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RESEARCH ARTICLE

Mental Health Literacy Level of University Students Enrolled in Health Departments: A Descriptive Study in Turkey

Selma KAHRAMAN [1] ✉, Suzan HAVLİOGLU [1], and Özlem KAÇKİN [2]

Affiliations
[1] Department of Public Health Nursing, Faculty of Health Sciences, Harran University, Sanliurfa, Turkey
[2] Department of Psychiatric Nursing, Faculty of Health Sciences, Harran University, Sanliurfa, Turkey

✉ Correspondence
Selma Kahraman
Harran University, Faculty of Health Sciences, Osmanbey Campus 63300 Haliliye, Sanliurfa, Turkey
Email: skahraman1308@gmail.com

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Introduction: Good mental health literacy (MHL) enables an individual to access, understand, and use information in a way that promotes and maintains good mental health and facilitates early referral to mental health services. The literature reports that MHL levels among adolescents are gradually increasing, but still remain at low/moderate levels, and that this situation bears a negative impact on both individual and societal health.
Aims: The Authors of this study aim to determine the level of MHL among university students engaged in the field of health, the factors that influence this level, and the differences between the various fields.
Methods: The sample of this cross-sectional study consisted of 1,227 students enrolled in a university health department between 1 December 2022 and 20 January 2023. Data were collected online using a questionnaire designed by the researchers, and applying the MHL Scale (MHLS). We used descriptive statistics, one-sample t-test, one-way ANOVA test, multiple comparison tests (Tukey) and multiple linear regression in the statistical analysis.
Results: The mean MHLS score of health faculty students was moderate (15.88, SD = 3.30). Female students, students aged >20 years and medicine, dentistry or nursing students had higher MHLS scores than others (p < .050).
Conclusions: We observed that university students in the health sector did not have the desired or expected level of MHL. Improving MHL has the potential to facilitate early intervention, ensuring effective community mental health promotion and support; therefore, educational programs should be developed for this group.

Keywords: health department, university student, mental health literacy level, mental health, health education

Introduction

Mental disorders account for one-third of young people's disease burden worldwide (Auerbach et al., 2018; Elyamani et al., 2021; Jung et al., 2016). An international study conducted in 2018 showed that the lifetime prevalence of mental illness among university students stood at 35.3% (Auerbach et al., 2018). Owing to the COVID-19 pandemic, whose global effects have been ongoing for almost three years, the incidence of mental disorders has increased, making mental health a priority (Aguirre Velasco et al., 2020; Gavin et al., 2021; Lai et al., 2022; Nobre et al., 2021). COVID-19 has now been effectively brought under control through the collective efforts of society as a whole; social order has gradually improved; and psychological distress has been alleviated

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with the pandemic's effective prevention and control. Nevertheless, more research remains needed to determine the impact of this pandemic on public mental health, the prevalence of mental illness in the short and long term, and how it may shape needs related to this issue (Gavin et al., 2021).

Most mental disorders (75.0%) begin in adolescence (12–24 years) but are usually detected later (Aguirre Velasco et al., 2020; Auerbach et al., 2018). Poor mental health negatively affects all aspects of young people's lives, particularly education and health; it bears a lasting impact on their health and social functioning in adulthood; and increases the risk of premature death (Aguirre Velasco et al., 2020; Elyamani et al., 2021; Morgado et al., 2021; Reis et al., 2022). Researchers therefore recognize mental disorders in young people to be a global public health issue (Aguirre Velasco et al., 2020; Auerbach et al., 2018; Elyamani et al., 2021; Morgado et al., 2021; Nobre et al., 2021; Reis et al., 2022). Despite this huge burden of disease, however, studies worldwide show that 70.0%–80.0% of young people do not seek the required mental health services they need due to the lack of information as well as negative and false beliefs (Aguirre Velasco et al., 2020; Nobre et al., 2021, Seki Öz, 2021). Mental health literacy (MHL) is the knowledge and skills needed to improve mental health (Elyamani et al., 2021; Jung et al., 2016; Kutcher et al., 2016; Morgado et al., 2021; Nobre et al., 2021). In other words, mental health literacy (MHL) refers to the understanding and competencies that are essential for improving mental well-being and constitutes a key determinant of mental health status. (Elyamani et al., 2021; Jung et al., 2016; Kutcher et al., 2016; Morgado et al., 2021; Nobre et al., 2021; Reis et al., 2022). Low levels of MHL can lead to young people being unaware of mental health problems in themselves or those around them, being unable to access professional help, or seeking inappropriate help and not receiving effective treatment (Jung et al., 2016; Polat Olca, 2023). Therefore, defining the knowledge, beliefs, and attitudes of individuals, especially young people, towards mental health problems is the first step in developing services and policies for community mental health (Elyamani et al., 2021; Jung et al., 2016; Kutcher et al., 2016).

