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ORIGINAL ARTICLE

Dimensionality of the Turkish Version of the Self-Stigma of Seeking Help Scale: Results from Exploratory and Confirmatory Factor Analyses

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Abstract Self-stigma has a substantial negative impact on help-seeking behaviors across various cultures and countries. A reliable and valid self-stigma of help-seeking measurement is needed to reduce barriers related to pursuing services. This study investigated the factorial validity of the *Self-Stigma of Seeking Help Scale* (SSOSH) with a sample of Turkish college students. The factor analysis identified a two-factor measurement structure: (a) feeling of inadequacy, and (b) threat to self-confidence. The scales measured the extent that help-seeking can influence individuals' self-confidence/self-stigma of help-seeking than male students. Female Turkish students had lower self-stigma of help-seeking than male students. Familiarity with health professionals in the Turkish mental health system (i.e., counseling psychologists, psychologists, and psychiatrists) were significantly associated with lower levels of threats of self-confidence related to help-seeking. Participants who had lower self-stigma were more likely to share their problems with a mental health professional. Outreach services to increase students' knowledge about mental health professionals and services to reduce stigma are discussed.

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Introduction

Entering college can be stressful for students from collectivist cultures such as Turkey (Eremsoy et al. 2005; Simons, Aysan, Thompson, Hamarat, and Steele 2002; Towbes and Cohen 1996). Industrialization, globalization, and rapid economic growth are beginning to shift Turkey from a collectivist to more of an individualistic culture. In college settings, Turkish students may be exposed to ideas and values that conflict with traditional family ideologies and religious values. Such value conflicts, in addition to the adjustment difficulties typically associated with the transition to college life, can promote the development of psychosocial adjustment problems.

The challenges associated with the transition of Turkish students into college suggest that mental health professionals must be proactive in their approach to assist students adjusting to college life. An important first step is to reduce barriers to help-seeking. Help-seeking behavior is particularly important for college students due to: (a) approximately 75 % of lifetime mental illnesses start by age 24, (b) college youth represent a significant part of the population, and (c) mental illness early in life is correlated with adverse academic, occupational, health and social outcomes (Eisenberg, Downs, Golberstein, and Zivin 2009; Lee, Chan, Ditchman, and Feigon 2014). Preventative steps focused on encouraging help-seeking behaviors of college students can lead to increased well-being of students and reduce further cost and problems associated with mental health.

Despite the potential benefits of mental health services, many people with psychological and interpersonal problems do not seek help for treatment (Corrigan 2004). For example, Bilican (2013) found that only 13–15 % of Turkish college students with a diagnosable problem actually sought psychological treatment. Self-stigma is a primary attitudinal barrier that impedes seeking help from mental health professionals (Eisenberg et al. 2009; Vogel and Wade 2009). Self-stigma is the prejudice and stereotype individuals hold toward themselves after being identified as part of a stigmatized group (Eisenberg et al. 2009). Corrigan, Watson, and Barr (2006) indicated that self-stigma forms through childhood as people become aware of shared negative thoughts and beliefs of society (perceived public stigma), form personal attitudes regarding the public stigma (personal stigma), and internalize those stigmatizing attitudes (self-stigma). For instance, in a society where people with mental health problems are seen as inferior, it is common for such people to label themselves as morally weak (Corrigan et al. 2006).

Stigma associated with seeking help includes beliefs or thoughts that seeking mental health treatment is undesirable or socially unacceptable (Vogel, Wade, and Hackler 2007). Public stigma influences self-stigma, and self-stigma has a distinct effect on the decision-making process concerning seeking help. To seek help, individuals need to accept that they need professional assistance and disregard negative feelings associated with such help-seeking. However, when people perceive psychological help as a threat to their sense of worth, confidence, or self-regard, they are less likely to go about seeking help (Vogel and Wade 2009).

Sibicky and Dovidio (1986) examined the relationship between self-stigma and helpseeking, and found that self-stigma would prevent people from seeking psychological help regardless of any consequences associated with not seeking help. Further, Vogel, Wade, and Haacke (Vogel et al. 2006) found that self-stigma is more predictive of attitudes toward seeking psychological help and willingness to receive counseling than factors such as gender and perceived risk of counseling. In addition, they reported that stigmatizing attitudes towards mental illness were associated with early termination of treatment. Barney, Griffits, Jorm, and Christensen (2006) showed that the self-stigma and embarrassment associated with seeing a mental health professional predicted negative help-seeking attitudes. In addition, personal attitudes appear to serve as a better predictor of intention to seek psychological help than the disapproval of others. Likewise, self-stigma can limit help-seeking from a variety of helping sources, including counselors, psychologists, and psychiatrists (Barney et al. 2006).

