

Association between Sexual Health Literacy and Belief in Sexual Myths among Students in Health-Related Programmes at a Turkish University: An Analytical Cross-Sectional

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Background and Objectives: This study aimed to examine the association between sexual health literacy and belief in sexual myths among Turkish university students and to identify factors associated with belief in sexual myths.

Materials and Methods: This analytical cross-sectional study was conducted with 255 university students in Turkey. Data were collected using the Demographic Information Form, the Sexual Health Literacy Scale (SHLS), and the Sexual Myths Scale (SMS). Independent-samples *t* tests, one-way ANOVA, Pearson correlation analysis, and multiple linear regression analysis were performed.

Results: The mean SHLS and SMS scores were 55.14 (SD=8.24) and 63.85 (SD=17.11), respectively. A significant negative correlation was found between SHLS and SMS scores ($r=-.250$, $p<.001$). The multiple linear regression model was statistically significant [$F(9, 245)=11.500$, $p<.001$] and explained 29.7% of the variance in SMS scores ($R^2=.297$; adjusted $R^2=.271$). Higher SHLS scores were independently associated with lower SMS scores ($\beta=-.225$, $p<.001$), whereas male sex was associated with higher SMS scores ($\beta=.387$, $p<.001$). Among the variables included in the model, sex had the largest standardised regression coefficient.

Conclusion: Higher sexual health literacy was associated with lower levels of belief in sexual myths. However, sex showed a larger standardised association with belief in sexual myths than sexual health literacy. These findings suggest that differences in belief in sexual myths may not be accounted for by sexual health literacy alone.

Keywords: Sexual Health, Health Literacy, Myths, University, Student

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Introduction

Sexual health, a positive dimension of overall health, is an essential component of individual well-being throughout life. However, it is particularly important during adolescence and young adulthood, as these developmental periods are characterized by the development of sexual attitudes, beliefs, and behaviours. Inadequate or inaccurate sexual health information and related decisions during this period may be associated with sexual and reproductive health problems later in life (1,2).

Sexual myths are widely held but scientifically unsupported beliefs about sexuality that may shape individuals' perceptions of sexual behaviours and experiences. These beliefs may involve misconceptions about sexual roles, sexual behaviour, masturbation, sexual intercourse, sexual satisfaction, sexual violence, and contraception. Beyond being inaccurate information, sexual myths may reflect socially and culturally transmitted expectations regarding sexuality (3–6). Studies conducted among university students in Turkey have documented beliefs concerning premarital sexual experience, the perception that sexual education may encourage sexual activity, and stereotypical expectations regarding the sexual roles of women and men. Similar beliefs have also been reported among students enrolled in health-related programmes (7–9).

Sexual health literacy refers to individuals' ability to access, understand, evaluate, and use sexual health information to make informed health decisions. Higher sexual health literacy has been associated with healthier sexual behaviours, better reproductive health outcomes, and lower levels of misinformation and risky behaviours (10–14). Given that sexual myths represent scientifically unsupported beliefs about sexuality, the ability to critically evaluate sexual health information may also be associated with belief in sexual myths. Understanding this relationship may provide useful evidence for developing sexual health education and counselling interventions that address both access to reliable information and misconceptions about sexuality. Empirical evidence has documented the involvement of health professionals in the provision of sexual health education and counselling, supporting their role in facilitating access to reliable sexual health information and addressing misconceptions in educational settings (4,15,16).

Previous studies have demonstrated an association between sexual health literacy and belief in sexual myths among university students. However, belief in sexual myths is also associated with sociodemographic and educational characteristics (7–9,17–19). Examining sexual health literacy alongside these factors may provide a more comprehensive understanding of the factors associated with belief in sexual myths among university students. Therefore, this study aimed to examine the association between sexual health literacy and belief in sexual myths among Turkish university students and to identify factors associated with belief in sexual myths.

Materials and Methods

Study type

This study employed an analytical cross-sectional design.

Study Questions

1. What are the sexual health literacy scores of university students?
2. What are the belief in sexual myths scores of university students?
3. Is sexual health literacy associated with belief in sexual myths among university students?
4. Which factors are independently associated with belief in sexual myths among university students?

Sample and Sampling

The study was conducted at Lokman Hekim University, a health-focused university in Turkey. The university comprises five faculties and one vocational school, with programmes in medicine, dentistry, pharmacy, health sciences, sport sciences, and vocational health services. Turkish students who were enrolled at the university during the 2023–2024 academic year and volunteered to participate were eligible for inclusion, whereas international students were excluded. Of the 4516 students enrolled at the university during the same academic year, 523 international students were excluded in accordance with the eligibility criteria, resulting in an eligible study population of 3993 students. A non-probability voluntary response sampling method was used. All 3993 eligible students were invited to participate during the data collection period through university-created student e-mail groups, and the online questionnaire remained accessible for two months. The final study size was determined by the number of eligible students who voluntarily completed the questionnaire during this period. A total of 255 students completed the questionnaire. All submitted questionnaires were checked for completeness, and no missing data were identified; therefore, all 255 responses were included in the analysis.

