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Predicting help-seeking attitudes and intentions in a Latino/a sample

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ABSTRACT

There were two main goals of this study. The first goal was to test the generalizability of the help-seeking model developed by Vogel, Wester, Wei, and Boysen (2005) in a Latino/a college student sample. The second goal of this study was to assess whether the model fit would be improved when three culture-related, independent variables (i.e., acculturation, enculturation, and cultural congruity of local mental health services) were added into Vogel et al.'s (2005) model. Participants were 424 students all of whom self-identified as Latino, Latina, or Hispanic. Data were analyzed using path analysis. Indirect effects were assessed using a bootstrapping technique. Results indicate that the original model developed by Vogel et al. (2005) for predicting help-seeking attitudes and intentions can be applied to a Latino/a sample. More specifically, comfort with self-disclosure, sex (being female), anticipated utility, social norm, and previous treatment were positively associated with attitudes toward seeking professional help. Social support, social stigma, and self-stigma were negatively related with attitudes toward seeking professional help. Attitudes toward seeking counseling was, in turn, related to intentions to seek help for all three concerns (i.e., interpersonal, drug/alcohol, and academic). Moreover, results of the bootstrap analysis indicate all of these indirect effects are statistically significant. Regarding the direct effects, current distress level and anticipated utility were both positively related to intentions to seek help for interpersonal and academic issues while anticipated utility was negatively related to intentions to seek help for interpersonal and drug/alcohol concerns. The results also indicate that the inclusion of acculturation in the model significantly added to the prediction of intentions to seek help for drug or alcohol concerns in this group.

CHAPTER 1: INTRODUCTION

Much evidence has been collected which indicates that Latino/a populations are much less likely to seek mental health services than non-Hispanic White populations (Vega, Kolody, & Valle, 1986; Shrout, Canino, Rubio-Stipec, Bravo, & Burnam, 1992; Hough, Landsverk, & Karno, 1987). This pattern of underutilization is especially concerning as Latino/a populations may face even more life stressors than their non-Hispanic White counterparts as they are often faced with racial discrimination, cultural conflicts, identity conflicts, and even poverty (Padilla, Ruiz, & Alvarez, 1975). All of these concerns may lead to an even greater need for mental health services. It has even been argued that the disproportionate usage of services seen in Latino/a populations (as well as other minority groups) may result in significant detriments to one's overall health (Alegria et al., 2002; Peifer, Hu, & Vega, 2000), not just one's overall mental health.

As psychologists, it is important to investigate some of the possible reasons underlying the lack of service utilization for Latino/a groups in order to encourage higher rates of treatment in the future. One possible avenue for this investigation is to assess the degree to which the knowledge we have about help-seeking, in general, is applicable to Latino/a groups. For example, a number of variables have been identified which may increase or decrease positive attitudes toward seeking professional help (Vogel, Wester, Wei, & Boysen, 2005; Liao, Rounds, & Klein, 2005; Cramer, 1999). From these studies, we have seen what variables may impact attitudes. We also see that these variables may impact intentions to seek counseling either directly or indirectly (through their impact on help-seeking attitudes; e.g., Vogel et al, 2005; Liao et al., 2005; Cramer, 1999). For example, Vogel et al. (2005) found that comfort with self-disclosure, anticipated utility, supportive

social norms, and previous therapy experiences were all positively related to intentions to seek professional help while social stigma and level of social support were negatively related to these intentions. Attitudes toward seeking professional help served as a mediator between all of these relationships. Similar results of mediation have been found for self-concealment (Liao et al., 2005, Cramer, 1999), public stigma, and self-stigma (Vogel, Wade, & Hackler, 2007) though this model utilized willingness to seek professional help rather than intentions to seek help. The complex models of analysis utilized in the previous studies (e.g., Liao et al., 2005; Cramer, 1999; Vogel et al., 2007) are especially useful as they allow for the identification of patterns of mediation (as described above) and also allow for the simultaneous analysis of variance for each variable while controlling for the contribution of all other variables.

While the information gained from the larger body of help-seeking research is extremely valuable, very little of this research focuses on Latino/a populations. As a result, we know very little about the help-seeking patterns of Latino/a individuals, despite the clear evidence that this population is likely to underutilize professional help (Vega, et al., 1986; Shrout, et al., 1992; Hough, et al., 1987). However, when looking at the help-seeking literature as a whole, a number of consistent predictor variables emerge. These variables can be organized into three categories: person-related, treatment-related, and culture-related constructs (West, 2007).

Person-related constructs are those which are related to factors inherent to the individual such as comfort with self-disclosure, the tendency to self-conceal information, current level of distress, or the individual's sex. There is evidence that these person-related variables may be a significant contributor to Latino/a individuals attitudes toward help-

seeking or help-seeking intentions. For example, Vega et al., (2001) found that self-rated severity of symptoms (i.e., level of distress) was related to help seeking from both mental health providers and medical doctors in a Mexican-American sample.

Treatment-related variables are those variables that have a direct relationship with the act of seeking professional help such as previous treatment use or the anticipated risks and utility of self-disclosing to a counselor. Also, perceptions of social support, social stigmas, or social norms related to help-seeking may be included in this category, as well as stigmatizing the self for needing treatment. Overall, little research is available that offers confirming or disconfirming evidence regarding treatment related variables and their impact on help-seeking behavior in a Latino/a population. For example, the relatively new variables of anticipated risk and utility have been found to be correlated to both attitudes toward seeking help and intentions to seek help in the expected directions in predominantly White populations (Vogel & Wester, 2003), however, no empirical research was located utilizing these variables in a Latino/a population. Given the lack of evidence regarding treatment related variables in a Latino/a population, it is difficult to make predictions of their utility in modeling help-seeking behavior. However, these variables have been theorized to be predictive of help-seeking attitudes and/or intentions in more general models (e.g., Vogel et al., 2005) making them strong candidates for further exploration in Latino/a populations. It is possible that these variables will be even more predictive of help-seeking behavior in a Latino/a population than in predominantly Anglo cultures. For example, because psychotherapy or other forms of mental health treatment may be viewed as an Anglo activity, people from other cultures such as Latino/a cultures, might experience even more stigma

(both self- and social). If differences do exist, they may make these types of variables even more important in studying help-seeking in this population.

Culture-specific variables are those variables that may differentially affect individual's help-seeking attitudes and intentions resulting from experience in one's ethnic background or with group cultural values. The culture-related variables within this study are acculturation, enculturation, and cultural congruence of local mental health services. Initially, the term acculturation was developed to refer to the process of adaptation of an immigrant or minority group member to the dominant culture. However, this definition does not take into account the maintenance of or changes in one's indigenous cultural experience. In order to account for this second aspect of one's cultural identity, it has been argued that acculturation is in fact comprised of two relatively orthogonal processes: (a) adapting to aspects of the dominant culture and the new associated norms and (b) maintaining aspects of the indigenous culture and norms (e.g., Berry & Kim, 1988; Berry, Trimble, & Olmeda, 1986). There have been a number of issues raised with the conceptualization of acculturation in this way. For example, it has been found that acculturation, as it is actually used, tends to describe the process of adaptation and not cultural maintenance (Kim, 2007a). It was also noted in Kim (2007b) that some individuals may never have been fully socialized into the value system of the original culture. This may be especially true for those who did not immigrate into the new culture but rather were born into it. When this is the case, conceptualizing acculturation, in part, as a maintenance variable may be inappropriate.

The ambiguity of acculturation being used as a term to describe both the adaptation to the new culture and maintenance of the indigenous culture has led to the recognition of the need for two variables, not just one, to describe the process of cultural change or

development. The term *acculturation* has been kept as a term to describe the adaptation to the dominant culture while the term *enculturation* has been introduced to draw attention to the process of both socialization and maintenance of the indigenous cultural norms (Kim & Abreu, 2001, Kim, 2007b). The use of two, orthogonal variables allows for the investigation of the relationship between one's current cultural statuses in more complexity. We can see not only how the level of acculturation affects the variables of interest (e.g., help-seeking behavior) but also how enculturation may affect these variables.

Only a handful of studies were located which investigated the relationship between help-seeking behavior in a Latino/a population and levels of acculturation or enculturation. Sanchez and Atkinson (1983) investigated attitudes toward seeking professional help and the relationship to cultural commitment within a Mexican-American population. When compared to individuals who showed a high level of commitment to both cultures (i.e., bicultural) and those who showed a weak commitment to both cultures (i.e., neither enculturated nor acculturated), individuals who only showed a strong commitment to Mexican-American culture (i.e., enculturated but not acculturated) had less positive attitudes toward seeking professional help. It is should be noted however, that this study measured commitment to each culture, rather than levels of acculturation or enculturation, and thus the findings are only indirectly linked to these variables. Similarly, Miville and Constantine (2006) found that higher acculturation was a significant predictor of actual help-seeking behavior within the past year for a sample of Mexican-American college students. However, these authors reported enculturation was not related to help-seeking behavior or to attitudes toward seeking professional help. Similar contradictions appear elsewhere in the literature. For example, acculturation has been shown to be unrelated to willingness to see a counselor (a variable

predictive of actual help-seeking behavior) as demonstrated by Atkinson, Lowe, and Matthews (1995). It is difficult to draw conclusions related to the associations between acculturation and enculturation and help-seeking attitudes and intentions in a Latino/a population given the inconsistencies that exist in the limited available research. What is clear is that these variables deserve further study and clarification. It is hoped that the current study will be able to shed light on the issue of how acculturation and enculturation are associated with help-seeking attitudes and intentions within a Latino/a population, thus clarifying these inconsistent results.

Related research with other minority groups has also demonstrated support for the use of these variables in predicting help-seeking attitudes and intentions. For example, Liao et al. (2005) utilized the help-seeking model developed in Cramer (1999) as a base for investigating help-seeking in Asian and Asian-American college students. Here, Liao et al. generally replicated Cramer's model showing, in part, that students with higher levels of concerns and more positive attitudes toward counseling were more willing to seek help. However, when behavioral acculturation and adherence to Asian values (i.e., enculturation) were included in the model, the model was significantly improved. Most interesting was that adherence to Asian values had a negative relationship with attitudes toward counseling while behavioral acculturation had a positive one. In addition, it was noted that adherence to Asian values accounted for more variance in the model than did behavioral acculturation. This study not only demonstrates the possible predictive power of acculturation and enculturation for both help-seeking attitudes and intentions but it demonstrates the strength of these variables (at least within Asian and Asian-American populations). The cultural variables only remained significant predictors of attitudes and intentions when controlling for other

variables in the model and they accounted for the most variance in the model. These findings indirectly support the hypothesis that acculturation and enculturation will add incremental variance to the prediction of help-seeking attitudes and intentions within a Latino/a population.

Cultural congruity of mental health services has often been described as an important factor in mental health services for minority populations. For example, Leong, Wagner, and Tata (1995) reported that a lack of culturally appropriate treatment approaches is related to underutilization of treatment options within Latino/a groups. In addition, Cheung and Snowden (1990) reported that within minority groups as a whole, those individuals who did seek treatment often did not return after the initial visit. As discussed in Sullivan, Ramos-Sanchez, and McIver (2007), this finding may indicate that those who do seek treatment may be encountering barriers once treatment is initiated, such as cultural incongruence of mental health services. In fact, O'Sullivan and Lasso (1992) argued that most mental health services might be considered culturally alien to those in Latino/a populations. Vega, Hough, and Miranda (1983) discussed earlier findings that indicated Mexican-American individuals tend to avoid utilizing mental health services but show increases in service use when culturally sensitive staff are available (Lopez, 1981). Vega et al. (1983) argued this finding indicates that mental health help-seeking is, at least partially, a culturally based behavior. Ruiz (1985) discussed ways in which cultural sensitivity may manifest itself in therapy such as through a detailed understanding of the client's biculturalism (i.e., acculturation and enculturation), and integrating this information into treatment planning. Therapists who are seen as more culturally sensitive will likely appear more attractive as sources of professional help when considering whether or not to seek help.

In addition to investigating how perceived cultural sensitivity may influence help-seeking attitudes and intentions in Latino/a populations, it is important to investigate perceptions of availability. As noted in Sullivan et al. (2007), one of the most basic approaches to increasing help-seeking in Latino/a populations is increasing accessibility. Increasing accessibility may for example, involve providing reduced rate or free services or providing extended service hours. In its most basic form, accessibility may be conceptualized as availability of culturally sensitive services.

Moreover, while evidence exists that these factors (e.g., cultural sensitivity, availability) may be related to treatment outcomes and length of time in treatment, no evidence exists indicating whether or not perceptions of congruity are associated with help-seeking attitudes or intentions. It seems reasonable that if one perceives the available mental health services to be incongruent with one's cultural values, this would decrease attitudes toward and intentions to seek professional help.

Goals of the Current Study

There are two main goals of the current study. The first is to examine whether Vogel et al.'s (2005) model can adequately be applied to a Latino/a population. All variables from Vogel et al.'s (2005) original model (with the addition of self-stigma) will be examined, including those which were not significant predictors. Because the research surrounding help-seeking attitudes and intentions in Latino/a populations is so sparse, it is reasonable to include all variables in order to examine which variables may be most important within Latino/a populations. The alternative is to assume those which were not significant predictors within a predominantly Caucasian population (as seen in Vogel et al., 2005) would continue to be non-significant with a Latino/a population, reducing the likelihood of adequately

modeling help-seeking attitudes and intentions. It is hypothesized that the relationship between person- and treatment-related variables and intentions to seek counseling will be mediated by attitudes toward seeking professional help, as seen in the original model.

Related, the second goal of this study is to assess whether the addition of culture-related variables to the model will significantly add to the prediction of help-seeking intentions. It is hypothesized that these variables (i.e., acculturation, enculturation, and cultural congruity of mental health services) will significantly add to the model. More specifically, it is hypothesized that increases in both acculturation and cultural congruity will lead to more positive attitudes toward seeking help as well as greater intentions to seek help. On the other hand, higher levels of enculturation is hypothesized to be related to less positive attitudes toward seeking professional help and lower intentions to seek such help.

