



Research Article/Özgün Araştırma

Religiosity, internalized sexism, and sexual attitudes in late female adolescents: A structural equality modeling

Geç dönem kadın ergenlerde dindarlık, içselleştirilmiş cinsiyetçilik ve cinsel tutumlar: Yapısal eşitlik modellemesi

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**Abstract**

**Aim:** Adolescence is a period marked by rapid physical and sexual changes, as well as the internalization of societal norms. However, while studies on sexual attitudes and religiosity yield inconsistent results, research on sexism remains limited. This study aims to examine the impact of religiosity on internalized sexism and sexual attitudes in late-adolescent women.

**Materials and Methods:** Conducted in Turkey, this study explores the effects of religiosity on internalized sexism and sexual attitudes among late-adolescent women. The sample consists of 670 women aged 18-25 years.

**Results:** Religiosity directly influences sexual attitudes and internalized sexism in late-adolescent women. Moreover, internalized sexism plays a mediating role in the relationship between religiosity and sexual attitudes.

**Conclusion:** Appropriately interpreting religious knowledge acquired from reliable sources positively influences adolescent women's attitudes toward sexism and sexuality. In this context, multidisciplinary collaborations among healthcare professionals are assumed to have a protective effect against risky sexual behaviors.

**Keywords:** Religiosity, internalized sexism, sexual attitudes, healthcare professionals, late adolescent women.

**Öz**

**Amaç:** Adölesan dönem pekçok alanda olduğu gibi fiziksel ve cinsel değişimlerinde hız kazanmasına ek olarak toplumsal normlarında içselleştirildiği bir dönem olmasına rağmen cinsel tutum ve dindarlığa ilişkin sonuçlar tutarsız iken, cinsiyetçilikle ilgili çalışmalar sınırlıdır. Bu araştırmanın amacı, geç ergenlik dönemindeki kadınlarda dindarlığın içselleştirilmiş cinsiyetçilik ve cinsel tutumlar üzerindeki etkisini belirlemektir.

**Gereç ve Yöntem:** Bu çalışma geç dönem ergen kadınlarda dindarlığın içselleştirilmiş cinsiyetçilik ve cinsel tutumlar üzerine etkisini belirlemek amacıyla Türkiye'de yürütülmüştür. Çalışmanın örneklemini 18-25 yaş arası 670 kadın ergen oluşturmuştur.

**Bulgular:** Geç dönem adölesan kadınlarda dindarlık, cinsel tutum ve içselleştirilmiş cinsiyetçiliği direkt etkilemektedir. Ayrıca dindarlık ile cinsel tutumlar arasındaki ilişkide içselleştirilmiş cinsiyetçilik aracı role sahiptir.

**Sonuç:** Doğru kaynaklardan edinilen din bilgisinin uygun yorumlanması ile kadın ergenlerin cinsiyetçiliğe ve cinselliğe yönelik tutumlarını olumlu etkilediği sonucuna ulaşılmıştır. Bu bağlamda sağlık profesyonellerinin ergenlere yönelik multidisipliner ekiple birlikte çalışmalar yapmalarının riskli cinsel davranışlara karşı koruyucu etkisinin olacağı varsayılmaktadır.

**Anahtar kelimeler:** Dindarlık, içselleştirilmiş cinsiyetçilik, cinsel tutumlar, sağlık profesyonelleri, geç dönem ergen kadınlar.

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## Introduction

Sexuality, a vital indicator of the individual's physical, spiritual, and social well-being, is one of the critical health issues of adolescence, as it affects future life. Awareness of sexuality begins in childhood, and a sense of sexual identity develops during adolescence.

Adolescence is considered between the ages of 10-19 (WHO, 2003)<sup>1</sup> and is classified as early, medium, and late adolescence. Although it is reported that the early adolescence period covers the 11-14 age range, the middle adolescence period covers the 13-17 age range, the late adolescence period covers the 16-19 age range,<sup>2</sup> it is also emphasized that late adolescence continues until the age of 25.<sup>3</sup> Late adolescence is significant because the individual develops an identity by becoming autonomous. It is also of considerable importance in terms of internalizing sexual identity, sexual orientation, social norms, and roles and shaping moral values in this period.<sup>4</sup> Understanding the individual factors affecting sexual attitudes and beliefs is essential for adolescents to develop a sexual identity and orientation appropriate for their gender. In addition, the World Health Organization (WHO, 2017)<sup>5</sup> stated that concepts such as gender, sexual health, sexuality, and sexual rights are the main themes for reproductive health and sexual health. In this study, religiosity and internalized sexism are discussed as factors that can affect sexual attitudes. The results are expected to reference sexual and psychological education and activity development activities for adolescents.

