

# *Using the Theory of Planned Behavior to Predict Korean College Students' Help-Seeking Intention*

**Ji-Yeon Lee & Yun-Jeong Shin**

**The Journal of Behavioral Health  
Services & Research**

Official Publication of the National  
Council for Behavioral Health

ISSN 1094-3412

J Behav Health Serv Res  
DOI 10.1007/s11414-020-09735-z



**Your article is protected by copyright and all rights are held exclusively by National Council for Behavioral Health. This e-offprint is for personal use only and shall not be self-archived in electronic repositories. If you wish to self-archive your article, please use the accepted manuscript version for posting on your own website. You may further deposit the accepted manuscript version in any repository, provided it is only made publicly available 12 months after official publication or later and provided acknowledgement is given to the original source of publication and a link is inserted to the published article on Springer's website. The link must be accompanied by the following text: "The final publication is available at [link.springer.com](http://link.springer.com)".**

# Using the Theory of Planned Behavior to Predict Korean College Students' Help-Seeking Intention

Ji-Yeon Lee, PhD

Yun-Jeong Shin, PhD

## Abstract

*When dealing with the mental health concerns of college students, access to professional mental health services is necessary to enable early identification and prevention of severe mental health issues. Accordingly, this study used the theory of planned behavior (TPB) as a theoretical framework to determine the predictors of help-seeking intentions among college students in Korea. The authors developed a TPB questionnaire to measure attitudes, subjective norms, behavioral control, and intentions for seeking help and subsequently validated it via the confirmatory factor analysis (CFA). The authors considered mental health condition as a pre-existing factor that influences TPB variables. In addition, they deemed knowledge of professional mental health services as a factor influencing perceived behavioral control regarding help-seeking behavior among Korean college students. The research hypotheses were stated as follows: (H1) mental health conditions would influence TPB variables, which would in turn influence their intentions to seek help, and (H2) knowledge about professional mental health services would influence perceived behavioral control. With 300 undergraduate and graduate students, our results confirmed that mental health condition and knowledge about professional mental health services were associated with TPB variables, and all of the TPB variables we examined predicted intention to seek help.*

## Introduction

Mental health concerns among college students have reached a serious level, as confirmed by a national survey in which over half of the students reported psychological difficulties including suicidal ideation, psychosis, and self-harm behaviors; moreover, increasing numbers of high-risk students were confirmed on college campuses both in the USA<sup>1</sup> and S. Korea.<sup>2</sup> The Spring 2019

---

**Electronic supplementary material** The online version of this article (<https://doi.org/10.1007/s11414-020-09735-z>) contains supplementary material, which is available to authorized users.

Address correspondence to Yun-Jeong Shin, PhD, Department of Education, Seoul National University, Seoul, 08826, Republic of Korea.

Ji-Yeon Lee, PhD, Graduate School of Education, Hankuk University of Foreign Studies, Seoul, Republic of Korea.

*Journal of Behavioral Health Services & Research*, 2020, 1–14. © 2020 National Council for Behavioral Health. DOI 10.1007/s11414-020-09735-z

nationwide survey conducted by the American college health association national college health assessment reported that 88% of college students felt overwhelmed within the last 12 months, and 66% of college students experienced overwhelming anxiety within the last 12 months in the USA.<sup>3</sup> Given the increasing number of college students who presented employment difficulties along with family and interpersonal crisis, the Korean Council for University Education decided to conduct the national survey to investigate the college students' mental health conditions in 2018.<sup>4</sup> The survey results indicated that 72.5% of Korean college students were classified as risk or at-risk for anxiety disorder symptoms, 43.2% of them have experienced depression symptoms, and 14.3% were at a higher risk of suicidal onset. In particular, 1.6% of Korean college students who attempted suicide in 2018 were twice the total suicide rate in Korea. However, receiving counseling services remains very low both in the USA<sup>5</sup> and S. Korea.<sup>6</sup> Among college students in the USA, the nationally recognized research survey, namely, the ACHA-National College Health Assessment (NCHA) survey, reported that only 24% of those diagnosed with depression received mental health services.<sup>6</sup>

To bridge the gap between students in distress and students who receive the needed professional mental health services, predicting the intention to seek help among college students is necessary. In a meta-analysis examining barriers to help seeking, the stigma against help seeking, poor mental health literacy, self-dependence, lack of trust in help sources, and hopelessness were identified as barriers to help seeking.<sup>7</sup> In other studies, stigma against help seeking and difficulty with self-disclosure were identified as internal barriers both in the USA and Korea.<sup>8, 9</sup> Accessibility and availability of counseling services as well as financial resources and time for mental health services were identified as external factors influencing individual decisions to seek help in the USA.<sup>10, 11</sup> However, these factors were not explored in Korea.

Although the increase in the numbers of college students with severe mental health issues and insufficient help-seeking behaviors is a cross-cultural phenomenon, existing unique contexts must be considered to understand S. Korean college students' help-seeking behavior. In a study of college dropouts in Korea, mental health issues were a few of the main reasons for dropping out of college.<sup>12</sup> Therefore, an increase in the number of counseling centers has been noted in S. Korea, and 86% of universities and 53% of colleges have counseling centers on campus.<sup>13</sup> However, university counseling centers lacked the following: interest and support from university governance, resources at counseling centers (e.g., very small numbers of counselors per center), and social awareness about counseling.<sup>14</sup> Despite efforts to build counseling services on campus, most students choose to solve problems on their own or talk with people around them, such as family and friends.<sup>6</sup> In fact, the rate of using professional psychological counseling services is approximately 10% of students on campus in both the USA and Korea.<sup>13</sup> Although the utilization rate is reported similarly in the USA and Korea, that in South Korea included the number of participants in liberal arts courses using psychological tests in class (e.g., MBTI), and an hour of lecture for freshmen orientation was included in the statistics rather than reflecting actual utilization rate of counseling services.<sup>4</sup> This lower rate of utilization of counseling services in S. Korea reflects the stigma associated with help-seeking behavior,<sup>6, 12</sup> especially in South Korea when people pay attention to others.<sup>13</sup>

In South Korea, a national licensure system does not exist. Therefore, the credentials of counselors are not guaranteed, thus easily enabling people with no license to open a clinic and practice counseling. A lack of information about the credibility of mental health treatments as well as the preference for directive and problem-solving approaches can serve as barriers to seeking professional help.<sup>15</sup> In addition, professional mental health services are not covered by health insurances in South Korea and the cost of services can act as a barrier for students if they must seek professional mental health services outside of campus. Considering the unique context of Korean college students, authors explored their intention to seek help using the theoretical framework of the theory of planned behavior (TPB). To fully grasp the contextual factors of Korean college

students' help-seeking behavior, the authors expanded TPB theory by considering pre-existing conditions for help-seeking behavior both at the individual (i.e., mental health condition) and contextual (i.e., knowledge of professional mental health services) levels.