MHL is an important strategy to encourage society to take action for better mental health (Aguirre Velasco et al., 2020; Morgado et al., 2021). Good MHL will enable individuals to access, understand, and use information in a way that promotes and maintains good mental health and facilitates referral to mental health services as early as possible (Jung et al., 2016). However, inadequate MHL is a global problem, particularly in developing countries (Kutcher et al., 2016).

Although most of the international literature on MHL before the COVID-19 pandemic focuses on developed countries, these studies report that MHL levels of the general population and adolescents have gradually increased but remain low/moderate and that low MHL is responsible for poor health outcomes and high suicide rates in societies (Kutcher et al., 2016; Nobre et al., 2021; Özer & Altun, 2022). Gaps exist in the literature regarding MHL after the COVID-19 pandemic in developing countries with diverse cultures, such as Turkey, so more studies are needed (Özer & Altun, 2022; Kantaş Yılmaz & Ünkür, 2023). Turkey, classified as a developing country, is characterized by its young population. Considering that most mental disorders occur in the young population, Turkey stands at risk in terms of mental disorders (Özer & Altun, 2022).

We conducted this study to determine the MHL among students in health departments and the factors influencing them. We included health department students because the responsibilities they will be taking on in the future will enable themselves, and the group they will serve, to protect and improve mental health, improve attitudes towards people with mental illness, reduce stigma, and encourage people with mental illness to benefit from health services at an optimal level. In Turkey, medical education has a curriculum of six years, dentistry five years, nursing four years and health services two years. In the future, these students will also assume decisive and influential roles in public health as health professionals. All these measures will have a positive impact on the quality of patient care and the community's mental health (Özer & Altun, 2022; Öztaş & Aydogan, 2021; Seki Öz, 2021).

Methods

Participants and Data Collection

We employed a descriptive and cross-sectional design in this study. The reporting of this study conforms to the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) statement guidelines for the reporting of observational studies (Ghaferi et al., 2021).

We conducted the study between 1 December 2022 and 20 January 2023 with 1,665 students enrolled in the health faculties (nursing, medicine, dentistry and the vocational school of health services) of Harran University, and continuing active education. Research data were collected by sharing an online survey link with the students.

We created the survey with Google forms, explained the study's purpose to the participants via the online link, and obtained their consent. Consents and forms collected by the researchers were recorded and stored digitally. The confidentiality of student responses was ensured, and responses on Google forms were only viewed through the researchers' e-mail accounts. The response time for the questionnaire ranged between 5–10 minutes.

To conduct the study, the necessary permissions were obtained from the relevant institution, the University Clinical Research Ethics Committee (Date: 31.10.2022, Issue: HRU.22.21.03), the Rectorate, and the health departments of the relevant university. Permission to use the MHLS was obtained from the researchers who conducted the Turkish reliability and validity study of the measurement instruments used. Before completing the survey, we informed the students about the study on the first page of the online link, asking them to check "I agree to participate in the study" if they agreed to participate in the study. Students were informed that they had the right to withdraw from the study at any time and that their participation in the study was voluntary. Students who completed the form online were considered to have agreed to participate in the study.

This study used convenience sampling to reach individuals. Out of the 1,665 students of the health faculties, the study was completed with 1,227 students who voluntarily agreed to participate (participation rate: 75.0%). As the online survey link was used for the research data, 300 people never accessed the link and 138 people did not answer all the questions in the survey. The mean age of the students participating in the study stood at 20.87 (*SD* = 2.50) years (17-39), and 71.9% of the students were women. Almost all of the students were single (97.0%). Table 1 shows other characteristics of the students. It was found that almost all of the students failed to receive any mental health help (92.7%), had no family members with a medical diagnosis related to mental health (87.0%), and 85.7% of the students did not receive any training on mental health.