Data Collection Tools

Descriptive Information Form: The form was developed by the researchers based on previous studies and the original development studies of the scales used in this study (8,9,18,20–22). It consisted of 10 questions assessing participants' sociodemographic and sexual health-related characteristics, including age, sex, marital status, parental education level, faculty/school, previous sexual health education, and willingness to have a sexual health counselling unit at the university.

Sexual Health Literacy Scale: The SHLS was developed by Üstgörül (2022) to assess sexual health literacy. The scale consists of 17 items and two dimensions: Sexual Knowledge and Sexual Attitude. Items are rated on a five-point Likert scale, and the last five items are reverse-scored. The Sexual Knowledge dimension consists of 12 items, with scores ranging from 12 to 60, whereas the Sexual Attitude dimension consists of five items, with scores ranging from 5 to 25. The total score ranges from 17 to 85, with higher scores indicating higher sexual health

literacy. The scale has no established cut-off point. Cronbach's alpha for the total scale was .88 in the original development study (21) and .74 in the present study. As neither scale has an established cut-off point and higher scores indicate higher levels of the measured construct, the scale scores were evaluated as continuous variables and interpreted based on mean scores.

Sexual Myths Scale: The SMS was developed by Gölbaşı et al. (2016) to assess belief in sexual myths. The scale consists of 28 items across eight dimensions: sexual orientation, gender, age and sexuality, sexual behaviour, masturbation, sexual violence, sexual intercourse, and sexual satisfaction. Items are rated on a five-point Likert scale, yielding a total score ranging from 28 to 140. Higher total scores indicate a higher level of belief in sexual myths. The scale has no established cut-off point. Cronbach's alpha for the total scale was .91 in the original development study (22) and was similarly found to be .91 in the present study. No established cut-off point is available for the SMS; therefore, interpretation was based on mean scores, with higher scores representing a greater level of belief in sexual myths.

Data Collection

Data were collected between April 1 and June 7, 2024, using an online questionnaire created via Google Forms. Following ethical approval and institutional permission, the questionnaire link was distributed through university-created student e-mail groups by staff from the Student Affairs and Information Technology units. International students were excluded from these distribution groups in accordance with the study eligibility criteria. Reminder e-mails were sent every two weeks throughout the data collection period. Access to the questionnaire was restricted to the university network, and responses could only be submitted while connected to this network.

The first page of the questionnaire contained an electronic informed consent form explaining the purpose of the study, the voluntary nature of participation, confidentiality of the data, the right to withdraw from the study, and that participation or non-participation would have no effect on students' academic standing or performance. Students could not proceed to the questionnaire unless they confirmed their consent by selecting the "I agree" option. After providing electronic informed consent, participants completed the Descriptive Information Form, the Sexual Health Literacy Scale, and the Sexual Myths Scale. All questionnaire items were set as required; therefore, the questionnaire could not be submitted with missing responses. No participant requested withdrawal from the study during the data collection period.

Data Analysis

Data were analysed using IBM SPSS Statistics version 22.0 (IBM Corp., Armonk, NY, USA). Descriptive statistics were presented as frequencies and percentages for categorical variables and means and standard deviations for continuous variables. The normality of continuous variables was assessed using skewness and kurtosis values. In accordance with Tabachnick

and Fidell values between -1.5 and $+1.5$ were considered indicative of an approximately normal distribution (23). Independent-samples t tests were used to compare mean scores between two groups, and one-way analysis of variance (ANOVA) was used for comparisons involving three or more groups. For statistically significant ANOVA results, homogeneity of variances was assessed using Levene's test. As the homogeneity of variance assumption was met, Tukey's HSD test was used for post-hoc comparisons. Pearson correlation analysis was used to examine the associations between SHLS total and subdimension scores and SMS total scores.

Multiple linear regression analysis was performed to identify factors independently associated with SMS scores. The SHLS total score was included as the primary independent variable, while sociodemographic and educational variables that showed statistically significant associations with SMS scores in the bivariate analyses (sex, faculty/school, and willingness to have a sexual health counselling unit) were also included in the model. Categorical variables with more than two categories were dummy-coded before inclusion in the regression model. Female students, students from the Vocational School of Health Services, and students who wanted a sexual health counselling unit were used as the reference categories for sex, faculty/school, and willingness to have a counselling unit, respectively. The assumptions of multiple linear regression were assessed by examining the distribution of residuals and residual scatterplots, the Durbin-Watson statistic, tolerance and variance inflation factor (VIF) values, and Cook's distance. No substantial violations of the regression assumptions were identified. Regression results were reported using unstandardized coefficients (B), standard errors (SE), standardized coefficients (β), 95% confidence intervals (CI), t statistics, and p values. Model performance was reported using R^2 , adjusted R^2 , and the overall F statistic. Statistical significance was set at $p < .05$.

