

Mediating Role of Mental Help-Seeking Attitude in the Effect of Mental Health Literacy on Mental Treatment: A Structural Equation Model

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ABSTRACT

Objective: This study aims to display the mediating role of mental help-seeking attitude in the effect of mental health literacy (MHL) on mental treatment

Methods: This study conducted through a structural equation model. This research was carried out in line with the descriptive survey and relational screening model to determine the relationship between the variables. In this scope, the predictive relationship between MHL's effect on mental treatment and the mental help-seeking attitude was examined through a structural equation model. Data were obtained from 391 individuals through the Personal Information Form, the Mental Health Literacy Scale, and the Scale of Attitudes Toward Seeking Professional Psychological Help-Short Form.

Results: It was observed that MHL affected mental help-seeking attitude. It was determined that the mental help-seeking attitude does not affect the mental treatment. While the resource-oriented sub-dimension of the Mental Health Literacy Scale had a statistically significant effect on mental treatment behavior, this effect was not observed in the knowledge-oriented and belief-oriented sub-dimensions. Mental help-seeking attitude does not play a mediating role in the effect of MHL on mental treatment.

Conclusions: It was found that the help-seeking attitude develops in line with the MHL level increase. However, an increase in the level of MHL alone does not affect mental treatment. This indicates that other factors might also impact the mental treatment towards psychological problems.

Keywords: Mental health literacy, mental help-seeking attitude, mental treatment, structural equation model

1. INTRODUCTION

Mental disorders constitute a significant burden for all countries, with consequences in health, social, human rights and economic fields (1). Nearly 792 million (10.7%) people worldwide suffer from mental disorders (2). This figure is estimated to increase considering the adverse effects of traumatic experiences on mental health, such as pandemics or environments of conflict (3,4). In this case, early diagnosis of mental disorders and good management of the treatment process is becoming increasingly important. The importance of protecting mental health has also been recognized worldwide, and it has been stated in one of the nine sub-goals of Goal Three: Good Health and Well-being covered under the United Nations (UN) Sustainable Development Goals (5) that mental health should be improved. UN member states should conduct activities on society's mental

health to improve it. One of these efforts is to increase MHL. Healthcare professionals, especially those providing public health services, can do much to increase MHL (6).

The concept of MHL refers to the knowledge, abilities and beliefs related to the protection of mental health, recognition, and management of mental disorders (7-10). Various factors affect MHL, and one of these is its level. Increasing MHL is important in many aspects. For instance, MHL was determined to impact all health-promoting behaviors. Individuals with high levels of MHL tend to practice health-promoting behaviors more (11). It was reported that in line with the enhancement of MHL, social and health-related outputs would also improve, and thus, the burden of disease would decrease (7). Moreover, it was also determined that

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increasing MHL improved university students' self-efficacy (12). However, MHL level is not at a sufficient level in general (6,13-15). It was determined that the MHL of Australian society is mostly satisfactory. Yet, there are deficiencies in recognizing and seeking professional treatment for some disorders, such as social phobia (16). Women's MHL level is higher than men's (6,15,17-19). MHL level decreases with increasing age (17) and increases with increasing educational level (19).

Health literacy levels might differ among those studying or working in health. MHL levels of the students studying health (pharmacy, medicine, and nursing) were determined to be alike (20). Similarly, it was found that the MHL levels of the doctors and nurses working in psychiatry clinics were also similar (21). However, it was established that the nurses who don't work on mental disorders do not have sufficient levels MHL (22). It was also noted that MHL could be affected by culture (21) and that despite numerous similarities, there are also differences in the MHL levels of the nursing students from different cultures (23). Among medical students, those who have experienced mental illness in their family, close friends or themselves show higher levels of MHL than those who have no experience of mental illness (18), and bisexuals and those with a history of mental disorder show higher levels of MHL than others (15).

The concept of MHL covers beneficial information for the individual's mental health, ways to prevent mental illnesses, recognition of mental disorders, effective methods to cope with mild-moderate problems individually, and psychological first aid skills necessary for the person and to help others (8,24). Moreover, MHL also means being active in the fields of protecting mental health, understanding mental problems and their treatments, decreasing stigmatization, and increasing mental help-seeking (25). Thereby, increasing MHL might help reduce stigmatization and early access to treatment (6,9,14).

The mental help-seeking attitude discussed under the subject of improving mental health refers to an individual's tendency to receive mental treatment or not (26). Besides the mental help-seeking attitude, other factors also affect mental treatment. Some studies carried out among high school and university students revealed that improving MHL increases mental treatment (7,27). Cultural features might also affect mental treatment. It might be asserted that the collectivistic culture plays an essential role in terms of mental treatment, and especially both stigmatization by society and self-stigmatizations prevent receiving mental treatment (6,28).

