

# Education Quarterly Reviews

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**Esen, Erol, Soylu, Yağmur, and Siyez, Diğdem Müge. (2021), Predictors of the Level of Knowledge about Sexual Harassment and Assault among College Students: A Chi-Squared Automatic Interaction Detection Analysis. In: *Education Quarterly Reviews*, Vol.4, No.2, 417-431.**

ISSN 2621-5799

DOI: 10.31014/aior.1993.04.02.291

The online version of this article can be found at:  
<https://www.asianinstituteofresearch.org/>

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Published by:  
The Asian Institute of Research

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# Predictors of the Level of Knowledge about Sexual Harassment and Assault among College Students: A Chi-Squared Automatic Interaction Detection Analysis

Erol Esen<sup>1</sup>, Yağmur Soylu<sup>2</sup>, Diğdem Müge Siyez<sup>3</sup>

<sup>1</sup> Department of Counseling and Guidance, Manisa Celal Bayar University, Manisa, Turkey

<sup>2</sup> Department of Counseling and Guidance, Dokuz Eylul University, İzmir, Turkey

<sup>3</sup> Department of Counseling and Guidance, Dokuz Eylul University, İzmir, Turkey

Correspondence: Erol Esen, Department of Counseling and Guidance, Manisa Celal Bayar University, Manisa, 45190, Turkey. E-mail: erol.esen@cbu.edu.tr

## Abstract

This study aims to determine college students' levels of knowledge about sexual harassment and assault, and to identify the predictors of this level of knowledge. Participants have been selected using a multi-stage sampling method and consist of 7,302 college students from a state college in Turkey. The age of participants ranged from 17 years to 29 years with a mean age of 21.33 years (SD = 2.04). The Sexual Harassment and Assault Knowledge Test, the Survey of College Students' Exposure to Sexual Harassment and Assault, and a socio-demographic form were used to obtain data from the sample. The two-steps cluster analysis revealed that 70.2 % of the all participants had moderate level of knowledge about sexual harassment and assault, while 13.6 % had a low level of knowledge and 16.2 % had high level of knowledge. The CHAID analysis indicated that sex was the main predictor of level of knowledge about sexual harassment and assault. Also, exposure to sexual harassment or assault, dating experience, and having gender-equality education were found as other predictor variables. Finally, classification accuracy of the CHAID model was found 79.5 % within the sample.

**Keywords:** Sexual Assault, Sexual Harassment, Level of Knowledge, College Students, CHAID

## 1. Introduction

Of the 1,761,394 students that graduated high school in Turkey in 2019, only 42 % successfully passed the two-stage national exams and won places in four-year degree programs (Higher Education Council, 2019). Despite differences between college admission processes in different countries, it is a great achievement for students to be accepted into colleges in every country. However, some college students that have managed to overcome this challenging process have subsequently dropped out of college education, and this happens for different reasons. One such reason is sexual harassment and assault (Coulter & Rankin, 2020), which is one of most traumatic events

that individuals may experience in their lives. Sexual harassment is defined as unwanted, sexually explicit, and disturbing statements, attitudes, or other forms of behaviors that do not involve bodily contact (Committee on the Elimination of Discrimination against Women [CEDAW], 1992) and sexual assault is defined as the violation of physical integrity through the uninvited and unwelcome actions, including bodily contact (Bennett, Manderson, & Astbury, 2000).

As a group, young adults aged 16–24 are the group most exposed to sexual harassment and assault (Gross, Winslett, Roberts, & Gohm, 2006; Sinozich & Langton, 2014). These traumatic situations may occur on campuses that are generally perceived as safe areas, in which the rate of sexual assaulters among peers and teachers is remarkable (World Health Organization [WHO], 2017). Studies conducted in Turkey and in a range of diverse cultures have demonstrated that female and LGBTI+ college students are exposed to sexual harassment and assault more frequently than male college students (Apaak & Sarpong, 2015; Cantor et al., 2015; Coulter et al., 2017; Coulter & Rankin, 2020; Eroğlu, Seven, Abalı, Çetin, & Önok, 2017). Although the incidence of sexual assault and harassment may vary, depending on the definitions and criteria used by researchers, approximately one out of every five college students in USA, the majority of whom are female, have been exposed to sexual harassment or assault during their college life (Fedina, Holmes, & Backes, 2018; Fisher, Cullen, & Turner 2000; Mellins et al., 2017). In Turkey, there are remarkably few studies that focus on experiences of college students in relation to sexual harassment and assault. The prevalence of sexual assault among female college students ranged between 1.2 % and 14.7 %, however men college students did not report any exposure to sexual assault (Dikmen, Özyayın, & Yılmaz, 2018; Kayı, Yavuz, & Arıcan, 2000; Yiğitalp, Ertem & Özkaynak, 2007). In another study conducted with Turkish college students, 14.2% of women and 28.9 % of men stated that they had made or tried to make another person part of nonconsensual sexual activities on at least one occasion (Schuster, Krahe, & Toplu-Demirtaş, 2016).

The wide range in the prevalence estimates for sexual assault may be linked to several methodological limitations such as included behaviors, screening items and sampling methods. Moreover, there is a high degree of consensus among experts that many victims do not report sexual harassment and assault, and avoid taking legal action against assaulters (Fisher et al., 2000; Gross et al., 2006; Kayı et al., 2000). According to Sinozich and Langton (2014), only one in five victims of sexual assault reports the assaults in college campuses. Thus, incidences of sexual harassment and assault that are reported are only the visible part of the metaphorical iceberg.

The factors that inhibit victims reporting sexual harassment and assault to legal authorities are victims' concerns about the violation of confidentiality, prejudicial attitudes towards victims, a sense of guilt, and feelings of shame or embarrassment (Bachman, 1998; Sable, Danis, Mauzy, & Gallagher, 2006). These findings are consistent with the perspective that stereotypes about sexual harassment and assault remain influential, despite awareness campaigns and legal reforms (Temkin & Krahe, 2008). "Sexual assault is caused by men's sexual drives," "women victims provoke assaulters by wearing short skirts and tight tops," "women are just being hyper-sensitive to sexual matter," "it only happens to women who look and act sexy," "she wanted or enjoyed it," "he didn't mean to do it" are some of the common stereotypes in almost every culture (Aydemir, 2019; Cowan, 2000; Kennedy & Gorzalka, 2002; Lonsway, Cortina, & Magley, 2008). When sexual assault survivors internalize the stereotypes into a belief system, they may resort to self-blame and avoid reporting incidents to police, particularly because these stereotypes suggest that women are responsible for their own sexual behavior (Suarez & Gadalla, 2010).

According to an intercultural study on sexual harassment and assault stereotypes in the college settings, Turkey is among the countries where these stereotypes are common (Ward et al., 1988). Research findings suggest that Turkish women are more tolerant of sexual harassment due to cultural factors, such as traditional gender stereotypes, double standards regarding gender and pervasive rape myths (Luthar & Luthar, 2002). A study based on cross-cultural comparison also found that Turkish women seeking social support after sexual harassment and assault had lower levels of avoidance and denial than Anglo American women (Wasti & Cortina, 2002). In another study conducted in Turkey with female college students, 66 % of students who were exposed to sexual harassment and assault preferred to remain silent (Timur & Yılmaz, 2013).

Lack of information about sexual harassment, is another factor affecting these low reporting rates. Some victims may not even be aware that they have been sexually harassed, due to their lack of knowledge about the behaviors that constitute sexual harassment (Leung, 2017; Tang, Yik, Cheung, Choi, & Au, 1996). Studies examining the knowledge level of college students regarding sexual harassment and assault reveal that majority of the college students' knowledge level is not adequate in developing countries (Abe, 2012; Menon et al., 2014). Additionally, when the studies studies that explore individuals' views on sexual harassment and assault assess attitudes rather than levels of knowledge. In other words, the number of studies involving the level of knowledge on the subject is very limited. While there are many measurement tools that assess the attitudes of individuals towards sexual harassment and assault (rape myth acceptance scale, the attitudes toward rape victims scale, perceived causes of rape scale, sexual harassment myth scale, sexual harassment attitudes questionnaire, the rape empathy scale etc.), the very limited number of tests that measure the level of knowledge is an indicator of this situation (Fisher, Davis, Yarber, & Davis, 2011). Considering that knowledge has a key role in shaping attitudes (Ajzen, 1991; Clarke & Crewe, 2000), it is thought that it is important and necessary to examine individuals' knowledge of sexual harassment and assault as much as attitudes.