## Background

Developmental psychology considers the individual as a whole with its bodily, behavioral, sexual, cognitive, linguistic, emotional, and social dimensions. It evaluates the individual's development as a whole, consisting of separate periods. Adolescence, which has an essential place in the developmental periods, is the transition period from childhood to adulthood, where biological, psychological, physical, and social development and maturation are experienced. This stage is a period of very rapid physical

and sexual changes.<sup>6,7</sup> Adolescents are a significant proportion of the total population in Türkiye and the world.<sup>8,9</sup> Late adolescence, which covers the ages of 18 to 24, is a developmental stage characterized by the individual's gradually becoming autonomous and gaining an adult identity.<sup>3,4</sup> In this period, adolescents entering university and professional life acquire new social roles and identities.<sup>4</sup> It is the most critical period in which sexual attitudes, social roles, and attitudes, religious values that are effective in forming moral values are shaped and affect each other.

Religious values, which are the reality of society and human beings, strongly influence the shaping of social phenomena. In this context, the influence of religion on constructing sexuality, which is a social phenomenon, and determining gender-related roles and principles is undeniable.<sup>10</sup> While sexuality is interpreted as coming together for reproduction and the continuation of the lineage in Judaism, celibacy and virginity are emphasized in Christianity. In Islam, on the other hand, it has been emphasized that sexuality experienced in appropriate (Halal) ways is worship and detailed information about sexuality has been given. Besides, there are some differences; it is stated that monotheistic religions emphasize the elimination of sexual desires and desires within legitimate limits.<sup>11</sup>

The desires and pursuits that increase in parallel with the emotional and cognitive skills developing rapidly during adolescence effectively shape the attitudes toward religious and sexual life in adolescents.<sup>6,12</sup> However, the findings on how these attitudes affect each other are inconsistent.<sup>13-16</sup> Although it is generally known that religiosity is a protective factor for risky sexual behaviors in adolescents,<sup>14-16</sup> it is emphasized that as the level of religiosity increases, sexual liberalization decreases as well as risky sexual behaviors increase.<sup>13,17</sup>

This period is also when adolescents strive to integrate with society, socialize, and adapt to social norms.<sup>18</sup> These norms shape the sexual and religious attitudes of the adolescent, as well as their perspective on gender. It is

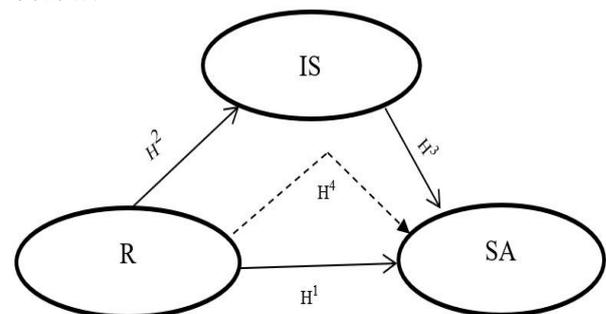
known that social pressure against women has increased, and sexual attitudes have been negatively affected in Türkiye.<sup>19</sup> While sexuality is considered a task/activity that needs to be fulfilled rather than giving consent for men, it appears as a prohibited action for women.<sup>20</sup> These social attitudes and pressures make gender differences towards sexuality more apparent, and it is thought that women increase the potential for risky behavior in this regard. It is also reported that adolescents are sexually active. In addition, adolescents are inclined to dangerous behavior due to limited resources to protect or support them from unsafe sex, sexually transmitted infections, or pregnancy. It is stated that this situation increases even more in late adolescence.<sup>21</sup>

The influence of moral, economic, social, and religious conditions on individuals' sexual attitudes cannot be denied, and these conditions are closely related to the role assigned to women. Therefore, sexuality, in general, is taboo in Türkiye, and moral debates are likely to occur when the words "sexuality" and "woman" come together.<sup>22</sup> These discussions may lead to women's submission and a tendency to internalize all or some of the objectifying, humiliating, and oppressive attitudes about women who make up society.<sup>23</sup> This tendency causes women to increase their perceptions of worthlessness towards themselves and other women, that is, to experience internalized sexism.<sup>24</sup> In the formation of this negative perception towards women, it is seen that women are humiliated and devalued with the use of religion, which is the most decisive spiritual element in culture.<sup>25</sup> Women living in such a social environment are more likely to experience internalized sexism. Internalized sexism is a type of internalized oppression, and this oppression is a mechanism that is sustained not only by external control but also by subordinating the minds of individuals/groups.<sup>26</sup> Therefore, internalized sexism affects women's emotional<sup>27</sup> and relational health<sup>28</sup> as well as their perceptions of sexual attitudes.<sup>29</sup>