The number of studies in Turkey examining the relationship between MHL and mental help-seeking is rather limited. It is important to disclose the relationship between mental literacy and the mental help-seeking attitude, which is affected by many factors, such as culture, in the Turkish population.

This research aims to reveal the mediating role of the mental help-seeking attitude in the effect of MHL on mental treatment through the structural equation model (SEM). As a sub-objective, the research also aims to examine the effect of MHL on mental help-seeking attitude and the impact of mental help-seeking attitude on mental treatment.

Research hypotheses

In line with these objectives, the following hypotheses will be tested (Figure 1):

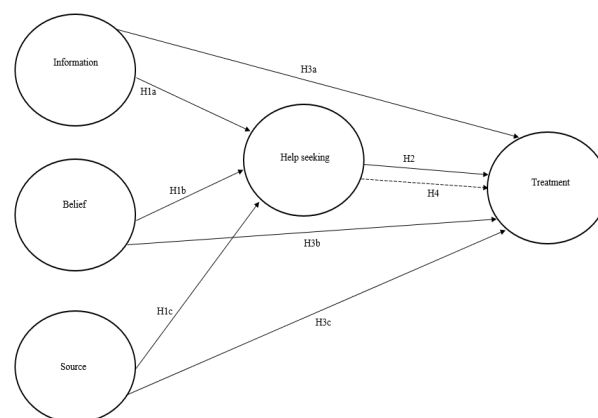


Figure 1. Research model.

H1: a) Knowledge, b) beliefs, and c) resource-oriented sub-dimensions of MHL affect the mental help-seeking attitude.

H2: Mental help-seeking attitude affects mental treatment.

H3: a) Knowledge, b) beliefs, and c) resource-oriented sub-dimensions of MHL affect the mental treatment.

H4: Mental help-seeking attitude has a mediating role in the effect of MHL on mental treatment.

2. METHODS

Permission granted by Kırıkkale University Ethics Committee (Approval date:10.03.20233 and Number: 2022.03.06) was obtained to verify the study's compliance with ethical considerations. The aim of the research was explained to the participants before answering the data collection tools. Volunteers filled out the data collection tools.

2.1. Design

This research was carried out in line with the descriptive survey and relational screening model to determine the relationship between the variables. The relational screening model helps to determine whether there is a relationship between variables and the direction of the relationship (29). Accordingly, the predictive relationship between MHL's effect on mental treatment and the mental help-seeking attitude was examined through a SEM. SEM is a statistical method testing the reciprocal and causal relationship between the

observed and latent variables on a single model (30). Data were collected between March and July 2022.

2.2. Participants

Data were collected through the convenience sampling method, a type of non-probability sampling method. In the scope of research, a survey was conducted with 408 individuals and 17 of the surveys were not included in the data set as they were not considered suitable for analysis. Thus, 391 surveys were included in the analysis.

2.3. Data collection

Data were obtained through the Personal Information Form, Mental Health Literacy Scale and Scale of Attitudes Toward Seeking Psychological Help-Short Form (ASPH-SF).

2.3.1. Personal Information Form

Personal Information Form covered questions aiming to identify the demographic characteristics of the participants, such as age, gender, and educational background. Besides, this part also covers questions (eight questions) on whether the participants or their close relatives experienced mental health problems and received professional mental health services.

2.3.2. Mental Health Literacy Scale

Mental Health Literacy Scale was developed by Jung et al. (31) and adapted to Turkish by Göktaş et al. (32). The scale consists of 22 items and has three dimensions: Knowledge-Oriented (ten questions), Belief-Oriented (eight questions), and Resource-Oriented (four questions). Total score that can be obtained on the scale is 0-22. An increase in the scores points out to higher levels of MHL. The total Cronbach alpha coefficient of the scale was found as .71 (31,32).

Scale of Attitudes Toward Seeking Psychological Help-Short Form (ASPH-SF)

ASPH-SF was developed by Türküm (33). The scale consists of 18 items. Questions are of five-point Likert type, and six questions are reversely scored. Evaluation is based on the total score, and the score that can be obtained on the scale is 18-90. In line with the increase in the total score on the scale, a positive attitude towards mental help-seeking also develops. Cronbach alpha coefficient for the whole scale is .88 (33).