Results

The sociodemographic and sexual health-related characteristics of the participants are presented in Table 1. The mean age of the students was 20.83 ($SD=2.24$) years; 134 (52.5%) were aged 18–20 years, 203 (79.6%) were female, and 249 (97.6%) were single. A total of 172 students (67.5%) were enrolled in the Vocational School of Health Services. The most frequently reported sources of first sexual information were the Internet [$n = 149$ (58.4%)] and friends [$n=125$ (49.0%)]. In addition, 189 students (74.1%) had not previously received sexual health education, while 149 (58.4%) reported that they would like a sexual health counselling unit to be available at their university (Table 1).

The descriptive statistics for the SHLS and SMS scores are presented in Table 2. The mean SHLS total score was 55.14 ($SD=8.24$), with mean scores of 37.95 ($SD=7.68$) for the sexual knowledge subdimension and 17.19 ($SD=3.44$) for the sexual attitudes subdimension. The mean SMS total score was 63.85 ($SD=17.11$) (Table 2).



SHLS scores differed significantly according to age, marital status, previous sexual health education, and willingness to have a sexual health counselling unit. Students aged 21–39 had higher SHLS scores than those aged 18–20 (56.78 ± 8.69 vs. 53.66 ± 7.65 , $p=.002$), while married students had higher scores than single students (59.33 ± 9.70 vs. 54.82 ± 8.04 , $p=.018$). SHLS scores were also higher among students who had received sexual health education than among those who had not (58.46 ± 7.52 vs. 53.98 ± 8.20 , $p<.001$). Students who wanted a sexual health counselling unit had higher SHLS scores than those who did not want one or had no opinion (57.78 ± 7.35 , 52.02 ± 8.57 , and 53.15 ± 8.18 , respectively; $p<.001$).

SMS scores differed significantly according to sex, faculty/school, and willingness to have a sexual health counselling unit. Male students had higher SMS scores than female students (76.75 ± 18.34 vs. 59.61 ± 14.80 , $p<.001$). SMS scores also differed across faculties/schools ($p<.001$), with post-hoc comparisons showing higher scores among students in the Vocational School of Health Services than among students in Medicine and Dentistry. Students who did not want a sexual health counselling unit had higher SMS scores than those who wanted one (69.43 ± 17.70 vs. 61.38 ± 15.86 , $p=.006$) (Table 3).

Table 1. Sociodemographic and Sexual Health-Related Characteristics of the Participants

Features	Number	%
Age: X (SD) = 20.83(2.24)		
18-20	134	52.5
21-39	121	47.5
Sex		
Female	203	79.6
Male	52	20.4
Marital status		
Single	249	97.6
Married	6	2.4
The region where the family lives		
Central Anatolia	203	79.6
Black Sea	14	5.5
Mediterranean	11	4.3
Marmara	8	3.1
Southeast Anatolia	8	3.1
Aegean	6	2.4
Eastern Anatolia	5	2.0
Mother's education level		
University	78	30.6
High School	83	32.5
Middle School	55	21.6
Primary School	35	13.7
Literate	2	0.8



Illiterate	2	0.8
Father's education level		
University	81	31.8
High School	99	38.8
Middle School	50	19.6
Primary School	25	9.8
Faculty/School		
Faculty of Medicine	24	9.4
Faculty of Dentistry	22	8.6
Faculty of Pharmacy	9	3.5
Faculty of Health Sciences	25	9.8
Faculty of Sport Sciences	3	1.2
Vocational School of Health Services	172	67.5
*Source of first sexual information		
Internet	149	58.4
Friend	125	49.0
Parent	97	38.0
Teacher	61	23.9
Health personnel	31	12.2
Spouse/Partner	11	4.3
Pornographic movies	17	6.7
Sexual health education receipt status		
Yes	66	25.9
No.	189	74.1
Willingness to have a sexual health counselling unit		
Yes	149	58.4
No.	21	8.2
No opinion	85	33.3

* Multiple responses were permitted. X: Mean, SD: Standard Deviation

Table 2. Descriptive Statistics for SHLS Total and Subdimension Scores and SMS Total Score

Scales and Subdimensions	X	SD.	Min.	Max.	Scale Min.	Scale Max.
SHLS	55.14	8.24	31.00	76.00	17.00	85.00
Sexual knowledge	37.95	7.68	15.00	60.00	12.00	60.00
Sexual attitudes	17.19	3.44	5.00	25.00	5.00	25.00
SMS	63.85	17.11	28.00	136.00	28.00	140.00

X: Mean, SD: Standard Deviation, Min.: Minimum, Max.: Maximum

Table 3. Comparison of Mean Sexual Health Literacy Scale and Sexual Myths Scale Scores by Selected Student Characteristics

Variables	n	SHLS	SMS
		X (SD)	X (SD)
Age			
18-20	134	53.66 (7.65)	64.44 (16.72)



