Help-Seeking Attitudes of United Arab Emirates Students: Examining Loss of Face, Stigma, and Self-Disclosure

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Abstract
The psychological help-seeking patterns of college students in the United Arab Emirates (UAE) have only recently begun to be examined. Initial suggestions indicate that the majority of Emirati students treat help seeking from counselors as a last resort, which may be linked to aspects of Emirati culture including feared loss of societal face, stigma associated with seeking help, and discouragement of self-disclosure to individuals outside of the family. The relationship among fear of losing face, stigma, self-disclosure expectations (i.e., risks and benefits), and help-seeking attitudes was examined using structural equation modeling with 407 Emirati college students. Loss of face and stigma were related to self-disclosure expectations, which in turn were related to help-seeking attitudes. Gender differences were also examined with results indicating significant mean differences across all variables, as well as across two paths of the structural model. These findings are discussed within the cultural context of the UAE.

Keywords
loss of face, stigma, self-disclosure, help seeking, UAE

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Students’ willingness to seek counseling services in the United Arab Emirates (UAE) has only recently begun to be examined (Al-Darmaki, 2011), which is surprising as many of these students experience problems similar to college students around the world. For example, students in the UAE experience anxiety, lack of motivation, and adjustment problems (Al-Darmaki, 2004, 2011). Other concerns like drug addiction, unemployment, career uncertainty, and identity confusion have also become more prevalent in the UAE following rapid social, cultural, and economic changes (Al-Darmaki, 2003; Al-Darmaki & Sayed, 2009). Despite these concerns, researchers have found that many individuals in the UAE do not seek help from counselors because of negative help-seeking attitudes (i.e., thoughts and feelings about seeking help; Al-Darmaki, 2003; Al-Krenawi, Graham, Al-Bedah, Kadri, & Schwail, 2009). In fact, researchers have reported that, among UAE students, counseling is viewed as a last resort or is only considered when problems become overly severe (Al-Darmaki, 2011; Al-Darmaki & Sayed, 2009).

The UAE is a predominately Muslim, Arab nation providing important cultural context to mental illness and help seeking (Al-Darmaki & Sayed, 2009). For example, mental health concerns are commonly viewed as a breakdown in an individual’s religious faith, and religious healers, Muttawa, are often sought to address these concerns rather than mental health professionals (Al-Darmaki, 2011). However, many of the concerns experienced by Emirati college students (e.g., adjustment problems, depression, career concerns) could also be addressed in college counseling centers. Thus, the development and promotion of counseling services in the UAE has been emphasized in recent years (see Al-Darmaki & Sayed, 2009). A combination of factors have been theorized to be related to more negative help-seeking attitudes among individuals living in the UAE including the fear of losing face (or status) in society, psychological help-seeking stigma, and fear of disclosing personal information to others (e.g., Al-Darmaki, 2004; Al-Darmaki & Sayed, 2009; Youssef & Deane, 2006). However, these theorized barriers have mostly been examined in college student samples in the United States and have yet to be tested empirically within Arab countries like the UAE (Ciftci, Jones, & Corrigan, 2013). Therefore, we examined how fear of losing face, help-seeking stigma, and expectations associated with self-disclosing to a counselor are related to help-seeking attitudes in a sample of Emirati college students.

**Loss of Face and Help Seeking**

The desire to uphold social reputation has been conceptualized in many Eastern cultures as a fear of *loss of face*, or the desire to avoid behaving
outside culturally sanctioned, or normative, behavior (Zane & Yeh, 2002). In the UAE, individuals’ behaviors are viewed as a reflection of their family’s adherence to social norms, values, and expectations (Erickson & Al-Timimi, 2001), and upholding the social reputation of the family is considered crucial (Youssef & Deane, 2006). Therefore, loss of face has implications not only for how individuals are perceived but also for how their families are perceived by society. Seeking psychological help is considered disgraceful in the UAE (Sayed, 2003), which may lead individuals to view this behavior more negatively and to avoid seeking help to uphold status (Youssef & Deane, 2006). However, research in the UAE has not examined loss of face as it relates to help-seeking attitudes.

Previous studies from other parts of the world have found that loss of face relates to help-seeking attitudes and intentions (e.g., Abe-Kim, Gong, & Takeuchi, 2004; David, 2010; Yakunina & Weigold, 2011). Whereas some studies have found that loss of face is associated with a lower probability of seeking out mental health care providers (Abe-Kim et al., 2004), and more negative help-seeking attitudes (David, 2010), other research has indicated that loss of face is related to greater intention to seek counseling (Yakunina & Weigold, 2011). One reason for this discrepancy might be that loss of face encourages help seeking in some ways, and discourages help seeking in others. For example, individuals who fear losing face might avoid seeking help to avoid societal repercussions, or alternatively, the fear of losing face for having a mental illness could actually increase an individual’s likelihood of getting help to avoid shame that might come with the development of more severe (and shameful) symptoms (Yakunina & Weigold, 2011). Including loss of face with other common societal barriers to help seeking, like stigma, may be useful to clarify the relationship between loss of face and help-seeking attitudes.

