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The relationship between nursing students' mental health literacy levels and holistic nursing competencies

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ABSTRACT

Aims: The study was conducted to examine the relationship between nursing students' mental health literacy levels and holistic nursing competencies.

Methods: This was a descriptive and relational study. The sample of the study consisted of 440 nursing department students at a state university. Data were collected with the Sociodemographic data form, the mental health literacy scale, and the holistic nursing competence scale.

Results: The mean score of the mental health literacy scale total scores of the students was 101.11 ± 8.49, and the mean total score of the holistic nursing competence scale total score was 168.41 ± 40.53. There was a positive relationship between the mental health literacy scale total score and the general ability sub-field ($r=0.101$) of the holistic nursing competence scale and the professional development sub-field ($r=0.095$), and this relationship was statistically significant ($p<0.05$).

Conclusion: According to the scale scores, the mental health literacy level of nursing students was low, holistic nursing competencies were at an intermediate level, there was a statistically significant very weak and positive correlation between the MHLS total score and the HNCS general ability (A) sub-field, and the HNCS professional development (B) sub-field. It is recommended that nursing students be given courses on mental health and holistic nursing, and more studies on mental health literacy and holistic nursing and interventional studies that increase students' mental health literacy and holistic nursing competencies.

Keywords: Competency, holistic nursing, literacy, mental health, nursing students

The abstract of the study was presented as an oral presentation at the Muğla Sıtkı Koçman University National Interdisciplinary Student Congress on May 12-14, 2022.

INTRODUCTION

The term mental health literacy was first used by Jorm et al. was defined as "knowledge and beliefs about recognizing, managing, and preventing mental disorders" in 1997.[1-3] Kutcher defined mental health literacy with four components: knowledge of how to achieve and maintain positive mental health; understanding psychiatric disorders and their treatments; reducing stigma related to psychiatric disorders; increasing professional help-seeking behavior and knowing where, when, and how the individual will receive mental health services.[8,10]

A high level of mental health literacy is of great importance in protecting and improving the mental health of individuals. In addition to these initiatives that will positively affect mental health, people's physical and mental health should also be evaluated together.[3-5] To achieve this, it is extremely important to consider individuals physically, socially and spiritually together, in other words, to evaluate them with a holistic approach.[8,10]

The holistic approach is the evaluation of the individual as a whole in a reciprocal relationship with his/her family and environment in terms of physical, mental, emotional, and sociocultural aspects. The suffering individual should be considered not only as a person with the disease, but as a whole in all aspects.[8-10] Holistic nursing care is a special field of nursing practice in which nurses use the nursing knowledge, skills, and theories they have learned to support the care of individuals and the formation of the therapeutic relationship.[11,12] The concept of competence in holistic nursing care is the fulfillment of nurses' personal characteristics, value judgments, attitudes, professional knowledge, competencies, and skills in nursing practices with the awareness of professional obligation. In addition, the continuous and adequate use of the holistic approach, not only in the fields of general health but also in the field of mental health, and determining the holistic competence level of nursing students and working toward achieving such competence will contribute to the development of mental health services.[8,13-14]

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In holistic patient care practices provided by nurses, the bio-psycho-social aspects of individuals are taken into consideration. According to this approach, nurses are responsible for individuals' social, must evaluate their biological, psychological and cultural situations together. In addition, nurses need to offer holistic solutions when planning the health care of individuals.[9] It is of great importance that nurses who care for healthy/sick individuals have good knowledge of mental health as well as physical health, so that they can provide the holistic care that people need.[9-10,12] In order to provide holistic nursing care, especially in nursing education, it is of great importance to evaluate the individual psychologically as well as physically.[9-10,14]

It is predicted that nursing students with high mental health literacy levels and holistic nursing competencies will enable them to evaluate their mental health as a whole as well as the physical health of the people they care for, and thus the nursing care provided will be holistic. The study was conducted to examine the relationship between nursing students' mental health literacy levels and holistic nursing competencies.