Table 1. Sociodemographic Characteristics of Students

Characteristics		*n*	%
Gender	Males	345	28.1%
	Females	882	71.9%
Place of Longest Residence	City	778	64.4%
	District	270	22.0%
	Village	179	14.6%
Current Residence	At Home With Family	626	51.0%
	Home alone or with Relatives	98	8.0%
	Dormitory	503	41.0%
Department	Medical or Dental	163	13.3%
	Nursing	454	37.0%
	Vocational School of Health Services	610	49.7%
Year of Education	First year	472	38.5%
	Second year	369	30.0%
	Third ≥ year	386	31.5%
Previous Mental Health Training	Yes	176	14.3%
	No	1,051	85.7%

Note. *N* = 1,227. Participants were on average 20.85 years old (*SD* = 2.50)

Measures

Research data were collected using a researcher-developed survey form, as well as the MHL Scale (MHLS). The form consisted of seven questions describing socio-demographic characteristics (age, gender, education, etc.) and five questions about mental health and health status ("Have you ever received professional mental health help?", "Are you taking psychiatric medication?", etc.).

Mental Health Literacy Scale (MHLS)

The original MHLS was developed by Jung et al. (2016). The Turkish validity and reliability of the scale was conducted by Göktaş et al. (2019). The MHLS consists of 22 items and three sub-dimensions. There are ten items in the knowledge-oriented MHL (KO-MHL) sub-dimension, eight items in the belief-oriented MHL (BO-MHL) sub-dimension, and four items in the resource-oriented MHL (RO-MHL) sub-dimension. The 18 items in the scale's first two sub-dimensions are from the six-point Likert-scales. The four items in the RO-MHL sub-dimension are answered as "yes" and "no." The scores are calculated by assigning one point to "strongly agree," "agree," and "yes" responses and no points to any other responses. Items 11–18 of the scale are coded inversely. The total score that can be obtained from the scale varies between 0 and 22 (Göktaş et al., 2019). The total score provides information about the individual's MHL level. The higher the score on the scale, the better the MHL level. A cut-off score was not calculated for the scale. Cronbach's alpha coefficient we calculated at α = .71 by Göktaş et al. (2019), and it was found to be α = .84 for knowledge-oriented MHL, α = .75 for belief-oriented MHL, α = .73 for resource-oriented MHL, and α = .72 for total MHL. The validity of the MHL scale was not measured, only the reliability.

Statistical Analysis

The **s**tatistical analysis of the data was performed using the SPSS 20.0 package program. The dependent variable is the perceived level of MHL. The independent variables are: students' department, year of education, place of residence, place of longest residence, gender, age, educational status, and mental health knowledge level. We found that the data showed a normal distribution, skewness and kurtosis. Descriptive statistics (numbers, percentages, and mean values), the one-sample t test, one-way ANOVA test, and multiple comparison tests (Tukey) were applied to evaluate the data. We performed multiple linear regression analysis with the variables having significant differences. Multiple linear regression analysis was performed between the total scores of the scale and the students' age and grade. $p < .05$ was accepted as a significant difference in all analyses.

Results

As Table 2 shows, it was found that the health students' mean scores on the total and sub-dimensions of the MHL scale stood at a moderate level compared to the maximum score that could be obtained.

Table 2. Mean MHLS Scores of the Students

Overall Scale and Subscales	Full						
	M	*SD*	*Min*	*Max*	*Value*	*Sk*	*Kt*
Knowledge-Oriented MHL	7.78	2.40	0	10	10	-1.58	2.24
Belief-Oriented MHL	5.87	2.05	0	8	8	-1.48	1.80
Resource-Oriented MHL	2.22	1.51	0	4	4	-0.20	1.42
Total	15.88	3.30	2	22	22	-0.52	-0.41

Notes. Mental Health Literacy. *M:* Mean, *SD:* Standard Deviation, *Min:* Minimum, *Max:* Maximum *Sk* = Skewness; *Kt* = Kurtosis. *N* = 1,227.