TPB<sup>16</sup> provides a theoretical framework to investigate an individual's intent to perform context-specific actions. The TPB emphasized that our intention to perform certain action depends on contexts. Accordingly, Ajzen<sup>16</sup> suggested the development of TPB questionnaires for given context-specific actions. The current study defined our context-specific action as Korean college students' help-seeking behaviors when they are emotionally overwhelmed. Help-seeking intentions can be defined as the tendencies to seek professional help such as counseling, psychotherapy, and psychiatric treatment<sup>17</sup> when one is emotionally overwhelmed. According to Ajzen,<sup>16</sup> (p.179) three factors determine intentions to engage in a certain behavior: (1) attitudes toward the behavior (e.g., "for me, help seeking is valuable"), (2) subjective norms (e.g., "my family would approve if I seek professional mental health services"), and (3) perceived behavioral control (e.g., "whether I seek professional mental health services or not is up to me"). In this study, attitude can be defined as Korean college students' attitudes toward help-seeking behavior, subjective norm is how Korean college students perceive significant others' opinion about their help-seeking behavior, and perceived behavior control is Korean college students' perception about how much control they have on their help-seeking behavior. Accordingly, when individuals have a favorable attitude toward a behavior, they believe that others would approve of the behavior; when the behavior is under their control, they can develop intentions to act on the behavior.<sup>16</sup> Empirical research has validated TPB for predicting behaviors, such as quitting cigarette smoking,<sup>18</sup> losing weight,<sup>19</sup> engaging in safe sex,<sup>20</sup> help-seeking behavior,<sup>21</sup> and referral behavior.<sup>22</sup> The TPB has been tested empirically across countries, including Iran,<sup>23</sup> Hong Kong,<sup>24</sup> and South Korea.<sup>20</sup> However, no studies have used the theoretical concepts from the TPB to predict emotional help-seeking intentions in South Korea.

### **TPB variables**

*Attitude* Attitude is defined as the degree of favorable or unfavorable evaluation of a certain behavior. Previous studies on predictors of help-seeking intentions found that attitude is the strongest predictor.<sup>25</sup> Negative attitudes toward seeking mental health services were associated with decreased help-seeking behavior<sup>26</sup> in Australia. In a qualitative study exploring the decision-making process regarding help-seeking behavior in Korea, recognizing the potential benefits of help seeking and hoping to increase quality of life through counseling were major underlying reasons for the decisions to seek professional help.<sup>27</sup> In sum, favorable evaluation of help-seeking behavior is associated with help-seeking intentions.

*Subjective norms* Subjective norms are the perceived pressure from or approval by significant others for performing a certain behavior. Significant others are people to whom an individual considers important in his or her life (e.g., partner, friends, and family). When a particular behavior is disapproved by significant others, a person is less likely to perform that behavior. In a study among college students in the USA, attitudes and behavioral control predicted depressed students' intentions to seek mental health services, but subjective norms did not.<sup>28</sup> However, South Korea may differ because cultural contexts influence help-seeking intentions due to the differences in stigma. Miville and Constantine<sup>29</sup> found that Asian cultural values and stigma against help seeking

are correlated. In South Korea, a strong stigma is associated with help seeking.<sup>30</sup> Therefore, subjective norms are expected to predict Korean college students' help-seeking intentions.

*Behavioral control* Behavioral control is defined as the perceived ease or difficulty of performing a behavior. Behavioral control is a critical factor determining intention because individuals with a sufficient degree of control over their behavior tend to act on their intentions.<sup>31</sup> Perceived behavioral control was the strongest predictor of help-seeking intentions among international students and African-American college students in the USA.<sup>32</sup>

### **Mental health condition**

Symptoms of mental health issues are considered critical factors determining whether an individual is likely to seek professional mental health services. However, contradictory findings exist regarding the association of mental health issues with increased or decreased help-seeking intentions. Some studies indicate that depressive symptoms are associated with unfavorable attitudes toward help seeking,<sup>26, 33, 34</sup> whereas others found that students who reported higher levels of psychological distress were more likely to seek professional mental health services.<sup>35–37</sup> In a study conducted in South Korea, individuals sought help from friends or family when their symptoms of mental distress were mild,<sup>38</sup> whereas another study found that the psychological discomfort felt by the individual predicted help-seeking behavior.<sup>39</sup>

### **Knowledge about professional mental health services**

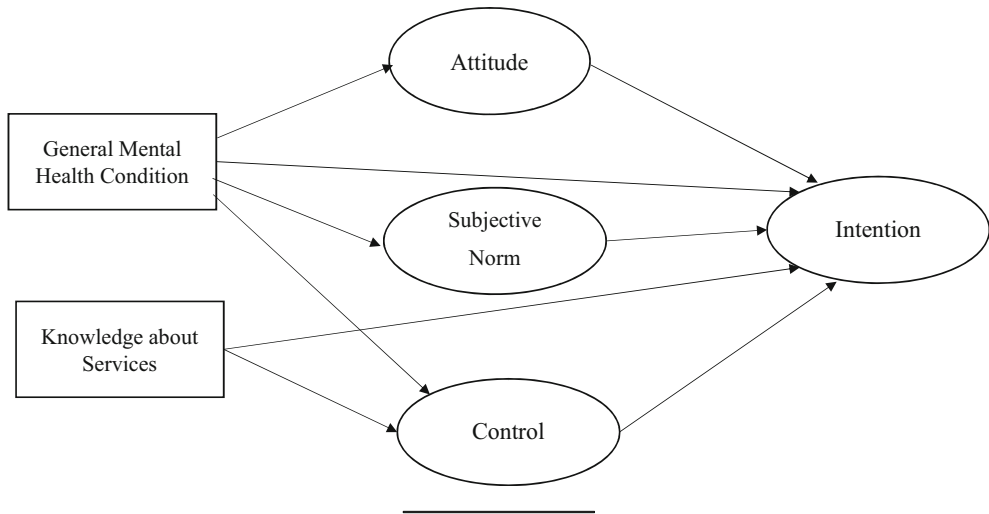
Knowing where to seek professional mental health services can be an important factor influencing help-seeking intentions due to behavioral control. Being unaware of where to seek mental health services or about insurance coverage predicted the lack of seeking intention for professional mental health services.<sup>10</sup> Providing teachers with referral sources has been used to increase referral behavior.<sup>40</sup> In a study of university resident assistant referral intentions, knowledge of places to refer students who seek help was associated with better crisis-related communication skills, which were in turn associated with actual referral behavior.<sup>41</sup> Identifying sources of professional mental health services in a culture where such services are rarely used is particularly difficult. Therefore, authors included a component on knowledge about professional mental health services in the TPB. Knowing about available professional mental health services was expected to influence behavioral control regarding help seeking.

