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# **Casual sex and the sexual self-image of adolescents and young adults**

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## Abstract

The current literature about casual sex (sex outside the context of a relationship) focuses particularly on predictors of having casual sex and feelings after having casual sex. This study contributes to this literature by focusing on the sexual self-image, which refers to body image and feelings about sex. It was examined which groups of adolescents and young adults (based on age, gender, education level, ethnicity and religion) have a more positive sexual self-image, and whether this can be explained by a higher level of permissive sexual attitudes and more frequent engagement in casual sex. To provide an answer to this question the cross-sectional dataset ‘Seks onder je 25<sup>e</sup>’ (2012) with a sample of Dutch adolescents and young adults ( $N = 7196$ ) was utilized. Results showed that having experience with sex was strongly associated with a more positive sexual self-image, and having casual sex not so much. Young adults, Western and Surinamese/Antillean males and nonreligious people have a more positive sexual self-image, and this can partly be explained by a higher level of permissive sexual attitudes and more frequent engagement in (casual) sex. Future research should examine the causal direction of the relationship between sexual behaviour and the sexual self-image.

*Keywords:* Permissive sexual attitudes; casual sex; sexual self-image; adolescence; young adulthood

De huidige literatuur over casual seks (seks buiten de context van een relatie) is specifiek gefocust op voorspellers van casual seks en gevoelens na het hebben van casual seks. Deze studie draagt bij aan deze literatuur door te focussen op het seksuele zelfbeeld, wat refereert naar het lichaamsbeeld en gevoelens over seks. Het is onderzocht welke groepen adolescenten en jongvolwassenen (gebaseerd op leeftijd, geslacht, opleidingsniveau, etniciteit en religie) een positiever seksueel zelfbeeld hebben en of dit verklaard kan worden door meer permissieve seksuele attitudes en het vaker hebben van casual seks. Om een antwoord te vormen op deze vraag is de cross-sectionele dataset ‘Seks onder je 25<sup>e</sup>’ (2012) met een steekproef van Nederlandse adolescenten en jongvolwassenen ( $N = 7196$ ) gebruikt. Resultaten laten zien dat het hebben van seksuele ervaring sterk is geassocieerd met een positief seksueel zelfbeeld, en het hebben van casual seks niet zozeer. Jongvolwassenen, Westerse en Surinaamse/Antilliaanse mannen en niet religieuze mensen hebben een positiever seksueel zelfbeeld en dit kan deels verklaard worden door hun meer permissieve seksuele attitudes en het vaker hebben van (casual) seks. Onderzoek in de toekomst zou de causale richting van de relatie tussen seksueel gedrag en het seksuele zelfbeeld moeten onderzoeken.

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## **Introduction**

The attitude of adolescents and young adults in the Netherlands towards sex without being in love or sex that occurs outside the context of a relationship (casual sex) has become more tolerant. In the Netherlands 59% of young men and 44% of young women approved of having sex without being in love in 2017 against 44% and 25% in 2012. Besides that, young people reported having sex with a casual partner more often (De Graaf, Van den Borne, Nikkelen, Twisk & Meijer, 2017). The primary basis of young people's opinions about sex is the representation of sexuality in popular media (Garcia, Reiber, Massey and Merriwether, 2012). Lyrics of songs, plots of books, movies and television shows include casual sex more and more often, which could explain the normalization of casual sex among young people.

The current literature about casual sex is primarily focused on direct predictors of having casual sex (such as gender, ethnicity, and sexual attitudes) or feelings after having casual sex (such as feeling guilty or pleased). This study contributes to this literature by combining these associations into one cohesive model. Instead of just focusing on feelings after having casual sex as outcome variable this study focuses on the sexual-image, which consists of the elements body image and feelings about sex (De Graaf et al, 2012). Body image refers to someone's subjective perception about his or her appearance (Markey, 2010). Feelings about sex refer to feelings of shame or guilt, the importance people attach to sex, and the enjoyment of sex (De Graaf et al., 2012). It was examined which groups of adolescents and young adults have a more positive sexual self-image and whether this can be explained by a higher level of permissive sexual attitudes and more frequent engagement in casual sex. This is likely because previous studies have already indicated that having casual sex provokes feelings, such as feeling pleased and attractive (e.g., Claxton & Van Dulmen, 2013).

### **Permissive sexual attitudes, casual sex and the sexual self-image**

The sexual self-image can either be negative or positive (De Graaf et al., 2012). People with a negative sexual self-image are insecure about their appearance and they feel ashamed and guilty when they think about sex (De Graaf et al., 2012). People with a positive sexual self-image are confident about their bodies and they have positive feelings about sex, such as feeling sex is important. It is likely that the variety in sexual attitudes and sexual behaviour accounts for observed differences in the sexual self-image. Having casual sex generates positive feelings, such as feeling happy, pleased, desirable and attractive (e.g., Claxton & Van Dulmen, 2013) So, this suggests that adolescents and young adults who engage in casual sex have a more positive sexual self-image.

Young adults have a more positive sexual self-image in comparison with adolescents (De Graaf et al., 2012), which could be explained by their more frequent engagement in casual sex

(Arnett & Hughes, 2012). Their permissive sexual attitudes may account for this age difference in sexual behaviour, because sexual attitudes and sexual behaviour among young people are closely related (Luquis, Brelsford & Rojas-Guyler, 2011). If indeed there is a positive relationship between having casual sex and the sexual self-image, it is possible that this relationship is not as strong for adolescents as for young adults. The body of adolescents is not fully developed yet, and sometimes they are not ready to have sex (DeLamater & Friedrich, 2002). This could result in an uncomfortable feeling during sex with someone they do not know, while this effect is less likely among young adults.

Males have a more positive sexual self-image than females (De Graaf et al., 2012), which again could be explained by their more permissive sexual attitudes (Petersen & Hyde, 2011) and more frequent engagement in casual sex (Claxton & Van Dulmen, 2013). The gender differences in permissive sexual attitudes and casual sex behaviour can be explained by the cognitive learning theory. This theory suggests that individuals learn behaviour by means of observing and imitating others (Bandura, 1986). As a result, men and women internalize existing sexual standards, such as the double sexual standard, and this will regulate their attitudes and eventually their behaviour. The double sexual standard with regard to casual sex implies that having casual sex is acceptable for males, but not for females. Females get a bad reputation for having sex with a lot of casual partners, and therefore they have less permissive sexual attitudes and a lower frequency of casual sex (Allison & Risman, 2013). The association between having casual sex and a positive sexual self-image appears to be less strong among females. Research shows that having casual sex can also provoke negative feelings about sex, such as shame and guilt, and that this relationship is stronger among females (Claxton & Van Dulmen, 2013). This is because having casual sex is often not accepted for them (Allison & Risman, 2013).