CHAPTER 2: LITERATURE REVIEW

Despite empirical evidence that psychotherapy can be helpful for many people across a wide rage of concerns (Wampold, 2001), there appears to be a lack of consumption of psychological services in the general population. The underutilization of mental health services has been recognized in a number of different sources such as national surveys (President's Commission on Mental Health, 1978), or other venues such as regional or local surveys (e.g., Stefl & Prosperi, 1985). The results of studies such as these are clear; many individuals who are in need of and would benefit from psychological help are not utilizing such services. For example, in a large-scale epidemiological study, Andrews, Issakidis, and Carter (2001) found that only 1/3 of those with a psychological disorder sought psychological help. Similar results have been found for other studies (e.g., Kessler et al., 2001; Regier, Narrow, Rae, & Manderscheid, 1993) with some studies indicating that as many as 62% of those meeting criteria for a psychological disorder did not seek treatment (Andrews, Hall, Teesson, & Henderson, 1999).

The statistics are even more daunting for minority groups who are typically underrepresented in the help-seeking population. For example, numerous studies have indicated that Mexican-Americans may underutilize mental health services (Jaco, 1960; Karmo & Edgerton, 1969; Padilla, Carlos, & Keefe, 1976; Padilla, et al., 1975). More specifically, it has been found that after controlling for other variables such as age, job status, and gender, Mexican-Americans were less likely than non-Latino/a Whites to use outpatient mental health specialty services (Wells, Golding, Hough, Burnam, & Karno, 1988). Additionally, it was found that having a psychiatric diagnosis had very little effect on the use of the general medical sector for this problem in Mexican-Americans but having a

psychiatric diagnosis increased non-Latino/a Whites use of general medical services more than threefold. These results came from a localized (i.e., Los Angeles) but large (N= 3132) epidemiological study by the National Institute of Mental Health Catchment Area Program. Results such as these are valuable in identifying the problem of low utilizations rates but offer little by way of explanatory variables such as psychological factors which may be influencing minority choices about help-seeking. More focused research is needed in order to best understand this phenomenon. In fact, the American Psychological Association (APA) has begun to form initiatives aimed at improving the public's willingness to use psychological services (APA, Practice Directorate, 1996). This type of initiative may be useful for Latino/a populations as well as other minority populations due to the exaggerated low levels of consumption often seen. However, before adequate efforts can be made by the APA or other motivated parties, we must understand what factors influence individuals to seek-help when faced with mental health concerns.

Previous research has indicated a number of variables that may influence help-seeking. Originally, many of the variables identified were related to demographic factors such as gender, race, socioeconomic status, religion, and education level (e.g., Leaf, Bruce, Tischler, & Holzer, 1987; Tessler & Schwarts, 1972; Loo, Tong, & True, 1989; Gourash, 1978; Greenley & Mechanic, 1976; Kelly & Achter, 1995). More recently, however, a number of psychological variables have also been found to account for differences in help-seeking behavior such as level of distress (Ingham & Miller, 1986; Cramer, 1999; Deane & Chamberlain, 1994), fear of treatment (Amato & Bradshaw, 1985; Kushner & Sher, 1989; Pipes, Schwartz, & Crouch, 1985), attitudes toward counseling (Rickwood & Braithwaite, 1994, Cramer, 1999, Kelly & Achter, 1995); desire for self-concealment (Kelly & Achter,

1995; Hinson & Swanson, 1993; Cepeda-Benito & Short, 1998), available or perceived social support (Rickwood & Braithwaite, 1994; Cramer, 1999; Liao, et al., 2005; Goodman, Sewell, & Jampol, 1984), avoidance of social stigma (Deane & Chamberlain, 1994; Farina, Holland, & Ring, 1966; Sibicky & Dovidio, 1986; Stefl & Prosperi, 1985) and the desire to avoid experiencing painful or distressing emotions (Komiya, Good, & Sherrod, 2000). Despite the wealth of research available that indicates a substantial number of variables that may be influencing individual's help-seeking attitudes, little previous research has examined more complex models of help-seeking which would identify patterns of mediation or moderation. There are notable exceptions to this however, and a number of such studies will be discussed below.

First, Cramer (1999) utilized path modeling to investigate the relationships among social support, self-concealment, level of distress (i.e., depression), and attitudes toward counseling with help-seeking behavior (both directly and indirectly), utilizing previous data from two independent studies (Cepeda-Benito & Short, 1998; Kelly & Achter, 1995). These results offered unique information regarding help-seeking behavior as the utilization of path modeling allowed for the examination of the unique effect of each variable on help-seeking attitudes and intentions. For example, it was indicated that the likelihood of seeking counseling greater when subjects held favorable attitudes and that attitudes were a better predictor than level of distress. Furthermore, level of distress was better predicted by self-concealment than by social support. In addition, this study indicated a number of statistically significant indirect paths through the model.

Second, Vogel et al. (2005) also used more complex modeling to investigate a number of factors simultaneously to better understand the impact each made on intentions to

seek professional help. When investigating this variance, a large number psychological factors were included such as social stigma, treatment fears, self-disclosure, self-concealment, anticipated risks, anticipated utility, social norms, distress, social support, previous therapy, and sex of participant; this model also included attitudes towards seeking professional help as a mediating variable. Using structural equation modeling (SEM), these researchers found that social support, self-disclosure, anticipated utility, social stigma, and social norms all predicted attitudes toward seeking professional help while self-concealment, anticipated risks, distress, and sex of the participant did not. Additionally, attitudes toward seeking professional help predicted the intent to seek help for both interpersonal issues and drug or alcohol issues but not for academic issues.

Third, Liao et al. (2005), examined the effects of additional variables on Cramer's (1999) model which were hypothesized to be relevant to minority populations; behavioral acculturation and adherence to ethnic values (i.e., Asian values). These researchers reported that these variables significantly added to the prediction of attitudes toward counseling which in turn predicted willingness to seek counseling. This line of research is valuable because it provides direct evidence that the variables involved in the choice to seek help for minority individuals, in this case Asian Americans, is more complex than that of the general population. More work is needed in this area however, such as the inclusion of other minority groups and possibly the addition of other culturally relevant variables.

Due to its breadth of variables and ease of interpretation, the model developed by Vogel et al. (2005) will serve as the foundation for the development of similar model of help-seeking attitudes and intentions in Latino/a populations. It is believed that this model will be highly applicable to this minority population due its potential for encompassing a seemingly

complete set of variables. It will also allow for an understanding of how each variable does or does not uniquely contribute to help-seeking attitudes and intentions through path analysis. It is noted that Cramer's (1999) model offered a similar approach in that this model also allowed for a determination of which variables were uniquely contributing to the model, however, Cramer's model utilized only four variables (i.e., social support and self concealment as predictors and distress and attitudes to counseling as mediators) while Vogel et al.'s model utilized twelve variables, eight of which significantly contributed to the prediction of intentions to seek counseling. It seems that given the limited knowledge we currently posses related to Latino/a help-seeking, the use of a model which allows for the most variability to be discovered may be the most ideal. That is, it is difficult to determine which variables may be most important for a Latino/a population at this point so by including many variables, we can best explore the relationships among the variables within this population. Therefore, modeling help-seeking in this way (i.e., utilizing Vogel et al.'s model) will allow us to begin to understand which variables are most important in predicting help-seeking behaviors for a Latino/a population.

Because model development for Latino/a populations is in its early stages, all paths originally included in the Vogel et al.'s model will be tested in the current model as it is unclear whether or not the insignificant paths will remain so for a different population; the Vogel et al.'s model was tested primarily on a White student population (84%) while the population in the current study will only include those individuals whom identify as Latino/a. In addition to Vogel et al.'s full model, four extra variables will be added. One of these variables is self-stigma, which is the internalized belief that one is inadequate or inferior due to the need to seek mental health services (see Vogel et al., 2006). An adequate measure of

this variable was developed shortly after the Vogel et al. (2005) model was introduced and, as such, can now be accounted for within the model. In addition, the variables of acculturation and enculturation as well as cultural congruity of mental health services will be added to the model in order to help account for the possible unique experiences of minority students, specifically Latino/a students, when considering help-seeking attitudes and intentions.

The variables utilized for this study can be organized around three overarching categories: person-related, treatment-related, and culture-related constructs (West, 2007). Person-related variables are those which are related to characteristics of the individual such as willingness to self-disclose, tendency for self-concealment, and sex. Treatment-related constructs are those which are directly related to seeking professional help. Within this study, these variables are anticipated risks and utility, perceived social and self-stigma, social norms, and previous experience with treatment. Finally, culture-bound constructs within this study include levels of acculturation, enculturation, and cultural congruence of mental health services. This organization will aid not only in providing order to a large number of variables but can also aid in making theoretically sound predictions and interpretation of results.

PERSON-RELATED VARIABLES

Self-Disclosure

Self-disclosure has only recently been available as a reliable variable in psychological research due to a lack of high quality measures of this construct (Vogel & Wester, 2003). Recently, research has improved in this area and we now know that one's comfort with self-disclosure is a good predictor of their help-seeking attitudes (Vogel & Wester, 2003). More specifically, it has been found that no single specific emotional self-disclosure (fear, sadness,

happiness, anger, anxiety, or jealousy) individually predicted attitudes towards seeking help (Vogel & Wester, 2003). The authors argued that this finding indicates it is one's overall level of disclosing emotional content that is important in the prediction of help-seeking attitudes and intentions rather than the comfort or discomfort with disclosing a particular emotion. Similarly, in a more complex path analysis, Vogel et al. (2005) found that self-disclosure predicted attitudes toward seeking professional help and both predicted intentions to seek professional help for interpersonal issues. This finding further stresses the importance of comfort with self-disclosure as not only a predictor of attitudes but also of behavioral intentions; a highly predictive variable to actual behavior (see Ajzen & Fishbein, 1980).

The specific variable of willingness to self-disclose has been studied very little within a Latino/a population, especially within a help-seeking model. There is some empirical evidence which indicates that patterns of self-disclosure may vary between Anglo cultures and Latino/a cultures. For example, LeVine and Franco (1981) reported that the frequency of self-disclosure varied by ethnicity with Anglo-Americans showing the highest frequency of self-disclosure and Hispanic Americans showing the least. Littlefield (1974) found similar results between Anglo-Americans and Mexican-Americans. These studies were not directly related to help-seeking or even self-disclosure in a help-seeking context but rather were measured in terms of self-disclosure to a number of possible individuals within the participants' life (i.e., father, mother, close friend). As a result, it is difficult to hypothesize how comfort with self-disclosure may impact attitudes toward seeking help or intentions to seek professional help. Therefore, this variable will be included in the model for exploratory purposes to help better understand the association of self-disclosure on help-seeking attitudes and intentions in a Latino/a population.

Self-Concealment

A related construct to willingness to self-disclose is self-concealment. This variable is defined as a predisposition to hide distressing and potentially embarrassing personal information (Kelly & Achter, 1995; Larson & Chastain, 1990). Historically, there has been controversy regarding what impact self-concealment has on help-seeking attitudes or intentions. For example, Kelly and Achter reported that high self-concealers held less favorable attitudes toward counseling when counseling was introduced as an event likely to required the disclosure of highly personal information when compared to the low self-concealers. There were no differences between groups when counseling was introduced without mention of requiring self-disclosure. However, despite rating counseling as less favorable, those high in self-concealment were also highest in intentions to seek counseling. A speculation was made to explain this finding that these individuals may be fearful of disclosure but forced into therapy due to lack of social support.

This particular interpretation was challenged by Cepeda-Benito and Short (1998) who noted that in the Kelly and Achter study, the high self-concealers endorsed the highest levels of depression but the lowest frequency of help-seeking. Thus, they argued that the finding by Kelly and Achter was simply an artifact of an inflated need for counseling in the self-concealment group rather than an effect of low social support. Their hypotheses were supported; self-concealment did in fact appear to contribute to psychological distress and also appeared to serve as a deterrent to seeking treatment. Moreover, these authors acknowledged that self-concealment was negatively correlated with social support. They did not, however, find that high self-concealment increased the behavioral intentions of seeking counseling as Kelly and Achter did.

In order to help solve the controversy created by these contradicting findings, Cramer (1999) reanalyzed both sets of data utilizing path analysis which allowed for the evaluation of both direct and indirect effects. Cramer summarized these findings by stating that "self-concealment is more strongly associated with distress than with attitudes toward counseling, and help-seeking is more strongly associated with attitudes toward counseling than distress" (p. 385). A similar finding was indicated by Vogel et al. (2005) using SEM in that self-concealment did not directly associate with attitudes toward seeking help or intentions to seek help when a number of other variables were included in the model. However, self-concealment was negatively correlated with attitudes toward seeking professional help when this relationship was analyzed independently.