Help-seeking may be particularly challenging for men because they seem to equate helpseeking with a sense of failure, loss of control, and a perception of weakness (Addis and Mahalik 2003). Vogel and Wade (2009) asserted that traditional gender roles of men, such as being independent and self-sufficient could increase concerns about seeking help. Similarly, women appear to be more likely than men to seek psychological help for emotional problems and have more positive attitudes toward counseling (Fischer and Farina 1995).

Cooper, Corrigan, and Watson (2003) found that undergraduate students who held negative or prejudiced attitudes toward individuals with mental illness were less likely to seek psychological help. Other studies have indicated that female college students, in regard to help-seeking, feel less self-stigma (Vogel et al. 2006), personal stigma (Eisenberg et al. 2009), and negative attitudes toward counseling (Komiya, Good, and Sherrod 2000) than male college students. Vogel et al. (2006) also indicated that individuals are less likely to seek help when they feel embarrassment. As a result, it is highly probable that college students with higher levels of self-stigma towards seeking help are less likely to utilize counseling services (Vogel et al. 2006).

Although the negative effect of self-stigma on help-seeking behavior may be applicable to many cultures, a majority of the self-stigma research related to help-seeking has been conducted in the United States. To address this concern, Vogel et al. (2013) used confirmatory factor analysis to investigate the factorial structure and factorial invariance of their *Self-Stigma of Seeking Help Scale* (SSOSH; Vogel et al. 2006) across six nations, including Turkey. Results indicated that the factorial structure of the SSOSH was similar across England, Taiwan, and the United States. However, factorial invariance was not supported for Greece, Israel, and Turkey, indicating that the measurement structure may vary in these countries.

Two other studies conducted independently to evaluate the factorial structure of the SSOSH with Turkish people yielded conflicting results. Acun Kapıkıran and Kapıkıran (2013) validated the Turkish instrument as a unidimensional measure after dropping one item from the scale. Conversely, Sezer and Kezer (2013) found a two-factor measurement structure for the Turkish version of the SSOSH. Because of these conflicting findings, additional investigation of the measurement structure of the SSOSH in Turkey is considered necessary.

The purpose of the current empirical validation study was four-fold: (a) to gain a better understanding of the dimensions underlying self-stigma associated with help-seeking; (b) to provide mental health professionals a brief and psychometrically sound measure to assess Turkish college students' self-stigma toward help-seeking; (c) to provide researchers a valid instrument to conduct cross-cultural self-stigma research to facilitate the development of effective stigma reduction interventions; and (d) to provide an outcome measure that can be used to evaluate the effectiveness of stigma-reduction interventions in Turkey and elsewhere.

Method

Participants

Two hundred and thirty-five university students (93 men and 142 women) were recruited from two Turkish universities to participate in this study. The age of the students ranged from 17 to

34 years, with a mean age of 20.22 years (SD=1.88). The sample comprised 57 freshmen (24 %), 79 sophomores (34 %), 49 juniors (21 %), and 50 seniors (21 %).

Measures

Self-stigma of Seeking Help

The 10-item version of the *Self-Stigma of Seeking Help Scale* (SSOSH; Vogel et al. 2006) was used to assess the extent that self-esteem would be threatened by seeking mental health counseling for psychological problems. Sample items for the SSOSH include: "I would feel inadequate if I went to a therapist for psychological help," and "I would feel worse about myself if I could not solve my own problems." Each item is rated on a 5-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree), and responses are summed over the 10 items after reversing the scores on five positive items (items # 2, 4, 5, 7, and 9). The summed score can range from 10 to 50, with higher scores indicating higher self-stigma towards help-seeking. The SSOSH was found to be associated with attitudes toward help-seeking (r=-.65) and intention to seek help (r=-.37) (Vogel et al. 2007). The internal consistency reliability coefficients (Cronbach's alpha) were reported to range between .79 and .92 in different samples of college students (Vogel et al. 2006, 2007).

Familiarity with Mental Health Professionals

This construct was measured by asking participants to rate the extent to which they were familiar with the three groups of mental health professionals (psychiatrists, psychologists and counseling psychologists) that typically provide mental health interventions for secondary school students and college students in Turkey. Each professional was rated using a 5-point Likert-type scale ranging from 1 (not at all) to 5 (very much).