2.4. Data Analysis

Data were analyzed in SPSS 22.0 and AMOS 21.0 programs. Descriptive statistics (frequency, percentage) and covariance-based SEM was used in the analyses. As in this research, SEM is frequently preferred in testing the mediating roles and has some advantages. Unlike regression analysis, in SEM, a dependent variable in the model might be an independent variable in another aspect. Moreover, SEM tests all these effects simultaneously. Actually, SEM is a two-level

multivariate analysis. Information on the structure of the scales is given at the first level, while information on the relationship between the variables is provided at the second level (34).

2.5. Research Model

In the research, while testing the mediating effect in SEM, sub-dimensions (knowledge-oriented, belief-oriented and resource-oriented) of the Mental Health Literacy Scale were taken as independent variables, ASPH-SF as the mediating variable and mental treatment as the dependent variable. In order to mention a mediating effect in SEM, the independent variable is required to affect the mediating variable, and the mediating variable affects the dependent variable. If the independent variable can affect the dependent variable without the mediating variable, and this effect is maintained when the mediating variable is included, then partial mediation is in question; if the independent variable cannot affect the dependent variable without the mediating variable and an effect is manifested when the mediating variable is included, then full mediation is in question (35). Before interpreting the significance of SEM's coefficients, the model goodness of fit values should meet the necessary conditions for the adequacy of the model. The model goodness of fit values obtained are expected to be $\chi^2 / df < 5$; CFI, NFI, IFI, TLI, GFI $> .90$ RMSEA, SRMR $< .80$ (35).

3. RESULTS

According to the research data, 60.9% of the participants were male, and 39.1% were female. In terms of their educational backgrounds, more than half of the participants had bachelor's degrees (52.2%). 36.1% of the participants were in the 18-28 age range, while 27.7% were in 29-39, 27.7% were in 40-50, and 20.5% in 51 and above. A great part of the participants (72.6%) stated not having experienced a mental problem they could not solve independently. 38.1% of the participants stated that in case of mental problems, they could share this with their parents, while 24.6% expressed that they could share this with their close friends. 69.8% of the participants declared that they had not received support from a mental health specialist until that day. While 58.1% of the participants expressed that their family members had not received support from a mental health specialist, 57.3% stated that the people in their close social spheres had received support from a mental health specialist (Table 1).

Figure 2 displays the SEM formed for testing the research hypotheses. The model goodness of fit values obtained from the SEM formed are as follows: $\chi^2 / df = 1.763$; CFI = .911; TLI = .903; IFI = .911; RMSEA = .044; SRMR = .052. After deciding that the model was sufficient with these values, the structure of the scales in the model was evaluated at the first level, and the items with factor loadings below .30 were removed from the model. Accordingly, two items in the Mental Health Literacy Scale and three items in ASPH-SF were not included in the scale.