Despite recent findings that self-concealment is not a strong predictor of attitudes toward help-seeking or intentions of seeking professional help when analyzed with SEM or path analysis and the presence of other predictor variables, this variable should not be ruled out as a possible predictor for a Latino/a population. Self-concealment has held up as a significant predictor of attitudes toward seeking professional help in some studies (e.g., Liao et al., 2005) which have utilized minority populations (i.e., Asian-American) indicating the possibility that this variable may function differently in different ethnic populations. In addition, self-concealment has served as a unique avoidance factor for seeking counseling (e.g., Cepeda-Benito & Short, 1998) in previous work (when variance of other predictors is not being controlled for) indicating that it does play some role in help-seeking behavior. This role may be minimal when including other variables that more strongly predict help-seeking behavior. However, little is known about how this self-concealment may function in a Latino/a population, thus it will be included for exploratory purposes. It is hypothesized that

self-concealment, if found to be a significant predictor of help-seeking attitudes or intentions, it will serve as an avoidance factor. Intuitively, it seems that because seeking professional psychological help generally requires openness with the therapist, a person who is unwilling or uncomfortable engaging in such behavior would be least likely to seek services. This intuitive rationale has been supported with previous work demonstrating, at the very least, the direction of this relationship (e.g., Cepeda-Benito & Short, 1998; Vogel et al., 2005; Kelly & Achter, 1995). In addition to these studies which largely utilized Caucasian populations, we continue to see that in minority research (i.e., Asian and Asian-American) self-concealment and attitudes toward help-seeking are negatively related (e.g., Liao et al., 2005). Moreover, it has been found that self-concealment is positively related to Africentrism in African American populations indicating that self-concealment increases as the values related to Africentrisim increase (i.e., unity, self-determination, collective work and responsibility, cooperative economics, purpose, creativity, and faith; Wallace & Constantine, 2005). Because many of these same values are likely to be respected within Latino/a cultures (e.g., unity, collective work and responsibility, cooperative economics, faith), this finding seems to provide further support for the hypothesis that self-concealment will serve as an avoidance factor for help-seeking (i.e., less positive attitudes toward seeking help and fewer intentions to seek professional help).

Distress

Increasing levels psychological distress have been predicted to increase the likelihood of seeking professional help (Vogel & Wester, 2003). In fact, research has consistently shown that individuals will become more likely to seek help as their capacity to deal with their problems reaches a level that is motivating to seek such help (e.g., Cramer, 1999;

Cepeda-Benito & Short, 1998; Ingham & Miller, 1986; Rickwood & Braithwaite, 1994). This suggests that as the level of current distress increases, so does the likelihood that one will feel motivated to seek help for said distress.

In addition, level of distress has been directly related to help-seeking intentions, though there has been some controversy surrounding the magnitude of this relationship on help-seeking. For example, Kelly and Achter (1995) reported that distress (i.e., measured depression) was not as good of a predictor of intentions to seek counseling as self-concealment was. However, Cepeda-Benito and Short (1998) took issue with the findings of Kelly and Achter by arguing this particular finding was actually a methodological artifact of directly measuring current depression while simultaneously measuring intentions to seek help for a variety of problems, not just depressed mood. When this methodology was adjusted in the Cepeda-Benito study, it was found that distress selectively predicted the likelihood of seeking help based on the type of distress experienced. Also, Komiya et al. (2000) found that distress uniquely predicted help-seeking attitudes in a regression model. Further, Vogel and Wei (2005) found that psychological distress was related to intentions to seek help. On the other hand, work by Vogel et al. (2005) investigated the relative effect of a large number of variables on attitudes toward seeking help and intentions to seek help. The results of this study indicated that distress is not a significant predictor of attitudes toward seeking help or intentions to seek help for interpersonal issues, academic issues, or drug/alcohol issues after controlling for a number of other variables. The completeness of the hypothesized model in this study and the subsequent finding relating to distress indicates that distress may not serve as an ideal predictor of attitudes toward seeking help or intentions to seek help.

However, as for so many variables in this study, there is limited data regarding how distress level may impact help-seeking in a Latino/a population, though data is not non-existent. For example, Cabassa (2007) reported that when Latino, immigrant men were presented with a vignette depicting an individual with major depression, only 13% felt they would attempt to resolve the problem without help. This finding provides some indirect, analogue evidence that the experience of a major psychological problem may be associated with a high likelihood of help-seeking, though formal help such as counseling was typically only a second or third choice for the men (with family and other informal sources being utilized first). Similar research provides additional evidence that severity of concerns may be related to help seeking behavior in this population. For example, Peifer et al. (2000) found that only 13% of those individuals reporting functional limitations from psychiatric symptoms but who did not yet meet DSM-III-R criteria had sought treatment. However, 31% of those reporting functional limitations and who also met diagnostic criteria had sought services. This finding implies that as distress became more severe (i.e., enough symptoms were present for a full diagnosis), the number of individuals seeking treatment increased. All participants were of Mexican-American descent. Finally, Vega et al., (2001) also utilized a Mexican-American sample and found that self-rated severity of psychiatric impairment was related to seeking help from both mental health providers and medical doctors. Given this evidence, it is hypothesized that current level of distress will be a significant predictor of attitudes toward and intentions to seek counseling within a Latino/a population.

Social Support

Social support is an important variable which helps to explain how some people experience many life stressors but very little psychological distress (i.e., social support can

work as a buffer against distress). This buffering hypothesis was put forward relatively early (Antonevsky, 1979; Cobb, 1976) and has been supported within the literature (Brown & Harris, 1978; Dean, Lin, & Ensel, 1981; Eaton, 1978). This line of research has translated into findings that may help explain variance within the help-seeking literature. For example, the results of Goodman et al. (1984) indicated that when the number of stressful life events are equal, the likelihood of seeking counseling increases as social support decreases. This finding is valuable as it gives us direct evidence that those with limited social support may be more likely to seek professional help than those with larger or higher quality social support systems. Also, lower perceived social support has been found to predict intentions to seek counseling in a number of studies, with level of psychological distress mediating this relationship (e.g., Vogel & Wei, 2005; Liao et al., 2005). In addition, research has indicated that as levels of perceived social support go up, attitudes toward counseling go down (e.g., Vogel et al., 2005). Social support, however, is not consistently found to be a predictor of attitudes or intentions relating to help seeking. For example, Vogel and Wester (2003) did not find social support to be a significant predictor of attitudes toward seeking help in a regression model.

Again, little is known about the relationship between social support in a Latino/a population and help-seeking attitudes or behaviors. It is known that within the traditional values of Latino/a culture, a high value is placed on the family, including the extended family, as a source of support during times of stress. The limited research available on this topic seems to indicate that individuals who perceive high levels of support from their family have more negative attitudes and behaviors related to psychological help-seeking it and also indicates that lower levels of perceived social support from family members is related to

more positive psychological help-seeking attitudes and behavior (Miville & Constantine, 2006). It should be noted that these findings were specific to Mexican-American populations and thus, even this finding has limited generalizability to the larger Latino/a population. It is hypothesized that social support will serve as a predictor variable for attitudes toward seeking professional help, with those indicating higher levels of perceived social support having more negative attitudes. It is further predicted that this variable will serve as a predictor of help-seeking intentions, again with higher levels of perceived social support being related to lower intentions to seek help.

TREATMENT-RELATED VARIABLES

Anticipated Risk and Utility

Anticipated utility, and a closely related construct, anticipated risk may also influence one's attitudes about and intentions to seeking professional help for mental health concerns. Anticipated utility refers to the perceived value of the outcome that will occur for the individual as a result of self-disclosing to someone such as a counselor. Anticipated risk refers to the perceived consequences of self-disclosure, in this case, to a professional such as loss of face or going against the family. Anticipated utility and anticipated risk have both been found to be act as predictors for attitudes towards seeking help (positive and negative, respectively) in a number of studies (e.g., Vogel & Wester, 2003; Vogel et al., 2006; Vogel et al., 2005). It is important to note that while Vogel et al.'s (2005) study utilized a relatively large number of variables to predict attitudes toward professional help-seeking and intentions to seek professional help, anticipated utility remained a strong predictor of attitudes though anticipated risks no longer significantly predicted variance in attitudes.

Again, there is little empirical research available to guide hypotheses regarding how these variables might work in a Latino/a population. In fact, there were no published studies which utilized the Disclosure Expectations Scale (DES; Vogel and Wester, 2003) as a direct measure of these constructs in a Latino/a population. The first step in understanding how these constructs may impact help-seeking attitudes and intentions within this population is to explore the relationships among these variables. Therefore, these variables will be included for exploratory purposes. Intuitively, it is believed that anticipated utility will increase the likelihood of seeking help while anticipated risks would decrease this likelihood; there is no theoretical reason to hypothesize otherwise.

Social Stigma

Social stigma, in this context, refers to a fear of negative judgment from others for seeking mental health treatment. Research has indicated that those individuals who hold greater perceptions of social stigma for seeking services also tended to hold the most negative attitudes toward seeking professional help (Komiya et al., 2000). An interesting finding discussed in Komiya et al. (2000) is that social stigma beliefs were not related to current levels of psychological distress, indicating that perceptions of stigma tend to hold, even as need for such services changes. Also, previous work has indicated that those problems which receive more negative judgments from others are those problems for which people are least likely to seek services (Bergin & Garfield, 1971; Overbeck, 1977; Perlman, 1975). This finding provides indirect evidence that social stigma may be an inhibiting factor for help-seeking behaviors. Furthermore, Stefl and Prosperi (1985) found that those individuals who had not yet sought services but for whom treatment would be beneficial were more than twice as likely to see stigma as an important barrier to seeking treatment

when compared to other subjects in the study. This work again, provides evidence that for some individuals, social stigma is a factor which reduces the likelihood they will seek services. Similarly, Vogel et al. (2005) reported that social stigma was a significant predictor of attitudes towards seeking professional help which was subsequently related to subjects' self-reported intentions to seek help.

There is some indirect evidence supporting the relation of social stigma and lowered help-seeking attitudes or intentions in a Latino/a population but very little direct evidence. For example, Cachelin and Striegel-Moore (2006) reported that while Mexican-American women and Anglo women reported similar barriers to treatment seeking for an eating disorder, the top barrier endorsed by the Mexican-American women was feeling shame. Even though the Mexican-American group rated feelings of shame higher than the Anglo women in the study, tests of significance were not performed on the data therefore the meaning, if any, of this numeric difference is not clear. However, it may imply that shame was a more serious concern for the Mexican-American women in this study. Shame is of course, only one facet of perceived social stigma and this population was highly specific (i.e., Mexican-American women with an eating disorder), however, these findings help provide initial evidence that social stigma is likely to be a significant negative predictor for attitudes towards professional help-seeking in a Latino/a population.

Self-Stigma

Self-stigma associated with seeking professional help is the fear that individuals will reduce their self-regard if they seek help from a psychologist or mental health professional (Vogel et al., 2007). This reaction may be due, in part, to an internalization of stereotypes regarding mental illness or of professional help-seeking. Initial support for the use of self-

stigma as a unique predictor for attitudes toward seeking professional help is promising, though this link has not yet been well-established (Vogel et al., 2007). For example, during the development of the Self-Stigma of Seeking Help Scale (SSOSH), Vogel et al. (2006) reported that self-stigma acted as a significant and unique predictor of intent to seek counseling, even when four other known predictor variables (i.e., sex, anticipated risks, anticipated benefits, public stigma) were entered into the hierarchical regression model first. A later study (Vogel et al., 2007) provided further evidence that self-stigma is related negatively to attitudes toward counseling. Additionally, similar results have indicated that self-stigma reduced the likelihood of help-seeking from a number of professional sources (e.g., psychologists; Barney, Griffiths, Jorm, & Christensen, 2006).

Given the relatively new standing of this variable as a predictor for help-seeking attitudes or intentions, no work could be located which supports its use in a Latino/a population. It is hypothesized, however, that this variable will continue to serve as a predictor variable for help-seeking attitudes and intentions in this population (i.e., more self-stigma would be related to less positive attitudes and fewer intentions to seek help). Latino/a values such as *machismo* in males may put pressure on males to remain brave, courageous, strong, and independent (Perez, 1977). In addition, many Latino/a individuals hold a strong sense of *familism* which encourages strong family bonds and relying on family for emotional support (Ruiz, 1985). These values may increase the likelihood that Latino/a individuals would internalize public stigma about help-seeking behaviors as they may feel pressure to remain strong and courageous in the face of mental illness or to remain connected to the family rather than seek support outside the close-knit family structure. If their problems become too great and they are no longer able to cope utilizing these learned traditions (i.e., staying

strong; turning to family), they may feel a sense of worthlessness, guilt, or shame. These negative emotions, or self-stigma, may result in part, because the person is not able to live up to cultural or individual beliefs about the "right way" of coping with personal problems.

Treatment Fearfulness

Treatment fearfulness has been defined as a "subjective state of apprehension arising from aversive expectations surrounding the seeking and consuming of mental health services" (Kushner & Sher, 1989, p. 251). Treatment fearfulness arises when individuals have negative expectations of one or more aspects of the seeking treatment or of the treatment process. Kushner and Sher (1991) specified that fears may vary on a number of different factors such as nature of the fear (i.e., irrational, specific, or diffuse), type of problem (e.g., seeking services for stress management versus sexual dysfunction), treatment modality (e.g., psychopharmacological interventions versus talk therapy), and type of service provider (e.g., psychiatrist, counselor, psychologist). Treatment fearfulness has been found to be related to actual treatment consumption as those with greater treatment fears were less likely to have sought treatment than those with fewer treatment fears (Pipes et al., 1985). Similarly, Vogel et al. (2005) found that treatment fearfulness was directly related to students' intentions to seek professional help for both interpersonal and academic issues.

As mentioned by Kushner and Sher (1991) it is important to recognize the unique experiences of minority status individuals or those from different cultural backgrounds as they may have different expectations and concerns regarding the mental health system. These differences may impact treatment fearfulness which is viewed as being multifaceted and culturally influenced (Kusher & Sher, 1989). Given this understanding, treatment fearfulness may serve as a barrier to treatment seeking in minority populations, including Latino/a

populations. For example, a number of authors have reported that a sense of mistrust and fear of treatment providers has developed within minority cultures as a result of previous mistreatment and discrimination against minority population members (e.g., Caldwell, 1996; Snowden, 2003; Snowden & Cheung, 1990). In addition, Choi and Gonzalez (2005) found indirect evidence for this relationship in their study which investigated the perceptions of mental health clinicians in regards to which factors impeded or facilitated access to services for African American and Mexican American adults. The clinicians in this study listed fear and distrust of the treatment system as a major obstacle which prevents patients and families from accessing services. These findings provide evidence that treatment fearfulness will likely serve as a significant barrier to intentions to seek counseling in a Latino/a population, though only indirectly as this finding is not from the client's perspective. Given that this variable has been supported as a unique predictor in research in majority populations (e.g., Vogel et al., 2005) it is possible that this variable may account for an even larger amount of variance in intentions to seek counseling within a Latino/a population. These individuals are at greater risk for the additional fears of treatment relating to mistrust of the treatment system due to historical discrimination within this system and the larger dominant society.