**Stigma and Help Seeking**

One of the most discussed help-seeking barriers in general (Corrigan, 2004), and in the Arab world specifically (e.g., Ciftci et al., 2013; Youssef & Deane, 2006), is stigma. Help-seeking stigma is the public endorsement of stereotypes and the engagement in prejudice and discrimination toward those who seek help from a counselor (Vogel, Wade, & Haake, 2006). In the UAE, men and women have reported that they do not seek counseling to avoid the stigma associated with seeing a therapist (Al-Darmaki, 2011). Furthermore, one study found that only 37% of parents would take their children to see a counselor should there be a concern about mental illness because of the stigma present in the UAE culture (Eapen & Ghubash, 2004). Although some
research has suggested that college students in the UAE may be more resistant to stigma than older generations (Al-Darmaki, 2003), stigma is still considered a major barrier (Al-Darmaki & Sayed, 2009).

Given the importance of stigma, including this factor with loss of face could help clarify some of the inconsistencies in the extant literature. This might be particularly true as the two constructs share many similarities (i.e., both are fears about societal perceptions). However, despite the similarities, the two are conceptually distinct, as stigma is more of an awareness of negative societal beliefs whereas loss of face is a direct concern for adhering to overarching cultural norms. Consistent with this, Yakunina and Weigold (2011) found that both constructs were uniquely related to help-seeking intentions, and loss of face and stigma were not significantly related to one another. Including both constructs as independent variables is an important next step to further clarify the relationship between these two constructs and help-seeking attitudes.

Disclosure Expectations as Mediating Factors

Clarifying how stigma and loss of face are related to help-seeking attitudes might also entail examining factors that mediate these relationships. For example, previous research has found that the relationship between societal perceptions and an individual’s help-seeking attitudes is mediated by his or her personal expectations and beliefs about a specific behavior (e.g., Vogel, Wade, & Hackler, 2007). Disclosure expectations, or the expectations associated with self-disclosing personal information to a counselor, may be a particularly salient mediating variable for UAE college students as self-disclosure is considered taboo in the UAE, constituting both a family betrayal and personal weakness (Al-Darmaki, 2003, 2011; Al-Darmaki & Sayed, 2009). Consistent with this, should counseling services be sought, family members are often included in treatment sessions—not only to show the client support but also to ensure the individual does not share private information about the family (Sayed, 2003). As such, self-disclosing information may be an important mediating factor between stigma and feared loss of face and help-seeking attitudes.

Although previous research has found that willingness to disclose information about the self is a key component of Emirati college students’ help-seeking attitudes (Al-Darmaki, 2003), researchers have yet to examine whether disclosing to a counselor mediates the relationships between societal perceptions (e.g., loss of face and stigma) and attitudes toward seeking help in an Emirati sample. This is an important omission, given the salience of disclosure expectations in the UAE and the fact that these are personal, not
societal, expectations. In addition, examining different types of disclosure expectations may help explain the inconsistent patterns of relationships between loss of face and an individual’s help-seeking attitudes and intentions. In accord, disclosure expectations can be divided into two categories, anticipated risks and anticipated benefits (Vogel & Wester, 2003), which refer to expectations that disclosing pieces of the self will be risky (e.g., being judged by the counselor) or beneficial (e.g., receiving emotional support from the counselor), respectively. Although fear of losing face for seeing a counselor may be associated with greater disclosure risks as a result of breaking the Emirati social norm of nondisclosure, there may be some benefits as well. For example, self-disclosing to a counselor may be a way to alleviate the threat of developing an even more severe form of mental illness that would result in even higher familial shame (Yakunina & Weigold, 2011). Thus, loss of face might relate to both increased disclosure risks and benefits. In contrast, other societal expectations, like stigma, have consistently been linked to more negative attitudes (e.g., Komiya, Good, & Sherrod, 2000), and likely have a different pattern of relationships. Specifically, stigma may be related to increased disclosure risks but fewer disclosure benefits. Disclosure risks are therefore likely to be related to more negative help-seeking attitudes, whereas disclosure benefits may be related to more positive attitudes.

