

Exploring psychopathological and cognitive factors associated with help-seeking intentions among Korean high school students

A cross-sectional study

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Abstract

Competitive college admissions and academic pressure have continuously increased the psychopathological burden of Korean high school students. Seeking help is one of the primary means of managing mental health, and more attention is required. This study aimed to explore the psychopathological and cognitive factors related to the help-seeking intentions of Korean high school students.

This cross-sectional study was conducted between July and August 2020 using the General Help-Seeking Questionnaire, Symptom Checklist-90-R, and Mental Health Literacy Scale. Four hundred and twenty-one Korean high school students (275 males, 146 females; average age 17.44 years [standard deviation = 0.651]) completed self-report questionnaires. We performed analysis of variance, Spearman's correlation analysis, and stepwise regression analysis to explore the factors related to help-seeking intentions.

The final model showed an explanatory power of 23.6% for the overall variance in help-seeking intentions. Somatization ($\beta = -0.200$; $P = .001$) and hostility ($\beta = -0.203$; $P = .001$) had a negative effect on help-seeking intentions. Further, knowledge of where to seek information ($\beta = 0.230$; $P < .001$) and attitudes promoting recognition and help-seeking behavior ($\beta = 0.095$; $P = .030$) had a positive effect.

Students responded to society's negative awareness of mental illness by converting psychopathology into socially acceptable symptoms. Educational support can improve mental health literacy. This study is expected to help improve mental illness awareness and increase adolescents' access to public services.

Abbreviations: GHSQ = General Help-Seeking Questionnaire, SCL-90-R = The Symptom Checklist-90-R, MHLS = Mental Health Literacy Scale.

Keywords: help-seeking intentions, Korean high school students, mental health literacy, psychopathological symptoms

1. Introduction

Among Korean parents, 81.3% hoped to send their children to a 4-year university.^[1] Concerns over the mental health of Korean high school students persist due to competitive college entrance exams, excessive daily study hours, and academic stress.^[2] According to the "2019 Youth Statistics" compiled by the Korea Statistical Office and the Ministry of Gender Equality and Family, the stress perception rate of adolescents (ages 13–18, school life) was 50.7%, and the depression experience rate of high school students was 28.7%.^[3] A high rate of stress perception and experience of depression are major predictors of serious mental problems such as suicidal thoughts; we must not overlook the fact that the suicide rate in Korea is 2.1 times the Organization for Economic Cooperation and Development average.^[4,5] Help-seeking is one of the means used to mediate

mental health problems and prevent serious mental illness in adolescents. However, social interest and support systems for help-seeking among Korean high school students are insufficient, and previous studies are scarce.^[6]

Help-seeking is a global concern in the field of mental health management.^[7] Adolescence is a period in which long-term mental health problems first appear, and the number and severity of mental disorders are increasing.^[8] Help-seeking is a problem-focused interaction that can reduce the long-term effects of mental health problems and prevent severe mental disorders.^[9] Help-seeking is the act of seeking support from both informal (e.g., family, friends, neighbors, etc.) and formal sources (e.g., mental health and health professionals, teachers, etc.).^[10]

Providing elements to facilitate help-seeking intentions and removing barriers is essential for successful mental health interventions.^[11] Therefore, in this study, it is necessary to identify

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the psychopathological factors that hinder the help-seeking intentions of Korean high school students and the cognitive factors that promote them. Although many studies have been conducted on individual factors related to help-seeking intentions, few have explored the factors that have a relatively greater influence on help-seeking intentions.

An existing problem with help-seeking intentions is that adolescents are generally unwilling to seek help.^[11] Previous studies found that most young people with mental health problems prefer not to talk to anyone, including colleagues.^[12–14] Their delay or refusal to seek help is the result of a transition from the personal domain (psychopathology) to the interpersonal domain (help-seeking intentions).^[11] In addition, delay in seeking help is related to the nature of the developmental process of mental health disorders. Anxiety symptoms often precede the symptoms of depression and other mood disorders.^[11] Symptoms of anxiety or general distress that occur before the onset of a mental health disorder can atrophy an individual's thoughts and actions and delay help-seeking behavior.^[13] This suggests that several factors in psychopathological symptoms are associated with a delay or refusal to seek help.^[15]

Previous studies have identified various predictors of help-seeking intentions.^[16,17] Most psychopathological symptoms such as depression and anxiety are negatively associated with help-seeking intentions.^[18,19] Meanwhile, among the various psychopathological symptoms internalized in an individual (group), those that emerge primarily in response to an external event may differ depending on the characteristics or circumstances of the individual (group).^[20] In situations where an individual (group) needs to seek help, identifying which psychopathological symptoms have a major influence on their help-seeking intentions will play an important role in their mental health intervention. Therefore, we need to explore the psychopathological factors associated with the delay or refusal of help-seeking intentions in adolescents.