Social Norms

The social norm of seeking professional treatment has been measured in previous research by Bayer and Peay (1997) and Vogel et al. (2005) in order to help estimate both attitudes toward seeking professional help and intentions to seek help. Vogel et al. found that social norm of seeking professional help uniquely predicted help-seeking attitudes in a primarily Caucasian population. In both studies, a single item was used for measurement, "Most people who are important to me would think that I should seek help from a mental

health professional if I were experiencing a persistent personal problem in my life". It has been noted in the literature that mental health services may be seen as inconsistent with the traditional values of minority cultures (Padilla, et al., 1976; Root, 1985). In general, the concept of seeking professional help is a Western concept for many Latino/a students who were raised to rely on family and religion in times of need, thus seeking professional help may not be the first line of support utilized when a personal problem is encountered (Cabassa, 2007). However, it seems that due to Latino/a culture being collectivistic in nature and members showing much respect for the opinions of family members, it is anticipated that approving social norms will be related to more positive attitudes toward seeking help and higher intentions to seek professional help.

Previous Treatment

Social psychological theory provides behavioral models which may inform us of the impact of prior treatment use on future treatment seeking. For example, as discussed in Eagly and Chaiken (1993), the inclusion of past behavior in behavior prediction models (e.g., Theory of Reasoned Action; Ajzen & Fishbein, 1975) improves the prediction of actual behavior. Ouellette and Wood (1998) argue that this process may occur through a number of processes including indirectly influencing attitudes, a variable known to mediate the relationship between previous treatment and intentions to seek professional help (Vogel et al., 2005). More specifically, Ouellette and Wood hypothesized that the more frequently the previous behavior has occurred, the more likely it is that one will hold positive attitudes and perceptions of the behavior and the ease with which the behavior can be carried out. In addition to this theoretical argument, the authors found evidence in their meta-analysis that previous behaviors directly impacted behavioral intentions. Using this theoretical framework,

it is hypothesized that previous treatment will predict both more positive attitudes toward seeking help as well as greater intentions to seek treatment in a Latino/a population.

CULTURE-RELATED VARIABLES

Acculturation and Enculturation

To assume that all individuals who are considering or in need of psychological treatment are similar is an assumption that could create large discrepancies between our empirical knowledge of the variables impacting help-seeking attitudes and intentions and the actual variables which influences these constructs. It is therefore imperative to not only consider what variables may be common across groups of individuals (e.g., by testing established models on new groups) but to also consider those variables that may be applicable only to subgroups of the general population (e.g., cultural variables). It is for this reason that we must consider what types of variables may impact minority groups, specifically Latino/a groups, in relation to help-seeking attitudes and intentions over-and-above those variables which are predictive of other groups (e.g., White or predominantly White populations). The inclusion of cultural variables (e.g., acculturation, enculturation, cultural congruity of mental health services) seems most pertinent for this purpose within this study as these variables are in many ways unique to minority groups (e.g., Latino/a) and have previously been demonstrated to be predictive of help-seeking attitudes and intentions within minority groups (e.g., Liao et al.).

The variable of acculturation has a long history within psychology and other fields interested in studying minority culture change which has been plagued with differential definitions and usages across time. In the early stages of the study of acculturation, the term was meant to define the process of adaptation or change that occurs as an immigrant or

minority group member goes through as they become accustomed to a new, dominant culture. However, this definition failed to account for the process of cultural maintenance that also occurs during the adaptation to a new, dominant culture. This definition did not account for the introduction of minority cultural norms to those individuals who have family heritage and cultural values outside the dominant culture but who were never fully socialized into those norms (e.g., second generation and beyond). Researchers have attempted to account for this second issue of maintenance by asserting that acculturation is actually the study of two relatively orthogonal processes: (a) adapting to aspects of the dominant culture and the new associated norms and (b) maintaining aspects of the indigenous culture and norms (e.g., Berry & Kim, 1988; Berry et al., 1986).

Unfortunately, this new and more exclusive definition of acculturation did not appear to fully solve the previous problems associated with the term. For example, Kim (2007a) has argued that as actually used, the term acculturation typically does not account for cultural maintenance but continues to only describe adaptation to the new culture. Given the ambiguity with which this term has historically been used and the recognition that there are likely two, relatively orthogonal processes at work, the need for a new term, *enculturation,* has been acknowledged and subsequently incorporated into research (Kim & Abreu, 2001; Kim 2007a, 2007b). Enculturation refers to the maintenance of or introduction to indigenous cultural values and norms. By including not only acculturation but also enculturation as a measure of one's cultural background, we are able to investigate with more complexity how these variables may be associated with help-seeking attitudes and intentions. As mentioned previously, these variables (i.e., acculturation, enculturation) have been successfully utilized within the minority population help-seeking literature. However, there were only a small

number of studies which utilized these variables within a Latino/a population and some of the results from these studies were mixed. It is for these reasons that their inclusion in this study which is investigating help-seeking in Latino/a populations will be especially important (i.e., first to add to the limited knowledge we have concerning Latino/a populations and help-seeking and second, to help clarify some contradictory findings within the literature that does exist).

The most directly related study is from Miville and Constantine (2006); this study targeted on Mexican-American college students and found that acculturation was significantly and positively related to help-seeking behavior (i.e., self-reported treatment within the last year), but not attitudes toward seeking professional help. Enculturation, on the other hand, was not significantly related to either attitudes towards seeking professional help or help-seeking behavior.

In related literature utilizing Asian and Asian-American populations, the addition of these cultural variables has significantly added to the prediction of help-seeking attitudes and intentions. One such example which is closely related to the aims of this study (i.e., improving the predictive power of help-seeking models for a minority population through the inclusion of culturally relevant variables) was completed by Liao et al. (2005). These investigators tested the help-seeking model developed in Cramer (1999) utilizing the original model and the original model plus the addition of behavioral acculturation and adherence to Asian values (similar to enculturation). The results indicated that both cultural variables contributed significantly to the prediction of willingness to seek counseling through the mediator of attitudes toward counseling. These results are promising for the current

investigation and offer some support for the hypothesis that these may also serve as important predictors in other minority groups (e.g., Latino/a).

Cultural Congruity in Mental Health Services

Cultural congruity refers to how well individuals feel they "fit" culturally into their surroundings (Gloria & Robinson Kurpius, 1996). Understanding this how one's perception of cultural congruity in the current environment impacts thoughts, feelings, and behaviors may be especially important for those individuals whom regularly navigate in two or more cultures with differing values and norms. As noted in Miville and Constantine (2006), such individuals may face contradicting desires to both maintain their ethnic heritage while simultaneously desiring to "fit in" to mainstream society. Prior research has frequently cited cultural incongruence as a factor impacting the under-representation of Latino/a populations in psychotherapy (Leong et al., 1995; Cheung & Snowden, 1990). Studies such as these, which indicate that cultural incongruence plays an important role in the under-representation of Latino/a clients in psychotherapy have failed to assess this congruence from the perspective of the *potential* client. It is not enough that we understand what increasing and decreasing actual congruence does to impact utilization rates but it is also imperative to assess how one's perceptions of such congruence impacts attitudes and intentions as these variables may ultimately predict help-seeking behaviors (see Ajzen & Fishbien, 1975).

Furthermore, as discussed in Wampold (2001) key components of successful psychotherapy are common factors such as a belief in the treatment (both therapist and client) as well as a coherent and believable explanation for the cause of the individual's problems. These factors are seen as important in all types of therapies (Wampold, 2001) but may become even more important within minority research as concepts within mental health are

ultimately culturally based (Chueng & Snowden, 1990). For example, the causes of mental health problems (e.g., organic, life stressors, spiritual possession, immoral behavior etc.) and viable solutions (e.g., psychotropic medication, talk therapy, indigenous folk healing) vary from one cultural group to another. These variations may not only make successful treatment less likely (mismatch between therapist and client; Wampold, 2001) but may also make professional help appear less attractive to those individuals whom carry differing cultural interpretations of mental health. As mentioned above, no studies were able to be located which assessed the potential client's perceptions of cultural congruence of mental health services. Therefore, this study hopes to add to our understanding of help-seeking attitudes and intentions within minority populations by assessing how one's perceptions of cultural congruence of mental health services to be associated with these variables. It is hypothesized that perceptions of cultural congruence of mental health services will increase both attitudes toward seeking professional help and intentions to seek professional help within a Latino/a population.

There is a relatively large body of research which indirectly supports this hypothesis. For example, the availability of culturally sensitive staff at treatment centers (Lopez, 1981) or being exposed to culturally responsive therapists is related to increases in use of services by Mexican-American individuals (Pomales, Claibor, & LaFromboise, 1986; Gim, Atkinson, & Kim, 1991). Also, previous research has found, for example, that when paired with ethnically similar therapists, improvements are seen in both length of treatment and treatment outcome (O'Sullivan & Lasso, 1992). However, the research on actual preferences for ethnically similar therapists has been mixed. As discussed in Atkinson, Casas, and Abreu (1992), a number of studies have found that Mexican-American's may hold these preferences

(Gilsdorf, 1978; Atkinson, Poston, Furlong, & Mercado, 1989; Lopez, Lopez, & Fong, 1991). On the other hand, a number of studies were cited which found that ethnically similar counselors were not perceived by Mexican-Americans to be more credible sources of help (Acosta & Sheehan, 1976; Furlong, Atkinson, & Casas, 1979; Atkinson, Ponce, & Martinez, 1984). These studies seem contradictory but may actually fit with the hypothesis that perceived cultural congruity is important. These findings imply that while Mexican-American's may find ethnically similar and dissimilar counselors to be equally competent, they continue to hold a preference for someone who is ethnically similar. This possibility is especially important in the context of the current study in that it is possible that individuals who are in need of professional treatment but hold preferences for a counselor who is ethnically similar, may not seek such services if they do not believe an ethnically similar counselor is available. Finally, it is important to consider accessibility as a cultural factor for minority populations. It is known that many barriers to services exist for minority populations including financial constraints, lack of transportation, or limited hours of availability. Treating these barriers as aspects of cultural congruity of services ensures that we are not overlooking some of the most basic and fundamental differences between minority (e.g., Latino/a) groups and majority groups (i.e., White).

CHAPTER 3: METHOD

Participants

The final sample consisted of 424 students. The average age was 18.9 (*SD* = 6.44; range 18-54). About three quarters of participants were female (72.4%). All participants self-identified as being Latino or Latina and were drawn from Florida International University's psychology research pool. Close to half of the participants were freshmen (46.5%) with the remaining students identifying as sophomore (19.8%), junior (20.8%), senior (11.3%), or other (7%).

In addition to this basic demographic information, participants were asked to report more specific information related to their family history and experiences in counseling (see Appendix A). Almost half of the participants were of Cuban descent (45.8%), followed by Columbian descent (11.1%), Puerto Rican descent (5.9%), Venezuelan descent (4.5%), or Dominican descent (4.2%). The remaining students (28.5%) indicated family heritages from 14 other South American countries. Regarding generation status, 4.2% were first generation immigrants, 26.4% indicated being 1.5 generation, 62.3% of this sample indicated being second-generation. The remaining students were 3rd generation or above (5.7%) or international students (1.2%). The average age at immigration was 9.5 (*SD* = 5.7).

Reported religious preferences were varied as 65% of participants identified themselves as Christian-Catholic while an additional 16.4% identified with other forms of Christianity, Protestant (8%), Latter Day Saints or Other Christian group (7.5%), Baptist (0.9%), Jehovah's Witness (0.9%). A noticeable proportion of students identified as Atheist or Agnostic (12.3%). The remaining students identified as Jewish (2.1%), Other (1.9%), Buddhist or Taoist (1.2%), and Islamic (0.2%).

The reported family income appeared to be distributed evenly across measured income levels. These ranges included less than $25,000 (14.6%), $25,000 to $35,000 (15.8%), $35,001 to $50,000 (17.2%), $50,001 to 75,000 (17.7%), $75,001 to $100,000 (17.0%), and greater than $100,000 (13.7%). There were 4.0% of students who did not complete this item.

The reported parental education levels seemed relatively similar for mothers and fathers. The results indicated that 13.2% of mothers and 16.3% of fathers had an advanced graduate degree while 21% of mothers and 17.5% of fathers had a college degree. An additional 33.2% of mothers and 27.9% of fathers had completed some college but had not graduated with a degree. Those mothers who had completed some high school or had a high school diploma were 28.5% while this number was 30.7% for fathers. The remaining mothers (3.8%) and fathers (7.5%) had less than a 9th grade education.

A substantial proportion of participants had previously sought professional help for a mental health concern (29.5%). Of those who previously sought help, 68.8% rated this experience as *Very Helpful* or *Somewhat Helpful*. A small percentage of participants (3.3%) were currently receiving professional help. Of those, 78.6% rated their current counseling experience as *Very Helpful* or *Somewhat Helpful*. It is important to note that 100% of those participants who were currently seeking treatment also indicated they had sought treatment in the past.

Instruments

Self-disclosure. The 12-item Distress Disclosure Index (DDI; Kahn & Hessling, 2001) will be used to measure one's tendency and comfort with self-disclosure of personally distressing information such as emotions. Items are scored on a 5-point Likert-type scale

ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Higher scores are indicative of a tendency to disclose distressing information. Half of the items are reversed scored. Internal consistency is high with alphas ranging from .92 to .95 in college student populations (Kahn, Lamb, Champion, Eberle, & Schoen, 2002; Vogel et al., 2005). Convergent validity of the DDI has been demonstrated (Kahn & Hessling, 2001) through its positive correlation to the scores of the Self-Disclosure Index (Miller, Berg, & Archer, 1983) and its negative correlation to the scores of the Self-Concealment Scale in a sample of college students (Larson & Chastain, 1990). In addition, the DDI has been shown to be predictive of the actual number of later disclosures in a college student population as well as later ratings of disclosure level by an observer (Kahn, et al., 2002). No data was available to support the use of this measure with a Latino/a college student population.