**Gender Differences**

Although gender is believed to be particularly salient to help seeking in the UAE (Al-Krenawi, Graham, Dean, & Eltaiba, 2004), the extant literature provides conflicting evidence for how gender relates to help-seeking attitudes in Arab cultures, broadly, and the UAE, specifically. For example, although women exhibit more willingness to seek help from counselors than do men in Arab cultures (Al-Krenawi, Graham, & Kanadah, 2000; Hamdan, 2009), like men, women are also expected to keep their psychological problems to themselves (Al-Darmaki, 2014). In addition, some researchers have hypothesized that women might experience heightened stigma and loss of face compared with men, as women more strongly represent their family’s honor, and their seeking out a therapist could bring greater shame to the family or limit future marriage proposals (Al-Krenawi et al., 2004; Youssef & Deane, 2006). Therefore, in this study, we attempt to provide some clarification by examining the mean gender differences across all study variables.

Gender differences might also exist in the strengths of the relationships between study variables. For example, different expectations have been noted in how men and women are supposed to behave in UAE culture. Specifically, men in the UAE are expected to be strong and self-reliant (Crabtree, 2007),
which are personality characteristics incongruent with seeking help (Addis & Mahalik, 2003). In addition, research from the United States has found that men are more likely to internalize stigma than are women (e.g., Vogel et al., 2007), which might also occur in the UAE because of similar gendered expectations for men (e.g., self-reliance). Therefore, men in the UAE may demonstrate a stronger relationship between stigma and disclosure risks than women. In addition, the path from disclosure benefits to help-seeking attitudes may not be as strong for men in comparison to women because men may not want to seek out help regardless of how beneficial they view disclosure to a counselor. Examining these potential differences is an important addition to the literature as previous research has not examined gender differences in the strength of relationships between help-seeking barriers in the UAE.

**Purpose of Study**

Although the low rates of counseling use among UAE college students are believed to be related to more negative help-seeking attitudes (Al-Darmaki, 2003), little is known about factors related to these attitudes. As the previously discussed literature attests, a variety of factors common to UAE culture may be related to more negative attitudes, like feared loss of face, stigma, and self-disclosure expectations. In our study, we examined a model in which the relationship between loss of face and stigma and help-seeking attitudes is mediated by self-disclosure expectations (see Figure 1). In Emirati culture, self-disclosing information to others is considered taboo (Al-Darmaki, 2003, 2011), and therefore, expectations associated with self-disclosing may serve as a more proximal variable to an individual’s attitudes than to broader cultural factors. Specifically, we expected loss of face to be positively related to both perceived risks and benefits associated with self-disclosing to a counselor, whereas stigma would be positively related to only perceived risks and negatively related to benefits. In turn, we expected that higher risk would be associated with more negative attitudes toward seeking help, whereas higher perceived benefit would be associated with more positive attitudes. Mean gender differences across all variables and differences in the strength of the structural paths were also examined.

**Method**

**Participants**

Participants were recruited by the third author and included 407 (161 male and 246 female) college students at a large national university in the UAE.
Although the university is located in the Eastern region of Abu Dhabi, the capital of the UAE, students come from all seven Emirates that make up the UAE. As this is a federal institution, the majority (~74%) of students who attend the university are UAE citizens (United Arab Emirates University, 2015). In this sample, 90.4% of the students were originally born in the UAE (n = 368), whereas 98% of the students reported currently residing in the UAE (n = 399). The participants ranged in age from 17 to 29 years, with an average of 20.6 years (SD = 1.74). The sample consisted of students across all years of college with 18.4% in their first year, 22.4% second years, 22.8% third years, 28.0% fourth years, 7.4% reporting other, and 1.0% not responding.

**Procedures**

To our knowledge, only the attitudes toward seeking help measure had previously been used in samples of Emirati college students (see Al-Darmaki, 2003). Therefore, before administering the survey, the English versions of the...
measures were translated into Arabic using translation and back-translation procedures used in previous studies (Mallinckrodt & Wang, 2004). To ensure equivalency of the scales in the UAE, bilingual psychology specialists checked the accuracy of the translations. Participants were recruited from general education courses and filled out a written consent form and survey. There was no incentive or direct benefit to the students who participated, and there were no exclusion criteria. Students were informed that participation was voluntary, that there would be no penalty for not participating, and that responses were anonymous.

**Measures**

**Fear of losing face.** The 21-item Loss of Face Scale (LFS; Zane & Yeh, 2002) was used to assess participants’ general concern with how they were perceived by others. The LFS is measured on a 7-point Likert-type scale from 1 (strongly disagree) to 7 (strongly agree). Items are summed with higher scores indicating a larger concern with losing face. An example item from the scale is “I try to act like others to be consistent with social norms.” A validation study using an Asian American sample reported a Cronbach’s alpha of .83 and found higher scores on the LFS were related to higher levels of self-consciousness and social anxiety (Zane & Yeh, 2002). In the current study, Cronbach’s alpha was .82.