The strength of gender differences in sexual attitudes and sexual behaviour differs with regard to ethnicity. These differences are very strong among Turkish and Moroccan adolescents and young adults, and this might explain why Turkish and Moroccan females have a much more negative sexual self-image in comparison with Turkish and Moroccan males. Research conducted in the Netherlands shows that Turkish and Moroccan females often are still a virgin during adolescence and young adulthood (De Graaf et al., 2012). In contrast, Turkish and Moroccan males usually have a relatively high number of sexual partners during this age period, just like Western males. Also, Surinamese and Antillean young people have a relatively high number of sexual partners. Although, this is especially the case for Surinamese and Antillean males. (De Graaf et al., 2012). The Turkish, Moroccan, Antillean and Surinamese cultures are based on gender conservatism (De Graaf et al., 2012). Therefore, males get more freedom with regard to relationships and sexuality than females, and because of this they are more likely to conform to the liberal sexual norms of the Western

culture. Eventually, these norms influence their sexual attitudes and behaviour (De Valk & Liefbroer, 2007), which might explain the fact that the sexual self-image of Western, Turkish, Moroccan, Surinamese and Antillean males is almost equally positive (De Graaf et al., 2012). Because liberal sexual norms are common in the Western culture, gender differences in sexual attitudes and behaviour are less strong among Western people.

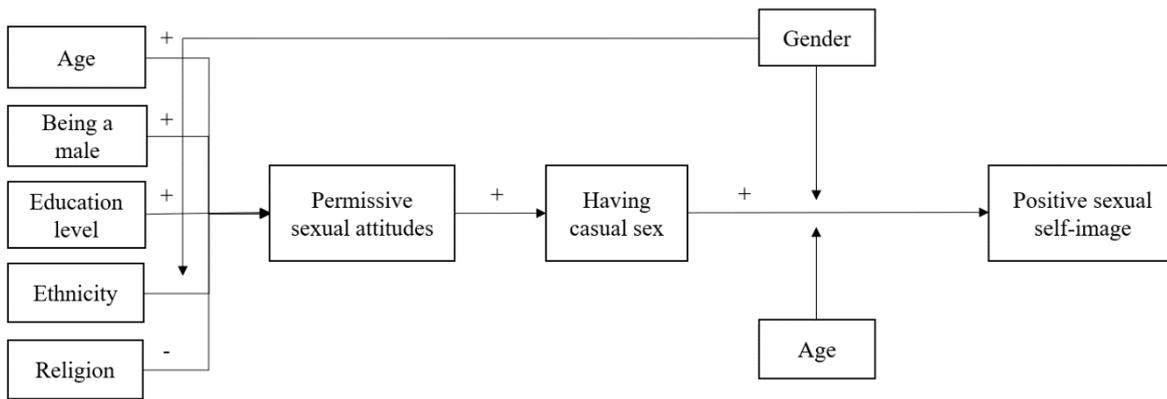
Besides ethnicity, religion is a strong predictor of sexual attitudes, sexual behaviour and the sexual self-image. Religious people have a more negative sexual self-image and a lower frequency of casual sex in comparison with nonreligious people. Their lower engagement in casual sex can be explained by their sexual attitudes (Claxton & Van Dulmen, 2013). The attitudes of Muslims and very strict Christians are influenced by the restriction to not have sex before marriage, imposed by their religion (Dialmy, 2010; Petersen & Donnerwerth, 1997).

The study of De Graaf et al. (2012) shows that higher educated people have a slightly more positive sexual self-image in comparison with lower educated people. However, lower educated people engage in casual sex more often (Lyons, Manning, Giaordano & Longmore, 2013). Furthermore, they are more conservative regarding sexuality (De Graaf et al., 2012). Because these research findings are conflicting it is necessary to examine these relationships in one cohesive model.

### **The current study**

In the current study it was examined which groups of adolescents and young adults (based on age, gender, education level, ethnicity and religion) have a more positive sexual self-image, and whether this can be explained by a higher level of permissive sexual attitudes and more frequent engagement in casual sex. In contrast to previous studies, which focused on American college students, the sample of this study this study consisted of Dutch adolescents and young adults of 12-25 years old. Therefore, it was possible to assess whether the relationship between having casual sex and the sexual self-image differs with regard to age. Furthermore, it was examined whether this relationship differs with regard to gender.

It was hypothesized that young adults, high educated people, autochthonous Dutch and Western immigrant males, Turkish/Moroccan and Surinamese/Antillean males and nonreligious people have a higher level of permissive sexual attitudes and more frequent engagement in casual sex, and that this explains their more positive sexual self-image. Furthermore, it was hypothesized that the positive relationship between having casual sex and the sexual self-image is stronger among young adults and males (see Figure 1).



**Figure 1.** Conceptual model

## Method

### Procedure and design

To conduct this study the dataset ‘Seks onder je 25e’ (2012) was used. The sample of this study consisted out of 7841 Dutch participants with the age of 12-25 years old. The participants were recruited via secondary schools and municipalities. Per province a few schools with different school levels were randomly selected. To reach participants above the age of 17 years old municipal personal records were used. It was important to select different municipalities (big cities and small villages) to compose a representative sample of the Dutch population. However, the response-rate of the people who were recruited via municipalities was very low (16,4%). The design of the study ‘Seks onder je 25e’ is cross-sectional. This study was conducted three times by now (in 2005, 2012 and 2017), and each time the questions of the survey and the sample differed.

### Sample

The sample of the study ‘Seks onder je 25e’ consists of 7841 respondents. In the current study lesbian, gay and bisexual (LGB) youth ( $N = 320$ ) were excluded because it is impossible to measure having sexual intercourse among LBG youth and heterosexual youth in the same way. Furthermore, respondents who did not answer the questions about education level and/or the question about casual sex and/or all the questions about the sexual self-image ( $N = 325$ ) were excluded. After excluding these respondents the sample of the current study consisted of 7196 people.

### Measures

**Education level.** The education level of the respondents was measured with the questions: “Which school/ education are you going to?” and “What is the highest level of education that you

have completed?”. When the respondents were no longer in school the highest completed education level was leading. Respondents were assigned to three groups. People with a low education level (lower general secondary education and intermediate vocational education), an average education level (higher general secondary education and higher vocational education) and a high education level (pre-university education and university). The people with a high education level formed the reference group.