Table 3 shows the MHLS scores with respect to the students' socio-demographic characteristics. Accordingly, in the KO-MHL, BO-MHL sub-dimension and total MHL, women students exhibited significantly higher scores than men students did.

Table 3. MHLS Scores According to Socio-Demographic Characteristics of the Students

Variables		Knowledge-Oriented			Belief-Oriented			Resource-Oriented			Total		
		M *(SD)*	*p*	d / ηρ²	M *(SD)*	*p*	d / ηρ²	M *(SD)*	*p*	d / ηρ²	M *(SD)*	*p*	d / ηρ²
AgeGender [a]	Female	7.98*(2.21)*	.001	2.181	5.99*(1.88)*	.001	0.254	2.23*(1.47)*	.622		16.21*(3.15)*	.001	0.342
	Male	2.29*(2.94)*			5.56*(2.42)*			2.19*(1.61)*			15.05*(3.63)*		
Age [a]	≤ 20 years	7.60*(2.39)*	.007	0.152	5.76*(2.06)*	.054		2.13*(1.51)*	.043	0.112	15.50*(3.16)*	.001	0.231
	>20 years	7.97*(2.51)*			5.99*(2.04)*			2.31*(1.51)*			16.27*(3.47)*		
Place of Longest Residence [b]	City	7.75*(2.50)*	.805		5.93*(2.07)*	.119		2.23*(1.51)*	.450		15.92*(3.41)*	.854	
	District	7.86*(2.38)*			5.65*(2.24)*			2.27*(1.50)*			15.78*(3.26)*		
	Village	7.81*(2.39)*			5.98*(1.66)*			2.09*(1.52)*			15.88*(3.11)*		
Current Residence [b]	At home with family	7.66*(2.62)*	.170		5.85*(2.07)*	.931		2.30*(1.52)*	.172		15.81*(3.51)*	.741	
	Home alone or with Relatives	7.79*(2.40)*			5.88*(2.22)*			2.19*(1.57)*			15.87*(3.24)*		
	Dormitory	7.94*(2.25)*			5.90*(2.00)*			2.13*(1.48)*			15.97*(3.12)*		
Department [b]	(1) Medical or Dental	8.22*(1.73)*	.001	0.011	6.37*(1.55)*	.001	0.014	1.84*(1.49)*	.003	0.009	16.44*(2.77)*	.001	0.015
	(2) Nursing	7.96*(2.67)*	1–3: .005		5.98*(2.22)*	1-3: . 027		2.27*(1.47)*	1–2: .005		16.23*(3.74)*	1–3: .003	
	(3) Vocational School of Health Services	7.53*(2.44)*	2–3: .014		5.66*(2.02)*	2-3: .001		2.28*(1.53)*	1–3: .003		15.48*(3.10)*	2–3: .001	
Year of Education [b]	(1) First year	7.42*(2.40)*	.001	0.016	6.02*(1.73)*	.001	0.012	2.15*(1.50)*	.460		15.59*(3.16)*	.001	0.012
	(2) Second year	7.86*(2.35)*	1–2: .005		5.53*(2.25)*	2–1: . 027		2.28*(1.52)*			15.68*(3.14)*	1–3: .003	
	(3) Third ≥ year	8.15*(2.57)*	1–3: .014		6.03*(2.18)*	2–3: . 001		2.24*(1.50)*			16.43*(3.65)*	2–3: .001	
Previous Mental Health Training [a]	Yes	8.48*(1.91)*	.001	0.36	6.04*(1.90)*	.243		2.84*(1.27)*	.001	0.521	17.37*(3.07)*	.001	0.542
	No	7.67*(2.52)*			5.84*(2.08)*			2.11*(1.52)*			15.63I*(3.31)*		

Notes. [a] Independent sample t-test with Cohen's d (d) as effect size; [b] One-Way ANOVA with partial eta-squared (ηρ²) as effect size and Post Hoc Test with Tukey correction

When the age variable was taken into account, we found that the mean scores of the KO-MHL, RO-MHL sub-dimensions and the total MHL scores of students aged 20 years and under were statistically significantly lower than those of students aged 20 years and over.

It was found that the mean scores on the total and sub-dimensions of the MHL scale were not statistically significant according to the place where the students had lived the longest and the place where they were staying.