METHODS

The study was carried out with the permission of Muğla Sıtkı Koçman University Health Sciences Ethics Committee (Date: 19.04.2021, Decision No: 210028-73). Since the necessity of protecting individual rights was prioritized in the research, the Helsinki Declaration of Human Rights was complied with throughout the study period.

Potential student participants were informed about the research with an informed consent form, and the individuals who agreed to participate were included in the research. It was explained that participation in the research was completely voluntary, that it did not contain any name or sign that would indicate personal information/identity, that they could leave the research whenever they wanted, and that the information obtained would be kept confidential. Each individual participating in the research was treated equally.

This was a descriptive and relational study. The research universe consisted of all students studying in the nursing department of a health sciences faculty of a state university in the spring semester of the 2020-2021 academic year (N=832). According to the sampling determination formula used in cases where the size of the sampling universe is known (5% error and 95% reliability are accepted),[15] it was found that at least 263 participants were needed once the calculation was made, and the students who agreed to participate in the research and filled out the data collection forms formed the sample of the study (n=440).

Data Collection

The data collection process was carried out digitally between 17 June and 30 June 2021 due to the restrictions imposed by the COVID-19 Pandemic. The questionnaires were uploaded to Google Forms[16] by the researcher. The relevant link was sent to the student who is the WhatsApp group leader of each class. The group leader shared the student link in the WhatsApp group and the students filled out the data collection forms by entering the relevant link.

Participants were then asked to complete three different forms. The sociodemographic data form, mental health literacy scale (MHLS) and the holistic nursing competence scale (HNCS). All these scales were in Turkish, and their Turkish translations have all been validated.[11,19]

Sociodemographic Data Form

The Sociodemographic Data Form, prepared by the researcher in line with the literature,[8,13,17,18] consisted of a total of 14 questions about the students' age, gender, high school they graduated from, class, mental health and holistic nursing.

Mental Health Literacy Scale (MHLS)

The scale developed by O'Connor & Casey was adapted into Turkish in 2020 by Tokur Kesgin et al.[19] MHLS is a Likert-type self-assessment tool that is evaluated over a total score of 35 items. The scale has six sub-dimensions: F1, recognizing diseases; F2, information on how to access information; F3, information on risk factors and their causes; F4, information on self-help/treatment interventions; F5, information on accessing professional help; and F6, attitudes that facilitate seeking appropriate help for mental disorders and attitudes toward mental disorders (stigmatization),[19] The Cronbach Alpha coefficient of the scale was 0.89 in the Turkish validity and reliability study[19] and 0.80 in this study. The cut-off score for the Turkish Society on the scale was determined as 109.50 for the Turkish Society, and those who scored above this score were considered to have a high level of mental health literacy.[20] In this study, the MHLS total score and six sub-dimensions were used. The cut-off point of the MHLS was taken as 109.50 according to the mean of the scale total score, and those who scored above this score were considered to have a high level of mental health literacy.

Holistic Nursing Competence Scale (HNCS)

The Scale was developed by Takase & Teraoka and adapted into Turkish in 2019 by Aydın & Hiçdurmaz.[11] It is a 7-point Likert-type scale consisting of 36 items, two parts, and five subfields. The first part (A) contains the general ability subfield, consisting of questions about usual behavior as a person, not as a nurse. The second

part (B) measures competence as a nurse and includes four subfields: Personnel Training and Management, Ethics-Focused Practice, Nursing Care in a Team, and Professional Development. There are no reverse scored items and cut-off points in the scale. An increase in the score obtained from the subscales indicates an increase in holistic nursing proficiency. In the Turkish validity and reliability study of the HNCS, the Cronbach Alpha coefficient was calculated as 0.90.[11] In our study the Cronbach Alpha coefficient was calculated as 0.97.

