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RESEARCH

KNOWLEDGE AND ATTITUDES TOWARD ELDERLY SEXUALITY: A COMPARISON OF YOUNG AND OLDER ADULTS

ABSTRACT

Introduction: The current study aimed to compare knowledge about and attitudes toward the sexuality of elderly people by gender and developmental periods.

Materials and Method: A total of 206 young adults aged 18-27 years and 127 older adults aged 60–86 years participated in this study. "The Aging Sexuality Knowledge and Attitudes Scale" and Sociodemographic Information Form were applied to the participants. Descriptive statistics were presented to explore topics including active sexual life, the frequency of sexual intercourse, and how each group defined their sexuality.

Results: The results of this study showed that 57.5% of the older adults continued to have an active sexual life. A two-way multivariate analysis of covariance indicated that the main effects of developmental period (p < .001) and gender (p < .01) were statistically significant; however, the interaction effect of developmental period and gender was not statistically significant (p > .05). The main effect of developmental period indicated that the young adults reported less knowledge about and a more permissive attitude toward elderly sexuality than the older adults did. The main effect of gender indicated that the females had less knowledge about elderly sexuality than the males.

Conclusion: The results of this study provide important contributions to both educational interventions in developmental psychology, gerontology, and geriatric nursing and the theoretical literature by examining the knowledge and attitudes toward the sexuality of the elderly from a developmental perspective for the first time in Turkey.

Keywords: Aged; Young Adult; Sexual Behavior; Attitude; Cross-sectional Studies.



INTRODUCTION

The period of old age is a natural stage of the life cycle process that continues with development and change. There are also changes in sexuality due to the physiological regressions that occur in this period (1). Sexuality in the elderly is an important dimension of life and is a "human right" for every human being (2). Elderly sexuality, however, is generally ignored because of some popular myths (3). Individuals in most of the societies believe that sexuality does not or should not continue in old age (4). However, studies in the literature do not seem to confirm this idea. According to a study, the rate of sexual activity among older people aged 60 years and over has been found to be 46% (5). In another study conducted with individuals between the ages of 40 and 80, it was reported that approximately half of the men and 21% of the women between the ages of 70 and 80 had had sexual intercourse within the prior year. In addition, only 23% of the women and only 17% of the men reported that elderly individuals do not have a sexual desire (6).

In old age, sexuality can be experienced in the form of sharing and relaxing together, without the aim of giving birth to a child or starting a family. In other words, the expression of sexuality changes with age (7). This situation also provides spouses with the opportunity to discover different things that they have not been able to do before and to live amicably (1). Furthermore, vaginal sex manifests itself in the form of intimacy, affection, romance or friendship with age (8). Similarly, touching, fantasy, and loving each other becomes more important for older individuals in this period (7). In old age, sexuality also includes the relaxation of the spouses by supporting each other and giving pleasure of each other. As a result, although there is a change in the content or a decrease in the frequency of sexual activity in old age, older individuals still define themselves as sexually active (9, 10), and both women and men show their interest in sexuality into their eighties (11). Therefore, it would be more accurate

to describe the changes in the sexual lives of individuals in old age as decreased sexual functionality (12).

It is noteworthy that gender differences are frequently studied as a critical variable regarding knowledge and attitudes toward sexuality. Previous studies have found that males had more permissive attitudes (13) and more knowledge compared to females (14). A few studies showed that being older was associated with knowing more about elderly sexuality (14, 15). When the attitudes of young people toward the sexuality of the elderly are examined, it is concluded that they generally think that sexuality is not important for the elderly and that they find the sexuality of the elderly to not be believable. The attitudes of elderly people toward their sexuality were found to be mostly positive. Also, elderly people with more positive attitudes are more likely to engage in sexual activity (16). In addition, older people state that the need for love and sexuality does not decrease with age and that other people commit age discrimination in this regard (17). The results of studies that compare the attitudes of young adults and older adults toward elderly sexuality are controversial. A study conducted in one state of Midwestern United States reported that the attitudes of older adults toward the sexuality of the elderly were more liberal than those of the young people (18). However, in another study conducted with Korean individuals who were between the ages of 18 and 65, it was concluded that the elderly participants were more conservative about the sexuality of the elderly as compared to the attitudes of the young participants (19).