### **Summary and research question**

The present study aimed to use the TPB as a theoretical foundation in identifying predictors of college student intentions to speak with mental health professionals when they are emotionally distressed. Authors were also interested in examining whether college students' mental health conditions influence TPB variables (i.e., attitudes, subjective norms, and behavioral control). Therefore, mental health condition may play a role in determining the attitudes, subjective norms, and behavioral control of help-seeking college students, which is sequentially expected to influence their help-seeking intentions. In addition, authors hypothesized that knowledge about professional mental health services would influence behavioral control of help seeking.

This study extended the TPB framework by considering the predictors of TPB variables in a specific cultural context, pre-existing mental health condition as the individual context, and knowledge about professional mental health services as systematic/cultural contexts (see Fig. 1).

**Figure 1**  
Hypothesized model



## Methods

### Participants

The participants were 300 undergraduate and graduate students who completed an online version of a questionnaire from an online survey company called Marketlink, a nationwide online research panel in South Korea. Marketlink's panel has over half million individuals, age 18 and above, whose panel membership was voluntarily. Panel members were given monetary incentives for the survey completion. Half of the participants were male, and the ages ranged from 19 to 31 years ( $M = 23.663$ ,  $SD = 2.830$ ). The participants comprised 13 freshmen (4.3%), 45 sophomores (15%), 73 juniors (24.3%), 127 seniors (42.3%), and 42 graduate students (14%). They specialized in the following fields: 67 humanities (22.3%); 68 social science (22.7%); 57 science (19%); 77 engineering (25.7%); 18 art, music, or sport (6%); and 13 were unclassified (4.3%).

### Measurements

*TPB questionnaire* Authors followed the manual and guidelines for constructing a TPB measure<sup>42</sup> to develop the TPB questionnaire. The manual for constructing a TPB measure instructed the development of a TPB questionnaire for the specific population of interest instead of using a pre-developed questionnaire.<sup>42</sup> For the first step, authors conducted a qualitative study to determine college students' underlying beliefs (i.e., attitudes, subjective norms, and perceived behavioral control) about help-seeking behavior, and the identified beliefs were used to create the quantitative items for the TPB questionnaire. Authors collected the qualitative data from the sample of college students in a university in S. Korea, and two researchers independently analyzed the content of the responses for themes. The two researchers compared the identified themes and reached a consensus regarding the primary assertions present in the data.<sup>43</sup> Participants in the qualitative study were volunteers from psychology classes in two different universities in Seoul (10 women, 8 men,  $M_{age} = 21.88$ , ranging from 20 to

27 years old) and responded to open-ended questions to present their beliefs regarding the advantages and disadvantages of help-seeking behavior (i.e., attitudes), the most important people who would approve or disapprove of help-seeking behavior (i.e., subjective norms), and the perceived barriers or facilitating factors for help-seeking behavior (i.e., perceived behavioral control; contact primary author for complete questionnaire).

On the advantages and disadvantages of help-seeking behavior, students reported that counseling can be beneficial ( $n = 10$ ), helps to see problems with objective perspective ( $n = 8$ ), responsible ( $n = 6$ ), and soothing ( $n = 5$ ). On the disadvantage of help-seeking behavior, students reported that it is not helpful or useless ( $n = 10$ ) and does not solve the problems they have ( $n = 8$ ). On people who would approve/disapprove their help-seeking behavior, students reported parents ( $n = 14$ ), friends ( $n = 13$ ), professors ( $n = 5$ ), relatives ( $n = 5$ ), siblings ( $n = 4$ ), romantic partner ( $n = 3$ ), and myself ( $n = 3$ ). For factors that enable their help-seeking behavior and barriers for help-seeking behavior, students answered that even when counseling is needed, help-seeking behavior depends on the decisions of others such as parents ( $n = 7$ ). Students also answered that they have no time and money for help-seeking behavior ( $n = 5$ ), consequently rendering counseling as simply an impossible option for them. Students also shared their fear of stigma, rumors ( $n = 4$ ), and the disadvantage associated with the seeking of professional mental health services when applying for jobs or getting married ( $n = 8$ ). Authors also included a question directing college students to define “emotionally in distress” to confirm our understanding of the term and help-seeking behavior.

The TPB questionnaire developed for this study consisted of quantitative items assessing college students' beliefs and intentions related to speaking with a mental health professional in times of distress. Items consisted of beliefs regarding the value of help-seeking behavior (i.e., attitudes), perceptions of how others (e.g., professors, friends) would view help-seeking behavior (i.e., subjective norms), and perceptions of the degree of control in seeking help from a mental health professional (i.e., perceived behavioral control). In addition, authors used 4 items recommended by Francis et al.<sup>42</sup> in assessing Korean college students' intention to seek professional help. All TPB quantitative items were rated by participants using a 7-point scale from 1 (strongly disagree) to 7 (strongly agree). As recommended by Francis et al.,<sup>41</sup> the mean scores of each of the four subscales were used in the analyses.

A high score of attitudes indicated positive beliefs regarding the value of help-seeking behavior, whereas a high score of subjective norms indicated less stigma or negative stereotypes on help-seeking behavior. Additionally, a high score of control means a better sense of control in help-seeking behavior when needed. Finally, a high score of intention reflects increased willingness to seek professional help. The authors named the newly developed survey, the Korean Help Seeking Scale using the TPB (K-TPB, Appendix 1).

*Korean version of the general health questionnaire-20*<sup>44</sup> Authors assessed mental health conditions using the Korean version of the General Health Questionnaire-20 (KHGQ-20), which consists of 20 items with four subscales: anxiety (5 items), depression (4 items), social maladjustment (10 items), and frequency of going out (1 item). Four potential responses were determined for each item, ranging from totally agree to totally disagree, with the score being 0 for totally agree and agree and 1 for disagree and totally disagree. The maximum total score is 20. High KHGQ scores indicate severe mental health conditions, including high degrees of anxiety, depression, and social maladjustment with withdrawal from social activity. Nam and Choi<sup>44</sup> reported that Cronbach's  $\alpha$  was .79, and the split-half reliability was .90. The test-retest reliability of KHGQ-20 with a 1-week interval was .87, and Cronbach's  $\alpha$  was .89 according to Shin.<sup>45</sup> The alpha coefficient of the total KHGQ score in this study was .887.



