (M = 51.12) and

moderately got to know Rhea (M = 42.92). On the other hand, participants on average thought that Rhea was mostly an expert (M = 70.96), trustworthy (M = 70.88), and likable (M = 73.19).

There was a significant difference in learning about group therapy by video, $F(2,19) = 7.32$, $p = .004$. Specifically, participants in the group information condition reported that they learned more about group therapy than participants in the therapist rapport ($p = .004$) or the control condition ($p = .029$). Participants in the therapist rapport and the control condition did not differ in their self-reported learning ($p = .615$). There were no differences in how well participants felt they got to know Rhea ($F[2,19] = 0.56$, $p = .585$) or how they felt about her expertise ($F[2,19] = 1.78$, $p = .200$), trustworthiness ($F[2,19] = 0.24$, $p = .785$), or likability ($F[2,19] = 0.63$, $p = .544$) across conditions.

Discussion

The first purpose of the pilot study was to test if participants who watch the videos can respond correctly to the attention check question. A majority of the participants responded correctly. However, one response option ("assessment services at counseling centers") was incorrectly endorsed twice. It is possible that individuals who do not have expertise in psychology or familiarity with psychological testing may interpret other aspects of psychological services described in the videos as assessment. Therefore, the correct response option for the third video was changed to "couples therapy."

The second purpose of the pilot study was to ensure that the manipulation check questions were capable of detecting potential differences between the three conditions in how much participants learn about group therapy and how they perceive the therapist in the video. Specifically, data was examined for floor and ceiling effects. No such effects were found for questions regarding group therapy learning and getting to know Rhea. The range of responses

for these questions appeared sufficient to detect potential differences between conditions. However, participants' high ratings of Rhea on expertise, trustworthiness, and likability may be indicative of ceiling effects for these items. Therefore, another manipulation check question was added about how well participants believe Rhea would understand them. The purpose of the question is to test if participants watching the therapist rapport video would perceive her as more approachable than participants who watch the other two videos.

Even though significant differences were not expected between the conditions in the pilot study due to the small sample size, participants who watched the group therapy informational video said that they learned more about group therapy than participants who watched the therapist rapport or overview of counseling services videos. This finding suggests that the group therapy informational video increases knowledge about group therapy as intended.

Table E1. *Summary of descriptive statistics for manipulation check variables by video.*

Question	Video	Mean	Median	SD	Min	Max
How much did you learn about group therapy from the video?	1	86.00	80.00	13.42	70	100
	2	33.11	30.00	31.27	0	85
	3	44.75	45.00	22.25	18	91
	All	51.11	50.00	30.24	0	100
How well did you get to know Rhea?	1	44.40	50.00	13.17	10	82
	2	53.00	50.00	7.57	15	80
	3	39.37	35.00	6.78	7	75
	All	42.92	48.00	25.60	7	82
Is she [Rhea] an expert at her job?	1	87.20	90.00	2.08	80	91
	2	69.78	67.00	7.15	40	100
	3	64.38	70.00	9.54	25	100
	All	70.96	72.50	21.74	25	100
Is she [Rhea] trustworthy?	1	77.60	80.00	78.81	50	97
	2	70.11	71.00	5.95	40	95
	3	74.12	80.00	7.98	39	100
	All	70.88	75.00	19.94	39	100
Is she [Rhea] likable?	1	79.60	80.00	15.19	60	98.00
	2	82.44	90.00	17.07	45	100.00
	3	71.00	77.50	9.92	13	100.00
	All	73.19	80.00	23.01	13	100.00

Note. $N = 22$.

Appendix F:

The Modified Personal Problems Inventory by Zhuzha et al. (2016)

Table F1. *EFA factor loadings for the modified Personal Problems Inventory.*

Item	Loading
General anxiety For example: I worry a lot; I feel uneasy about many things; I have nerves	.65
Alcohol use problems For example: I have a problem that is related to my alcohol drinking	.28[a]
Shyness For example: I feel nervous or uncomfortable about meeting people; I feel nervous or uncomfortable talking to people	.61
College adjustment problems For example: I have problems adjusting to some part of college or university life	.62
Sexual functioning problems For example: When interacting with someone sexually, I experience some type of a problem	.41
Depression For example: I feel sad or low; I feel empty and indifferent	.69
Conflicts with parents For example: I have conflicts with my parents; My parents do not approve of what I am doing	.41
Academic performance problems For example: I have problems with grades, homework, research, work with advisor, etc.	.61
Speech anxiety For example: I feel nervous speaking in front of others; I feel nervous speaking in a group of people	.51
Dating or relationship problems For example: I have problems with a romantic relationship	.40

