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Examining East Asian American College Students' Mental Health Help-Seeking

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EXAMINING EAST ASIAN AMERICAN COLLEGE STUDENTS'

MENTAL HEALTH HELP-SEEKING

by

LOUIS CHOW

Under the Direction of Lisa Armistead, Ph.D. and Akihiko Masuda, PhD

ABSTRACT

This study examined underutilization of mental health services by East Asian American (EAA) college students and the effectiveness of an intervention aimed at increasing mental health outcomes. The literature presents discrepant findings of whether behavioral or values based acculturation measures were more predictive of mental health outcomes. Previous researchers have also identified cultural and practical barriers that lead to underutilization of services. It was hypothesized that relative to behavioral acculturation, values acculturation would be more predictive of attitudes and intentions to seek counseling. Additionally, recent studies highlighting the importance of practical barriers, a brief education based video intervention was developed in hopes of increasing attitudes and intentions of mental health help seeking. The role of gender in these relations was explored. A total of 60 EAA college students were randomly assigned to one of two conditions, either the counseling information intervention video or a comparison video

about career services offered at the university. It was found that after controlling for behavioral acculturation, increased adherence to Asian values was associated with decreased intentions to seek counseling about personal problems and there were no significant gender differences. Regarding the intervention, unexpectedly, information provided in the comparison condition about career services led to increased willingness to see a counselor about academic/career problems. Overall, the counseling intervention video was not effective in increasing mental health outcomes. Notably, participants in the counseling video intervention had higher perceptions of knowledge and ability to seek counseling, which was positively correlated with increased willingness to see a counselor about personal problems. Gender differences were not significant in the analyses. Implications of the study include further development and examination of interventions developed to address practical barriers, presenting topics related to academic concerns as a way to increase counseling use by EAA college students, and further investigation of the role of self-efficacy in predicting mental health utilization.

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LOUIS CHOW

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Introduction

In the U.S., Asian Americans (AAs) are often portrayed as a "model minority;" individuals who are considered to be high achieving, hard-working, and successful, without experiencing significant social and psychological difficulties (Sue & Morishima, 1982). Support for this stereotype may be found in the low rates of mental health services utilization in both inpatient and outpatient settings (Matsuoka, Breaux & Ryujin, 1996; Snowden & Cheung, 1990, Sue et al. 1991). However, low reliance on psychological services by AAs may be more about barriers to use than about an absence of need.

Contrary to the "model minority" label, evidence suggests that AAs in fact experience a range of significant mental health problems and that when AAs did seek services, their conditions were more severe and chronic compared to patients of other cultural backgrounds, requiring more care and intensive treatment (Bui & Takeuchi, 1992; Durvasula & Sue, 1996; Cheung, 1980: Okazaki, 2000). Further, recent data gathered from college students revealed greater endorsement of intense symptoms of psychological distress by AAs relative to other college students (Lee, Okazi & Yoo, 2006). In a nationwide college survey of 15,997 students, when compared to white students, AA students were the sole ethnic group reporting significantly higher rates (1.6 times odds ratio) of seriously thinking about suicide (Kisch, Leino, Silverman, 2005). Despite the need of psychological services, AAs tend to have less favorable attitudes toward seeking professional psychological services (Atkinson & Gim, 1989; Masuda, Anderson et al., 2009) or less intention to seek therapy for their psychological issues than their European American counterparts (Abe-Kim et al, 2006; Meyer, Zane, Cho & Takeuchi, 2009). Altogether, these findings present a need to better understand and improve the utilization rates of mental health services among AAs.

Challenge in Asian American Research

One of the major challenges encountered in the literature surrounding AAs and their

help-seeking attitudes and behavior is the variability of cultural groups falling in the category of

"Asian American" (Leong and Lau, 2001). For example, whereas some studies focus on Chinese

Americans exclusively (Abe-Kim ,Takeuchi & Hwang, 2002; Kung, 2004; Tata & Leong, 1994),

others include AAs with diverse Asian backgrounds or subgroups of AA, such as East Asians

(e.g. Koreans, Chinese, Taiwanese, and Japanese) and Southeast Asians (e.g. Thai, Filipino,

Vietnamese and Cambodians) (Atkinson, Lowe & Matthews, 1995; Gim, Atkson, & Whitely,

1990; Liao, Rounds, & Klein, 2005; Takeuchi, Leaf & Kuo, 1988) as well as Asian Indians (Kim

& Omizo, 2003) . Although AAs from diverse Asian background are often aggregated into a

single group, a growing body of evidence has shown that there are differences in experiences of

psychological distress and help-seeking patterns between the Asian ethnic groups (Akutsu &

Chu, 2006; Kim, Yang, Atkinson, Wolfe & Hong 2001: Leong & Lau, 2001; Uehara, Takeuchi,

& Smukler, 1994). These findings underscore the importance of considering the heterogeneity of

Asian groups and the dangers of making overgeneralizations about the AA population. To

partially address this concern, the present investigation has exclusively focused on East AAs

(i.e., Asian Americans of Japanese, Chinese, Korean, and Taiwanese background). Although

East Asian countries are culturally distinct from one another in many ways (e.g. language,

history, traditions), there are shared cultural elements that provide support for the use of

participants from East Asia as a demographic category in cultural psychology research (Heine,

2001). For example, an important commonality is the strong presence of Confucian beliefs and

values in each country's heritage that shaped the collectivism and interdependence found in East

Asian cultures. Confucianism emphasizes the importance of maintaining interpersonal harmony within a group (e.g. family, work environment, country) and values the practices of filial piety, humility, and being responsive to the needs of others (Uba, 1994). Given these similarities, this study aimed to seek a balance between the competing demands of adequate sample size and homogeneity of the sample by including only East Asian Americans (EAA).

Mental Health Help-Seeking Outcomes

Within a sample of East Asian Americans (EAAs) the current study considered attitudes, intentions, and behaviors related to seeking mental health services. Justification for the use of attitudes and intentions as mental health help-seeking outcomes was found in a collection of social and behavioral theories that underscore their roles in predicting health behavior and consumer behavior (e.g. Theory of Reasoned Action, Fishbein & Azjen, 1975; Theory of Planned Behavior, Azjen 1985). The theories define attitudes as evaluations of a behavior that are formed based on a person's belief that "performing the behavior is good or bad" (Azjen & Fishbein, 1980) and behavioral intentions as a person's motivation or willingness to perform that behavior (Albarracin, Johnson, Fishbein & Muellerleile, 2001). There is a similar differentiation between attitudes and intentions in the mental health help-seeking literature; attitudes about help-seeking have been described as a global construct related to beliefs about help-seeking, whereas intentions about seeking help relate more narrowly to one's willingness to engage in the specific behavior of seeking mental health counseling (Kim & Omizo, 2003). Notably, studies often times did not include an outcome measure of actual help-seeking behavior, i.e. seeing a mental health provider. To more fully examine mental health help seeking, behavioral indicators were incorporated in the second part of the current study, which is described further in the Present Study section.

The relationships between attitudes, intentions, and help-seeking behavior have not been clearly demonstrated in previous studies with EAA or other AA cultural groups (Kim & Park, 2009) and were not examined in the current study. Instead, the purpose of the current study was to better understand factors that influence each of the three help-seeking constructs separately. Specifically, the current study examined factors that influenced attitudes about seeking help for mental health issues, intentions to seek counseling, and mental health help-seeking behaviors.

Factors Associated with Psychological Services Help-Seeking Outcomes

Evidence on help-seeking among EAAs is limited, however several studies with AAs as a whole or subsets of EAAs have shown common barriers to mental health help-seeking outcomes. In a review of barriers for AA mental health service utilization, Leong and Lau (2001) organized barriers into two broad categories that capture the range of obstacles examined in the literature: cultural barriers and physical barriers (Note the latter was relabeled as "practical barriers" by Kung, 2004).

Cultural Barriers. According to Leong and Lau (2001), cultural barriers to mental health help-seeking are comprised of three components: culturally informed beliefs about how mental illnesses are conceptualized and treated, culturally based responses of shame and stigma about mental illness, and culturally informed values that inform norms for communication and emotional management. Regarding the conceptualization of mental illness, from the perspective of many AAs, including EAAs, the experience of psychological distress is a reflection of an individual's lack of will power, a weakness of character (Sue & Morishima, 1982), or a problem with the body, stemming from beliefs about the mind body relationship (i.e., illnesses of the mind and body cannot be separated from each other) (Ying, 2002). Consistent with this belief, AAs are more likely to attribute mental illnesses to organic causes than Caucasian Americans

(Sue et al. 1976; Zhou & Siu, 2009). The attention placed on the body is found across AA groups, including EAAs, who tend to experience somatic manifestations of psychological distress (Kirmayer & Young, 1998). Thus, when AAs seek professional help for psychological distress they may be more likely to seek services from Western medical professionals (e.g. physicians) or traditional Eastern healers (e.g. acupuncturists) (Lin, Inui, Kleinman, & Womack, 1982) rather than mental health professionals. The reluctance to seek mental health services stems from differences between culturally informed conceptions of managing psychological distress and the approach of Western models of psychotherapy. Whereas individuals in some Asian cultures, including EAAs, believe that dwelling on morbid thoughts or close examination of psychological distress creates more harm, Western models of psychotherapy often emphasize analyzing distressing thoughts and feelings (Sheu & Selacek, 2004; Sue, Davis, Margullis, & Lew, 1976). Moreover, Asians generally expect professionals to assume an expert role, and, in contrast, most mental health professionals are trained to provide clients with treatment options and work with them in a non-directive, collaborative manner (Hong, 1988). The juxtaposition of Asians' expectations and the Western mental health professionals' approach may result in loss of credibility for AAs regarding the effectiveness of psychotherapy services (Leong and Lau, 2001).

Although the attribution of psychological distress to organic causes and somatisizing may lead AAs to seek services from different professionals than European Americans, oftentimes mental health issues are never brought forward and instead are kept within families (Lin, Tardiff, Donetz, and Goretsky, 1978; Maki & Kitano, 2002). The reasons for keeping the issues within families has been attributed to culturally based affective responses of shame and stigma (Leong and Lau, 2001). Leong and Lau (2001) present literature that suggests that an emphasis on upholding family reputation and "face" leads to a tendency for AAs to rely on family

involvement in addressing mental health issues rather than publicly admitting problems and seeking professional help. Given the previously noted attributions of character weakness as a source of psychological distress, experiences of shame and stigma are a prominent theme for AAs, including EAAs, who experience mental health issues (Kung, 2004). As a result of the presence of shame and a cultural emphasis on the avoidance of shame, there may be heavier family involvement in help-seeking, as well as a lengthy delay in seeking professional mental health care for AAs compared to other ethnic groups (Lin et al, 1982).

In addition to affective responses of shame and stigma, culturally based values that inform norms for communication and emotional management may also prevent AAs, including EAAs, from discussing personal problems outside of the family (Leong & Lau, 2001). For instance, Chinese Americans with collectivistic values often have a sphere of privacy that extends from an individual to the immediate and extended family. Thus, an individual's disclosure of problems that exist within the familial context can be a violation of the privacy of other family members (Lin & Lin, 1978). Furthermore, collectivistic values discourage placing individual goals before the needs of the family, which contrasts the approach taken in Western traditional psychotherapy orientations of emphasizing one's individual goals over the needs of others (Sue & Sue, 1977).

Given that beliefs about how mental illnesses are formed and treated, affective responses of shame and stigma, and norms for communication and emotional management are all culturally informed, many researchers have hypothesized that acculturative processes that include adoption of Western values and culture (i.e. degree of acculturation) will explain increases in mental health seeking attitudes and behavior (Atkinson & Gim, 1989; Fung & Wong, 2007; Tata & Leong, 1994). Acculturation, which has been defined as a process of modifications made in

behaviors, identity, and values that individuals undertake as they accommodate to the dominant culture (Kim & Abreu, 2001), is commonly included in studies examining AA and EAA attitudes about mental health services (Miller et al., 2011). However, the literature contains contradictory findings, suggesting that the relation between cultural factors, such as acculturation, and help-seeking outcomes is complex and at times unclear (Kim & Omizo, 2003; Suinn, 2010).   One contributing factor to equivocal findings may stem from the way in which researchers have operationalized acculturation. Multiple strategies have been applied, and relationships between help-seeking behavior and acculturation differ depending on the way in which acculturation is measured, among other factors. In a study of 128 Chinese Americans in California, acculturation was measured by asking participants one question assessing generational status in the U.S. and one question assessing English language proficiency (Ying and Miller, 1992). The researchers found a positive relationship between English proficiency and help-seeking attitudes. Using a similar approach, Suinn, Richard-Figueroa, Lew and Vigil (1987) created an acculturation scale, the Suinn-Lew Asian Self-Identity Acculturation Scale (SL-ASIA), comprised of a broader array of behavior-focused items, such as language proficiency, ethnicity of friends, years in a non-Asian neighborhood, and age upon beginning school in the U.S. Higher scores on the SL-ASIA were positively related to AA students' attitudes towards seeking psychological help in several studies (e.g., Tata & Leong, 1994; Atkinson & Gim, 1989).   However, when Gim, Atkinson, and Whiteley (1990) used the SL-ASIA with a sample of 816 AA university students (including Chinese-Americans, Filipino-Americans, Japanese-Americans, and Korean-Americans), an inverse relation between acculturation and willingness to see a counselor was observed. Students with lower levels of acculturation tended to have greater willingness to see a counselor than students who were more acculturated.

While the difference may appear to be attributed to differential effects of acculturation on different help-seeking outcomes of attitudes and intentions, other studies found no relation between scores on the SL-ASIA and attitudes towards seeking professional help (Liao, Rounds, and Klein, 2005) or willingness to see a counselor (Atkinson, Lowe, and Matthews, 1995) in their samples of East and Southeast AAs. These discrepant findings have lead researchers to assume that levels of behavioral acculturation may not be directly related to help-seeking related outcomes of attitudes toward mental health help-seeking and intentions to seek counseling (Kim and Omizo, 2003).