It is known that there is a relationship between the attitudes of adolescents towards sexual education and the attitudes of families towards sexism<sup>30</sup> and that families give

answers to questions about sexuality based on religious beliefs.<sup>31</sup> How scientific these answers are is a matter of debate. In this context, it is essential for healthcare professionals who are responsible for providing holistic care to consider the sexual and religious beliefs and attitudes of individuals and families. It is also emphasized that healthcare professionals should increase their knowledge and awareness of these issues.<sup>32</sup> For this reason, it is thought that the present study will contribute to the literature in terms of realizing how the attitudes towards sexism and sexuality are affected by the religious beliefs and attitudes of healthcare professionals, who are an essential part of society and the health system.

In addition to the adolescents' search for their personality identity and social roles, research on this topic is considered necessary due to intense experiences of sexual emotions, sexual curiosity, and risky sexual intercourse. However, when the literature on this subject is examined, it is reported that research on women's sexuality is quite limited.<sup>33</sup> In addition, the effects of taboos and social perceptions on individuals have been virtually undiscovered, and it is expressed that it is essential to conduct such research.<sup>33</sup> It is thought that this research will contribute to the literature both in terms of religiosity and internalized sexism that affect women's sexual attitudes and in terms of the research method. Therefore, this study aims to investigate the effects of internalized sexism and religiosity levels on the sexual attitudes of late adolescent women (18-25 years old). The hypotheses established for this purpose are presented below:



**Figure 1.** Hypothesis model

\* SA: Sexual Attitudes; R: Religiosity; IS: Internalized Sexism

**H<sup>1</sup>:** The level of religiosity of late adolescent women affects their sexual attitudes.

**H<sup>2</sup>:** The level of religiosity of late adolescent women affects the level of internalized sexism.

**H<sup>3</sup>:** The level of internalized sexism of late adolescent women affects their sexual attitudes.

**H<sup>4</sup>:** Internalized sexism has a mediating role in the assumed relationship between the level of religiosity and sexual attitudes of late adolescent women.

## Materials and Methods

### Design and sample

This is a cross-sectional study aiming to investigate the effects of late adolescent (18-25 years old) women's internalized sexism and religiosity levels on their sexual attitudes by establishing structural equation modeling (SEM). A STROBE Statement for cross-sectional studies was used to report the study (<https://www.strobe-statement.org/checklists/>). The study inclusion criteria were adolescents between 18 and 25 who were female and had approved the informed consent form. Adolescents who had difficulties reading and understanding Turkish were excluded from the study. Data were collected between 30 December 2021 and 29 January 2022. Participants were selected by non-probability, convenience, and serial sampling; all female adolescents who met the inclusion criteria during the data collection process were invited to participate.

The research population consisted of female adolescents aged 18-25. Sample calculation was not made in the study, and theoretical information about the number of samples in SEM was considered. Structural equation modeling has no basic rule or standard for sample size.<sup>34</sup> Including three latent and 18 observed variables (all observed indicators and socio-demographic variables), the minimum sample size of 200 was calculated as a moderately effective (0.3) minimum sample size with a power value of 0.95 and an  $\alpha$  value of 0.05 in this study, in a priori sample size calculator designed to calculate the sample size of SEM (Soper, 2015). In addition, attention was paid to the fact that the number of variables in the model should be between 10-20 times and not less than 200 in line with the recommendation of the literature.<sup>34</sup> The study forms created online were delivered to adolescents through WhatsApp groups. A group was not made for the study, and no additional information was requested. Adolescents were given 30 days to increase their willingness to participate in the survey at

their appropriate time and to ensure the reliability of the answers to the questions. At the end of this period, the study was terminated with 670 adolescents who voluntarily participated. The details of the socio-demographic and sexual attitude characteristics are given in Table 1.

The data were collected with the information form containing the socio-demographic (age, gender, etc.) data of the individuals, the Hendrick Sexual Attitude Scale, the Religiosity Scale, and the Women's Internalized Sexism Scale.

### Socio-demographic characteristics data form

This form consists of questions such as age, family type, marital status, talking about sexuality with the family, sexual intercourse experience, and opinions about pre-marital sexual intercourse.