21-39	121	56.78 (8.69)	63.19 (17.58)
Statistical analysis		t^b= -3.066 p=.002	t^b= .585 p=.559
Sex			
Female	203	54.82 (7.80)	60.76 (15.14)
Male	52	56.40 (9.77)	75.88 (19.09)
Statistical analysis		t^b= -1.235 p=.218	t^b= -6.070 p <.001
Marital status			
Single	249	54.89 (8.13)	63.95 (17.22)
Married	6	65.33 (6.88)	59.33 (12.07)
Statistical analysis		t^b= 3.114 p=.002	t^b= -.654 p=.514
Mother's education level			
Higher Education	78	56.39 (7.88)	60.07 (19.25)
Secondary Education	138	54.04 (8.30)	65.61 (16.26)
Primary education	37	56.37 (8.30)	65.61 (14.67)
Illiterate	2	59.50 (13.43)	58.50 (13.43)
Statistical analysis		F= 1.901 p=.130	F=1.957 p=.121
Father's education level			
Higher Education	81	56.45 (8.39)	60.25 (17.95)
Secondary Education	149	54.42 (8.04)	65.41 (16.29)
Primary education	25	55.16 (8.77)	66.16 (17.99)
Statistical analysis		F=1.592 p=.206	F=2.668 p=.071
Faculty/School			
Medicine ^a	24	57.95 (7.64)	54.83 (16.38)
Dentistry ^b	22	53.63 (8.07)	63.50 (16.03)
Pharmacy ^c	9	59.00 (5.40)	52.88 (16.66)
Health Sciences ^d	25	56.44 (7.28)	54.92 (15.73)
Sport Sciences ^e	3	52.66 (2.08)	75.00 (10.14)
Vocational School of Health Services ^f	172	54.59 (8.07)	66.83 (16.67)
Statistical analysis		F=1.439 p=.211	F=5.115 p <.001 Post-hoc (Tukey HSD): f > a, p = .012 f > d, p = .011
Receipt status of sexual health education			
Yes	66	59.34 (8.55)	62.28 (20.76)
No.	189	53.67 (7.63)	64.39 (15.67)
Statistical analysis		t^b= 5.034 p <.001	t^b= -.754 p=.453
Willingness to have a sexual health counseling unit			
Yes ^a	149	57.58 (7.94)	61.54 (16.82)
No ^b	21	51.28 (7.95)	75.09 (20.44)
No opinion ^c	85	51.82 (7.34)	65.11 (15.63)
Statistical analysis Post-hoc (Tukey HSD)		F=17.775 p <.001 a > b (p=.002) a > c (p<.001)	F=6.377 p=.002 b > a (p=.002) b > c (p=.040)

Pearson correlation analysis showed a significant negative correlation between SHLS total and SMS scores ($r=-.250$, $p<.001$). No significant correlation was found between the sexual knowledge subdimension and SMS scores ($r=-.104$, $p=.098$), whereas a significant negative

correlation was found between the sexual attitudes subdimension and SMS scores ($r=-.366$, $p<.001$) (Table 4).

Table 4. Correlations Between SHLS Total and Subdimension Scores and SMS Total Score

Scales			
	SHLS	Sexual Knowledge Subdimension	Sexual Attitude Subdimension
SMS	$r=-.250$ $p<.001$	$r=-.104$ $p=.098$	$r=-.366$ $p<.001$

The multiple linear regression model examining factors associated with SMS scores was statistically significant [$F(9, 245)=11.500$, $p<.001$] and explained 29.7% of the variance in SMS scores ($R^2=.297$; adjusted $R^2=.271$). Higher SHLS scores were independently associated with lower SMS scores ($B=-0.466$, $\beta=-.225$, $p<.001$). Male students had higher SMS scores than female students ($B=16.389$, $\beta=.387$, $p<.001$). Compared with students in the Vocational School of Health Services, students in Medicine ($B=-12.589$, $\beta=-.215$, $p<.001$), Dentistry ($B=-10.046$, $\beta=-.165$, $p=.004$), and Health Sciences ($B=-8.355$, $\beta=-.145$, $p=.009$) had lower SMS scores. Students who did not want a sexual health counselling unit had higher SMS scores than those who wanted such a unit ($B=8.988$, $\beta=.145$, $p=.013$). Among the variables included in the model, sex had the largest standardized regression coefficient ($\beta=.387$) (Table 5).

Table 5. Multiple Linear Regression Analysis of Factors Associated with Belief in Sexual Myths

Variables	B	SE	β	t	p	95% CI for B
Constant	88.429	6.989	—	12.652	<.001	74.662 102.195
Total SHLS	-0.466	0.120	-0.225	-3.873	<.001	-0.704 -0.229
Sex						
Male	16.389	2.394	0.387	6.846	<.001	11.674 21.104
Faculty/School						
Medicine	-12.589	3.225	-0.215	-3.903	<.001	-18.941 -6.236
Dentistry	-10.046	3.437	-0.165	-2.923	.004	-16.815 -3.277
Pharmacy	-8.096	5.067	-0.087	-1.598	.111	-18.077 1.885
Health Sciences	-8.355	3.164	-0.145	-2.640	.009	-14.588 -2.122
Sport Sciences	0.206	8.651	0.001	0.024	.981	-16.834 17.246
Willingness to have a sexual health counselling unit						
No	8.988	3.597	0.145	2.499	.013	1.904 16.072
No opinion	0.632	2.129	0.017	0.297	.767	-3.563 4.826



Dependent variable: Sexual Myths Scale (SMS) total score. B, unstandardized regression coefficient; SE, standard error; β , standardized regression coefficient; CI, confidence interval; SHLS, Sexual Health Literacy Scale. Reference categories were female for sex, Vocational School of Health Services for faculty/school, and "Yes" for willingness to have a sexual health counselling unit. $R^2 = .297$; adjusted $R^2 = .271$; $F(9, 245) = 11.500$, $p < .001$.

