

PERCEPTIONS OF SEX, VIRGINITY, AND CONSENT; CONSIDERING GENDER,  
SEXUALITY, AND ALCOHOL CONSUMPTION

by

Ashley E. Frost

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Committee Members:

Roque Mendez, Chair

Shirley Ogletree

Alessandro De Nadai

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## TABLE OF CONTENTS

	<b>Page</b>
ACKNOWLEDGEMENTS.....	iv
LIST OF TABLES.....	vii
ABSTRACT.....	viii
CHAPTER	
I. STUDY 1.....	1
Method.....	4
Participants.....	4
Measures.....	4
Procedure.....	5
Results.....	5
Comparisons of Means.....	11
Additional Findings.....	11
Discussion.....	12
II. STUDY 2:.....	14
Method.....	15
Participants.....	15
Measures.....	16
Procedure.....	16
Results.....	17
Discussion.....	22
III. STUDY 3.....	24
Method.....	26
Participants.....	26
Design.....	27
Procedure.....	28
Results.....	28
Discussion.....	34
Limitations and Future Directions.....	36

IV. GENERAL SUMMARY ..... 38

APPENDEX SECTION ..... 40

REFERENCES ..... 46

## LIST OF TABLES

<b>Tables</b>	<b>Page</b>
1 Percentages of Participants Agreeing by Sexual Orientation and Participant Gender for Virginty Items.....	6
2 Percentages of Participants Agreeing by Partner Gender and Orientation for the Entire Sample’s Opinions on Sex and Virginty Items .....	17
3 Participants Opinions on Consent.....	21
4 Opinions on non-verbal consent considering relationship.....	29
5 Opinions on consent considering group status.....	30
6 Differences in consent requirements across sexuality.....	33

## **ABSTRACT**

The present studies investigated current perceptions of what acts constitute a loss of virginity (study 1) and are considered sex (study 2) for each partner in heterosexual and same-sex interactions as well as how these perceptions might change with varying levels of consent (study 3). Participants (Total N = 1,310) read situational statements, vignettes, and opinion questions concerning their own sexuality and gender, as well as others to determine not only how a group views itself, but how others view them. Studies 1 & 2 found penile penetration, vaginally and anally, constituted both sex and a loss of virginity. Seven items that did not constitute a loss of virginity were considered sex and any act that is non-consensual is not considered a valid sexual interaction nor constitutes virginity loss. In study 3, even if verbal consent is acquired, if either participant is intoxicated, the validity of that consent is questioned.

## I. STUDY 1

In the wake of the Me Too movement and its effects on media, politics, and survivors of sexual assault, it is important to analyze what actions require consent, when consent is valid, and how educated the masses are on these definitions. While sex and the loss of virginity are colloquially understood to require penetration of some kind, there is not currently a gold standard for what actions are considered sex and what actions might constitute the loss of virginity. In this study, researchers attempt to create a better understanding of current perceptions of sex and virginity while also considering gender and sexual orientation.

We investigated this topic because “virginity” has typically been defined from a heteronormative perspective—only considering those who have romantic and sexual encounters with the opposite sex. This disregards 18% of the population according to Geary et al.’s 2018 study measuring sexual identities and attractions within the general population. Without exploring these populations and the perceptions of their community by the population at large as their perceptions towards their own values might vary within their community and the population at large. For example, perhaps losing one’s virginity is a more meaningful life event for individuals who are heterosexual than those who are homosexual. Averett and colleagues (Averett, Moore, & Price, 2014) reported that the concept of “virginity” was less important to LGBT participants than “coming out” as a rite of passage. Past research defining virginity loss have considered a broad range of behaviors, including genital stimulation, oral acts, and penetrative behaviors (Barnet, Fleck, Marsden, & Martin, 2017; Bogart, Cecil, Wagstaff, Pinkerton, & Abramson, 2000; Byers, Henderson, & Hobson. 2009; Hans & Kimberly, 2011; Sanders & Reinish, 1999).

Sanders and Reinisch (1999) reported, not surprisingly, that almost all participants considered penile-vaginal contact sex and roughly 80% of the sample also reported anal intercourse as “hav[ing] sex.” Inversely only 40% of the sample considered oral-genital contact “sex” and even fewer at 14% of the sample considering manual stimulation “ha[ving] sex.”

A complication with this data in terms of virginity is that many people do not believe that even the same acts they considered to be “sex” would necessarily constitute a loss of virginity in those engaging in such acts (Barnett et al., 2017; Castañeda, 2015; Trotter & Alderson, 2007). For example, Trotter and Alderson (2007) reported that participants were more likely to include oral-genital contact or anal-genital penetration in definitions of “having sex” than in definitions of virginity loss. A working definition of virginity becomes even more problematic when considering relationships other than heterosexual. What about relationships where penile-vaginal contact is not possible? Based on focus group and interview results, Averett et al. (2014) suggested that loss of virginity may be tied to the concept of penetration; anal penetration may be important in defining virginity loss to at least gay *men*, but women who identify as LGBT may associate virginity loss with heterosexual penetration.

Virginity is a value-laden, socially created term; “losing” one’s virginity implies a worth given to virginity. As Carpenter (2002) points out, though, this may not always apply. In Carpenter’s framework, virginity may be regarded as a gift of value, a burden to be disposed of, or part of the process of becoming an adult.

Moreover, sexual orientation, gender roles, and religiosity may differentially impact the worth/importance placed on virginity. Averett, Moore, and Price (2014)

reported that the concept of “virginity” was less important to LGBT participants than “coming out” as a rite of passage. Related to gendered communication, Heisler (2014) found that mothers of college student daughters reported 24 sexual gatekeeping messages (remaining abstinent) to daughters but only two such messages to sons. On the other hand, 13 maternal messages to sons, compared to two messages to daughters, focused on sexual experience being positive or expected—a male “rite of passage.” Religiosity also may be a factor; Crowden and Bradshaw (2007) reported that religiosity was related to sexual concerns, discomfort with masturbation, and sexual guilt.

The research here examines what behaviors young adults in a U.S. sample define as resulting in the loss of virginity and how those definitions vary across sexual orientation and gender. In addition, the rated importance of virginity is considered as a function of participant gender and sexual orientation. Based on past research and the current climate of greater inclusivity related to sexual orientation, I predicted the following hypotheses:

H1: The highest percentage of agreement will be found in defining penile-vaginal sex as constituting the loss of virginity.

H2: More than half of the participants will regard anal penetration, whether same-sex or other-sex, as resulting in virginity loss.

H3: The majority of participants will not regard oral-genital sex, whether mouth to penis or mouth to vulva, as behavior leading to loss of virginity.

H4: In female-female couples where penile penetration does not occur, a greater number of behaviors will be considered as resulting in a loss of virginity.

H5: In male-male couples, penile-anal sex will be the act most commonly associated with loss of virginity.

H6: Female, compared to male, participants will rate more items as constituting the loss of virginity and will rate virginity loss as more important.

H7: Female virginity will be rated as more important than male virginity among all participants.

## **Method**

### **Participants**

A sample of 139 males and 457 females, were recruited from various departments at a central Texas university in the USA. Participants were 51% white/Caucasian, 33% Hispanic/Latinx, 7% African American, 5% Asian/Pacific islander, and 4% other/unspecified. The majority of participants (499) identified as straight, 51 identified as bi, 26 identified as gay, and 11 identified as otherwise members of the LGBT community. The median participant age was 21, with 90% of participants being 25 years of age or younger.

### **Measures**

Participants completed demographic information including age, ethnicity, socioeconomic status, gender identity, sexual orientation, and religiosity (rated on a five-point scale).

Next participants answered twenty-six items regarding hypothetical couples in male/female, female/female, and male/male relationships performing certain acts. These questions can be found in Table 1. The virginity questions were developed by the researcher based on past research and input from an undergraduate focus group; the questions were piloted with a small sample before being administered as part of the study.

Participants indicated, using a four-point scale (“strongly agree,” “somewhat agree,” “somewhat disagree,” and “strongly disagree”), the extent to which they believed

an act would constitute the loss of virginity in one or both of the partners involved. The following item is an example: “In a heterosexual relationship, anal penetration performed on the female partner constitutes the loss of virginity for the male partner.” Two items regarding foreplay were excluded from analyses because of lack of specificity of the word “foreplay.” Finally, participants completed three items about the importance of virginity and rated the statement, “Virginity is real,” using the same four-point agree/disagree scale.