### Hendrick sexual attitudes scale

The Turkish validity and reliability of the scale, which was made by Karaçam et al.<sup>35</sup>, consists of 23 items. It is in a 5-point Likert type. It comprises four sub-dimensions: Permissiveness, Birth Control, Communion, and Instrumentality. A score between 23 points and 115 points is obtained from the scale. High scores from the total of the scale indicate that the individual has an ideal, healthy, and balanced sexual attitude. In contrast, low scores indicate that the individual is in a self-centered sexual life and has a sex attitude far from an ideal sexual attitude. The total scale's Cronbach alpha internal consistency coefficient was 0.85.<sup>35</sup> In our study, this value was determined as 0.89.

### Religiosity scale

It is a scale developed by Ayten and Hussain<sup>36</sup>, has nine items and a 5-point Likert type. It consists of two sub-dimensions: Religious influence and religious faith and worship. A score between 9 and 45 points is obtained from the scale. Higher scores on the scale indicate an elevated level of religiosity. The Cronbach's alpha coefficient for the overall scale was 0.76.<sup>36</sup> The Cronbach's alpha of the scale was determined to be 0.89 in our study.

**Table 1.** Relationships between socio-demographic characteristics and variable scores.

Descriptive Characteristics	N(%)	SA	R	IS
		Mean±SD	Mean±SD	Mean±SD
<b>Family type</b>				
Nuclear family	559 (83.4)	80.38±15.80	32.61±8.06	91.53±15.73
Extended family	92 (13.7)	78.23±14.38	34.20±7.23	95.13±15.55
Broken family	19 (2.9)	77.26±16.37	30.10±9.61	94.05±14.19
<i>p</i>		0.359	0.072	0.108
<b>Marital status</b>				
Unmarried	660 (98.5)	80.02±15.68	32.72±8.00	92.01±15.61
Married	10 (1.5)	78.70±12.84	35.20±9.21	97.90±20.45
<i>p</i>		0.791	0.334	0.239
<b>Talking about sexual matters with family</b>				
Yes	113 (16.9)	74.29±14.81	29.88±8.51	88.67±16.33
No	557 (83.1)	81.15±15.55	33.34±7.79	92.79±15.48
<i>p</i>		<b>0.001</b>	<b>0.001</b>	<b>0.011</b>
<b>Education status with sexuality</b>				
Yes	319 (47.6)	79.18±13.99	33.15±7.45	91.70±14.97
No	351 (52.4)	80.74±16.97	32.41±8.49	92.45±16.33
<i>p</i>		0.199	0.231	0.540
<b>Sexual intercourse status</b>				
Yes	46 (6.9)	68.80±15.04	24.02±8.96	83.23±16.34
No	624 (93.1)	80.82±15.36	33.40±7.56	92.75±15.46
<i>p</i>		<b>0.001</b>	<b>0.001</b>	<b>0.001</b>
<b>Opinions regarding pre-marital sexuality</b>				
I am against any pre-marital sexual intercourse for religious reasons.	378 (56.4)	85.09±15.05 <sup>a</sup>	36.65±6.01 <sup>a</sup>	94.90±15.47 <sup>a</sup>
Pre-marital sexual intercourse should be limited.	167 (24.9)	76.35±12.45 <sup>b</sup>	30.05±6.01 <sup>b</sup>	90.22±14.19 <sup>b</sup>
Pre-marital sexual intercourse is natural.	105 (15.7)	67.26±13.67 <sup>c</sup>	23.22±7.38 <sup>c</sup>	85.12±17.16 <sup>c</sup>
Other	20 (3.0)	80.00±15.63 <sup>ab</sup>	31.95±7.91 <sup>b</sup>	91.25±9.84 <sup>abc</sup>
<i>p</i>		<b>0.001</b>	<b>0.001</b>	<b>0.001</b>

(a,b,c,d: Superscript shows the differences within the group. There is no difference in the measurement in the same letters.) SA: Sexual Attitudes; R: Religiosity; IS: Internalized Sexism

### Internalized sexism scale for women

Bozku<sup>37</sup> developed the scale to measure various aspects of internalized sexism in women with questions such as "Some women deserve violence" and "I don't like to be tantalizing like some women." The scale consists of 35 items and is in a 5-point Likert type. It comprises five sub-dimensions: Self-Objectification, Derogation, Internalized Powerlessness, Self-Separation and Male Prioritization. A score between 35 and 175 points is obtained from the scale. The scale can be used based on sub-dimensions and by taking the total score. The high score obtained from the scale indicates that the internalized sexism of women is high. The Cronbach's alpha coefficient for the overall scale was 0.84.<sup>37</sup> In our study, Cronbach's alpha on the scale was determined to be 0.81.