Discussion

In this study, the mean SHLS total score was 55.14 (SD = 8.24). Previous studies conducted among university students in Turkey reported mean SHLS total scores of 45.56 (SD = 10.22) by Yeşil and Apak (2024) and 50.26 (SD = 7.85) by Karakoç and Aydın Doğan (2026). The mean SHLS score observed in the present study was higher than those reported in both previous studies (7,24). Differences across studies may be related to variations in sample size and the sociodemographic and sociocultural characteristics of the study populations.

Regarding belief in sexual myths, the mean SMS total score was 63.85 (SD=17.11). Previous studies conducted among university students in Turkey reported mean SMS total scores of 57.48 (SD=15.31) by Duman et al. (2023), 56.77 (SD=17.80) by Gündül Öz et al. (2020), 53.57 (SD=17.54) by İnan Kırmızıgül et al. (2024), and 68.50 (SD=17.76) by Karakoç and Aydın Doğan (2026). Thus, mean SMS scores reported in previous studies ranged from 53.57 to 68.50, with the score observed in the present study falling within this range (7–9,18,25). Variations in SMS scores across studies may be related to differences in sample size and the sociodemographic and sociocultural characteristics of the study populations.

When the variables associated with sexual health literacy were examined, SHLS scores differed significantly according to age, marital status, and previous receipt of sexual health education. Specifically, students aged 21–39 years had higher SHLS scores than those aged 18–20 years, married students had higher scores than single students, and students who had previously received sexual health education had higher scores than those who had not. Studies conducted in different countries have similarly identified age, marital status, and previous sexual health education as factors associated with sexual health literacy (6,19,26,27). Similar associations have also been reported in studies conducted in Turkey (7,24,28). The higher SHLS scores among older students may be related to greater life experience and increased opportunities to encounter, access, and evaluate sexual health information over time. Similarly, sexual and reproductive health issues may have greater personal relevance for married students, which may be associated with greater engagement with sexual health information. The higher SHLS scores among students who had previously received sexual health education may reflect greater exposure to structured and reliable sexual health information. Taken together, these findings suggest that differences in sexual health literacy among university students may be associated with both accumulated life experiences and opportunities to receive sexual health-specific education.

When the variables associated with belief in sexual myths were examined, SMS scores differed significantly according to sex and faculty/school. Male students had higher SMS

scores than female students, consistent with previous studies reporting greater belief in sexual myths among male university students (8,9,18,25). Previous research among Turkish university students has shown that male students tend to hold more traditional gender-role attitudes than female students (29). This finding should also be considered within the sociocultural context of gender roles in Turkey. In this sociocultural context, different expectations regarding sexuality for men and women and gender-specific socialization processes may contribute to the transmission and maintenance of stereotypical beliefs about sexual roles and behaviours. Accordingly, the higher SMS scores among male students in the present study may reflect not only differences in access to or exposure to sexual health information but also the influence of culturally embedded traditional gender norms. SMS scores also differed according to faculty/school. Students in the Vocational School of Health Services had higher SMS scores than students in Medicine and Health Sciences. Previous studies have also reported differences in belief in sexual myths according to students' academic disciplines, although the findings have not been consistent (8,10,28,30). The differences observed in the present study may partly be related to the unequal distribution of students across faculties/schools. They may also reflect differences in exposure to sexual and reproductive health-related content across academic programmes, particularly in programmes in which students receive more direct education on sexual and reproductive health. Therefore, the differences observed across faculties/schools should be interpreted cautiously and cannot be attributed solely to students' field of study.

Notably, willingness to have a sexual health counselling unit was associated with both SHLS and SMS scores. Students who wanted such a unit had higher SHLS scores than those who did not and those who had no opinion. In contrast, students who did not want a counselling unit had higher SMS scores than both those who wanted one and those who had no opinion. Previous studies have similarly indicated that seeking or expressing a need for sexual health information and counselling is associated with fewer misconceptions about sexuality (27,31,32). These findings may suggest that students with greater sexual health literacy and fewer sexual myths are more aware of the value and need for professional sexual health services. In other words, greater ability to access, understand, and evaluate sexual health information may be accompanied by greater recognition of the importance of reliable and accessible counselling services.

A significant negative correlation was found between SHLS and SMS scores, indicating that higher sexual health literacy was associated with lower belief in sexual myths. This finding is consistent with previous studies reporting an inverse relationship between sexual health literacy and belief in sexual myths (7,24,28). However, the subdimension analyses provide further insight into this relationship. While the sexual knowledge subdimension was not significantly correlated with SMS scores, the sexual attitude subdimension showed a significant negative correlation with belief in sexual myths. This finding suggests that the relationship between sexual health literacy and sexual myths may not be explained by sexual

health knowledge alone. Rather, how individuals evaluate and approach sexuality may be particularly relevant to the persistence of sexual myths. From this perspective, having sexual health information does not necessarily imply the rejection of culturally and socially transmitted misconceptions about sexuality; attitudes shaped within the sociocultural environment may continue to coexist with factual knowledge.