Increasing students' awareness and knowledge about these mostly traumatic experiences is at the core of efforts to reduce the incidence of sexual violence in colleges (Becker, 2015; Mellins et al., 2017). Therefore, equipped with such knowledge, students will be able to easily identify sexually harassing and assaulting behaviors, clarify boundaries in relationships, and seek help from professionals (Gurung, Priyadarshini, & Margaret, 2016; Leung, 2017). Moreover, increasing students' awareness and knowledge causes undermining of stereotypes about sexual harassment and assault (Matusitz, 2012). In Turkey, where this current study was carried out, issues related to sexuality are still difficult to discuss; courses on gender issues or sexual health are not taught in secondary or high schools, and only a limited number of courses are included at college level (Esen, 2016).

Gender and taking education about sexual harassment and assault are among the most frequently studied variables related to the level of knowledge of college students. These studies showed that women college students have a higher level of knowledge than their men counterparts (Apaak & Sarpong, 2015; Becker 2015; Menon et al., 2014). Also, it is reported that the college students who had received education about sexual harassment and assault, have a higher level of knowledge than others (Kimberly & Hardman, 2019; Roehling & Huang, 2018).

The inadequate level of knowledge, high incidence rate, and negative effects of sexual harassment and assault all emphasize the need for prevention studies on the subject. Therefore, investigating students' levels of knowledge about sexual harassment and assault is a crucial aspect of configuring necessary interventions (Gurung et al., 2016). It is thought that addressing different socio-demographic variables other than gender and taking gender-equality education variables regarding the level of knowledge will shed light especially on prevention studies. At this point, Chi-Square Automatic Interaction Detection (CHAID) analysis, which is not commonly used in counseling or in the social sciences (Hoare, 2004), can be used to find interaction or combinations between variables and to identify the strongest associations between predictors and outcome variables (Dalton, 2007; Pigeot, Ahrens, Foraita, Jahn, & Pohlbeln, 2007) in large sample sizes (Kosciulek, 2004). It can be said that CHAID has several advantages in the context of mixed analysis. In particular, determining whether group level variables are justified in segmenting the sample into subgroups CHAID analysis allow for the inclusion of cluster variables (Collins, Onwuegbuzie, & Jiao, 2010).

In this context, this study aims to determine levels of knowledge about sexual harassment and assault among college students and to identify predictors of these levels of knowledge.

Research questions:

1. What level of knowledge do college students have about sexual harassment and assault?
2. Which socio-demographic factors predict college student's level of knowledge about sexual harassment and assault?
3. How accurate is predictive classification (i.e., what is the risk of false classification) in each of the CHAID analyses?

## 2. Methods

### 2.1. Participants

A multi-stage sampling method was used, which meant that first, according to the stratified sampling method, each campus was accepted as a stratum. Then, the number of students from each stratum was determined, based on the ratio of the population. Secondly, random sampling with a random number table was used to select faculties, classrooms, and departments. Although data were collected from 7,415 students, the data of 113 participants over 30 years of age were not included in the analysis. As a result, the sample for this research consists of 7,302 college students (3,566 women and 3,736 men) from a state college in western Turkey. Participants' ages ranged from 17 to 29 ( $M_{age} = 21.33$ ,  $SD = 2.04$ ). Other socio-demographic characteristics of the participants are presented in Table 1.

Table 1: The Socio-demographic Characteristics of the Participants

Socio-demographic Variables	n	%
Grade level		
Freshman	2454	33.6
Sophomores	2004	27.4
Juniors	1414	19.4
Seniors	1430	19.6
Residential Type		
Lives in a family house	2571	35.2
Lives in a house (alone or with a friend)	2404	32.9
Lives in dorm, boarding house, student residence	2300	31.4
Monthly Income		
Below 90\$	2497	34.2
91 to 180\$	2671	36.6
181 to 270\$	1172	16.1
Above 270\$	721	9.9
Exposure to Sexual Harassment or Assault		
Never	4934	67.8
At least once	2344	32.2

### 2.2. Measures

*The Sexual Harassment and Assault Knowledge Test.* The Sexual Harassment and Assault Knowledge Test (SHAKT), which was developed to determine levels of knowledge about sexual harassment and assault, consists of 16 items. Due to the fact that there is not any knowledge test developed in Turkey or adapted in Turkish on the issue, SHAKT was used in this study. Five of the items in the test are straight ("Asking for a date persistently is a sexual harassment." e.g.) and 11 are reverse-coded (Sexual intercourse is essential for the crime of sexual assault." e.g.). Respondents were asked to indicate whether the items were "True," "False," or they "Do not know." Correct responses were given a score of 1 and incorrect or "I don't know" responses given a score of 0. The number of correct responses was calculated with higher scores on the SHAKT indicating a greater level of knowledge about sexual harassment and assault.

In the development process of SHAKT, content validity was evaluated first. To evaluate the content validity, five experts opinions' about test items was gathered. Content validity index was calculated in line with expert opinions. As Davis (1992) suggests a limit of .80 for the content validity index, it is seen that each item of the SHAKT is over the threshold value. In the next step, the discriminant validity and reliability of the SHAKT were tested and also item analysis were performed with 499 college students. To evaluate the discriminant validity t-tests were performed between the 27 % upper and 27 % lower criterion groups. Results indicated that each item of the test could discriminate the upper and lower groups properly. The KR-20 reliability coefficient of the SHAKT was calculated as .65, which is an acceptable value for short tests with few items (Mangal & Mangal, 2013). Item analysis showed that the average difficulty index of the test items ranged .21 to .97 and the the overall average difficulty index was .78. Content validity, discriminant validity, and the KR-20 reliability analyses

revealed that SHAKT is a valid and reliable measurement of college students' knowledge about sexual harassment and assault (Esen et al., 2018).

*Survey of College Students' Exposure to Sexual Harassment and Assault.* The Survey of College Students' Exposure to Sexual Harassment and Assault (SCSESHA) is a list of 15 items that are related to sexual harassment and assault. This was used to determine the frequency with which participants were exposed to sexual harassment and assault from a friend, partner (e.g., a lover or spouse), academician, or employee of the college ("Have you been asked questions about your sexual life in a way that will disturb you by your friend, partner (lover, spouse), teacher or employee in your college life?", "Has your friend, partner (lover, spouse), teacher or employee touched any part of your body without your consent in your college life?" e.g.). Responses were gauged by a four-point scale ("Never," "Once," "Two or three times," or "More than four times"). According to the results of the survey, participants were divided into two groups: those that marked "never" for all of these items were categorized as "non-assaulted and harassed," while those that marked "Once," "Two or three times," or "More than four times" for any of the items were categorized as "assaulted and harassed at least once."

*Socio-demographic form.* A socio-demographic survey was also distributed, to gather information about gender, age, dating experience, grade level, residential type, monthly income, and gender-equality training.

### 2.3. Procedure

Ethical permission was obtained from the Ethical Review Board of a state college. Additionally, application permission was gained from each department and faculty. The data were collected by the researchers in the spring semester of 2018 by the paper / pencil method in the classroom setting. Before the administration of the scales, participants were informed about the study and informed consent was obtained. All participants agreed to participate in the study after being informed about the purpose of the study. The questions in the SCSESHA can trigger trauma for those that had previously been exposed to sexual harassment or assault. For this reason, researchers informed participants that they could access psychological support if they felt uncomfortable with the questions in the survey. This was reinforced in writing and verbally. These measures took approximately 25–30 minutes to complete.