Self-concealment. Self-concealment will be measured with the Self-Concealment Scale (SCS; Larson & Chastain, 1990). This 10-item scale measures the degree to which one desires to actively conceal personal information from others. Responses to items are summed from a 5-point Likert-type scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*) with higher scores indicating a stronger desire to disclose personal information. No items are reversed scored. The internal consistency of this scale has been shown to be adequate with alphas ranging from .83 to .88 among college students (Larson & Chastain, 1990; Vogel et al., 2005). In addition, Constantine, Okazaki, and Utsey (2004) reported a coefficient alpha of .87 when utilizing a mixed minority sample of international college students, 32% of whom were from Latin American countries. In addition, Constantine et al. reported positive correlations between the scores on SCS and scores on Center for Epidemiologic Studies-Depression Scale (CES-D; Radloff, 1977) and with a measure of acculturative stressors.

Also, Larson and Chastain (1990) indicated that the scores on SCS correlated positively with scores on the measures of anxiety, depression, and physical symptoms among college students.

Psychological distress. Current psychological distress will be measured with the Hopkins Symptoms Checklist-21 (HSCL-21; Green, Walkey, McCormick, & Taylor, 1988). This 21-item scale is a shortened version of the Hopkins Symptom Checklist (Derogatis, Lipman, Richels, Uhlenhuth, & Covi, 1974). Items assess a range of symptoms including somatic, performance, and general distress as currently experienced by the respondent using a 4-point Likert-type scale ranging from 1 (*not at all*) to 4 (*extremely*). Higher scores are indicative of higher levels of current distress. In addition, Cepeda-Benito and Gleaves (2000) tested the factor structure of the HSCL-21 within a Latino/a college student population and reported that, in general, the factor structure was similar to that of the other samples within the study (i.e., European American and African American). Internal consistency information was not reported in Cepedo-Benito and Gleaves' study or in Saldaña (1995). However, Vogel et al. (2005) reported the internal consistency with alphas of .90 for the total score. Construct validity has been supported through positive associations with both general college student stressors and minority status stressors in a Latino/a college student population (Saldaña, 1995). Previous studies using college students from other minority samples indicated a mean of 1.91 (SD = .55; Su, Lee, & Vang, 2005) while in the current study the mean was slightly lower (M = 1.71; SD = .43).

Social support. Social support will be measured with the 24-item Social Provisions Scale (SPS; Cutrona & Russell, 1984). This scale was developed to assess the respondent's perceptions of the quality of their social support in six domains: Attachment, Social

Integration, Reassurance of Worth, Reliable Alliance, Guidance, and Opportunity for Nurturance. Items are scored on a 4-point Likert-type scale ranging from 1 (*strongly* disagree) to 4 (*strongly* agree) with half of the items being reversed scored such that a higher score on both the total scale or any individuals subscale indicates higher perceptions of strong social support in general or within that domain, respectively. For the purposes of this research, the total scale score will be utilized. This scale has demonstrated convergent validity by correlating with scores on other measures of social support (Cutrona & Russell, 1984). The total scale has been shown to have adequate internal consistency with alpha's ranging from .85 to .92 in college student populations (e.g., Cutrona & Russell, 1984; Vogel et al., 2005). There was minimal information available regarding the use of the SPS in Latino/a populations, with only one such study being located. However, the study that was located used a revised version of the SPS (i.e., shortened and reworded to be appropriate for high school students). The sample was composed of high school students and a range of ethnicities; however the majority of participants were Latino/a (i.e., 67%). In this study, the coefficient alpha was reported to be .74 (Solberg, Carlstrom, Howard, & Jones, 2007).

Anticipated utility and anticipated risk. The anticipated risk and the anticipated utility of seeking professional help from someone such as a counselor will be measured with the Disclosure Expectations Scale (DES; Vogel & Wester, 2003). This 8-item scale assesses one's perceptions about both the anticipated risk and the anticipated utility of talking about an emotionally laden issue or problem with a counselor. Items are scored on a 5-point Likert-type scale ranging from 1 (*not at all*) to 5 (*very)* with four items loading each factor (i.e., anticipated risk and anticipated utility). Adequate internal consistency for each subscale has been demonstrated across multiple studies with values ranging from .81to .83 (anticipated

utility) and from .74 to .81 (anticipated risk) among college students (Vogel & Wester, 2003; Vogel et al., 2005). Vogel et al. reported a negative correlation between anticipated risk and comfort with self-disclosure and a positive relationship between anticipated utility and self-disclosure within a college student population. In addition, these authors found a correlation between anticipated risks with both self-concealment and treatment fears, demonstrating convergent validity of these two subscales. Thus far, no studies were available which utilized the DES with a Latino/a population.

Social stigma. Perceived stigma of seeking mental health counseling will be measured with the Stigma Scale for Receiving Psychological Help (SSRPH; Komiya et al., 2000). This five item questionnaire uses a Likert-type scale ranging from 1 (*strongly disagree)* to 4 (*strongly agree*). Higher scores indicate more perceived social stigma. This scale has been demonstrated to have adequate internal consistency with coefficient alphas found to be .72 (Komiya et al., 2000) and .78 (Vogel et al., 2005); both studies utilized a college student sample. In addition, construct validity has been supported through positive associations with a number of related variables including attitude toward seeking professional help (Komiya et al., 2000), fears of psychological treatment (Vogel et al., 2005), and a negative association with social support (Vogel et al., 2005).

Self-stigma. Self-stigma of seeking mental health services will be assessed with the Self-Stigma of Seeking Help scale (SSOSH; Vogel et al., 2006). This 10-item scale was designed to directly measure the extent to which seeking mental health services threatens one's self-regard, satisfaction with oneself, one's self-confidence, and overall self-worth. Items are scored on a 5-point Likert-type scale ranging from 1 (*strongly disagree*) to 3 (*agree and disagree equally*) to 5 (*strongly agree*). Internal consistency of this single factor scale

has been demonstrated as adequate with scores ranging from .86 to .90 for college student samples (Vogel et al., 2006; Vogel et al., 2007). Vogel et al. demonstrated convergent validity of the total scale score on the SSOSH, showing positive correlations to the tendency to self-disclose information and perceptions of public stigma as well as a negative correlation to comfort with disclosing personal information. Again, there were no studies available which had utilized this scale with a Latino/a population.

Treatment fears. Treatment fears will be measured with the Thoughts About Psychotherapy Survey (TAPS; Kushner & Sher, 1989). This scale was developed based off of the Thoughts About Counseling Survey (TACS; Pipes et al., 1995) by expanding the items as well as defining treatment and its service providers more broadly than "counseling" and "counselors". The 19 items on this scale are measured on a 5-point Likert-type scale ranging from 1 (*no concern*) to 5 (*very concerned*). Factor analysis during the development of the TAPS revealed three subscales, Therapist Responsiveness, Image Concerns, and Coercion Concerns. The Therapist Responsiveness subscale measures an individuals fears of about how the therapist will respond; the Image Concerns subscale measures one's fears of being judged negatively by the self or others for seeking treatment; and the Coercion Concerns subscale measures the extent to which one is fearful of being pushed to think, do, or say things against their will. A total score will be used in the present study. Higher scores are indicative of more concerns related to psychotherapy. High internal consistency ($\alpha = .92$) was found utilizing a college student sample (D.L. Vogel, personal communication, April 13, 2008; see Vogel et al., 2005 for sample information). Validity of this scale is supported through positive correlations with anticipated risks of treatment, perceived social stigma, and

the tendency to conceal personal information (Vogel et al., 2005). No data was available for use of this scale with a Latino/a population.

Social norms. As modeled in Bayer and Peay (1997), the social norms of help-seeking will be measured with a single question rated on a Likert-type scale ranging from -3 (*unlikely*) to 3 (*likely*). The item reads as follows: "Most people who are important to me would think that I should seek help from a mental health professional if I were experiencing a persistent personal problem in my life"; thus higher scores indicate a higher level of this belief. This single observation has been shown to uniquely predict help-seeking intent (Bayer & Peay, 1997). This single item has additionally been used by Vogel et al. (2005) as a predictor of attitudes toward seeking professional help in college students. It has shown positive correlations with attitudes toward seeking professional help and anticipated utility from seeking help (Vogel et al., 2005) demonstrating construct validity. A similar item both in content and rating scale has been previously utilized within a Latino/a immigrant population for measuring subjective norms (Cabassa & Zayas, 2007).

Acculturation and Enculturation. Acculturation and enculturation will be measured with an adapted version of the Acculturation Rating Scale for Mexican-Americans-II (ARSMA-II; Cuéllar, Arnold, & Maldonado, 1995). The ARSMA-II is a revision of the Acculturation Rating Scale for Mexican-Americans. The 30-item revised version incorporates two subscales, a Mexican-Orientation Scale (MOS) and an Anglo-Orientation Scale (AOS). The MOS will be utilized as a measure of enculturation while the AOS will be utilized as a measure of acculturation. Items are scored on a five point Likert-type scale ranging from (1) *not at* all to (5) *extremely often or always.* Higher scores on each subscale are indicative of higher levels of each orientation. This scale has been found to positively

correlate with the original ARSMA (Cuéllar et al., 1995) demonstrating concurrent validity with a previously well accepted measure of acculturation. The two measured subscales have demonstrated adequate reliabilities with scores ranging from .83 to .87 for the AOS and .88 to .96 for the MOS in a Mexican-American Sample (Cuellar et al., 1995; Ruelas, Atkinson, & Ramos-Sanchez, 1998). In order to accommodate all Latino/a populations, not just Mexican-Americans, the scale will be revised such that items which previously referred to Mexican culture will be reworded to refer to Latino/a culture. For example, item #18 asks "My contact with *Mexico* has been…"; this item will be reworded to ask "My contact with *my country of origin* has been…" No items within the ARMSA-II refer directly to specific aspects of Mexican culture (e.g., specific traditions or beliefs but instead refer only generally to "foods" etc.) thus these changes should not create large differences between the content of the original scales. See Appendix B for a complete list of changes.

Cultural Congruence of Mental Health Service. Despite research consistently indicating cultural sensitivity and congruence of available services is related to better treatment outcomes, no scales were available which directly assessed one's perception of this congruence in relation to the services available in the area. Thus, in order to assess the degree to which individuals feel that the professional services in their area would be congruent with their cultural beliefs and expectations, a number of items were developed in hopes of tapping this construct. Some of these items were modified items from the Cultural Congruity Scale (Gloria & Robinson Kurpius, 1996) and the Preferences for Mental Health Services of Culturally Deaf Senior Citizens (Feldman & Gum, 2007; personal communication with David Feldman, April 15, 2008) as well as a number of new items. These ten-items were scored on a four-point Likert type scale ranging from (1) *Disagree* to (4) *Agree.* Five items

are reversed scored to help control for response bias. In order to understand these items, an exploratory factor analysis with a principal axis factoring method was conducted on all ten-items. Results of this revealed the existence of one factor. Any item with a factor loading higher than .40 was chosen for inclusion in the final analyses. This resulted in a three-item (6, 8, and 10) scale. Higher scores indicate higher beliefs that culturally congruent services are available in the respondent's area. Internal consistency for these three items was adequate and is reported in Table 1.

Attitudes toward seeking professional help. Attitudes toward seeking professional help will be measured with the Attitudes Toward Seeking Professional Help Scale (ATSPPHS; Fischer & Farina, 1995). This 10-item scale is a shortened version of an earlier, 29-item version of the ATSPPHS (Fischer & Turner, 1970). Items are scored on a 4-point Likert-type scale ranging from 1 (*disagree*) to 4 (*agree*). Five items are reversed scored such that higher scores indicate more positive attitudes toward seeking professional help. Fischer and Farina (1995) reported a high correlation between the original ATSPPHS and the revised 10-item version, suggesting these two scales are tapping similar constructs. Internal consistency has been found to be adequate with reliabilities ranging from .80 to .84 in college student samples (Vogel et al., 2005; Vogel et al., 2007; Fischer & Farina, 1995). No studies were located which utilized only Latino/a population in which internal consistency information was reported. Two related studies were found, both of which utilized minority sampling. Constantine (2002) reported a coefficient alpha of .83 (25% Latino/a college students) while Moore and Constantine (2005) reported a coefficient alpha of .81 (29% Latin American international college students). Validity of this scale has been supported with positive correlations to intentions to seek help for interpersonal, academic, and drug/alcohol

problems as well as negative correlations with perceptions of social stigma surrounding help seeking and with the tendency to self-conceal personal information among college students (Vogel et al., 2005).

Intentions to seek counseling. Intentions to seek counseling will be measured with the Intentions to Seek Counseling Inventory (ISCI; Cash, Begley, McCown, & Weise, 1975). This measure requires respondents to rate on a 4-point scale, how likely it is that they would seek counseling if they were to experience one of the problems indicated. The scale ranges from (1) *very unlikely* to (4) *very likely* with higher scores indicating a higher likelihood of seeking such help. Cepeda-Benito & Short (1998) have recently found 16 of the 17 items factor into three subscales; Interpersonal Problems (10-items), Academic Problems (4-items), and Drug/Alcohol Problems (2-items). The total score has been shown to have a positive correlation with favorable attitudes toward psychotherapy in a sample of college students (Kelly & Achter, 1995). The overall total scale has been found to have good internal consistency with scores ranging from .88 to .89 in college students (Kelly & Achter, 1995; Cepeda-Benito & Short, 1998). The subscales have also demonstrated adequate internal consistency with coefficient alphas ranging from .88 to .90 for Interpersonal Problems; .69 to .71 for Academic Concerns; and .86 to .88 for Drug/Alcohol Problems in college student populations (Cepeda-Benito & Short, 1998; Vogel et al., 2005).