The regression analysis further showed that sexual health literacy remained independently associated with belief in sexual myths after accounting for the other variables included in the model. Higher SHLS scores were associated with lower SMS scores ($\beta = -.225$), whereas sex had the largest standardized regression coefficient in the model ($\beta = .387$). Faculty/school and willingness to have a sexual health counselling unit were also independently associated with SMS scores for some categories. These findings extend the bivariate correlation results by showing that the inverse association between sexual health literacy and belief in sexual myths persisted when the sociodemographic and educational variables included in the model were considered simultaneously. However, the larger standardized coefficient for sex suggests that differences in belief in sexual myths cannot be understood solely in terms of sexual health literacy. Thus, sexual health literacy and gender-related sociocultural influences may represent distinct but interconnected factors associated with belief in sexual myths among university students.

Study Limitations and Strengths: This study has several strengths. It examined sexual health literacy and belief in sexual myths concurrently and evaluated their relationship while accounting for relevant sociodemographic and educational characteristics. The inclusion of both correlation and multivariable regression analyses enabled the relationship between sexual health literacy and belief in sexual myths to be examined both at the bivariate level and after adjustment for other variables included in the model. In addition, examining the sexual knowledge and sexual attitude subdimensions separately provided further insight into which components of sexual health literacy were associated with belief in sexual myths.

This study has several limitations. First, the use of a non-probability voluntary response sampling method may have introduced self-selection bias, as students who chose to participate may have differed from non-participants in their interest in or awareness of sexual health issues. Second, the cross-sectional design does not allow causal relationships to be established between sexual health literacy and belief in sexual myths. The data were collected using self-report measures; therefore, responses to questions concerning sexuality may have been influenced by social desirability or participants' willingness to disclose personal views. The study was conducted at a single health-focused university, the distribution of participants across faculties/schools was uneven, and female students constituted the majority of the sample. These characteristics may limit the representativeness of the sample and the generalizability of the findings to students from other universities, academic disciplines, or sociocultural settings.

Implications and Future Research: The findings support the consideration of structured and accessible sexual health education and counselling within university student services. Such programmes should extend beyond the provision of factual information by providing opportunities to address misconceptions, sexual attitudes, and gender-related sociocultural beliefs. Gender-sensitive approaches may also be considered when designing these services. Future research should examine the relationships identified in this study using multicentre samples with more balanced representation across academic disciplines. Longitudinal studies are needed to clarify the temporal relationship between sexual health literacy and belief in sexual myths, while intervention studies could evaluate the effects of sexual health education and counselling approaches on these outcomes. Further psychometric evaluation of the SHLS and SMS in diverse university student populations would also strengthen the evidence base.

Conclusion

This study demonstrated a significant inverse association between sexual health literacy and belief in sexual myths among university students. Higher sexual health literacy was independently associated with lower belief in sexual myths, while sex, faculty/school, and willingness to have a sexual health counselling unit were also independently associated with SMS scores. Notably, the association with belief in sexual myths was evident for the sexual attitude subdimension but not for the sexual knowledge subdimension, suggesting that the relationship between sexual health literacy and sexual myths may extend beyond factual knowledge. Overall, the findings indicate that belief in sexual myths among university students is associated with sexual health literacy as well as individual and educational characteristics.