**Ethnicity.** Ethnicity was measured with the questions: “Where were you born?”, “Where was your mother born?” and “Where was your father born?”. If the respondent was not born in the Netherlands or if at least one of the respondents’ parents was not born in the Netherlands he or she was assigned to one of the ethnic minority groups. If the respondent and both parents were born in the Netherlands, he or she was considered autochthonous Dutch. Four groups were formed: an autochthonous Dutch/Western immigrant group (reference group), Turkish/Moroccan group, Surinamese/Antillean group and a remaining non-Western immigrant group.

**Religion.** The religion of the respondents was measured with the questions: “Is religion important to you?” and “With which religion are you raised?”. Nonreligious respondents formed the reference group. Three other groups were formed: a Christian group who considers religion somewhat important, a Christian group who considers religion very important and a Muslim group. The group of Muslims who considers religion somewhat important was too small ( $N = 102$ ) to make a distinction between the two Muslim groups.

**Permissive sexual attitudes.** To measure permissive sexual attitudes the opinion of the respondents was asked about the following situations: “Pre-marital sexual intercourse”, “Sexual intercourse between a boy and a girl in a committed relationship”, “Sexual intercourse between a boy and a girl who are in love” and “Sexual intercourse between a boy and a girl who are not in love”. The answer options were not right at all, not right, right and totally right. A scale was made by means of the mean score of these items ( $\alpha = .83$ ). A high score indicated more permissive sexual attitudes.

**Casual sex.** Respondents were asked if they ever have had sexual intercourse and how many sex partners they have had. Respondents who did not have experience with sexual intercourse yet were assigned to the group with respondents who did not have experience with sex. Respondents who just had sexual intercourse once were asked: “With whom was your first time sexual intercourse?”. The first answer option was “With my boyfriend/ girlfriend”, respondents who answered with this option were assigned to the group who did have experience with sexual intercourse, but not with casual sex. The second option was “With someone I did not have a committed relationship with”, these respondents were assigned to the group who had casual sex regularly. This is because this group consisted out of respondents who indicated that most of the

people they have slept with were casual partners. The third was “With a summer romance”, these respondents were assigned to the group who had casual sex incidentally, because this tends less to casual sex. Respondents who have had multiple sex partners were asked: “With whom did you have sexual intercourse?”. The first answer option was “Always with people with whom I had a committed relationship”, respondents who chose this option were assigned to the group who did have experience with sex, but not with casual sex. The second was “Most of the time with people with whom I had a committed relationship”, these respondents were assigned to the group who had casual sex incidentally. The third and fourth answer options were “Most of the time with whom I did not have a committed relationship” and “Always with people with whom I did not have a committed relationship”, these respondents were assigned to the group who had casual sex regularly. The group with respondents who had experience with sexual intercourse but not with casual sex formed the reference group.

**Sexual self-image.** The sexual self-image was measured with eleven statements which referred to feelings about sex and body image, such as: “I feel ashamed if I have or would have sexual feelings” and “I think I am attractive”. The respondents could answer with a 5-point Likert scale. The mean score of these items was utilized to compose a scale ( $\alpha = .76$ ). A high score indicated a positive sexual self-image.

## **Data analyses**

At first, the direct relationships between the demographic factors and the sexual self-image were tested with multiple regression analysis. Demographic factors that did not have a significant relationship with the dependent variable were excluded from any further analyses, because then mediation is not possible (Baron & Kenny, 1986). Afterwards, the relationships between the demographic factors and the first mediator (permissive sexual attitudes) were tested with multiple regression analysis. Further, the relationships between the demographic factors and the second mediator (casual sex) were tested with multinomial logistic regression analysis. Next, it was assessed whether permissive sexual attitudes mediated the relationship between the demographic factors and having casual sex. Finally, a hierarchical regression analysis was conducted. In model 1 the direct relationships between the demographic factors and the dependent variable were assessed. In model 2 the mediator permissive sexual attitudes was added to the analysis, in model 3 the mediator casual sex was added and in model 4 the interaction effects of casual sex and age and casual sex and gender were included.

**Table 1.** Descriptive statistics ( $N= 7196$ )

	<i>N</i>	%	<i>M</i>	<i>SD</i>	Range
Gender					
Male	2945	40.9			
Female	4251	59.1			
Age			19.08	3.36	10.52 - 26.11
Education level					
Low educated	3234	44.9			
Average educated	2359	32.8			
High educated	1603	22.3			
Ethnicity					
Autochthonous Dutch/ Western immigrants	6124	85.1			
Turkish/Moroccan	335	4.7			
Surinamese/ Antillean	430	6.0			
Remaining non- Western immigrants	307	4.3			
Religion					
Non-religious	4787	66.5			
Christian, religion somewhat important	1311	18.3			
Christian, religion very important	441	6.1			
Muslim	399	5.5			
Remaining religions	258	3.6			
Permissive sexual attitudes			3.12	.70	1.00 – 4.00
Casual sex					
No experience with sexual intercourse	2701	37.2			
Experience with sexual intercourse, no casual sex	2321	32.3			
Incidental casual sex	1376	19.1			
Regular casual sex	798	11.1			
Sexual self-image			3.72	.60	1.36 – 5.00