*Knowledge of services* Authors measured the students' knowledge about counseling services' availability using two questions: "Do you know that the university provides counseling services for mental health issues, such as depression, anxiety, and school adjustment?" and "Do you know how to access and use these services?" The responses were coded as 1 for yes and 0 for no, and the sum of the two questions was recorded for this study.

*Attitudes toward seeking professional help scale-short form*<sup>46</sup> The Attitudes Toward Seeking Professional Help Scale-Short Form (ASSPPH-SF) measured the attitudes toward seeking professional help, consisting of 10 items. Items were rated on a 4-point Likert Scale ranging from 0 (disagree) to 3 (agree). High ASSPPH-SF scores indicated positive attitudes toward seeking help. We used the ASSPPH-SF which was validated in Korean by Nam.<sup>47</sup> The reliability of the ASSPPH-SF was .84, and the 1-month test-retest reliability was .80 in a US sample.<sup>46</sup> The reliability coefficient in the present study was .73. The construct validity was confirmed by conducting confirmatory factor analysis (CFA) with a sample comprising 3000 Korean adults and subsequently showed that the model indices met the standard of model fit of that construct validity.<sup>47</sup>

*Disclosure expectations scale*<sup>48</sup> The Disclosure Expectations Scale (DES) measures individual expectations about anticipated benefits and risks associated with disclosing emotional issues to counselors. We used the DES which is translated and validated in Korean.<sup>48</sup> Two subscales are found in the DES, namely, utility (4 items) and risk (4 items), which are associated with individual expectations and concerns of talking with counselors about emotional problems. A sample question assessing anticipated risk is "How risky would it feel to disclose your hidden feelings to a counselor?" An example assessing anticipated benefit is "How likely would you receive a useful response if you disclose an emotional problem to a counselor?" The responses were rated on a 5-point Likert type scale from 1 (*strongly disagree*) to 5 (*strongly agree*). High utility subscale scores reflect anticipated positive outcomes after useful responses from counselors, and high risk subscale scores mean increased anticipation of risky feelings after disclosing emotional problems to counselors. The reliabilities of the two DES subscales, namely, anticipated utility and risks, were respectively reported to be .83 and .74,<sup>47</sup> and .85 and .83.<sup>49</sup> The alpha coefficients of the two subscales of DES in this study were .816 and .788 for anticipated utility and anticipated risk, respectively. The construct validity was also shown in Son and Lee.<sup>48</sup> The two-factor model which was tested by using CFA satisfied the standard of model fit.

*Stigma scale for receiving psychological help (SSRPH)*<sup>50</sup> The Stigma Scale for Receiving Psychological Help (SSRPH) was used to examine the construct validity of K-TPB as it assesses the perceived stigma about receiving psychological help. The SSRPH comprises 5 items measured on a 4-point Likert scale ranging from 1 indicating strongly disagree to 4 indicating strongly agree. An example includes "People tend to like less those who are receiving counseling for psychological issues." High scores indicate strong public stigma against individuals who receive counseling or psychotherapy. The internal consistency of SSRPH was .72.<sup>51</sup> In the present study, the internal consistency of SSRPH was .752.

## Analysis approach

As a preliminary analysis, the authors checked whether a group difference existed between undergraduate and graduate students among the variables in this study by using multivariate

analysis of variance (MANOVA). After checking the psychometric properties of K-TPB by conducting CFA, the authors examined several types of validity (e.g., discriminant and interment) of K-TPB via correlation analysis and hierarchical regression analysis using SPSS 24.0. In addition, the authors tested the mediation model whether the degree of mental health problems and the extent of knowledge of mental health resource availability would be associated with the TPB variables in predicting professional help-seeking intention through structural equation modeling analysis using AMOS 22.0.

## Results

### Descriptive statistics and correlations

Table 1 presents the correlations among study variables and the means and standard deviations of variables. The subscales of K-TPB, attitudes, subjective norm, control, and intention were all negatively related to general mental health condition and positively correlated with knowledge about services.

### Preliminary analysis

Multivariate analysis of variance (MANOVA) was conducted to see if a difference existed among variables in this study between undergraduate and graduate students. MANOVA results indicated no significant differences on the variables between undergraduate and graduate students ( $F(6, 293) = 1.10, p > .05$ ). Therefore, the authors did not control class level (undergraduate vs. graduate students) in the main analysis. In addition, the internal reliability of K-TPB was tested. Cronbach's  $\alpha$  of the attitudes, subjective norms, control, and intention were .861, .866, .683, and .942, respectively. No items caused Cronbach's  $\alpha$  to increase if deleted.

### Psychometric properties of the K-TPB

The construct validity of the newly developed TPB measure was tested using CFA with AMOS, a program that reports several goodness-of-fit statistics. The comparative fit index (CFI) indicates

**Table 1**

Summary of intercorrelations, means, and standard deviations for scores on study variables

	1. Attitudes	2. Subjective norms	3. Control	4. Intention	5. General mental health condition	6. Knowledge about services
1	—	.254**	.401**	.449**	-.180**	.069
2	—	—	.334**	.450**	-.160**	.110
3	—	—	—	.429**	-.226**	.143*
4	—	—	—	—	.059	.157**
5	—	—	—	—	—	-.045
<i>M</i>	4.521	2.908	4.557	4.7367	7.903	.7833
<i>SD</i>	1.01	.749	1.159	1.398	5.326	.886

*M* mean, *SD* standard deviation

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

the relative fit between the hypothesized model and a baseline model that supposes no relationships among the variables; the CFI ranges from 0 to 1, and values closer to 1.0 indicate a better fit. A normed fit index (NFI) of .90 or above indicates a well-fitting model. The standardized root mean square error of approximation (RMSEA) should be .05 or less in a well-fitting model. The authors also tested the correlation with other relevant instruments, such as DES, ASPPH, SSRPH, and KHGQ. As a result of structural equation modeling, the model has a good fit with the data ( $\chi^2(146) = 282.459$  ( $p < .001$ ), CFI = .952, TLI = .944, RMSEA = .056 (.046-.066), SRMR = .048<sup>52, 53</sup>). The factor analysis loading to each item ranged from .594 to .933 (see Fig. 2).