Procedure

Participants initiated participation by signing up for the study using their school's SONA system. Participants were then directed to an online survey where they were asked to read an informed consent document and to provide consent by electronically signing the informed consent document by responding "yes" or "no" to the consent question. The online

survey included all measures as well as demographic information and was designed to take no more than 50 minutes to complete. It was assumed that all participants had a basic level of proficiency in English language skills due to their successful enrollment in an American university where the vast majority of courses are taught in English. All participants received two research credits for their participation.

CHAPTER FOUR: RESULTS

Descriptive Statistics

Means, standard deviations, coefficient alphas, and correlations for the 19 measured variables are shown in Table 1. Many measured variables showed a significant correlation with other measured variables in the expected direction. The independent variables of comfort with self-disclosure, sex, anticipated utility, social stigma, self-stigma, treatment fears, social norm, and previous treatment all showed a significant association with the hypothesized mediating variable, attitudes toward seeking professional help. Also, attitudes toward seeking help showed a significant relationship with intentions to seek help for all three measured concerns (dependent variable). Notably, acculturation and enculturation showed a significant negative relationship.

Multivariate Normality

In order to assess the whether the data met the underlying assumption of normality in the maximum likelihood method, a multivariate normality test was conducted. As discussed in McDonald and Ho (2002) the presence of such factors need to be identified and the data adjusted if such issues arise as they could lead to biased standard errors and incorrect test statistics. The results indicate that the data were not normal, χ^2 (2, N = 424) = 140.79, $p <$ .001. Therefore, the Satorra-Bentler (2001) scaled chi-square was reported to adjust for the non-normality of the data. Also, the scaled chi-square difference test (Satorra & Bentler, 2001) was used to compare the models.

The Examination of Vogel et al.'s (2005) Model (Model 1)

Path analysis was conducted in LISREL 8.54 to test the hypothesis that Vogel et al.'s (2005) model (plus self-stigma) would adequately predict attitudes toward seeking

professional help and intentions in a Latino/a sample. Model 1 (see Figure 1) was utilized for this test, as it is identical to the model described by Vogel et al. (with the addition of self-stigma). Three fit-indices are proposed for this purpose including the comparative fit index values (CFI) ≥ .95; root-mean-square-error approximation (RMSEA) ≤ .06; standardized root-mean-square residual (SRMR) ≤ .08, which would indicate a relatively good fit (Hu & Bentler, 1999). Results of these calculations indicated that Model 1 demonstrated a perfect fit (the model was saturated). For this reason, the magnitude of the parameter estimates provides more useful information to evaluate the model. These results can be found in Figure 2. Overall, these findings indicate that three person-related variables (i.e., self-disclosure, social support, and sex) and four treatment-related variables (i.e., anticipated utility, self-stigma, social norm, and previous treatment) showed significant associations with attitudes toward seeking professional help (all *p*s < .05). Social stigma was associated with attitudes toward seeking professional help at $p = .05$ level. All three paths from attitudes toward seeking professional help to intentions to seek help for each of three concerns (interpersonal, academic, and drug/alcohol) were statistically significant.

Addition of Cultural Variables

Two additional models were developed to assess whether the cultural variables would add incremental variance when predicting attitudes toward seeking professional help and/or intentions. Model 2 assessed the indirect effects of cultural variables on intentions to seek help through help-seeking attitudes while Model 3 assessed the direct effects of cultural variables on intentions of seek help (see Figure 1). A corrected scaled chi-square difference test was used to estimate the effects of these additions ($\Delta\chi^2$, Satorra & Bentler, 2001). It is not possible to make direct comparisons between Model 1 and Model 2 or 3 because the

number of variables differs in Model 1 (does not contain the cultural variables). As discussed in Jöreskog & Sörbom (1996), each model must contain the same number of variables to receive a statistically valid chi-square test (pp. 10–11). Therefore, it was necessary to compare Model 2 with and without constraints for the paths from the three cultural variables to attitudes toward seeking help. In order to assess Model 3, the same procedure was necessary. Here, Model 3 was compared with and without constraints for the paths from the three cultural variables to intentions to seek help for interpersonal, academic, and drug or alcohol concerns.

For Model 2, without constraining the paths from three cultural variables to attitudes toward seeking help, the results showed a good fit to the data, standard χ^2 (9, N = 424) = 22.86, $p < .01$, scaled χ^2 (9, N = 424) = 19.86, $p < .05$, CFI = .99, RMSEA = .05 (90% confidence interval [CI]: .02; .09), SRMR = .01. When Model 2 with constraints on the three cultural paths was tested, it also showed a good fit to the data, standard χ^2 (12, N = 424) = 21.19, $p < .05$, scaled χ^2 (12, N = 424) = 24.04, $p < .05$, CFI = .99, RMSEA = .04 (90% confidence interval [CI]: .04; .07), SRMR = .01. The results of the chi-square difference test indicate that there is no significant difference between Model 2 with and without the paths from cultural variables to attitudes constrained to zero , $\Delta\chi^2$ (3, N = 424) = 4.16, $p > .05$. This finding means that the three paths from cultural variables to attitudes toward seeking professional help do not add a significant contribution to the model.

In addition, Model 3, without constraining the paths from the three cultural variables to intentions to seek help in three domains (interpersonal, academic, and drug/alcohol concerns), showed a good fit to the data, standard χ^2 (3, N = 424) = 1.18, $p < .05$, scaled χ^2 (3, N = 424) = 1.11, $p < .05$, CFI = 1.00, RMSEA = .00 (90% confidence interval [CI]: .00; .05),

SRMR = .003. Similarly, when the three cultural paths to intentions to seek help constrained to zero, Model 3 showed a good fit to the data, standard χ^2 (12, N = 424) = 21.19, p < .05, scaled χ^2 (12, N = 424) = 24.04, p < .05, CFI = .99, RMSEA = .04 (90% confidence interval [CI]: .04; .07), SRMR = .01. The results of the chi-square difference test comparing Model 3 with and without constraints indicated a significant difference, $\Delta\chi^2$(9, N = 424), = 19.74, p < .05. Examination of the path analysis results indicated there was a statistically significant direct effect of acculturation on intentions to seek help for drug or alcohol concerns (see Figure 3). Specifically, higher levels of acculturation were related to lower intentions for seeking help for drug or alcohol concerns (β = -.13). Therefore, Model 3 with the direct paths from the three cultural variables to intentions to seek help is a better model and will serve as the final model for testing the significance levels of the indirect effects.

Testing the Significant Levels of Indirect Effects

A bootstrap procedures developed by Shrout and Bolger (2002) was utilized to test the level of significance of the indirect effects. This procedure develops an empirical specification of the sample distribution, which is not required to be symmetrical (Efron & Tibshirani, 1993). As indicated by Shrout and Bolger, the first step in the bootstrap procedure was to create 1,000 samples from the original data set (N = 424) by utilizing random sampling, with replacement. The path analysis was run by utilizing this new sample to yield 1,000 estimations of each path coefficient. The next step involved estimating the indirect effects by multiplying the path coefficients from (a) the independent variables to the mediating variable (attitudes toward seeking professional help) and then from (b) the mediating variable to the dependent variables (intentions to seek professional help for interpersonal, academic, or alcohol/drug concerns). In order to test the significance of the

indirect effects, a 95% confidence interval (CI) was used. If the 95% CI did not include zero, the indirect effect was considered significant at the .05 level. The results indicated that eight indirect paths to intentions to seek help through attitudes toward seeking professional help were significant (see Table 2). More specifically, three person-related variables (i.e., comfort with self-disclosure, perceived social support, and sex) and five treatment-related variables (i.e., anticipated utility, social stigma, self-stigma, social norm, and previous treatment) were significant (see Table 2). No indirect effects were significant for the cultural variables.

CHAPTER FIVE: DISCUSSION

There were two main purposes of this study. The first purpose was to test the help-seeking model described by Vogel et al. (2005) with a Latino/a sample. To date, this particular model has been tested in primarily Caucasian samples only. The second purpose of this study was to assess the incremental predictive power of cultural variables (i.e., acculturation, enculturation, and perceived cultural congruity of local mental health services) in this model within a Latino/a sample. Results of the path analyses provide support for hypothesis 1 and partial support for hypothesis 2. More specifically, analyses revealed that Model 3 (see Figure 3) was the best model. Model 3 contained direct paths from three cultural variables to intentions to seek help for interpersonal, academic, and drug/alcohol concerns as well as all original independent variables in Vogel et al.'s model (with the additional self-stigma).

In regards to the indirect effects of Model 3 (see Figure 3), it was found that three person-related variables (i.e., self-disclosure, social support, and sex) and five treatment-related variables (i.e., anticipated utility, social stigma, self-stigma, social norm, previous treatment) were related to attitudes toward seeking profession help. In turn, positive attitudes toward seeking help were associated with intentions to seek help for interpersonal, academic, and drug or alcohol problems. From the bootstrap results, there were significant indirect effects from these three person-related and five treatment-related variables through attitudes toward seeking help to intentions to seek help for interpersonal, academic, and drug/alcohol problems (see Table 3).

These findings help to support the generalizability of the variables described in Vogel et al.'s (2005) help-seeking model to a Latino/a population. The similarity of the indirect

effects between Vogel et al.'s (2005) model and the current model indicates that attitudes toward seeking professional help are affected similarly for a largely Caucasian sample and a Latino/a sample. These similarities may point to broad and robust variables that can be focused on with these two groups of students to increase help-seeking attitudes. The finding that comfort with self-disclosure is significantly related to attitudes toward seeking help for both groups is interesting. Previous research has indicated that Anglo-Americans have a higher frequency of self-disclosure than Mexican-Americans (Littlefield, 1974) and even more broadly, Hispanic-Americans (LeVine & Franco, 1981). However, the current results indicate people from both groups are likely going to have positive attitudes toward seeking professional help when they feel comfortable with self-disclosure. Secondly, a pattern seemed to emerge in that a number of the similar variables between the findings from the two studies are clearly embedded in a social context: social support, social stigma, and social norms. This finding provides indirect evidence that the help-seeking beliefs students hold from their social world and the support they receive in that world are quite important for both Caucasian and Latino/a students. Finally, is the finding that previous treatment was predictive of more positive attitudes toward seeking help in both populations. Because Latino/a populations tend to underutilize mental health services (Vega et al., 1986; Shrout et al., 1992; Hough et al., 1987), this type of similarity may seem surprising. Nonetheless, it may also imply that if students can be initially persuaded to try out counseling, this utilization gap may decrease as their attitudes toward seeking help become more positive.

One difference between these two models is the significant association that sex demonstrated with attitudes toward seeking professional help. In this Latino/a sample, sex (i.e., being female) successfully predicted positive attitudes while this was not the case in the

Vogel et al.'s (2005) study. Additionally, self-stigma was found to be significant in this model, a variable not included in the original Vogel et al.'s model because no such scale existed at the time. However, this variable was included in later studies (Vogel et al., 2007) and found to be a significant predictor of negative attitudes toward seeking professional help in a primarily Caucasian sample.

The unique impact that sex made on the model (was not true for Vogel et al., 2005) may be related to cultural differences between the groups. Generally speaking, Latino/a cultures tend to demonstrate more defined sex roles such as male demonstrated *machismo* and female *marianismo*. *Machismo* has been defined in a number of ways such as a culturally valued ideal of courage and honor (Christenson, 1975; Mirandé, 1988). It has also been characterized as a more exaggerated form of behavior such as toughness, aggression, risk taking, or virility (Boulding, 1990; Mosher, 1991). *Marianismo*, on the other hand, prescribes, in part, that Latina women are capable of enduring suffering inflicted by men (Reid, & Comas-Diaz, 1990; Salgado de Snyder, Cervantes, & Padilla, 1990). It is easy to see that men who identify themselves with the more traditional views of *machismo* may hold more negative attitudes toward seeking help than their female counterparts may hold. It is possible that these more traditional roles may impact the current sample in ways that are generally not true for Caucasian populations.

Similarly, one person-related variable (i.e., distress), two treatment-related variables (i.e., anticipated risk and anticipated utility), and one cultural variable (i.e., acculturation) showed direct relations to intentions to seek help in the current Latino/a sample (see Figure 3). Model 3 partially supports the second hypothesis, that the addition of cultural variables

will add incremental predictive abilities in the model. Specifically, the results indicate a significant direct path from acculturation to intentions to seek help for drug/alcohol concerns.

Differences were seen between the original help-seeking model (Vogel et al., 2005) and the current model regarding the direct effects of the independent variables on intentions to seek help for all concerns (i.e., interpersonal, academic, and drug/alcohol). Specifically, for interpersonal concerns, Vogel et al. (2005) reported direct effects on intentions to seek help for comfort with self-disclosure and treatment fears. In the current study, significant direct paths were identified for distress, anticipated risks, and anticipated utility of seeking help to intentions to seek help for interpersonal concerns. Next, in Vogel et al.'s (2005) study, a direct effect of treatment fears was also seen on intentions to seek help for academic issues. In the current study, a relationship was found from both distress and anticipated utility but not from treatment fears to intentions to seek help for academic concerns. Interestingly, treatment fears did not show a direct link for intentions to seek help in any domain in the current study despite rather robust findings for this variable by Vogel et al. Finally, in terms of drug/alcohol issues, Vogel et al. did not note any direct effects while the current sample demonstrated a direct negative link on drug/alcohol issues for anticipated risk.

These findings seem to support a very broad notion that the variables that are most likely to directly affect Latino/a student's intentions to seek help are quite pragmatic. It seems that if Latino/a students can (1) recognize they are in distress, (2) recognize they are unlikely to be harmed by disclosing personal information to a counselor, and (3) see the benefit of that disclosure to a counselor, this should tend to increase their intentions to seek help. Previous work with Latino/a samples has indirectly supported the impression that, for this group, as symptom severity worsens the likelihood of seeking help goes up (see Peifer et

al., 2000). However, this appears to be the first published study using the constructs of anticipated risk and utility in this population.