**Stigma associated with seeking help.** Participants’ perceived stigma associated with seeking counseling was measured with the Stigma Scale for Receiving Psychological Help (SSRPH; Komiya et al., 2000). The SSRPH is a five-item scale rated on a 4-point Likert-type scale from 1 (strongly disagree) to 4 (strongly agree). A sample item from the scale is “People tend to like less those who are receiving professional psychological help.” Higher total scores indicate higher levels of perceived stigma. In validation studies using samples from the United States and Middle Eastern countries (i.e., Turkey), Cronbach’s alpha values of .72 to .80 were reported, and stigma correlated with more negative attitudes toward seeking psychological help (Komiya et al., 2000; Topkaya, 2011). In the current study, Cronbach’s alpha was .70.

**Self-disclosure expectations.** Anticipated risks and benefits associated with disclosing to a counselor were measured using the Disclosure Expectations Scale (DES; Vogel & Wester, 2003). The measure consists of eight items rated on a 5-point Likert-type scale from 1 (not at all) to 5 (very). The scale consists of two four-item subscales: Anticipated Risks and Anticipated Benefits. Higher total scores on each subscale represent greater perceived risks
and benefits. A sample risk item is “How risky would it feel to disclose your hidden feelings to a counselor?” and a sample benefit item is “How helpful would it be to self-disclose a personal problem to a counselor?” The scale was normed in the United States, and Cronbach’s alpha values were .74 for Anticipated Risks and .83 for Anticipated Benefits (Vogel & Wester, 2003). Anticipated Risks have been found to correlate with higher levels of stigma, more negative attitudes toward seeking help, and decreased intentions to seek counseling, whereas Anticipated Benefits has been found to correlate with lower levels of stigma and more positive attitudes and intentions toward seeking help (Vogel, Gentile, & Kaplan, 2008). In the current study, Cronbach’s alpha was .74 for risks and .73 for benefits.

**Attitudes toward seeking help.** The Attitudes Toward Seeking Professional Psychological Help Scale–Short Form (ATSPPH-SF; Fischer & Farina, 1995) was used to measure attitudes regarding counseling. The measure is an abbreviated 10-item version of the original 29-item measure (Fischer & Turner, 1970). Items are answered using a 4-point Likert-type scale from 1 (disagree) to 4 (agree). Half of the items are reverse scored so that higher total scores indicated more positive attitudes about seeking help from a counselor. A sample item is “I might want to have psychological counseling in the future.” The scale developers reported Cronbach’s alpha values of .84 for the abbreviated scale in a U.S. sample (Fischer & Farina, 1995). The psychometric properties for the long form of the scale have been established in an Emirati college sample, with a reported alpha of .78 (Al-Darmaki, 2003). In the current study, Cronbach’s alpha was .65.

**Results**

**Initial Analyses**

Mean gender differences were assessed using independent sample *t* tests. Women reported more positive attitudes toward counseling ($M_{Women} = 15.92$, $SD_{Women} = 4.68$; $M_{Men} = 13.83$, $SD_{Men} = 4.16$; $p < .001$; $d = .47$), lower levels of stigma ($M_{Women} = 10.32$, $SD_{Women} = 2.77$; $M_{Men} = 11.27$, $SD_{Men} = 3.02$; $p < .01$; $d = .33$), greater loss of face ($M_{Women} = 91.63$, $SD_{Women} = 16.55$; $M_{Men} = 85.55$, $SD_{Men} = 18.32$; $p < .01$; $d = .35$), more benefit associated with self-disclosing ($M_{Women} = 15.00$, $SD_{Women} = 3.75$; $M_{Men} = 13.02$, $SD_{Men} = 3.59$; $p < .001$; $d = .54$), and more risk associated with self-disclosing ($M_{Women} = 11.02$, $SD_{Women} = 3.92$; $M_{Men} = 10.14$, $SD_{Men} = 3.78$; $p < .05$; $d = .23$) than men. All effect sizes were small to medium in strength. Zero-order correlations were also calculated. As expected, loss of face was related to greater perceived risk ($r = .31$, $p < .001$) and
benefits ($r = .26, p < .011$) with self-disclosing. Stigma was related to greater perceived risk ($r = .23, p < .001$) and less perceived benefit ($r = -.12, p < .05$), as anticipated. In turn, self-disclosure risks were negatively related to help-seeking attitudes ($r = -.20, p < .001$), and benefits were related to more positive attitudes ($r = .38, p < .001$). Loss of face and stigma were correlated ($r = .20, p < .001$), though as in previous research, risks and benefits were not ($r = -.01, p = .85$). Stigma was negatively correlated with help-seeking attitudes ($r = -.12, p < .05$), though loss of face was not correlated with attitudes ($r = .01, p = .86$).