Statistical Analyses

The IBM SPSS Statistics 23 (SPSS Inc., Chicago, IL, USA) package program was used to evaluate the data. As a result of the statistical analysis, the normality distribution of the data was examined with the Kolmogorov-Smirnov test. It was observed that the data did not demonstrate normal distribution. In addition to descriptive statistical methods (arithmetic mean, standard deviation), comparisons between groups were made with the Kruskal Wallis and Mann Whitney U tests and the Spearman Correlation analysis, and non-parametric Bonferroni analysis was used to determine between which groups there was a significant difference.[21] Therefore, the results were evaluated at the 95% confidence interval and a significance level of $p < 0.05$.

RESULTS

According to the results of the research, the mean age of the students participating in the study was 21.06±1.76, 25.9% of them were 21 years old, 68% were female and 26.6% were fourth year students. Of the nursing students, 84.3% stated that there was no individual with a mental illness in their family, 97.7% stated that they thought the holistic approach was important in the nursing profession, and 52% stated that they evaluated their knowledge level about the holistic nursing approach as moderate.

According to the research data, the MHLS total score average of the nursing students was 101.11±8.49, and the mean scores of the MHLS sub-dimensions were as follows: F1, recognizing diseases, 24.14±3.13; F2, information on how to access information, 5.27±1.11; F3, information on risk factors and their causes, 5.55±1.00; F4, information on self-help/treatment interventions, 8.60±1.11; F5, information on accessing professional help, 14.95±2.43; and F6, stigmatization, 43.01±7.15. The mean HNCS total score of the nursing students was 168.41±40.53. The average score of the HNCS sub-fields were as follows: General Ability (A), 34.92±7.01; Personnel Training and Management (B), 38.57±11.03; Ethics-Focused Practice (B), 42.68±12.10; Nursing Care in a Team (B), 33.70±1.81; and Professional Development (B), 18.52±5.69 (**Table 1**).

Table 1. Examination of the distribution of the scores of the mental health literacy scale and holistic nursing competence scale				
Scale Score Averages	**Min**	**Max**	**$\overline{x}$**	**SD**
Mental health literacy scale total score	74	143	101.11	8.49
Mental Health Literacy Scale's Sub-Dimensions				
F1: Recognizing diseases	10	22	24.14	3.13
F2: Information on how to access information	2	8	5.27	1.11
F3: Information on risk factors and their causes	2	8	5.55	1.00
F4: Information on self-help/ treatment interventions	4	12	8.60	1.11
F5: Information on accessing professional help	4	20	14.95	2.43
F6: Stigmatization	2	72	43.01	7.15
Holistic nursing competence scale total score	36	252	168.41	40.53
Holistic Nursing Competence Scale's Sub-Fields				
General ability (A)	7	49	34.92	7.01
Personnel training and management (B)	9	63	38.57	11.03
Ethics-focused practice (B)	9	63	42.68	12.10
Nursing care in a team (B)	7	49	33.70	1.81
Professional development (B)	8	28	18.52	5.69

When the difference between the MHLS and the sub-dimension scores according to the descriptive characteristics of nursing students was examined, the following results emerged. In terms of gender, female students scored higher as follows: F1, recognizing diseases, 3.05±.35; F2, information on how to access information, 1.07±.23; and F3: information on risk factors and their causes, while male students scored higher on the sub-dimension F6, stigmatization, 2.85 ±.48. Fourth-year students' MHLS total score average, 2.96±.21, was found to be higher than that of other groups, as was their score on the following sub-dimensions: F1, recognizing diseases, 3.17±.43; F2, information on how to access information, 1.10±.20; and F5, information on accessing professional help, 5.18 ±.88. The students who responded that they had mental illness in the family scored as follows on F2, information on how to access information, 1.13±.23; and students who responded that they did not have mental illness in the family scored higher on the F6 sub-dimension, stigmatization, 2.70±.45. Students who thought that a holistic approach was important in nursing scored higher on the following sub-dimensions: F1, recognizing diseases, 3.02±.38; F3, information on risk factors and their causes, 2.78±.50; and F5, information on accessing professional help, 5.01±.77. Students who evaluated their knowledge level about the holistic nursing approach as "good" had a higher MHLS total score, 2.99±.37, and a higher mean score on the F5 sub-dimension, information on accessing professional help, 5.17±.82. In addition, these results are statistically significant ($p < 0.05$) (**Table 2**).