As a result of the literature review, no empirical study was found in our country that compared knowledge levels and attitudes toward the sexuality of the elderly by considering the developmental period and gender. Therefore, it is believed that this study, which investigates knowledge about and attitudes toward the sexuality of the elderly, will fill an important gap in the literature of our country. In ad-



dition, exploring the sexual lives of both young and older adults is one of the aims of this study.

MATERIALS AND METHODS

1. Sample

The young adult sample of this study was taken from Ege University and Ufuk University, and the elderly sample was taken from the community. The study sample consisted of 206 young adults aged 18 to 27 (Mage = 21.41, SD = 1.94) and 127 older adults **aged 60 years and over** (Mage = 68.42, SD = 5.72) **who were** living in Izmir and Ankara. While 71% (n = 147) of the young adults were female, 61.4% (n = 78) of the older adults were female participants. In total, 74% (n = 94) of the older adults stated that they were married. All of the young adults were single. The older adults reported the following about their educational level: 43.2% (n = 55) literate or elementary school, 35.5% (n = 45) secondary school or high school, and 21.3% (n = 27) college and above.

2. Measures

Sociodemographic Information Form: This form was prepared by researchers to obtain some sociodemographic information, such as gender, age, marital status, and perceived socioeconomic level. In addition to demographic information, this form included questions about the sexual lives of the young and older adults, such as frequency of sexual intercourse.

The Aging Sexuality Knowledge and Attitudes Scale (ASKAS): This scale, which was used to evaluate the knowledge and attitudes of individuals toward the sexuality of the elderly, was developed by White (20) and translated into Turkish by Doğan, Demir, Eker, and Karim (14). The 61-item scale has two subdimensions: knowledge and attitude. While the 35-item knowledge dimension of the scale is coded as "yes, no, and I do not know," the attitude dimension is evaluated on a 7-point Likert-type scale. The possible score that can be obtained on the knowledge subdimension ranges from 35 to

105, while the possible score on the attitude subdimension ranges from 26 to 182. High scores in the knowledge dimension show a low level of knowledge about the sexuality of elderly people. In addition, high scores in the attitude dimension indicate a more conservative attitude toward the sexuality of the elderly. This scale is well known for being used to assess knowledge and attitudes in our country (14, 21). In this study, the Cronbach's alpha internal consistency coefficients for the knowledge and attitude subdimensions were .91 and .92 for older adults and .90 and .92 for young adults, respectively.

3. Procedure

For the young sample, departments and classes were randomly determined in one university each in Izmir and Ankara, and permission was obtained from a responsible lecturer of the course to collect the data. The purpose of the research and the implementation process were explained to the participants, and the written consent was obtained. The scale was applied to the volunteers in the classroom. The scale took approximately 20 minutes to complete. Snowball sampling and an appropriate sampling method were used to recruit the older adults. Written consent was also obtained from the older adults. The application of the scale took approximately 35–40 minutes.

4. Data Analysis

Statistical analysis was performed using SPSS v.22. First, missing data in the data set obtained from young adults and older adults were investigated, and it was found that missing data were randomly distributed. To handle missing data, missing values were replaced with the mean score. To test the normality assumption, the values of skewness and kurtosis were investigated. Skewness and kurtosis values between +1.96 and -1.96 were considered acceptable (22). Descriptive statistics were presented to explore active sexual life and frequency of sexual intercourse, and how each group defined their sexuality. Chi-square and two-way MANCOVA tests were conducted to determine the differences

between groups. As the assumptions of MANCO-VA, homogeneity of error variances for knowledge (Levene's test = 1.992, p > .05) and attitude scores (Levene's test = .995, p > .05) and homogeneity of covariance matrices (Box's M test = 12.60, p > .05) were also investigated, and the assumptions for the analysis were met. The statistical significance level was set at p < 0.05.