Adolescents can experience various mental disorders simultaneously^[20]; therefore, it is necessary to evaluate psychopathological factors using a multidimensional scale that reflects these characteristics. The researchers used the Symptom Checklist-90-R (SCL-90-R), which is useful for screening for general psychopathology in adolescents that inhibits or promotes seeking help.^[21]

Mental health literacy is a significant global concern that influences adolescents' help-seeking intentions. It is defined as knowledge and beliefs about mental disorders that help recognize, manage, or prevent mental disorders.^[22] Mental health literacy is a significant determinant of mental health and can improve the health of individuals and the public.^[23–25] Nevertheless, researchers have pointed out that adolescents do not have sufficient mental health literacy to recognize mental health problems and seek professional help when needed.^[25]

Considering that mental health literacy mainly reflects knowledge and beliefs about mental disorders, a lack of education can be suspected as the primary cause of the lack of mental health literacy.^[22] Mental health literacy is an unfamiliar concept for high school students in Korea. Nevertheless, there are few research and education programs on mental health management in terms of knowledge among adolescents in Korea, and more attention and support are required.^[5]

Various studies on mental health literacy have been conducted worldwide and are known to have a positive correlation with the intention to seek help.^[26,27] However, there are fewer exploratory studies on the subfactors of mental health literacy associated with help-seeking intentions. Researchers expect to explore the subfactors of mental health literacy associated with the help-seeking intentions of high school students in Korea and use them as basic data for mental health interventions.

This study aimed to explore the factors associated with help-seeking intentions among factors of psychopathological symptoms and mental health literacy and present the results as a logical basis to reinforce help-seeking intentions.

2. Method

2.1. Ethical approval and informed consent

This study was conducted in accordance with the guidelines of the Declaration of Helsinki and approved by the Institutional Review Board of Dankuk University (Project identification code DKU 2020-05-020). Informed consent was obtained from all the subjects involved in the study.

2.2. Study design and subjects

This cross-sectional study was conducted with high school students in Seoul, Daejeon, and Seosan in Korea between July and August 2020. Of the 437 students who provided informed consent, 421 high school students (including both males and females) completed a questionnaire to measure their mental health literacy, psychopathological symptoms, and help-seeking intentions. Before requesting that they complete the questionnaire, we informed participants of the purpose of the study, their right to refuse participation, and their right to withdraw from participation at any stage.

2.3. Study instruments

2.3.1. Socio-demographic data. The researchers designed a socio-demographic questionnaire and collected data such as gender, grade, parental socioeconomic status, parental education level, living with parents, and experiences of seeing mental health professionals.

2.3.2. General Help-Seeking Questionnaire. The researchers used the General Help-Seeking Questionnaire (GHSQ) to measure high school students' help-seeking intentions.^[13] In the translation process, a mental health expert and an English-speaking Korean translator participated in the work and revised it with the help of a native speaker. The GHSQ measures how likely a participant is to seek help with personal/emotional problems (10 questions) from someone on the list over the next 4 weeks. The list may include a partner, friend, parent, other relatives, mental health professional, phone helplines, family doctor/general practitioner, teacher, someone else not listed above, or "I would not seek help from anyone." All items were rated on a 7-point Likert scale ranging from 1 (extremely unlikely) to 7 (extremely likely). The last question (not seeking help) was excluded from the analysis because none of the participants responded. Therefore, participants could score between 9 (lowest) to 63 points (highest), and the higher the score, the greater the intention to seek help. In question 2a, a binary item (yes or no), participants were asked, "Have you ever met a mental health professional to get help for personal problems?" In this study, we considered "experience of professional help" as an experience of mental difficulties. The test-retest reliability of the GHSQ was reported to be excellent ($r = 0.92$).^[13] In this study, the internal consistency of the GHSQ was 0.74.