### Testing discriminant validity

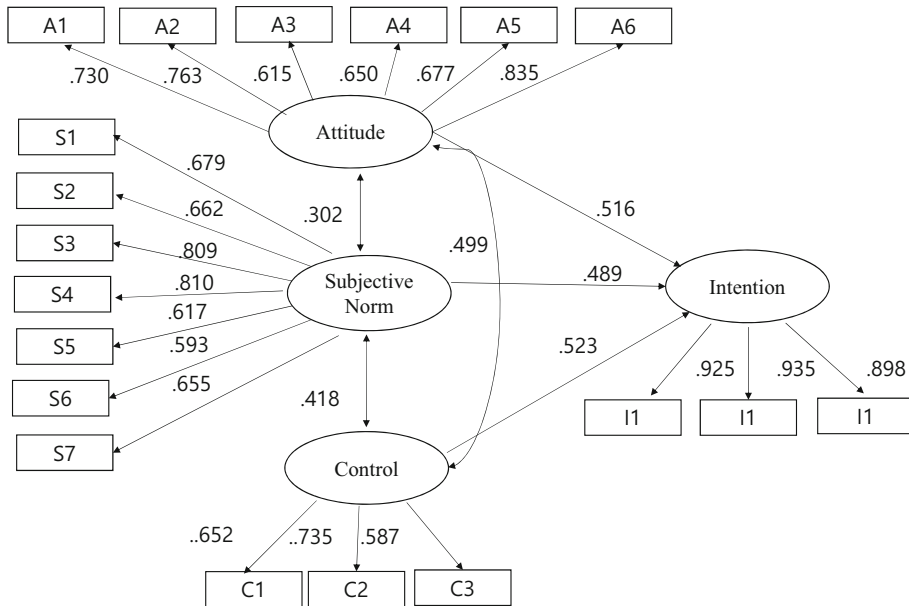
To evaluate the discriminant validity of K-TPB, the authors conducted correlation analyses with age; sex; two subscales of DES, KGHQ, SSRPH; and previous experience with counseling as variables (Table 2). Similar to the findings of previous studies, age and sex were not related to K-TPB. The four subscales of K-TPB were positively correlated with two subscales of DES, namely, utility and risk. In addition, 3 subscales of K-TPB were negatively associated with KGHQ, whereas intention was not; this result is similar to previous finding that attitudes, subjective norms, and control were negatively linked to depression.<sup>45</sup> Finally, among the four subscales of K-TPB, only stigma and intention were positively correlated with previous experience with counseling.

### Testing interment validity

The authors conducted hierarchical multiple regression analysis to assess interment validity (Table 3). The authors designated sex and two subscales of DES, namely, risk and utility, as

**Figure 2**

Confirmatory factor analysis of K-TPB. All presented factor loadings were standardized coefficient with \*\*\* $p < .001$



**Table 2**

Correlation analysis to test the construct validity of K-TPB (N= 300)

	<i>r</i> <sub>attitude</sub>	<i>r</i> <sub>subjective_norm</sub>	<i>r</i> <sub>control</sub>	<i>r</i> <sub>intention</sub>
Age	.026	.083	.021	-.028
Sex	.073	-.049	.062	.063
Anticipated utility-DES	.456*	.250**	.345**	.520**
Anticipated risk-DES	-.406*	-.216**	-.430**	-.343**
ASPPH-SF	.488**	.433**	.567**	.675**
KGHQ-20	-.180**	-.160**	-.226**	.059
SSRPH	-.296**	-.157**	-.508**	-.254**
Experience of counseling	.055	.159**	.113*	.211**

DES, Disclosure Expectations Scale; ASPPH-SF, Attitudes toward Seeking Professional Help Scale-Short Form; KGHQ-20, Korean version of General Health Questionnaire-20; SSRPH, Stigma Scale for Receiving Psychological Help

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

relevant variables investigated in previous studies to evaluate mental health condition. The results of hierarchical multiple regression analysis showed that the unique variance of general mental health condition was explained well by the K-TPB along with demographic variables (sex) and two subscales of DES. Specifically, sex only explained 1.5% of the total variance, and the two subscales of DES uniquely explained 7% of the variance. However, K-TPB explained approximately 10% of the total variance of general mental health conditions.

**Testing the mediation model**

By using the theoretical framework of TPB, the authors investigated whether the degree of mental health problems and the extent of knowledge of mental health resources would be associated with the TPB variables in predicting Korean college students' intention to seek help.

**Table 3**

Hierarchical regression analysis to test interment validity

	<b>Predictors</b>	<i>B</i> ( <i>SD</i> )	<i>B</i>	<i>T</i>	<i>R</i> <sup>2</sup>	$\Delta R^2$
Step 1	Sex	1.287 (.612)	.121	2.104*	015*	015*
Step 2	Sex	1.157 (.593)	.109	1.950	085***	070***
	Anticipated utility-DES	-.164 (.419)	-.023	-.391		
	Anticipated risk-DES	.429 (.100)	.256	4.301***		
Step 3	Sex	1.085 (.570)	102	1.904*	185***	100***
	Anticipated utility-DES	-.519 (.460)	-.074	1.128		
	Anticipated risk-DES	.342 (.104)	.204	3.280***		
	Attitude	-.655 (.341)	.125	1.920		
	Subjective norm	-1.206 (.430)	.170	2.808**		
	Control	-.259 (.098)	.169	2.643**		
	Intention	1.394 (.268)	.366	5.196***		

DES, Disclosure Expectations Scale

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

First of all, we tested the measurement model and assessed the model-data fit, and the present model is found to have good fit to the data ( $\chi^2(176) = 336.156$  ( $p < .001$ ), CFI = .945, TLI = .934, RMSEA = .055 (.046–.064), SRMR = .0485<sup>52, 53</sup>). If the CFI and TLI values are over .95, RMSEA is below .05, and SRMR is below .08, the fit of proposed model is typically considered good fit.<sup>50</sup> The factor analysis loading for attitude ranged from .615 to .835, subjective norm ranged from .593 to .812, control ranged from .574 to .772, and intention ranged from .896 to .926. Both the general mental health condition and knowledge of services were observed variables.

After confirming the measurement model, the Structural Model was tested. The hypothesized model has good fit to the data ( $\chi^2(182) = 413.872$  ( $p < 0.001$ ), CFI = 0.920, TLI = 0.908, IFI = 0.921, RMSEA = 0.065 (0.057–0.074)). As indicated in Figure 3, both direct and indirect effects of mental health condition were significant to help-seeking intention via attitudes, subjective norms, and control.