**Testing Mediation**

Structural equation modeling (SEM) is generally the preferred analytic method for testing mediation (Frazier, Tix, & Barron, 2004; MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002). We used a two-step procedure to test mediation using SEM (Anderson & Gerbing, 1988). First, we developed a measurement model by conducting a confirmatory factor analysis. Second, we calculated a structural model to test the hypothesized relationships. The LISREL 8.8 program was used for all analyses. We used the full information maximum likelihood (FIML) estimation to address missing data, which accounted for less than 1% of the item-level responses across all variables. Goodness of fit of the models was assessed using five indices: the comparative fit index (CFI; .95 or greater), the nonnormed fit index (NNFI; .95 or greater), the incremental fit index (IFI; .95 or greater), the standardized root mean square residual (SRMR; .08 or less), and the root mean square error of approximation (RMSEA; .06 or less; see Hu & Bentler, 1999; Martens, 2005).

Russell, Kahn, Spoth, and Altmaier (1998) recommended creating observed indicators (parcels) for latent variables. Parcels were created to (a) meet the assumptions of the maximum-likelihood method used in SEM by accounting for possible violations of multivariate normality and (b) reduce the number of parameters present in the analyses (see Russell et al., 1998, for a discussion). Furthermore, parcels were used (rather than additional measures of each construct) because many of the constructs (e.g., loss of face) had only one validated scale and because using fewer measures reduced participant burden. Three parcels were created for the loss of face, stigma, and attitudes latent variables, whereas two parcels were created for the risk and benefit variables, which only have four items each. We chose Russell et al.’s (1998) method over other methods of parceling because Russell et al. asserted that “when this procedure is used, the resulting item parcels should reflect the underlying construct . . . to an equal degree” (p. 22). Factor analyses were conducted for each variable using the maximum likelihood method and fitting to a one-factor solution to obtain item loadings for each factor. Items were ranked based on
factor loadings, and the highest and lowest ranking items were then parceled in pairs to equalize the average loading of each parcel on its respective factor. The test developed by Mardia (as cited by Bollen, 1989) was also used to test whether the data met the normality assumption underlying the maximum likelihood procedure. The normality of the observed variables was assessed, and the results indicated that the multivariate data were not normal, $\chi^2(2, N = 407) = 24.79, p < .001$. Therefore, we used the Satorra–Bentler scaled chi-square in all analyses (see Satorra & Bentler, 1988).

**Measurement model.** An initial measurement model was tested, which resulted in a good fit to the data: CFI = .97; NNFI = .95; IFI = .97; SRMR = .049; RMSEA = .056, 90% confidence interval (CI) = [.043, .069]. Each parcel’s factor loading on its respective latent variable was significant at $p < .001$, indicating the latent variables adequately measured their indicators (see Figure 1).

**Structural model.** We hypothesized that the relationships between loss of face and stigma with help-seeking attitudes would be mediated by self-disclosure expectations. The structural model used to test this hypothesis (see Figure 1) was an excellent fit to the data: CFI = .97; NNFI = .95; IFI = .97; SRMR = .05; RMSEA = .05, 90% CI = [.042, .067]. Stigma and loss of face were both significantly related to risks and benefits, which were then related to help-seeking attitudes.

We utilized the bootstrap procedure recommended by Shrout and Bolger (2002), which was also used in previous studies (e.g., Pederson & Vogel, 2007), to calculate indirect effects from stigma and loss of face to help-seeking attitudes. For the bootstrap procedure, 10,000 bootstrap data samples ($n = 407$) were created in LISREL by randomly sampling with replacement from the original data set. The mediation model was then run in LISREL with each of the created samples, resulting in 10,000 estimates of each path coefficient. Each indirect path was then calculated by multiplying the mean of the 10,000 pairs of path coefficients from (a) stigma to risks and help-seeking attitudes (mean indirect effect = –.14, 95% CI [–.29, –.03]), (b) stigma to benefits and help-seeking attitudes (mean indirect effect = –.27, 95% CI [–.45, –.12]), (c) loss of face to risks and help-seeking attitudes (mean indirect effect = –.03, 95% CI [–.05, –.01]), and (d) loss of face to benefits and help-seeking attitudes (mean indirect effect = .05, 95% CI [.03, .08]). Each indirect path in the model was significant.