5. Ethical Issues

Ethical approval for this study was obtained from the Ufuk University Social and Human Sciences Scientific Research and Publication Ethics Committee (reference number: 2018-50).

RESULTS

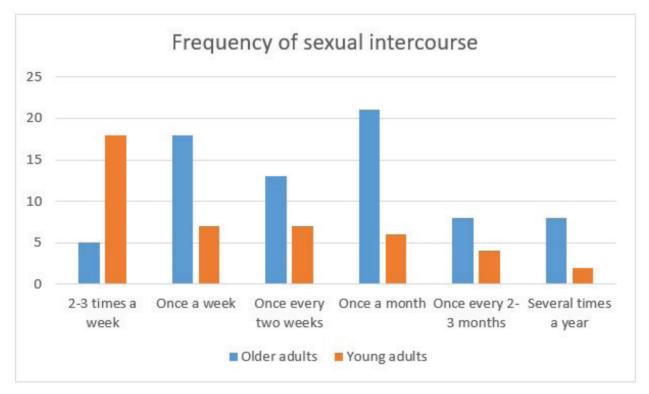
Descriptive Statistics

Active Sexual Life: While 57.5% (n = 73) of older adults stated that they continued their sexual life

actively, 42.5% (n = 54) reported that they did not continue their sexual life. Of young adults, 34% (n = 70) stated that they had experienced sexual intercourse. In addition, 22.8% (n = 47) of young adults stated that they are currently sexually active, while 77.2% (n = 159) stated that they are not active. Chi square test showed that the percentage of participants that were currently sexually active differed by developmental periods, $\chi^2(1) = 40.918$, p < .001. In other words, older adults were significantly reported to have more active sexual lives.

Frequency of Sexual Intercourse: The participants were asked about the frequency of sexual intercourse, and the answers are presented in Graphic 1. Of older adults, 3.9% (n = 5) reported having sex 2–3 times a week, 14.2% (n = 18) once a week, 10.2% (n = 13) once every 2 weeks, and 16.5% (n = 21) reported having sexual intercourse once a month. In addition, 6.3% (n = 8) of older adults reported hav-







ing sexual intercourse once every 2–3 months and 6.3% (n = 8) several times a year. 8.8% (n = 18) of young adults reported having sexual intercourse 2–3 times a week. 3.4% (n = 7) of the participants reported having sexual intercourse once a week, 3.4% (n = 7) once every 2 weeks, 3% once a month (n = 6), and 2% (n = 4) once every 2–3 months.

Definitions of Sexual Experiences: 54.3% (n = 69) of older adults and 33% (n = 68) of young adults defined their sexual life as sexual intercourse. There was a significant difference between young adults and older adults in terms of defining their sexual life as sexual intercourse ($\chi^2(1) = 14.677$, p < .001). While 22% (n = 28) of older adults defined their sexual life as kissing, 44.7% of young adults reported their sexual life as kissing. Chi-square test showed that older adults and young adults who reported their sexual experiences as kissing differed significantly ($\chi^2(1)$ = 17.509, p < .001). In addition, 23.3% (n = 36) of older adults and 41.7% (n = 86) of young adults described their sexual life as hugging/touching. There was a significant difference between young adults and older adults in terms of defining their sexual life as hugging/touching ($\chi^2(1) = 11.706$, p < .001). In summary, older adults defined their sexual life more as sexual intercourse, while young adults described their sexual life as kissing and hugging/touching.

Knowledge and Attitudes by Developmental Period and Gender

A two-way MANCOVA was conducted to determine whether there was an interaction effect between developmental period (young adults vs. older adults) and gender (female vs. male) on the knowledge and attitude scores obtained from ASKAS after controlling for the variable of the city where the participants live (Ankara vs. Izmir). The mean and standard deviation values of the knowledge and attitude scores toward the sexuality of the elderly according to developmental period and gender are presented in Table 1.