The finding that only one of three included cultural variables made a direct impact on intentions to seek help (acculturation → drug/alcohol concerns) was unexpected and incongruent with previous, similar research. For example, Miville and Constantine (2006) indicated increases in help-seeking behavior as acculturation increased in their Mexican-American sample. Similarly, Liao et al. (2005) found acculturation was related to attitudes toward seeking counseling in an Asian and Asian-American sample. However, the direct link that was found to be significant in the current study seems to indicate that as Latino/a students become more acculturated, their intentions to seek help for drug/alcohol concerns is reduced. This finding could be related to negative experiences in Anglo culture regarding these particular issues. For example, if students have encountered stereotypes about drug or alcohol use in their ethnic community, especially from the majority culture, they may be less willing to disclose this information to a counselor (e.g., Berg [2002] reported Hispanic Americans are most often portrayed as drug lords or *banditos* in cinema). It is reasonable to assume that those individuals with higher levels of acculturation have had more contact with the majority culture and therefore more opportunities to be exposed to these hurtful stereotyped beliefs.

Limitations

The results of the current study are a promising step toward understanding the help-seeking attitudes and intentions of Latino/a individuals. However, these findings need to be considered in the context several limiting methodological issues. First, this sample was composed of college students living in Miami or surrounding areas only and thus is not

necessarily generalizable to other Latino/a groups such as the community adult population, recent immigrants, or to Latino/as in other regions of the United States. On the other hand, however, this work may be especially useful for certain subgroups of Latino/a individuals such as Cuban-American college students or those with more recent generational immigration.

A second limitation of this study involves the use of path modeling analyses on cross-sectional data. As noted in Liao et al. (2005) with a similar study focused on Asian American students, the causality implied by the final model can only be considered conceptual rather than empirical given that the present data is correlational. On the other hand, as noted in Vogel et al. (2005), work by Ajzen and Fishbein (1980) support the temporal relationship described in this model. More specifically, the Theory of Reasoned Action posits that one's intentions are the greatest predictors of actual behavior (i.e., future help-seeking behavior) while a strong predictor of one's behavioral intentions are their attitudes toward that behavior. Thus, this previous work provides indirect evidence for the temporal relationship between attitudes toward seeking help and intentions to seek counseling. It also provides promising evidence that these factors should ultimately influence actual help-seeking behavior, the more global concern in this area of research.

Finally, even though Model 3 was compared with Models 1 and 2 and was then identified as the best model, this does not preclude the potential creation of a better model (e.g., adding other important variables) that has yet to be tested. For example, such a model may include other cultural variables (e.g., religiosity) or other independent variables (e.g., type of mental illness) not yet considered. As a result, it cannot be conclude that the best

model (Model 3) in this study is the definitive model for predicting help-seeking attitudes and intentions.

Future Research

As discussed above, the sample utilized for this particular study was a convenience sample of college students. Future research may want to focus on other groups of Latino/a individuals such as community adults across more diverse age ranges, groups living in different regions of the United States, or recent immigrants. Also, there was much variability across different demographic variables such as religion, socioeconomic status, and country or origin. Future research may want to isolate some of these demographic variables to assess their impact on help-seeking attitudes and intentions. Related, is the notable finding that about 30% of the students in this sample had previously sought psychological treatment; a percentage significantly higher than expected. It could be that because the university setting removes many barriers to treatment (e.g., high cost, availability), increasing utilization. Future research should include more structural type factors such as possession of health insurance to better understand these relationships.

Furthermore, it is known that culturally sensitive staff members (Lopez, 1981) and culturally responsive therapists (Pomales et al., 1986; Gim et al., 1991) increase minority use of counseling services. Yet, it was not possible to locate a valid and reliable measure of one's perceptions of the available mental health resources for use in Latino/a population. Thus, it was necessary to develop a new series of questions to assess the perceived cultural congruity of local mental health services (e.g., "I feel that my appearance would make it hard for my counselor to accept me"). From the original ten developed items, only three showed adequate

internal consistency to be included in the final analyses. Future research may want to focus efforts to continue to develop and refine empirically valid questions to assess this construct.

Related to this issue is the non-significant results found for enculturation. One possible reason for this non-significant finding may be related to the choice of measure used in this study. This specific measure focused heavily on items related to enculturation-related behaviors and activities (e.g., speaking Spanish, enjoying Spanish language TV, music, or movies). However, criticism in the literature regarding this approach (Kim, Atkinson, & Yang, 1999) was noted in Liao et al. (2005) as it largely ignores one's cultural values. Future research may want to include measures of enculturation more focused on Latino/a values rather than behaviors.

Finally, future research should focus efforts on intervention and outreach programming. Ultimately, the goal of this line of research is to be able to increase help-seeking behavior. Experimental research can work to isolate the variables of interest to assess their impact on this behavior. For example, the development of outreach programming could focus its educational materials on those factors shown to have a strong association with one's attitudes and intentions such as anticipated risk and utility. A multiple time-point design would allow researchers to assess how these independent variables measured at Time 1 are affected by outreach programming both immediately (Time 2), over time (Time 3), and ultimately behavioral change (Time 4). This type of study could easily be made into a quasi-experimental design where different types of outreach programming are offered (e.g., education regarding the benefits of therapy vs. education about the myths of therapy vs. education to help recognize the need for therapy). This type of research may be especially useful to university counseling centers as they are frequently the entity on campus that

provides outreach services. By understanding what variables to focus on in their outreach programming, they can become more effective at getting students in need to seek mental health services.

Counseling Implications

The implications from this study strike home the need for continued efforts to increase both the attitudes toward and the intentions to seek professional help. For Latino/a students it seems that likely targets for this may be to educate students about both the possible benefits and the myths of seeking counseling. This information might work to contradict any false beliefs they may have about counseling (e.g., if I go to counseling, I will be forced to talk about things I am not ready to talk about) and subsequently increase the likelihood they will seek help if in need.

Moreover, the results of the current study indicate that both self- and social stigmas are negatively related to one's attitudes about seeking professional help. By focusing efforts to students who may be at risk for mental health concerns and to the larger college community, it may be possible to change the perception of stigma associated with seeking help for mental health concerns. These types of outreach services may also serve to open the dialogue between peers, family members, and faculty regarding the usefulness of counseling services. If this occurs, students in need may begin to feel encouraged about the social norms regarding professional. These types of interventions and knowledge may be especially useful to a subset of universities across the United States, those whom are members of the Hispanic Association of Colleges and Universities holding the title of a Hispanic-Serving Institution (HSI). These institutions have at least 25% of their enrollment filled by Hispanic students (Hispanic Association of Colleges and University website, retrieved May 9, 2009).

These findings may also be important aspects to include in the field's efforts at training new practitioners and the continuing education of established therapists. One application of this knowledge would be for a Latino/a client who seems to be harboring some resistance to treatment. If the source of resistance is not clear to the therapist, these areas (e.g., anticipated risks, utility, comfort with self-disclosure, etc.) may be good topics to explore with the client. In this way, psychoeducation can occur on an individual basis. A likely secondary gain of this exploration would be the development of a deeper and more meaningful rapport between therapist and client.

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Table 1

Reliability Coefficients, Means, Standard Deviations, and Correlations Among 19 Measured Variables

	α	*M*	*SD*	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1.	.91	3.41	.77	-.34	-.15	.40	.14	-.22	.23	-.17	-.23	-.13	.09	-.01	.09	.10	.12	.24	.13	.16	.09
2.	.86	2.43	.79	--	.49	-.42	.03	.40	.02	.34	.23	.30	.10	-.18	-.04	.03	-.03	-.03	.18	-.13	.07
3.	.87	1.71	.43		--	-.35	.13	.30	.06	.17	.15	.28	.16	-.18	.00	-07	-.08	.04	.34	-.03	.25
4.	.87	3.25	.33			--	.11	-.10	-.01	-.22	-.22	-.11	-.06	.09	.16	.13	.20	-.01	-.19	.08	-.10
5.	--	1.72	.45				--	.11	.22	-.11	-.08	.07	.06	-.08	.23	.06	.11	.25	.22	.08	.10
6.	.83	11.2	4.29					--	-.04	.30	.28	.44	.06	.01	-.03	-.03	-.02	-.12	-.03	-.16	-.02
7.	.87	12.9	4.21						--	-.09	-.23	.04	.26	-.12	.14	.03	.09	.47	.37	.12	.24
8.	.78	1.93	.55							--	.43	.25	-.06	.01	-.06	.02	-.01	-.26	-.05	-.14	-.10
9.	.77	2.28	.63								--	.30	-.07	.09	-.12	-.06	-.09	-.42	-.15	-.15	-.09
10.	.92	2.81	.90									--	.08	.05	.10	.01	-.01	-.15	.04	-.08	.02
11.	--	.37	2.34										--	-.11	.05	.08	.05	.28	.23	.08	.15
12.	--	1.71	.46											--	.08	-.04	.06	-.19	-.21	.04	-.12
13.	.88	3.70	.65												--	-.14	.05	.07	.06	.00	.09
14.	.68	3.93	.40													--	-.01	.07	.02	-.09	.03
15.	.70	3.20	.67														--	.08	-.02	.11	-.09
16.	.81	2.66	.56															--	.50	.19	.28
17.	.87	22.4	6.74																--	.46	.54
18.	.90	4.81	2.42																	--	.17
19.	.60	8.19	2.67																		--

Note. $N = 424$. 1 = Self-Disclosure Scale; 2 = Self-Concealment Scale; 3 = Hopkins Symptom Checklist; 4 = Social Provisions Scale; 5 = Male (1), Female (2); 6 = Disclosure Expectations Scale (Anticipated Risk Subscale); 7 = Disclosure Expectations Scale (Anticipated Utility Subscale); 8 = Stigma Scale for Receiving Psychological Help; 9 = Self-Stigma of Seeking Help Scale; 10 = Thoughts about Psychotherapy Survey; 11 = Social Norm item; 12 = Previous Treatment – Yes (1), No (2); 13 = Acculturation Rating Scale for Mexican Americans-II-R (Latino Orientation Subscale); 14 = Acculturation Rating Scale for Mexican Americans-II-R (Anglo Orientation Subscale); 15 = Cultural Congruity of Mental Health Services; 16 = Attitudes Toward Seeking Professional Help Scale; 17 = Intentions to Seek Counseling Inventory (Interpersonal Concerns Subscale); 18 = Intentions to Seek Counseling Inventory (Alcohol and Drug Concerns Subscale); 19 = Intentions to Seek Counseling Inventory (Academic Concerns Subscale).
$p < .05 = \pm .10$ to $\pm .13$, $p < .01 = \pm .14$ to $\pm .16$, $p < .001 = \pm .17+$

Table 2. *Bootstrap Analyses of the Magnitude and Statistical Significance of Indirect Effects*