### **Procedure**

Participants were recruited via an online announcement for individual courses. Professors chose whether to offer extra credit or to allow students to participate without any incentives. From this announcement, participants clicked a link taking them to a Qualtrics questionnaire. After participants gave consent to participate, they completed demographic items and virginity attitude items.

### **Results**

To test the hypotheses, I examined descriptive statistics shown in Table 1. Agreement in Table 1 was determined by creating a dichotomous variable; as such, those who indicated that the “strongly agreed” or “somewhat agreed” were coded to represent “agreement”, likewise, those who indicated that they “strongly disagreed” or “somewhat disagreed” with a statement were coded as “disagreeing” with the statement. Percentages of participants, reported separately by sexual orientation and gender, who “strongly agreed” or “somewhat agreed” with each of the virginity items are given in Table 1.

**H1:**

The first hypothesis was strongly supported, with approximately 95% of overall participants agreeing that, in a heterosexual relationship, vaginal penetration constitutes the loss of virginity for both the male and female partner (Items 1&2).

Table 1  
*Percentages of Participants Agreeing by Sexual Orientation and Participant Gender for Virginity Items*

Item	Sexual Orientation		Participant Gender	
	Straight (n=499)	LGBT (n=88)	Male (n=139)	Female (n=457)
1. In a heterosexual relationship, vaginal penetration constitutes the loss of virginity for the male partner.	96.4**	88.6**	96.4**	94.5**
2. In a heterosexual relationship, vaginal penetration constitutes the loss of virginity for the female partner	97.6**	93.2**	96.4**	96.7**
3. In a heterosexual relationship, anal penetration performed on the male partner with the use of a foreign objects/toys (pegging) constitutes the loss of virginity for the male partner.	44.5	63.6*	38.1	49.9
4. In a heterosexual relationship, anal penetration performed on the male partner with the use of foreign objects/toys (pegging) constitutes the loss of virginity for the female partner performing the act.	26.9	40.2	21.7	30.9
5. In a heterosexual relationship, anal penetration performed on the female partner constitutes the loss of virginity for the female partner.	59.4*	69.3*	64.0*	59.8*
6. In a heterosexual relationship, anal penetration performed on the female partner constitutes the loss of virginity for the male partner.	59.7*	69.3*	63.3*	60.2*
7. In a heterosexual relationship, oral performed on the male partner constitutes the loss of virginity for the male partner.	31.3	39.8	25.2	34.7

Table 1. Continued

8. In a heterosexual relationship, oral performed on the male partner constitutes the loss of virginity for the female partner.	25.3	34.1	20.3	28.4
9. In a heterosexual relationship, oral performed on the female partner constitutes the loss of virginity for the female partner.	30.1	39.8	28.8	32.4
10. In a heterosexual relationship, oral performed on the female partner constitutes the loss of virginity for the male partner.	23.7	31.8	20.9	25.9
11. In a heterosexual relationship, genital touching/rubbing without penetration constitutes the loss of virginity for the female partner.	11.4	25.0	11.5	13.8
12. In a heterosexual relationship, genital touching/rubbing without penetration constitutes the loss of virginity for the male partner.	11.2	25.0	12.2	13.8
13. In a male/male relationship, anal penetration constitutes the loss of virginity for the receiving partner.	86.9**	93.2**	81.2**	89.2**
14. In a male/male relationship, anal penetration constitutes the loss of virginity for the acting partner.	85.1**	89.8**	78.3**	87.5**
15. In a male/male relationship, oral constitutes the loss of virginity for the receiving partner.	33.2	40.9	30.4	35.1
16. In a male/male relationship, oral constitutes the loss of virginity for the acting partner.	27.8	35.2	24.6	30.0
17. In a male/male relationship, genital rubbing/touching without penetration constitutes a loss of virginity.	14.0	22.7	16.7	14.7
18. In a female/female relationship, vaginal penetration with foreign objects/toys constitutes the loss of virginity for the receiving partner	62.1*	86.4**	67.9*	65.3*

Table 1. Continued

19. In a female/female relationship, vaginal penetration with foreign objects/toys constitutes the loss of virginity for the acting partner.	38.1	59.1*	47.8	39.3
20. In a female/female relationship, anal penetration with foreign objects/toys constitutes the loss of virginity for the receiving partner.	46.6	70.5**	50.7*	49.8
21. In a female/female relationship, anal penetration with foreign objects/toys constitutes the loss of virginity for the acting partner.	29.7	51.1*	39.1	30.8
22. In a female/female relationship, performing oral constitutes the loss of virginity for the acting receiving partner.	35.3	45.5	31.9	38.5
23. In a female/female relationship, performing oral constitutes the loss of virginity for the acting partner.	28.8	37.5	26.8	31.5
24. In a female/female relationship, genital rubbing/touching without penetration constitutes a loss of virginity.	17.1	34.1	20.3	19.4
25. Virginity is important.	74.9**	38.6	65.5*	71.4**
26. Male virginity is important.	69.9*	34.1	59.7*	66.5*
27. Female virginity is important.	75.8**	37.5	66.2*	71.6**
28. Virginity is real.	88.0**	55.7*	85.6**	82.6**

Table 1 depicts the percentage of participants who agree with each statement. For this table, the following symbols depict:

\*=50% or more of the sample agrees the item is sex or constitutes a loss of virginity.

\*\*=70% or more of the sample agrees the item is sex or constitutes a loss of virginity.

## H2:

Regarding the second hypothesis, support was found with the majority of participants agreeing that anal penetration (but only with a penis, not with a toy) resulted in a loss of virginity for both male/female and male/male partners. Notably, overall 61%

of the participants agreed that anal penetration resulted in the loss of virginity for both the male and female partners; however, in male/male relationships the overall percentages increased to 87% for the receiving partner and 85% for the acting partner (Items 3-6, 13-14, 20-12).

**H3:**

Oral-genital contact, as predicted by the third hypothesis, resulted in ratings of loss of virginity in heterosexual relationships with percentages below 40% in all cases (Items 7-10). Similarly, for male/male relationships (items 15&16), percentages ranged from 25% to 41% for considering oral sex as resulting in virginity loss; overall percentages were 34% for the receiving partner and 29% for the acting partner. Similar results were also found for female/female relationships; overall percentages were 37% for the receiving partner and 30% for the acting partner (Items 22&23).

**H4:**

The fourth hypothesis, that a greater number of behaviors would be considered as resulting in virginity loss in female/female relationships, was not supported (Items 18-24). Only in the case of vaginal penetration of the receiving partner with an object/toy did a majority of participants (66%) consider the behavior resulting in virginity loss. For the acting partner only 41% overall agreed that the action resulted in virginity loss. Not quite 50% (49.9%) of the participants indicated that anal penetration of the receiving partner would result in loss of virginity. The comparable overall percentage for anal penetration of a male with an object/toy in male/female relationships was similar (47.1%). The comparable question about anal insertion of an object/toy was not asked for male/male relationships or for females in heterosexual relationships.

**H5:**

Survey results supported the fifth hypothesis, that penile-anal sex will be the behavior most consistently thought to result in loss of virginity in male/male relationships. As mentioned previously, over 80% of participants believed penile-anal sex resulted in virginity loss for both participants; moreover, this was the only behavior that a majority of participants believed would result in virginity loss in male/male relationships (Items 13-17).

**H6:**

The sixth hypothesis that women, compared to men, would rate more items as leading to the loss of virginity and would rate virginity as being more important was marginally supported. Of the 28 items rating virginity loss and importance/being real, in 17 instances women's ratings were higher than men's by at least a percentage. Men gave higher ratings than women in eight instances, and in three cases the percentages were less than one point apart. It is notable that when asking about same-sex relationships, females agreed more than male participants with four of the five items concerning male/male relationships; however, this gender difference was not obvious in items concerning female/female relationships. Mean ratings of men/women on the items are compared in the next section.

**H7:**

As predicted by the seventh hypothesis, female virginity was rated as more important than male virginity. In terms of overall participants, 64.8% agreed that male

virginity was important compared to 70.2% for female virginity. Mean comparisons for these two items are given in the next section.

### **Comparisons of Means**

Related to the sixth hypothesis, a multivariate analysis of variance was performed on the 28 virginity items with participant gender as the independent variable. Participant gender was significant,  $F(28, 551) = 2.22, p \leq .001, \eta^2 = .10$ . However, only the two items (Item 3 and Item 4) assessing penetration of the male (pegging) in male/female relations were individually significant at the .05 level. Females agreed more in each case. The other two items related to the active and receiving partners in anal intercourse for a male/male relationship, Item 13 and item 14, approached significance at the .06 level, again with females being more agreeing.