2.3.3. The Symptom Checklist-90-R. The researchers used the Korean version of the SCL-90-R to assess the psychopathological symptoms of high school students.^[28,29] It comprises 90 questions, and we rated all items on a 5-point Likert scale from 1 (not at all) to 5 (very severe). It measured how much the subject suffered from the problem of the question presented over the last 7 days. Based on previous studies, the researchers calculated the total SCL-90-R score and the score of subscales divided by the number of items. If the total SCL-90-R score is >160 or the score of any subscale is >2 , we can suspect that the respondent is experiencing psychological pain. The 9 symptom dimensions (number of questions) were as follows: somatization (12 items), obsessive-compulsive (10 items), interpersonal sensitivity (9 items), depression (13 items), anxiety (10 items), hostility (6 items), phobic anxiety (7 items), paranoid ideation (6 items), and

psychoticism (10 items). Their test–retest reliability coefficients ranged from 0.73 to 0.83, and their internal conformance values ranged from 0.67 to 0.86.^[30] In this study, the internal consistency of sub-factors ranged from 0.78 to 0.89.

2.3.4. Mental Health Literacy Scale. The researchers translated the Mental Health Literacy Scale (MHLS) and used it to measure Korean high school students' mental health literacy.^[31] We considered the readability of high school students and the Korean context (modified questions 9 and 10) and were faithful to the purpose of measuring each item in the original MHLS. The MHLS assesses 6 subfactors: recognition of disorders, knowledge of how to seek mental health information, knowledge of risk factors and causes, knowledge of self-treatments, knowledge of professional help available, and attitudes promoting recognition and appropriate help-seeking. The MHLS is a 35-item 5-point Likert scale, and subjects can obtain a minimum of 35 points and a maximum of 160 points; the higher the score, the higher their mental health literacy. The MHLS was excellent, with a Cronbach's α of 0.873 and test–retest reliability ($r = 0.797$; $P < .001$).^[31] In this study, the internal consistency of the MHLS was 0.70.

2.4. Statistical analysis

All data were statistically analyzed using SPSS Statistics for Windows (version 21.0; IBM, Armonk, NY). The Shapiro–Wilk test for the dependent variable GHSQ satisfied normality; thus, the data were expressed as mean \pm standard deviation (SD); analysis of variance was used for comparisons between groups. As the results of the Shapiro–Wilk test for independent variables SCL-90-R and MHLS did not satisfy normality, the median (interquartile range [IQR]) was used to describe the data. The researchers conducted a Spearman correlation test to confirm whether the subfactors of psychopathological symptoms and mental health literacy were associated with help-seeking intentions. Finally, a stepwise regression analysis was conducted to explore the factors associated with help-seeking intentions. The independent variables were those with P -values $<.05$ in the demographic data. Further, in the Pearson correlation test, all

subfactors of the independent variables that were significantly correlated with the dependent variable were input.

3. Results

The flow diagram (Fig. 1) shows that out of the 437 participants, 16 responses were disqualified and excluded from the analysis. Finally, 421 response sheets were included in the final sample, and the effective response rate was 96.3%.

3.1. Score of each item of help-seeking intentions

The scores for each item of help-seeking intention are presented in Table 1. The mean score (SD) of help-seeking intentions was 34.84 (SD = 10.053; range, 9.00–63.00; 95% CI, 33.87–35.80). Parents ($M = 5.08$; $SD = 1.706$) were the most likely informal sources for participants to seek help with personal or emotional problems, followed by friends ($M = 4.48$; $SD = 1.587$) and partners ($M = 4.10$; $SD = 1.833$). Among the official sources, mental health professionals (4.59 ± 1.748) had the highest score, followed by general practitioners ($M = 4.19$; $SD = 1.799$) and teachers ($M = 3.96$; $SD = 1.734$).

3.2. Socio-demographic data and scores of help-seeking intentions

Demographic data on the participants' help-seeking intentions are presented in Table 2. The analysis of the mean difference for help-seeking intentions showed a statistically significant difference in grade ($P = .043$), the socioeconomic status of parents ($P = .039$), and the question, "Have you ever seen a mental health professional?" ($P = .028$).