*Note.*  $N$  = sample,  $M$  = mean and  $SD$  = standard deviation

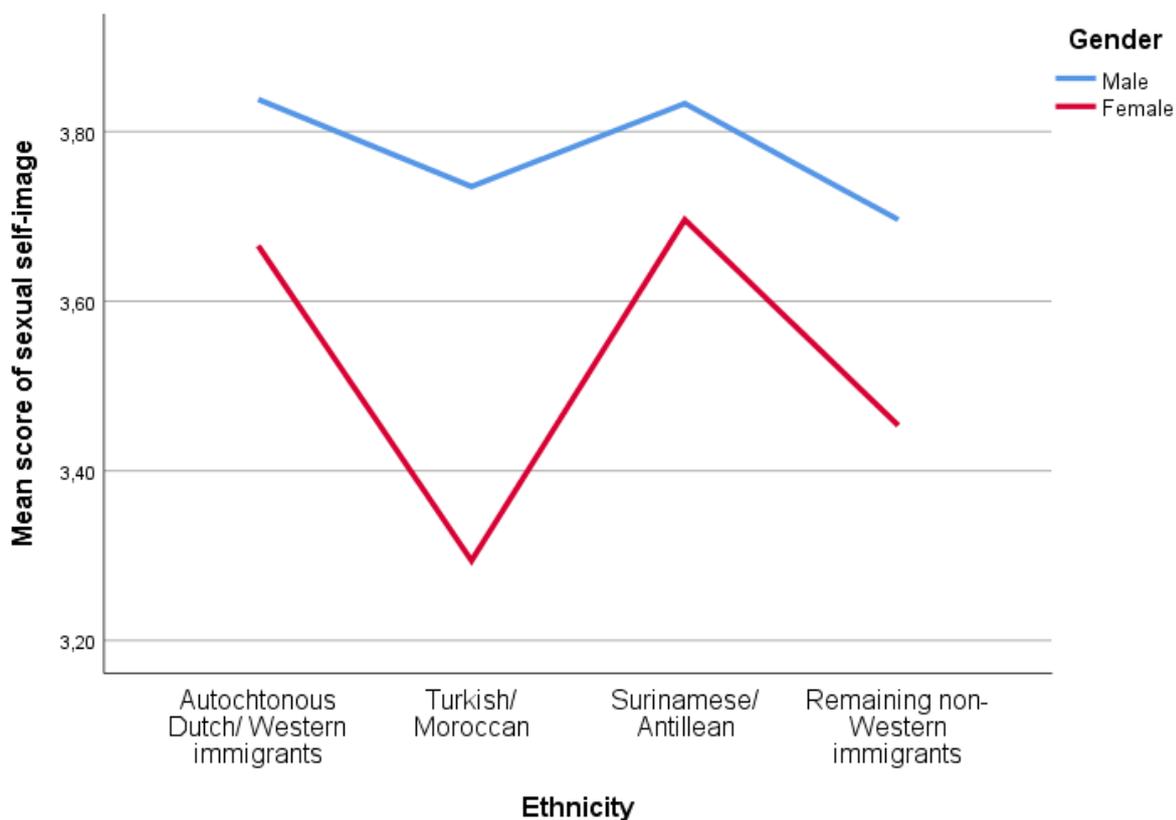
## Results

### Descriptive analyses

As shown in Table 1, the mean age of the respondents was 19.1 years old and the distribution of males and females (40.9% was male and 59.1% was female) was unequal. It is notable that most of the respondents did not have experience with sexual intercourse yet ( $N = 2701$ ). Respondents who had casual sex regularly formed the smallest group ( $N = 798$ ).

### Direct relationships with the sexual self-image

The direct relationships between the demographic factors and the sexual self-image are shown in model 1 (see Table 4). The predictor education level was excluded from the analyses depicted in Table 4 due to the insignificant relationship between education level and the sexual self-image. As age increased the sexual self-image got more positive ( $\beta = .392, p < .001$ ). Also, the interaction effects of ethnicity and gender were significant, with exception of the interaction effect of the remaining non-Western immigrant group and gender. Males and the autochthonous Dutch/Western immigrant group formed the reference groups. In general, females had a more negative sexual self-image compared to males (see Figure 1). This gender difference was the biggest among Turkish and Moroccan people ( $\beta = -.051, p < .01$ ). Autochthonous Dutch, Western immigrant, Surinamese and Antillean males had the most positive sexual self-image. Turkish and Moroccan females had the most negative sexual self-image. Furthermore, all the religious groups had a more negative sexual self-image compared to the nonreligious group, and Christians who consider religion very important had the least positive sexual self-image ( $\beta = -.168, p < .001$ ).



**Figuur 1.** Gender differences in the mean score of the sexual self-image for each ethnic group

### **Permissive sexual attitudes and casual sex**

Permissive sexual attitudes ( $\beta = .241, p < .001$ ) (see Table 2) and engagement in casual sex (see Table 3, appendix 1) increased as age increased. As shown in Table 2, females had less permissive sexual attitudes in comparison with males ( $\beta = -.136, p < .001$ ). Also, they engaged in casual sex less often (see Table 3).

As depicted in model 1 (Table 2), the Turkish/Moroccan group had the least permissive sexual attitudes ( $\beta = -.090, p < .001$ ) compared to the autochthonous Dutch/Western immigrant group. In model 2 the interaction effects of gender and ethnicity were added. The results showed that especially Turkish/Moroccan females ( $\beta = -.096, p < .001$ ) had less permissive sexual attitudes (see Figure 2). Furthermore, Turkish/Moroccan people were more likely to be a virgin in comparison with the autochthonous Dutch/Western immigrant group (see model 1, Table 3). In contrast, they also were more likely to have casual sex regularly. When the interaction effects of ethnicity and gender were included it became clear that especially Turkish/Moroccan females were more likely to be a virgin, and that only Turkish/Moroccan males were more likely to have casual sex regularly (see model 2, Table 3).

The Surinamese/Antillean group also had less permissive sexual attitudes compared to the autochthonous Dutch/Western immigrant group ( $\beta = -.029, p < .01$ ) (see Table 2). There were no significant differences with regard to engagement in casual sex between the Surinamese/Antillean and autochthonous Dutch/Western immigrant group, with exception of the result that only Surinamese/Antillean females had less casual sex regularly (see Table 3).