When we examined the mean scores on the total and sub-dimensions of the MHL scale according to the students' department, we found that the group of students exhibiting the lowest score on the KO-MHL sub-dimension were the persons studying at the Vocational School of Health Services, and the difference between the groups was due to this group. As for BO-MHL and Total MHL, it was found that the mean score of the individuals studying at the Vocational School of Health Services stood lower than that of the other departments and the difference was significant due to this group.

On the RO-MHL scale, we found that persons studying in the Faculties of Medicine and Dentistry demonstrated lower scores than did students in the Nursing and Health Professions Schools, and the difference between the groups was due to this group.

When the students' mean scores on the scale were examined according to their university class status, we found that first-year students reached the lowest mean score on the KO-MHL and the difference between the groups existed due to the first-year students compared to the second and third year and above students. In BO-MHL, the lowest mean score belonged to the second-year students and the statistical difference between the groups was due to the second-year students.

When the total MHLS and sub-dimension scores were examined according to whether the students received any mental health education, it was observed that the KO-MHL, RO-MHL, and total MHLS scores of the students who stated that they received mental health education stood significantly higher than those of the students who did not receive any education.

Table 4. Regression Coefficients and MHL Scale Total Scores

Independent variable	*B*	*SE(B)*	*β*	*t*	*p*
Age	0.78	0.21	.11	3.66	.001
Year of Education	0.17	0.21	.02	0.81	.418
Gender 1 = Female 0 = Male	1.44	0.20	.19	6.97	.001
Previous Mental Health Training 1 = Yes 2 = No	1.66	0.26	.16	6.04	.001
Department 1 = Vocational School of Health Services 2 = Medical or Dental or Nursing	-0.69	0.19	.10	-3.63	.001

Notes. R2 = .08, F(5, 1221) = 22.89, $p < .001$
B = unstandardized regression coefficient; SE(B) = standard error for the unstandardized regression coefficient; β = standardized regression coefficient

In this study, we found that there was a positive correlation between the total MHL level with increasing age and years of education, and that female gender and previous mental health education positively increased the MHL level. On the other hand, it we found that being a student at a vocational school for health services decreased the MHL level.

Discussion

Identifying the mental health knowledge and beliefs of prospective health professionals is an integral part of developing targeted education and mental health promotion initiatives. It is apparent, therefore, that a need exists for university students to be well informed about mental health so that they are able to independently take action

when at risk, build foundational knowledge of how to recognize symptoms, and appropriately seek help (Reis et al., 2022). The mean MHLS score of the university students engaged in the departments of nursing, medicine, dentistry, and the vocational school of health services was 15.88 (*SD* = 3.30). In a study conducted in Turkey with the same scale and health students, the total MHL was 14.53 (*SD* = 3.31) (Kantaş Yılmaz & Ünkür, 2023). Considering that the highest score that can be obtained on this scale is 22, the students' knowledge level is moderate. We observed that the students' mean sub-dimension scores stood at a moderate level, similar to the total score of the MHLS. A study examined the MHL-level of healthcare workers in Turkey at the beginning of the COVID-19 pandemic (between March and May 2020), when there were many uncertainties and anxiety increased accordingly. The healthcare workers' mean MHLS score was found to be 16.96 (*SD* = 3.30), and it was found that the MHL levels of healthcare workers were not at the desired level (Öztaş & Aydogan, 2021). Another study was conducted between September 8 and 10, 2021, among individuals living in a city center. The study examined the level of MHL and found that the mean MHLS score was 14.76 (*SD* = 3.67) (Seki Öz, 2021). The COVID-19 pandemic had a negative impact on the mental health of the population, and its effects are still ongoing, albeit less intensely compared to previous years. University students actively experienced the COVID-19 pandemic and had the opportunity to see its effects on mental health both in themselves and in society. Under these conditions, university students in the health department are expected to increase their mental health related knowledge and practice; however, the scores obtained from the scale are not at the desired level. It was found that the health students' MHL levels did not differ from the results in the research done with other groups (Lee et al., 2020a; Lee et al., 2020b; Miles et al., 2020; Seki Öz, 2021). According to our results, these students' expected higher MHL awareness remains insufficient; therefore, the content of the courses they take on the topic of mental health should be reconsidered. It is thus necessary to investigate why young people's knowledge and practices regarding mental problems are not at the desired level.