(continued)

Item	Loading
Financial concerns For example: I have problems with money	.37
Career problems For example: I have problems with choosing a career or a major; I have problems with applying to graduate schools; I have problems with the job search, etc.	.44
Insomnia For example: I have trouble sleeping at night	.52
Drug use problems For example: I have a problem that is related to my use of illegal drugs (e.g. marijuana in most states), legal drugs that require a prescription but were not prescribed to me, or legal drugs that I take in greater amount or frequency than recommended	.18[a]
Loneliness or isolation For example: I feel lonely; I feel isolated	.75
Inferiority feelings For example: I feel I am not as valuable or worthy as others	.73
Test anxiety For example: I feel worried or nervous before or during taking a test, and it interferes with my test performance	.47
Alienation For example: I feel disconnected from others	.73
Problem making friends For example: I have problems making friends; I do not have enough friends	.71
Trouble studying For example: When I try to study, I experience some difficulty	.61
Ethnic or racial discrimination For example: At times I feel that I am treated worse than others because of my race, where I am from, or the language I speak	.46
Roommate problems For example: I have problems with my roommate or roommates	.38

(continued)

Item	Loading
Ethnic identity confusion For example: I feel unsure about my ethnic or cultural identity; I wish my ethnic or cultural identity was different; Being in a new to me culture has changed aspects of my ethnic or cultural identity, and I find some of these changes stressful	.54
General health problems For example: I have problems with my physical health	.47

Note. N = 243. One factor extracted via Principal Axis Factoring extraction method.

[a]Items with loadings < .30 were be dropped from the scale for the purpose of the present study.

Appendix G:

The Personal Problems Inventory (PPI) in the Present Study

You will see 22 concerns/problems that university students commonly experience. Example statements are included to help you understand what each concern or problem means. However, these are only examples and may not capture all experiences or circumstances. Some concerns may sound repetitive and may seem to have more than one possible interpretation. When reading each concern, please think about the interpretation that applies to you most and give your best guess when responding.

Please move the slider to indicate the extent to which each concern/problem has **affected you** in the **last month**.

0----------100
Did not affect me at all — Affected me very much

1. **General anxiety**

   For example: I worry a lot; I feel uneasy about many things; I have nerves

2. **Shyness**

   For example: I feel nervous or uncomfortable about meeting people; I feel nervous or uncomfortable talking to people

3. **College adjustment problems**

   For example: I have problems adjusting to some part of college or university life

4. **Sexual functioning problems**

For example: When interacting with someone sexually, I experience some type of a problem

5. **Depression**

   For example: I feel sad or low; I feel empty and indifferent

6. **Conflicts with parents**

   For example: I have conflicts with my parents; My parents do not approve of what I am doing

7. **Academic performance problems**

   For example: I have problems with grades, homework, research, work with advisor, etc.

8. **Speech anxiety**

   For example: I feel nervous speaking in front of others; I feel nervous speaking in a group of people

9. **Dating or relationship problems**

   For example: I have problems with a romantic relationship

10. **Financial concerns**

    For example: I have problems with money

11. **Career problems**

    For example: I have problems with choosing a career or a major; I have problems with applying to graduate schools; I have problems with the job search, etc.

12. **Insomnia**

    For example: I have trouble sleeping at night

13. **Loneliness or isolation**

    For example: I feel lonely; I feel isolated

14. Inferiority feelings

For example: I feel I am not as valuable or worthy as others

15. Test anxiety

For example: I feel worried or nervous before or during taking a test, and it interferes with my test performance

16. Alienation

For example: I feel disconnected from others

17. Problem making friends

For example: I have problems making friends; I do not have enough friends

18. Trouble studying

For example: When I try to study, I experience some difficulty

19. Ethnic or racial discrimination

For example: At times I feel that I am treated worse than others because of my race, where I am from, or the language I speak

20. Roommate problems

For example: I have problems with my roommate or roommates

21. Ethnic identity confusion

For example: I feel unsure about my ethnic or cultural identity; I wish my ethnic or cultural identity was different; Being in a new to me culture has changed aspects of my ethnic or cultural identity, and I find some of these changes stressful

22. General health problems

For example: I have problems with my physical health

23. Move the slider to 0 for this question to show you are paying attention

Appendix H:

The Intentions to Seek Counseling Inventory (ISCI) Personal Problems (PP) Subscale in the Present Study

Answering the following 9 questions, please assume that free counseling services are available to you at your university. Imagine that Rhea works at your university counseling center.