### Ethics committee approval

The data forms were sent to the adolescents via Google Forms, and they were asked to fill

them in. The "Informed Consent Form" was placed on Google Forms, and the volunteering tab was mandatory. In addition, approval was obtained from the Social and Human Sciences Ethics Committee (Approval No:473/Date:28.12.2021).

### Statistical analysis

Data were evaluated using IBM SPSS Statistics Standard Concurrent User version 25. An independent sample was used to assess binary variables in evaluating score differences in socio-demographic data. ANOVA test was applied for three or more variables. A Pearson correlation test was used to determine the correlation between variables.

Structural equation modeling applies a two-stage method, measurement and hypothetical model. First, exploratory factor analysis was performed for all scales, and it was found that KMO>0.83 and Bartlett/df<0.05. When the exploratory factor analysis results were found suitable, confirmatory factor analysis was

performed in the LISREL 8.71 program to measure whether the measurement models met the good fit index values. The fit of the model was taken as CMIN/df (<5) root mean square error of approximation (RMSEA)<0.08, Goodness Index fit Index (GFI), Adjusted Goodness Adjustment Index (AGFI), and Comparative Fit Index (CFI)>0.90<sup>34</sup> (Table 2). These values reflect a good model fit. It is reported that for sample size >300, normality of data is acceptable with skewness value ≤2 and kurtosis value ≤4.<sup>38</sup> Since multivariate normality could be achieved, the bootstrap method was applied, and a bias-corrected

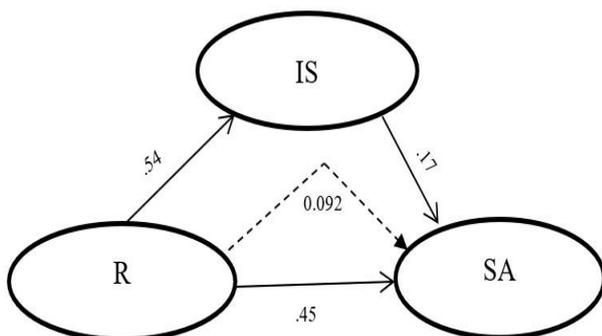
bootstrap approach based on 2000 samples was used to test the standardized sum and the direct and indirect effects of each variable. This method studies a resampling technique that is thought to represent the original data. Multiple subsamples of the same size as the original sample are randomly drawn and replaced, providing data for empirical analysis of parameter estimation and fit indices. In the bootstrap approach, parameters, standard errors, and model test statistics are estimated by empirical sampling distributions from many produced samples.<sup>34</sup>

**Table 2.** Structural equation modeling fit index and normal distribution (skewness-kurtosis) values of the study.

Index name	Test value	Threshold value <sup>34</sup>		Variables	Normality <sup>38</sup>	
		Good fit	Acceptable		Skewness	Kurtosis
CMIN/df	4.62	<3	3< CMIN/df<5	SA	-0.080	0.030
RMSEA	0.074	<0.05	<0.08	R	-0.603	-0.091
GFI	0.96	>0.95	>0.90	IS	0.557	1.298
AGFI	0.90	>0.95	>0.90			
CFI	0.93	>0.95	>0.90			

SA: Sexual Attitudes; R: Religiosity; IS: Internalized Sexism

Finally, the hypothetical structural equation modeling based on the theoretical infrastructure was evaluated. First, Chi-square, df, and Probability level (*p*) were used to assess the model, and then the fit indicators listed above were examined. The corrections depending on the modification indices ensured the hypothetical model's frugality. The final model is given in Figure 2.



**Figure 2.** Structural equality modeling established between sexual attitude, religiosity, and internalized sexism

\* SA: Sexual Attitudes; R: Religiosity; IS: Internalized Sexism

**Results**

A total of the participants 98.5% were single and 83.4% stated that they had a nuclear family type. Furthermore, of the participants 83.1% said that they did not talk to their

families about sexual matters. In addition, of the participants 52.4% said that they did not receive any training on sexuality during their education. Of the participants 93.1% stated that they did not have any sexual intercourse experience. Lastly, of the participants 56.4% indicated that they were against any sexual intercourse before marriage due to religious reasons.

The mean scores of the scale variables and the multiple correlation analysis values of the adolescents are given in Table 3. It is seen that the mean scores of sexual attitudes and religiosity of the adolescents participating in our study are higher than the mean score of the scale. Still, the mean score of internalized sexism is close to the middle level. In addition, a statistically significant positive correlation was found between the sexual attitude levels of the adolescents and the levels of religiosity ( $r(670) = .419, p < 0.01$ ) and internalized sexism ( $r(670) = .095, p < 0.05$ ). A negative and statistically significant relationship was found with the age variable ( $r(670) = -.085, p < 0.05$ ). It is seen that there is a positive and significant relationship between religiosity and internalized sexism ( $r(670) = .208, p < 0.01$ ).