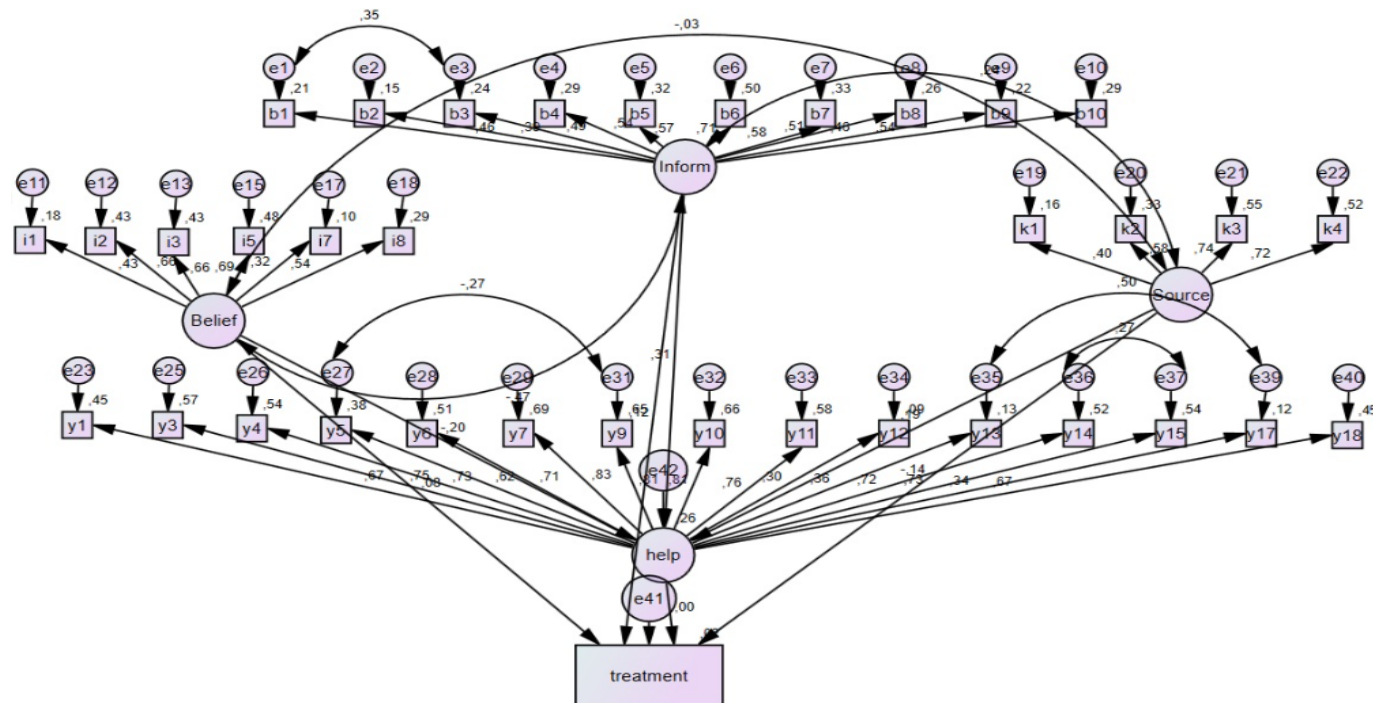


Figure 2. SEM results of research model.

Table 1. Descriptive statistics of sample group (n = 391)

Sex	n	%
Female	238	60.9
Male	153	39.1
Educational level		
Primary School-Middle School	18	4.6
High school	111	28.4
University	204	52.2
Master's degree and above	58	14.8
Age		
18-28	141	36.1
29-39	85	27.7
40-50	85	27.7
51 years and older	80	20.5
State of having mental problems		
Yes	107	27.4
No	284	72.6
Preferred people to sharing mental problems		
Parents	149	38.1
Children	16	4.1
Partner	60	15.3
Health worker (I know)	59	15.1
Close friend	96	24.6
I don't talk to anyone	11	2.8
Status of getting support from a mental health specialist		
Yes	118	30.2
No	273	69.8
Status of family members to get support from a mental health specialist		
Yes	163	41.7
No	228	58.3
Status of receiving support from a mental health specialist in the close social environment		
Yes	224	57.3
No	167	42.7

Table 2 displays the coefficients and significance levels obtained in SEM, used for the analyses. This part presents the results concerning the effects of the sub-dimensions of Mental Health Literacy Scale on the mental help-seeking attitude and the effects of the sub-dimensions of Mental Health Literacy Scale and mental help-seeking attitude on the mental treatment. Accordingly, it was observed that all sub-dimensions of MHL affect the mental help-seeking attitude ($p < .05$). H1a, H1b and H1c hypotheses were agreed on. It was determined that the mental help-seeking attitude did not affect the mental treatment ($p > .05$), and thus, the H2 hypothesis was rejected. Examining the effect of the sub-dimensions of MHL on mental treatment, it was detected that only the resource-oriented sub-dimension had a significant effect ($p < .05$), while the knowledge-oriented and belief-oriented sub-dimensions did not have a significant impact ($p > .05$). Accordingly, H3a and H3b were rejected, while H3c was agreed on.

Table 2. Path coefficients of SEM results

Dependent variable	Path	Independent variable	B Coefficient	Std. B	Standard error	t	p value
Help seeking	<---	Belief	-.252	-.197	.089	-2.824	.005
Help seeking	<---	Source	1.191	.193	.390	3.050	.002
Help seeking	<---	Information	.562	.308	.138	4.066	<.001
Treatment	<---	Help seeking	.003	.004	.044	.060	.952
Treatment	<---	Belief	.069	.077	.065	1.066	.286
Treatment	<---	Source	-.589	-.136	.285	-2.069	.039
Treatment	<---	Information	.151	.121	.097	1.594	.111

Key: SEM: Structural Equation Modelling, Std. B: Standardized B coefficient, Significant p value assessed at .05.

The presence of an indirect effect cannot be indicated since the ASPH-SF scale, which serves as the mediating factor in the model, does not affect the dependent variable, mental treatment. Moreover, Table 3 displays the coefficients and significance levels obtained concerning the mediating effect. Mental help-seeking attitude does not have a mediating role in the effect of MHL on mental treatment ($p > .05$). Accordingly, H4 hypothesis was rejected.