**Gender comparison.** Consistent with recent group comparisons (see Kim & Zane, 2015), we first examined the measurement models for men ($n = 161$) and women ($n = 246$) separately. Both models showed acceptable fit to the
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data (men: CFI = .97; NNFI = .95; IFI = .97; SRMR = .06; RMSEA = .06, 90% CI = [.03, .08]; women: CFI = .96; NNFI = .94; IFI = .96; SRMR = .06; RMSEA = .06, 90% CI = [.04, .08]) supporting configural invariance. All parcel factor loadings of the indicators to their respective factors were significant at \( p < .001 \) for both men and women (all factor loadings > .57). Then, we compared a model in which all factor loadings were freely estimated against a model where all of the factor loadings were set to be equal across groups. A chi-square difference test between the model where all factor loadings were freely estimated, and the model where all of the factor loadings were set to be equal across groups was nonsignificant, \( \Delta \chi^2(8, N = 407) = 12.29, p = .14 \), suggesting factorial invariance. Researchers have suggested that an additional approach to comparing measurement invariance is to examine changes in specific model fit indices (Cheung & Lau, 2012; Meade, Johnson, & Braddy, 2008). For example, Meade et al. (2008) suggested that changes in fit indices, such as the CFI, are less sensitive to issues such as (a) sample size and (b) number of indicators. For programs such as LISREL that use the normal theory weighted least squares chi-square, Meade et al. suggested a cutoff of \( \Delta \leq .002 \) for the \( \Delta \text{CFI} \), \( \Delta \leq .008 \) for \( \Delta \text{McDonald’s noncentrality index (NCI; McDonald, 1989)} \), and \( \Delta \leq .007 \) for \( \Delta \text{RMSEA} \) (as opposed to the .01 cutoff for programs like Mplus that use the minimum fit chi-square; Cheung & Rensvold, 2002). Results indicated that \( \Delta \text{McDonald’s NCI} \) was .005 and \( \Delta \text{RMSEA} \) was .002. The \( \Delta \text{CFI} \) was .002, equal to the .002 cutoff suggested by Meade et al.; however, examination of the modification indices suggested that no significant improvement would result from freeing any of the constrained paths (i.e., all modification indices < 3.84; Dimitrov, 2010). Thus, overall results provide support for measurement invariance between the groups.

Next, we conducted an SEM multiple-group comparison analysis to test the invariance of structural path coefficients in the full mediation model between the groups. To compare the invariance of the structural path coefficients, we examined both a model in which the relationships between loss of face, stigma, disclosure expectations, and attitudes were freely estimated and a model in which the path coefficients were set to be equal for men and women. Then, using the corrected scales chi-square difference test, we determined if these two models were the same. There was a significant corrected scaled chi-square difference, \( \Delta \chi^2(2, N = 407) = 7.84, p < .05 \), indicating that there were differences in path coefficients between the two genders (see Figure 2). To identify which paths were different between men and women, one path was constrained at a time and a model in which the path was set to be equal for men and women was compared with a model in which the relationship was freely estimated. Results indicate a significant gender difference for the path between stigma and risks, \( \Delta \chi^2(1, N = 407) = 5.57, p < .05 \), and the
path between perceived benefits and attitudes, $\Delta \chi^2(1, N = 407) = 9.30, p < .01$. Stigma was significantly related to disclosure risks for men, whereas it was not for women, and perceived benefits were more strongly related to higher attitudes for women than for men.

Given these two direct path differences, we tested the indirect effects using the same bootstrapping procedure described earlier (i.e., 10,000 estimations) for men and women separately. We examined the three indirect paths that included the direct paths where gender differences were present: (a) stigma to risks and help-seeking attitudes, (b) stigma to benefits and help-seeking attitudes, and (c) loss of face to benefits and help-seeking attitudes. For men, stigma had a significant negative indirect relationship to help-seeking attitudes through disclosure risks (mean indirect effect = $-0.23$, 95% CI $[-0.519, -0.003]$). For women, loss of face had a significant positive indirect relationship with help-seeking attitudes through disclosure benefits (mean indirect effect = $0.05$, 95% CI $[0.009, 0.091]$). All other indirect effects had CIs that included zero, indicating they were statistically nonsignificant.

**Discussion**

Research on psychological help-seeking attitudes in UAE college students has only recently begun. Studying this group is particularly important, as
rapid social, cultural, and economic changes have contributed to an increased prevalence of concerns like substance use, anxiety, and adjustment problems (Al-Darmaki, 2003; Al-Darmaki & Sayed, 2009). Despite the increase, many students in the UAE are still hesitant to seek counseling for their problems, likely due to negative attitudes toward seeking help (e.g., Al-Darmaki & Sayed, 2009; Al-Krenawi et al., 2009). Results of the present study suggest that help-seeking attitudes are indirectly related to feared loss of face and stigma through the mediating variables of perceived risks and perceived benefits associated with self-disclosing to a counselor.