**Table 3.** Average, standard deviation, min-max, and correlation values of adolescents' ages and scores obtained from the scales

Variables	X± SS	Min-Max	1.	2.	3.	4.
1. SA	80.00±15.63	23-115	-			
2. R	32.76±8.01	9-45	.419**	-		
3. IS	92.09±15.69	50-167	.095*	.208**	-	
4. Age	20.24±1.62	18-25	-.085*	-.019.	-.063	-

Spearman's rho (\*\*  $p < .01$ , \*  $p < .05$ ); SA: Sexual Attitudes; R: Religiosity; IS: Internalized Sexism

### Results related to structural equation model analysis

In this section, structural equation model analyses were conducted to reveal the effects of religiosity and sub-factors and internalized sexism and its sub-factors on sexual attitudes.

The test results of the first structural equation model established did not meet the recommended values in some indices of the statistics suitable for the model (CMIN/df= 12.09, RMSEA = 0.129, GFI= 0.87, AGFI = 0.79, CFI=0.76). For this reason, modifications were made to the established model. Theoretical backgrounds and the statistical significance of the modification index values were considered while modifying the model. The standardized parameters of the final model are presented in Figure 2. The effect of each variable on sexual attitude values is summarized in Tables 3 and 4.

When the fit statistics of the structural equation modeling in Figure 2, obtained as a result of the modifications created depending on the theoretical background and modification index values, were examined, it was seen that df=30 and  $p < 0.05$ . Since df > 0, it was seen that the model was fully saturated. Since  $p < 0.05$  was small, model fit indices were examined. Model fit index values were determined as CMIN/df=4.62, RMSEA=0.074, GFI=0.96, AGFI=0.90,

CFI=0.93. These values show that the data support the model and that the fit indices are acceptable.<sup>34</sup>

Figure 2 and Table 4 show the results of the structural equation model analysis established to determine how much religiosity and internalized sexism predict sexual attitudes in late adolescent women. It is seen that religiosity affects internalized sexism and sexual attitudes in late adolescent women, and this effect is statistically significant ( $p < 0.001$ ). It was determined that internalized sexism has a substantial impact on sexual attitudes ( $p < 0.05$ ). A one-unit increase in the level of religiosity of late adolescent women causes an increase of 0.260 in the level of internalized sexism and an increase of 1.417 in the level of sexual attitudes. In addition, a one-unit increase in the level of internalized sexism results in an increase of 1,108 units in the level of sexual attitudes. Similarly, one standard deviation change in religiosity causes a standard deviation of 0.542 in internalized sexism and 0.452 in sexual attitudes. In addition, a one standard deviation change in internalized sexism in late adolescent females creates a 0.170 standard deviation in sexual attitudes. In addition, it is seen that 29.3% of the changes in internalized sexism and 31.7% of the changes in sexual attitudes are explained by this model (Table 4).

**Table 4.** Regression weights, standardized regression weights, and squared multiple correlations of the model.

Variables	Estimate		S.E.	t	p
	Unstandardized $\beta$	Standardized $\beta$			
IS <--- R	0.260	0.542	0.070	3.708	<b>0.001</b>
SA <--- IS	1.108	0.170	0.436	2.542	<b>0.011</b>
SA <--- R	1.417	0.452	0.170	8.342	<b>0.001</b>
SMC					
IS	0.293				
SA	0.317				

\* SA: Sexual Attitudes; R: Religiosity; IS: Internalized Sexism; S.E.:Standard Error; SMC: Squared Multiple Correlations

It is seen that religiosity has a substantial and statistically significant effect on

internalized sexism (effect value = 0.54) and sexual attitudes (effect value = 0.45)

( $p < 0.001$ ). In addition, it was determined that internalized sexism has a direct (effect value = 0.17) effect on sexual attitudes ( $p < 0.05$ ). Finally, it was determined that religiosity has a direct impact on sexual attitudes, as well as

through internalized sexism (effect value = 0.09) ( $p < 0.01$ ). In this context, internalized sexism is a significant mediator between religiosity and sexual attitudes (Table 5).