The results of the MANCOVA analysis showed that the main effect of developmental period (F (2,

327) = 40.723, p < .001, η^2 = .20) and gender (F (2, 327) = 5.905, p < .01, η^2 = .04) on the combined dependent variables was statistically significant after controlling for the city where the participants live. The main effect of developmental period showed that there was a significant difference in the knowledge scores of the older adults and the young adults (F (1, 328) = 33.667, p < .001, η^2 = .09). In terms of attitude scores, there was also a significant difference between the older adults and the young adults (F (1, 328) = 34.514, p < .001, η^2 = .10). Higher scores on the ASKAS knowledge dimension indicate a lower level of knowledge. In this study, the results showed that the young adults had a lower level of knowledge than the older adults. A lower attitude score indicates a more permissive attitude regarding the sexuality of elderly people. The results showed that the young adults had a more permissive attitude than the older adults toward the sexuality of elderly people. In other words, the older adults demonstrated a more conservative attitude toward the sexuality of the elderly than the young adults. The main effect of gender indicated that there was a significant difference between the knowledge scores of the female and male participants (F(1, 328) = 11.821, p < .001, η^2 = .04), with the females demonstrating less knowledge about elder sexuality than the males. In terms of the attitude scores, there was no significant difference between the female and the male participants (F(1, 328) =.171, p > .05, η^2 = .001). The interaction effect of developmental period and gender was not statistically significant (F (2, 327) = 3.001, p > .05, η^2 = .02).

DISCUSSION

The purpose of this study was to investigate the knowledge levels and attitude toward the sexuality of the elderly. In this study, knowledge and attitudes towards elderly sexuality were examined by considering the gender and developmental level of the participants. In addition, in this study, active sexual life, frequency of sexual life, and meaning of sexual



Table 1. Mean and standard deviation values of the knowledge and attitude scores toward the sexuality of the elderly by developmental period and gender

	Developmental period	Gender	M	SD	N
Knowledge ⁺	Older adult	Female	68.01	16.26	78
		Male	59.31	11.28	49
		Total	64.65	15.11	127
	Young adult	Female	75.50	14.55	147
		Male	72.86	15.63	59
		Total	74.75	14.88	206
	Total	Female	72.91	15.54	225
		Male	66.71	15.35	108
		Total	70.90	15.73	333
Attitude ⁺⁺	Older adult	Female	103.78	28.93	78
		Male	95.73	26.29	49
		Total	100.67	28.11	127
	Young adult	Female	78.80	27.37	147
		Male	81.48	22.66	59
		Total	79.57	26.08	206
	Total	Female	87.46	30.30	225
		Male	87.94	25.28	108
		Total	87.62	28.73	333

Note: ⁺ Individuals with lower knowledge scores have a high level of knowledge regarding the sexuality of elderly people. ⁺⁺Individuals with lower attitude scores have a more permissive attitude regarding the sexuality of elderly people.

life were investigated for both groups.

When the sexual lives of young adults and older adults were examined, it was found that older adults had a more active sexual life than young adults. There are some possible explanations for young people to report a less active sex life than older adults. Firstly, the vast majority of older adults were married, while the young adults were all single. Secondly, the majority of the young adults were women. Although it is known that sexual activity among young and single individuals has increased in recent years in our country (23), premarital sexual experi-

ence is still not supported, especially for women, and there remains an expectation of virginity at the time of marriage (24). Thirdly, single young adults may not want to report their sexual experiences because sexuality is a sensitive topic in Turkey.

Moreover, it is noteworthy that 57% of the elderly participants were continuing their sexual life. This finding is parallel to the current literature (5). In addition, when the frequency of sexual intercourse in older adults was examined, it was found that 42.5% stated that they had not had sexual intercourse in the last few years, and 16.5% stated that they had



sexual intercourse only once a month. In other words, it can be concluded that there is a decrease in the frequency of sexual intercourse in old age. It is thought that this is due to physiological, psychological, and social changes that occur with increasing age (25). This finding is consistent with studies showing a decrease in the frequency of sexual activity in old ages (9, 10). The findings in this study seem to support the literature that indicates a change in the sexual life of individuals in old age in the direction of decreased sexual functionality (12).