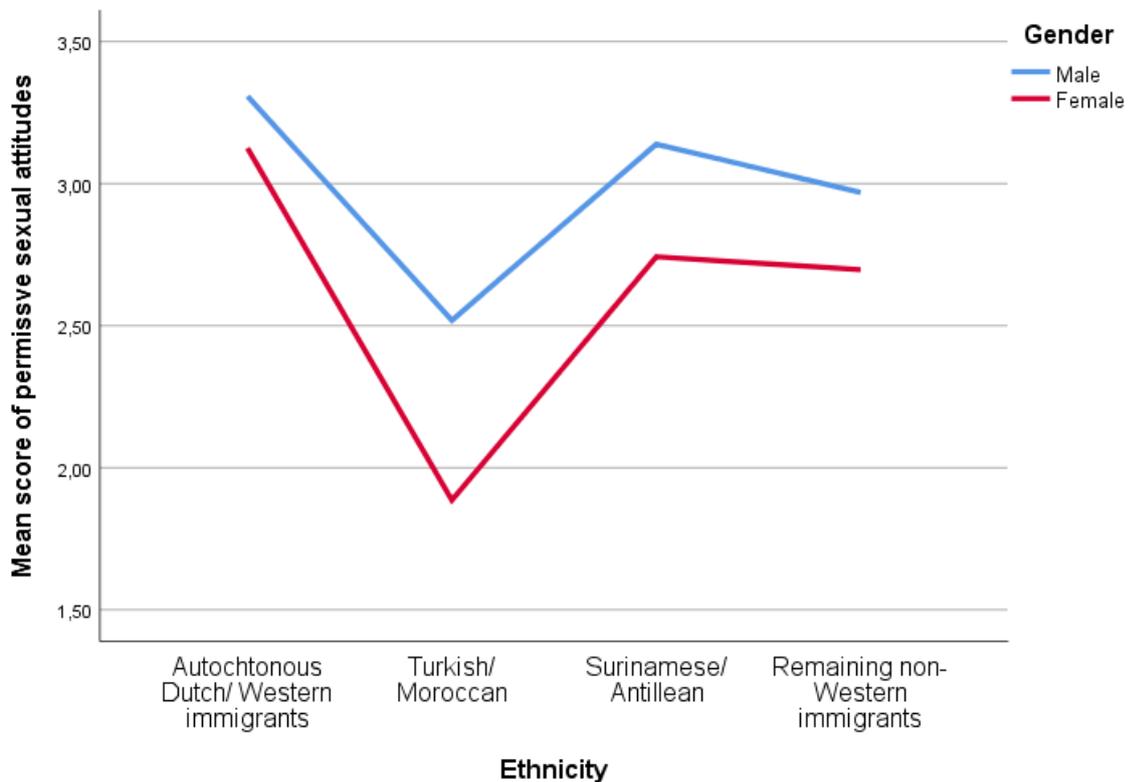
All the religious groups had less permissive sexual attitudes (see Table 2) in comparison with the nonreligious group. The Christian group that considers religion very important had the least permissive sexual attitudes ( $\beta = -.408, p < .001$ ). Furthermore, Christians engaged in casual sex less often in comparison with the nonreligious group (see Table 3). The people in the Muslim group were more likely to be a virgin in comparison with the nonreligious group, but there were no significant differences between these two groups with regard to having casual sex. The Christian group that considers religion very important engaged the least in casual sex.

Permissive sexual attitudes had a positive relationship with having casual sex. When this mediator was added to the analyses in Table 3 (model 3) the relationships between the demographic factors and having casual sex became weaker, with exception of the relationship between age and having casual sex. Permissive sexual attitudes especially explained much of the relationship between religion and having casual sex.

**Table 2.** Summary of hierarchical regression analysis for variables predicting permissive sexual attitudes ( $N = 7196$ )

	Model 1			Model 2		
	<i>B</i>	<i>SE B</i>	<i>B</i>	<i>B</i>	<i>SE B</i>	$\beta$
Age	.051	.002	.243***	.051	.002	.241***
Gender (ref. = males)	-.195	.013	-.136***	-.169	.015	-.118***
Ethnicity (ref. = autochthonous Dutch/ Western immigrants)						
Turkish/Moroccan	-.300	.054	-.090***	-.081	.063	-.024
Surinamese/ Antillean	-.085	.029	-.029**	-.030	.046	-.010
Remaining non-Western immigrants	.016	.035	.005	-.008	.050	-.002
Religion (ref.= non-religious)						
Christian, religion somewhat important	-.262	.018	-.143***	-.263	.018	-.144***
Christian, religion very important	-1.195	.028	-.408***	-1.196	.028	-.408***
Muslim	-.936	.050	-.304***	-.931	.050	-.303***
Remaining religions	-.466	.037	-.123***	-.474	.038	-.125***
Interaction effects (ref.= autochthonous Dutch/ Western immigrants and males)						
Turkish/Moroccan x gender				-.426	.063	-.093***
Surinamese/ Antillean x gender				-.088	.057	-.024
Remaining non-Western immigrants x gender				.014	.066	.003
$R^2$		.367			.371	
F for change in $R^2$		462.677***			1353.126***	

Note. *B* = unstandardized beta, *SE B* = standard error for the unstandardized beta,  $\beta$  = standardized beta,  $R^2$  = explained variance and *F* = *F* value. \*  $p < .05$  \*\*  $p < .01$  \*\*\*  $p < .001$



**Figure 2.** Gender differences in the mean scores of permissive sexual attitudes for each ethnic group

**Table 4.** Summary of hierarchical regression analysis for variables predicting the sexual self-image ( $N = 7196$ )

	Model 1			Model 2			Model 3			Model 4		
	<i>B</i>	<i>SE B</i>	$\beta$									
Age	.070	.002	.392***	.055	.002	.307***	.020	.002	.114***	.008	.004	.044*
Gender (ref. = males)	-.182	.014	-.150***	-.132	.013	-.109***	-.169	.013	-.139***	-.078	.021	-.065***
Ethnicity (ref. = autochthonous Dutch/ Western immigrants)												
Turkish/ Moroccan	.169	.061	.059**	.192	.058	.067**	.133	.055	.046*	.117	.055	.041*
Surinamese/ Antillean	-.013	.044	-.005	-.006	.042	-.003	-.047	.039	-.019	-.039	.039	-.016
Remaining non-Western immigrants	.029	.048	.010	.032	.046	.011	.008	.044	.003	-.008	.043	-.003
Religion (ref. = nonreligious)												
Christian, somewhat important	-.119	.017	-.077***	-.040	.016	-.026*	-.025	.015	-.016	-.023	.015	-.015
Christian, very important	-.418	.027	-.168***	-.054	.029	-.022	.002	.028	.001	-.004	.027	-.001
Muslim	-.381	.048	-.144***	-.097	.047	-.037*	-.067	.044	-.025	-.063	.044	-.024
Remaining religions	-.199	.036	-.062***	-.056	.034	-.017	-.028	.032	-.009	-.024	.032	-.007
Interaction effects of ethnicity and gender (ref.= males and autochthonous Dutch/ Western immigrants)												
Turkish/ Moroccan x gender	-.196	.061	-.051**	-.066	.058	-.017	.057	.056	.015	.098	.056	.025
Surinamese/ Antillean x gender	.114	.055	.036*	.145	.052	.046**	.152	.049	.048**	.138	.049	.044**
Remaining non-Western immigrants x gender	-.040	.063	-.010	-.048	.060	-.012	-.014	.057	-.004	.014	.057	.004
Permissive sexual attitudes				.302	.011	.354***	.243	.011	.285***	.243	.011	.284***
Casual sex (ref. = no casual sex)												
No experience with sex							-.415	.016	-.335***	-.268	.024	-.216***
Incidental casual sex							.058	.017	.038***	.084	.029	.055**
Regular casual sex							-.018	.020	-.010	-.005	.032	-.002
Interaction effects casual sex, gender and age (ref. = males and no casual sex)												
No experience with sex x age										.025	.005	.091***
No experience with sex x gender										-.218	.028	-.149***
Incidental casual sex x age										.000	.007	.001
Incidental casual sex x gender										-.025	.034	-.014
Regular casual sex x age										.014	.007	.024
Regular casual sex x gender										-.035	.040	-.013
R <sup>2</sup>		.220			.298			.368			.377	
F for change in R <sup>2</sup>		163.766***			227.419***			253.684***			191.915***	

Note: Males and the autochthonous Dutch/ Western immigrant group served as reference groups. *B* = unstandardized beta, *SE B* = standard error of unstandardized beta and  $\beta$  = standardized beta.