**Table 5.** Standardized estimates of direct and indirect effects on sexual attitudes.

		Bias-adjusted 95% (Confidence interval)	
		R	IS
<b>Total Effect</b>	IS	0.578 (0.468/0.706)***	
	SA	0.544 (0.328/0.569)***	0.181 (0.012/0.338)*
<b>Direct Effects</b>	IS	0.542 (0.448/0.680)***	-
	SA	0.452 (0.165/0.486)***	0.170 (0.087/0.337)*
<b>Indirect Effects</b>	IS	-	-
	SA	0.092 (0.029/0.218)**	-

\* SA: Sexual Attitudes; R: Religiosity; IS: Internalized Sexism; \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ . (Maximum Likelihood Test)

## Discussion

Sexual attitudes and behavior, which are considered most important determinants of sexual health, affect many social problems, such as sexually transmitted infections, family planning, sexual abuse, and adolescent pregnancy.<sup>39,40</sup> This causes adolescence and adolescent sexuality to attract researchers, where sexual tendencies are shaped, and problematic sexual orientation is high. It is known that one of the factors affecting sexual attitudes in adolescence is religiousness.<sup>16</sup> However, the findings on this subject are inconsistent.<sup>13-16</sup> In a study by Miller and Gur<sup>17</sup>, it was determined that although there was a positive relationship between religiosity and sexuality, personal conservatism, which is a sub-dimension of religiosity, negatively affected risky sexual attitudes and behavior. In general, it is reported that the importance given to religion is the most critical deterrent to starting sexual intercourse at an early age and having multiple sexual partners and that religiosity is a protective factor for risky sexual behaviors in adolescents.<sup>14-16</sup>

In our study, it was found that religiosity affects the sexual attitudes of late adolescent women (effect value=0.45;  $p < 0.001$ ), which is consistent with the literature in general (Figure 2; Table 4; Table 5). Accordingly, of the hypotheses investigated in the study, the H<sup>1</sup> hypothesis stating that religiosity affects the sexual attitudes of late adolescent women was accepted. This finding can be interpreted as an elevated level of religiosity in late adolescent women has a protective feature against risky sexual attitudes and behavior such as random,

multiple partners and may contribute to the individual's ideal, healthy, and balanced sexual attitude.

Another issue closely related to religiosity in adolescent sexuality is gender differences.<sup>41</sup> It has been emphasized that religiosity has a predictive effect on sexual attitudes, and this affects women more<sup>16</sup>. It is essential to investigate the mechanisms that cause this in women<sup>16</sup>. In our study, internalized sexism was assumed to be an essential variable in the interaction between religiosity and sexual attitude in late adolescent women. It was determined that individuals were affected by their level of religiosity (effect value=0.54;  $p < 0.001$ ) and sexual attitudes (effect value=0.17;  $p < 0.05$ ). According to these findings, the H<sup>2</sup> and H<sup>3</sup> hypothesis was accepted. In addition, it has been determined that religiosity has a direct effect on sexual attitudes, as well as through internalized sexism (effect value = 0.09), and internalized sexism is a mediator (Figure 2; Table 4; Table 5). With this finding, the H<sup>4</sup> hypothesis was accepted.

In light of this, it can be interpreted that internalized sexism, which includes negative situations such as self-objectification, loss of self, or male prioritization, will evolve into a positive and have a positive effect on sexual attitudes as a result of correctly interpreting religious knowledge. It is also reported that while patients want reliable and non-judgmental access to sexual health education during their care processes, healthcare professionals frequently ignore sexual health issues in this process. One of the most

important reasons for ignoring sexuality in care processes is healthcare professionals' attitudes and beliefs that sexual health services are private and not a priority.<sup>32</sup> It can be said that internalized sexism and religiosity may have influenced these attitudes and beliefs.

As with all Muslim societies, sexuality, culture, and gender are historically linked to religion in Turkish society. It is known that the Turkish community has a patriarchal structure and that the majority of its population is Muslim.<sup>22</sup> The two primary sources of Islam are the words of Allah (Qur'an) and the words and practices of the Prophet Muhammad (hadith/Sunnah), which shape people's thoughts, behavior, and values.<sup>42</sup> In this context, sexuality is a necessity for human survival, but it is a phenomenon that must be managed according to Islamic rules. According to Islamic regulations, sexual intercourse outside of marriage is accepted as adultery and prohibited. In addition, sexuality is considered legitimate with marriage and includes protective measures such as compensation and alimony.<sup>43</sup>