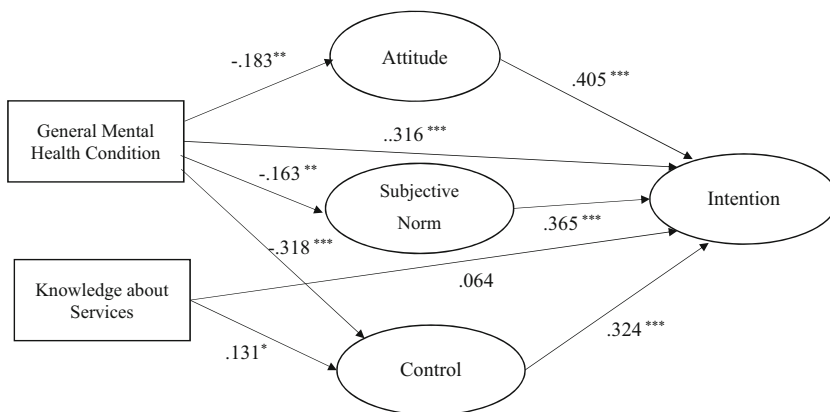
Specifically, the positive effects of attitudes, subjective norms, and control on intention were significant and thus consistent with the predictions of the TPB theoretical framework. The paths from general mental health condition to attitudes, subjective norms, and control were significant. Individuals with severe mental health conditions tend to have negative beliefs, negative stereotypes, and less sense of control regarding help-seeking behavior. Interestingly, individuals who tend to present with non-adjusting mental health conditions have increased intentions to obtain professional help regardless of negative attitudes, biases, and limited sense of control regarding professional help. By contrast, increased knowledge about where the counseling center is located and how to use the services led to a strong sense of control in seeking help, which leads students to exhibit a strong willingness to receive counseling services. However, being knowledgeable about counseling services did not directly predict intention to receive counseling.

### Discussion

Using the conceptual framework of TPB,<sup>16</sup> authors explored the mechanisms in understanding Korean college students' intention to seek help with their mental health conditions and knowledge about professional mental health service as well as TPB variables. Our findings suggest that severe mental health conditions predicted a high negative attitude, less perceived approval from others about help-seeking behavior, and less sense of behavioral control. In addition, knowledge about mental health-related services indirectly predicted college students' help-seeking intentions by increasing their sense of behavior control.

**Figure 3**

Hypothesized mediation model with TPB. \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$



This study expands TPB theory by considering the pre-existing conditions for target behaviors (i.e., help-seeking), both at individual (i.e., mental health condition) and contextual (i.e., knowledge of professional mental health services) levels. Authors hypothesized that individual mental health conditions influence attitudes, subjective norms, and behavioral control. They also hypothesized that knowledge about professional mental health services influence perceived behavioral control relevant to help seeking. The TPB focuses on the internal processes of individuals with intentions to act on certain behaviors, but pre-existing conditions and the social context of the behavior must be considered to understand individual intentions. The current study examined knowledge about professional mental health services as a factor influencing perceived behavioral control because individuals would have no behavioral control over help seeking if they do not know where to go to seek help. The lack of knowledge about available professional services is one of the main reasons for the underutilization of services.<sup>15</sup> This finding is especially true in societies in which professional mental health services are not easily accessible. These difficulties should be considered along with internal factors influencing help-seeking intentions, and the result of the study can be applicable to other countries where mental health system is underdeveloped.

South Korean college students who reported experiencing maladjusted mental health conditions such as high degrees of anxiety, depression, and social maladjustment with withdrawal from social activities were likely to express intentions to seek professional help in the current study. Our results are consistent with previous findings that students with mental health conditions (e.g., depression, anxiety) exhibit help-seeking intentions.<sup>7</sup> However, the results of our study are inconsistent with previous findings that nearly two-thirds of people with mental disorders do not seek help or are reluctant to seek help across countries.<sup>54, 55</sup> These contradictory findings indicate that barriers exist for people with mental health conditions to seek professional help. Given our findings, doubts about the value of help-seeking behavior, fear of other people's judgment about help-seeking behavior, and not having a sense of control when seeking help seem to mediate the relationship between an individual's mental health and intentions to seek help. In other words, even if individuals who have experienced symptoms of depression, anxiety, and social maladjustment are willing to seek help, they are likely to feel reluctant and discouraged once they have thought about (a) the pros and cons of receiving professional help, (b) stereotypes and biases about mental health conditions within their cultural context, and (c) lack of locus of control in seeking help.

### **Implications for Behavioral Health**

Help-seeking intention is critical in determining the utilization of behavioral health services. The results of this study would provide practical and empirical contributions by broadening the understanding about the factors contributing to college students' help-seeking behavior. To increase college students' help-seeking intentions in South Korea, professionals should institute campaigns about professional mental health services on college campuses. More specifically, the result of this study can help aim the target population of outreach programs to promote help-seeking behavior (e.g., students with pre-existing mental health issues) and contents of the outreach program (e.g., including referral resources). The result of the study suggests that distributing information about mental health resources can be helpful in increasing help-seeking behavior in a society where mental health resources are limited.

The TPB variables continued to be informative in understanding students' help-seeking behavior and would be useful in systematizing behavioral health services. The results of the study can be used for developing and delivering psycho-educational programs to increase favorable attitudes, reduce stigma, and increase behavioral control regarding help seeking. Designing experiential outreach programs targeting attitudes toward help seeking among college students is also recommended. To intervene in subjective norms, changing societal norms and addressing the stigma against help seeking are necessary. Even when a student becomes interested in help

seeking, if the student's significant others are against the idea, following through is difficult. In a collectivistic culture, individuals tend to be concerned about the social implications of help seeking, which can negatively influence relationships and social reputation.<sup>56</sup> Therefore, the results of our study can be used to guide rules regarding mental health literacy interventions on campus by suggesting the following: (a) the intervention focus must include subjective norms, behavioral control, and attitudes toward help seeking; (b) considering the cultural contexts of help-seeking behavior; and (c) providing the needed resources are necessary.

The result of this study can be applicable to societies in which professional mental health services are not easily accessible. Future research can examine different samples in which the mental health system is not well developed. Thus, further studies must explore the effects of other contextual factors. In addition, studies examining the factors influencing actual help-seeking behavior are needed instead of measuring intention. For example, the lack of accessibility to receive service when it is needed can be the critical factors to influence help-seeking behavior. In South Korea, very few (on average, 2–3) full-time counselors have worked at university settings, the average ratio between one full-time counselor to students is 1 to 2000, and the waiting period for receiving counseling is 3–4 months.<sup>4</sup> Thus, even if students are willing to receive counseling, their help-seeking behavior may not be fully supported or enhanced because they cannot promptly receive the service when it is needed. Although this study considered students' knowledge of the availability of counseling services on campus, future study is needed to see if accessibility of counseling services and the degree of under-resourced service would limit the connection between help-seeking intention and help-seeking behavior. TPB variables are less critical for predicting actual behavior when contextual barriers exist, and understanding how factors influencing help-seeking intentions can lead individuals to perform the behavior would be informative.