Rather than relying on behavioral acculturation, Kim and Omizo (2003) examined adherence to Asian values in their study of help-seeking attitudes and intentions to seek counseling. Specifically, they relied on the Asian Values Scale (AVS; Kim, Atkinson, Yang, 1999), which includes the measurement of values such as collectivism, conformity to norms, emotional self-control, family recognition through achievement, filial piety, and humility. In a sample of 242 AA college students (from China, Korea, Philippines, Japan, India, and multiethnic backgrounds) at a mid-Atlantic university and a university in Hawaii, Kim and Omizo (2003) found that adherence to Asian values was negatively associated with attitudes towards seeking professional psychological help as well as general willingness to see a counselor. Similar outcomes were found in a study of only Korean Americans; a negative relationship between scores on the AVS and attitudes towards seeking professional psychological help was demonstrated, though, notably only for women, and not men or first generation immigrant participants (Gloria, Castellanos, Park, & Kim, 2008).

Efforts to better understand acculturation continue, and the extant literature suggests that the relationship between acculturation and both attitudes about and willingness to see a counselor

are complex and not fully understood. In addition to differences in the way in which acculturation has been operationalized, differences in study findings might be attributable to heterogeneity of Asian ethnic groups and variations in the definition of the outcome variable. Some studies included only measures of attitudes toward mental health services (e.g. Atkinson & Gim, 1989; Tata & Leong, 1994) or willingness to see a counselor (e.g. Gim, Atkinson, & Whiteley, 1990; Atkinson, Lowe & Matthews, 1995), whereas others (i.e., Kim & Omizo, 2003) used both types of measures. Thus, the current study aimed to capture mental health help-seeking outcomes broadly defined by including measures of help-seeking attitudes, intentions, and actual use of mental health services.

Practical Barriers. Accompanying cultural barriers to seeking mental health services are physical or practical barriers, including a lack of information about the services provided by counselors and how to access services (Kung, 2004; Loo, Tong, & True, 1989). An understanding of the role of practical barriers in limiting help-seeking is important as reduction of these barriers may be an appropriate intervention target. In the present study, participants' experience of practical barriers to seeking services was assessed and intervened upon.

In their literature review of barriers of AA access to mental health services, Leong and Lau (2001) recognized that some barriers are not related exclusively to cultural values and beliefs but may be related to practical issues such as finances, knowledge of available services, and time considerations. The concern about finances was raised by Surgeon General David Satcher in 2001 when he described health disparities in access and treatment as disproportionately affecting ethnic minority individuals, including AAs, in the report, *Race, Culture, and Ethnicity and Mental Health.* Lack of insurance coverage has also been shown to be

a significant predictor of underutilizing counseling services among AAs (Kim-Takeuchi, Hwang, 2002).

The importance of knowledge about services was raised in an interview with 108 Chinese American community members in California, of which 74% of individuals reported no awareness of medical clinics or mental health centers that counsel people with mental health issues (Loo, Tong, & True, 1989). Not surprisingly, researchers found this knowledge gap contributed to low utilization rates of mental health services. Similarly, in a statewide survey in Hawaii that included 285 Filipino Americans and 540 Japanese Americans, AAs more frequently reported lack of awareness of treatment availability for alcohol and emotional problems as barriers to service utilization compared to their European American counterparts (Takeuchi, Leaf, & Kuo, 1988). As a result of unfamiliarity with mental health services, AAs may turn to other resources for counseling support. In a community sample of 1503 Chinese Americans, lack of awareness of where to seek help for psychological distress was a significant predictor of utilizing informal services (i.e. priests and ministers) to address their problems (Abe-Kim, Takeuchi, & Hwang, 2002). Notably, across these studies (i.e., Abe-Kim, Takeuchi & Hwang, 2002; Loo, Tong & True, 1989; Takeuchi, Leaf & Kuo, 1988), there were no significant gender differences in knowledge gaps about mental health services among AAs, including EAAs. Altogether, these studies highlight the importance of raising awareness among AAs about the availability of mental health resources.

The role of cultural and practical barriers in underutilization of mental health services among EAA's was underscored in a study by Kung (2004). Her investigation was conducted using data gathered from the Chinese American Psychiatric Epidemiological Study (CAPES), which included 1747 Chinese American participants living in Los Angeles, California. In the

analyses, Kung separated barriers into the categories of practical barriers (cost of treatment, time required for treatment, knowledge of access, and language) and cultural barriers (credibility of treatment, recognition of need, and fear of loss of face). Kung found that only practical barriers were significant predictors of actual mental health service use with cost of treatment reported as the greatest barrier. There were also no significant gender differences found in the analyses. One caveat, however, is that the cultural barriers were assessed with only three items (e.g. "When seeking help in these problems, one should be concerned about what others might think") and the measure of practical barriers was comprised of only four items (e.g. "I do not know where to seek help for these problems."), leading the author to speculate that a complex construct of cultural beliefs and values may not have been captured. Nevertheless, the findings emphasize the importance of focusing attention on addressing practical barriers to help increase utilization of mental health services.

The importance of addressing practical barriers was also emphasized in a survey of 59 Ethnic Services Coordinators who were tasked with improving use of mental health services by ethnic minorities, including EAAs and AAs, across California (Snowden, Masland, Ma & Clemens, 2006). Three of the top four most effective strategies rated by the coordinators all related to practical barriers. This included outreach efforts to raise awareness of services available to ethnic minorities, addressing language issues by increasing the availability of providers that spoke Asian languages, and addressing issues of access by both extending hours of availability and providing services in convenient locations for the clients. Notably, the study was based on perceptions of effectiveness by the Ethnic Services Coordinators and not based on report by the users of the mental health services. Despite the limitations raised in Kung (2004) and Snowden and colleagues' (2006) studies, the findings highlight the potential benefits of

focusing attention on addressing practical barriers to increase utilization of mental health services by EAAs.

Role of Gender in East Asian American's Mental Health Help-Seeking

In addition to cultural and practical barriers, researchers have also examined gender and help seeking (i.e., attitudes and intentions) in AAs', including EAAs. Study results are mixed. Whereas some studies find that East and Southeast AA women have more positive attitudes about help-seeking (Gloria, Castellanos, Park & Kim, 2008; Tata & Leong, 1994) and greater willingness to see a counselor (Gim, Atkinson, & Whiteley, 1990) than men, others have demonstrated no gender differences in attitudes (Masuda, Suzumura, Beachamp, Howells, & Clay, 2005; Akutsu, Lin, & Zane, 1990; Atkinson & Gim, 1989) or willingness to see a counselor (Atkinson, Lowe, Matthews, 1995). To address the discrepant findings regarding attitudes of mental health help-seeking, a meta-analysis of 14 studies that used the measure, Attitudes Towards Seeking Professional Psychological Help Scale (ATSPPHS, Fischer and Farina, 1995) with university students between 1995-2008 was conducted (Nam, Chu, Lee, Kim & Lee, 2010). The meta-analysis included 3,365 South, Southeast, and East AA participants and found that women had more positive attitudes than men in seeking psychological help. However, given that the meta-analysis did not include intentions to seek mental health services and did not account for the heterogeneity between Asian American ethnic groups, the role of gender in attitudes and intentions of mental health help-seeking continues to warrant further exploration and was addressed in the current study.

Interventions for Increasing Mental Health Help-Seeking

Examination of AAs', including EAA, underutilization of mental health services can be broken down into two areas: (1) barriers to initiation of mental health services and (2) barriers to

remaining in treatment once treatment has begun (Leong & Lau, 2001). Despite the overall low underutilization rates among AAs, including EAAs, a review of existing literature on ethnic minority mental health suggests interventions are primarily focused on the second barrier. In a meta-analysis of 76 studies examining mental health interventions for ethnic minorities the majority of the studies targeted culturally sensitive treatment to minority clients who were already seeking mental health services (Griner & Smith, 2006). Although some studies in the review included a measure of service utilization (i.e. client retention or treatment duration) they did not examine factors that facilitated or hindered initial contact with service providers. While it is important to provide effective and culturally sensitive treatment to minority clients who are already seeking mental health services, rates of underutilization also suggest a need to understand and reduce barriers related to their willingness to come in for an initial appointment. Unfortunately, beyond descriptive studies, a review of the literature revealed a dearth of research examining interventions developed to increase AA's, including EAA, initial contact with mental health service providers.

When interventions have been developed to address cultural barriers to mental health service utilization, they have been large in scale and require supportive community involvement, policy directives, and financial support from funding agencies, such as the ethnic specific community mental health centers established in Seattle-King County of Washington State (O'Sullivan, Peterson, Cox & Kikeby, 1989). The centers were built in the neighborhoods of the communities they were designed to serve and offered training to members of the ethnic communities to provide culturally competent mental health services. The ethnic specific community mental health centers were found to be effective in addressing cultural barriers such that ethnic minorities, including EAAs, were no longer underutilizing mental health services

(O'Sullivan, Peterson, Cox & Kikeby, 1989). While this intervention was successful, the mental health centers required resources and support from local communities and government agencies that are not easily replicated. However, the literature on mental health help-seeking has presented an opportunity to target barriers to mental health utilization that may be addressed in a more cost effective approach by focusing on practical barriers.

Kung's (2004) analysis of barriers to actual utilization of services provides compelling evidence for researchers to consider addressing practical barriers by developing interventions to increase knowledge about mental health services. The urgency of this need was echoed in studies by Loo et al. (1989) and Takeuchi et al. (1988) over twenty years ago. Yet, a literature review yielded only one study examining the effectiveness of an education-based intervention for EAAs or any AA cultural group. The study by Teng and Friedman (2009) found that a one-hour didactic presentation given to 27 older Chinese Americans (mean age was 74 years) led to increases in willingness to seek help from mental health professionals as measured by the Help-Seeking Preferences Questionnaire. The intervention included an introduction to mental health, an outline of types of mental health professionals and differences in their training, types of services offered, and psychiatric disorders most relevant to an elderly Chinese population. Although several limitations of the study are noted (e.g. absence of a control group, exclusion of variables such as acculturation and health status), the preliminary findings warrant future consideration of education-based intervention as a way to increase awareness and utilization of mental health services for AAs.

Intervention studies for promoting help-seeking behaviors within EAA and AA samples are still limited. However, a review of extant literature suggested educational approaches promoted help-seeking behavior by targeting and reducing obstacles of seeking mental health

services (Deane & Chamberlain, 1994; Nemec, 2005). These programs have been employed in different modalities and across a range of settings and target audiences. For instance, in order to address concerns about underutilization of mental health services for depression, government funded interventions in the United Kingdom, United States, and Australia have utilized mass media initiatives to provide information about depression in radio, print, and television advertisements (Nemec, 2005). These public health initiatives present similar issues of being replicated as described previously in the development of ethnic specific community mental health centers.

On a smaller scale, educational information about mental health has also been presented in printed material including pamphlets and billboard advertisements (Gonzalez, Tinsley, & Kreuder, 2002; Highet & Culjak, 2012) and a series of education workshops designed for students as a part of their high school (Berridge, Hall, Dillon, Hides & Lubman, 2011; Esters, Cooker, & Ittenbach, 1998;) and college (Morrison & Teta, 1980) curricula. The interventions presented information addressing the effectiveness of psychotherapy treatment, normalized experiences of mental illnesses (Highet & Culjak, 2012) and identified different sources of mental health services and the qualifications of providers (Esters, Cooker, & Ittenbach, 1998). The methods were found to increase help-seeking outcomes including accurate recall of facts about mental illnesses, accessing additional information about counseling on their website (Highet & Culjak, 2012), improved attitudes about mental health help-seeking (Gonzalez, Tinsley, & Kreuder, 2002), increased knowledge about client confidentiality and confidence in knowing how to seek mental health help (Berridge, Hall, Dillon, Hides, & Lubman, 2011).

While these education-based interventions have been effective, there are issues with cost (i.e. delivery of information via mass media initiatives), time (i.e. length of intervention) and

capacity to reach only a limited audience using seminar based interventions. Upon first glance, educational information that is delivered in print appears to address some of these limitations. However a review of written interventions found that only four out of eleven studies were effective in positively influencing expectations about counseling. More specifically, the authors of the study expressed concern that written materials would not be read carefully by target audiences (Tinsley et al, 1988). Furthermore, a comparison of delivering information by print to a multimedia approach with video clips, narrations, and text revealed that the multimedia intervention was more effective in reducing concerns about seeking mental health services among college students (Guajardo and Anderon, 2007).

Multimedia interventions that include the use of video appear to offer an alternative strategy to providing information about mental health to reduce barriers of help-seeking. In one study, the effectiveness of seven, ten-minute television programs broadcast throughout the United Kingdom about mental health was examined and found to lead to increased knowledge and awareness about mental illnesses (Barker, Pistrang, Shapiro, Davies & Shaw ,1993), but the issue with needing abundant resources to replicate this approach remain. On a smaller scale, Demyan and Anderson (2011) used videos to present college students in a Midwestern university in the United States with a brief educational video that addressed lack of knowledge about counseling (e.g. effectiveness of therapy, client confidentiality) and normalized help-seeking behavior (i.e. seeing mental health providers). They found that the intervention led to improved attitudes about mental health help-seeking among the participants, though there were no changes in intentions to seek counseling.

One possible limiting factor of the intervention in Demvan and Anderson (2011) was the brief duration of the video. Since it was designed as a public service announcement, the length

was set at two minutes and provided limited information to the participants. The script for the video contained only nine sentences that presented information about mental health throughout the video.

In a separate study examining multimedia presentation of information about counseling to undergraduate students, investigators were able to include a wide range of information (e.g. roles of clients and therapists, benefits of therapy, information about confidentiality, and issues addressed in therapy) in a 20-minute video (Guajardo & Anderson, 2007). In comparing the video presentation to similar information that was presented in print form and to a control group that received nothing, the video was most effective in reducing concerns about seeking counseling services and improved expectations about the process and outcome of therapy. Although intentions to seek therapy were not directly measured, the authors posited that positive attitudes and increased expectations about therapy would translate into greater likelihood of utilizing counseling services. Notably, none of the studies included measures of actual help-seeking behaviors.