3.3. Median (IQR) of independent variables and correlation analysis of the GHSQ

Table 3 presents the medians (IQRs) for the SCL-90-R and MHLS. It also shows the correlation between the independent

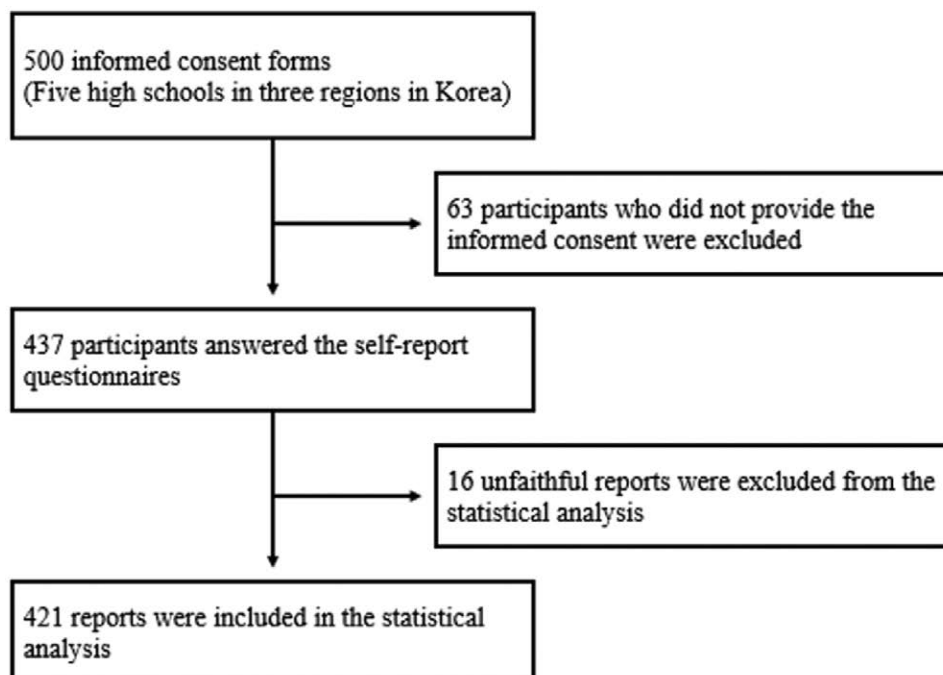


Figure 1. Flow diagram of study selection process.

Table 1
Score of each item of the help-seeking intentions (n = 421, mean ± SD).

Item	Score range	Score
Total	9–63	34.84 ± 10.053
Partner	1–7	4.10 ± 1.833
Friend	1–7	4.48 ± 1.587
Parents	1–7	5.08 ± 1.706
Other relative/family member	1–7	3.71 ± 1.709
Mental health professional	1–7	4.59 ± 1.748
Phone help line	1–7	3.82 ± 1.745
Family doctor/GP	1–7	4.10 ± 1.799
Teacher	1–7	3.96 ± 1.734
Someone else not listed above	1–7	0.98 ± 1.746

GP, general practitioner, SD = standard deviation.

variables and the GHSQ. The total score of the SCL-90-R was 140.00 (111.00–200.00). There were 170 subjects (40.3%) with psychopathological abnormalities (total score > 160). Obsessive-compulsive (2.00; 1.40–2.60) and interpersonal sensitivity (1.88; 1.33–2.66) showed relatively high scores on the 9 dimensions of the SCL-90-R. All dimensions of the SCL-90-R showed a significant negative correlation with the GHSQ ($r = -0.319$ to -0.421 ; $P < .001$).

The total MHLS was 101.00 (93.00–107.00). Knowledge of where to seek information (3.25; 2.50–3.75) and attitudes promoting recognition and help-seeking behavior (3.06; 2.75–3.37) showed relatively high scores in the 6 dimensions of MHLS. GHSQ was positively correlated with knowledge of self-help treatment ($r = 0.123$; $P = .012$), knowledge of professional help available ($r = 0.117$; $P = .017$), knowledge of where to seek information ($r = 0.311$; $P < .001$), and attitudes promoting recognition and help-seeking behavior ($r = 0.181$; $P = .001$).

3.4. Multiple linear stepwise regression of factors influencing help-seeking intentions

A stepwise regression analysis was conducted with GHSQ scores as the dependent variable, and the results are presented in Table 4. Independent variables were P -values $< .05$, as determined by univariate analysis, and variables that showed a significant correlation with GHSQ in the correlation analysis. The variables that remained in the final model were hostility ($\beta = -0.203$; $P = .001$), somatization ($\beta = -0.200$; $P < .001$), knowledge of where to seek information ($\beta = 0.230$; $P < .001$), and attitudes promoting recognition and help-seeking behavior ($\beta = 0.095$; $P = .030$). The coefficient of determination R^2 was 0.236, and these 4 factors accounted for 23.6% of the total variance of the GHSQ.