In the present study, we found that female students scored higher than male students on the total scale and the KO-MHL sub-dimension than male students. This finding is also consistent with other studies conducted during the pandemic (Kantaş Yılmaz & Ünkür, 2023; Lee et al., 2020a; Lee et al., 2020b; Miles et al., 2020; Seki Öz, 2021). However, one study reported no difference between men and women participants (Öztaş & Aydogan, 2021). These findings indicate that women have more knowledge about mental health, are better able to recognize mental disorders, and are more likely to seek professional mental health services.

In the present study, total MHLS and sub-dimension scores increased with increasing age. One study reported that participants in the 28–32 age group had higher levels of MHLS (Miles et al., 2020). Other studies did not report age-related results (Lee et al., 2020a; Lee et al., 2020b; Öztaş & Aydogan, 2021; Seki Öz, 2021). This is most likely because as the age of university students enrolled in health departments increases, their knowledge of and experience with mental health also increases. In this study, a low correlation was found between age and the total MHL scale. This result suggests that more important factors than age should be considered in the mental health literacy level of students.

In the present study, it was found that the lowest mean score on the KO-MHL belonged to first-year students and the difference between the groups was due to this specific group, while the highest score on the total-MHL belonged to students in grade three and above; this group accounted for the difference between the three groups. This result is expected, since the level of knowledge about mental health increases as the grade level of the students increases. These results are consistent with the literature (Jafari et al., 2021; Lee et al., 2020a; Lee et al., 2020b; Miles et al., 2020; Öztaş & Aydogan, 2021; Seki Öz, 2021). They indicate that unlike age, class status is not a significant factor in terms of increasing the mental health literacy level of students, and there are more important factors affecting it.

One of the most important results of the present article is the analysis of MHL based on the student's field of study. According to this, the total MHLS, BO-MHL, and KO-MHL scores obtained by the students anrolled in the Vocational School of Health Services, which is a two-year program, were lower than those obtained by nursing students with four years of education, medical students with six years of education, and dental students with five years of education. To the best of our knowledge, no study has compared these results yet. This result is most likely due to the courses taken by the students in their respective curricula. Although the educational content of each department is different, it remains important to increase the number of courses on mental health, especially for health department students. A study conducted with 1,213 university students found that those who took courses on mental health issues or had experience in this area demonstrated higher MHL (Miles et al., 2020). One of the interesting findings obtained in the present study is that medical and dental students scored lower in the resource-oriented MHL sub-dimension compared to students in other departments. Resource-oriented questions

include where to go, where to look/call for mental health services, and where to get information. However, medical students, who are expected to have knowledge on this subject, had lower scores in this sub-dimension. This shows that interventions are needed to address this gap. A review conducted before the COVID-19 pandemic found low levels of MHL among doctors, nurses, and other relevant health professionals (Elyamani et al., 2021). This can constitute a real barrier to providing effective mental health services.

In this study, although the effects of age, gender, faculty and previous educational status variables on the total MHL were significant, the total variance explained remained low. This suggests that the above factors may not need to be taken into account in any intervention to increase students' MHL.

Strengths and Limitations

One of the strengths of this study is that the sample size stands quite large compared to that of previous studies. However, the results may have been limited by the fact that the study was conducted over a period of time and focused on the relationship between participants' MHL levels and their influencing factors. Another limitation involves the use of convenience sampling.

Conclusion, Implications, and Future Directions

The results we garnered in the present study indicate that the MHL level of university students enrolled in health departments did not reach the desired and expected levels, and that gender, age, department, year of education, and receiving education on mental health bore an effect on MHL levels.

We recommend many steps that must be taken to improve MHL in Turkey, a developing country with a young population. Improved MHL has the potential to facilitate early intervention, enhance mental health promotion, and enable effective community support. In addition, initiatives to improve the MHL level of future health professionals will surely have a positive impact on future patient outcomes. We recommended that interventions to increase the awareness and MHL levels of health department students should be planned, implemented, evaluated, and – where appropriate – integrated into the educational curriculum.