In sum, information based videos have been shown to be effective in improving knowledge about therapy (Barker, Pistrang, Shapiro, Davies & Shaw, 1993), expectations about the effectiveness of therapy (Guajardo & Anderson, 2007), and attitudes about mental health services (Demyan & Anderson, 2011), though studies have not included examinations of changes in intentions to seek counseling or actual utilization of mental health services. While these studies have not focused on EAA or AA participants, the findings appear to warrant an exploration of the effectiveness of a video based intervention designed to address practical barriers related to underutilization of mental health services by EAAs. The video-based intervention utilized in this study is further described below.

Present Study

Throughout the literature on AA's utilization of mental health services, studies have focused attention on understanding the relationship between cultural factors, including acculturation and loss of face, and attitudes about seeking mental health services and willingness to see a counselor. While these studies provided an increased understanding of the relations between cultural factors and mental health help-seeking, discrepant findings persist, suggesting the need of continuing efforts to better understand mental heath services underutilization. Additionally, few studies have examined the role of practical barriers in mental health help-seeking despite the findings that lack of familiarity about mental health services remains a problem in the AA community. Thus, the first part of this study, which utilized a correlational, cross-sectional design, examined the relationship between cultural and practical barriers and mental health help-seeking.

The present study took a number of notable steps for addressing the discrepancies found in the literature,. First, the study included a more homogenous sample of EAAs, rather than those from all Asian cultural groups. Second, while most of the previous studies used either behavior-based acculturation measures or values-based acculturation measures, the present study included both forms of acculturation to capture a wide array of acculturation factors, investigating their associations with attitudes about seeking mental health services and willingness to see a counselor. Finally, the study was designed to investigate the role of practical barriers (i.e., knowledge about mental health services) and its association with mental health help-seeking attitudes and willingness to see a counselor.

The second part of the study, which utilized an experimental design, investigated the effect of a brief, practical barriers-focused video-intervention on mental health help-seeking

outcomes. The intervention addressed practical barriers in mental health help-seeking, an area that has largely been missing or minimized in previous studies. More specifically, in order to maximize the social validity of intervention, the intervention was tailored to the present research participants (i.e., EAA undergraduate students at Georgia State University) by addressing practical barriers associated with attitudes about seeking mental health services, willingness to see a counselor and actual help-seeking behavior. A range of behavioral indicators of help-seeking were incorporated in the outcome of help-seeking behaviors, including acquiring information about a university counseling center online or on the phone and receiving services from a mental health provider. Given estimates that about half of all clients who sought mental health treatment in America were urged to seek professional help by someone else (Therapy in America, 2004) and findings that Southeast and East AAs who utilized mental health services were frequently referred by friends, family, and community members (Abe-Kim, Takeuchi, & Hwang, 2002), recommending others to seek psychological help was also included as a help-seeking behavior.

In the current study, all potential participants were college undergraduates who were fluent in English and were qualified for 15 free individual psychotherapy sessions from the university counseling center. This suggested that the practical barriers of cost (i.e. money and insurance concerns) (Abe-Kim, Takeuchi, & Hwang 2002; Cheung & Snowden, 1990; Kung, 2004) and language concerns (Kung, 2004; Takeuchi, Chung & Shen, 1998) were minimal. For this reason, the practical barriers-based video intervention focused primarily on the lack of information about counseling services, a factor associated with low utilization rates of mental health centers (Kung, 2004; Loo, Tong, & True, 1989; Takeuchi, Lea, & Kuo, 1988) as well as use of informal services for psychological distress (Abe-Kim, Takeuchi & Hwang, 2002).

Specifically, the intervention video was designed to provide knowledge about the location, accessibility, and range of services offered at the counseling center. In addition to lack of awareness of services and low rates of underutilization, AA students are less likely to know someone with counseling experience or a diagnosis of a psychological disorder (Masuda et al., 2009), both of which may provide a source of information about professional psychological help. Thus, general knowledge about counseling (e.g. range of services offered, the process of counseling) and mental health was presented in the video to familiarize participants with mental health services.

Education based video interventions presented to college students about mental health services have varied in content, amount of information presented and length of video, ranging from a two-minute public service announcement (Demyan & Anderson, 2011) to a twenty-minute multimedia presentation (Guajardo & Anderson, 2007). In order to adequately address the practical barriers of information about counseling services while keeping the intervention brief, the video length in this study was 10 minutes.

Study Aims

The current study was comprised of two parts. In the first part of the study, the aim was to describe the relationship between cultural and practical barriers on mental health help-seeking. Specifically, the literature warrants an exploration of the relative association between behavioral acculturation and values based acculturation on mental health help-seeking attitudes and intentions. Given that behavioral indicators of acculturation measured in the SL-ASIA are influenced by geographical and community factors (e.g. presence of Asians and availability of Asian restaurants in local communities) and are not reflective of cultural beliefs that may influence help-seeking (Kim & Omizo, 2003), the first hypothesis was that a measure of Asian

values, relative to a measure of behavioral acculturation, would be more closely associated with mental health help-seeking. Specifically, lower adherence to Asian values would be associated to more positive attitudes about seeking professional psychological help and greater willingness to see a counselor about a range of problems. Additionally, based on a meta-analysis on the role of gender in mental health help-seeking among AAs (Nam, Chu, Lee, Kim & Lee, 2010), the second hypothesis was that EAA women would have more positive attitudes towards seeking psychological help than EAA men. The role of gender in intentions to seek counseling was exploratory given the inconsistent findings in the literature (Atkinson, Lowe, Matthews, 1995). Thirdly, it was hypothesized that the presence of practical barriers (i.e. knowledge about cost of counseling, location of counseling center, range of services provided, process of counseling, and effectiveness of counseling) would adversely impact attitudes and intentions to seek counseling above and beyond the contribution of culture-based barriers (as measured by behavior based acculturation and adherence to Asian values) equally for men and women.

The second part of the study examined the effectiveness of an intervention developed to increase mental health outcomes. The intervention was an education-based video that aimed to provide information about counseling (e.g. location, accessibility, and range of services offered at the counseling center) in a counseling information experimental condition. The effectiveness of the intervention condition was compared to a comparison group that was presented with a video of similar length providing information about career services, a resource available to students at the university. It was hypothesized that relative to the comparison group, the counseling information intervention would lead to increases in knowledge about counseling, attitudes about seeking psychological help, intentions to seek counseling, and actual service utilization for both EAA men and women.

Methods

Participants

       Participants in this study were undergraduate students attending a large four-year university in the southeastern United States in which AAs comprise 11% of the student body but utilize only 5.5% of the mental health services offered at the university's counseling center. To ensure adequate power, study enrollment was limited to AAs, without regard to specific Asian ethnicity or national origin. However, only EAAs were included in data analysis[1]. While the inclusion of all participants would have resulted in increased power, limiting the sample to EAA allowed for a more culturally specific examination of the study aims.

       Data collection occurred online to increase the ease and convenience of participation. The surveys were presented on psychdata.com, a website designed to conducting social science research while conforming to Institutional Review Board (IRB) guidelines for web- based research. Participants were recruited from undergraduate psychology courses through a web-based research participant pool, as well as through flyers placed around campus building bulletin boards in high traffic areas. At the end of six months of recruitment, the study enrolled 165 participants, of which 71 identified as EAA (i.e. Asian Americans of Korean, Chinese, Japanese, or Taiwanese descent). A table participant flow chart is shown in Figure 1.

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[1]   Analyses were conducted both with the full sample of all Asian participants and with each
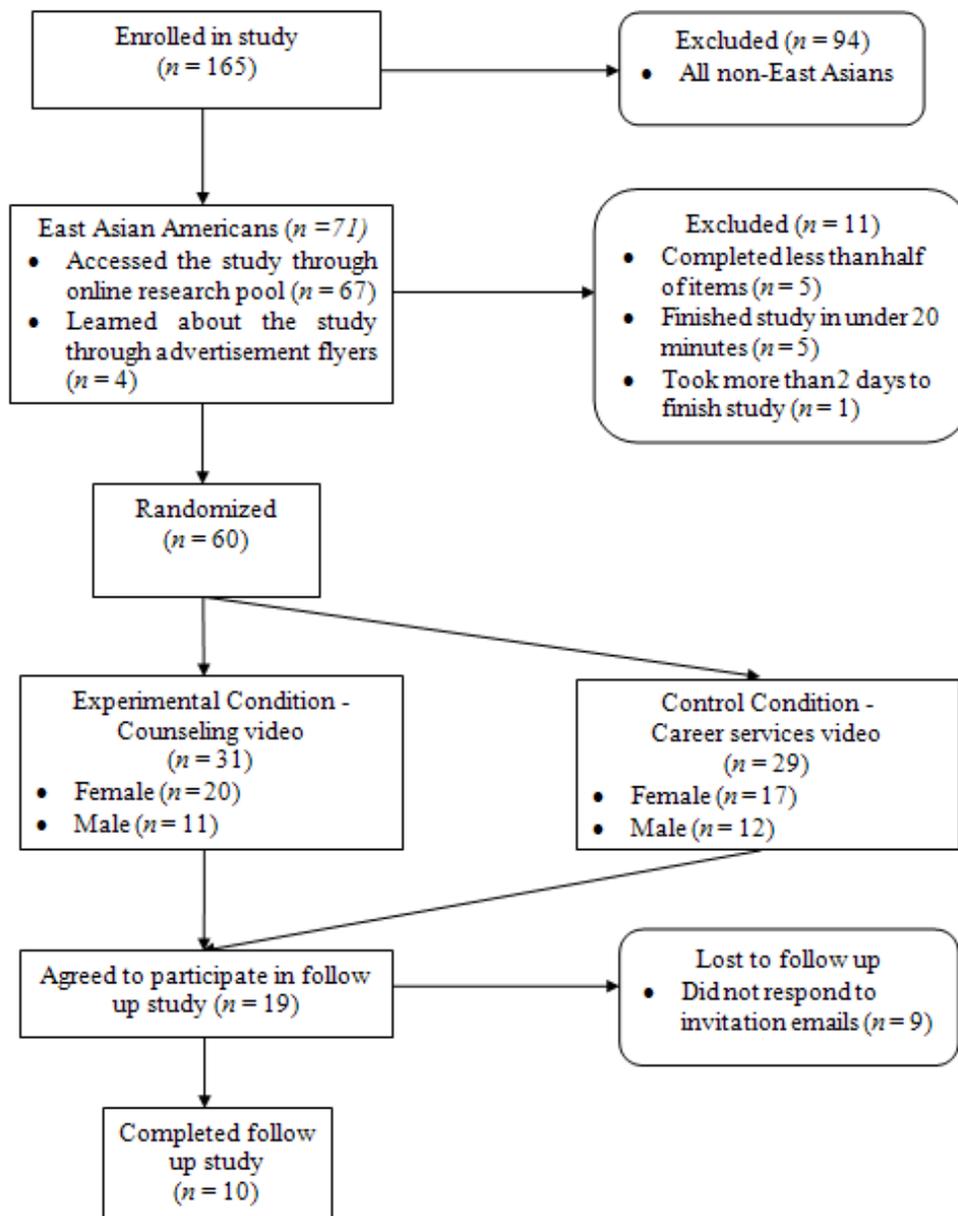
Figure 1. Participant Flow Chart

Among the 71 EAAs, five participants started the surveys but completed less than 50% of items and were subsequently removed from the data set. Another exclusion criterion was the length of time participants spent completing the surveys. The time recorded spanned from the moment a participant signed on to start the survey until the last question has been completed. Although this method of time recording is imprecise (i.e. participants were asked to complete the

survey in one sitting; however, this could not be enforced) it provided one measure of participants' attentiveness to the study. Participants that completed the task in less than 20 minutes were excluded from the analyses as the video presentations were almost 10 minutes long each and there were 211 questions presented to each participant. It was estimated that students completing the task in less than 20 minutes would not have spent enough time to thoughtfully answer questions while watching the entirety of the presented video. One participant who completed the survey after more than 48 hours was also excluded from the study, leaving 60 EAA participants.

Among the participants, the largest cultural and ethnic background represented were Koreans ($n = 38$), followed by Chinese ($n = 14$), Japanese ($n = 6$), and Taiwanese ($n = 2$). Most participants reported being the first generation in their family to be born in the U.S. (i.e. second generation, $n = 34$), and 14 participants were born in a different country. The remaining 12 participants were born in the U.S., and their parents and/or grandparents were also born in the U.S. The sample had 37 women and 23 men with an average age of 19.72 years ($SD = 2.39$). Fifteen percent of participants were enrolled at the university as psychology majors, 15% as business majors, 9% as undeclared majors, with the remaining students reporting "other major". The majority of participants were recruited from the web-based research pool; four students enrolled in the study after reading flyers placed around campus.

Procedures

Upon accessing the on-line study, students were presented with the consent form approved by the Georgia State University's Institutional Review Board. After providing consent, participants completed a pre-intervention questionnaire battery and then were randomized to either the control or intervention condition. Due to a procedural error in setting up the online

study, students were not presented with the measure assessing knowledge about counseling (i.e., a component of practical barriers) at pre-intervention. The implications of this error are discussed further in the results and discussion sections below. Depending on group assignment, participants were presented with a brief video that provided information about either the university's career services center (control group) or the university's counseling center (experimental group).

Immediately following the video, participants were presented with measures of attitudes toward seeking psychological help, willingness to see a counselor/utilize career services, and knowledge about counseling services/career services. Participants completed the surveys from pre-intervention to post-intervention in an average of 37.1 minutes. Participants recruited from psychology courses earned credit for their participation, whereas other students were given a movie pass upon completion of the study.

After post-intervention measures were completed, participants were asked to participate in a follow-up assessment in four months' time. Only 19 EAA participants agreed to be contacted for the follow-up study. Four months after participants completed the survey, an email was sent to these 19 participants, containing a link to the follow-up study with instructions to complete the survey within ten days in order to receive their compensation of ten dollars from Amazon.com. Three days before the deadline, a reminder email was sent to participants who had not yet accessed the study online. A final email extending the opportunity for participation by one more week was sent after the ten days passed. In all, ten EAA participants completed the follow-up survey, prohibiting analyses on the follow-up data.

Intervention Conditions

Participants in both the experimental and the control group were shown a 10-minute informational video presented by the author of the study. The scripts for the intervention videos are included in Appendix A.