You will see 9 concerns/problems that university students commonly experience and will be asked how likely you are to attend group therapy for each concern/problem at your university counseling center.

Example statements are included to help you understand what each concern or problem means. However, these are only examples and may not capture all experiences or circumstances. Some concerns may sound repetitive and may seem to have more than one possible interpretation. When reading each concern, please think about the interpretation that applies to you most and give your best guess when responding.

Please move the slider to indicate how likely you are to attend group therapy for each concern/problem at your university counseling center while you are a student.

0----------100
Very Unlikely Very likely

1. **General anxiety**

   For example: I worry a lot; I feel uneasy about many things; I have nerves

2. **Shyness**

   For example: I feel nervous or uncomfortable about meeting people; I feel nervous or uncomfortable talking to people

3. **Conflicts with parents**

   For example: I have conflicts with my parents; My parents do not approve of what I am doing

4. **Dating or relationship problems**

   For example: I have problems with a romantic relationship

5. **Loneliness or isolation**

   For example: I feel lonely; I feel isolated

6. **Inferiority feelings**

   For example: I feel I am not as valuable or worthy as others

7. **Alienation**

   For example: I feel disconnected from others

8. **Problem making friends**

   For example: I have problems making friends; I do not have enough friends

9. **Ethnic identity confusion**

   For example: I feel unsure about my ethnic or cultural identity; I wish my ethnic or cultural identity was different; Being in a new to me culture has changed aspects of my ethnic or cultural identity, and I find some of these changes stressful

10. Move the slider to 100 for this question to show you are paying attention

Appendix I:

Direct and Vicarious Experience with Therapy

1. Have you ever been in psychotherapy AND had a positive overall experience?

   If you have been to therapy more than once and had both positive and negative experiences, please answer the question thinking about your **most recent** experience.

   a) Yes, I have been to therapy and my experience was positive.

   b) I have been to therapy, but my experience was negative.

   c) No, I have never been to any type of therapy.

If you are not completely sure what psychotherapy is, please refer to the explanation below:

Therapy IS:

Psychotherapy is when you meet a psychologist or a mental health practitioner to work on some mental health concerns or goals. Therapy can be as short as few meetings or it can last several months or years. Therapy sessions typically occur weekly or every 2 weeks. Most common type of therapy is individual, where you meet with a therapist one-on-one. Other types of therapy include group, couples, and family. In therapy, clients often explore their psychological concerns and work towards growth or improvement.

Therapy IS NOT:

Meeting a psychologist or a mental health practitioner only once, such as for consultation or because of crisis.

Meeting with a doctor once a month or less frequently to check-in or consult about psychotropic

medications.

Alcoholics Anonymous (AA) or similar meetings led by peer mentors.

[If the option a) or b) was selected, the participant was directed to the question #2. Otherwise, they were directed to the question #3]

2. What types of therapy have you been in (regardless of positive or negative experience)?

   Select all that apply

   - o Individual (one-on-one)
   - o Group
   - o Family
   - o Couples
   - o Other: _____

3. Has anyone close to you (e.g., good friend, family member, teacher/mentor) ever been to any type of psychotherapy AND had a positive overall experience that you know of?

   - o Yes, at least one person who is close to me has been to therapy and had a positive experience.
   - o People close to me have been to therapy, but I don't know if their experience was positive or negative.
   - o People close to me have been to therapy, but no one had a positive experience.
   - o No one close to me has ever been to therapy that I know of.

If you are not completely sure what psychotherapy is, please refer to the explanation below:

Therapy IS:

Psychotherapy is when a person meets a psychologist or a mental health practitioner to work on some mental health concerns or goals. Therapy can be as short as few meetings or it can last several months or years. Therapy sessions typically occur weekly or every 2 weeks. Most common type of therapy is individual, where the person meets with a therapist one-on-one. Other types of therapy include group, couples, and family. In therapy, clients often explore their psychological concerns and work towards growth or improvement.

Therapy IS NOT:

Meeting a psychologist or a mental health practitioner only once, such as for consultation or because of crisis.

Meeting with a doctor once a month or less frequently to check-in or consult about psychotropic medications.