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In our research, the relationship between the MHLS total score, the MHLS' sub-dimensions, the HNCS total score, and the HNCS' sub-fields was examined by correlation analysis. As a result of this analysis, there was a statistically significant very weak and positive correlation between the MHLS total score and the HNCS General Ability (A) sub-field (r=0.101, p=0.033) and the HNCS Professional Development (B) sub-field (r=0.095, p=0.046) (**Table 3**).

Table 2. Investigation of the difference between mental health literacy scale scores according to nursing students' descriptive characteristics

Introductory information	Mental health literacy scale total score $\overline{x}\pm SD$	Mental health literacy scale sub-dimensions					
		F1[a] $\overline{x}\pm SD$	F2[b] $\overline{x}\pm SD$	F3[c] $\overline{x}\pm SD$	F4[d] $\overline{x}\pm SD$	F5[e] $\overline{x}\pm SD$	F6[f] $\overline{x}\pm SD$
Gender							
Female	2.88±.21	3.05±.35	1.07±.23	2.85±.48	4.33±.53	5.04±.73	2.64±.38
Male	2.93±.28	2.93±.45	1.01±.19	2.62±.51	4.23±.59	4.85±.94	2.78±.54
	*U=20641.500 p=.725	*U=18228.500 *p=.020	*U=18212.500 **p=.014	*U=16329.000 **p=.000	*U=19147.000 p=.097	*U=18859.000 p=.070	*U=17972.500 **p=.012
Year							
1	2.83±.26	2.93±.34	1.01±.22	2.70±.52	4.23±.53	4.80±.84	2.68±.46
2	2.84±.21	2.98±.34	1.02±.23	2.82±.49	4.27±.54	4.91±.78	2.64±.41
3	2.90±.25	2.97±.38	1.06±.20	2.75±.45	4.27±.57	5.03±.63	2.73±.47
4	2.96±.21	3.17±.43	1.10±.20	2.82±.53	4.41±.56	5.18±.88	2.70±.43
	***KW=25.634 **p=.000	***KW=25.244 **p=.000	***KW=14.709 **p=.002	***KW=4.612 p=.203	***KW=5.999 p=.112	***KW=12.404 **p=.006	***KW=4.304 p=.230
Having a mental illness in the family							
Yes	3.05±.37	1.13±.23	2.86±.48	4.38±.47	5.13±.79	2.57±.38	2.87±.23
No	3.01±.39	1.04±.21	2.76±.50	4.28±.57	4.95±.81	2.70±.45	2.89±.24
	*U=12203.000 p=.533	*U=10527.500 **p=.012	*U=11480.000 p=.151	*U=11183.000 p=.075	*U=10970.500 p=.055	*U=11131.500 **p=.025	*U=12762.000 p=.969
Is holistic approach important in nursing?							
Yes	2.89±.23	3.02±.38	1.05±.22	2.78±.50	4.31±.55	5.01±.77	2.68±.44
No	2.72±.36	2.66±.52	1.00±.09	2.40±.56	4.00±.52	3.90±1.49	2.76±.61
	*U=1559.500 p=.137	*U=1229.500 **p=.019	*U=1744.000 p=.276	*U=1402.000 **p=.047	*U=1615.500 p=.151	*U=1133.500 **p=.009	*U=1833.500 p=.425
Evaluation of the levels of holistic nursing approach							
Good	2.99±.37	3.09±.37	1.05±.21	2.75±.48	4.38±.56	5.17±.82	2.68±.41
Middle	2.85±.21	2.98±.31	1.05±.22	2.80±.51	4.24±.49	4.89±.70	2.65±.43
Bad	2.81±.28	2.93±.45	1.04±.22	2.62±.59	4.31±.52	4.36±1.11	2.67±.50
	***KW=16.955 **p=.001	***KW=7.084 p=0.69	***KW=1.237 p=.744	***KW=3.790 p=.285	***KW=6.809 p=.078	***KW=28.283 p=.000	***KW=7.668 p=.053