Counseling information video: The video for the experimental group was designed to address a wide array of practical barriers of mental health utilization identified in the literature review and further described in the *Present Study* section. In order to tailor to the present participants, information presented in the video was primarily derived from university and college counseling center websites, including the website of the current study participant's counseling center. Specifically, to address the barrier of financial concerns (e.g. having money or insurance), the video informed participants that students receive 15 free sessions each year from the counseling center located at the university where the present study was conducted. Lack of awareness of mental health services as a major barrier was targeted by providing the location and contact information of the university counseling center. As a previous study revealed that AA students also are less likely to know someone who has gone to counseling or has received a psychological disorder diagnosis (Masuda et al., 2009), the intervention included information about the range of issues commonly addressed at the counseling center (e.g. difficulty adjusting to college) and how the counseling center addresses these issues. Furthermore, the intervention script includes information about the level of training of counselors, extent of confidentiality, the center's diversity mission statement, basic information about mental health and counseling including prevalence rates of psychopathology, benefits of counseling, and what clients can expect in counseling. The video was about ten minutes long and contained a film of the author speaking as well as slides containing graphics and text highlighting key notes about counseling.

Career services video: The control-group video provided information about the university career services center including the location, services offered, hours of availability, and contact information. The major purpose of the comparison condition was to control for extraneous factors, such as demand characteristics and exposure to an educational video. All of the information for the script was collected from the homepage of the university's career service center. Similar to the intervention video, the duration of the video was about ten minutes and contained clips of the author speaking as well as slides with graphics and bullet points of information about the career services center. Among the services mentioned, many are geared towards helping students find a job, including resume reviews, accessing job postings online, mock job interviews, and workshops from career professionals. The video also presented the availability of services geared towards helping students pursue academic goals after attaining their undergraduate degree. This includes helping students find a graduate or professional school that matches their interests and creating an action plan to help them get into programs of interest.

Measures

Measures used in the present study's analyses are included in Appendix B

Demographic Information. Participants provided information about their age, ethnicity, gender, household income, and program of study at the university.

Values acculturation. Level of values acculturation will be assessed with the *Asian Values Scale-Revised* (AVS-R: Kim & Hong, 2004), which was developed with 618 AA participants from California, Hawaii, and Maryland with 59% identifying as EAA. The AVS-R is a shortened version of 25 items that is based on the original Asian Values Scale (AVS: Kim et al., 1999), which contained 36 items. Revisions by Kim and Hong (2004) to the 36 item scale included removing redundant items and changing the Likert-type scale from 7 point responses to

4 point responses (1= "strongly disagree" to 4 = "strongly agree"). The measure assessed

participant's adherence to Asian cultural values including collectivism, conformity to norms,

emotional self-control, family recognition through achievement, filial piety, and humility. Kim

and Hong (2004) reported correlation coefficient of .93 with the original scale and a person

separation reliability coefficient of .80. For the current sample, reliability was adequate with a

Cronbach's alpha of .71 at pre-intervention.

Behavioral acculturation. The Suinn-Lew Asian Self-Identity Acculturation Scale (SL-

ASIA; Suinn, Rickard-Figueroa, Lew, & Vigil, 1987) contains 21 questions that assess four areas

of behavioral acculturation. The scale was developed with 324 university students in Colorado

that identified as AA broadly defined including Southeast, East and South Asian ethnic

backgrounds. The four areas assessed in the measure include language familiarity, usage, and

preference; ethnic identity; cultural behaviors; and ethnic interactions. For each item,

participants were asked to choose one response out of five choices that best describes them. An

acculturation score is calculated by taking the total score and dividing by the number of items.

The resulting scores of one represent Asian-identification (low acculturation), three represent

bicultural identification, and scores around five represent western-identification (high

acculturation). In the present study, the alpha coefficient of this measure was .92. at pre-

intervention.

Knowledge of counseling. Knowledge of counseling and of the university's counseling

center was assessed with 12 multiple-choice items that include one correct response. The

questionnaire was developed for the present investigation. The questions cover an array of topics

including location of the counseling center, cost of counseling sessions, services provided at the

counseling center, extent of confidentiality in counseling, and empirical support of effectiveness

of counseling. Reliability of the 12-item measure at post-intervention was adequate with a

Cronbach's alpha of .79 in the present study.

Given that the construct of counseling knowledge is one that is difficult to fully capture

in a 12 item multiple choice measure, three questions were added at the end of the knowledge

measure to allow participants to rate their perceived knowledge about and ability to seek out

mental health counseling. The items included "If I wanted to see a counselor at the GSU

counseling center, I know how to get the process started", "I have the financial means to see a

counselor at GSU", and "I have adequate knowledge about the training a counselor receive."

Responses ranged from one ("disagree") to four ("agree). Cronbach's alpha for the three items

was .87.

Help-Seeking Attitudes: Attitudes toward Seeking Professional Psychological Help-Short

Form (ATSPPH-SF; Fischer and Farina, 1995). The questionnaire contains 10 items that

measure attitudes of seeking professional psychological help. The short form was developed

from Fischer and Turner's (1970) original 29-item measure and represents similar constructs as

the original instrument. Responses range from 1 (strongly disagree) to 4 (strongly agree). For

ease of interpretability, a total score was calculated by summing all item scores and dividing by

the number of items. High scores indicate a positive attitude toward seeking professional

psychological help. A correlation of .87 with the original measure demonstrate good convergent

validity (Fischer and Farina, 1995). Although the measure was originally developed with a

primarily European Caucasian sample, both the original and short form version of this measure

has been commonly used with South, East, and Southeast AA participants, and found to be

reliable (Kim, 2007; Kim & Omizo, 2003; Leong, Kim, Gupta, 2011). The current study yielded

alpha coefficients of .78 pre-intervention and .72 post-intervention.

Willingness to See a Counselor: Participants' intention to seek mental health services was assessed with the *Willingness to See a Counselor* scale (WSC, Gim et al. 1990), a 19-item measure, which provides a specified list of problems. The list contains problems that college students might experience such as depression, anxiety, and career choice concerns and was modified to include problems that minority clients often experience including adjustment to college and loneliness (Ponce and Atkinson, 1989). The original authors further revised the measure for use with AA participants by adding four problems that may be relevant for AAs (e.g. ethnic identity confusion or racial discrimination). Participants indicated the presence of these problems as well as their willingness to see a counselor about each problem. The WSC was developed with 816 AA college students, including 65% identifying as EAA enrolled in a West Coast university. For the purposes of this study, only willingness to see a counselor about the problem was considered in data analyses. Kim and Omizo (2003) divided the measure into three subscales: WSC-Personal Problems (9 items; e.g. depression, anxiety, family conflict), WSC-Academic/Career Problems (6 items; e.g. academic performance, career choices) and WSC-Health Problems (4 items; e.g. insomnia, alcohol problems). Each item was completed on a 4-point response scale (1= not willing, 4= willing). The items across the three subscales yielded Cronbach's alphas ranging from .85 to .92, pre and post intervention.

Mental Health Help-Seeking Behavior: Participants were asked if they have ever utilized the university's counseling center or other mental health services. The question was framed as "ever" in the baseline assessment and as "in the past four months" at the follow-up study. If participants reported seeing a mental health provider, they were asked to rate the quality of that experience ranging from helpful to harmful and the reason for seeking services. The measure

also assessed for indirect help-seeking behaviors, including if they accessed the counseling center's website or called the counseling center.

Mental Health History. Students reported on whether they have ever received a mental health diagnosis and completed the Brief Symptom Inventory-18 (BSI-18: Derogatis, 2000) to assess their current level of psychological symptoms. The BSI-18 is an 18-item measure of psychological symptoms that is based on a shortened version of the 53-item BSI (Derogatis, 1993), which was based on the 90-item Symptom Checklist (SCL-90R; Derogatis & Clearly, 1977). A global symptom severity index can be calculated and has been shown to correlate at .90 or greater with similar scores from the SCL-90-R (Derogatis, 2000). Furthermore, the BSI-18 has been found to be reliable with alpha at .89 (Constantine & Flores, 2006) and .94 (Shim & Schwartz, 2008) in previous studies with AA samples. Due to IRB concerns, the question on the BSI regarding thoughts of suicide on the BSI was removed in order to reduce the amount of distress participants might experience. Thus, 17 items were used in the BSI for the present study yielding a Cronbach's alpha of .94.

Additional Measures to Control Demand characteristics

The following measures were included to reduce demand characteristics (i.e. the likelihood that participants assigned to the control group would accurately form hypotheses about the aim of the study).

Knowledge of University Career Services: 11 multiple-choice items were given to assess for knowledge of the career services center. Questions included knowledge of location of the GSU Career Services center, services provided, and ways to prepare for life after graduation. Reliability was adequate with an alpha of .84.

Willingness to use University Career Services: Participants were presented 10 items listing a range of services provided at the career services center and asked to rate their willingness to utilize each service. Each item was completed on a 4-point response scale (1= not willing, 4= willing). The measure demonstrated good reliability with an alpha of .95.

Utilization of University Career Services: Participants were asked if they have ever used any professional career service providers. The questions were framed as "ever" in the baseline assessment and as "in the past four months" at the follow-up study. If students had seen a career services provider, they were asked to rate the quality of that experience ranging from helpful to harmful and the reason for seeking services. For students who indicated they had not accessed career services, they were asked if they believed they would utilize services if the need arose.

<div align="center">Results</div>

Preliminary Analyses

Frequency distributions were obtained for all variables and revealed a range of zero to five percent of responses missing in each measure. Using SPSS 18.0 Missing Values Analysis (MVA), missing scores were imputed by conducting Expectation-Maximization (EM) algorithm based imputation, which uses moderately correlated variables in the data set to predict the missing values at the item level. MVA also includes randomly chosen error terms from the observed residuals of complete cases to be added to the estimates to increase variability in the distribution of the replaced values. Predictors included variables from measures that were included in the current study. After data imputation, participants' score for each variable was then calculated as the sum of the participants' responses to the questionnaire measuring the variable construct. For some constructs (e.g. AVS, SL-ASIA) the sum of the responses were then divided by the number of items in the measure as instructed by the authors of the measures.

Subsequently, variable normality was assessed for all variables except for gender, which is a dichotomous variable. Three variables did not need to be transformed; the measure of behavioral acculturation, SL-ASIA, knowledge of counseling, and the mental health help-seeking attitudes outcome, ATSPPH-SF, were normally distributed. The three mental health help-seeking intentions outcome variables at both pre and post intervention were positively skewed such that most participants reported low levels of intentions to seek mental health help. The histogram of the values acculturation measure, AVS-R, revealed excess kurtosis. These variables were successfully transformed to a more normal distribution through an inverse transformation. Transformed scores were used in all analyses except for sample descriptives to allow for ease of interpretation of mean scores for each scale.

Pre-intervention data were used to investigate the associations among cultural factors and help-seeking related outcomes. Pearson correlations were conducted to determine variables that would be used as covariates for the first part of the study aims examining the relationship between acculturation and mental health help-seeking outcomes (see Table 1). Potential covariates included demographic variables (i.e. age, gender, household income) and mental health history (i.e. BSI-18 scores, and previous mental health experience). Notably, 20% ($n =$ 12) of the participants reported prior experience working with a mental health professional. Results revealed that those who had past experience with a mental health provider had greater willingness to see a counselor about personal problems than those without such help-seeking experience. The importance of including both measures of acculturation is also highlighted by the absence of significant association between the two measures, suggesting they are measuring distinct constructs.

Overall, participants identified as being bi-cultural with a mean score of 3.20 ($SD = .65$) out of a range of one to five on the SLASIA measure, suggesting that their level of behavioral acculturation includes a balance of both Asian and Western cultures (Suinn, Lew, Vigil, 1987). Regarding their cultural values, out of a range of scores from one to five (high scores representing adherence to Asian values) the mean score was 2.58 ($SD = .24$), suggesting that while participants were more likely to be bicultural behaviorally, they tended to adhere less to Asian values (Kim & Hong, 2004). Relative to the possible range of scores from one to four, the mean scores on the three WSC outcome measures were all less than 1.50 ($SD = .66$), reflecting low levels of willingness to seek counseling across the areas of personal problems, academic/career issues, and health concerns. To determine if there were any differences in participants' willingness to see a counselor about different issues, a within subjects ANOVA analysis was conducted for the three WSC measures. Results revealed significant difference among the WSC subscales ($F (2, 118) = 3.76, p < .05$). Within subjects contrasts revealed greater willingness to see a counselor about academic/career problems, relative to personal problems, $F (1, 59) = 4.22, p < .05$, and health problems, $F (1, 59) = 6.67, p < .05$. Participant scores on attitudes towards seeking counseling was a mean of 2.38 ($SD = .48$) out of a range of one to four with higher scores representing favorable attitudes.

For the second part of the study, preliminary chi-square analyses for categorical variables and t-tests for continuous variables were conducted to ensure that randomization to intervention or control group was successful. In addition to family income, gender, and BSI-18 scores, the number of years participants' had been enrolled at the university, previous experiences with mental health counseling, and pre-intervention mental health help-seeking outcomes (i.e. ATSPPH-SF, three WSC subscales) were included in the analyses. Results revealed no

Table 1

Bivariate Correlations and Sample Descriptive for Study Variables Pre-Intervention

	M(SD)	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
1. Counseling experience	--	--	.10	.10	-.14	.24	-.16	.19	.19	.25*	.08	.06
2. Age	19.72 (2.39)		--	.05	.06	.08	-.13	.15	.08	.22	.11	-.02
3. BSI 18[a]	27.93 (11.13)			--	.01	.12	-.07	.02	-.09	.23	.16	.12
4. Gender	--				--	-.04	-.03	.14	-.06	-.14	-.17	-.21
5. Family Income[b]	3.25 (1.59)					--	-.07	.29*	-.06	.12	-.09	.11
6. Values Acculturation	2.58 (.24)						--	-.09	-.20	-.26*	.01	-.08
7. Behavioral Acculturation	3.20 (.24)							--	-.04	.13	-.07	.12
8. ATSPPH-SF	2.38 (.48)								--	.25*	.29*	.34**
9. WSC Personal Problems	1.32 (.47)									--	.68**	.57**
10. WSC Academic/Career	1.50 (.66)										--	.65**
11. WSC Health	1.41 (.76)											--

Note. ATSPPH-SF = Attitudes Towards Seeking Professional Psychological Help – Short Form; BSI 18 = Brief Symptom Inventory; WSC = Willingness to See a Counselor.
[a]Possible Range: 1=less than 20,000; 2=20,000 to 39,999; 3=40,000 to 59,999; 4=60,000 to 79,999; 5=80,000 to 99,999; 6=100,000 to 149,999; 7=100,000 to 149,99; [b]Possible Range: 17 to 85
*$p<.05$ **$p<.0$

significant group differences on these variables; no covariates were entered into the ANOVA models.