According to the seventh hypothesis, female virginity is more important than male virginity. This hypothesis was supported,  $t(593) = 6.32, p < .001, d = 0.11$  when the means of these two items dichotomized into “agree”/“disagree” variables were compared using a t-test.

### **Additional Findings**

As can be seen from the table, fewer participants who identified as LGBT, compared to those who identified as straight, tended to agree with virginity being important or real; see items 25 through 28 listed at the end of Table 1. Because the tests for homogeneity of variance were significant for three of these four one-way ANOVA comparisons, the Welch statistic was used rather than the F statistic. In the comparisons of the means for these four items, the means of individuals identifying as LGBT versus straight were significantly different ( $p < .001$  in each case).

We also computed correlations between religiosity and the four items rating importance/realness of virginity with the following results: “Virginity is important” ( $r = .42$ ); “Male virginity is important” ( $r = .39$ ); “Female virginity is important” ( $r = .43$ ); and “Virginity is real” ( $r = .36$ ); Thus, the more religious individuals rated virginity, male virginity, female virginity and the reality of virginity as more important than those less religious individuals. All four correlations were significant at the .001 level, with 592 participants.

### **Discussion**

As we hypothesized and as previously reported (Barnett et al., 2017; Sanders & Reinisch, 1999), penile-vaginal sex remains the most clearly agreed upon definition of experiencing virginity loss for these emerging adults in central Texas. Although the majority of participants believed that anal sex performed on a female in a male/female relationship also resulted in virginity loss, these percentages had dropped compared to the 80% figures past researchers have reported. However, for male/male relationships over 80% of our participants defined penile-anal sex as resulting in virginity loss for both partners. Also, in female/female relationships, over half of the participants indicated that only one act constituted the loss of virginity; this act, for the recipient only, involved inserting a penis-like object into the vagina.

Although percentages of participants considering oral sex as resulting in virginity loss tended to be higher than the 20% figure reported by Hans et al. (2010), oral sex was still less likely than vaginal or anal penetrative sex to be considered as constituting the loss of virginity. Genital touching was even less likely to be considered by these participants as resulting in virginity loss.

According to Gesselman and colleagues (Gesselman, Webster, & Garcia, 2017), virginity may not be valued as much as formerly, especially if the loss of virginity is delayed into adulthood. However, among the participants here, virginity was still considered important by three-quarters of heterosexual participants. Almost 90% of heterosexual participants also considered virginity to be real. Notably, virginity was still rated as more important for women than men. In heterosexual relationships perhaps it is still more important for women to “sexy than sexual” (Ogletree & Ginsburg, 2000).

This picture, though, is not accurate for participants identifying as LGBT, with less than 40% of these participants rating virginity as important. Our data support Avertt et al.’s (2014) finding that, compared to “coming out,” losing one’s virginity was a less important rite of passage.

These data and results led me to ask what actions might be considered sex that do not constitute a loss of virginity for current college-aged persons, thus leading to the implementation of Study 2.

## II. STUDY 2:

Historically, research has shown that people often do not believe that even the same acts they considered to be “sex” would necessarily constitute a loss of virginity in those engaging in such acts (Barnett et al., 2017; Castañeda, 2015; Trotter & Alderson, 2007). For example, Trotter and Alderson (2007) reported that participants were more likely to include oral-genital contact or anal-genital contact in definitions of “having sex” than in definitions of virginity loss.

Sanders and Reinisch (1999) reported, unsurprisingly, that almost all participants in their study considered penile-vaginal contact to be intercourse. However, only 80% considered penile-anal contact to be sex, and even fewer at 40% considered oral-genital contact to be sex. Hans, Gillen, and Akande (2010) referred to the “Clinton-Lewinsky era,” noting a decrease in participants who considered oral-genital contact as “having sex” following this incident. Comparing a 1991 sample to a 2007 sample, Hans and colleagues found that in the 2007 sample only about half as many, around 20% of participants, considered oral/genital contact as “having sex.”

Given that extreme change, it is important to regularly retest these definitions as such drastic increases and decreases in sexual perception have occurred over short periods of time. Another thing to consider is that almost all of the research done to this point has been either on heterosexual populations or using a heterosexual sample. Zaikman et al. (2016) show that while sexual double standards persist across gender and sexuality, LGBT individuals have a different view of positive sexuality. Zaikman et al. (2016), replicated Marks and Fraley’s (2005) as cited in Zaikman et al. (2016), findings that overall sexually active males are viewed more highly within the community than

sexually active females; yet gay men with higher numbers of partners are viewed more positively than straight men with a higher number of partners (straight men with one constant sexual partner is viewed more highly than straight men with many casual partners). As such, LGBT individuals may rate more items as being considered “sex” than straight individuals to gain a higher social status. This means that these definitions of sex may vary based on sexuality, gender, and other group identities. With this in mind, this study hoped to define the actions that are considered sex across partner, gender, and sexuality.

The hypotheses were as follows:

H1: More acts will be considered sex and constitute the loss of virginity for female partners than male partners.

H2: More acts will be considered sex than constitute the loss of virginity.

H3: The act would not constitute a loss of virginity or be considered a valid sexual encounter if the encounter is not consensual.

## **Methods**

### **Participants**

A sample of 80 males and 337 females ( $M = 19.37$ ,  $SD = 2.58$ ), was recruited from various departments at a central Texas university in the USA. Participants were 40% white/Caucasian, 41% Hispanic/Latinx, 12.2% African American, 4.5% Asian/Pacific islander, and 2% other/unspecified. The majority of participants (355) identified as straight, 43 identified as bi, 9 identified as gay, and 4 identified as otherwise members of the LGBT community, and 8 chose not to answer.

## **Measures**

Participants completed demographic information including age, ethnicity, socioeconomic status, gender identity, sexual orientation, and religiosity (rated on a five-point scale).

Next participants answered a twenty-six item measure regarding hypothetical couples in male/female, female/female, and male/male relationships performing certain acts modified from the questionnaire used in study 1. Participants indicated, using a four-point scale (“strongly agree,” “somewhat agree,” “somewhat disagree,” and “strongly disagree”, later collapsed into a dichotomous item of “agree” or “disagree” for analysis), the extent to which they believed an act would be considered sex for one or both of the partners involved. The following item is an example: “In a heterosexual relationship, anal penetration performed on the female partner would be considered sex for the male partner.” Finally, participants completed ten items about consent and three about their comfort levels discussing sex with friends and partners using the same four-point agree/disagree scale.

## **Procedure**

Participants were recruited via an online announcement for individual courses. Professors chose whether to offer extra credit or to allow students to participate without any incentives. From this announcement, participants clicked a link taking them to a Qualtrics questionnaire. After participants gave consent to participate, they completed sex attitude items, consent items and demographics.

## Results

### Tests of Hypothesis

#### H1:

Descriptive statistics reported in Table 2 were used to assess agreement for each item. Those responses of “strongly agree” and “somewhat agree” were recoded into one value of “agree” and “strongly disagree” and “somewhat disagree” were likewise recoded into one value of “disagree” for all 26 items. Based on these descriptives, the data do not show that males have more overall acts considered sex (eight out of nine presented acts) than acts being considered sex for females (nine out of ten presented acts) as predicted in hypothesis 1; neither were there more acts that constituted a loss of virginity for one sex over the other with both males and females having three acts that constituted a loss of virginity. As such, we cannot reject the null hypothesis.