### 2.4. Data Analysis

Firstly, descriptive analyses were conducted to assess the sociodemographic characteristics of the study sample and to determine the frequency distribution of participants response of SHAKT items. Secondly, CHAID analysis was used to determine the variables that predict the level of knowledge about sexual harassment and assault. Since, CHAID analysis produces better results if the dependent variable is categorical (Kass, 1980; Magidson, 1994; Power & Xie, 2008), the SHAKT scores were converted into categorical variables using two-step clustering analysis. The two-step cluster analysis yielded three clusters, with two cut-off points at 6 and 14. Of the participants, 13.6 % (n = 994) scored between 0 and 6 (this cluster was labeled a low level of knowledge), 70.2 % (n = 5,127) of the participants scored 7–13 (this cluster was labeled a moderate level of knowledge), and 16.2 % (n = 1,181) of the participants scored 14–16 (this cluster was labeled a high level of knowledge). Thirdly, the effect size measure was calculated using Cramer's V method. For chi-square tests with degrees of freedom equal to 2, Cohen (1988) suggests that a Cramer's V value over .35 demonstrates a large effect, while a value within the range of .21 to .35 reveals a medium effect, and a value within the range of .07 to .21 demonstrates a small effect. SPSS 23.0 was used in the analysis, and the significance value was accepted as  $p < .05$ .

## 3. Results

### 3.1. Level of Knowledge about Sexual Harassment and Assault

The frequency distribution of the items in the SHAKT was calculated, in order to determine the participants' levels of knowledge about sexual harassment and assault (Table 2). Table 2 reveals that 92% of the participants thought that males could be sexually assaulted, 91.7 % of the participants believed that staying silent during sexual

harassment or assault does not mean that the person has given their consent, and 90.2 % of the participants believed that behaviors not involving the use of physical force could be accepted as sexual assault. Conversely, only 13.6 % of the participants believed that sexual harassment and assault are frequently committed by someone that knows the victim, 50.2 % of the participants believed that unwanted sexual conducts between partners could be considered sexual harassment or assault, and 51.9 % of the participants believed that potential sexual assault could not be easily identified. Also, 34.6 % of the participants had no idea about whether potential sexual assaulters can be easily identified or not, and 24.2 % of the participants had no idea about whether unwanted sexual conducts between partners can be considered sexual harassment and assault or not.

Table 2: Frequencies of Participants' Answers to Sexual Harassment and Assault Knowledge Test Items

		KNOWLEDGED		BIASED		NO IDEA	
		Men	Women	Men	Women	Men	Women
*1.	No evidence about sexual assault in the medical examination, means that there is no sexual assault.	64.8%	77.1%	6.6%	3.3%	28.6%	19.6%
*2.	Staying silent during sexual harassment and assault means that the person has given their consent.	89.6%	95.9%	6.8%	1.2%	3.7%	2.9%
*3.	Sexual harassment and assault usually occurs in marginal locations.	72.8%	85.1%	7%	1.6%	20.2%	13.4%
*4.	Men can not be sexually assaulted.	93%	94.3%	2.4%	1.1%	4.6%	4.6%
*5.	Sexual assaulters generally have low socioeconomic status.	69.2%	78.5%	12.5%	6.7%	18.3%	14.8%
#6.	Sexual harassment and assault frequently committed by someone who knows the victim.	13.7%	14.3%	59.8%	65.2%	26.5%	20.5%
*7.	Behaviors that do not involve use of physical force can't be accepted as sexual assault.	89%	94.2%	3.9%	1.1%	7.2%	4.7%
*8.	Sexual harassment and assault occurs only in dark and isolated locations.	89.2%	93.4%	4.4%	2.2%	6.4%	4.4%
#9.	Forcing someone to watch sexually explicit images is a sexual harassment.	79.2%	85.2%	12.4%	9.3%	8.5%	5.5%
#10.	Asking for a date persistently is a sexual harassment.	62.2%	78.6%	18.5%	10.2%	19.3%	11.3%
*11.	Sexual assaulters are people who can't control their sexual urges.	13.6%	16.2%	72.4%	69.5%	14%	14.2%
*12.	Potential for sexual assaulters can be easily identified.	49.6%	56.6%	17.6%	8.8%	32.7%	34.6%
#13.	After sexual harassment and assault, the victim's trauma symptoms may appear at different times	69.2%	75.2%	5.5%	4%	25.4%	20.8%
*14.	Sexual intercourse is essential for the crime of sexual assault.	86%	93.2%	5.5%	2.1%	8.5%	4.7%
*15.	Unwanted sexual conducts between partners cannot be considered sexual harassment or assault	43.3%	59.8%	31.7%	18.9%	25%	21.4%
#16.	A sexual assaulter may be of different or same gender with the victim.	88.7%	91.6%	4.9%	3.6%	6.4%	4.8%

# The item is true

\* The item is false

3.2. Predictors of Levels of Knowledge about Sexual Harassment and Assault

CHAID analyses identified multiple predictors of levels of knowledge about sexual harassment and assault that concern sex, dating experience, being sexually harassed or assaulted, and taking gender-equality training (Figure 1). The CHAID analysis also revealed that the strongest predictor of a student’s level of knowledge about sexual harassment and assault was sex, as female participants had more knowledge than male participants,  $\chi^2(2, 7302) = 328.33$ , adj p = .000. Indeed, 21.9 % of female participants had high-level knowledge about sexual harassment and assault, whereas only 10.7 % of the male participants had high-level knowledge about sexual harassment and assault.

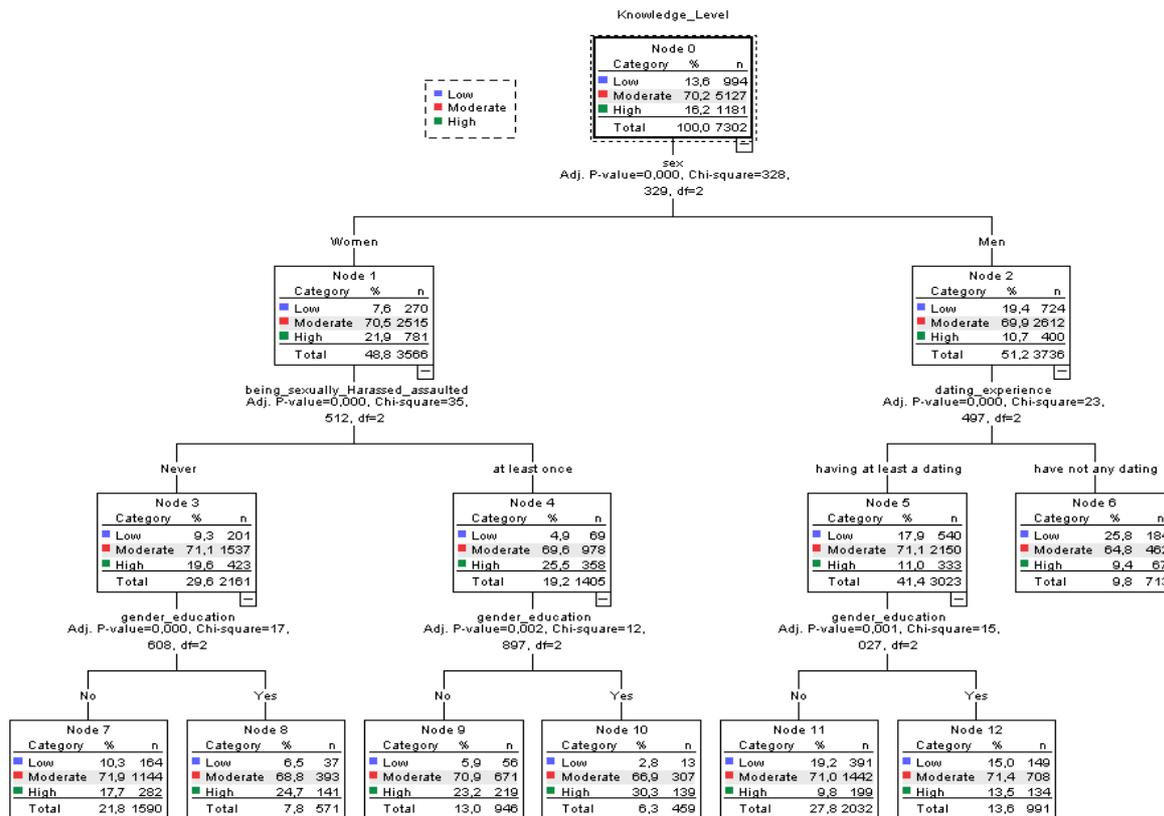


Figure 1: CHAID Analysis of the Level of Knowledge about Sexual Harassment and Assault