Pearson's correlations and sample descriptive were run for all the study variables presented following the video interventions (see Table 2). Of note, items related to perception of knowledge and ability to seek counseling were positively correlated with WSC academic/career problems and both knowledge of counseling and perception of knowledge and ability to seek counseling were positively correlated to WSC personal problems.

Unfortunately, only 10 EAA participants completed the follow-up study four months after they were presented with the intervention. The low participation rates did not provide a large enough sample to investigate the effectiveness of the intervention on actual utilization of mental health services.

Table 2

Bivariate Correlations for Sample Descriptive Study Variables Post-Intervention

Table 2. *Bivariate Correlations for Study Variables Post Intervention*

	Mean (Standard Deviation)		1.	2.	3.	4.	5.	6.	7.
	Control $n = 29$	Experimental $n = 31$							
1. Knowledge of Counseling	6.45(2.68)	8.39 (1.82)	--	.56**	-.18	.24	.31*	.25	.25
2. Knowledge/ability perception	8.67(2.42)	9.91(1.70)		--	-.12	.22	.26*	.32**	.22
3. Gender	--	--			--	-.14	-.30*	-.18	-.24
4. ATSPPH-SF	2.64(.50)	2.52(.38)				--	.42**	.79**	.37**
5. WSC Personal Problems	1.30 (.69)	1.28(.45)					--	.73	.70
6. WSC Academic/Career	1.68(.86)	1.51(.55)						--	.56**
7.WSC Health	1.49(.98)	1.31(.56)							--

Note. ATSPPH-SF = Attitudes Towards Seeking Professional Psychological Help Scale-Short Form;
WSC = Willingness to See a Counselor Scale
* $p < .05$, ** $p < .01$

Part 1: Describing the relationship between cultural and practical barriers on mental health help-seeking outcomes

The present investigation consisted of two parts: The first part was a cross-sectional investigation designed to examine the role of cultural and practical barriers on mental health help-seeking outcomes among EAA students. Cultural barriers were represented by measures of behavioral acculturation and values-based acculturation; the practical barrier was measured by assessing knowledge about counseling. The first aim of this cross-sectional investigation was to examine whether behavioral or values-based acculturation was more predictive of attitudes about mental health help-seeking and intentions to seek counseling. The role of gender in these relations was examined in the second aim. The third aim was to investigate whether knowledge about counseling would be associated with mental health help-seeking outcomes (i.e. attitudes, intentions, and behaviors related to mental health help-seeking) above and beyond cultural barriers.

As mentioned in the Methods section, a procedural error in setting up the presentation of surveys online prevented participants from answering questions assessing knowledge about

counseling prior to the presentation of the intervention. Therefore, the third aim was not examined in the current study.

To address the first and second aims, four hierarchical multiple regression analyses were conducted separately for each mental health help-seeking variable as an outcome (i.e., attitudes towards mental health help-seeking and willingness to see a counselor about personal problems, academic/career problems, and health problems). All regression analyses assumptions were met. In each model, gender was entered into step one and both acculturation variables, SL-ASIA and AVS, were entered into the second step. In order to reduce multicollinearity, each independent variable was centered and then multiplied by the gender variable to create two interaction terms that were entered individually into the final step. In the regression analysis with the willingness to see a counselor about personal problems outcome variable, previous experience with counseling was entered in as a covariate in step one and the subsequent steps were the same as the models in the regressions with the other outcome variables.

As shown in Table 3, regression analysis revealed that, although the final step of the model was not significant, $R^2_{adj} = .06$, $F = 1.64$, $p = .15$, Asian values acculturation was significantly associated with willingness to see a counselor about personal problems, $\beta = -.37$, $p < .05$. That is, higher levels adherence to Asian values was associated with lower willingness to see a counselor about personal problems. There were no other significant associations. Thus, regarding the first aim it appears that, relative to behavior based acculturation, values based acculturation was a more significant predictor of willingness to see a counselor about personal problems. For the second aim, results revealed that gender did not play a significant role in predicting or moderating the relationship between cultural barriers and attitudes about mental health help-seeking, thus failing to support the second hypothesis. Similarly, no gender differences were found with willingness to see a counselor about personal, academic/career, or health problems.

Table 3

Hierarchical Regression Models for Mental Health Help-Seeking (N=60)

Variables	β	B	$SE\ B$	t	p
ATSPPH-SF					
Step 1 (R^2 = .004)					
Step 2 ($R^2 \Delta$ = .05)					
Step 3 ($R^2 \Delta$ = .01)					
Gender	-.07	-.06	.14	-.46	.65
Behavioral Acculturation (SL-ASIA)	-.06	-.04	.12	-.38	.70
Values Acculturation (AVS-R)	-.21	-3.03	2.32	-1.30	.20
Behavioral x Gender	.01	.01	.23	.06	.95
Values x Gender	.01	.16	4.01	.04	.97
WSC Personal Problems					
Step 1 (R^2 = .03)					
Step 2 ($R^2 \Delta$ = .01)					
Step 3 ($R^2 \Delta$ = .07)					
Step 4 ($R^2 \Delta$ = .04)					
Mental Health Experience	.10	.05	.06	.73	.47
Gender	-.21	-.08	.05	-1.51	.14
Behavioral Acculturation (SL-ASIA)	.09	.02	.04	.51	.62
Values Acculturation (AVS-R)	-.37	-2.04	.89	-2.29	.03
Behavioral x Gender	.09	.05	309	357	.57
Values x Gender	.24	2.21	1.52	1.45	.15
WSC Academic/Career Problems					
Step 1 (R^2 = .03)					
Step 2 ($R^2 \Delta$ = .00)					
Step 3 ($R^2 \Delta$ = .01)					
Gender	-.17	-.09	.07	-1.24	.22
Behavioral Acculturation (SL-ASIA)	-.04	-.01	.06	-.23	.82
Values Acculturation (AVS-R)	-.05	-.40	1.23	-.32	.75
Behavioral x Gender	-.03	-.02	.12	-.16	.87
Values x Gender	.08	1.04	2.12	.49	.63
WSC Health Problems					
Step 1 (R^2 = .05)					
Step 2 ($R^2 \Delta$ = .03)					
Step 3 ($R^2 \Delta$ = .01)					
Gender	-.22	-.11	.07	-1.56	.12
Behavioral Acculturation (SL-ASIA)	.20	.08	.06	1.30	.20
Values Acculturation (AVS-R)	-.08	-.60	1.23	-.49	.63
Behavioral x Gender	-.11	-.08	.12	-.40	.49
Values x Gender	-.01	-.13	2.12	-.06	.95

Note. ATSPPH-SF = Attitudes Towards Seeking Professional Psychological Help Scale – Short Form; WSC = Willingness to See a Counselor Scale; SL-ASIA = Suinn-Lew Asian Self-Identity Acculturation Scale; AVS-R = Asian Values Scale – Revised.

Part 2: Examining the effectiveness of an intervention on mental health help-seeking outcomes

The second part of the study was designed to examine the effectiveness of the information-based intervention on mental health help-seeking outcomes. As such, a series of 2 (condition; counseling-focused vs. career service-focused) x 2 (gender; female vs. male) x 2 (time; pre vs. post) repeated measure analyses of variance (ANOVAs) were conducted on help-seeking attitudes and the three WSC subscales. Means and standard deviations of study variables are presented in Table 4. Results revealed a main effect of time in help-seeking attitudes, $F(1, 56) = 14.58$, $p < .01$, suggesting the increase in favorable help-seeking attitudes at post intervention. The main effects of time were also found in the WSC personal problems, $F(1, 56) = 9.90$, $p < .01$, such that the intention to seek a counselor for personal problems decreased over time. There were no significant main effects of time for WSC academic/career, $F(1, 56) = 2.44$, $p = .12$, or WSC health, $F(1, 56) = .31$, $p = .58$.

Regarding the hypothesized positive effects of the counseling intervention on mental health help-seeking outcomes, results revealed the trend of a condition by time interaction effect on the outcome of willingness to see a counselor about academic/career, $F(1, 56) = 3.30$, $p = .07$. Subsequent repeated measures ANOVA analyses revealed increases in willingness to see a counselor for academic/career problems in the career service-focused control group, $F(1, 28) = 4.70$, $p < .05$, but not in the counseling information experimental group, $F(1, 28) = .06$, $p = .81$. No significant condition by time effects were found in help-seeking attitudes, $F(1, 56) = .61$, $p = .43$, WSC personal problems, $F(1, 56) = .15$, $p = .70$, or WSC health, $F(1, 56) = 1.22$, $p = .27$. Thus, the present findings did not support the hypothesized positive effects of the counseling information experimental condition on attitudes and intentions toward seeking counseling.

Table 4

Mental Health Outcome Average Scores (Standard Deviations) by Gender and Condition and

Time

	Pre-intervention	Post-intervention
ATSPPH-SF	2.38 (.48)	2.57 (.44)
Counseling	2.28 (.45)	2.52 (.38)
Women (*N* = 20)	2.27 (.41)	2.54 (.34)
Men (*N* = 11)	2.30 (.52)	2.49 (.45)
Career Services	2.49 (.49)	2.64 (.50)
Women (*N* = 17)	2.56 (.52)	2.74 (.53)
Men (*N* = 12)	2.38 (.45)	2.50 (.45)
WSC Personal Problems	1.32 (.47)	1.29 (.57)
Counseling	1.33 (.41)	1.28 (.45)
Women (*N* = 20)	1.31 (.37)	1.29 (.38)
Men (*N* = 11)	1.36 (.50)	1.25 (.37)
Career Services	1.32 (.53)	1.30 (.69)
Women (*N* = 17)	1.44 (.66)	1.52 (.83)
Men (*N* = 12)	1.14 (.13)	1.02 (.15)
WSC Academic/Career	1.50 (.66)	1.59 (.72)
Counseling	1.55 (.62)	1.51 (.55)
Women (*N* = 20)	1.58 (.65)	1.54 (.56)
Men (*N* = 11)	1.49 (.59)	1.47 (.56)
Career Services	1.45 (.70)	1.68 (.86)
Women (*N* = 17)	1.60 (.82)	1.90 (.98)
Men (*N* = 12)	1.24 (.45)	1.36 (.54)
WSC Health	1.41 (.76)	1.40 (.78)
Counseling	1.44 (.78)	1.31 (.56)
Women (*N* = 20)	1.41 (.73	1.37 (.61)
Men (*N* = 11)	1.50 (.90)	1.20 (.45)
Career Services	1.31 (.56)	1.49 (.98)
Women (*N* = 17)	1.63 (.91)	1.78 (1.19)
Men (*N* = 12)	1.02 (.07)	1.49 (.98)

Note. ATSPPH-SF = Attitudes Towards Seeking Professional Psychological Help – Short Form; WSC = Willingness to See a Counselor

As the knowledge of counseling measure and the three items measuring perceptions of knowledge about and ability to access counseling services were only available at post-intervention, t-tests were conducted to investigate group differences in these variables. Results revealed a significant difference in knowledge of counseling scores for participants who were in the counseling information condition (*M* = 8.39, *SD* = 1.82) compared to participants in the comparison condition (*M* = 6.45, *SD* = 2.68), *t* (58) = 3.30, *p* < .01. Scores for perception of

knowledge and ability to accessing counseling services were also higher for participants receiving the counseling information intervention ($M = 10.33$, $SD = 1.80$) relative to the control condition ($M = 8.44$, $SD = 2.73$), $t(58) = 3.12$, $p < .01$.

Regarding the role of gender, the results of repeated measures ANOVA revealed a significant gender by time interaction effect for WSC personal problems, $F(1, 56) = 4.33$, $p < .05$. The interaction effect was further examined with within subjects ANOVA analyses, demonstrating that male participants' willingness scores decreased significantly from pre-intervention to post-intervention, $F(1, 22) = 21.07$, $p < .01$, but not for female participants, $F(1, 36) = .61$, $p = .44$. That is, men were less willing to see a counselor about personal problems over time across both experimental groups. This pattern of scores was unique to personal problems and not found for gender by time effects in outcomes of attitudes, $F(1, 56) = .41$, $p = .53$, WSC academic/career, $F(1, 56) = .08$, $p = .78$, or WSC health, $F(1, 56) = .17$, $p = .68$. In the remaining three help-seeking outcomes, gender did not play a significant role in the relations between the other study variables.

Discussion

The purpose of the present investigation was to better understand and to intervene upon the relatively low use of mental health services among East Asian Americans (EAA). In order to accomplish this, the study was separated into two parts; the first part of the study was a descriptive investigation, examining cultural factors related to EAA college students' attitudes about mental health help-seeking and intentions to seek mental health services. The second part of the study, which was a small randomized controlled trial, aimed to examine the effectiveness of an education-based intervention on mental health help-seeking attitudes and willingness to seek help from a counselor among EAA students..

In the descriptive portion of the present study, the first aim compared the relationships of behavior-based acculturation and values-based acculturation on mental health help-seeking outcomes. As hypothesized, values-based acculturation was significantly associated with participants' willingness to see a counselor, though only about personal problems. The direction of the association was such that participants who adhered more to Asian values were less willing to see a counselor about personal problems. This finding supports past research, showing a similar pattern between these variables (Kim, 2007; Kim and Omizo, 2003). Given that the AVS measure includes items assessing the importance of emotional self-control, emphasizing the needs and well being of others over oneself, and conforming to norms, a plausible line of reasoning is that seeking a counselor about one's own personal problems might be a violation of Asian cultural values.