Table 2

*Percentages of Participants Agreeing by Partner Gender and Orientation for the Entire Sample’s Opinions on Sex and Virginity Items*

Item	Is considered Sex	Constitutes a loss of virginity
	% Agree n=419	% Agree n=597
1. In a heterosexual relationship, vaginal penetration _____ for the female partner.	97.13**	96.48**
2. In a heterosexual relationship, vaginal penetration _____ for the male partner.	96.89**	94.81**
3. In a heterosexual relationship, anal penetration performed on the female partner _____ for the female partner	88.51**	60.67*

Table 2. Continued

4. In a heterosexual relationship, anal penetration performed on the female partner _____ for the male partner.	88.79**	60.80*
5. In a heterosexual relationship, oral performed on the male partner _____ for the male partner.	74.88**	32.44
6. In a heterosexual relationship, oral performed on the male partner _____ for the female partner.	68.73*	26.51
7. In a heterosexual relationship, oral performed on the female partner _____ for the female partner.	74.64**	31.49
8. In a heterosexual relationship, oral performed on the female partner _____ for the male partner.	68.66*	24.66
9. In a heterosexual relationship, manual manipulation performed on the male by the female partner (hand jobs) _____ for the female partner.	44.15	13.26
10. In a heterosexual relationship, manual manipulation performed on the male by the female partner (hand jobs) _____ for the male partner.	50.60*	13.40
11. In a heterosexual relationship, manual manipulation performed on the female by the male partner (fingering) _____ for the female partner.	55.03*	13.26
12. In a heterosexual relationship, manual manipulation performed on the female by the male partner (fingering) _____ for the male partner.	44.87	13.40
13. In a male/male relationship, anal penetration _____ for the acting partner.	95.95**	85.21**

Table 2. Continued

14. In a male/male relationship, anal penetration _____ for the receiving partner.	96.18**	87.21**
15. In a male/male relationship, oral _____ for the acting partner.	75.42**	28.74
16. In a male/male relationship, oral _____ for the receiving partner.	78.28**	33.95
17. In a male/male relationship, manual manipulation performed on the partner (hand jobs) _____ for the acting partner.	52.51*	15.13
18. In a male/male relationship, manual manipulation performed on the partner (hand jobs) _____ for the receiving partner.	56.33*	15.13
19. In a female/female relationship, vaginal penetration with foreign objects/toys _____ for the acting partner.	81.58**	41.22
20. In a female/female relationship, vaginal penetration with foreign objects/toys _____ for the receiving partner.	88.54**	65.82*
21. In a female/female relationship, anal penetration with foreign objects/toys _____ for the acting partner.	76.61**	32.72
22. In a female/female relationship, anal penetration with foreign objects/toys _____ for the receiving partner.	84.00**	49.92
23. In a female/female relationship, oral _____ for the acting partner.	74.90**	30.35

Table 2. Continued

24. In a female/female relationship, oral _____ for the receiving partner.	79.93**	36.93
25. In a female/female relationship, manual manipulation performed on the partner (fingering)_____ for the acting partner.	63.59*	19.56
26. In a female/female relationship, manual manipulation performed on the partner (fingering)_____ for the receiving partner.	69.10*	19.56

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Table 2 depicts the percentage of participants who agree with each statement. For this table, the following symbols depict:

\*=50% or more of the sample agrees the item is sex or constitutes a loss of virginity.

\*\*=70% or more of the sample agrees the item is sex or constitutes a loss of virginity.

## H2:

As shown in Table 2, in the test of Hypothesis 2, I found that many items are considered sex that do not constitute a loss of virginity such as oral performed on either partner, though, interestingly, there is a difference between partners for the extent to which the sample considers each act to be considered sex. For example: “In a heterosexual relationship, oral performed on the female partner” is considered sex according to 75% of the sample for the female partner but only 68% of the sample considered the same item sex for the male partner performing the act in question. This was not heterosexual specific, the same pattern was clear in female/female and male/male relationships as well. For example, “in a female/female relationship, anal penetration with foreign objects/ toys” was considered sex according to 84% of the sample for the receiving partner but was only considered sex according to 76.6% of the sample for the

acting partner in question. As such, hypothesis 2 was supported in that seventeen items that did not constitute a loss of virginity were considered sex.

**H3:**

Table 3, like tables 1 and 2, was coded dichotomously in that answers “strongly agree” and “somewhat agree” were coded as “agreeing” and reported as a percentage of the sample that agreed with each statement. From data shown in Table 3, it is clear that according to this sample, no matter what the act might be—If there is not consent, neither the sexual encounter nor a loss of virginity can be valid. That said, an emotional connection between partners does not seem to be required for this validity so it is plausible that this is also not required to constitute valid consent. With these data, hypothesis 3 is supported in that acts the would be considered sex were not considered sex if the act occurs nonconsensually.

Table 3  
*Participants Opinions on Consent*

Item	% Agree n=419
1. Consent is necessary for an act to be considered sex	83.11**
2. Consent is necessary for an act to constitute the loss of virginity	76.37**
3. Both partners must agree/assent for an act to constitute the loss of virginity	77.51**
4. Both partners must agree/assent for an act to be considered sex	78.94**
5. Any act that is considered sex would also constitute the loss of virginity	62.68*
6. There must be an emotional connection between partners for an act to constitute the loss of virginity	27.99

Table 3 depicts the percentage of participants who agree with each statement. For this table \*=50% or more of the sample agreeing on the item in question. \*\*=75% or more of the sample agreeing with the item in question.

Interestingly, the sample claimed that any act that is considered sex, would also constitute a loss of virginity according to 63% of the population, however, data in Table 2 contradict this.

## **Discussion**

The data was not sufficient to support the first hypothesis that more acts would be considered sex or constitute the loss of virginity for female participants than for male partners. However, it is worth noting that on average there was a 2% increase in attitudes toward female virginity loss when compared to their male partners for the same actions.

Consistent with past sex research (Barnett et al., 2017; Castañeda, 2015; Trotter & Alderson, 2007), the second hypothesis, that more acts would be considered sex than constitute the loss of virginity, was supported by a total of 17 actions being considered sex that does not constitute a loss of virginity. These consisted of six heterosexual activities, four male/male activities, and seven female/female activities. It is also interesting to note that what constitutes sex or a loss of virginity in one partner does not necessarily hold true for the other partner. For example, a female partner giving her male partner a hand job is not considered to be having sex, yet the male who is receiving the manual manipulation is having sex. This was also true of the reverse gender roles (fingering).

Lastly, the third and final hypothesis—the loss of virginity or validity of a sexual encounter will be removed if the encounter is not consensual—was supported across the board. Sex was more likely to be considered invalid if there was not consent than the loss of virginity, however more than 75% of the sample agreed that both a loss of virginity

and a sexual encounter would be invalid if nonconsensual. This consent is not dictated by an emotional connection—measured here by the length of the relationship in question.

Now that it is clear what acts constitutes loss of virginity and what acts are considered sex, are these true in every instance? These data show that a lack of consent can invalidate sexual contact and the loss of virginity; but what are and are not considered valid forms of sexual consent? These questions led me to the creation of study 3.

### III. STUDY 3

What actions constitute consent? Consent on a Central Texas campus is defined as “an informed and freely and affirmatively communicated willingness to participate in a particular sexual activity. Consent can be expressed either by words or by clear and unambiguous actions (TSUS Policy, 2017).” The “ambiguous” phrasing of this statement leads to unclear conditions for punishment. This statement further stipulates that these expressions can be ambiguous “so long as those words or actions create mutually understandable permission regarding the conditions of each instance of sexual activity. It is the responsibility of the person who wants to engage in the sexual activity to ensure that s/he has the consent of the other to engage in each instance of sexual activity (TSUS Policy, 2017).”

What “actions create mutually understandable permission”—and for that matter, what actions require consent (Jozkowski, Marcantonio, & Hunt, 2017)? If consent must be “mutually understood,” communication comes into question. Are people comfortable discussing these topics with their partners (Newstrom, 2018)?

Those under the age of 17 in the state of Texas cannot legally consent to sexual activity; yet the average age of male virginity loss is 16.9 (Center for Disease Control, 2017). Does this mean that the average male is not giving valid consent?

One highly publicized issue surrounding consent—especially on a college campus—revolves around the consumption of alcohol. According to Fisher et al. (2000), and Payne-James and Rogers (2002) if one or both partners consume alcohol there is an increased risk of sexual assault. Wallerstein (2009) explains that many people prefer to consume alcohol to some extent when engaging in casual sexual content; can those with

high blood-alcohol content consent (Herbenick, Fu, Dodge, Fortenberry, 2018)? Past research supports there being drunken consent so long as the person in question is not too drunk (Abbey, 1991; Benson, Gohm, Gross, 2007; Herbenick, Fu, Dodge, & Fortenberry, 2018; Hindmarch & Brinkmann, 1999; Wallerstein, 2009), but who is in charge of making that distinction?