Likelihood to Consult a Mental Health Professional

The participants were asked who they were most likely to seek help from when they were distressed. Response choices included father, mother, sibling, friend, teacher, and mental health professional. An 11-point Likert-type scale ranging from 0 (most unlikely) to 10 (highly likely) in regard to each choice was used to provide these ratings, and the rating for seeking help from a mental health professional was used in data analysis.

Procedure

Institutional review board approval was obtained from the affiliated universities. Participants were recruited with the assistance of course instructors. Participants were informed that participation was voluntary and that no personal identifying information would be collected. Volunteer participants completed the questionnaires in a computer lab belong to their universities through a secured website (i.e., www. surveymonkey.com). They were given as much time as they needed to complete the questionnaires online.

Results

Descriptive Information

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Results indicated a mean total SSOSH score of 24.49 (SD=5.18), which was similar to the average score of 23.10 (SD=6.16) reported in Vogel et al.'s (2013) study. Female students (M= 23.70, SD=4.70) had significantly lower levels self-stigma of help-seeking than male students (M=25.71, SD=5.65), t (233)=2.95, p<.01. Students were more familiar with counseling psychologists (M=3.05, SD=1.38) than psychologists (M=2.60, SD=1.36), t (224)=7.85, p<.001, and they were more familiar with psychologists than psychiatrists (M=2.33, SD= 1.28), t (223)=6.01, p<.001.

Exploratory Factor Analysis (EFA)

The 10×10 correlation matrix of the SSOSH was subjected to a principal component analysis. The Kaiser-Meyer-Olkin measure of sampling adequacy (Kaiser 1970) for this set of items was .73, which exceeded the minimum criteria of .50. The Bartlett's test of sphericity (Bartlett 1950), which tests the hypothesis that the correlation matrix is an identity matrix, was found to be significant χ^2 (45, N=235)=426.58, p<.001, indicating that correlations in the data set were appropriate for factor analysis. Kaiser–Guttman's "eigenvalues greater than one" criterion (Kaiser 1960) indicated a three-factor structure, and Cattell's *scree* test (Nunnally and Bernstein 1994) indicated a two-factor measurement structure. The two- and three-factor solutions were rotated using oblique rotation. The two-factor solution accounted for 45 % of the total variance and provided the best interpretable factor structure. All items had factor loadings over .40. Means and standard deviations for each of the items on the SSOSH scale, factor loadings, eigenvalues, and percentage of variance explained, are presented in Table 1.

The two factors were consistent with the original conceptualization of stigma towards psychological help-seeking as representing specific threat to one's self-worth, confidence and self-regard (Vogel and Wade 2009). Therefore, the two factors were labeled (a) feeling of inadequacy, and (b) threat to self-confidence, respectively. The 'feeling of inadequacy factor' accounted for 28 % of the total variance. This factor was comprised of five items, with these reflecting feeling inadequate, inferior, and experiencing dissatisfaction with oneself regarding help-seeking (e.g., 'If I went to a therapist, I would be less satisfied with myself'). The mean rating for this factor was 2.16 (SD=0.66).

The 'threat to self-confidence factor' accounted for 17 % of the total variance. The factor was comprised of five items that measure whether seeking psychological help will affect self-esteem, self-confidence, and one's view of self (e.g., 'My view of myself would not change just because I made the choice to see a therapist'). The mean rating for this factor was 2.74 (SD=0.67). The threat to self-confidence as an indicator of self-stigma for help-seeking was significantly higher than the feeling of inadequacy factor in this sample of Turkish college students, t(234)=-10.61, p<.001.

Confirmatory Factor Analysis

Since EFA is data driven and involves subjective decision-making, confirmatory factor analysis (CFA) is frequently used to cross validate the factor structure of a psychological measure (van Prooijen and van der Kloot 2001). However, several methodological issues can result in lack of correspondence between results from EFA and CFA when tested with different