aF1: Recognizing Diseases, bF2: Information on How to Access Information, cF3: Information on Risk Factors and Their Causes, dF4: Information on Self-Help/Treatment Interventions, eF5: Information on Accessing Professional Help, fF6: Stigmatization, *Mann Whitney U Test value=U, **p<0.05, ***Kruskal Wallis Test value=KW

Table 3. Examination of the relationship between nursing students' mental health literacy scale and holistic nursing competence scale scores

Holistic nursing competence scale and sub-fields		Mental health literacy scale and sub-dimensions						
		Mental health literacy scale total score	F1[a]	F2[b]	F3[c]	F4[d]	F5[e]	F6[f]
Holistic nursing competence scale total score*	r	.076	.030	.012	.035	.019	.058	.054
	p	.111	.524	.802	.459	.695	.222	.259
General ability (A)*	r	.101**	.019	-.011	.071	.041	.070	.081
	p	.033	.694	.814	.137	.390	.143	.091
Personnel training and management (B)*	r	.011	-.022	.001	.025	-.024	.028	.022
	p	.823	.651	.985	.595	.615	.561	.649
Ethics-focused practice (B)*	r	.067	.038	-.003	.019	.020	.061	.040
	p	.164	.428	.957	.696	.669	.200	.404
Nursing care in a team (B)*	r	.093	.061	.032	.031	.033	.059	.054
	p	.052	.204	.501	.514	.487	.214	.259
Professional development (B)*	r	.095**	.050	.047	.022	.029	.042	.065
	p	.046	.293	.321	.646	.546	.376	.174

aF1: Recognizing Diseases, bF2: Information on How to Access Information, cF3: Information on Risk Factors and Their Causes, dF4: Information on Self-Help/Treatment Interventions, eF5: Information on Accessing Professional Help, fF6: Stigmatization, *Spearman Correlation Analysis, **p<0.05

DISCUSSION

According to the research data, the MHLS total score average of the nursing students was "101.11±8.49". The cut-off score for the Turkish Society on the scale was determined as "109.50" for the Turkish Society, and those who scored above this score were considered to have a high level of mental health literacy.[20] According to this result, it is thought that the mental health literacy level of nursing students is low. In a study conducted with students studying in health programs[22] and in a study conducted with health professionals,[23] it was determined that the mental health literacy levels of health professionals working outside of mental health units were above moderate but not at the desired level. In a study conducted with nursing students, nearly half of the students stated that their mental health literacy levels were at a low level.[24] In addition, in another study conducted with nursing students, more than half of the students considered themselves inadequate in knowledge, stigmatization, and communication about mental illnesses,[24] in another study,[25] it was found that the mental health literacy levels of the participants who were not interested in mental health issues and who did not have a relative with a mental illness were low. Our research results are similar to the results of these studies. The results reveal the importance of increasing the mental health literacy levels of nursing students.

According to the data of our study, female students' sub-dimensions of recognizing diseases, knowledge of how to access information, knowledge about risk factors and mental health literacy levels were higher than males. In several studies,[5,17,22,25,26] it was found that women's mental health literacy levels were higher than men's, similar to the findings in our study. Another finding related to gender in our study is that men's stigma sub-dimension mean scores were higher than women's. Similar to our study result, a study[5] found that men have higher stigma levels. It is predicted that this result is due to men's lower mental health literacy levels and higher stigma levels.