Most important, loss of face was significantly associated with both higher perceived disclosure risks and benefits. This suggests that self-disclosing may be risky for those worried about losing face as it breaks the Emirati social expectation of nondisclosure to others (Al-Darmaki, 2003, 2011). Yet, self-disclosing may be beneficial for those who fear losing face as self-disclosing to a counselor could alleviate more serious symptoms that could also decrease social standing. This result may help explain previous contradictory findings regarding the role of loss of face on help-seeking attitudes (Yakunina & Weigold, 2011). For example, whereas the indirect effects between stigma and attitudes were both negative (i.e., stigma was associated with more negative attitudes through both more risk and less benefit), the indirect effects between loss of face and attitudes were both positive and negative (i.e., loss of face was related to more positive attitudes through greater perceived benefits and more negative attitudes through greater perceived risks). This supports previous suggestions that loss of face could act as both a barrier and a motivating tool to address mental health concerns (Yakunina & Weigold, 2011).

Although the indirect relationships between loss of face and attitudes were significant, it is important to note that the zero-order correlation between loss of face and attitudes was not statistically significant. One possible explanation is that the multiple mediating variables (i.e., risks and benefits) canceled out the direct relationship (Frazier et al., 2004). Specifically, our results showed that loss of face had both a positive indirect relationship through perceived benefits, and a negative indirect relationship through perceived risks, on individuals’ help-seeking attitudes. As these indirect paths are opposite in direction, the initial relationship between loss of face and attitudes may appear to be near zero.

The relationship between stigma and help-seeking attitudes was also mediated by both self-disclosure risks and benefits. Stigma was related to increased risk and decreased benefits associated with self-disclosing to a counselor. Both indirect effects between stigma and help-seeking attitudes were negative. These findings generally support our hypotheses and previous
research regarding the relationship of stigma with help-seeking attitudes (Komiya et al., 2000).

However, it is important to note that although the relationship between stigma and attitudes was present, the zero-order correlation \((r = -0.12)\) was somewhat weaker than other studies \((0.25-0.40; \text{Komiya et al., 2000; Vogel, Shechtman, & Wade, 2010})\). One possible explanation is that stigma in the UAE is somewhat less important than in other parts of the world. Consistent with this, a study conducted in Israel found a small, nonsignificant relationship between stigma and help-seeking attitudes \((r = -0.08; \text{Shechtman, Vogel, & Maman, 2010})\). The authors suggested that when diversity exists in the perceptions and attitudes about help seeking among individuals living in countries going through transitions, people may be more likely to form their own opinions about seeking help rather than relying on social expectations. As noted earlier, the UAE is a society undergoing rapid cultural and economic changes \((\text{e.g., Al-Darmaki, 2003; Al-Darmaki & Sayed, 2009})\), which might explain why the present sample’s relationship between stigma and attitudes is lower than in some other countries. However, the UAE may not be experiencing the same degree of instability that Shechtman et al. (2010) proposed for Israel, leading to a slightly stronger relationship than found in their sample. Further research is needed to test this hypothesis.

Another goal of this study was to clarify gender differences in the means of the variables under investigation. Consistent with previous research, women reported more positive help-seeking attitudes than men \((\text{Al-Krenawi et al., 2000; Hamdan, 2009})\). Women also reported higher benefits associated with self-disclosing to a counselor. One possibility is that women may see more value \((\text{e.g., decreased distress})\) in disclosing to a counselor and more positive attitudes associated with seeking help than men, as women tend to experience greater distress because of increased responsibility to uphold the family honor \((\text{e.g., Hamdan, 2009})\). Our results also indicate that women report less help-seeking stigma than men, in contrast with previous studies that postulate women in Arab communities may experience greater stigma \((\text{e.g., Youssef & Deane, 2006})\). However, women did report significantly higher levels of loss of face and self-disclosure risks than men. These findings are consistent with previous research \((\text{e.g., Youssef & Deane, 2006})\) indicating that women have more responsibility for upholding their family’s honor in society \((\text{i.e., higher loss of face})\) and therefore may perceive more risk in breaking cultural norms like self-disclosing personal information \((\text{Al-Krenawi et al., 2004})\).

Gender differences also existed in the strength of two model paths. Specifically, men exhibited a weaker relationship between disclosure benefits and help-seeking attitudes than do women and exhibited a stronger relationship between stigma and disclosure risks. These differences also
manifested in the indirect relationships. For men, stigma had a significant negative indirect relationship to help-seeking attitudes through disclosure risks. For women, loss of face had a significant positive indirect relationship with help-seeking attitudes through disclosure benefits. One explanation for these differences may be related to aspects of socialized masculinity in Emirati culture. For example, men are expected to be strong and self-reliant (Crabtree, 2007), and because of this, men’s attitudes about seeing a counselor may not increase even if they see benefits associated with self-disclosing to a counselor. Socialized masculine norms are believed to be incongruent with help-seeking behaviors and are associated with more negative help-seeking attitudes (e.g., Addis & Mahalik, 2003). As such, the desire to maintain status as a man may overshadow any perceived benefits associated with self-disclosing to a counselor. In addition, men tend to internalize stigma more than women do (e.g., Vogel et al., 2007), which may account for men’s stronger relationship between stigma and disclosure risks. Much of the research on socialized masculine norms and help-seeking barriers has been conducted in the United States, though the results of this study support the need for future research addressing masculine norm adherence and help-seeking barriers in the UAE. For women, results seem to indicate that feared loss of face may actually act as a motivator to disclose to a counselor and seek help. As suggested by other scholars, this may be due to the fear that not seeking counseling could result in more serious mental illness, resulting in even greater amounts of individual and familial shame or limited marriage prospects (e.g., Yakunina & Weigold, 2011). Future research might clarify this by examining perceptions of seeking help for psychological concerns relative to perceptions of developing a mental illness.