Item	M (SD)	Factor loadings	
		Feeling of Inadequacy	Threats to Confidence
8. If I went to a therapist, I would be less satisfied with myself.	2.02 (0.93)	.80	.05
1. I would feel inadequate if I went to a therapist for psychological help.	2.16 (1.06)	.76	.09
3. Seeking psychological help would make me feel less intelligent.	1.95 (0.98)	.75	.01
6. It would make me feel inferior to ask a therapist for help.	1.56 (0.82)	.64	.17
10. I would feel worse about myself if I could not solve my own problems.	3.10 (1.07)	.41	30
2. My self-confidence would not be threatened if I sought professional help.	2.69 (1.19)	02	.72
5. My view of myself would not change just because I made the choice to see a therapist	2.46 (1.14)	03	.68
7. I would feel okay about myself if I made the choice to seek professional help.	2.72 (0.97)	.24	.54
9. My self-confidence would remain the same if I sought professional help for a problem I could not solve.	3.05 (1.05)	08	.54
4. My self-esteem would increase if I talked to a therapist.	2.77 (1.00)	.21	.52
Total Score	24.49 (5.18)		
Eigenvalue		2.82	1.67
% Variance		28.19 %	16.71 %
Cumulative % Variance		28.19 %	44.90 %

 Table 1
 Means and standard deviations for each of the items on the SSOSH scale, factor loadings, eigenvalues, and percentage of variance explained by each factor

samples (e.g., inappropriate applications of EFA, incomparability of EFA and CFA, and inappropriate applications of CFA). Van Prooijen and van der Kloot (2001) suggest that to minimize issues associated with methodological explanations of different results between EFA and CFA, researchers should also conduct EFA and CFA with the same sample. In other words, studies conducting CFA on new data can better be interpreted after both EFA and CFA are performed using the same data.

A CFA was conducted using the AMOS graphics statistical program to test the factorial validity of the SSOSH. As suggested by Weston, Gore, Chan, and Catalano (2008), the goodness-of-fit of the measurement model was evaluated using the chi-square goodness-of-fit test, χ^2/df ratio, and the Comparative Fit Index (CFI). A non-significant chi-square, a relative chi-square (χ^2/df) in the range of 3 to 1, and values greater than .95 for CFI indicate a good model fit (Hu and Bentler 1999; Weston et al. 2008). In addition, a root mean square error of approximation with 90 % confidence interval was reported, where a value of less than .05 is considered a close fit and values up to .08 are considered reasonable errors of approximation in the population (Byrne 2001).

Two CFA models were evaluated: (1) the one factor model (to confirm that the SSOSH is not a unidimensional scale), and (2) the two-factor intercorrelated model (involving feeling of inadequacy concerning help-seeking and threat to self-confidence in help-seeking). The CFA results indicated a poor fit for the one-factor model: χ^2 (35, N=235)=148.84, p<.001; χ^2/df = 4.25; CFI=.71; RMSEA=0.12, 90 % CI [0.10, 0.14]. Results indicated a better fit between the model and the data for the two-factor model, with χ^2/df =2.21 and RMSEA=0.072. However,

whilst the chi-square was significant χ^2 (34, N=235)=74.96, p<.001, the CFI (.89) was below the acceptable level of .95.

Examination of modification indices suggested that three pairs of error terms should be correlated. The pairs include: (a) item e9 ("My self-confidence would remain the same if I sought professional help for a problem I could not solve") with item e5 ("My view of myself would not change just because I made the choice to see a therapist."), (b) item e4 ("My self-esteem would increase if I talked to a therapist") with item e9 ("My self-confidence would remain the same if I sought professional help for a problem I could not solve"), and (c) item e5 ("My view of myself would not change just because I made the choice to see a therapist") with item e2 ("My self-confidence would NOT be threatened if I sought professional help"). Correlated error terms indicate that knowing the residual of one item helps in knowing the residual associated with another item. Results of the re-specified, two-factor, intercorrelated model then provided a good fit between model and data: χ^2 (31, N=235)=49.84, p=.017; $\chi^2/df=1.61$; CFI=.95; RMSEA=0.05, 90 % CI [0.02, 0.08].

The two-factor model for the SSOSH is depicted in Fig. 1. The Pearson product–moment correlation coefficient between feelings of inadequacy and threat to self-confidence were significant (r=.39, p<.01). All factor loadings were significant at p<.01, ranging from .22 to .73 for the feeling of inadequacy factor and between .28 and .65 for the threat to self-confidence factor. The two-factor model provided a significantly better explanation of the data than the one-factor model (χ^2_{diff} =99.00, df_{diff} =4, p<.01). As such, the results suggest that the one-factor model did not fit the data, whereas the two-factor, intercorrelated model fitted the data well after connecting three pairs of error terms.