Lastly, we hope to understand exactly what actions require consent. Frazier, Cochran, and Olson in 1995, studied 4000 students and were still not able to accurately nail down what might be considered sexual harassment. They note that each situation must be individually assessed. Sexual consent has led to equally inconsistent results (Fenner, 2017). When asked about personal experience and how one goes about getting consent from their partner Jozkowski and Peterson (2013) found that males feel they should be aggressive and physical before asking for consent if they choose to ask at all or some may choose to use deception. Women did not employ deception but also consider men to be in charge of obtaining their consent, rather than consent being the result of a mutual discussion. This is not a solitary finding; coercion to sexual acts, deception, and non-consent has been a common factor in sex research (Clough, 2018; Munro, 2010).

Lastly, considering the sexual double standard, it is often thought or assumed that men are always consenting and that they are not taken advantage of by a female partner as a woman might be if the situation were reversed. Men are less likely to report sexual assault for fear of seeming weak or not masculine. On the other hand, women are more likely to be unable to leave threatening situations or fear personal harm for rebuffing a man's sexual advances (Boynton, 2003). On college campuses alone, 90% of sexual assault victims will not report the crime (Fisher, Cullen, & Turner, (2000).

As such, the current study employs situational vignettes to give participants as much unambiguous information as possible. In this study I hope to explore and analyze the current perceptions held by college students towards physical and sexual consent through vignettes and explicit questions regarding the necessity of consent in various situations. This study will test four hypotheses:

H1: More participants will consider long term relationships to need less explicit consent than short term/first date relationships (measured with items 1-6, 13 and 15).

H2: Participants will not indicate a necessity for consent for non-physical or traditional non-sexual interactions (i.e. hugging, handshakes, verbal instances, etc. measured with items 21-26).

H3: More participants will consider verbal consent to be more valid than non-verbal consent (measured with items 1-6, 13 and 15).

H4: More participants will consider alcohol to be a factor that invalidates consent (measured with items 7-12, 29 and 30).

H5: LGBT individuals will be more likely to require consent in all instances.

## **Method**

### **Participants**

A sample of 242 females and 52 males—ranging from 18 to 50 years old with a mean age of 21.18 (SD=5.004)—were recruited from a Texas University using the human subjects participant pool as part of a course grade and from individual courses for extra credit at the discretion of the instructor. These participants consisted of 49.2% Caucasian persons, 32.1% Latinx participants, 9.7% African American Participants, 2.7% Asian or

pacific Islander participants, and 3.7% other. Of these, 75.9% identified as heterosexual, 18.7% identified as members of the LGBT community—further divided into 9.7% bisexual, 4.7% homosexual, 4.3% otherwise LGBT—and 2.3% of participants chose not to disclose.

Five participants were excluded for incomplete demographics. Other participants who chose not to answer certain questions were still included in the analysis so long as the demographic marker questions each analysis were based on were completed.

## **Design**

After completing a consent form, each participant was asked the same 34 questions and given the same 12 situational, heterosexual, vignettes making this a within subjects design, though the order of vignette presentation was randomized. For vignettes there were two repeated measures designs. Firstly, a 2X3 design with the variables as follows:

- i. Verbal or nonverbal consent
- ii. Duration of relationship (exclusively dating for three months, casually dating for three months, or first date)

An example of one such vignette would be “Michael and Monica have just gone on a date to a dinner and a movie, this is their first date. After the movie Michael invites Monica back to his apartment for coffee. The date has gone well and they decide to have sex. They use non-verbal cues as consent from their partner.”

Secondly, a 3X2 design was used with the following variables:

- i. Which partner has been drinking (Male, female, both)
- ii. Which partner initiates sexual contact

An example of these vignettes would be “Tom and Martha have just gone on a date to a party, this is their first date. Both have been drinking and have had a good time. The date has gone well and Tom decides to initiate sex. He obtains verbal consent from Martha.” For these vignettes all situations involve verbal consent to alleviate potential confounds.

Participants also answered 20 opinion questions about consent on a 100-point sliding scale going from “agree” to “disagree”. These questions were piloted in study two and can be referred to in the appendix. Two exploratory questions were added after considering possible future questions including “who is responsible for obtaining consent? A). the acting partner, B). the receiving partner, or C). both partners”.

## **Procedure**

Participants were recruited from various courses at Texas State University to attempt to balance gender in the sample. They participated via an online link to the survey hosted on Qualtrics survey systems. Participants first read the consent form and agreed to participate in the study. Then they were asked to enter their age. Any student under the age of 18 was directed to the end of the study without participating, and their data were not stored for analysis.

Next, participants read 12 randomized vignettes and answer questions about the validity of consent expressed in the vignettes. Participants then answered 22 randomized opinion based questions about situational consent on a 100-point sliding scale, ranging from “agree” to “disagree.” The entire survey took roughly 15-20 minutes.

## **Results**

### **H1:**

To test hypothesis one, a within subjects, repeated measures ANOVA was conducted to compare the effect of relationship length on the validity of non-verbal

sexual consent in exclusive, casual, and first date conditions for both partners. There was a significant main effect of relationship type on the validity of consent participants reported  $F(2,292) = 39.689$   $p < .001$ ,  $\eta^2 = .119$ . Sidak corrected adjustment for multiple comparisons yield significantly stronger valid consent in long-term exclusive relationships than in first date relationships at  $p < .001$  and a higher rate of valid consent for long-term casual relationships compared to first date relationships at  $p < .001$ . This supports the hypothesis that more participants consider long-term relationships to need less explicit consent than first date relationships. It was also noted that there was a significant main effect of gender on the validity of non-verbal sexual consent  $F(2,293) = 5.19$ ,  $p = .023$ ,  $\eta^2 = .017$ . Sidak corrected adjustment for multiple comparisons yield significantly higher rates of valid consent for male vignette partners than female vignette partners in identical situations at  $p = .008$ . There was not, however, an interaction between gender and relationship type in the validity of non-verbal sexual consent  $F(1,293) = 2.474$ ,  $p = .117$ ,  $\eta^2 = .008$ .

Table 4 further supports the hypothesis that participants consider long-term relationships to need less explicit consent than short term/first date relationships across all gender and sexuality groups studied in the sample allowing us to confidently reject the null hypothesis.

Table 4  
*Opinions on non-verbal consent considering relationship*

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Item	Mean score based on identity					Other
	Male	Female	Straight	Bi	Gay	

Table 4. Continued

13. If partners have been in a relationship for 3 months, verbal consent is no longer necessary	-22.23	-34.65	-33.01	-29.00	-30.00	-31.91
14. If partners have been in a relationship for 6 months, verbal consent is no longer necessary.	-19.57	-32.29	-29.90	-23.00	-29.33	-31.18
15. If partners are married, verbal consent is not necessary.	-6.76	-24.66	-19.85	-22.65	-26.50	-30.55

---

Table 4 reflects mean scores on items where -50 is “Strongly disagreeing” with the statement and 50 is “Strongly Agreeing” with the statement. All above statements show varying levels of disagreement with the statements in question based on group identity.

## H2:

For hypothesis 2, descriptive statistics were used to analyze items 21-26, as shown in Table 5. Based on these data it is clear that shaking hands is less likely to require consent than an other item. Once divided by group identity, these data also show that male participants are less likely to require consent for any item than any other group sampled. Overall, LGBT participants were more likely to require consent than the heterosexual participants for every item analyzed. These data partially support hypothesis two that participants will not indicate a necessity for consent in non-sexual acts compared to sexual acts. This was found in the instance of shaking hands, but not in the instance of hugging, which still required consent to some degree.

Table 5  
*Opinions on consent considering group status*

	Male	Female	Straight	Bi	Gay	Other
21. Consent is necessary for hugging	7.02	16.95	12.44	25.72	30.83	28.08
22. Consent is necessary for kissing	27.04	32.51	28.82	44.66	36.54	38.69
23. Consent is necessary for any physical contact	4.64	31.01	24.72	36.62	35.64	23.23
24. Consent is necessary for shaking hands	-15.43	-5.24	-10.81	17.68	2.42	-3.15
25. Consent is necessary for foreplay.	30.58	38.49	35.44	46.79	38.42	36.77
26. Consent is necessary for sex.	45.51	47.26	46.17	49.59	50.00	50.00

Table 5 reflects mean scores on items where -50 is “Strongly disagreeing” with the statement and 50 is “Strongly Agreeing” with the statement. Most of the above statements show varying levels of agreement with the statements in question based on group identity.