In this study, it was found that senior students had higher mental health literacy levels and higher sub-dimension mean scores on recognizing diseases, information on how to access information, and information on accessing professional help. These results can be attributed to the fact that the mental health and diseases nursing course is given in the last year in the nursing department curriculum.[27] In a study conducted with nursing students,[24] third year students had higher levels of mental health literacy than first, and second year students. This result is similar to our research results. In line with these results, it was concluded that the mental health and diseases nursing course contributes positively to the level of mental health literacy because it contains detailed information about mental diseases and mental health.

In present study, students who had mental illness in the family had a higher information on how to access information sub-dimension score averages, and those who did not have a family history of mental illness had higher stigmatization sub-dimensions. In a study,[28] students with a relative with mental illness had positive beliefs about mental illnesses, in another study,[25] it was found that the mental health literacy levels of the participants who did not have a relative with a mental illness were low. In line with these results, it is concluded that having a mental illness in the family causes an increase in students' ability to cope with mental illness, an increase in empathy skills, and a decrease in stigmatization.

When the holistic nursing competencies of the students were evaluated, it was determined that they had medium-level holistic nursing competencies. In some studies[8,10,29,30] it was determined that nurses' holistic nursing competencies are high. In our study, the holistic nursing competencies of the students were determined as moderate, and it is thought that the students had awareness about holistic nursing, but this result is not at the desired level. During the data collection phase of the research, the students had been receiving distance education for about a year and a half due to the pandemic. It is thought that this result is related to the students' inability to go to the hospital practice at that time and their inability to evaluate patients one-on-one.

In our research, students who evaluated their knowledge level about the holistic nursing approach as "good" had higher score averages on the sub-dimension, information on accessing professional help. Also, in this study, the relationship between MHLS total score and MHLS' sub-dimensions was examined by correlation analysis. As a result of this analysis, between the MHLS total score and the HNCS General Ability (A) sub-field and between the MHLS total score and the Professional Development (B) sub-field, a statistically very weak and positive correlation was found. This result is attributed to the fact that students were in distance education due to the pandemic, did not have face-to-face hospital practice, and were not able to participate in one-on-one patient care. Although the correlation between scales is weak, there is a positive relationship between the two scales. According to this result, it is thought that increasing the mental health literacy level of students will also increase their proficiency in general skills and professional development sub-domains in holistic nursing competence. The literature was reviewed, but no previous study examining mental health literacy and holistic nursing proficiency could be found. Competence in holistic nursing care is the implementation of nurses' personal characteristics, values, attitudes, knowledge, and skills along with a sense of professional responsibility. Achieving this competence depends on the ethical focus

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of nursing practices, continuous education for nurses and nursing students, proper management of the workforce, and professional development.[8,13,14,31] In line with these results, it is considered that nursing students who will enter the nursing profession in the future should have high mental health literacy levels and holistic nursing competencies, be able to evaluate the physical and mental health of the people they care for as a whole, and should be able to contribute greatly to the holistic nursing care provided.

Limitations

This research is limited to the students participating in the research and data collection forms. In addition, due to the COVID-19 Pandemic, another limitation is that the education is distance education and the data collection phase of the research is carried out in a digital environment. Another limitation of the study is that students cannot participate in face-to-face hospital practices and evaluate patients due to distance education due to the COVID-19 Pandemic.

CONCLUSION

According to the results of this research, the following have been determined. The mental health literacy level of nursing students is low, holistic nursing competencies are at an intermediate level, there was a statistically significant very weak and positive correlation between the MHLS total score and the HNCS General Ability (A) sub-field, and the HNCS Professional Development (B) sub-field. Therefore, according to the results of the research, it is recommended that nursing students be given courses on mental health and holistic nursing, and more studies on mental health literacy and holistic nursing and interventional studies that increase students' mental health literacy and holistic nursing competencies.

ETHICAL DECLARATIONS

Ethics Committee Approval: The study was carried out with the permission of Muğla Sıtkı Koçman University Health Sciences Ethics Committee (Date: 19.04.2021, Decision No: 210028-73).