Reliability

Internal consistency reliability estimates were measured using Cronbach's alpha coefficients. The estimates for feeling of inadequacy in help-seeking and threat to self-confidence in help-seeking factors were .70 and .61, respectively. Cortina (1993) suggests that although an alpha coefficient of .70 is a commonly acceptable cut off point for reliability estimates of psychosocial measures, the value of alpha changes as a function of the number of items. With a low number of items, as in the threat to self-confidence factor, the alpha coefficient of .61 reflects only an acceptable level of reliability.

External Correlates

Correlations between SSOSH factors and other measures are shown in Table 2. Results indicate that female students held less stigmatizing attitudes towards help-seeking than males. Better education was significantly associated with less self-stigma towards help-seeking. Finally, higher familiarity with mental health professionals and increased likelihood of consulting a mental health professional for problems were significantly associated with lower levels of self-stigma related to help-seeking. All of the correlations were in the expected direction.

Discussion

The current study provided information regarding the reliability and validity of the Turkish version of the SSOSH. The EFA analysis indicated a two-factor measurement structure. The CFA further confirmed this two-factor measurement structure for the Turkish version of the



Fig. 1 Two-factor intercorrelated model for the SSOSH

SSOSH. Both factors had acceptable levels of internal consistency reliability. Although Vogel et al. (2013) and Acun Kapıkıran and Kapıkıran (2013) observed a one-factor structure, a factorial invariance between the SSOSH in several countries was noted in the results of Vogel et al. (2013), and the current study clearly revealed a two-factor structure for the Turkish version of the SSOSH scale based on both exploratory and confirmatory factor analyses. This finding is consistent with the findings of Sezer and Kezer (2013) who also reported a two-factor structure for the Turkish version of the SSOSH.

The threat to self-confidence was a more stigmatizing factor than the feeling of inadequacy factor in the sample of Turkish college students. For Turkish students, the self-stigma of seeking help was strongly influenced by concerns about the effect of needing professional help on their self-esteem, self-confidence, and views of themselves as a capable person. Sezer and

Factor	Gender (Female)	Education	Familiarity (Counseling Psychologist)	Familiarity (Psychologist)	Familiarity (Psychiatrist)	Consult with mental health therapist
Threat to self- confidence	16*	20**	20**	20**	16*	16*
Feeling of inadequacy	13*	09	17*	13	-14*	24**

Table 2 Correlation between SSOSH Factors and Other Measures

**p*<.05, ** *p*<.01

Kezer (2013) suggested that this factor derives from the need to support one's ego as a competent person who can resolve problems on his or her own, and that seeking help does not support this perception.

A feeling of inadequacy as an indicator of self-stigma of help-seeking is also consistent with Turkish culture. Turkey is still generally considered a collectivistic culture, and people in such cultures may prefer to share problems with a friend or relative, rather than a mental health professional (Bilican 2013). Seeking help from a mental health professional may be perceived as inappropriate disclosure of family conflicts to an outsider and a sign of inferiority in a collaborative society, leading to self-devaluation and negative feelings (Mojaverian, Hashimoto, and Kim 2013; Sezer and Kezer 2013).

Previous studies indicate that gender and education seem significantly associated with attitudes toward help-seeking (Jagdeo, Cox, Stein, and Sareen 2009; Vogel et al. 2007), yet Vogel et al. (2013) did not study the effect of gender and education on self-stigma with the Turkish students in their study. Accordingly, this present study assessed the association between gender, education level, and SSOSH factors. Female students had significantly less self-stigma of seeking help than male students and more senior students were less affected by the threat to self-confidence in help-seeking. In addition, familiarity with mental health professionals was significantly associated with lower levels of threat to self-confidence in help-seeking. Further, students who had less self-stigma of seeking help were more likely to share their problems with a mental health professional.

Results of the current study are similar to other studies of self-stigma with regard to gender differences in that men seem to have higher self-stigma toward seeking help than do women (Fischer and Farina 1995). Male students, compared to female students, indicated higher threat to self-confidence and higher feeling of inadequacy ratings on self-stigma help-seeking factor scores. As such, male students may more readily perceive help-seeking as a sign of inferiority and a threat to self-confidence and self-esteem. These attitudes could prevent Turkish male students in particular from seeking help and, thereby, increases their risk of having untreated psychological or adjustment problems.