Figure 2 shows the flow and results of the stepwise regression of psychopathological and cognitive factors influencing help-seeking intentions.

4. Discussion

This study aimed to measure the psychopathological symptoms and mental health literacy of Korean high school students and explore the subfactors associated with their help-seeking intentions.

4.1. Characteristics of Korean high school students' help-seeking intentions

The mean score for help-seeking intentions ($M = 34.84$; $SD = 10.053$) was lower than that in previous studies.^[17,26,32] We can infer that Korean high school students and their parents are so engrossed in competitive college entrance exams that they have little interest in mental health management.

Parents ($M = 5.13$; $SD = 1.72$) were the most likely sources for participants to seek help with personal or emotional problems.

Table 2
Socio-demographic data and scores of the help-seeking intentions (n = 421).

Variables	N (%)	Score Mean ± SD	F	P-value
Gender				
Male	275 (65.3)	35.09 ± 10.232	0.494	.482
Female	146 (34.7)	34.36 ± 9.724		
Grade			3.178	.043*
First	40 (9.5)	31.28 ± 9.249		
Second	208 (49.4)	35.62 ± 10.501		
Third	173 (41.1)	34.72 ± 9.538		
Socio-economic Status of parents			3.260	.039*
Low	80 (19.0)	32.28 ± 10.035		
Middle	313 (74.3)	35.47 ± 9.825		
High	28 (6.7)	35.07 ± 11.835		
Father's education level			0.424	.655
High school	172 (40.9)	35.38 ± 9.974		
College-University	205 (48.7)	34.44 ± 9.993		
Graduate School	44 (1.05)	34.57 ± 10.756		
Mother's education level			0.098	.907
High school	206 (48.9)	35.00 ± 9.481		
College-University	181 (43.0)	34.77 ± 10.842		
Graduate School	34 (8.1)	34.21 ± 9.279		
Do you live with your parents?			0.301	.583
Yes	362 (85.9)	34.94 ± 10.105		
No	59 (14.1)	34.17 ± 9.788		
Have you ever met a mental health professional?			4.847	.028*
Yes	65 (15.4)	32.35 ± 8.335		
No	356 (84.6)	35.29 ± 10.280		

SD = standard deviation.

* $P < .05$.

Table 3
Median (IQR) of independent variables and correlation analysis of the GHSQ of Korean high school students (N = 421).

Independent variables	Number of items	Median (interquartile range)	r	P
Somatization	12	1.41 (1.16–2.00)	−0.421	.000*
Obsessive-compulsive	10	2.00 (1.40–2.60)	−0.381	.000*
Interpersonal sensitivity	9	1.88 (1.33–2.66)	−0.386	.000*
Depression	13	1.69 (1.23–2.46)	−0.400	.000*
Anxiety	10	1.50 (1.10–2.10)	−0.391	.000*
Hostility	6	1.50 (1.16–2.16)	−0.405	.000*
Phobic anxiety	7	1.14 (1.00–1.57)	−0.319	.000*
Paranoid ideation	6	1.50 (1.00–2.16)	−0.401	.000*
Psychoticism	10	1.30 (1.00–1.90)	−0.344	.000*
Total of the Symptom Checklist-90-R	90	140 (111–200)	−0.427	.000*
Ability to recognize mental health disorders	8	21.00 (18.00–23.00)	−0.082	.092
Knowledge of risk factors and causes	2	2.50 (2.50–3.00)	−0.022	.651
Knowledge of self-help treatment	2	2.50 (2.50–3.00)	0.123	.012**
Knowledge of professional help available	3	2.66 (2.66–3.00)	0.117	.017**
Knowledge of where to seek information	4	3.25 (2.50–3.75)	0.311	.000*
Attitudes promoting recognition and help-seeking behavior	16	3.06 (2.75–3.37)	0.181	.000*
Total of the mental health literacy scale	35	101.00 (93.00–107.00)	0.195	.000*

GHSQ = General Help-Seeking Questionnaire; IQR = interquartile range.

* $P < .001$.