Although the spiritual existence of women in Islam has been elevated, the patriarchal structure has not been destroyed. Of course, the current cultural order has a significant impact on the occurrence of this situation. In addition, although worship and rituals in Islam are determined according to gender, the Qur'an addresses men and women together in every religious issue, such as faith, worship, morality, halal, and haram. Women are included in general addresses such as "O people" and "O believers" in the Qur'an, and the fundamental rights and freedoms granted to men are equally recognized for women.<sup>44</sup> In this context, individuals who understand and interpret the religion of Islam correctly cannot be expected to be adversely affected by gender differences or internalized sexism.; because the belief that "female or male individuals do not have superiority over each other, superiority is only in taqwa" prevails in Islam. In addition, there are no significant differences between other monotheistic (Judaism, Christianity) religions, such as Islam, and all divine religions have a common discourse on the perfection and development of human

beings. It can be stated that when superstitions are excluded, all religions have a positive perspective on women and sexuality.<sup>45</sup>

### Limitations

Since some conditions limit the generalizability of the study, the findings should be interpreted within these limitations. The study was a cross-sectional study based on self-reporting to obtain variable data from an appropriate sample. Therefore, the data obtained are limited to the scales used. In addition, since the study group consists of female adolescents of Turkish ethnicity who adopt the religion of Islam, it cannot be generalized to adolescent populations other than this group or samples with different ethnic and religious structures. Finally, the use of only internalized sexism as a mediator variable was accepted as a limitation in terms of revealing mediator variables between religiosity and sexual attitude. Therefore, future research can apply a longitudinal design to evaluate more variables at different time points, thus contributing to the literature regarding increasing knowledge on sexual attitudes.

### Conclusion

In this study, it was determined that internalized sexism and religiosity had an effect on sexual attitudes in late adolescent women and that internalized sexism had a mediating effect on the interaction between religiosity and sexual attitudes. Religiosity has a relatively sizeable direct impact (effect value = 0.54) on internalized sexism. In addition, it was determined that religiosity has a direct effect on sexual attitude (effect value = 0.45). In addition, internalized sexism has a direct impact (effect value = 0.17) on sexual attitudes. Finally, it was determined that religiosity had a direct effect on sexual attitudes as well as internalized sexism (effect value = 0.09), and internalized sexism was the mediator between these variables. It is thought that the study conducted in light of these findings will contribute to the literature in terms of determining the source of taboos regarding the sexual behavior of women who are affected by social and cultural values. In addition, it is assumed that this study will

enable healthcare professionals to understand why they have difficulty assessing the sexual dimension of the patients they care for.<sup>32</sup>

Additionally, late adolescent women need to learn and interpret religious information from suitable sources and internalize the religious perspective towards women through a cognitive filter to have positive sexual attitudes. In this context, it can be stated that sexual attitudes to be acquired will have a protective effect on adolescent women against risky sexual situations.

The well-being of adolescents' health indicators, which is one of the health achievements of nations, has deficiencies in developing countries, especially in terms of sexuality and sexism. In addition, physical growth, sexual development, and psychological changes in adolescence are essential factors in shaping risky behaviors such as unprotected sexual intercourse, early marriages, early or unwanted pregnancies, and sexually transmitted diseases. Therefore, in addition to focusing on healthcare, health protection, and health promotion, the quality of training given to healthcare professionals should also be considered.<sup>46</sup> During the planning of healthcare professionals' training, factors such as religiosity and sexism that may affect sexual attitudes should be considered, and the training content should be determined accordingly. In addition, the usefulness of including a multidisciplinary team (clergy, social worker, etc.) in training planning should not be overlooked.

It is important to note that sexuality is an essential component of physical and mental health, which may affect the future life of the individual. For this reason, the correct healthcare practices in the adolescent period, in which sexual, religious, and social trends are shaped, will protect individuals in the future stages of development. Finally, it is thought that healthcare professionals should be aware of their perspective on sexuality and which factors, such as religion and sexism, affect this perspective to be able to implement correct and effective practices.

### **Ethics Committee Approval**

Ethics committee approval for our study was received from Erciyes University, Social and Human Sciences Ethics Committee (Approval No:473/Date:28.12.2021). All procedures were utilized in accordance with the Declaration of Helsinki.

### **Informed Consent**

Informed consent form was obtained from all participants

### **Author Contributions**

M.E.: Idea/Concept, Design, Audit/Consultancy, Data collection and/or processing, Analysis and/or comment, Literature review, Writing, Critical review.

### **Conflict of Interest**

There is no conflict of interest to declare.

### **Financial Disclosure**

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### **Declarations**

The study was presented as an oral presentation at the Black Sea Summit 8th International Social Sciences Congress, 05 March 2022, Ordu, Türkiye

### **Peer-review**

Externally peer-reviewed.

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