Education may be an important factor in reducing self-stigma of help-seeking. As participants' years of education increased, self-esteem, self-confidence, and self-perception were less affected by the stigma of help-seeking. As a result, increased education perhaps allows students to critically analyze societal beliefs, leading to decreased negativity toward helpseeking. Interestingly, the same effect was not observed in regard to age itself, demonstrating that life experience alone may be insufficient in decreasing self-stigma.

Significant associations between self-confidence in help-seeking and familiarity with mental health professionals were found, suggesting that increased familiarity with mental health professionals were related to improved help-seeking behavior. A better understanding of the roles of mental health professionals may help students appreciate the collaborative relationship in the counseling process, reducing the perceived threats to their self-esteem, self-confidence, or self-perception. Conversely, no statistically significant relationship was observed between a feeling of inadequacy and familiarity with mental health professionals. This, perhaps, is because a better understanding of the role of mental health professionals in the counseling process would not necessary change a feeling of self-devaluation, because seeing a therapist can still be perceived as inappropriate disclosure of personal and family conflicts to an outsider and a sign of inferiority in a collaborative society (Mojaverian, Hashimoto, and Kim 2013; Sezer and Kezer 2013).

Implications

It appears that the Turkish version of the SOSSH is composed of two factors: (a) a feeling of inadequacy and (b) a threat to self-confidence. The items in the threat to self-confidence factor reflect the effect of help-seeking on self-esteem, self-confidence, and self-perception, whereas items in the feeling of inadequacy factor seem to measure the effect of help-seeking and its negative effect on emotions and feelings (e.g., feeling inadequate, less intelligent, inferior, and being less satisfied with oneself). In this study, threat to self-confidence was more self-stigmatizing than feeling of inadequacy in discouraging Turkish college students from potentially seeking help. Interestingly, familiarity with mental health professionals was inversely associated with threat to self-confidence, suggesting that providing accurate information about the roles of mental health professionals, as well as the collaborative relationship in the helping process, may be an important first step to improving the image of mental health professionals and reducing social stigma towards mental health in Turkish societies. Therefore, intervention programs designed to increase students' knowledge about and familiarity with mental health professionals would be useful.

It is also important to highlight the high levels of professional training that mental health professionals have undertaken, so as to help reduce Turkish college students self-stigma related to threats to self-confidence for seeking professional help with psychosocial or vocational problems. Interventions could include introductions to mental health professionals in student orientation activities at the beginning of the academic year and promoting counseling services at regular intervals throughout the academic year. Such programs may decrease self-stigma and increase the likelihood of students sharing their problems with mental health professionals. In addition, intervention at the societal level, such as mass media awareness campaigns and outreach events in the community to provide information regarding mental health professionals, the scope of their work and the effectiveness of their interventions, could help reduce the social stigma of seeking help for mental health problems (Niederkrotenthaler, Reidenberg, Till, and Gould 2014).

The second self-stigma factor identified in this study was a feeling of inadequacy. We hypothesized that in a collectivist culture, disclosing personal or family conflicts to an outsider may be viewed as a betrayal resulting in self-devaluation and negative emotions. Interestingly, similar to the threat to self-confidence factor, familiarity with the roles of counseling psychologists and psychiatrists was also inversely related to a feeling of inadequacy. Therefore, to address students' negative feelings regarding personal disclosure, it may be prudent to educate Turkish students and their families about confidentiality as a fundamental trust between the counselor and the client and the non-judgmental nature of the counseling relationship and process.

Additionally, male students had higher self-stigma in regard to seeking help than female students. Consequently, interventions designed by mental health professionals or administrators in college settings should consider the stigma barriers in the help-seeking behaviors of

male students in particular and develop outreach efforts tailored to them. Interventions could focus on negative perceptions of help-seeking behaviors in relation to traditional male roles and their ego needs for projecting competence that are prevalent in Turkish society (Adana et al. 2011). Such actions would not only have a positive impact on the psychological status of male college students, but it may also improve academic outcomes due to the interaction between psychological and academic constructs.

Finally, it should be noted that there are several limitations to the study undertaken. The study was conducted with a convenience sample of Turkish college students that included a large percentage of females. Factorial structure of the SOSSH was found to have two factors; however, results may show differences for differing clinical populations, thus limiting the generalizability of the present findings. Further studies investigating psychometric properties of the SSOSH and other variables influencing self-stigma among Turkish college students are suggested. Self-report measures used in this investigation are susceptible to shared method variance and response bias (Livneh and Antonak 1994), so future studies involving multimethod assessments would help provide additional evidence.

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