** $P < .05$.

Table 4
Multiple linear stepwise regression of factors influencing the help-seeking intentions (n = 421)

Independent variables	B	se	β	t value	P value
Constant	30.328	3.267		9.283	.000*
Hostility	−0.469	0.140	−0.203	−3.347	.001**
Knowledge of where to seek information	0.685	0.129	0.230	5.289	.000*
Somatization	−0.240	0.073	−0.200	−3.303	.001**
Attitudes promoting recognition and help-seeking behavior	0.113	0.052	0.095	2.184	.030**

$F = 32.081$; $P < .001$; $R = 0.486$; $R^2 = 0.236$.

β = standard regression coefficient, B = partial regression coefficient, se = standard error.

* $P < .001$.

** $P < .05$.

We can infer that this is related to the tendency of high school students to place high value on academic problems and depend entirely on their parents.^[33] In such an environment, people tend to regard mental health problems as academic pressure or career distress, which could increase the possibility of informal interventions such as those conducted by parents.^[34] Further, the high dependence on informal help is associated with the Asian sentiment that it is undesirable to seek professional help for mental health problems.^[6] These results show a lack of awareness of converting to public services when seeking help with personal or emotional problems.

4.2. Psychopathological symptoms and help-seeking intentions

The total score of the SCL-90-R was 140.00 (111.00–200.00), which is higher than the results of a previous study.^[35] Among all participants, 170 (40.3%) showed psychopathological abnormalities (total score > 160). In an Asian cultural environment^[36] that places a significant value on academic achievement, most participants spent considerable time studying in preparation for competitive entrance exams.^[36] We inferred that most participants were mentally burdened by stress and exhaustion.^[37] The results suggest that it is most urgent to improve the poor mental health environment of Korean high school students, which is filled with the pressure of academics and competitive entrance exams.

SCL-90-R was significantly negatively correlated with GHSQ ($r = -0.427$; $P < .001$) and negatively correlated with all subfactors of the SCL-90-R (Table 3). This means that the higher the level of psychopathological symptoms, the lower the intention to seek help, which is consistent with the results of previous studies.^[26] Our findings support the previous results that people with mental disorders tend not to seek help until the problem becomes serious and that most students (37%–84%) with mental disorders do not seek treatment.^[38,39] This suggests that the alleviation of psychopathological symptoms is a requirement for improving the intention to seek help.

4.2.1. Somatization and help-seeking intentions. Stepwise regression analysis showed that somatization ($\beta = -0.200$; $P < .01$) had a significant negative effect on help-seeking intentions, supporting the results of previous studies.^[40] Further, it is in line with a previous study that states that Asians tend to somatize psychopathological symptoms compared with Westerners and visit general medical institutions more than mental health professionals do.^[41]

Individuals with mental illness can engage in self-criticism based on ethics and beliefs, and it is suggested that they may physicalize mental illness to avoid such accusations.^[42] This shows that people with mental illness can convert their psychopathology into socially acceptable symptoms.^[40]

Consequently, Korean high school students experience the hardship twice because of both poor mental health conditions and negative social awareness of mental disorders. However, they did not fully reveal their difficulties.

4.2.2. Hostility and help-seeking intentions. Hostility ($\beta = -0.203$; $P < .01$) also had a significant negative effect on help-seeking intentions (Table 4).

People often consider hostility to be a male expression code. As hostility prevents us from recognizing the symptoms of a mental disorder, it could hinder or delay help-seeking.^[43,44] Our findings also support previous results that social norms about traditional masculinity suppress the emotional expression of psychopathology.^[44] This tendency also seems to be associated with the Asian cultural characteristics that seek help from others conflicts with the value of self-reliance.^[45] These findings support previous studies stating that traditional male roles that emphasize self-reliance or emotional control and strength hinder the use of accessible services.^[44]