Students majoring in health departments and by virtue of the responsibilities they will assume in the future, will empower themselves and the group they will serve in the future to protect and improve mental health, better attitudes towards people suffering mental illness, reduce stigma, and enable people with mental illness to benefit from health services at an optimal level. These students will also play a crucial and influential role in public health as health professionals in the future. All of these interventions will have a positive impact on the quality of patient care and community mental health.

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Author contribution
Selma KAHRAMAN: conceptualization, design, methodology, funding acquisition, investigation, project administration, data management, formal analysis, interpretation, supervision, writing original draft, writing review and editing.
Suzan HAVLİOGLU: conceptualization, design, methodology, funding acquisition, investigation, data management, formal analysis, interpretation, writing original draft.
Özlem KAÇKİN: design, funding acquisition, investigation, data management, interpretation, supervision, writing original draft.

Declaration of interest statement
No conflict of interest has been declared by the authors.

Ethical statement

This manuscript is the authors' original work.
All participants engaged in the research voluntarily and anonymously.
Their data are stored in coded materials and databases without personal data.
The studies involving human participants were reviewed and approved by the Noninvasive Clinic Ethical Committee of the Medical Faculty at Harran University (Date: 31.10.2022, Issue: HRU.22.21.03)

Data availability statement

Datasets presented in this article are available from the corresponding author upon reasonable request.

ORCID

Selma KAHRAMAN https://orcid.org/0000-0002-4486-6629
Suzan HAVLİOGLU https://orcid.org/0000-0001-5593-5688
Özlem KAÇKIN https://orcid.org/0000-0003-1720-0343

References

Aguirre Velasco, A., Cruz, I. S. S., Billings, J., Jimenez, M., & Rowe, S. (2020). What are the barriers, facilitators and interventions targeting help-seeking behaviours for common mental health problems in adolescents? A systematic review. *BMC Psychiatry, 20*, Article 293. https://doi.org/10.1186/s12888-020-02659-0

Auerbach, R. P., Mortier, P., Bruffaerts, R., Alonso, J., Benjet, C., Cuijpers, P., Demyttenaere, K., Ebert, D. D., Green, J. G., Hasking, P., Murray, E., Nock, M. K., Pinder-Amaker, S., Sampson, N. A., Stein, D. J., Vilagut, G., Zaslavsky, A. M., Kessler, R. C., & WHO WMH-ICS Collaborators. (2018). WHO World Mental Health Surveys International College Student Project: Prevalence and distribution of mental disorders. *Journal of Abnormal Psychology, 127*(7), 623–638. https://doi.org/10.1037/abn0000362

Elyamani, R., Naja, S., Al-Dahshan, A., Hamoud, H., Bougmiza, M. I., & Alkubaisi, N. (2021). Mental health literacy in Arab states of the Gulf Cooperation Council: A systematic review. *PloS One, 16*(1), Article e0245156. https://doi.org/10.1371/journal.pone.0245156

Gavin, B., Lyne, J., & McNicholas, F. (2021). The global impact on mental health almost 2 years into the COVID-19 pandemic. *Irish Journal of Psychological Medicine, 38*(4), 243–246. https://doi.org/10.1017/ipm.2021.75

Ghaferi, A. A., Schwartz, T. A., & Pawlik, T. M. (2021). STROBE Reporting guidelines for observational studies. *JAMA Surgery*, *156*(6), 577–578. https://doi.org/10.1001/jamasurg.2021.0528

Göktaş, S., Işıklı, B., Önsüz, M. F.,Yenilmez, Ç., & Metintaş, S. (2019). Ruh Sağlığı Okuryazarlığı Ölçeği'nin (Rsoy Ölçeği) Türkçe Geçerlilik ve Güvenilirliğinin Değerlendirilmesi [Evaulation of validity and reliability of the Turkish version of the Mental Health Literacy Scale (Mhl Scale)]. *Konuralp Medical Journal*, *11*(3), 424–431. https://doi.org/10.18521/ktd.453411

Jafari, A., Nejatian, M., Momeniyan, V., Barsalani, F. R., & Tehrani, H. (2021). Mental health literacy and quality of life in Iran: A cross-sectional study. *BMC Psychiatry, 21*, Article 499. https://doi.org/10.1186/s12888-021-03507-5