Among the female participants, whether they had been exposed to sexual harassment and assault predicted their level of knowledge,  $\chi^2(2, 3566) = 35.51$ ,  $p = .000$ . Findings reveal that 25.5 % of the females that had been exposed to sexual harassment and assault at least once had high-level knowledge about sexual harassment and assault. By contrast, only 19.6 % of females that had never been sexually assaulted or harassed had high-level knowledge about sexual harassment and assault. Taking gender equality education was another variable that predicted a student’s level of knowledge about sexual harassment and assault among female participants, including those with exposure to sexual harassment and assault at least once,  $\chi^2(2, 1405) = 12.90$ , adj p = .002, and females that had never been sexually assaulted or harassed,  $\chi^2(2, 2161) = 17.61$ , adj p = .000. Furthermore, 24.9 % of females that had not been sexually assaulted or harassed and that had taken gender equality education had high-level knowledge, while 17.7 % of females that had not been sexually assaulted or harassed but had not taken gender equality education had high-level of knowledge. Moreover, 30.3 % of female participants that had been exposed to sexual harassment and assault at least once and that had taken gender equality education had high-level of knowledge, while 23.2 % of females that had been sexually assaulted or harassed at least once but had not taken gender-equality education had high-level knowledge.

In contrast, among the male participants, dating experience was the strongest predictor of level of knowledge,  $\chi^2(2, 3736) = 23.50$ ,  $\text{adj } p = .000$ . In this respect, 11 % of males that had dated at least once had high-level knowledge, while 9.4 % of males that had not dated at all had high-level knowledge. Taking gender-equality education was also a variable that predicted male students' levels of knowledge about sexual harassment and assault, for men that had dated at least once,  $\chi^2(2, 3023) = 15.02$ ,  $\text{adj } p = .001$ . Thus, 13.5 % of males that had dated at least once and had taken gender-equality education had high-level knowledge, while 9.8% of males that had dated at least once but had not taken gender-equality education had high-level knowledge.

### 3.3. The Accuracy of the CHAID Model

Classification accuracy and risk estimates can be used to assess the success of this model. As a result of the CHAID analysis, the risk estimate was found to be .20 and the standard error was .005. The overall model resulted in a classification accuracy of approximately 79.5 % within the sample. Cramer's V effect size and statistical significance were both calculated for each node (see Table 3). Table 3 reveals that all relationships were within the small-effect size range.

Table 3: Effect Size Values for Knowledge about Sexual Harassment and Assault

Relationships	Node	Chi-Square	Cramers' V	Effect Size
Sex	0	328.33	.21	Medium
Exposed to sexual assault at least once for women	1	35.51	.10	Small
Dating experience for men	2	23.50	.08	Small
Taking gender education for women never harassed/assaulted	3	17.61	.12	Small
Taking gender education for women harassed/assaulted at least once	4	12.90	.10	Small
Taking gender education for men	5	15.03	.07	Small

## 4. Discussion

Regarding the participants' level of knowledge about sexual harassment and assault, the two-step cluster analysis results show that 70 % of the participants have moderate knowledge. Accordingly, the majority of the participants could correctly answer a maximum of 12 questions out of 16 items in the SHAKT. Research in the related literature similarly asserts a lack of information about sexual harassment and assault among college students (DeSouza & Fansler, 2003; Equal Opportunities Commission, 2013; Krebs et al., 2007).

The frequency distributions of the SHAKT items also, support this finding. Evaluation of the level of participants' knowledge of each item reveals that most of the respondents do not believe that "Sexual harassment and assault are frequently committed by someone that knows the victim" (Item 6)". Interestingly, Item 6 is one of the most common stereotypes about sexual harassment and assault. According to 22–24.2 % of college students (Ahmad & Kamal, 2000; Kamal, Shaikh, & Shaikh, 2010), sexual assaults are only carried out by strangers. Yet, many studies emphasize that a significant portion of sexual assaults are carried out by people that are close to or known to the victim (Balci, Erbas, Işık, & Karbeyaz, 2014; Kernsmith, Comartin, Craun, & Kernsmith, 2009; Lee et al. 2010; WHO, 2017; Xue et al. 2019). Indeed, women are four times as likely to be raped by an acquaintance than by a stranger (Szymanski, Devlin, Chrisler, & Vyse, 1993). Additionally, studies involving victims indicate that most know their aggressor, and this acquaintance makes it difficult to report the incident (Illinois Coalition Against Sexual Assault, 1995; Lee, Busch, Kim, & Lim., 2007).

College students also tend to believe that "Sexual assaulters are people who can't control their sexual urges" (Item 11). This is another common stereotype, with studies conducted with college students finding that 43.9 % (Johnson, Kuck, & Schonder, 1997) and more than half (Xue et al., 2019) of participants agreed that assailants were unable to control their sexual urges. However, less studies are conducted with aggressors than with victims.

A study by Amir (1971), based on police records about rape incidents, notes that 71 % of rape incidents were previously planned, and that actions were not impulsive (as cited in Scully, 1994).

Another finding from this study reveals that one-third of participants responded “I do not know” to Item 12 (“People that have the potential to be sexual assaulters can be easily distinguished”) and approximately one-quarter of participants responded “I do not know” to Item 1 (“No evidence about sexual assault in the medical examination, means that there is no sexual assault.”), as well as to Item 13 (“After sexual harassment and assault, the victim’s trauma symptoms may appear at different times”) and Item 15 (“Unwanted sexual conducts between partners cannot be considered sexual harassment or assault”). Similarly, 40 % (Ahmad & Kamal, 2000) and 33 % (Kamal, Shaikh, & Shaikh, 2010) of college students reported that sexual behaviors among married couples cannot be identified as sexual assault. In another study, 20 % of college students reported that they were undecided about a statement explaining that women could be sexually assaulted by their partners. Nearly a quarter of college students reported that they were undecided about the notion that “Men from nice middle-class homes almost never rape” and “Rapists are usually sexually frustrated individuals” (Xue et al. 2019). Another common myth about attackers is that “He’s not the kind of guy that would do this” (Franiuk, Seefeldt, & Vandello, 2008). In a scenario in which date rape was committed, 36.8 % of students would describe the victim as having been sexually assaulted, whereas 16.8 % stated that it is not a sexual assault (Gölge, Yavuz, MÜderrisoglu, & Yavuz, 2003). Many studies suggest that stereotypes and myths about sexual harassment and assault contribute to the continuation of sexual violence (Cowan, 2000; Lonsway, & Fitzgerald, 1994). In fact, these stereotypes are common in many cultures (Kalra & Bhugra, 2013), which continue to nurture a “rape-supportive” climate (Struckman-Johnson & Struckman-Johnson, 1992).