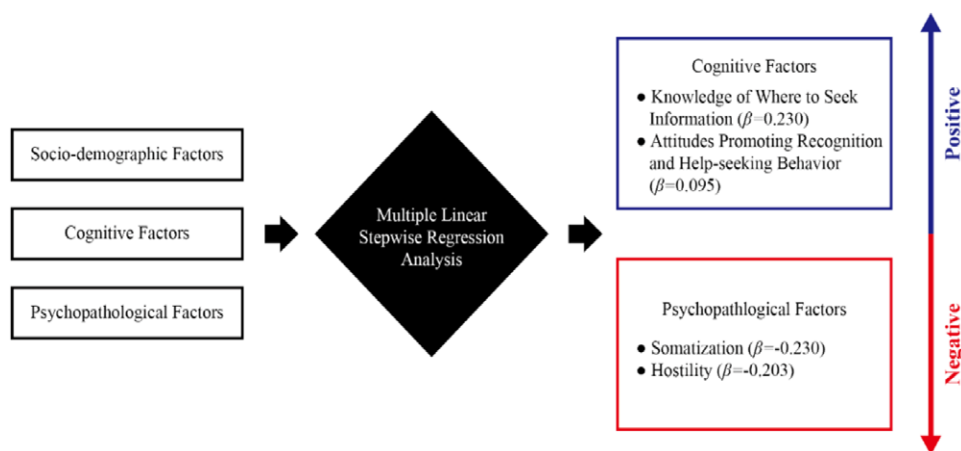


Figure 2. Psychopathological and cognitive factors that influence help-seeking intentions. Three demographic variables showing a significant mean difference in help-seeking intentions, 4 out of 6 cognitive factors (Table 2), and 9 psychopathological factors showing a significant correlation with help-seeking intentions were input (Table 3). The result of stepwise regression showed that 2 cognitive factors had a positive effect, and 2 psychopathological factors had a negative effect on help-seeking intentions.

This shows that the atmosphere of Korean society, which still emphasizes the social norms of masculinity, lowers the help-seeking intentions of high school students. Positive awareness of psychopathological symptoms can expand the social acceptability of mental illness.^[46] Therefore, it is necessary to increase accessibility to mental health professionals by improving the public's positive awareness of traditional male roles.

4.3. Mental health literacy and help-seeking intentions

MHLS had a slightly significant positive correlation with GHSQ ($r = 0.195$; $P < .001$), which is consistent with the results of previous studies.^[26,47,48] The results indicate that participants with higher MHLS are more likely to seek help.^[13,27,31] The MHLS score of Korean high school students was 101.00 (93.00–107.00), which was significantly lower than those of previous studies.^[26] This result may be due to poor education in Korean high school students' mental health literacy. Therefore, additional educational considerations are required.

Stepwise regression analysis (Table 4) showed that knowledge of where to seek information ($\beta = 0.230$) and attitudes promoting recognition and help-seeking behavior ($\beta = 0.095$) significantly affected help-seeking intentions. Mental health literacy is a factor that promotes help-seeking intentions in terms of the promotion of mental health information and positive attitudes.

As mental health literacy is related to knowledge and beliefs about mental disorders and positively correlated with the intention to seek help, if appropriate educational considerations are supported, it is possible to increase access to public services for Korean high school students.

5. Conclusion

The more severe the psychopathological symptoms, the more likely it is that thoughts and behaviors will atrophy, and the more difficult it is to objectify problems. This tendency naturally promotes passivity and can delay or reduce help-seeking intentions. We found that somatization and hostility were the main factors hindering help-seeking intentions. This is a reaction to the negative awareness of mental illness and is the result of converting one's psychopathology into socially acceptable symptoms.

Therefore, it is necessary to alleviate individual psychopathological symptoms and improve public awareness so that adolescents can receive more professional treatment instead of visiting general medical institutions.

In addition, we found that knowledge of where to seek information and attitudes promoting recognition and help-seeking behavior are key factors in the promotion of help-seeking intentions. This suggests that educational support for the promotion of mental health information and positive attitudes toward seeking help can improve the poor mental health literacy of Korean high school students.

The results of this study will be used to improve awareness of psychopathology and increase the accessibility of public services among adolescents.

6. Research limitations and future research ideas

This study used the socio-demographic variables, SCL-90-R and MHLS as predictive factors for help-seeking intentions. Therefore, there is a limitation of not fully considering other predictive factors. A comprehensive study that includes variables such as stigma, perceptions, and the attitudes of the local community is needed in future research. As this was a cross-sectional study, there was a limit to revealing the causal relationship between the variables. Because the sample was limited to high school students, future studies involving all adolescents are needed.

Despite these limitations, to the best of our knowledge, this study is the first to attempt to study the help-seeking intentions of high school students in Korea in a multidimensional way from both psychopathological and cognitive aspects. This study is expected to provide reliable data for future research on adolescents' help-seeking intentions in Korea.

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