Jung, H., von Sternberg, K., & Davis, K. (2016). Expanding a measure of mental health literacy: Development and validation of a multicomponent mental health literacy measure. *Psychiatry Research*, *243*, 278–286. https://doi.org/10.1016/j.psychres.2016.06.034

Kantaş Yilmaz, F., & Ünkür P. (2023). Determination of mental health literacy, help-seeking behaviours and psychological distress levels of health science students. *Journal of Health Literacy, 7*(4), 9–20. https://doi.org/10.22038/jhl.2022.66098.1308

Kutcher, S., Wei, Y., & Coniglio, C. (2016). Mental health literacy: Past, present, and future. *The Canadian Journal of Psychiatry, 61*(3), 154–158. https://doi.org/10.1177/0706743715616609

Lai, H.-J., Lien, Y.-J., Chen, K.-R., & Lin, Y.-K. (2022). The effectiveness of mental health literacy curriculum among undergraduate public health students. *International Journal of Environmental Research and Public Health, 19*(9), Article 5269. https://doi.org/10.3390/ijerph19095269

Lee, H. Y., Hwang, J., Ball, J. G., Lee, J., Yu, Y., & Albright, D. L. (2020a). Mental health literacy affects mental health attitude: Is there a gender difference? *American Journal of Health Behavior, 44*(3), 282–291. https://doi.org/10.5993/AJHB.44.3.1

Lee, H. Y., Hwang, J., Ball, J. G., Lee, J., & Albright, D. L. (2020b). Is health literacy associated with mental health literacy? Findings from Mental Health Literacy Scale. *Perspectives in Psychiatric Care, 56*, 393–400. https://doi.org/10.1111/ppc.12447

Miles, R., Rabin, L., Krishnan, A., Grandoit, E., & Kloskowski, K. (2020). Mental health literacy in a diverse sample of undergraduate students: Demographic, psychological, and academic correlates. *BMC Public Health*, *20*(1), Article 1699. https://doi.org/10.1186/s12889-020-09696-0

Morgado, T., Loureiro, L., Rebelo Botelho, M. A., Marques, M. I., Martínez-Riera, J. R., & Melo, P. (2021). Adolescents' empowerment for mental health literacy in school: A pilot study on ProLiSMental psychoeducational intervention. *International Journal of Environmental Research and Public Health, 18*(15), Article 8022. https://doi.org/10.3390/ijerph18158022

Nobre, J., Oliveira, A. P., Monteiro, F., Sequeira, C., & Ferré-Grau, C. (2021). Promotion of mental health literacy in adolescents: A scoping review. *International Journal of Environmental Research and Public Health, 18*(18), Article 9500. https://doi.org/10.3390/ijerph18189500

Özer, D., & Altun Ö. Ş. (2022). Ruh sağlığı okuryazarlığı: Farkındalık ile toplum ruh sağlığını güçlendirme [Mental health literacy: Strengthening community mental health through awareness]. *Psikiyatride Güncel Yaklaşımlar, 14*(2), 284–289. https://doi.org/10.18863/pgy.1016368

Öztaş, B., & Aydogan, A. (2021). Assessment of mental health literacy of health professionals. *Journal of Psychiatric Nursing, 12*(3), 198–204. https://doi.org/10.14744/phd.2021.43265

Polat Olca, S. (2023). Üniversite öğrencilerinin ruh sağlığı okuryazarlığı ve psikolojik sağlamlık düzeylerinin değerlendirilmesi [Evaluation of university students' mental health literacy and psychological resilience levels]. *Gümüşhane* Üniversitesi *Sağlık Bilimleri Dergisi, 12*(1), 118–126. doi.org/10.37989/gumussagbil.1097156

Reis, A. C., Saheb, R., Moyo, T., Smith, C., & Sperandei, S. (2022). The impact of mental health literacy training programs on the mental health literacy of university students: A systematic review. *Prevention Science,* 23, 648–662. https://doi.org/10.1007/s11121-021-01283-y

Seki Öz, H. (2021). Bir il nerkezinde yaşayan bireylerin ruh sağlığı okuryazarlığının incelenmesi [Investigation of mental health literacy of individuals living in a city center]. *Humanistic Perspective, 3*(3), 660–675. https://doi.org/10.47793/hp.993929