In terms of defining their sexual life, the older adults tended to define their sexual life as sexual intercourse more than the young adults. It is thought that this finding is mainly due to the marital status of the participants. Young adults may have defined their sexual life more in terms of hugging/touching and kissing, as they are single and have lower rates of sexual intercourse. In addition, although the older adults defined their sexual life in terms of sexual intercourse, 22% of older individuals defined their sexual life as kissing and 23.3% as hugging/touching. This means that, contrary to expectations, sexuality does not consist solely of sexual intercourse, and bodily contact, such as hugging/touching and kissing are an important part of sexuality and maintain its functionality. Therefore, the findings of this study support the view that touching and loving each other are as important as sexual intercourse in old age (11, 12).

In this study, the older adults had a higher level of knowledge about the sexuality of the elderly than the young adults. This finding is consistent with previous literature (14, 15). The explanations why older adults had more knowledge are as follows. Firstly, older adults may need and have access to more information about their aging in terms of physiological and sexual changes. Secondly, older adults indicated experiences such as having painful sexual intercourse in the information questions. Thirdly, this result may be related to the fact that this subject is avoided in the socio-cultural context of our

country and that it is not included in the education curriculum. In addition, the findings of this study are consistent with previous studies reporting that older adults were more conservative than young adults (19). In contrast to some studies conducted in developed countries (17,18), in this study—similar to the findings of a study conducted in Korea (19)—the finding that the older adults were more conservative than the younger adults may be due to cultural characteristics. It is not unexpected that attitudes regarding sexuality in older adults are more conservative in developing societies that are more collectivist and are characterized by repressive attitudes toward sexuality. Due to sexual myths and a lack of information, older adults in these countries may have internalized social prejudices about sexuality in old age and assumed that sexuality should not continue past a certain age (26). The findings of this study show the importance of cross-cultural comparisons of attitudes toward elder sexuality and the significance of examining the macro variables that affect attitudes.

This study found that the female participants had less knowledge about sexuality in older adults than the male participants; however, both females and males had similar attitudes toward sexuality in older adults. A study conducted with healthcare professionals in Turkey found that the female participants had less knowledge about sexuality in older adults than the male participants (14). Factors such as gender roles (14), sexual education differences, ignorance about female sexuality, and the fact that male sexuality is more freely discussed (27) may contribute to this gender difference. Due to these factors, males may have more ready access to information about sexuality. However, contrary to previous literature (19), in the current study, the male and female participants showed no difference in their attitudes toward sexuality in older adults. Accepted cultural values may contribute to this finding. In other words, the internalization of macro-level belief systems, traditions, or cultural dogmas may lead to similar attitudes on the part of both males and females toward sexuality in older adults.

To our knowledge, this is the first study to compare the different developmental periods in terms of knowledge level and attitude toward the sexuality of the elderly between older adults and young adults in Turkey. Another unique aspect of this study is that it compared the sexual experiences of different developmental stages. For these reasons, this study makes an important contribution to the literature.

This study, which makes significant contributions to the literature, has some limitations. First, the sample size of the older adults participating in the study was low. In addition, both the young and older adults were recruited only from the Ankara and İzmir provinces. Data for the young adults were collected from a private university in Ankara and a public university in Izmir, so the city variable was controlled. However, the effect of university type should not be ignored in the findings obtained by controlling for the city variable. The generalizability of the findings is limited by these sample characteristics. On the other hand, educational level is an essential factor influencing the older adults' level of knowledge about and attitude toward sexuality. It is noteworthy

that it is difficult to compare the educational levels of young and older adults in cross-sectional studies. As a result, the difference in educational levels among the older adults may have a confounding influence on the findings. Secondly, due to the nature of the study's cross-sectional design, the results should be interpreted carefully. The age-related differences obtained in this study may be due to the cohort effect, which is the result of individuals from different generations having distinctive experiences and lifestyles. Longitudinal studies are needed to establish causal relationships. The final limitation relates to the collection of data through self-report scales. Because sexuality is difficult to discuss at all stages of development in Turkey, self-reported assessments may lead to social desirability.

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Conflict of Interest: We have no conflicts of interests to disclose.

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