## **Limitations**

Despite the significant findings of the current study, several limitations must be addressed. First, the nature of our convenience sample imposes limits on the interpretation and generalization of our findings. In this study, the data were collected from a sample of South Korean college students with various backgrounds via an online survey, but these students may not represent the entire Korean college student population. Second, the current study excluded measures of help-seeking behavior and only examined help-seeking intentions. Given the previous findings that intention does not generally lead to actual behavior, further investigations testing the TPB by examining actual help-seeking behavior will be beneficial to obtain a more comprehensive understanding of the overall help-seeking process among Korean college students. Lastly, this study did not ask whether the universities where the participants are attending, have university counseling centers on campus or not. Although nearly all universities in S. Korea have university counseling centers on campus, further investigation that distinguishes the availability and knowledge of the availability of counseling resources is needed.

## **Conclusions**

Our findings extended the TPB by examining the effects of mental health conditions and knowledge of the availability of professional services on help-seeking intentions among Korean college students, apart from the previously well-known factors such as attitudes, subjective norms, and behavioral control. The findings of this study specifically suggest that Korean college students with mental health concerns are willing to seek professional help, but consideration of the costs and benefits of receiving help and other well-known factors such as attitudes and subjective limited sense of control, could negatively affect their help-seeking intention. Moreover, knowing where to

seek counseling services increased behavioral control, which leads individuals to make additional help-seeking intentions.

## Compliance with ethical standards

*Conflict of Interest* The authors declare no conflict of interest.

## References

1. Ibrahim AK, Kelly SJ, Adams CE, et al. A systematic review of studies of depression prevalence in university students. *Journal of psychiatric research*. 2013;47(3): 391-400.
2. Choi HY, Baek HJ, Cha JS, et al. Qualitative study on the experience of recovery from burnout among counselors in college counseling centers. *Korean Journal of Counseling and Psychotherapy*. 2015; 27(4): 825-848.
3. American College Health Association. *American College Health Association–National College Health Assessment: Reference Group Data Report*. Baltimore, MD: American College Health Association. 2019.
4. Noh YS, Lee SE. The fact and key issues about the college students' mental health and counseling service at the university settings in South Korea. *KCUE Higher Education Issue*. 2019; 2: 1-8. Retrieved from <http://www.kcue.or.kr/bbs/view.php?gb=pds&page=1&idx=513&kind=&culm=&word=>
5. Eisenberg D, Hunt J, Speer N. Help seeking for mental health on college campuses: Review of evidence and next steps for research and practice. *Harv Rev Psychiatry*. 2012; 20(4): 222-232.
6. Kim E, Jeon S, Kim D. Suicide prevention and intervention among college counseling centers. *Journal of Human Understanding and Counseling*. 2016; 37(1): 1-20.
7. Gulliver A, Griffiths KM, Christensen H. Perceived barriers and facilitators to mental health help-seeking in young people: a systematic review. *BMC Psychiatry*. 2010; 30: 110-113. <https://doi.org/10.1186/1471-244X-10-113>.
8. Vogel DL, Wester SR, Wei M, et al. The role of outcome expectations and attitudes on decisions to seek professional help. *Journal of Counseling Psychology*. 2005; 52(4): 459-470. <https://doi.org/10.1037/0022-0167.52.4.459>
9. You YR, Lee JY. Adult Attachment and Help-Seeking Intention: The Mediating Roles of Self Concealment, Perceived Social Support, and Psychological Distress. *Korean Journal of Counseling and Psychotherapy*. 2000; 18: 441-460.
10. Eisenberg D, Golberstein E, Gollust SE. Help-seeking and access to mental health care in a university student population. *Med Care*. 2007; 45(7): 594-601.
11. Kessler RC, Berglund PA, Bruce ML et al. The prevalence and correlates of untreated serious mental illness. *Health Services Research*. 2001; 36(6): 987-1007.
12. Kang SH. Predictors of academic achievement and dropout thinking among University students. *Journal of Educational Evaluation*, 2010; 23(1): 29-53.
13. Choi YM. Review of current conditions of university and college counseling centers in Korea and the United States. *Journal of Human Understanding and Counseling*. 2012; 33(2): 21-36.
14. Kim EH, Jeon SY, Kim DY, et al. A qualitative study on the experience of suicide prevention and crisis intervention among college counselors, *Studies on Korean Youth*, 2015; 26(4): 177-206.
15. Leong FT, Kalibatseva Z. Cross-cultural barriers to mental health services in the United States. *Cerebrum*. 2011; 5.
16. Ajzen I. The theory of planned behavior. *Organizational Behavior and Human Decision Processes*. 1991;50(2): 179-211. doi:[https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
17. Fischer, EH, Turner, JI. Orientations to seeking professional help: Development and research utility of an attitude scale. *Journal of Consulting and Clinical Psychology*. 1970; 35(1): 79-90. doi <https://doi.org/10.1037/h0029636>
18. Conner M, McMillan B. Interaction effects in the theory of planned behavior: Studying cannabis use. *British Journal of Social Psychology*. 1999; 38(2): 195-222. <https://doi.org/10.1348/014466699164121>
19. Schiffer DE, Ajzen I. Intention, perceived control, and weight loss: An application of the theory of planned behavior. *Journal of Personality and Social Psychology*. 1985; 49(3): 843-851. <https://doi.org/10.1037/0022-3514.49.3.843>
20. Cha ES, Kim KH, Patrick TE. Predictors of intention to practice safer sex among Korean college students. *Archives of Sexual Behavior*. 2008; 37(4): 641-651
21. Hess TR, Tracey TG. Psychological help-seeking intention among college students across three problem area. *Journal of Counseling and Development*. 2013; 91(3): 321-330.
22. Lee JY. Using the Theory of Planned Behavior to Predict Teachers across three problem area.ee problems. ior. havior. le. ort, and Psychological Diea and U.S. School. *Social Psychology Quarterly*. 2014; 29(4): 385-394
23. Lin CY, Oveisi S, Burri A, et al. Theory of planned behavior including self-stigma and perceived barriers explain help-seeking behavior for sexual problems in Iranian women suffering from epilepsy. *Epilepsy and Behavior*. 2017; 68: 123-128.
24. Mo PK, Mak WW. Help-seeking for mental health problems among Chinese: The application and extension of the theory of planned behavior. *Social psychiatry and psychiatric epidemiology*. 2009; 44(8): 675-684. <https://doi.org/10.1007/s00127-008-0484-0>.