Alcoholics Anonymous (AA) or similar meetings led by peer mentors.

Appendix J:

Demographic and Other Questions

1. How old are you? (skip this question if uncomfortable to disclose)

Please type in the number (Arabic numerals)

_____

2. What is your gender or gender identity? (skip this question if uncomfortable to disclose)
   - o Man
   - o Woman
   - o Transgender Man
   - o Transgender Woman
   - o Gender Fluid/Queer
   - o Other: _____
3. What is your home country? (skip this question if uncomfortable to disclose)

   _____
4. What is your racial background? (skip this question if uncomfortable to disclose)

   Choose all that apply

   - o East Asian
   - o South Asian
   - o Pacific Islander
   - o Middle Eastern/Persian
   - o White
   - o Hispanic/Latino/Latina
   - o Black
   - o Indigenous/Native
   - o Other: _____

5. How many years have you lived in the U.S.? (skip this question if uncomfortable to disclose)

   Please type in the number (Arabic numerals)

   _____

6. What is your major or discipline of study? (skip this question if uncomfortable to disclose)

   _____

7. How many more academic years (not counting this semester) do you expect to be enrolled as a student (undergraduate or graduate) at your university? (skip this question if uncomfortable to disclose)

   Please type in the number (Arabic numerals). Feel free to use a decimal point

   _____

8. At what university are you currently enrolled as a student? (skip this question if uncomfortable to disclose)

   - o University 1
   - o University 2
   - o University 3
   - o University 4
   - o University 5
   - o University 6
   - University 7
   - o University 8
   - o University 9
   - o University 10
   - o Other: _____

9. Think back to the video you watched at the beginning of the survey. Did you watch it with the sound on?
    - o Yes
    - o No
10. Have you completed this study before?
    - o Yes
    - o No
    - o I completed a similar study, but it did not have a video
    - o I completed this study, but I watched a different video
    - o I am not sure. Please explain: _____
11. OPTIONAL:

    If you have any comments for the researcher about the video or the survey questions, please type them below. Since your responses within this survey are anonymous, the researcher will not be able to respond to your comment.

    If you have a question to which you would like the researcher to respond, please email Kseniya Zhuzha at kzz0006@auburn.edu instead.

Appendix K:

Facebook Recruitment

The following two posts were shared in Facebook groups and on the researcher's timeline:

Dear friends, I am conducting a research study for my dissertation and need your help ☺. Please consider completing this survey if you are an international student in the U.S. or sharing this post!

To learn more about the study and to participate, please follow the link:

https://auburn.qualtrics.com/SE/?SID=SV_cDewZiC0E6X6lCZ

Dear friends, I am conducting a research study for my dissertation and need your help ☺. Please consider sharing this survey with international students in the U.S. (e.g., posting the link in Facebook groups that have international students).

To learn more about the study, please follow the link:

https://auburn.qualtrics.com/SE/?SID=SV_cDewZiC0E6X6lCZ

Appendix L:

Optional Survey Comments

Table L1. *Summary of optional comments participants left at the end of the survey.*

Theme	Comment Content	#
Critiques of the study	Confusion about "early steps" of the survey	1
	Difficulty answering questions about group therapy because they are not situation-specific	1
	Too many attention check questions	1
	Attention check questions are "innovative"	1
	0-100 rating scale provides too many options	1
	Lengthy survey	1
	Importance of the I-2 video is unclear	1
	Short video about the therapist is insufficient to know whether the therapist could be helpful, would understand, or is truly committed to issues of multiculturalism	1
Suggestions for the study	Subtitles for the video (vs. closed captions)	2
	Include questions about sexual orientation and religion	1
Positive study experience	Appreciation of the survey/topic	4
	Learning about group therapy	2
	Learning something new	1
Interest in the study	Curiosity about study results	2
Wishes	Good luck wishes to the researcher	3

(continued)

Theme	Comment Content	#
Reservations about group therapy	Confidentiality	2
	Wasting time by listening to others' problems	1
	Difficulty expressing own thoughts and needs given limited time	1
	Hearing multiple perspectives may be confusing	1
	Language barrier	1
	Some issues are better handled in individual therapy	1
	Feelings of inferiority related to being in a group of people from a different culture an SES	1
Benefits of group therapy	Diversity of opinions may be useful	1

Note. $N = 22$. Some participants left comments that fell under more than one theme or content area.