Informed consent: All students signed free of charge and informed consent form.

Referee Evaluation Process: Externally peer reviewed.

Conflict of Interest Statement: The authors have no conflicts of interest to declare.

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Author Contributions: All the authors declare that they have all participated in the design, execution, and analysis of the paper, and that they have approved the final version.

REFERENCES

1. Griffiths KM, Christensen H, Jorm AF. Metal health literacy as a function of remoteness of residence: an Australian national study. *BMC Public Health.* 2009;9(92):01-20. doi:10.1186/1471-2458-9-92

2. Mond JM. Eating disorders mental health literacy: an introduction. *J Ment Health.* 2014;23(2):51-54. doi:10.1186/1471-2458-9-92

3. Baş M. Research of the relationship between the mental health literacy of the relatives of individuals with mental disorders and their beliefs about mental illnesses and their mental stigmatization. İzmir Kâtip Çelebi University, Institute of Health Sciences, Department of Psychiatric Nursing, Master Thesis. İzmir, Türkiye. 2022. https://tez.yok.gov.tr/UlusalTezMerkezi/tezSorguSonucYeni.jsp

4. Özer D, Şahin Altun Ö. Mental health literacy: strengthening community mental health through awareness. *Curr App Psychiatry.* 2022;14(1):284-89. doi:10.18863/pgy.1016368

5. Çevre E. Determination of mental health literacy level and investigation of affecting factors: The case of Bursa province. University of Health Sciences, Hamidiye Institute of Health Sciences, Department of Health Management, Master Thesis. İstanbul, Türkiye. 2021. https://tez.yok.gov.tr/UlusalTezMerkezi/tezSorguSonucYeni.jsp

6. Kutcher S, Wei Y, Coniglio C. Mental health literacy: past, present, and future. *CJP.* 2016;61(3):154-158. doi:10.1177/0706743715616609

7. Kutcher S, Wei Y, Costa S, Gusmão R, Skokauskas N, Sourander A. Enhancing mental health literacy in young people. *Eur Child Adolesc Psychiatry.* 2016;25(6):567-69. doi:10.1007/s00787-016-0867-9

8. Aydın A. Investigation of nurses' holistic nursing competences and perspectives towards holistic nursing. Hacettepe University, Institute of Health Sciences, Department of Psychiatric Nursing, Doctorate Thesis. Ankara, Türkiye. 2017. https://tez.yok.gov.tr/UlusalTezMerkezi/tezSorguSonucYeni.jsp

9. Demirsoy N, Değirmen N, Kırımlıoğlu N. The place and importance of the concept of holism in health services: review. *Türkiye Klinikleri J Med Ethics.* 2011;19(3):164-174.

10. Açıkgöz E. Examining the relationship between nurses' holistic nursing competence and professional commitment. Ankara Yıldırım Beyazıt University, Institute of Health Sciences, Department of Nursing, Master Thesis. Ankara, Türkiye. 2022. https://tez.yok.gov.tr/UlusalTezMerkezi/tezSorguSonucYeni.jsp

11. Aydın A, Hiçdurmaz D. Holistic nursing competence scale: Turkish translation and psychometric testing. *Int Nurs Rev.* 2019;66(3):425-433. doi:10.1111/inr.12514

12. El Dahshan MEA, Diab GM. Holistic nursing care as perceived by nurses working in wards and critical care units at Menoufiya University Hospital. *IOSR-JNHS.* 2015;4(2):70-78. doi:10.6084/m9.figshare.1379816

13. Saldıroğlu E. Validity and reliability of the holistic nursing competence scale's Turkish version. Aydın Adnan Menderes University, Institute of Health Sciences, Department of Nursing Fundamentals, Master Thesis. Aydın, Türkiye. 2019. https://tez.yok.gov.tr/UlusalTezMerkezi/tezSorguSonucYeni.jsp

14. Brodowicz-Król M, Zarzycka D, Stadnicka S, Bartoń E. The holistic nursing professional competence of students graduate. *J Educ Health Sport.* 2016;6(8):113-127.