The null findings related to academic/career problems and health may also be due to the absence of conflict between seeing a counselor for these reasons and Asian values. For instance, addressing problems related to academic achievement may be more aligned with cultural values than addressing problems about anxiety or loneliness. A survey of Southeast and East AA clients at a college counseling center in Hawaii showed significantly higher endorsements of academic and career issues as presenting problems, compared to Caucasian students who predominantly endorsed interpersonal issues (Tracey, Leong & Glidden, 1986). Thus, while the researchers have identified acculturation as being a potential barrier in AAs' willingness to see a counselor (Gloria, Castellanos, Park, & Kim, 2008; Kim & Omizo, 2003), the current study suggests that the relevance of cultural factors on help-seeking may be dependent on the types of problems an EAA college student is experiencing.

There was not a significant association between behavioral- and values-based acculturation measures, suggesting that the two measures assessed different constructs. Items on the behavioral measure included language proficiency, age of beginning school in the U.S., food preferences, and the ethnic background of friends. These questions may be more indicative of the time a person has spent in this country and about the diversity of communities available in a person's city rather than about a person's values. These findings provide support for using multiple measures of acculturation.

The second aim of part one of the study examined whether EAA women had more positive attitudes about seeking mental health services and to clarify discrepant findings on the role of gender in help-seeking intentions among EAAs. Results revealed that gender did not play a significant role in EAA college students' mental health seeking attitudes or willingness to see a counselor. The results conflict with a meta-analysis review of 14 studies that found more positive mental health help-seeking attitudes among AA women relative to AA men (Nam, Chu, Lee, Kim & Lee, 2010). However, the authors of the meta-analysis review recommended further investigation of gender differences among specific Asian cultural groups. In their analyses, they combined participants from previous studies, resulting in a sample of East and South East Asian participants, which differs from the current study's focus on EAA participants. In a study that included a sample comprised exclusively of EAA (Chinese, Japanese, and Korean Americans) undergraduate college students, results similar to the current study's were found, i.e. there were no significant gender differences in attitudes about mental health services (Atkinson & Gim, 1989). Additionally, researchers have noted that significant findings of gender differences in both attitudes of mental health help-seeking and intentions to seek mental health services may be related to low rates of acculturation to the Western culture (Tata & Leong, 1990), which was not

characteristic of the acculturation level of the current study's participants.   In the current study, behavioral acculturation was found to be bi-cultural, and participants tended to have low adherence to Asian values. Thus, the current study's absence of significant gender effect in attitudes about and intentions to seek mental health may suggest that socialization of EAA men and women with respect to using mental health services are similar, a possibility that has been raised in past studies (Atkinson & Gim, 1989; Atkinson, Lowe & Matthews, 1995). Since the effects of gender on attitudes and intentions of help-seeking appear to vary between ethnic groups and depend on acculturation level, the findings from the current study recommends caution in generalizing to populations that differ from the current sample's participants.

The second part of the study examined the effectiveness of a practical barriers-focused education in mental health help-seeking outcomes. Preliminary analyses showed that participants in the counseling information intervention group had significantly greater knowledge of counseling than participants in the control group at post-intervention. Given that the participants were randomly assigned into the two conditions and did not differ on important demographic characteristics, it appears that being in the experimental group was associated with greater knowledge about counseling services.

Three questions were added onto the knowledge about counseling measure as a way to account for perceptions of knowledge and ability to seek counseling. Preliminary analyses showed that participants that received information about counseling had higher levels of perception of knowledge and ability when compared to the control group. Higher scores on these three items suggested that participants in the experimental group were more confident in their ability to initiate counseling services, believed they had the financial resources to seek counseling, and had sufficient knowledge about the counselor's qualifications to provide

psychological services than those in the comparison group. Furthermore, summed scores on these items were positively correlated with willingness to see a counselor about personal and academic/career problems. Since there were only three items that measured perceptions of knowledge and ability to seek counseling and the questions were not guided by past studies in the mental health help-seeking literature, caution is required in interpreting findings. However, the results provide a glimpse at potential areas to examine in future research, particularly in the area of self-efficacy. Although the three items were not designed to measure self-efficacy, the questions appear to include components of self-efficacy as defined in the health behavior change literature. Specifically, self-efficacy has been defined as "belief in one's capabilities to organize and execute the course of action required to produce given levels of attainment" (Bandura, 1998) and is an important component that is studied and intervened upon (e.g. Condiotte & Lichtenstein, 1981; Forehand et al. 2007). Thus, the preliminary results regarding perceptions of knowledge and ability to seeking counseling services suggest that self-efficacy may be an area that warrants further examination, particularly in light of its absence in previous studies examining EAA and AA underutilization of mental health services.

Repeated measures ANOVAs revealed several unexpected findings. It was originally hypothesized that the counseling information condition would improve all mental health help-seeking outcomes, compared to the career services information control condition. However, results revealed that participants in both conditions demonstrated increases in favorable attitudes towards seeking psychological help at post-intervention. The interpretation of the positive effects in the control condition is challenging and different explanations for the results can be considered. One possible explanation is the potential confound of demand characteristics. However, if the results were biased by participants conforming to the perceived expectations of

the experimenter, one would expect scores on the willingness to see a counselor measures to have increased at post-intervention as well, which did not occur in the present study. A review of the attitudinal measure and the information presented in the control condition video provided a possible explanation. Questions on the measure of attitudes towards seeking professional psychological counseling assessed for participants' attitudes about dealing with problems on their own (e.g. "A person should work out his or her own problems…counseling would be a last resort" and "A person with an emotional problem is not likely to solve it alone."). Regarding these items, the control video presented the university career services as an available resource that is designed to help students be successful in achieving their goals at the university. This script may have led participants to recognize that they do not need to deal with a range of stressors in college alone, including stressors related to emotional difficulties, leading to the unintended effect of more positive attitudes towards psychological providers.

Another unexpected effect of the career services video was a nearly significant finding that participants in the control condition reported being more willing to see a counselor about academic/career problems relative to participants who were presented information about counseling. Although this finding was in the opposite direction of the hypothesis, it can also be explained by the contents of the university career services video. As described earlier, the script of the university career services video provided information about resources designed to help students with their career goals by finding a job or getting into graduate school. Whereas the video about counseling briefly mentioned academic difficulties as one of the issues addressed at the counseling center, a significant portion of the university career services video was spent orienting the participant to academic and career resources (e.g. resume reviews, action plan to get into graduate school, mock interviews). It is important to emphasize that the university

career services video did not include information about the psychological distress related to academic or career difficulties. However, it may be that thoughts about academic and career problems were more salient for participants in the control condition, relative to the counseling information experimental condition, leading to greater intent to see a counselor about those issues. This is consistent with literature that suggests AA families emphasize academic achievement (D. Sue & D.W. Sue, 1993), and AAs' greater preference of seeing counselors for academic problems compared to personal problems (Atkinson, Lowe & Matthews, 1995). Similarly, repeated measures ANOVAs on pre-intervention data in the current study revealed that EAAs were most willing to see a counselor for academic/career problems relative to personal problems or health problems. Thus, it may be that outreach programs and interventions aimed at increasing EAA college student use of counseling services would benefit from highlighting the benefits of counseling in addressing academic and career problems.

The most puzzling effect of the second part of the study was the finding that across both conditions, men were less willing to see a counselor about personal problems over time; a finding made more puzzling by the fact that positive attitudes about seeking help increased for participants regardless of gender or intervention condition. A review of the literature yielded no studies that incorporated measures of attitudes or intentions to see a counselor in a repeated measures design, so it was difficult to find similar studies to support or contrast the current finding. One explanation of the results is that in responding to the survey a second time (i.e. post intervention) participants were forced to dwell on personal problems multiple times, leading to a decreased willingness to share these problems with a counselor. The order in which the measures were presented to participants was such that the pre-intervention WSC personal problems survey was the first measure to ask participants to think about personal experiences of

distress (e.g. depression, loneliness, anxiety). Subsequently, the BSI measure was administered and required participants to think about a range of symptoms associate with distress (e.g. feeling fearful, feeling worthless) once more. By the time participants began the post-intervention WSC personal problem survey, they had been asked to dwell on psychological symptoms twice already, and male participants may have felt particularly reluctant to share these problems with a counselor. In support of this explanation, 348 EAA and South AA college students were found to prefer avoidant coping strategies (i.e. "I try not to think about or deal with problems as long as I can") significantly more than either Caucasian or African American peers, though they did not find a gender difference (Sheu & Selacek, 2004). Additionally, individuals from Asian cultures may believe that dwelling on morbid thoughts can lead to additional harm (Sue, Wagner, Margullis, & Lew, 1976). Since the present study did not include a measure of participants' coping strategies or tendencies for dealing with psychological distress (e.g. Conception of Mental Health Scale; Nunnally, 1961), this explanation cannot be confirmed. It is also important to note that while there was a statistically significant decrease in scores of willingness to see a counselor about personal problems, the change in means was from 1.25 to 1.11 on a scale that ranged from 1 to 4. Continued examination of this trend may be important, but, based on the limited clinical or practical significance, it does not appear that EAA men's decreased willingness to talk about practical problems is of great magnitude.

<div style="text-align:center">Limitations and Consideration</div>

The current study had several limitations. The most notable limitations included factors that prevented a thorough investigation of all the study aims, i.e. the absence of knowledge of counseling and perceptions of knowledge and ability to seek counseling services questions prior to the intervention as well as low retention rates for the follow-up study. A simple clerical error

in setting up the survey questions online caused all students who identified as AA to automatically skip the counseling knowledge and perceptions of knowledge and ability to seek counseling services questions prior to the intervention presentation. This prevented examination of the relationship between these constructs and mental health help-seeking outcomes. Therefore, the aim of examining the role of practical barriers (i.e. knowledge of counseling) in mental health seeking was not addressed. Since there were only post-intervention measures of counseling knowledge and perceptions of knowledge and ability to seek counseling, the effectiveness of the intervention on increasing knowledge could not be determined in repeated measures ANOVAs. Despite these limitations, simple t-test analyses and correlations revealed promising findings about the role of counseling knowledge and perceptions of knowledge and ability to seeking counseling.

Out of the 60 EAA participants, only 19 indicated interest in the follow-up study and ten completed the surveys. The low retention rates were due to a retention strategy that was flawed. Specifically, the plan for increasing participation in the follow-up study was to maximize ease of access to the study by placing it online, ensuring privacy of participation by limiting required contact information to provision of an email address, minimizing disruptions to participants by emailing them judiciously, and adding incentives by including monetary compensation. Unfortunately, three of the strategies employed were inconsistent with recommendations from public health researchers. A post-mortem examination of effective recruitment and retention of ethnic minority research participants indicated that retention was most successful in studies that had both frequent follow-up and contact with subjects (Yancey, Ortega, Kumanyika, 2006). Experimenter contact with participants in the present study was infrequent and only via email, and the web-based design removed the opportunity for a face to face contact with the

experimenter. In hindsight, conducting the study in person and requesting a telephone number to call may have improved retention rates and allowed for an examination of changes in utilization of mental health services.

Another limitation of the study was the use of a control condition that provided information related to a mental health outcome measure, willingness to see a counselor about academic/career problems. Although this resulted in a promising future direction, the intent of the control condition was to provide a comparison group to test for the unique effects of the counseling intervention.

It is also important to consider the characteristics of the participants in the study to understand the extent to which the findings are relevant to specific AA groups. The vast majority of the participants identified as being born in America and the acculturation scores revealed that participants did not endorse high levels of Asian values. Thus, the findings may not pertain to recent immigrants or EAAs who adhere highly to Asian values. This is particularly relevant in light of studies with EAAs that link recent immigration to severe problems including depression (Hwang, Chun, Takeuchi, Myers & Siddarth, 2005; Ying 1998) and poorer attitudes towards seeking mental health services (Kim, 2007).

While the measures were found to be reliable in previous studies with AAs, they were not developed and normed for EAAs specifically and few of the studies included EAAs exclusively. When EAAs were included, they were mostly recruited from the west coast and Hawaii, and may differ to EAA college students in the current study. Similarly, the current study findings was limited to EAA college students in a university located in an urban setting in the southeastern region of the United States and may not apply to EAAs in other geographic locations. It is

recommended that caution is used in generalizing findings to groups that differ from the current sample.

The participants reported surprisingly high rates of previous mental health experience, with 20% of the sample having seen a counselor. Given that previous research with 82 AAs at the same university as the present study using similar recruitment methods yielded 7.5% endorsement of previous experience receiving mental health services (Masuda et al. 2009), reasons for the current study's high rates of usage remain unclear. Although previous mental health experience was accounted for in the analyses, the participants may be different from other samples in ways that were not considered and assessed. There was a missed opportunity in the present study to conduct follow up interviews with participants to further explore the factors that led them to seek counseling in the past. Highlighting these factors may have further informed interventions aimed at increasing mental health service use from the larger student body of AAs who have been shown to underutilize counseling services at the present study's university.

The results of the study may have also been limited by the sample size of 60 participants, especially with the 2 x 2 x 2 repeated measures ANOVAs analyses. The smaller sample increased the likelihood of a type II error, leading to the possibility that significant effects may not have been detected due to lower power in the study. However, all analyses were conducted with the larger and more heterogeneous samples, and findings were quite consistent across the larger and smaller samples. Regrettably, the sample size prevented examination of the differences that may exist between each ethnic group.

Notwithstanding these limitations, the present study has several implications for future research. The findings linking knowledge about counseling and perceptions of knowledge and ability to seek counseling with greater intentions to seek counseling warrants future examination

of the roles these factors play in underutilization of mental health services among EAAs. The present study was not guided by specific theory in examining the role of perceptions of efficacy in performing a behavior; however, extant literature in the area of health behavior has over one thousand empirical studies that have examined various theories (e.g. Theory of Planned Behavior) that link attitudes, intentions, and/or self-efficacy to predict behavior (Noar & Zimmerman, 2005). These theories can be used to develop culturally relevant and reliable measures of self-efficacy as well as form hypotheses about how attitudes, intentions, and self-efficacy interact to predict use of mental health services.