This finding illustrates a lack of adequate knowledge concerning sexual harassment and assault. This is not surprising, as gender inequality and gender stereotypes underpin gender-based violence and sexual harassment (Gilmartin, 1994; Polat, 2017). According to The Global Gender Gap Report (World Economic Forum, 2018), Turkey ranks 130 among 149 countries that are benchmarked by their progress towards gender parity. Information on sexual harassment and assault is provided in the context of sexual health or gender-equality education, in an educational setting. Secondary and high-school curriculums in Turkey do not include any compulsory or elective courses in this area (Esen, 2016). Furthermore, in terms of gender analysis, course content in primary and secondary education programs similarly fails to provide examples of gender equality (Karakuş, Mutlu, & Diker Çoşkun, 2018). Examples of these courses are also limited in colleges. For example, a study examining counseling programs found that only ten of 79 counseling undergraduate programs involved a gender equality course, and only 17 included sexual health lessons (Siyez & Soyulu, 2017).

One source of accurate information about sexual harassment and assault for college students is colleges’ sexual assault response and prevention centers. Although the establishment of these center is mandatory in many states of the USA (under Title IX), they were only recently introduced in Turkey. The Higher Education Council (2015) states that efforts should be made to prevent sexual harassment and assault in universities, but the number of universities with these units remains low. In Turkey, eight out of 179 universities (112 state and 67 private universities) have units working on sexual harassment and assault. In these units, psychological, legal, and medical support is provided to victims.

This study’s findings also illustrate that gender is the first predictive variable of participants’ level of knowledge. Similarly, many studies report that the level of knowledge of female college students is higher than that of men college students (Karjane, Fisher, & Cullen, 2005; Krebs et al., 2007; Yiğitalp et al., 2007). Women having more knowledge than men can partly be attributed to differences in parents’ child-rearing styles, as girls are more-protectively raised by their parents than boys are. Research conducted on the topic reveals that parents are more protective over girls (McNaughton, & Niedzwiecki, 2000; Mızrakçı, 1994; Morrongiello, & Dawber, 1999; Stephens, 2009). Şanlı and Öztürk (2015) note that parental attitudes differ by gender, with 13.9 % of parents exhibiting authoritarian attitudes when raising girls but only 8.6 % when raising boys. In another study, democratic parental attitudes were found to differ in favor of males (Aydoğdu & Dilekmen, 2018). In addition, boys are considered stronger and more resilient, while girls are understood to be more vulnerable (Grigorenko & Sternberg, 2000). As part of these differing processes, parents may provide more information to daughters, in order to protect

themselves. Thus, the high rates of sexual harassment, assault, and risk to women may explain their increased sensitivity and awareness of the issue (Cantor et al., 2015; Eroğlu et al., 2017; Fisher et al., 2000; Krebs et al., 2007).

Women's increased knowledge, compared to men, is also understandable in terms of past experiences. Research carried out in different countries asserts that women are more exposed to sexual harassment and assault than men (Karjane et al., 2005; Krebs et al., 2007; Yiğitalp et al., 2007). Indeed, this study demonstrates that exposure to harassment is a discriminative variable in terms of women's level of knowledge. Those exposed to sexual harassment or assault tend to read formal or informal resources related to their situation, aside from seeking medical and legal assistance (Ullman, Starzynski, Long, Mason, & Long, 2008). Experiences, described from the victim's perspective on the issue, may have effected this increased level of knowledge. Exposure to sexual harassment and assault can have negative effects on the individual (Carey, Norris, Durney, Shepardson, & Carey, 2018; Ullman et al., 2007), both in the short and long term, and may increase their sensitivity to this issue.

This study has determined that the most important variable predicting men's level of knowledge is their experiences of dating. Accordingly, men with experiences of flirting have a higher level of knowledge. Schema therapy asserts that individuals develop schemas for relationships, based on the relationships with which they interact (van Genderen, Rijkboer, & Arntz, 2012). Following this approach, and since past experiences affect current behaviors, past relationships can be expected to shape individuals' current lives. Thus, these individuals may gain increased awareness if they receive feedback about behaviors at the end of a relationship.

In this study, gender-equality education was found to affect the level of knowledge of both men and women students. Accordingly, those taking gender-equality education had a higher level of knowledge than those that had not undertaken such a course. There is a broad consensus that gender-based inequality lies at the root of the acts of sexual harassment and sexual assault, which occur in different forms of violence in every level of societies (Canadian Women's Foundation 2016). Gender-equality education emphasizes an egalitarian perspective, while aiming to reduce stereotyped judgements. An examination of the literature reveals that many studies emphasize that gender-equality education is an effective factor (Soylu & Esen, 2018).

Limitations of this research should also be considered. First, it is not possible to draw a conclusion about a cause-and-effect relationship between dependent and independent variables, due to the study's cross-sectional research design. Secondly, self-reported data collection tools were used in this study, which means participants may have given false negative and/or false positive responses to explain private details, especially about exposure to sexual assault and harassment. Thirdly, a limited number of independent variables were evaluated in this study.

In light of the findings of this study, it is possible to provide suggestions for researchers and practitioners. Other variables may be evaluated as predictors, such as the respondent being a perpetrator, gender roles, and tolerance for sexual harassment and assault in social environments. Considering the influence of gender-focused courses on levels of knowledge, an extension of these courses is recommended. A connection can also be made between lack of knowledge about sexual harassment and assault and the inability to resist violence. The results of this research illustrate that some actions are not included in definitions of sexual harassment and that sexual violence by close acquaintances or partners is not perceived as violence. In particular, the fact that dating violence is not perceived as violence suggests that anyone can tolerate violence and accept this as a natural form of suffering. In this context, it is necessary to teach college students about basic legal, psychological, and medical knowledge of sexual harassment and assault. College students should also be provided with effective training to teach basic information about sexual harassment and assault. In addition to this training, various social media campaigns, such as #metoo or #heforshe, which have had a great impact, can be useful to raise awareness.

It is observed that there is not enough preventive work carried out at the case college where the research is conducted. Although there are courses related to gender in some departments of some faculties (for example, Faculty of Medicine, Department of Psychological Counseling and Guidance), it seems that this is not sufficient. In addition, it is emphasized that prevention works towards developing more positive and healthy behaviors are more successful (Berkowitz, 2001; Borges, Banyard, & Moynihan, 2008). In this context, it is possible to make

additional suggestions based on the case college settings. Research on sexual harassment and assault prevention programs shows that interaction-based, long-term, internet-based training programs can also be effective (Anderson & Whiston, 2005; Borges et al., 2008). It is thought that the interactive nature of the internet can engage and motivate students more actively to process information in a meaningful way (Heppner, Humphrey, Hillenbrand-Gunn, & DeBord, 1995). It is also mentioned that effective sexual violence prevention programs should use different strategies and mechanisms to educate individuals (Centers for Disease Control and Prevention, 2004). Accordingly, it can be suggested that various strategies should be used in training programs on sexual harassment and assault and that these programs may be internet-based. Moreover, it may be advisable to provide specific information on sexual harassment and assault in an accessible section of the college web pages. This information may include instructions on content, policies, sources of reference and myths about sexual harassment and assault (Buhi, Clayton, & Surrency, 2009). In this way, it can be ensured that the students in the college can easily access the accurate information.

Researchers also note that prevention programs that are prepared specifically for a particular population may be more effective (Wandersman & Florin, 2003). An examination of the literature reveals that providing accessible and accurate information about sexual assault can reduce the rate of sexual assault on college campuses, and can also increase student safety and help to fulfill the task of providing a safe educational environment for all students (Sözer & Clevenger, 2010). In addition, the results of this study emphasize that prevention efforts that work toward developing more positive and healthy behaviors are particularly successful (Berkowitz, 2001; Borges et al., 2008). In addition, it is advisable to provide specific information on sexual harassment and assault, in accessible sections of college webpages. This information may include information on content, policies, sources of reference, and myths about sexual harassment and assault (Buhi et al., 2009). This way can ensure students in the college can easily access accurate information. General observations gleaned from the findings of this study include a lack of knowledge and misconceptions about the sexual harassment and assault of college students. Despite awareness campaigns and efforts to prevent sexual harassment and assault in recent years, college students' knowledge does not reach the desired level. Thus, they need more comprehensive and tailored interventions.