**H3:**

To test hypothesis three, a one-way within subjects ANOVA was conducted to compare the effect of consent type on the validity of sexual consent in verbal and non-verbal conditions for both partners and three relationship types. There was a significant main effect of consent type on the validity of consent participants reported with verbal consent being considered more valid than non-verbal consent in all instances,  $F(2,292) = 503.10$   $p < .001$ ,  $\eta^2 = .633$ . This supports the hypothesis that more participants consider verbal consent a more valid form of sexual consent than non-verbal consent. It was also noted that there was a significant main effect of vignette gender on the validity of sexual consent with females participants in vignettes being less likely than males to have consented in identical situations at  $F(2,293) = 7.01$ ,  $p = .009$ ,  $\eta^2 = .023$ . There was also

a main effect between relationship type and consent types  $F(2,292) = 15.01, p < .001, \eta^2 = .049$ .

#### **H4:**

For hypothesis four, a one-way within-subjects ANOVA was conducted to compare the effect of which partner consumes alcohol (male partner, female partner, or both), who initiates the contact (male partner or female partner), and the gender of the partner in question on the validity of consent. There was a significant effect which partner drinks on the validity of consent,  $F(1,285)=34.268, p < .001, \eta^2 = .164$ . Sidak corrected adjustment for multiple comparisons yield significantly higher consent scores when both partners are drinking compared to male or female solitary drinkers at  $p < .001$  and  $p < .001$  respectively. Between male and female drinkers alone, consent was more valid when only the male partner drank than when only the female partner drank,  $p = .019$ .

There was not a significant effect of which partner initiates sexual contact on the validity of consent at  $F(1,285) = .984, p = .322, \eta^2 = .032$ . There was a significant effect of the gender of the partner on the validity of consent,  $F(1,285)=4.443 p = .036, \eta^2 = .015$ . Sidak corrected adjustment for multiple comparisons yielded significantly higher consent scores for male partners than female partners in all conditions at  $p = .036$  Lastly, 84% of participants agreed that if someone has been drinking heavily, they cannot consent to sex.

#### **H5:**

For our fifth, and final hypothesis: LGBT individuals were predicted to be more likely to require consent in all instances. Correlations were used to examine this hypothesis considering average answers on consent (Items 13-20) and answers directly

relating to alcohol consumption (questions 29 and 30 in the appendix). Average answers were calculated by each participant's -50 through 50 rating from strongly disagree to strongly agree while reverse scoring items 19, 20, and 29. There was not a significant correlation between average consent answers for vignettes and sexual orientation  $r(294) = 0.02, p = .108$ . Those who scored highly on items directly enquiring about one's ability to consent when intoxicated did not necessarily show higher rates of consent invalidity in vignettes including alcohol consumption.

For direct consent questions replicated from study 2, this sample yielded the following results as shown in table 6. This sample reflected a higher necessity for consent in every instance for LGBT participants compared to heterosexual participants and a requirement for consent in one more physical condition of "shaking hands" than their heterosexual counterparts.

Table 6

*Differences in consent requirements across sexuality*

	Straight Mean	Bi Mean	Gay Mean	Other Mean	Total LGBT Mean
Consent is necessary for hugging	12.44	25.72	30.83	28.08	28.21
Consent is necessary for kissing	28.82	44.66	36.54	38.69	39.96
Consent is necessary for any physical contact	24.72	36.62	35.64	23.23	31.83
Consent is necessary for shaking hands	-10.81	17.68	2.42	-3.15	5.65

Table 6. Continued

Consent is necessary for foreplay.	35.44	46.79	38.42	36.77	40.66
Consent is necessary for sex.	46.17	49.59	50.00	50.00	49.86

Table 6 reflects mean scores on items where -50 is “Strongly disagreeing” with the statement and 50 is “Strongly Agreeing” with the statement. Every instance above reflects that the LGBT participants require consent at higher rates than heterosexual participants.

Comparisons of means for these data show a significant difference between sexualities in four of the six conditions; Consent is necessary for hugging  $t(266) = -3.264$ ,  $p = .001$ ,  $d = 0.51$ ; Consent is necessary for kissing  $t(272) = -3.246$ ,  $p = .001$ ,  $d = 0.55$ ; Consent is necessary for any physical contact  $t(273) = -2.025$ ,  $p = .044$ ,  $d = 0.31$ ; and Consent is necessary for shaking hands  $t(248) = -3.817$ ,  $p < .001$ ,  $d = 0.60$ . One condition, “Consent is necessary for foreplay” approached significance at  $t(270) = -1.704$ ,  $p = .054$ ,  $d = 0.33$ , and one condition was not significant for “consent is necessary for sex” at  $t(277) = -1.704$ ,  $p = .089$ ,  $d = 0.32$ . With these data, hypothesis five can be partially supported.

### Discussion

As predicted, in hypothesis one, a 6-month relationship was less likely to require verbal consent than a 3-month relationship. Likewise, a married relationship was less likely to require verbal consent than a 6-month relationship. Though this does not directly measure time spent in the relationship, it does denote a certain level of commitment to one’s partner.

For the vignettes, as predicted, participants were less likely to consider non-verbal cues as a valid form of consent in short term relationships (item 6) than in a longer term

relationship (item 5) and participants rated both items as less likely to be considered valid consent than non verbal cues in a long term-committed relationship (item 4)

Regarding hypothesis 2, items without sexual connotation such as shaking hands and hugging (items 21, 23, and 24) were less likely to require consent—verbal or otherwise—than those actions with a sexual connotation such as kissing, foreplay, or sex (items 22, 25, and 26).

Researchers were able to reject the null for hypothesis 3 finding that participants were significantly more likely to consider all items that denote explicit verbal consent (items 1-3) as valid than non-verbal consent (items 4-6) for both genders. It is important to note that non-verbal consent and feigning sexual desire (O’Sullivan & Allgeier, 1998) cannot be immediately differentiated and could lead to an assumption of consent to unwanted sexual activity. This bodes well for participants who denote verbal consent as more valid in that they are getting clear confirmation that their partner is a willing participant to any activities. However, this goes against past findings that college students tend to use non-verbal means to convey their consent, and that both men and women perceive women to use non-verbal cues to indicate their consent (Burrow, Hannon, & Hall, 1998).

Based on study 2, it was expected that hypothesis four—more participants will consider alcohol to be a factor that invalidates consent—would have mixed results. Despite past research that shows college students prefer to be drinking to some extent before engaging in casual sexual contact (Herbenick, Fu, Dodge, & Fortenberry, 2018), these data showed a stark difference between 96-98% of participants considering a first date, verbal consent to be valid in an alcohol-free vignette to a 58-59% of participants

considering verbal consent valid on a first date where both partners are drinking. This roughly 40% shift can be attributed to the introduction of alcohol into the equation as all other factors were kept equal. This is also shown when participants are specifically asked if alcohol consumption can invalidate consent to which 84% of participants agree.

The data related to hypothesis five were partially able to support the hypothesis that LGBT participants would require consent in all instances. While these data successfully replicated items from study 2 in that LGBT participants required consent in more physical situations than heterosexual participants, only four of the six items had a statistically significant difference between sexualities. Additionally, when asked new, consent specific questions, there was not a significant difference between sexualities in mean consent requirement scores. More studies with a better balanced participant pool of sexualities will be needed to definitively confirm or deny this hypothesis.

### **Limitations and Future Directions**

One of the most notable limitations for this study was a large gender gap in participants, with more than three times as many female to male participants. In future studies, having equal participant gender groups would allow for better, more accurate gender comparisons. Our findings, namely the correlation between religiosity and valuing virginity as well as a greater emphasis on virginity for women, suggest that those emerging adults with more traditional gendered attitudes would value virginity more, especially for women. Future research could add to our understanding of the complex interplay among these variables — exploring how religiosity and traditional, sexist views relate to valuing virginity. Such attitudes may also impact contraceptive preparedness for intercourse and sexual satisfaction.

A strong limitation for this study would be that the two sexuality samples were not equal in size and there was a strong lack of LGBT input in the overall sample. There was also an age limitation as all participants were University students. Future studies should expand the sample to include participants outside of a normal college sample. It would also be worth replicating this study with a larger LGBT sample and to survey sexual assault survivors who might have an interesting and incredibly relevant view on consent having been through clear nonconsensual encounters.

Additionally, having only heterosexual situational vignettes was a strategy put in place to minimize survey length, hoping to maximize participant engagement as well as noting the small number of LGBT participants in studies 1 and 2. Studies moving forward would gain valuable information using non-heteronormative pairings about not only other cultures and communities' perceptions of themselves, but also general perceptions of the culture/community. This stark difference in such perceptions was noted in studies 1 and 2.