This sample's greater willingness to seek counseling for academic and career problems, relative to personal problems, has been supported by past research (Atkinson, Lowe & Matthews, 1995; Tracey, Leong, & Glidden, 1986). Moreover, results suggest providing information about academic and career issues should be further examined as a way to increase the use of counseling center services by EAAs. Since previous mental health experience has been associated with greater willingness to seek counseling about personal problems (current study; Solberg, et al. 1994) and favorable attitudes about seeking psychological help (Kim, 2007), increasing students' use of counseling services for academic difficulties may lead to increased familiarity and comfort with a broader range of mental health services.

In sum, the present study provides support for continuing to examine the role of both cultural and practical barriers related to EAA college students' use of mental health services and offers areas to be further considered in developing interventions in this area.

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Appendix A

Script for Intervention Video

Hi. My name is Louis Chow and I'm a graduate student at Georgia State University. For the next 10 minutes I'd like to share with you some information about counseling and about the counseling center we have at GSU. I think this information is important because as university students our responsibilities include not only making sure we get a good education, but also to making sure we are healthy both physically and mentally. While you are a student at GSU you will likely go through happy and exciting times as well as stressful and difficult situations. Sometimes these difficulties may decrease our quality of life and affect us in a number of ways. Actually, this is quite common. In order to get help with stressful times, we have to be armed with both information and resources.

First, in order to avoid confusion, I want to talk about some terms I will use today. Mental health providers have many different types of training and degrees. For instance, the term mental health professional includes counselors, social workers, and clinical psychologists just to name a few. To avoid confusion, I will use the term "counselor" to represent a mental health professional. Similarly, there are also different terms used to describe what a counselor does: Such as counseling and therapy. To simplify, I will just use the term "counseling" rather than switch back and forth with therapy.

Now let's get started by describing what a counselor does. Simply put, a counselor is someone who helps another person better understand and solve a problem in his or her life. In a general sense, you might know many people in your life like friends and family who provide a type of counseling. But a professional counselor is someone who has gone through years of training in psychology and human behavior and has experience in working with a wide range of problems people experience. Just like virtually every other university in the nation, there is a counseling center at Georgia State University. Our counseling center is located conveniently on campus on Piedmont Avenue right next to the University Commons. It is just five blocks away from Urban Life Building, where the psychology department is located.

 So who are the GSU counselors? There are 10 staff counselors that are licensed psychologists who have a doctoral degree in counseling or psychology. The rest of the counselors are advanced graduate students with master's degrees and are working on getting their Ph.D. The students are supervised closely by a licensed counselor to make sure clients are getting the best care possible. Since all of the counselors at GSU either have a doctorate already or are working to get one, let's talk about what their training looks like. Although there are some differences: counselors go through competitive doctoral programs such as in clinical psychology and counseling that can last from 4 to 6 years and begin after they've finished an undergraduate degree. The training includes a combination of coursework and clinical practice. The clinical training includes spending over 2000 hours with clients, during which they are closely supervised by a licensed counselor. This training takes place while they are in graduate school and one year of internship. After that, they have about two years of postdoctoral training.

Okay, so counselors go through a lot of education and training. But what does that mean for clients? What happens in counseling? When a person is ready to get counseling, they can expect to have a confidential and safe environment with a counselor that works hard to understand their

experiences without judging or criticizing them. The counselor and client work together to set goals and create a plan to reach those goals. Clients share their experiences and thoughts as honestly and openly as they are comfortable doing. At times, the client experiences discomfort in sharing difficult experiences, but they can expect the counselor to be supportive, respectful, and caring. The counselor works to help the clients gain insight and find solutions to their problems. Aside from listening and providing support, counselors may also teach client skills to relieve stress, help with time management, or manage anger.

I just mentioned the word "confidential" and I want to explain what "confidential" means. When clients come to the GSU counseling center, they can expect that everything they share with their counselor will be kept private. The only exceptions to this are related to safety or if a court issues a subpoena. Specifically, if the counselor believes the client will attempt suicide, has intent to harm someone else, or reports that a child or elder is currently at risk of being abused, then the counselor will inform the client that they will break confidentiality in order to ensure their safety and/or another person's safety. If a court issues a subpoena for the client's chart records, then the counselor may have to break confidentiality. But breaking confidentiality is quite rare. Many students are worried that if their parents call the center they will have access to their counselor or to what is shared in counseling. Actually, the law prevents counselors from revealing the identity of any clients unless the client gives permission to share that information. People also worry that if they share with their counselors that they've done something illegal like shoplift or smoke marijuana they would be turned in to the police. This is simply not true.

How long does counseling last? In general, when clients start counseling at the GSU counseling center, they will meet with their counselor once a week for 50 minutes each time. The number of times clients meet with their counselor is dependent on things like the nature and severity of the client's problem and the goals they have set. Ultimately, the client can decide to stop counseling at any time, for any reason. The power is in the clients' hands, and they will receive no penalty or consequence from the counselor or the counseling center whenever they decide to stop.

Now let's address an important question to consider: Does counseling work? The answer can be complicated but the bottom line is: Absolutely. In 1995, Consumer Reports sent out a thorough survey to thousands of subscribers to learn about their experiences with seeing a mental health professional. The survey results showed that most clients experienced drastic improvements in dealing with the problems that led them in to counseling. 92% of people who went in to therapy feeling "fairly poor" reported feeling "very good, good, or at least so-so" by the time of the survey. Although this finding is important and widely discussed, what about studies designed and tested by research scientists? There are also empirical studies published in scientific journals provide strong evidence that counselors can utilize counseling approaches to effectively help clients deal with a range of problems

Where do I fit in? Every counseling experience is different depending on the client and the counselor. The counseling center at GSU recognizes that students are all unique with different backgrounds, experiences, beliefs, and values. In fact, their diversity statement reflects the center's commitment to treating all clients with respect and dignity. The counselors work to integrate multicultural awareness into the counseling services they provide. The counseling center also recognizes that students come in with a range of issues. Some of the issues they offer

counseling for include academic difficulties, improving relationships, family conflicts, financial stress, dealing with racism, thoughts of suicide, substance abuse, adjusting to change and depression.   They also offer couples counseling and social skills groups.

How do I get started? Once you are ready to start counseling, just type Counseling Center on GSU's website and follow the link to the homepage.   On the home page you can get the counseling center's phone number and call to set up an appointment with a counselor.   The counseling center is open every day of the week from *8:30 to 5:00 and is conveniently open for later hours until 8 p.m. on Wednesdays and Thursdays*.   How much does it cost? Seeing a counselor at GSU costs you nothing. Your student fees help pay for counseling services and every student gets 15 free sessions each year. If students want another option for counseling on campus or if there is a long wait list at the counseling center, they are also able to work with a counselor at the Psychology Clinic at GSU that offers unlimited sessions with very low costs. You can find more information about the Counseling Center and the Psychology Clinic on GSU's webpage.

Just to review, it is quite common to experience stress in college. In order to get help with stressful times, we have to be armed with both information and resources. Counselors help others better understand and solve problems in their lives. Our counseling center is located on Piedmont Avenue right next to the University Commons. The center is staffed by licensed psychologists who have a doctoral degree in counseling or psychology and masters level graduate students. You choose what information to share in counseling, and counselors keep that information confidential to the extent allowed by laws. Counseling helps most people who use it and can be designed to help with a range of difficulties (return to list on the board). GSU's webpage provides information about the Counseling Center and the Psychology Campus.

Script for Control Condition Video (University Career Services)

Hi. My name is Louis Chow and I'm a graduate student at Georgia State University. For the next 10 minutes I will share with you some information about a resource we have available at GSU to help students. This resource is The University Career Services Center. The Career Services center is designed to help students and alumni pursue their professional goals. They do this by helping students explore their academic majors, finding internships and jobs, and exploring graduate and professional school options.

The staff at the center includes employees with experiences in numerous areas and advanced degrees in areas such as human resources, business administration and career counseling. This range of diversity and expertise allows the center to provide a number of important services to students. One of these services directly addresses an important goal on almost every students' mind: Finding a job! The career services center offers different ways to help prepare you for finding a job. Students can arrange to meet individually with a career counselor. Career counselors can help you clarify your knowledge about your values, interests, personality, or skills. They can help identify options and information about your career paths. Career counselors may also teach interview skills and techniques.

Beyond the more obvious areas of finding a job such as having a good resume and being able to interview, the University Career Services provides even more in depth assistance in important areas such as providing information about proper dinner etiquette. Since job applicants may be invited to dining functions, it will be important to be prepared to follow appropriate etiquette. Advisers will teach correct silverware usage, appropriate topics for mealtime discussion, and how to conduct oneself in this delicate aspect of the employment process.

In addition to services offered at its physical location, the career services center also provides resources on the internet.   This helps increase accessibility to students. One important online resource is the Panther Career Net. This is where students can access job postings, internships, part-time and off-campus jobs, as well as career entry-level positions. More than 15,000 GSU students are using this service.

The Interview Stream System helps create a realistic interview experience where you are asked challenging questions and must respond. The questions are similar to the questions you would get in a real job interview. After you are finished, the interview is recorded and accessible on-line. Students can then solicit feedback from career services faculty, alumni, friends, family and employers about their performance. This is a way for students to practice and become more skilled in a non-threatening environment. You can use this services as often as you want. If you don't have a webcam you can schedule a time to use the program at the UCS center.

In addition to Interview Stream and mock interviewing appointments, the UCS has workshops aimed at helping students learn behavioral-based interviewing from professionals. Since successful interviewing is a skill that requires confidence, which comes from knowledge and practice: the workshops help students acquire knowledge and the individual appointments help students gather experience by practicing.

<u>Workshops.</u> Although individual appointments can be made for most services offered, the UCS also provides workshops throughout the year that students have found to be helpful. Workshops are geared for students at all levels in their academic careers. For dates and times of upcoming workshops and career showcases and other seminars, check the Events Calendar on Panther Career Net or access the University Career Services website through GSU's web page.

Most of the information provided has been about finding a job, but what about for students who are interested in pursuing graduate or professional school? The Career Services Center can also help students plan in this area. Starting as early as freshmen year, UCS can support your efforts at finding a graduate program that matches your interest and help you navigate through the application process. The services include conducting an assessment, providing advisement, and creating an action plan to help with graduate school. They can also help students with finding information and resources and help students pursue experiential opportunities to strengthen their application to graduate school. Additionally, every Fall, UCS hosts a graduate and professional school fair at which over 60 schools send recruiters from around the country to recruit GSU students.

How much does this resource cost? For all current students, there is no fee to access the Career services center. It's also available for students up to one year after they graduate from GSU. If alumni wish to access this resource one year after graduation, it only costs $75 to receive the same services for an entire year.

In summary, the University Career Services center is a free service that offers a number of resources to students. It can help you find an academic major that fits your career goals. And it can help you earn that career by helping you in a variety of ways from refining your resume to improving your interview skills.   But if you're interested in going to graduate school or a professional school, the UCS can provide you assistance as well. Aside from individual meetings, there are workshops and career chat panels that take place throughout the year to inform students about career opportunities.   I hope you've found some of this information to be helpful. Thank you for taking the time to listen.

Appendix B

Demographic Questionnaire

INSTRUCTIONS: Please provide some information about yourself in the following questions.

1. What is your age? __
2. What is your gender?
    a. Female
    b. Male
3. What is your major?
    a. Business
    b. Psychology
    c. Undeclared
    d. Other
4. How many psychology courses have you taken?
    a. 0
    b. 1
    c. 2-3
    d. 4 or more
5. How many years have you been a student at GSU?
    a. One year (or less)
    b. Two years
    c. Three years
    d. Four years
    e. Five or more years
6. What is your family's total household income?
    a. Less than $20,000
    b. $20,000 to $39,999
    c. $40,000 to $59,999
    d. $60,000 to $79,999
    e. $80,000 to $99,999
    f. $100,000 to $149,999
    g. $150,000 or more
7. How would you describe your race or ethnicity?
8. Please select all the options that apply to how you would describe your race or ethnicity. (Please select all that apply.)
    a. Vietnamese
    b. Korean
    c. Japanese
    d. Asian Indian
    e. Chinese
    f. Filipino
    g. Taiwanese
    h. Other _____

Mental Health Help-seeking Behavior

INSTRUCTIONS: Please read each item carefully and provide the response that best reflects your experiences.

1. Have you <u>ever</u> received services from a professional mental health provider?
   a. No
   b. Yes
      i. If yes, please select <u>all</u> providers you have worked with:
         1. Counselor at GSU counseling center
         2. Counselors at GSU psychology clinic
         3. Counseling center at another university
         4. Psychiatrist
         5. Social Worker
         6. Counselor in another setting (e.g. hospital, private practice)
         7. Clergy, pastor, or other religious figure
         8. Don't remember the provider's profession
         9. Other:_____

2. How would you describe your experience with the professional mental health provider? (Please select <u>one</u> of the options. If you have received counseling from more than one provider, please consider your overall experience.)
   a. Very helpful
   b. Helpful
   c. Somewhat helpful
   d. Somewhat harmful
   e. Harmful
   f. Very harmful

3. Have you ever received a mental health diagnosis from a professional mental health provider?
   a. Yes
   b. No
      i. If yes, please provide the mental health diagnosis you received. Remember that all information collected is kept anonymous and confidential. If you'd prefer not to answer, please continue to the next item: _____

4. If you <u>have not</u> received professional counseling, please indicate why not: (Please select <u>all</u> that apply)
   a. I have not had the need to see a counselor
   b. I don't know enough about counseling
   c. I'm not sure how counseling would help me
   d. I don't believe counseling works
   e. Fees associated with counseling
   f. Time associated with counseling
   g. Transportation difficulties
   h. I would feel ashamed for seeking counseling.
   i. My family would not support me in receiving counseling

      j.   My friends would not support me in receiving counseling

      k. Language barriers

      l.   Other:_____

5. Have you ever tried to contact the GSU counseling center? This includes calling the counseling center or emailing someone at the counseling center?

      a. Yes

      b. No

6. Have you ever encouraged a friend to contact the GSU counseling center?

      a. Yes

      b. No

7. Have you ever encouraged a family member to seek counseling?

      a. Yes

      b. No

8. Have you ever been presented with information about the GSU counseling center (e.g. read a pamphlet about the counseling center or heard a talk about the counseling center)?

      a. Yes

      b. No

9. Would you be willing to encourage a friend to see a counselor?

      a. Very willing

      b. Willing

      c. Somewhat willing

      d. Somewhat unwilling

      e. Unwilling

      f. Very unwilling

10. Would you be willing to suggest GSU counseling services to a friend at GSU who is having problems in his/her life?

      a. Very willing

      b. Willing

      c. Somewhat willing

      d. Somewhat unwilling

      e. Unwilling

      f. Very unwilling

11. Would you be willing to encourage a family member to see a counselor?

      a. Very willing

      b. Willing

      c. Somewhat willing

      d. Somewhat unwilling

      e. Unwilling

      f. Very unwilling

Asian Values Scale-Revised (AVS-R)

INSTRUCTIONS: Use the scale below to indicate the extent to which you agree with the value expressed in each statement.