Table 3. Mediation results*

Variables	Total Effect			Direct Effect			Indirect Effect		
	Std. B	C. I.	p value	Std. B	C. I.	p value	Std. B	C. I.	p value
Help seeking	.004	-.122 .087	.908	-	-	-	-	-	-
Belief	.076	-.077 .193	.319	.077	-.079 .192	.290	-.001	-.015 .028	.940
Source	-.135	-.244 .256	.064	-.136	-.242 -.004	.085	.001	-.021 .016	.968
Information	.122	-.010 -.022	.115	.121	-.010 .283	.127	.001	-.040 .026	.888

Std. B: Standardized B coefficient; C. I.: Confidence intervals, *Dependent variable: Help Seeking Behavior (treatment)

4. DISCUSSION

This research addressed the mediating role of the mental help-seeking attitude in the effect of the MHL of the participants on their mental treatment. This research revealed that all sub-dimensions MHL affect the mental help-seeking attitude (H1 was agreed on). It was pointed out in research that MHL has both direct and indirect effects on mental help-seeking attitudes (9). In some study carried out in Germany among unemployed people, it was found that the Mental Health Literacy Scale as a whole has a significant positive relationship with the intention of mental help-seeking (37). People with low levels of MHL delay seeking mental help as they do not recognize the symptoms of the illness (7,17). It is known that especially the young tend to be late to seek mental help, and the reason for this is explained with the lack of knowledge among young people (7). However, MHL is an integral part of the early recognition of the symptoms and timely intervention for treating these disorders (14).

In some study, it was pointed out that despite high levels of mental help-seeking attitude, an individual might not equally tend to seek mental treatment in case of mental problems and thus, mental help-seeking attitude and mental treatment should be addressed separately (38). This research also revealed that MHL affects mental help-seeking attitude, but the mental help-seeking attitude does not affect mental treatment (H2 hypothesis was rejected). In future studies, it might be important to address the reasons why a person has the desire to seek mental treatment but does not receive it.

It was observed in this research that the resource-oriented sub-dimension of MHL affected the mental treatment, while the knowledge and belief-oriented sub-dimensions

had no effect (H3a and H3b were rejected, but H3c were agreed on). Those with low levels of MHL seek help at a later stage due to the fear of stigmatization, and this leads to progression of the disease and delayed treatment (7). While some research revealed no significant relationship between MHL and mental treatment (15), another study found a significantly positive relationship between MHL and mental treatment (37). This difference might be related to the scales measuring MHL. In the resource-oriented sub-dimension of the MHL scale used in this research, there are four questions evaluating the knowledge of where to apply when a person suffers from an illness (32). According to the results of this research, improving even this one aspect of MHL would enhance mental treatment. However, increasing knowledge and belief-oriented sub-dimensions might effectively increase knowledge of the disease and reduce stigmatizing attitudes. Studies indicate that decreasing stigmatizing attitudes enhances the desire to seek mental help and mental treatment (9,38). Stigmatizing attitudes are still an essential problem in terms of mental health. There are many studies on this subject (7,14,20,39,40). The results clearly show that the MHL of society, healthcare professionals and students to become healthcare professionals in the future should be increased to improve mental treatment.

5. CONCLUSION

MHL is essential for the early recognition of the symptoms and timely treatment of mental health disorders. This research established that MHL affects the mental help-seeking attitude, but the mental help-seeking attitude does not affect the mental treatment. Moreover, it was determined that the mental help-seeking attitude does not have a mediating role in the effect of MHL on mental treatment. On the other hand, the high level of resource-oriented (knowing where to receive mental help) sub-dimension of MHL positively affects mental treatment. It is crucial that research predicting the effective factors other than MHL and mental help-seeking attitude are conducted to determine the impediments to mental treatment. Thus, it can contribute to the improvement of mental health.

There were a few limitations in the research. The first of these may be the collection of data by the convenience sampling method, a type of non-probability sampling method. Although it was not a direct priority for the research, it would be better to use one of the probabilistic sampling methods. Researchers are advised to consider this issue. Another limitation is that the data was collected both online and face-to-face. We thought that this issue would not affect the research results. However, collecting data by face-to-face interview method could have helped the participants to be more careful.

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Author Contributions:

Research idea: SA, EA

Design of the study: SS

Acquisition of data for the study: SA, SS, PÖK, EA

Analysis of data for the study: SS, PÖK

Interpretation of data for the study: SA, SS, PÖK, EA

Drafting the manuscript: SA, SS

Revising it critically for important intellectual content: SA

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