Another cause for concern might be that participants answer differently in hypothetical situations than they might when actually confronted with the same situation in their personal lives. This cannot be truly solved in a lab considering the sensitivity of the topics discussed. However, the situations could be made more relatable by using gender and race matched videos depicting similar scenes. Alternatively, using an existing alcohol and sexual consent scale such as Ward et al.'s 2012 scale could yield better results as it is already validated. Additionally, including participants from women's shelters and other vulnerable communities who may have specific incites into the subject matter might provide valuable information.

#### **IV. GENERAL SUMMARY**

Considering all three studies together, the following conclusions can be made: that even though Western society is changing in many ways, the majority of our emerging adult participants continued to hold traditional attitudes related to the behaviors that lead to virginity loss and valuing virginity. Loss of virginity is defined first and foremost by penile-vaginal penetration followed by penile-anal penetration. Other behaviors including oral genital stimulation were typically considered as resulting in virginity loss by a minority of participants. In addition, virginity was considered more important for women than men, virginity was valued less by LGBT participants compared to heterosexual participants, and religiosity was correlated with valuing virginity.

What constitutes sex or a loss of virginity in one partner does not necessarily hold true for the other partner, virginity was considered more important for women than men, and other actions including penile-anal penetration and oral-genital stimulation are considered sex. As such, not all sexual acts constitute a loss of virginity. This was supported by a total of 17 actions being considered sex that do not constitute a loss of virginity across three sexualities and relationship types. There is a difference between sexualities noted in all three studies for both sample participants and hypothetical situations depicted in the studies.

In both studies two and three, regarding an encounter as resulting in virginity loss or as having had sex is impacted by whether or not the interaction is consensual. Nearly all participants consider consent a necessity for an act to be considered sex. LGBT participants require consent in more activities and more strongly than heterosexual

participants. This consent is not dictated by an emotional connection—measured here by the length of the relationship in question—but by the action itself.

## APPENDIX SECTION

### Study 3 Survey

**This survey appeared online via the Qualtrics survey system and was distributed to participants through the human subject pool (SONA) and online TRACS announcements.**

The following questions will be about your opinions. Please indicate the extent to which you agree or disagree with statements. Please try to answer all questions to the best of your ability. If you are uncomfortable with any subject matter you may choose to skip specific questions at your discretion.

6 Questions:

1. Michael and Tammy have just gone on a date to a dinner and a movie, they have been dating exclusively for three months. After the movie Michael invites Tammy back to his apartment for coffee. The date has gone well and they decide to have sex. Each obtains verbal consent from their partner.

a. Michael consented to have sex.

Strongly agree      Somewhat agree      Somewhat disagree      Strongly disagree

b. Tammy consented to have sex.

Strongly agree      Somewhat agree      Somewhat disagree      Strongly disagree

2. Jason and Kim have just gone on a date to a dinner and a movie, they have been dating casually for three months. After the movie Jason invites Kim back to his apartment for coffee. The date has gone well and they decide to have sex. Each obtains verbal consent from their partner.

a. Jason consented to have sex.

Strongly agree      Somewhat agree      Somewhat disagree      Strongly disagree

b. Kim consented to have sex.

Strongly agree      Somewhat agree      Somewhat disagree      Strongly disagree

3. Michael and Monica have just gone on a date to a dinner and a movie, this is their first date. After the movie Michael invites Monica back to his apartment for coffee. The date has gone well and they decide to have sex. Each obtains verbal consent from their partner.

a. Michael consented to have sex.

Strongly agree      Somewhat agree      Somewhat disagree      Strongly disagree

b. Monica consented to have sex.

Strongly agree      Somewhat agree      Somewhat disagree      Strongly disagree

4. Michael and Jennifer have just gone on a date to a dinner and a movie, they have been dating exclusively for three months. After the movie Michael invites Jennifer back to his apartment for coffee. The date has gone well and they decide to have sex. They use non-verbal cues as consent from their partner.

a. Michael consented to have sex.

Strongly agree      Somewhat agree      Somewhat disagree      Strongly disagree

b. Jennifer consented to have sex.

Strongly agree      Somewhat agree      Somewhat disagree      Strongly disagree

5. Jason and Tammy have just gone on a date to a dinner and a movie, they have been dating casually for three months. After the movie Jason invites Tammy back to his apartment for coffee. The date has gone well and they decide to have sex. They use non-verbal cues as consent from their partner.

a. Jason consented to have sex.

Strongly agree      Somewhat agree      Somewhat disagree      Strongly disagree

b. Tammy consented to have sex.

Strongly agree      Somewhat agree      Somewhat disagree      Strongly disagree

6. Michael and Monica have just gone on a date to a dinner and a movie, this is their first date. After the movie Michael invites Monica back to his apartment for coffee. The date has gone well and they decide to have sex. They use non-verbal cues as consent from their partner.

a. Michael consented to have sex.

Strongly agree      Somewhat agree      Somewhat disagree      Strongly disagree

b. Monica consented to have sex.

Strongly agree      Somewhat agree      Somewhat disagree      Strongly disagree

Alcohol: Participant drinking, gender of intent. 3X2 Factorial Design, should use a factorial ANOVA to analyze.

6 Questions:

7. Tom and Martha have just gone on a date to a party, this is their first date. Both have been drinking and have had a good time. The date has gone well and Tom decides to initiate sex. He obtains verbal consent from Martha.

a. Martha consented to have sex.

Strongly agree      Somewhat agree      Somewhat disagree      Strongly disagree

b. Tom consented to have sex.

Strongly agree      Somewhat agree      Somewhat disagree      Strongly disagree

8. Tom and Martha have just gone on a date to a party, this is their first date. Both have been drinking and have had a good time. The date has gone well and Martha decides to initiate sex. She obtains verbal consent from Tom.

a. Martha consented to have sex.

Strongly agree      Somewhat agree      Somewhat disagree      Strongly disagree

b. Tom consented to have sex.

Strongly agree      Somewhat agree      Somewhat disagree      Strongly disagree

9. Martha and Tom have just gone on a date to a party, this is their first date. Michael has been drinking and both have had a good time. The date has gone well and Martha decides to initiate sex. She obtains verbal consent from Tom.

a. Martha consented to have sex.

Strongly agree      Somewhat agree      Somewhat disagree      Strongly disagree

b. Tom consented to have sex.

Strongly agree      Somewhat agree      Somewhat disagree      Strongly disagree

10. Mark and Veronica have just gone on a date to a party, this is their first date. Mark has been drinking and both have had a good time. The date has gone well and Mark decides to initiate sex. He obtains verbal consent from Veronica.

a. Mark consented to have sex.

Strongly agree      Somewhat agree      Somewhat disagree      Strongly disagree

b. Veronica consented to have sex.

Strongly agree      Somewhat agree      Somewhat disagree      Strongly disagree

11. Mike and Georgia have just gone on a date to a party, this is their first date. Georgia has been drinking and both have had a good time. The date has gone well and Mike decides to initiate sex. He obtains verbal consent from Georgia.

a. Mike consented to have sex.

Strongly agree      Somewhat agree      Somewhat disagree      Strongly disagree

b. Georgia consented to have sex.

Strongly agree      Somewhat agree      Somewhat disagree      Strongly disagree

12. Ron and Georgia have just gone on a date to a party, this is their first date. Georgia has been drinking and both have had a good time. The date has gone well and Georgia decides to initiate sex. She obtains verbal consent from Ron.

a. Ron consented to have sex.

Strongly agree      Somewhat agree      Somewhat disagree      Strongly disagree

b. Georgia consented to have sex.

Strongly agree      Somewhat agree      Somewhat disagree      Strongly disagree

Individual questions (20).

If we were able to get a different population, this might be a good place for t-tests as we have data for these questions from 500 undergrads. Maybe MTURK or a women's center.

13. If partners have been in a relationship for 3 months, verbal consent is no longer necessary.

Strongly Disagree      Strongly Agree  
-50      0      50

14. If partners have been in a relationship for 6 months, verbal consent is no longer necessary.

Strongly Disagree      Strongly Agree  
-50      0      50

15. If partners are married, verbal consent is not necessary.

Strongly Disagree      Strongly Agree  
-50      0      50

16. If a partner says no but changes their answer after being asked several times, they are giving consent.

Strongly Disagree      Strongly Agree  
-50      0      50

17. If partners have had sex before, their consent is implied.

Strongly Disagree      Strongly Agree  
-50      0      50

18. If a partner doesn't say no, they are giving consent.

Strongly Disagree		Strongly Agree
-50	0	50

19. The length of a relationship is important when determining if verbal consent is necessary.

Strongly Disagree		Strongly Agree
-50	0	50

20. The type of relationship (casual, exclusive, engaged, married) is important when determining if verbal consent is necessary.