1 = Strongly Disagree
2 = Disagree
3 = Agree
4 = Strongly Agree

_____1.   One should not deviate from familial and social norms.
_____2.   Children should not place their parents in retirement homes.
_____3.   One need not focus all energies on one's studies.
_____4.   One should be discouraged from talking about one's accomplishments.
_____5.   Younger persons should be able to confront their elders.
_____6.   When one receives a gift, one should reciprocate with a gift of equal or greater value.
_____7.   One need not achieve academically in order to make one's parents proud.
_____8.   One need not minimize or depreciate one's own achievements.
_____9.   One should consider the needs of others before considering one's own needs.
_____10.   Educational and career achievements need not be one's top priority.
_____11.   One should think about one's group before oneself.
_____12.   One should be able to question a person in an authority position.
_____13.   Modesty is an important quality for a person.
_____14.   One's achievements should be viewed as family's achievements.
_____15.   One should avoid bringing displeasure to one's ancestors.
_____16.   One should have sufficient inner resources to resolve emotional problems.
_____17.   The worst thing one can do is to bring disgrace to one's family reputation.
_____18.   One need not remain reserved and tranquil.
_____19.   One should be humble and modest.
_____20.   Family's reputation is not the primary social concern.
_____21.   One need not be able to resolve psychological problems on one's own.
_____22.   Occupational failure does not bring shame to the family.
_____23.   One need not follow the role expectations (gender, family hierarchy) of one's family.
_____24.   One should not make waves.
_____25.   One need not control one's expression of emotions.

Suinn-Lew Asian Self-Identity Acculturation Scale (SL-ASIA)

INSTRUCTIONS: The questions which follow are for the purpose of collecting information about your historical background as well as more recent behaviors which may be related to your cultural identity. Choose the one answer which best describes you.

1. What language can you speak?
    1. Asian only (for example, Chinese, Japanese, Korean, Vietnamese, etc.)
    2. Mostly Asian, some English
    3. Asian and English about equally well (bilingual)
    4. Mostly English, some Asian
    5. Only English

2. What language do you prefer?
    1. Asian only (for example, Chinese, Japanese, Korean, Vietnamese, etc.)
    2. Mostly Asian, some English
    3. Asian and English about equally well (bilingual)
    4. Mostly English, some Asian
    5. Only English

3. How do you identify yourself?
    1. Oriental
    2. Asian
    3. Asian-American
    4. Chinese-American, Japanese-American, Korean-American, etc.
    5. American

4. Which identification does (did) your mother use?
    1. Oriental
    2. Asian
    3. Asian-American
    4. Chinese-American, Japanese-American, Korean-American, etc.
    5. American

5. Which identification does (did) your father use?
    1. Oriental
    2. Asian
    3. Asian-American
    4. Chinese-American, Japanese-American, Korean-American, etc.
    5. American

6. What was the ethnic origin of the friends and peers you had, as a child up to age 6?
    1. Almost exclusively Asians, Asian-Americans, Orientals
    2. Mostly Asians, Asian-Americans, Orientals
    3. About equally Asian groups and Anglo groups
    4. Mostly Anglos, Blacks, Hispanics, or other non-Asian ethnic groups

     5. Almost exclusively Anglos, Blacks, Hispanics, or other non-Asian
        ethnic groups

7. What was the ethnic origin of the friends and peers you had, as a child
  from 6 to 18?
     1. Almost exclusively Asians, Asian-Americans, Orientals
     2. Mostly Asians, Asian-Americans, Orientals
     3. About equally Asian groups and Anglo groups
     4. Mostly Anglos, Blacks, Hispanics, or other non-Asian ethnic groups
     5. Almost exclusively Anglos, Blacks, Hispanics, or other non-Asian
        ethnic groups

8. Whom do you now associate with in the community?
     1. Almost exclusively Asians, Asian-Americans, Orientals
     2. Mostly Asians, Asian-Americans, Orientals
     3. About equally Asian groups and Anglo groups
     4. Mostly Anglos, Blacks, Hispanics, or other non-Asian ethnic groups
     5. Almost exclusively Anglos, Blacks, Hispanics, or other non-Asian
        ethnic groups

9. If you could pick, whom would you prefer to associate with in the community?
     1. Almost exclusively Asians, Asian-Americans, Orientals
     2. Mostly Asians, Asian-Americans, Orientals
     3. About equally Asian groups and Anglo groups
     4. Mostly Anglos, Blacks, Hispanics, or other non-Asian ethnic groups
     5. Almost exclusively Anglos, Blacks, Hispanics, or other non-Asian
        ethnic groups

10. What is your music preference?
     1. Only Asian music (for example, Chinese, Japanese, Korean, Vietnamese, etc.)
     2. Mostly Asian
     3. Equally Asian and English
     4. Mostly English
     5. English only

11. What is your movie preference?
     1. Asian-language movies only
     2. Asian-language movies mostly
     3. Equally Asian/English English-language movies
     4. Mostly English-language movies only
     5. English-language movies only

12. What generation are you? (circle the generation that best applies to you:)
     1. 1st Generation = I was born in Asia or country other than U.S.
     2. 2nd Generation = I was born in U.S., either parent was born in Asia or country other
     than U.S.

3. 3rd Generation = I was born in U.S., both parents were born in U.S, and all grandparents born in Asia or country other than U.S.
4. 4th Generation = I was born in U.S., both parents were born in U.S, and at least one grandparent born in Asia or country other than U.S. and one grandparent born in U.S.
5. 5th Generation = I was born in U.S., both parents were born in U.S., and all grandparents also born in U.S.
6. Don't know what generation best fits since I lack some information.

13. Where were you raised?
    1. In Asia only
    2. Mostly in Asia, some in U.S.
    3. Equally in Asia and U.S.
    4. Mostly in U.S., some in Asia
    5. In U.S. only

14. What contact have you had with Asia?
    1. Raised one year or more in Asia
    2. Lived for less than one year in Asia
    3. Occasional visits to Asia
    4. Occasional communications (letters, phone calls, etc.) with people in Asia
    5. No exposure or communications with people in Asia

15. What is your food preference at home?
    1. Exclusively Asian food
    2. Mostly Asian food, some American
    3. About equally Asian and American
    4. Mostly American food
    5. Exclusively American food

16. What is your food preference in restaurants?
    1. Exclusively Asian food
    2. Mostly Asian food, some American
    3. About equally Asian and American
    4. Mostly American food
    5. Exclusively American food

17. Do you
    1. Read only an Asian language?
    2. Read an Asian language better than English?
    3. Read both Asian and English equally well?
    4. Read English better than an Asian language?
    5. Read only English?

18. Do you
    1. Write only an Asian language?
    2. Write an Asian language better than English?

3. Write both Asian and English equally well?
4. Write English better than an Asian language?
5. Write only English?

19. If you consider yourself a member of the Asian group (Oriental, Asian, Asian-American, Chinese-American, etc., whatever term you prefer), how much pride do you have in this group?
    1. Extremely proud
    2. Moderately proud
    3. Little pride
    4. No pride but do not feel negative toward group
    5. No pride but do feel negative toward group

20. How would you rate yourself?
    1. Very Asian
    2. Mostly Asian
    3. Bicultural
    4. Mostly Westernized
    5. Very Westernized

21. Do you participate in Asian occasions, holidays, traditions, etc.?
    1. Nearly all
    2. Most of them
    3. Some of them
    4. A few of them
    5. None at all

<u>Knowledge about Counseling and the GSU's University Counseling Center.</u>

INSTRUCTIONS: Please read each item carefully and provide the response that demonstrates your knowledge about each question.

1. Everything that a client shares with a counselor is kept private...
    a. Unless it is about something illegal (e.g. using drugs, stealing things).
    b. Unless there is risk of the client or someone else being harmed.
    c. Unless parents or legal guardians formally request for information.
    d. No matter what.
    e. Don't know.
2. Once a client starts seeing a counselor, when does a client finish with counseling?
    a. On average, 10 months to one year.
    b. Ultimately, the client decides when s/he stops.
    c. It depends entirely on the counselor's professional opinion.
    d. Never.
    e. Don't know.
3. In scientific studies counseling has been found to be:
    a. Effective for a wide range of mental health issues.
    b. More effective for women than men.
    c. Less effective than taking medication as prescribed by a medical doctor
    d. Ineffective effective.
    e. Don't know.
4. The magazine, Consumer Reports, conducted a survey and found that the majority of subscribers who had through counseling described it as:
    a. Ineffective.
    b. Harmful.
    c. More effective for women than men.
    d. Helpful.
    e. Don't know.
5. What kind of training goes into earning a doctorate in counseling or clinical psychology?
    a. An average of 4-6 years in graduate school.
    b. Course work and clinical training
    c. Internship training and post-doctorate work that is closely supervised.
    d. All of the above.
    e. Don't know.
6. Who works at the GSU counseling center?
    a. Counselors with a bachelors degree in psychology who have taken a licensing exam.
    b. Licensed counselors with a doctorate degree and graduate students with a master's degree.
    c. Staffed entirely by graduate students.
    d. Medical students from Emory and Morehouse who are interning at GSU.
    e. Don't know.
7. Where is the GSU counseling center located?
    a. At GSU's Panthersville Recreation location (about 10 miles from campus)

    b. On GSU's campus, near the University Commons.

    c. At Georgia Tech's campus near the Ferst Center.

    d. Don't know.

8. How much does it cost to be a client at the counseling center?

    a. You get 15 free sessions as a student a year.

    b. 30 dollars a session.

    c. 70 dollars a session.

    d. Only the co-pay on your insurance plan.

    e. Don't know.

9. What kinds of services do they offer at the counseling center?

    a. Couples counseling, Individual counseling, groups that teach social skills

    b. Vocational training for people with schizophrenia

    c. Hypnosis for weight loss and smoking cessation

    d. Don't know.

10. On average, how often does a client meet with a counselor per week?

    a. 50 minutes every day.

    b. 50 minutes once a week

    c. 4 hours once a week

    d. Don't know.

11. The counseling center is open every day of the week, including on evenings on some nights.

    a. True

    b. False

    c. Don't know

12. The counseling center's diversity statement

    a. Encourages students to take foreign languages and cultural studies at GSU.

    b. Emphasizes a commitment to providing respectful and culturally sensitive counseling to students at GSU.

    c. Is taught in their financial management workshop. It underscores the importance of diversifying financial assets.

    d. Don't know.

Perception of Knowledge and Ability to Seek Counseling

INSTRUCTIONS: For the following questions, please rate how strongly you agree with each statement.

1= disagree 2= partly disagree 3= partly agree 4= agree

1. If I wanted to see a counselor at the GSU counseling center, I know how to get the process started.
2. I have the financial means to see a counselor at GSU.
3. I have adequate knowledge about the training counselors receive.

Attitudes Towards Seeking Professional Psychological Help- Short Form (ATSPPH-SF)

INSTRUCTIONS: Please use the one of the four responses below to indicate your level of agreement with each statement.

1= disagree 2= partly disagree 3= partly agree 4= agree

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

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

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

4. There is something admirable in the attitude of a person who is willing to cope with his or her conflicts and fears *without* resorting to professional help.
5. I would want to get counseling if I were worried or upset for a long period of time.

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

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

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

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

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

Willingness to See a Counselor (WSC)

INSTRUCTIONS: A list of problems which some students have experienced appears below. For each item, select the number in column 1 which best indicates how much of a concern that problem is for you. Then, circle the number in column 2 which best indicates your degree of willingness to see a counselor about that problem.

	Column 1				Column 2			
	Not a problem	Mild problem	Significant problem	Major problem	Not willing	Probably not willing	Probably willing	willing
a. General Anxiety	1	2	3	4	1	2	3	4
b. Alcohol problems	1	2	3	4	1	2	3	4
c. Shyness	1	2	3	4	1	2	3	4
d. Adjustment to college	1	2	3	4	1	2	3	4
e. Sexual functioning	1	2	3	4	1	2	3	4
f. Depression	1	2	3	4	1	2	3	4
g. Conflicts with parents	1	2	3	4	1	2	3	4
h. Academic performance	1	2	3	4	1	2	3	4
i. Speech anxiety	1	2	3	4	1	2	3	4
j. Dating problems	1	2	3	4	1	2	3	4
k. Financial problems	1	2	3	4	1	2	3	4
l. Career choice	1	2	3	4	1	2	3	4
m. Insomnia	1	2	3	4	1	2	3	4
n. Drug addiction	1	2	3	4	1	2	3	4
o. Loneliness-isolation	1	2	3	4	1	2	3	4
p. Inferiority feelings	1	2	3	4	1	2	3	4
q. Test anxiety	1	2	3	4	1	2	3	4
r. Alienated, not belonging	1	2	3	4	1	2	3	4
s. Making friends	1	2	3	4	1	2	3	4

t.	Trouble studying	1	2	3	4	1	2	3	4
u.	Roommates	1	2	3	4	1	2	3	4
v.	Sexual relationships	1	2	3	4	1	2	3	4
w.	Personal/et hnic identity	1	2	3	4	1	2	3	4
x.	Being a minority member	1	2	3	4	1	2	3	4