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References

1. Alhussaini NWZ, Elshaikh U, Abdulrashid K, Elashie S, Hamad NA, Al-Jayyousi GF. Sexual and reproductive health literacy of higher education students: a scoping review of determinants, screening tools, and effective interventions. *Glob Health Action*. 2025;18(1):2480417. doi:10.1080/16549716.2025.2480417. <https://doi.org/10.1080/16549716.2025.2480417> PMID:40116037 PMCID:PMC11934179
2. World Health Organization. Sexual health [Internet]. Geneva: World Health Organization; 2022 [cited 2025 Aug 10]. Available from: https://www.who.int/health-topics/sexual-and-reproductive-health-and-rights#tab=tab_1
3. Bain LE, Amu H, Tarkang EE. Barriers and motivators of contraceptive use among young people in Sub-Saharan Africa: a systematic review of qualitative studies. *PLoS One*. 2021;16(6):e0252745. doi:10.1371/journal.pone.0252745. <https://doi.org/10.1371/journal.pone.0252745> PMID:34086806 PMCID:PMC8177623
4. Cohen N, Mendy FT, Wesson J, Protti A, Cissé C, Gueye EB, et al. Behavioral barriers to the use of modern methods of contraception among unmarried youth and adolescents in eastern Senegal: a qualitative study. *BMC Public Health*. 2020;20(1):1025. doi:10.1186/s12889-020-09131-4. <https://doi.org/10.1186/s12889-020-09131-4> PMID:32600290 PMCID:PMC7325306
5. Mwaisaka J, Gonsalves L, Thiongo M, Waithaka M, Sidha H, Agwanda A, et al. Exploring contraception myths and misconceptions among young men and women in Kwale County, Kenya. *BMC Public Health*. 2020;20(1):1694. doi:10.1186/s12889-020-09849-1. <https://doi.org/10.1186/s12889-020-09849-1> PMID:33176738 PMCID:PMC7661170
6. Vamos CA, Thompson EL, Logan RG, Griner SB, Perrin KM, Merrell LK, et al. Exploring college students' sexual and reproductive health literacy. *J Am Coll Health*. 2020;68(1):79-88. doi:10.1080/07448481.2018.1515757. <https://doi.org/10.1080/07448481.2018.1515757> PMID:30388946
7. Karakoç S, Aydın Doğan R. The relationship between sexual health literacy and sexual myths among health science students: a cross-sectional study in Türkiye. *J Obstet Gynaecol Res*. 2026;52(3):e70252. doi:10.1111/jog.70252. <https://doi.org/10.1111/jog.70252> PMID:41850734
8. İnan Kırmızıgül E, Damsarsan S, Baran GK, Şimşek Küçükkeleş D, Gölbasi Z. Identification of sexual myths of university students in health-related departments and affecting factors. *Rev Assoc Med Bras* (1992). 2024;70(8):e20240416. doi:10.1590/1806-9282.20240416. <https://doi.org/10.1590/1806-9282.20240416> PMID:39230145 PMCID:PMC11370744
9. Örüklü C, Dağcı DG, Çakmak S. Üniversite öğrencilerinin cinsel mitlere bakış açısı ve ilişkili faktörler. *İstanbul Gelişim Üniversitesi Sağlık Bilimleri Dergisi*. 2021;(13):71-87. doi:10.38079/igusabder.845736. <https://doi.org/10.38079/igusabder.845736>
10. Avcıbay B. Üniversite öğrencilerinin cinsel mitlere ilişkin inanç ve tutumları. *Lokman Hekim Derg*. 2020;10(3):392-403. doi:10.31020/mutftd.720744. <https://doi.org/10.31020/mutftd.720744>
11. Gündül Öz H, Balcı Yangın H, Ak Sözer G. Cinsel sağlık dersinin hemşirelik öğrencilerinin cinsel mitleri üzerine etkisi. *STED*. 2022;30(6):400-408. doi:10.17942/sted.910182. <https://doi.org/10.17942/sted.910182>
12. Martínez-Vázquez S, Hernández-Martínez A, Peinado-Molina RA, Martínez-Galiano JM. Nursing students' attitudes towards sexuality before training in sexual and reproductive health. *Nurs Open*. 2023;10(10):7038-7047. doi:10.1002/nop2.1959. <https://doi.org/10.1002/nop2.1959> PMID:37515451 PMCID:PMC10495724