### Acknowledgments

The Ethics Committee of Institute of Educational Sciences at Dokuz Eylül University approved the study. This work was supported by the Dokuz Eylül University under Grant [number 2017.KB.EGT.004].

### References

- Abe, I. (2012). Defining and awareness of sexual harassment among selected college students in Lagos Metropolis, Nigeria. *Journal of Emerging Trends in Educational Research and Policy Studies*, 3(3), 212-218.
- Ahmad, S., & Kamal, A. (2000). Development of rape myths scale and its relation with gender role attitudes. *Pakistan Journal of Psychological Research*, 15(1-2), 57-74.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50, 179-211.
- Anderson, L. A., & Whiston, S. C. (2005). Sexual assault education programs: A meta-analytic examination of their effectiveness. *Psychology of Women Quarterly*, 29(4), 374-388. doi: 10.1111/j.1471-6402.2005.00237.x
- Apaak, D., & Sarpong, E. O. (2015). Knowledge level and incidence of sexual harassment in sports: Views of Ghanaian female university athletes. *Journal of Educational and Social Research*, 5(3), 121-130. doi: 10.5901/jesr.2015.v5n3p121
- Aydemir, L. (2019). Kadın tacizlerine yönelik bir tutum araştırması [An attitude research on women's harassment]. *International Journal of Social and Humanities Sciences (IJSHS)*, 3(1), 199-216
- Aydoğdu, F., & Dilekmen, M. (2018). Analyzing the leisure time elementary school students spend with their mothers according to the views of mothers. *Sakarya Üniversitesi Eğitim Fakültesi Dergisi*, (35), 49-63.
- Bachman, R. (1998). The factors related to rape reporting behavior and arrest: New evidence from the National Crime Victimization Survey. *Criminal Justice and Behavior*, 25(1), 8-29. doi:10.1177/0093854898025001002

- Balcı, Y., Erbaş, M., Işık, Ş., & Karbeyaz, K. (2014). Evaluation of the sexual assault crimes in Muğla Forensic Medicine Department. *Adli Tıp Bülteni*, 19(2), 87-95. doi:10.17986/blm.2014192795
- Becker, E. (2015). *Student knowledge and understanding of sexual violence: A case study at Duke University* (Undergraduate Honors Thesis). Retrieved from [https://dukespace.lib.duke.edu/dspace/bitstream/handle/10161/11467/Becker\\_Thesis\\_Final\\_Publication.pdf?sequence=1](https://dukespace.lib.duke.edu/dspace/bitstream/handle/10161/11467/Becker_Thesis_Final_Publication.pdf?sequence=1)
- Bennett, L.R., Manderson, L. & Astbury, J. (2000). *Mapping a Global Pandemic: Review of Current Literature on Rape, Sexual Assault and Sexual Harassment of Women*. Geneva: Global Forum for Health Research.
- Berkowitz, A.D. (2001). Critical elements of sexual assault prevention and risk reduction programs for men and women. In C. Kilmartin (ed.), *Sexual assault in context: Teaching college men about gender*. Holmes Beach, FL: Learning Publications.
- Borges, A. M., Banyard, V. L., & Moynihan, M. M. (2008). Clarifying consent: Primary prevention of sexual assault on a college campus. *Journal of Prevention & Intervention in the Community*, 36(1-2), 75-88. doi:10.1080/10852350802022324
- Buhi, E., Clayton, H., & Surrency, H. H. (2009). Stalking victimization among college women and subsequent help-seeking behavior. *Journal of American College Health*, 57, 419–425. doi:10.3200/JACH.57.4.419-426
- Canadian Women's Foundation (2016). *Sexual assault and harassment fact sheet*. Retrieved from <https://www.canadianwomen.org/wp-content/uploads/2017/09/Facts-About-Sexual-Assault-and-Harassment.pdf>
- Cantor, D., Fisher, B., Chibnall, S., Townsend, R., Lee, H., Bruce, C., Thomas, G., ... & Westat, Inc. (2015). *Report on the AAU Campus Climate Survey on Sexual Assault and Sexual Misconduct*. Washington, DC: Association of American Universities.
- Carey, K. B., Norris, A. L., Durney, S. E., Shepardson, R. L., & Carey, M. P. (2018). Mental health consequences of sexual assault among first-year college women. *Journal of American College Health*, 66(6), 480-486.
- Centers for Disease Control and Prevention (2004). *Sexual violence prevention: Beginning the dialogue*. Atlanta, GA: Centers for Disease Control and Prevention.
- Clarke, N. E., & Crewe, N. M. (2000). Stakeholder attitudes toward ADA Title I: Development of an indirect measurement method. *Rehabilitation Counseling Bulletin*, 43(2), 58-65.
- Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.
- Collins, K. M. T., Onwuegbuzie, A. J., & Jiao, Q. G. (2010). *Toward a broader understanding of stress and coping: Mixed methods approaches*. Charlotte, NC: Information Age.
- Committee on the Elimination of Discrimination against Women (CEDAW), (1992). *General recommendation No. 19: Violence against women* (Contained in UN Doc A/47/38). Retrieved from <https://www.globalhealthrights.org/instrument/cedaw-general-recommendation-no-19-violence-against-women>.
- Coulter, R. W., Mair, C., Miller, E., Blosnich, J. R., Matthews, D. D., & McCauley, H. L. (2017). Prevalence of past-year sexual assault victimization among undergraduate students: Exploring differences by and intersections of gender identity, sexual identity, and race/ethnicity. *Prevention Science*, 18(6), 726-736.
- Coulter, R. W., & Rankin, S. R. (2020). College sexual assault and campus climate for sexual-and gender-minority undergraduate students. *Journal of Interpersonal Violence*, 35(5-6), 1351-1366.
- Cowan, G. (2000). Women's hostility toward women and rape and sexual harassment myths. *Violence Against Women*, 6(3), 238-246. doi:10.1177/10778010022181822
- Dalton, J. A. (2007). *Predicting successful rehabilitation outcomes for persons who are deaf or hard of hearing: an application of chi squared automatic interaction detector and logistic regression analyses*. (Unpublished doctoral dissertation). University of Wisconsin, Madison.
- DeSouza, E., & Fansler, A. G. (2003). Contrapower sexual harassment: A survey of students and faculty members. *Sex Roles*, 48(11-12), 529-542. doi: 0.1023/A:1023527329364
- Dikmen, H.A., Özyayın, T. & Yılmaz, S.D.(2018). Üniversitedeki kadın öğrencilerde yaşanan flört şiddeti ile anksiyete ve umutsuzluk düzeyleri arasındaki ilişki [The Relationship Between Dating Violence and Anxiety/Hopelessness Among Women Students in University]. *ACU Sağlık Bilimleri Dergisi*, 9(2),170-176. doi:10.31067/0.2018.9
- Equal Opportunities Commission (2013). *Study on students' sexual attitudes and views on sexual harassment report*. Retrieved from [https://www.eoc.org.hk/EOC/Upload/ResearchReport/SH\\_eFullReport.pdf](https://www.eoc.org.hk/EOC/Upload/ResearchReport/SH_eFullReport.pdf)
- Eroğlu, K., Seven, M., Abalı Çetin, S., & Önok, M.R. (2017). The experiences and opinions of college students on sexual abuse and harassment. *KASHED*, 3(1), 18-39.
- Esen, E. (2016). Investigation of training programs for supporting healthy adolescent development. *21. Yüzyılda Eğitim ve Toplum Eğitim Bilimleri ve Sosyal Araştırmalar Dergisi*, 5(15), 265-292.