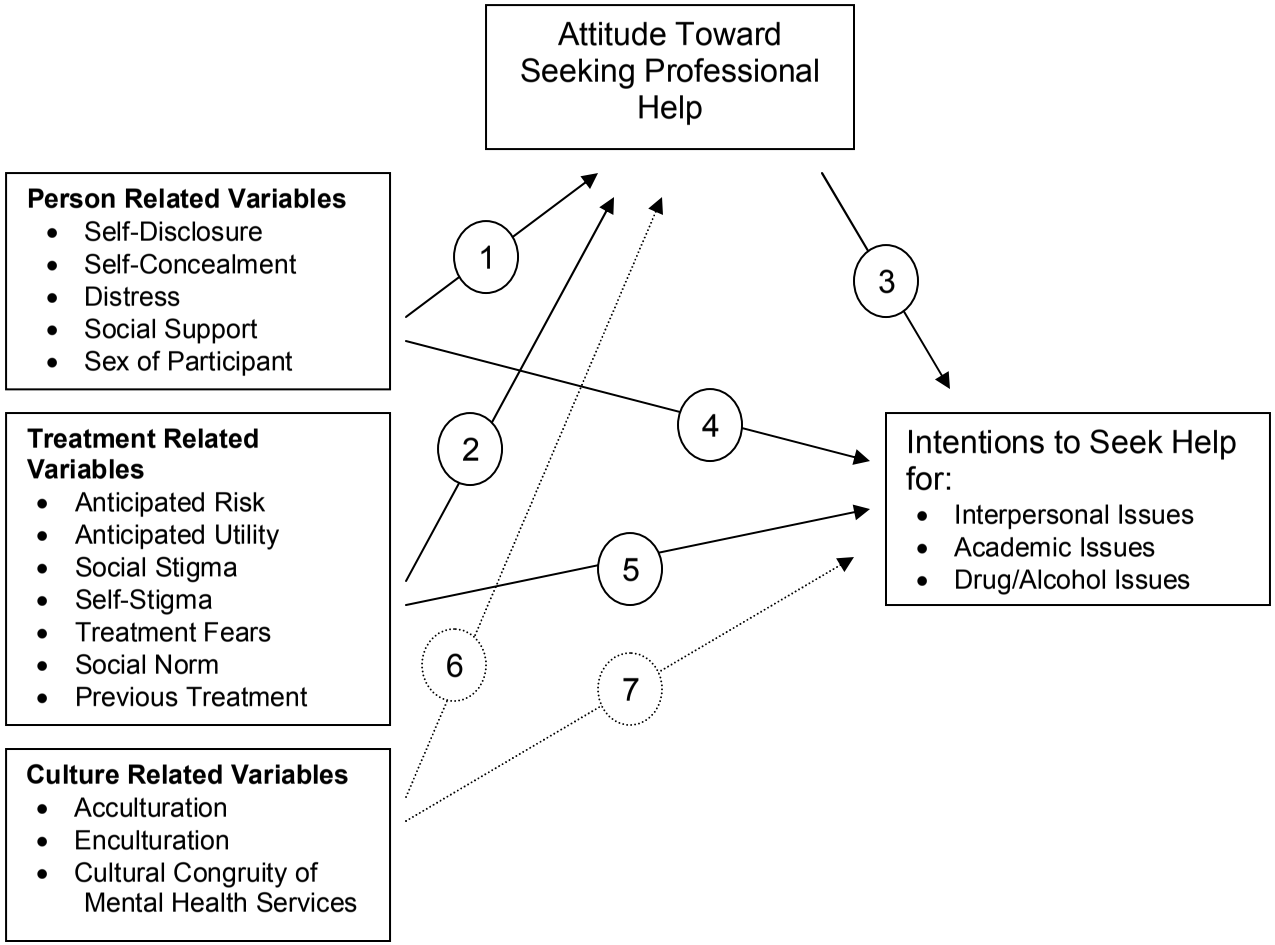
Independent Variable		Mediator Variable		Dependent Variable	β Standardized Indirect Effect	Mean Indirect Effect	SE of Mean	95% CI Mean Indirect Effect
			→	**Interpersonal**	**(.11) x (.08) = .009**	**.3309**	**.0099**	**.06, .68**
Self-Disclosure	→	**Attitudes**	→	**Drug/Alcohol***	**(.11) x (.06) = .007**	**.0394**	**.0014**	**-.001, .11**
			→	**Academic**	**(.11) x (.06) = .007**	**.0678**	**.0019**	**.01, .15**
			→	Interpersonal	(.04) x (.06) = .002	.1199	.0054	-.20, .45
Self-Concealment	→	Attitudes	→	Drug/Alcohol	(.04) x (-.04) = -.002	.0145	.0007	-.023, .069
			→	Academic	(.04) x (-.03) = -.001	.0233	.0011	-.04, .10
			→	Interpersonal	(.00) x (.27) = .000	-.0626	.0099	-.69, .56
Distress	→	Attitudes	→	Drug/Alcohol	(.00) x (.05) = .000	-.0081	.0013	-.10, .08
			→	Academic	(.00) x (.25) = .000	-.0120	.0021	-.14, .12
			→	**Interpersonal**	**(-.12) x (-.08) = .010**	**-.9426**	**.0124**	**-1.77, -.24**
Social Support	→	**Attitudes**	→	**Drug/Alcohol**	**(-.12) x (.03) = -.004**	**-.1138**	**.0025**	**-.30, -.002**
			→	**Academic**	**(-.12) x (-.05) = .006**	**-.1914**	**.0031**	**-.41, -.03**
			→	**Interpersonal**	**(.14) x (.07) = .010**	**.7972**	**.0088**	**.31, 1.39**
Sex	→	**Attitudes**	→	**Drug/Alcohol**	**(.14) x (.05) = .007**	**.0043**	**.0018**	**.004, .23**
			→	**Academic**	**(.14) x (-.02) = -.003**	**.1630**	**.0024**	**.04, .33**
			→	Interpersonal	(.01) x (-.10) = -.001	.0047	.0009	-.06, .06
Anticipated Risk	→	Attitudes	→	Drug/Alcohol	(.01) x (-.12) = -.001	.0006	.0001	-.01, .01
			→	Academic	(.01) x (-.04) = -.001	.0008	.0002	-.01, .01
			→	**Interpersonal**	**(.29) x (.13) = .038**	**.1779**	**.0011**	**.11, .26**
Anticipated Utility	→	**Attitudes**	→	**Drug/Alcohol**	**(.29) x (.02) = .006**	**.0209**	**.0003**	**.001, .04**
			→	**Academic**	**(.29) x (.11) = .032**	**.0361**	**.0004**	**.01, .06**

Table 2. *(continued)*

Independent Variable		Mediator Variable		Dependent Variable	β Standardized Indirect Effect	Mean Indirect Effect	SE of Mean	95% CI Mean Indirect Effect
			→	**Interpersonal**	**(-.09) x (.01) = -.001**	**-.4213**	**.0070**	**-.89, -.09**
Social Stigma	→	**Attitudes**	→	**Drug/Alcohol***	**(-.09) x (-.02) = .002**	**-.0491**	**.0012**	**-.13, .003**
			→	**Academic**	**(-.09) x (-.07) = .006**	**-.0855**	**.0017**	**-.21, -.003**
			→	**Interpersonal**	**(-.27) x (.01) = .003**	**-1.0978**	**.0080**	**-1.63, -.63**
Self-Stigma	→	**Attitudes**	→	**Drug/Alcohol**	**(-.27) x (-.04) = .011**	**-.1289**	**.0021**	**-.27, -.01**
			→	**Academic**	**(-.27) x (.03) = -.008**	**-.2218**	**.0025**	**-.39, -.07**
			→	Interpersonal	(-.09) x (.03) = -.003	-.2444	.0046	-.55, .02
Treatment Fears	→	Attitudes	→	Drug/Alcohol	(-.09) x (.02) = -.002	-.0292	.0007	-.08, .003
			→	Academic	(-.09) x (.00) = .000	-.0494	.0011	-.12, .003
			→	**Interpersonal**	**(.15) x (.03) = .005**	**.1651**	**.0017**	**.27, .07**
Social Norm	→	**Attitudes**	→	**Drug/Alcohol**	**(.15) x (.06) = .009**	**.0196**	**.0004**	**.05, .001**
			→	**Academic**	**(.15) x (.02) = .003**	**.0338**	**.0005**	**.07, .01**
			→	Interpersonal	(-.08) x (-.05) = .004	-.4277	.0073	-.90, .02
Previous Treatment	→	Attitudes	→	Drug/Alcohol	(-.08) x (.07) = -.006	-.0510	.0013	-.15, .005
			→	Academic	(-.08) x (-.02) = .002	-.0870	.0017	-.21, .003

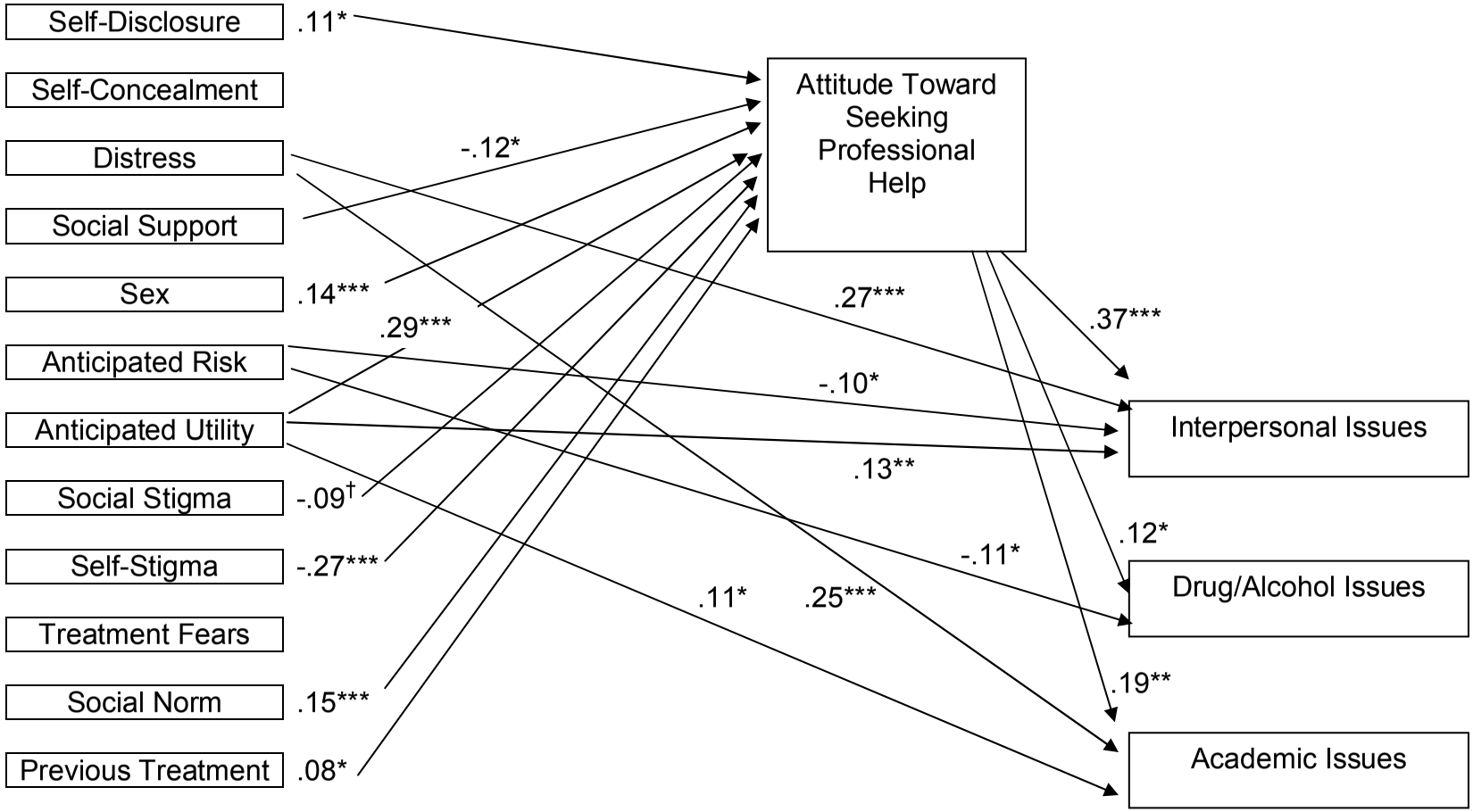
Note. $N = 424$. Confidence intervals which do not contain zero are statistically significant at the $p < .05$ level and are noted in bold font. * Significant after bias correction

Figure 1. *Hypothesized help-seeking models (Models 1, 2, 3).*



Model 1 includes Paths 1, 2, 3, 4, and 5. Model 2 includes Paths 1, 2, 3, 4, 5, and 6. Model 3 includes Paths 1, 2, 3, 4, 5, and 7.

Figure 2. *Replication of Vogel et al.'s (2005) Model*



* p <.05, ** p < .01, p < .001, † p < .05 after bias correction

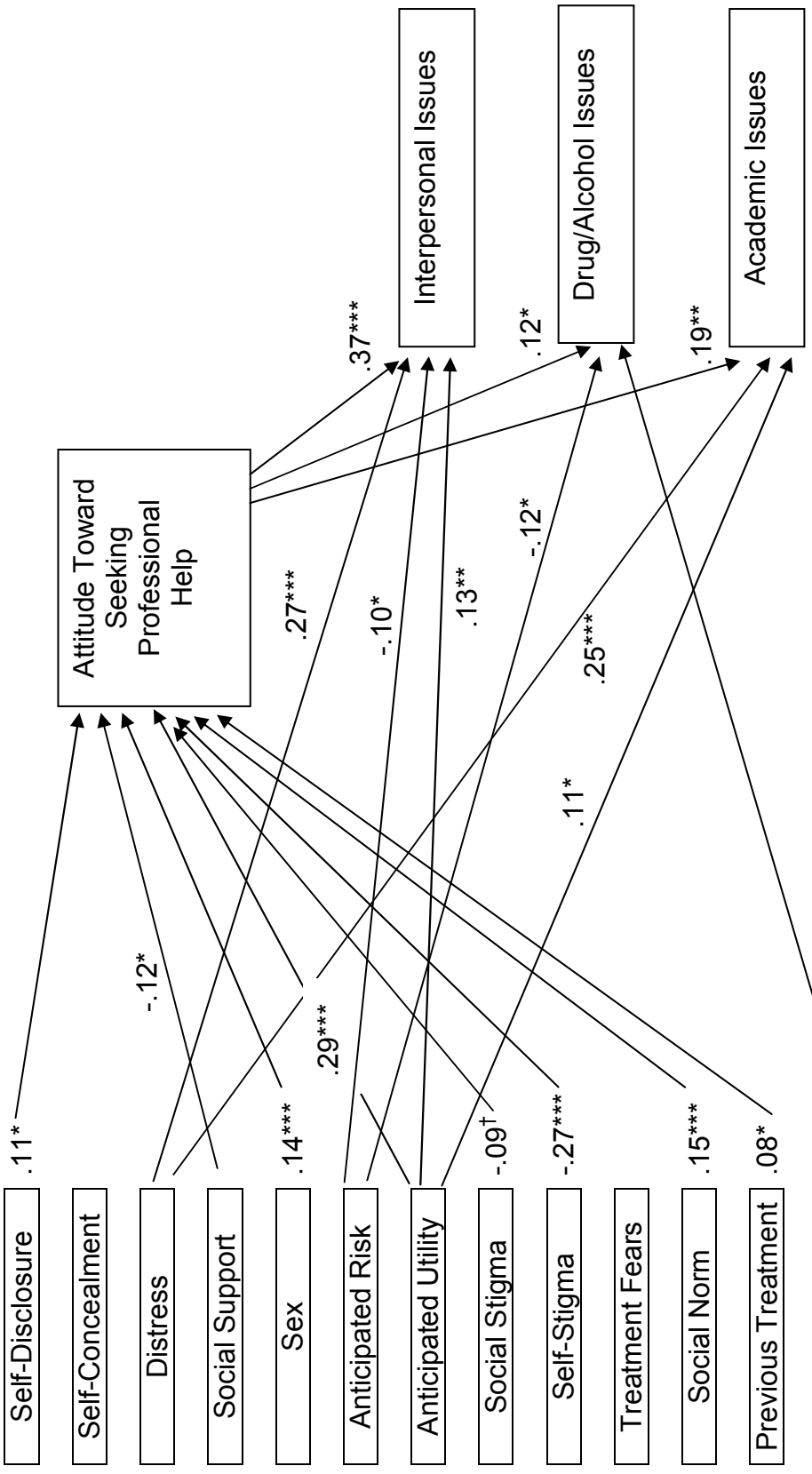


Figure 3. *Final Model*

* $p < .05$, ** $p < .01$, $p < .001$, † $p < .05$ after bias correction