13. Uzdil N, Günaydın Y. Ebelik öğrencilerinde cinsel tutum ve inanışlar üzerinde cinsel utangaçlığın etkisi. *Androloji Bülteni*. 2022;24(4):264-272. doi:10.24898/tandro.2022.03764. <https://doi.org/10.24898/tandro.2022.03764>
14. Guo R, Xie H, Zhao W, Wang J. Web-based sexual and reproductive health education for adolescents aged 10-17 years: a systematic review and meta-analysis. *BMJ Paediatr Open*. 2025;9(1):e003714. doi:10.1136/bmjpo-2025-003714. <https://doi.org/10.1136/bmjpo-2025-003714> PMID:41176330 PMCID:PMC12581069
15. Nymo B, Eriksen SB, Oygarden AMU. The role of school nurses in promoting positive sexual health education: a scoping review. *J Sch Nurs*. 2026;42(1):6-18. doi:10.1177/10598405251337769. <https://doi.org/10.1177/10598405251337769> PMID:40356460 PMCID:PMC12819888
16. Rosário J, Dias S, Pedro AR. Co-creation of sexual and reproductive health literacy interventions and access to healthcare services among higher education students: using the nominal group technique. *Port J Public Health*. 2026;43(4):249-264. doi:10.1159/000549299. <https://doi.org/10.1159/000549299> PMID:41409444 PMCID:PMC12707951
17. Üstgörül S, Önür H, Tekin Önür H. Üniversite öğrencilerinin toplumsal cinsiyet algıları ile cinsel tutumlarının incelenmesi. *Al-Farabi Int J Soc Sci*. 2020;5(3):77-87. doi:10.46291/Al-Farabi.050308. <https://doi.org/10.46291/Al-Farabi.050308>
18. Güdül Öz H, Ak Sözer G, Balcı Yangın H. Hemşirelik öğrencilerinin cinsel mitlere inanma durumları ve etkileyen faktörler. *Ordu Üniversitesi Hemşirelik Çalışmaları Dergisi*. 2020;3(2):136-145. doi:10.38108/ouhcd.743376. <https://doi.org/10.38108/ouhcd.743376>
19. Nematzadeh S, Shahhosseini Z, Moosazadeh M, Hamzehgardeshi Z. Sexual health literacy level and its related factors among married medical sciences college students in an Iranian setting: a web-based cross-sectional study. *Reprod Health*. 2024;21(1):53. doi:10.1186/s12978-024-01756-7. <https://doi.org/10.1186/s12978-024-01756-7> PMID:38632616 PMCID:PMC11025204
20. Kartal B. Cinsel sağlık eğitiminin hemşirelik öğrencilerinin cinsel mitlerine etkisi. *Androloji Bülteni*. 2020;22(3):167-171. doi:10.24898/tandro.2020.80774. <https://doi.org/10.24898/tandro.2020.80774>
21. Üstgörül S. Cinsel sağlık okuryazarlık ölçeğinin geliştirilmesi: geçerlik ve güvenirlik çalışması. *Ankara Sağlık Bilimleri Dergisi*. 2022;11(2):164-176. doi:10.46971/ausbid.1086403. <https://doi.org/10.46971/ausbid.1086403>
22. Gölbaşı Z, Evcili F, Eroğlu K, Bircan H. Sexual Myths Scale (SMS): development, validity and reliability in Turkey. *Sex Disabil*. 2016;34(1):75-87. doi:10.1007/s11195-016-9430-3. <https://doi.org/10.1007/s11195-016-9430-3>
23. Tabachnick BG, Fidell LS. Using multivariate statistics. 7th ed. Pearson; 2021.
24. Yeşil Y, Apak H. Ebelik ve hemşirelik bölümü öğrencilerinin cinsel sağlık okuryazarlığı ve cinsel sağlığa yönelik tutumlarının belirlenmesi. *Gümüşhane Üniversitesi Sağlık Bilimleri Dergisi*. 2024;13(1):48-54. doi:10.37989/gumussagbil.1410112. <https://doi.org/10.37989/gumussagbil.1410112>
25. Duman R, Dinç Kaya H, Günaydın S. Üniversite öğrencilerinde cinsel mitlere inanma düzeyi ile kadına yönelik namus anlayışı arasındaki ilişki. *Ordu Üniversitesi Hemşirelik Çalışmaları Dergisi*. 2023;6(3):631-639. doi:10.38108/ouhcd.1244315. <https://doi.org/10.38108/ouhcd.1244315>
26. Zakaria M, Karim F, Mazumder S, Cheng F, Xu J. Knowledge on, attitude towards, and practice of sexual and reproductive health among older adolescent girls in Bangladesh: an institution-based cross-sectional study. *Int J Environ Res Public Health*. 2020;17(21):7720. doi:10.3390/ijerph17217720. <https://doi.org/10.3390/ijerph17217720> PMID:33105739 PMCID:PMC7672593
27. Kohansal F, Nourizadeh R, Sattarzadeh Jahdi N, Arab Bafrani M, Mehrabi E. The effect of counseling based on health promotion awareness on self-care needs and reproductive and sexual health literacy of newly married women: a randomized controlled clinical trial study. *BMC Womens Health*. 2024;24:374. doi:10.1186/s12905-024-03214-9. <https://doi.org/10.1186/s12905-024-03214-9> PMID:38937728 PMCID:PMC11212208



28. Sürmeli Y, Yıldırım C, Yüzbaşıoğlu Ü, Güldağ Ö. The effect of sexual health education on sexual myths and sexual health literacy among university students. *Afr J Reprod Health*. 2024;28(10):112-121. doi:10.29063/ajrh2024/v28i10.11. <https://doi.org/10.29063/ajrh2024/v28i10.11> PMID:39625216
29. Gursoy E, McCool WF, Sahinoglu S, Yavuz Genc Y. Views of women's sexuality and violence against women in Turkey: a cross-sectional investigation among university students. *J Transcult Nurs*. 2016;27(2):189-198. doi:10.1177/1043659614550485. <https://doi.org/10.1177/1043659614550485> PMID:25225236
30. Doğan MB, Çavuş Solmaz Y, Eycan Ö, Abdan M, Doğan M, Güder P, et al. Attitudes and views of university students on sexual myths/sexual assault myths. *Bull Leg Med*. 2022;27(1):24-34. doi:10.17986/blm.1551. <https://doi.org/10.17986/blm.1551>
31. Dişsiz M, Akkurt Yalçintürk A, Sümer G, Tavşan C, Dede S, Durmuş Ş, et al. Hemşirelik öğrencilerinin cinsel sağlık konusundaki bilgi düzeyleri ve görüşleri. *Zeynep Kamil Tıp Bülteni*. 2020;51(2):78-83. doi:10.16948/zktpb.691007. <https://doi.org/10.16948/zktpb.691007>
32. Işık HK, Şen Aytekin M, Kahraman A, Öcalan D. Ebelik bölümü öğrencilerinin cinsellik ve cinsel sağlıkla ilişkili bilgi düzeylerinin değerlendirilmesi. *Anatolian J Health Res*. 2023;4(3):125-131. doi:10.29228/anatoljhr.72354. <https://doi.org/10.29228/anatoljhr.72354>