**Clinical Implications**

These findings have important implications for clinicians working with Emirati students. First, outreach programs designed to increase help-seeking attitudes might target expectations associated with self-disclosing to a counselor. Previous researchers have noted that perceptions of societal norms may be less malleable to change because they require societal changes, which is generally slow (e.g., Vogel et al., 2007). Instead, individuals’ expectations about self-disclosing may be more flexible. Specifically, programs might highlight that self-disclosing to a counselor can help ease emotional concerns and can provide support during challenging times, and that counseling sessions are strictly confidential. Confidentiality might be a particularly salient topic to discuss, as self-disclosing family and personal issues/concerns to someone else is undesirable in UAE culture. The importance of addressing
confidentiality has been discussed in previous literature regarding counseling services in the UAE (Al-Darmaki & Sayed, 2009).

As gender differences were present in this investigation, programming for Emirati students could not only address stigma and fears regarding loss of face but could also specifically highlight the benefits for women associated with self-disclosing to a counselor, as this had the strongest relationship to attitudes for women. For example, clinicians might develop pamphlets or outreach presentations for women that highlight benefits that come from self-disclosing to a counselor.

In turn, programming for men might focus on alleviating the risks associated with self-disclosing to a counselor, as this path had the strongest link to attitudes for men. Possible interventions might include providing men with vignettes of men who had self-disclosed to a counselor and sought help, which might reduce potential concerns. This type of programming has been used in other parts of the world (e.g., U.S. National Institute of Mental Health’s “Men and Depression” campaign, 2015) but has yet to be tested in the UAE.

**Limitations and Future Directions**

Although this is the first study to examine this mediation model in the UAE, there are some limitations that could be addressed in future research. First, the sample consisted solely of Emirati college students. It is unclear how stigma, fear of losing face, and disclosure expectations would relate to help-seeking attitudes in other communities—both in the UAE and around the world. Future research is needed to explore the generalizability of our findings in other cultures where the variables we measured are present (e.g., Asian groups). Despite this limitation, studying Emirati students is important. For example, though some hypothesize that younger people in the UAE might be more resistant to stigma and more open to seeking psychological help than older generations (Al-Darmaki, 2003), our results indicate that even this group is susceptible to the stigma and cultural norms surrounding seeking out counseling.

Another limitation is that our model only included two mediation factors, disclosure risks and benefits. It is likely that other mediating factors exist, like religious beliefs and family/social support. As mental health concerns are commonly viewed as a breakdown in religious faith, and religious healers are often sought to address concerns (Al-Darmaki, 2011), future research could incorporate measures of religious belief or ask about seeking help from religious healers as well as counselors. Family support is also a very influential factor when seeking help in the UAE (Sayed, 2003), and future research might incorporate measures of family support or social network stigma (i.e., the stigma that one’s family or friends endorses in regard to seeking help;
Vogel, Wade, & Ascheman, 2009). In addition, the measures used in this study were not native to the UAE, and some measures (e.g., help-seeking attitudes and stigma) had lower reliability coefficients. Although we used a translation–back-translation process, translating measures introduces measurement bias and error. Future research should utilize measures normed within the UAE to attenuate this bias. Finally, future research might also use longitudinal or experimental designs to examine causality and measure behavior as well as attitudes. Despite these limitations, this study provides novel information regarding the relationships between help-seeking barriers and attitudes for Emirati students and also identifies important gender differences in how these barriers are related to one another.

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Note

1. Although correlations between independent and dependent variables are often considered an important first step in justifying mediation analyses (Baron & Kenny, 1986), others have argued that this step is not necessary (Kenny, Kashy, & Bolger, 1998). For example, when multiple mediating variables exist with both positive and negative relationships between the independent and dependent variables, the relationship between the independent and dependent variables can be canceled out resulting in weak and nonsignificant relationships (Frazier, Tix, & Barron, 2004; Kenny et al., 1998; MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002). As the present study included two mediating variables (risks and benefits associated with self-disclosing to a counselor) that showed both negative and positive relationships with the independent and dependent variables, the mediation analyses were still conducted.

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