15. Akbulut Ö. Determination of sample size in multivariate and different-scale studies. *JASP.* 2021;4(2):199-215. doi:10.51970/jasp.946399

16. Data Collection Form. Accessed 17 June, 2021. https://docs.google.com/forms/d/e/1FAIpQLSdJZ3gD59M6BfhtK-TfzMK6SCm5U-3bbdDtztwjdhhkXzvIaw/viewform

17. Canciğer Eltaş M. Student mental health literacy scale for teacher candidates development research. Mustafa Kemal University, Faculty of Medicine, Department of Public Health, Thesis in Medicine. Hatay, Türkiye. 2020. https://tez.yok.gov.tr/UlusalTezMerkezi/tezSorguSonucYeni.jsp

18. Akdoğan E. Turkish adaptation of mental health literacy scale, validity and reliability study. Karabük University, Institute of Health Sciences, Department of Nursing, Master Thesis. Karabük, Türkiye. 2018. https://tez.yok.gov.tr/UlusalTezMerkezi/tezSorguSonucYeni.jsp

19. Tokur Kesgin M, Pehlivan Ş, Uymaz P. Study of validity and reliability of the mental health literacy scale in Turkish. *Alpha Psychiatry.* 2020;21(2):05-13.

20. Akgün Ş, Tokur Kesgin M, Hançer Tok H. The correlation between health literacy and mental health literacy in Turkish society. *Perspec Psychiatr Care.* 2022;58(4):2950-2961. doi:10.1111/ppc.13146

21. Öncü ÖT, Can Ş. Biostatistical applications in health. *IKCUFHSC.* 2018;3(1):39-45.

22. Öztaş B, Ünal N, Ölçer Z, Çal A, Öge G. Mental health literacy level of university students: a crosssectional study. *J TOGU Heal Sci.* 2023;3(2):198-214.

23. Öztas B, Aydoğan A. Assessment of mental health literacy of health professionals. *J Psychiatric Nurs.* 2021;12(3):198-04. doi:10.14744/phd.2021.43265

24. Saito AS, Creedy DK. Determining mental health literacy of undergraduate nursing students to inform learning and teaching strategies. *IJMHN.* 2021;30(5):1117-26. doi:10.1111/inm.12862

25. Seki Öz H. Investigation of mental health literacy of individuals living in a city center. *Humanistic Perspective.* 2021;3(3):660-75. doi:10.47793/hp.993929

26. Polat S. Evaluation of university students' mental health literacy and psychological resilience levels. *GUJHS.* 2023;12(1):118-26.

27. Muğla Sıtkı Koçman University Nursing Department Curriculum. Accessed 15 December, 2022. Available at: https://sbf.mu.edu.tr/Newfiles/83/Content/2022%20Hem%C5%9Firelik%20M%C3%BCfredat%C4%B1.pdf

28. Evli M. The effect of psychiatric nursing education on the relationship between belief and attitude towards mental diseases. *Ordu University J Nurs Stud.* 2021;4(1):64-74. doi:10.38108/ouhcd.823895

29. Kardaş Ç, Ünlüsoy Dinçer N. Metaphor analysis for holistic nursing care: Constructing a puzzle. *DEUHFED.* 2022;15(3):317-327. doi:10.46483/deuhfed.977034

30. Bakır N, Demir C. Patient-Centered care competency and holistic nursing competence of nurses. *J Health Sci Institute.* 2020;5(3):109-117. doi:10.1371/journal.pone.0287648

31. Wu XV, Chi Y, Panneer Selvam U, et al. A clinical teaching blended learning program to enhance registered nurse preceptors' teaching competencies: pretest and posttest study. *J Med Internet Res.* 2020;24;22(4):e18604. doi:10.2196%2F18604