\*  $p < .05$  \*\*  $p < .01$  \*\*\*  $p < .001$

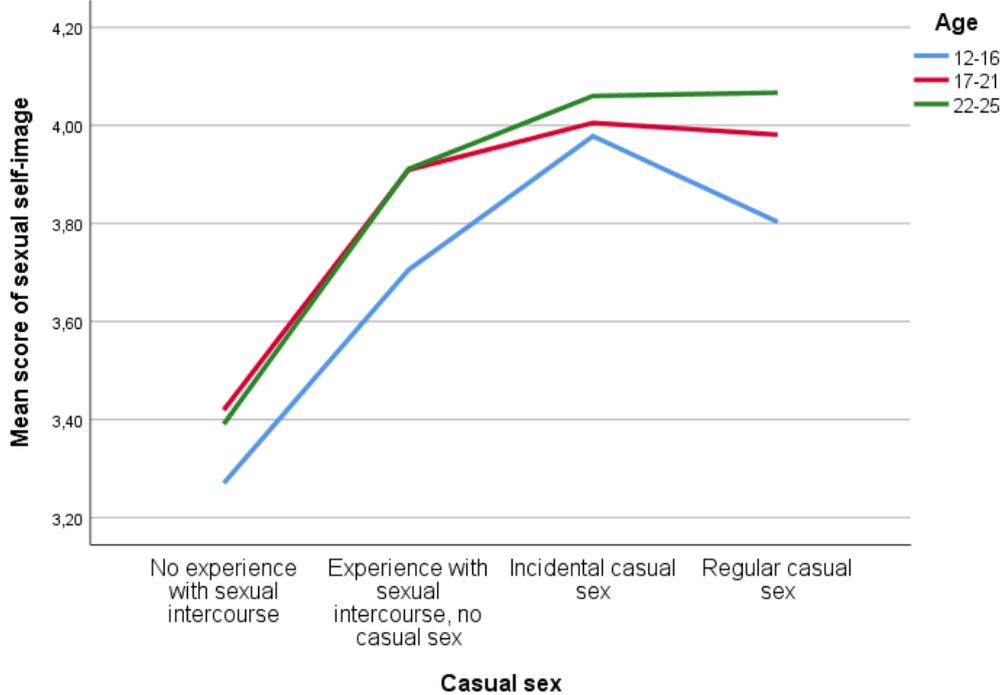
As shown in model 2 (see Table 4), there was a positive relationship between permissive sexual attitudes and the sexual self-image ( $\beta = .354, p < .001$ ). When this mediator was added to the analyses the positive relationship between the sexual self- image and age became weaker ( $\beta = -.307, p < .001$ ). Furthermore, the significant interaction effect of the Turkish/Moroccan group and gender (reference groups were males and the autochthonous Dutch/Western immigrant group) disappeared ( $\beta = -.017, p = .262$ ). In contrast, the interaction effect of the Surinamese/Antillean group and gender became stronger ( $\beta = .046, p < .01$ ). The differences between the religious groups and the nonreligious group became less strong, and the Christians who consider religion very important did not have a significantly more negative sexual self-image compared to the nonreligious group anymore ( $\beta = -.022, p = .062$ ).

As shown in model 3 (Table 4), adolescents and young adults who had casual sex incidentally had a more positive sexual self-image in comparison with young people who had experience with sex but not with casual sex ( $\beta = .038, p < .001$ ). People who did not have experience with sexual intercourse had a much more negative sexual self-image in comparison with this group ( $\beta = -.335, p < .001$ ). People who had casual sex regularly did not differ significantly in their sexual self-image compared to the people who did have experience with sex but not with casual sex ( $\beta = -.010, p = .365$ ). When the mediator casual sex was added to the analyses the positive relationship between age and the sexual self-image became even weaker ( $\beta = .114, p < .001$ ). The strength of the interaction effects of gender and ethnicity did not change. Furthermore, the Christian group who considers religion somewhat important ( $\beta = -.016, p = .101$ ) and the Muslim group ( $\beta = -.025, p = .130$ ) did not have a significantly more negative sexual self-image compared to the nonreligious group anymore.

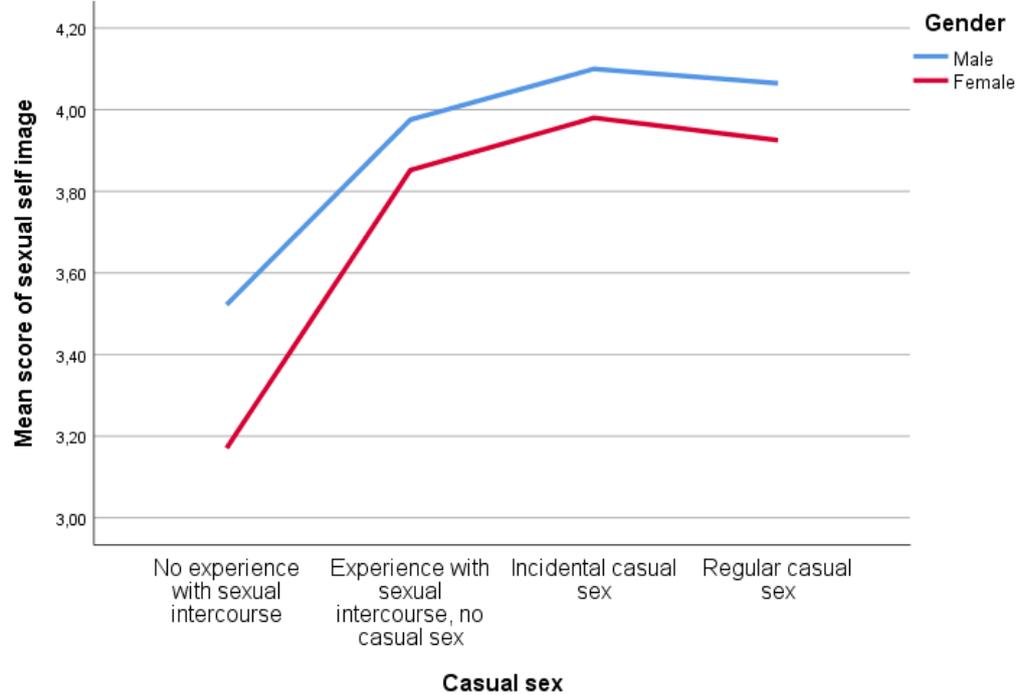
### **Interaction effects of casual sex**