25. Schomerus G, Matschinger H, Angermeyer MC. Attitudes that determine willingness to seek psychiatric help for depression: a representative population survey applying the Theory of Planned Behaviour. *Psychological Medicine*. 2009; 39(11): 1855-1865. <https://doi.org/10.1017/S0033291709005832>.
26. Roness A, Mykletun A, Dahl AA. Help seeking behaviour in patients with anxiety disorder and depression. *Acta Psychiatrica Scandinavica*. 2005; 111(1): 51-58. <https://doi.org/10.1111/j.1600-0447.2004.00433.x>
27. Oh H, Kim J. The Process of Decision Making about Seeking Counseling among Clients in Korea: A Qualitative Study. *Korean Journal of Counseling and Psychotherapy*, 2012; 24: 781-805.
28. Bohon LM, Cotter KA, Kravitz RL, et al. The theory of planned behavior as it predicts potential intention to seek mental health services for depression among college students. *Journal of American College Health*. 2016; 64(8): 593-603. DOI:<https://doi.org/10.1080/07448481.2016.1207646>
29. Miville ML, Constantine MG. Cultural values, counseling stigma, and intentions to seek counseling among Asian American college women. *Counseling and Values*. 2007; 52: 2-11.
30. Kim HC. Mediating Effect of Stigma on the Relationship between Psychological Distress and Help-seeking Attitudes among University Students in South Korea. *Mental Health and Social Work*. 2018; 46: 5-33. <https://doi.org/10.24301/MHSW.2018.03.46.1.5>
31. Ajzen I, Madden TJ. Prediction of goal-directed behavior: Attitudes, intentions, and perceived behavioral control. *Journal of experimental social psychology*. 1986; 22(5): 453-474. Doi:[https://doi.org/10.1016/0022-1031\(86\)90045-4](https://doi.org/10.1016/0022-1031(86)90045-4)
32. Mesidor J, Sly K. Mental health help-seeking intentions among international and African American college students: An application of the theory of planned behavior. *Journal of International Students*. 2014; 4: 137-149. <https://doi.org/10.1192/bjp.179.5.417>
33. Calhoun LG, Selby JW. Help-seeking attitudes and severity of psychological distress. *Journal of Clinical Psychology*. 1974; 30(3): 247-248.
34. Garland AF, Zigler EF. Psychological correlates of help-seeking attitudes among children and adolescents. *American Journal of Orthopsychiatry*. 1994; 64(4): 586-593. <https://doi.org/10.1037/h0079573>
35. Andrews G, Issakidis C, Carter G. Shortfall in mental health service utilization. *British Journal of Psychiatry*. 2001; 179(5): 417-425. <https://doi.org/10.1192/bjp.179.5.417>
36. Rosenthal B, Wilson WC. Mental health services: Use and disparity among diverse college students. *Journal of American College Health*. 2008; 57(1): 61-68. <https://doi.org/10.3200/JACH.57.1.61-68>.
37. Yorgason JB, Linville D, Zitzman B. Mental health among college students: Do those who need services know about and use them? *Journal of American College Health*. 2008; 57(2):173-181. <https://doi.org/10.3200/JACH.57.2.173-182>.
38. Kim KI, Kim JH, Nam JH, et al. A study of mental health of the college students. *Mental Health and Social Work*. 1988; 7: 86-102.
39. Shin YH, Ahn HH. The relative importance of approach factors and avoidance factors in predicting professional help seeking behavior. *Korean Journal of Counseling and Psychotherapy*. 2005;17: 177-195.
40. Canu WH, Mancil EB. An examination of teacher trainees' knowledge of attention-deficit/hyperactivity disorder. *School Mental Health*. 2012; 4(2): 105-114. <https://doi.org/10.1007/s12310-012-9071-3>
41. Taub DJ, Servaty-Seib, HL, Miles N, et al. The impact of gatekeeper training for suicide prevention on university resident assistants. *Journal of College Counseling*. 2013; 16: 64-78. Doi:<https://doi.org/10.1002/j.2161-1882.2013.00027.x>
42. Francis JJ, Eccles MP, Johnston M, et al. *Constructing questionnaires based on the theory of planned behavior: A manual for health services researchers*. United Kingdom: University of Newcastle. Centre for Health Services Research. Newcastle Upon Tyne; 2004.
43. Patton, MQ. Two decades of developments in qualitative inquiry: A personal, experiential perspective. *Qual Soc Work*, 2002; 1(3): 261-283. <https://doi.org/10.1177/1473325002001003636>
44. Nam J, Choi J. Study on Implementation of Community mental health programs. *Policy Report of Korea Institute for Health and Social Affairs*. 1993; 93:1-281.
45. Shin SI. The validity and reliability of the Korean version of the general health questionnaire: KGHQ-20 and KGHQ-30. *Korean Journal of Social Welfare*. 2001; 46: 210-235.
46. Fischer EH, Farina A. Attitudes toward seeking professional psychological help: A shortened form and considerations for research. *Journal of College Student Development*. 1995; 36(4): 368-373.
47. Nam, SK. The construct validity of the attitudes toward seeking professional psychological help scale-short form(ATSPPH-SF). *The Korean Journal of Counseling*, 11(3), 1007-1020.
48. Son, EJ., Lee SU. The influence of mother's adult attachment on the decision of counseling for children and adolescents: The mediating role of anticipated benefits of counseling, and courtesy stigma. *Korean Journal of Counseling*, 14(6), 3261-3282.
49. Vogel DL, Wester SR. To seek help or not to seek help: The risks of self-disclosure. *Journal of Counseling Psychology*. 2005; 52: 459-470.
50. Vogel DL, Wade NG, Haake, S. Me-assuring the self-stigma associated with seeking psychological help. *Journal of Counseling Psychology*. 2006; 53(3): 325-337. <https://doi.org/10.1037/0022-0167.53.3.325>
51. Komiya N, Good GE, Sherrrod, NB. Emotional openness as a predictor of college students' attitudes toward seeking psychological help. *The Journal of Counsel Psychology*. 2000; 47: 138-143.
52. Hu LT, Bentler PM. Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: a Multidisciplinary Journal*. 1999; 6(1): 1-55. Doi:<https://doi.org/10.1080/10705519909540118>
53. Kline RB. *Methodology in the social sciences. Principles and practice of structural equation modeling*. 4th ed. New York, NY, US: Guilford Press; 2016.
54. Essau CA. Frequency and patterns of mental health services utilization among adolescents with anxiety and depressive disorders. *Depress and Anxiety*. 2005; 22(3): 130-137. <https://doi.org/10.1002/da.20115>.
55. Zachrisson HD, Rödje K, Mykletun A. Utilization of health services in relation to mental health problems in adolescents: a population-based survey. *BMC Public Health*. 2006; 16: 6-34. <https://doi.org/10.1186/1471-2458-6-34>.
56. Mojaverian T, Hashimoto T, Kim HS. Cultural differences in professional help seeking: A comparison of Japan and the US. *Frontiers in Psychology*. 2013; 3: 615-622.