- Esen, E., Soylu, Y., Firuzan, E., Belkıs, Ö., Baran, B., Ercan., S., Öztürk, B., ...Siyez, D. M. (2018). *Development of sexual harassment and assault knowledge test*. 2<sup>nd</sup> Women's Congress, İzmir, Turkey.
- Fedina, L., Holmes, J. L., & Backes, B. L. (2018). Campus sexual assault: A systematic review of prevalence research from 2000 to 2015. *Trauma, Violence, & Abuse*, 19(1), 76-93.
- Fisher, B.S., Cullen, F.T., & Turner, M.G. (2000). *The sexual victimization of college women: Research report* (NCJ-182369) Washington, DC: U.S. Department of Justice, Office of Justice Programs.
- Fisher, T. D., Davis, C. M., Yarber, W. L., & Davis, S. L. (2011). *Handbook of sexuality-related measures* (3rd ed.). New York, NY: Routledge
- Franiuk, R., Seefeldt, J. L., & Vandello, J. A. (2008). Prevalence of rape myths in headlines and their effects on attitudes toward rape. *Sex Roles*, 58(11-12), 790-801. doi:10.1007/s11199-007-9372-4
- Gilmartin, P. (1994). *Rape, Incest, and Child Sexual Abuse: Consequences and Recovery*. New York: Garland Publishing.
- Grigorenko, E. L., & Sternberg, R. J. (2000). Elucidating the etiology and nature of beliefs about parenting styles. *Developmental Science*, 3(1), 93-112.
- Gross, A.M., Winslett, A., Roberts, M., & Gohm, C.L. (2006). An examination of sexual violence against college women. *Violence Against Women*, 12(3), 288-300. doi:10.1177/1077801205277358
- Gölge, Z. B., Yavuz, M. F., Müderrisoğlu, S., & Yavuz, M. S. (2003). Turkish university students' attitudes toward rape. *Sex Roles*, 49(11-12), 653-661.
- Gurung, A., Priyadarshini, S., & Margaret, B. E. (2016). Knowledge of sexual harassment among the undergraduate students in Udipi district. *Nitte University Journal of Health Science*, 6(2), 4.
- Heppner, M. J., Humphrey, C. F., Hillenbrand-Gunn, T. L., & DeBord, K. A. (1995). The differential effects of rape prevention programming on attitudes, behavior, and knowledge. *Journal of Counseling Psychology*, 42(4), 508-518. doi:10.1037/0022-0167.42.4.508
- Higher Education Council (2015). *Yüksek öğretim kurumları toplumsal cinsiyet eşitliği tutum belgesi [Higher education institutions gender equality attitude document]*. Retrieved from <http://dekaum.deu.edu.tr/wp-content/uploads/2016/06/Tutum-Belgesi.pdf>
- Higher Education Council (2019). *Yükseköğretim kurulu 2019 yılı yükseköğretim kurumları sınavı yerleştirme sonuçları raporu [Higher education council 2019 higher education institutions exam result report]*. Retrieved from [https://www.yok.gov.tr/HaberBelgeleri/Haber%20%C4%B0%C3%A7erisindeki%20Belgeler/Dosyalar/2019/yks\\_2019\\_sonuc\\_raporu.pdf](https://www.yok.gov.tr/HaberBelgeleri/Haber%20%C4%B0%C3%A7erisindeki%20Belgeler/Dosyalar/2019/yks_2019_sonuc_raporu.pdf)
- Hoare, R. (2004). *Using CHAID for classification problems*. New Zealand Statistical Association Conference, Wellington, New Zealand.
- Illinois Coalition Against Sexual Assault (1995). *Acquaintance rape: When the rapist is someone you know*. Springfield, IL : Illinois Coalition Against Sexual Assault.
- Johnson, B.E., Kuck, D.C., & Schander, P.R. (1997). Rape myth acceptance and sociodemographic characteristics: A multidimensional analysis. *Sex Roles*, 36, 693-707.
- Kamal, A., Shaikh, I. A., & Shaikh, M. A. (2010). Comparative analysis of attitudes and perceptions about rape among male and female university students. *Journal of Ayub Medical College Abbottabad*, 22(2), 108-110.
- Kalra, G., & Bhugra, D. (2013). Sexual violence against women: Understanding cross-cultural intersections. *Indian Journal of Psychiatry*, 55(3), 244. doi:10.4103/0019-5545.117139
- Karakuş, E., Mutlu, E., & Diker Coşkun, Y. (2018). Gender analysis of the national curricula for primary and secondary level compulsory courses updated in 2017 and 2018. *İstanbul Üniversitesi Kadın Araştırmaları Dergisi*, (17), 31-54.
- Karjane, H. M., Fisher, B. S., & Cullen, F. T. (2005). *Sexual assault on campus: What colleges and universities are doing about it* (NCJ-205521). Washington, DC: National Institute of Justice, Office of Justice Programs.
- Kass, G.V. (1980). An exploratory technique for investigating large quantities of categorical data. *Applied Statistics* 29(2), 119-127
- Kayı, Z., Yavuz, M.F., & Arıcan, N. (2000). Sexual violence; A Victim survey in a national sample of female college students and graduates. *Adli Tıp Bülteni*, 5(3), 157-163. doi:10.17986/blm.200053421
- Kennedy, M. A., & Gorzalka, B. B. (2002). Asian and non-Asian attitudes toward rape, sexual harassment, and sexuality. *Sex Roles*, 46(7-8), 227-238. doi:10.1023/A1020145815129
- Kernsmith, P.D., Comartin, E., Craun, S.W., & Kernsmith, R.M. (2009). The relationship between sex offender registry utilization and awareness. *Sexual Abuse*, 21(2), 181-193. doi:10.1177/1079063209332235
- Kimberly, C., & Hardman, A. M. (2019). Mississippi college students' attitudes, willingness to intervene and legal knowledge toward sexual assault. *Sex Education*, 19(1), 68-83. doi:10.1080/14681811.2018.1478807
- Kosciulek, J. F. (2004). On classification trees. *Rehabilitation Education*, 18, 139-145
- Krebs, C.P., Lindquist, C.H., Warner, T.D., Fisher, B.S., & Martin, S. L. (2007). *The campus sexual assault (CSA) study* (No: 221153). Washington, DC: National Institute of Justice, US Department of Justice.