As shown in model 4 (Table 4), the interaction effects of no experience with sex and age ( $\beta = .091, p < .001$ ) and no experience with sex and gender ( $\beta = -.149, p < .001$ ) (reference categories were males and no casual sex) were significant. In Figure 3 age is divided into three groups. When adolescents and young adults had experience with sexual intercourse but not with casual sex the groups of 17 – 21 and 22 – 25 years old had a more positive sexual self-image in comparison with the group of 12 – 16 years old. The difference in the sexual self-image between the three age groups was smaller when they had casual sex incidentally, and when adolescents and young adults had casual sex regularly the sexual self-image of the group of 12 – 16 years old was much more negative than the other two groups.

As depicted in Figure 4, when adolescents and young adults had no experience with sexual intercourse, males had a much more positive sexual self-image than females. When both groups had experience with sexual intercourse this difference was smaller and stayed stable with regard to having casual sex incidentally and regularly.



**Figure 3.** Age differences in the mean score of the sexual self-image for each group of casual sex



**Figuur 4.** Gender differences in the mean scores of sexual self-image for each group of casual sex

## Discussion

The aim of this study was to examine which groups of adolescents and young adults have a more positive sexual self-image, and whether this can be explained by a higher level of permissive sexual attitudes and more frequent engagement in casual sex. It can be concluded that young adults, autochthonous Dutch/Western immigrant males, Surinamese/Antillean males and nonreligious people have a more positive sexual self-image, and this can partly be explained by their higher level of permissive sexual attitudes and more frequent engagement in (casual) sex. Against the expectations, having experience with sex is strongly associated with a positive sexual self-image, and having casual sex not so much. People who have casual sex incidentally only have a slightly more positive sexual self-image than people who have experience with sexual intercourse, but not with casual sex. People who have casual sex regularly do not differ in their sexual self-image from this group.

Young people who have experience with sexual intercourse but not with casual sex have a much more positive sexual self-image in comparison with young people who do not have experience with sex. This difference is even stronger among females. Having sex could function as a self-esteem boost (Meston & Buss, 2007), and this may explain why people who have sex have a more positive sexual self-image than people who do not. Especially females indicate that for them having sex functions as a self-esteem boost (Meston & Buss, 2007). It is also possible that feeling ready to have sex, not feeling ashamed or guilty when thinking about sex and having a positive body image makes the difference in engaging in sexual intercourse or not. So, maybe having a positive sexual self-image changes people in a way that they feel ready to have sex, and that this effect is stronger among females. This is likely because research shows that people who are insecure about their body and have negative feelings about sex tend to avoid sexual activity (Buhi & Goodson, 2007; La Rocque & Cioe, 2011). Especially among females a negative body image forms a barrier for engaging in sexual activity. Females think it is important that their body looks attractive during sex, while males see their body more as an instrument (Woertman & Van den Brink, 2012). All of the above suggests that the sexual self-image is a predictor rather than an outcome in the relationship between having sexual intercourse and the sexual self-image. Future research should examine the causal direction of the relationship between these factors.

In line with the expectations, young adults have a more positive sexual self-image in comparison with adolescents. This can partly be explained by the fact that they are more likely to have experience with sexual intercourse and engage in casual sex incidentally. Against the expectations, permissive sexual attitudes do not explain the positive relationship between age

and having casual sex. Other factors may account for this relationship, such as the sexual monitoring of parents. The sexual behaviour of adolescents is monitored by their parents most of the time, and this is not the case for young adults. So, young adults can engage in casual sex more easily (Deptula, Henry & Schoeny, 2010).

As expected, having casual sex regularly is not associated with a more positive sexual self-image, especially for adolescents. This can be explained by the stage of sexual development where adolescents are situated in (DeLamater & Friedrich, 2002). Adolescents are often not ready for sex, and most of the time their body is not fully developed yet. So, when they have casual sex regularly this could lead to a less positive sexual self-image.

The hypothesis that males have a more positive sexual self-image in comparison with females can be confirmed. This could be explained by the fact that males have more permissive sexual attitudes and engage in (casual) sex more often. This could be a consequence of the sexual double standard, which implies that there are different norms regarding sexuality for males and females (Allison & Risman, 2013). As expected, the gender difference in sexual attitudes, sexual behaviour and the sexual self-image is the strongest among Turkish and Moroccan adolescents and young adults. The Turkish and Moroccan cultures are based on very strong gender conservatism. When Turkish and Moroccan females have sexual intercourse this is a shame, and this could result in strong negative feelings about sex such as shame and guilt.

In line with the expectations, religious adolescents and young adults have a more negative sexual self-image compared to nonreligious young people, which can be explained by their less frequent engagement in (casual) sex. Christians who consider religion very important have the least positive sexual self-image. Maybe, this is because it was not possible to make a distinction between Muslims who consider religion somewhat or very important. The less frequent engagement in (casual) sex of the religious groups can almost fully be explained by a lower level of sexual permissive attitudes. These attitudes may arise from specific restrictions implied by the Islam (Dialmy, 2010) and conservative Christian churches (Petersen & Donnenwerth, 1997).

There are some limitations to this study. First, the dataset used in this study did not contain sufficient items to measure casual sex adequately. The respondents were not asked if they were in love when they had sex with someone outside the context of a relationship. Because of this, casual sex in this study was defined as sex with someone you do not have a relationship with. In contrast, the most common definition of casual sex is sex outside the context of a relationship or without being in love. In this way, this study deviates from other studies examining casual sex, which makes it hard to compare the results. Besides that, the intention

was to make a distinction between body image and feelings about sex (two elements of the sexual self-image). However, it was impossible to make this distinction because the body image scale was not reliable enough. As a result, it was hard to make specific conclusions about the sexual self-image. Finally, the dataset of this study is cross-sectional. Because of this, it was impossible to prove that the mediators precede each other in time, and draw conclusions about causality. Although this study has its limitations, this study also has its strengths. Multiple mediation and moderation effects were assessed in one cohesive model, and because of this the description of the relationships between the demographic factors and the sexual self-image was very precise. Furthermore, casual sex was divided into four categories (no experience with sexual intercourse, experience with sex but not with casual sex, having casual sex incidentally and having casual sex regularly). In such way, it was possible to make a distinction in different degrees of casual sex behaviour.