- Lee, J., Busch, N. B., Kim, J., & Lim, H. (2007). Attitudes toward date rape among university students in South Korea. *Sex Roles, 57*(9-10), 641-649. doi:10.1007/s11199-007-9297-y
- Lee, C. Y., Chao, S. S., Chen, S. P., Chou, F. H. C., Su, C. Y., & Ho, W. W. (2010). The characteristics of and risk factors associated with incarcerated sex offenders in Taiwan. *International Journal of Law and Psychiatry, 33*(3), 144-148. doi:10.1016/j.ijlp.2010.03.003
- Leung, L. C. (2017). Understanding the help-seeking decisions of sexual assault survivors: Implications for social work practice in Hong Kong. *International Social Work, 60*(4), 927-940. doi: 10.1177/0020872815594222
- Lonsway, K. A., Cortina, L. M., & Magley, V. J. (2008). Sexual harassment mythology: Definition, conceptualization, and measurement. *Sex Roles, 58*(9-10), 599-615.
- Lonsway, K. A., & Fitzgerald, L. F. (1994). Rape myths: In review. *Psychology of Women Quarterly, 18*(2), 133-164. doi:10.1111/j.1471-6402.1994.tb00448.x
- Magidson, J. (1994). The CHAID approach to segmentation modeling: Chi-squared automatic interaction detection. In R.P. Bagozzi (ed.) *Advanced Methods of Marketing Research* (pp. 118–159). Cambridge, UK: Blackwell.
- Mangal, S. K., & Mangal, S. (2013). *Research methodology in behavioural sciences*. Delhi: PHI Learning Pvt. Ltd.
- Matusitz, J. (2012). Relationship between knowledge, stereotyping, and prejudice in interethnic communication. *PASOS. Revista de Turismo y Patrimonio Cultural, 10*(1), 89-98.
- McNaughton, J., & Niedzwiecki, C. K. (2000). Gender differences in parent child communication patterns. *Journal of Undergraduate Research, 3*, 25-32.
- Mellins, C. A., Walsh, K., Sarvet, A. L., Wall, M., Gilbert, L., Santelli, J. S., & Hirsch, J. S. (2017). Sexual assault incidents among college undergraduates: Prevalence and factors associated with risk. *PLoS One, 12*, e0186471.
- Menon, J. A., Sanjobo, N., Lwatula, C., Nkumbula, T., Zgambo, L., Musepa, M., & Ngoma, M. P. S. (2014). Knowledge and perception of sexual harassment in an institution of higher education in Sub-saharan Africa. *Medical Journal of Zambia, 41*(3), 137-143.
- Mızrakçı, Ş. (1994). *Factors affecting mothers child rearing attitudes: Demographic characteristics, own upbringing style, child development knowledge and perceptions of the child's temperament* (Unpublished master thesis). Ege Üniversitesi Sosyal Bilimler Enstitüsü, İzmir.
- Morrongiello, B. A., & Dawber, T. (1999). Parental influences on toddlers' injury-risk behaviors: Are sons and daughters socialized differently? *Journal of Applied Developmental Psychology, 20*(2), 227-251.
- O'Hare, E.A., & O'Donohue, W. (1998). Sexual harassment: Identifying risk factors. *Archives of Sexual Behavior, 27*(6), 561-580. doi:10.1023/A:1018769016832
- Pigeot, I., Ahrens, W., Foraita, R., Jahn, I., & Pohlabein, H. (2007). Sample selection and outcome evaluation in primary prevention. *Journal of Public Health, 15*(2), 93-99. doi: 10.1007/s10389-006-0087-8
- Polat, O. (2017). Şiddet [Violence]. *Marmara Üniversitesi Hukuk Fakültesi Hukuk Araştırmaları Dergisi, 22*(1), 15-34.
- Power, D. A., & Xie, Y. (2008). *Statistical methods for categorical data analysis*. (2<sup>nd</sup> ed.). Bingley, UK: Emerald Publishing
- Roehling, M. V., & Huang, J. (2018). Sexual harassment training effectiveness: An interdisciplinary review and call for research. *Journal of Organizational Behavior, 39*(2), 134-150. doi:10.1002/job.2257
- Sable, M. R., Danis, F., Mauzy, D. L., & Gallagher, S. K. (2006). Barriers to reporting sexual assault for women and men: Perspectives of college students. *Journal of American College Health, 55*(3), 157-162. doi:10.3200/JACH.55.3.157-162
- Schuster, I., Krahé, B., & Toplu-Demirtaş, E. (2016). Prevalence of sexual aggression victimization and perpetration in a sample of female and male college students in Turkey. *The Journal of Sex Research, 53*(9), 1139-1152.
- Scully, D. (1994). *Understanding sexual violence*. New York: Routledge.
- Sinozich, S., & Langton, L. (2014). *Rape and sexual assault victimization among college-age females, 1995-2013*. Washington, DC: Bureau of Justice Statistics.
- Siyez, D. M., & Soylu, Y. (2017). *Gender-sensitive teacher and counselor education*. 26th Educational Conference of Educational Sciences, Antalya, Turkey.
- Soylu, Y., & Esen, E. (2018). *A systematic review on gender themed training programs*. 2nd Women's Congress, İzmir, Turkey.
- Sözer, M. A., & Clevenger, S. (2010). The effectiveness of college based rape and sexual assault education programs. *Eskişehir Osmangazi University Journal of Social Sciences, 11*(1), 89-121.
- Stephens, M. A. (2009). *Gender differences in parenting styles and effects on the parent-child relationship* (Unpublished honors thesis). Texas State University-San Marcos, San Marcos, TX, USA.

- Struckman-Johnson, C., & Struckman-Johnson, D. (1992). Acceptance of male rape myths among college men and women. *Sex Roles, 27*(3-4), 85-100.
- Suarez, E., & Gadalla, T. M. (2010). Stop blaming the victim: A meta-analysis on rape myths. *Journal of Interpersonal Violence, 25*(11), 2010-2035. doi: 10.1177/0886260509354503
- Szymanski, L. A., Devlin, A. S., Chrisler, J. C., & Vyse, S. A. (1993). Gender role and attitudes toward rape in male and female college students. *Sex Roles, 29*(1-2), 37-57. doi: 10.1007/BF00289995
- Şanlı, D., & Öztürk, C. (2015). The effect of culture on parents' attitudes towards raising children. *DEUHFED, 8*(4), 240-246.
- Tang, C. S. K., Yik, M. S., Cheung, F. M., Choi, P. K., & Au, K. C. (1996). Sexual harassment of Chinese college students. *Archives of Sexual Behavior, 25*(2), 201-215.
- Temkin, J., & Krahé, B. (2008) *Sexual assault and the justice gap: A question of attitude*. Portland, OR: Hart Publishing.
- Timur, S., & Yılmaz, Y. (2013). Hemşirelik ve ebelik öğrencilerinin cinsel tacize ilişkin olumsuz tutum ve deneyimlerinin benlik saygısı ile ilişkisi [The Relationship between negative attitudes and experiences of nursing and midwifery students about sexual harassment and self esteem]. *Türkiye Klinikleri Journal of Nursing Sciences, 5*(2), 64-70.
- Ullman, S.E. (2010). *Talking about sexual assault: Society's response to survivors*, Washington, DC: American Psychological Association.
- Ullman, S. E., Starzynski, L. L., Long, S. M., Mason, G. E., & Long, L. M. (2008). Exploring the relationships of women's sexual assault disclosure, social reactions, and problem drinking. *Journal of interpersonal violence, 23*(9), 1235-1257. doi: 10.1177/0886260508314298
- Ullman, S.E., Townsend, S.M., Filipas, H.H., & Starzynski, L.L. (2007). Structural models of the relations of assault severity, social support, avoidance coping, self-blame, and PTSD among sexual assault survivors. *Psychology of Women Quarterly, 31*, 23–37. doi:10.1111/j.1471-6402.2007.00328.x
- van Genderen, H., Rijkboer, M., & Arntz, A. (2012). Theoretical model. Schemas, coping styles, and modes. In M. van Vreeswijk, J. Broersen, & M. Nadort (Eds.), *The Wiley-Blackwell handbook of schema therapy: theory, research and practice* (pp. 27–40). West Sussex: Wiley.
- Ward, C., Newlon, B., Krahe, B., Myambo, K., Payne, M., Tastaban, Y., et al. (1998). The Attitudes toward Rape Victims Scale: Psychometric data from 14 countries. *Social and Behavioral Sciences Documents 18*, 2877.
- Wasti, S. A., & Cortina, L. M. (2002). Coping in context: Sociocultural determinants of responses to sexual harassment. *Journal of Personality and Social Psychology, 83*(2), 394-405.
- Wandersman, A., & Florin, P. (2003). Community interventions and effective prevention. *American Psychologist, 58*(6-7), 441-448. doi:10.1037/0003-066X.58.6-7.441
- World Health Organization (WHO), (2017). *Violence against women*. Retrieved from <http://www.who.int/en/news-room/fact-sheets/detail/violence-against-women>.
- World Economic Forum (2018). *The Global gender gap report 2018*. Retrieved from [http://www3.weforum.org/docs/WEF\\_GGGR\\_2018.pdf](http://www3.weforum.org/docs/WEF_GGGR_2018.pdf).
- Xue, J., Fang, G., Huang, H., Cui, N., Rhodes, K. V., & Gelles, R. (2019). Rape myths and the cross-cultural adaptation of the Illinois Rape Myth Acceptance Scale in China. *Journal of Interpersonal Violence, 34*(7), 1428–1460. doi:1428-1460. 10.1177/0886260516651315
- Yığıtalp, G., Ertem, M., & Özkaynak, V. (2007). College students' experiences about violence and opinions on this issue. *Türk Medline, 6*(2), 131-136.