This study has contributed to the existing literature about casual sex through the conclusion that the vision about casual sex has to be altered. Especially having sex is strongly associated with a positive sexual self-image, and having casual sex not so much. It is important to provide more clarity about the causal direction of this relationship. It is suggested that future research examines this relationship, whereby a distinction between feelings about sex and body image is made.

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## Appendix 1: Multinomial regression analyses with factors predicting casual sex

**Table 3.** Multinomial regression analyses with demographic factors predicting casual sex ( $N = 7196$ )

	Model 1	Model 2	Model 3
	OR (95% CI)	OR (95% CI)	OR (95% CI)
<b><i>No experience with sexual intercourse vs. no casual sex</i></b>			
Age	.59 (.58 - .61)***	.59 (.57 - .60)***	.60 (.58 - .62)***
Gender (ref. = males)	.67 (.58 - .77)***	.61 (.52 - .71)***	.54 (.46 - .63)***
Ethnicity (ref. = autochthonous Dutch/ Western immigrants)			
Turkish/ Moroccan	2.04 (1.11 – 3.74)*	.89 (.42 – 1.86)	.82 (.39 – 1.74)
Surinamese/ Antillean	.64 (.47 - .87)**	.58 (.34 – .98)*	.59 (.35 – 1.01)
Remaining non-Western immigrants	1.08 (.75 – 1.55)	1.13 (.63 – 2.01)	1.21 (.68 – 2.16)
Religion (ref.= non-religious)			
Christian, religion somewhat important	1.44 (1.20 – 1.72)***	1.46 (1.22 – 1.75)***	1.27 (1.05 – 1.52)*
Christian, religion very important	5.02 (3.78 – 6.65)***	5.13 (3.86 – 6.81)***	2.57 (1.86 – 3.55)***
Muslim	3.53 (2.01 – 6.19)***	3.64 (2.06 – 6.40)***	2.28 (1.27 – 4.10)**
Remaining religions	2.14 (1.45 – 3.15)***	2.17 (1.47 – 3.20)**	1.79 (1.20 – 2.67)**
Interaction effects (ref.= males and autochthonous Dutch/ Western immigrants)			
Turkish/ Moroccan x gender		5.24 (2.46 – 11.18)***	4.23 (1.98 – 9.03)***
Surinamese/Antillean x gender		1.18 (.63 – 2.21)	1.06 (.56 – 2.01)
Rem. non-Western immigrants x gender		.93 (.47 – 1.99)	.91 (.44 – 1.89)
Permissive sexual attitudes			.57 (.50 - .64)***
<b><i>Incidental casual sex vs. no casual sex</i></b>			
Age	1.01 (1.07 – 1.13)***	1.10 (1.07 – 1.13)***	1.09 (1.06 – 1.11)***
Gender (ref. = males)	.90 (.78 – 1.03)	.95 (.82 – 1.10)	1.09 (.93 – 1.27)
Ethnicity (ref. = autochthonous Dutch/ Western immigrants)			
Turkish/ Moroccan	1.17 (.60 – 2.27)	1.85 (.84 – 4.09)	2.28 (1.02 – 5.06)*
Surinamese/ Antillean	1.22 (.91 – 1.62)	1.30 (.81 – 2.07)	1.42 (.88 – 2.27)
Remaining non-Western immigrants	1.40 (.95 – 2.08)	2.23 (1.22 – 4.11)*	2.60 (1.40 – 4.81)**
Religion (ref.= non-religious)			
Christian, religion somewhat important	.78 (.65 - .93)**	.78 (.65 - .93)**	.93 (.77 – 1.11)
Christian, religion very important	.35 (.24 - .51)***	.35 (.24 - .51)***	.76 (.50 – 1.14)
Muslim	.81 (.43 – 1.52)	.79 (.42 – 1.49)	1.61 (.83 – 3.09)
Remaining religions	.62 (.41 - .96)*	.63 (.41 - .96)*	.86 (.55 – 1.32)
Interaction effects (ref.= males and autochthonous Dutch/ Western immigrants)			
Turkish/ Moroccan x gender		.36 (.14 - .92)*	.35 (.14 - .91)*
Surinamese/ Antillean x gender		.92 (.52 – 1.62)	.96 (.54 – 1.71)
Rem. non-Western immigrants x gender		.46 (.21 – 1.01)	.40 (.18 - .89)*
Permissive sexual attitudes			2.09 (1.82 – 2.41)***
<b><i>Regular casual sex vs. no casual sex</i></b>			
Age	1.04 (1.01 – 1.07)**	1.05 (1.01 – 1.08)**	1.03 (1.00 – 1.06)
Gender (ref. = males)	.52 (.44 - .61)***	.64 (.53 - .76)***	.82 (.68 - .98)*
Ethnicity (ref. = autochthonous Dutch/ Western immigrants)			
Turkish/ Moroccan	2.80 (1.47 – 5.35)**	4.84 (2.29 – 10.26)***	6.96 (3.19 – 15.21)***
Surinamese/ Antillean	1.33 (.96 – 1.85)	2.06 (1.31 – 3.25)**	2.38 (1.49 – 3.80)***
Remaining non-Western immigrants	1.82 (1.19 – 2.77)**	3.22 (1.78– 5.56)***	4.01 (2.15 – 7.46)***
Religion (ref.= non-religious)			

Christian, religion somewhat important	.82 (.65 – 1.02)	.81 (.64 – 1.01)	1.08 (.85 - 1.36)
Christian, religion very important	.60 (.40 - .90)*	.61 (.40 - .92)*	2.08 (1.31 – 3.30)**
Muslim	1.15 (.61 – 2.16)	1.08 (.56 – 2.09)	3.29 (1.64 – 6.59)**
Remaining religions	1.22 (.79 – 1.87)	1.22 (.79 – 1.89)	1.98 (1.27 – 3.10)**
Interaction effects (ref.= males and autochthonous Dutch/ Western immigrants)			
Turkish/ Moroccan x gender		.15 (.05 - .41)***	.15 (.05 - .43)***
Surinamese/ Antillean x gender		.40 (.21 - .77)**	.45 (.23 - .87)*
Rem. non- Western immigrants x gender		.32 (.13 - .76)*	.27 (.11 - .67)**
Permissive sexual attitudes			3.98 (3.31 – 4.80)***

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*Note.* Data are given as odds ratio (95% confidence interval). \*  $p < .05$  \*\*  $p < .01$  \*\*\*  $p < .001$