Strongly Disagree		Strongly Agree
-50	0	50

21. Consent is necessary for hugging

Strongly Disagree		Strongly Agree
-50	0	50

22. Consent is necessary for kissing

Strongly Disagree		Strongly Agree
-50	0	50

23. Consent is necessary for any physical contact

Strongly Disagree		Strongly Agree
-50	0	50

24. Consent is necessary for shaking hands

Strongly Disagree		Strongly Agree
-50	0	50

25. Consent is necessary for forplay.

Strongly Disagree		Strongly Agree
-50	0	50

26. Consent is necessary for sex.

Strongly Disagree		Strongly Agree
-50	0	50

27. If an act is nonconsensual, it is considered a valid sexual contact

Strongly Disagree		Strongly Agree
-50	0	50

28. If an act is nonconsensual it can constitute the loss of virginity

Strongly Disagree		Strongly Agree
-50	0	50

29. If someone has been drinking heavily they cannot consent to sex

Strongly Disagree		Strongly Agree
-50	0	50

30. If someone is intoxicated by drugs or alcohol, they can consent to sex.

Strongly Disagree		Strongly Agree
-50	0	50

31. Consent is needed from the acting partner to perform oral sex on their partner

Strongly Disagree		Strongly Agree
-50	0	50

32. Consent is not needed from the receiving partner for oral sex to be performed on them

Strongly Disagree		Strongly Agree
-50	0	50

33. If partners are married, consent is not necessary

Strongly Disagree		Strongly Agree
-50	0	50

## REFERENCES

- Abbey, A. (1991). Acquaintance rape and alcohol consumption on college campuses: how are they linked, *Journal of American College Health*, 39(4).
- Averett, P., Moore, A., & Price, L. (2014). Virginity definitions and meanings among the LGBT community. *Journal of Gay & Lesbian Social Services: The Quarterly Journal of Community & Clinical Practice*, 26(3), 259-278.
- Barnett, M. D., Fleck, L. K., Marsden, A. I., & Martin, K. J. (2017). Sexual Semantics: The meanings of sex, virginity, and abstinence for university students. *Personality and Individual Differences*, 106, 203-208.
- Benson, B. J., Gohm, C. L., Gross, A. M. (2007). College women and sexual assault: the role of sex-related alcohol expectancies, *Journal of Family Violence*, 22(6).
- Bogart, L. M., Cecil, H., Wagstaff, D. A., Pinkerton, S. D., & Abramson, P. R. (2000). Is it “sex”? College students’ interpretations of sexual behavior terminology. *Journal of Sex Research*, 37, 108-116.
- Boynton, P. M. (2003). “I’m just a girl who can’t say no”?: Women, consent, and sex research, *Journal of Sex & Marital Therapy* 29(s) 23-32.
- Burrow, J. J., Hannon, R., Hall, D. (1998). College Student’s Perceptions of Women’s Verbal and Nonverbal Consent for Sexual Intercourse. *Journal of Human Sexuality*, 1.
- Byers, E.S., Henderson, J., & Hobson, K.M. (2009). University students' definitions of sexual abstinence and having sex, *Archives of Sexual Behavior*, 38, 665-674
- Carpenter, L.M. (2002) Gender and the meaning and experience of virginity loss in the contemporary United States. *Gender and Society*, 16, 345-365

- Castaneda, D. (2015). Virginitly unmasked: The many meanings of Virginitly. *Sex Roles*, 73(1-2), 83-85.
- Center for Disease Control (2017). National Health Statistics Reports.
- Clough, A. (2018). Conditional consent and purposeful deception. *The Journal of Criminal Law* 82(2), 179-190.
- Corbin, W. R., Bernat, J. A., Calhoun, K. S. (2001). The role of alcohol expectancies and alcohol consumption among sexually victimized and nonvictimized college women. *Journal of Interpersonal Violence*, 16, 297-311.
- Cowden, C. R., Bradshaw, S. D. (2007). Religiosity and sexual concerns. *International Journal of Sex Health*. 19, 15-23. doi:10.1300/J514v19n01\_03.
- Fenner, L. (2017). Sexual consent as a scientific subject: A literature review. *American Journal of Sexuality Education*, 12(4), 451–471.
- Fisher, B., Cullen, F., & Turner, M. (2000). The sexual victimization of college women (NCJ 182369). Retrieved from the National Criminal Justice Reference Service: <https://www.ncjrs.gov/pdffiles1/nij/182369.pdf>
- Frazier, P. A., Cochran, C. C., Olson, A. M. (1995). Social Science Research on lay definitions of sexual harassment, *Journal of Social Issues*, 51(1), 21-37.
- Geary, R. S., Tanton, C., Erens, B., Clifton, S., Prah, P., Wellings, K., et al. (2018) Sexual Identity, attraction and behavior in Britain: The implications of using different dimensions of sexual orientation to estimate the size of sexual minority populations and inform public health interventions. *PLoS ONE* 13(1): e01896707. <https://doi.org/10.1371/journal.pone.0189607>

- Gesselman, A. N., Webster, G. D., & Garcia, J. R. (2017). Has virginity lost its virtue? Relationship stigma associated with being a sexually inexperienced adult. *Journal of Sex Research, 54*(2), 202-213.
- Hans, J.D., Gillen, M., & Akande, K. (2010). Sex redefined: The reclassification of oral-genital contact. *Perspectives on Sexual and Reproductive Health, 42*, 74-78.
- Hans, J.D., & Kimberly, C (2011) Abstinence, sex, and virginity: Do they mean what we think they mean? *American Journal of Sexuality Education, 6*, 329-342
- Heisler, J. M. (2014). They need to sow their wild oats: Mothers' recalled memorable messages to their emerging adult children regarding sexuality and dating. *Emerging Adulthood, 2*, 280-293.
- Herbenick, D., Fu, T.C. (Jane), Dodge, B., & Fortenberry, J. D. (2018). The alcohol contexts of consent, wanted sex, sexual pleasure, and sexual assault: Results from a probability survey of undergraduate students. *Journal of American College Health*
- Hindmarch, I., Brinkmann, R. (1999). Trends in the use of alcohol and other drugs in cases of sexual assault, *Human Psychopharmacology: Clinical and Experiments* 14(4).
- Jozkowski, K. N., Marcantonio, T. L., and Hunt, M. E. (2017). College students' sexual consent communication and perceptions of sexual double standards: A qualitative investigation. *Perspectives on Sexual and Reproductive Health, 49*(4), 237-244.
- Jozkowski, K. N., Peterson, Z. D. (2013). College students and sexual consent: unique insights. *Journal of Sex Research, 50*, 517-523.

- Munro, V. E. (2010). 'An Holy Trinity? Non-Consent, Coercion and Exploitation in Contemporary Legal Responses to Sexual Violence in England and Wales', *Current Legal Problems* 63, 45-54.
- Newstrom, N. P. (2018). Sexual communication: An exploration of how couples communicate and consent to sexual behaviors. Dissertation Abstracts International: *Section B: The Sciences and Engineering. ProQuest Information & Learning.*
- Ogletree, S. M., Ginsburg, H. J. (2000). Under the Hood: Neglect of the Clitoris in Common Vernacular. *Sex Roles* 14(11-12), 917-926.
- O'Sullivan, L. F., Allgeier, E. R. (1998) Feigning sexual desire: consenting to unwanted sexual activity in heterosexual dating relationships. *Journal of Sex Research*, 35(3), 234-243.
- Payne-James, J., Rogers, D. (2002). Drug-Facilitated sexual assault, 'ladettes' and alcohol, *Journal of the Royal Society of Medicine*, 95.
- Sanders S.A., & Reinisch J.M. (1999). Would you say you had sex if...?. *Journal of the American Medical Association*, 281, 275-277.
- Trotter, E. C., & Alderson, K. G. (2007). University students' definitions of having sex, sexual partner, and virginity loss: The influence of participant gender, sexual experience, and contextual factors. *The Canadian Journal of Human Sexuality*, 16, 11-29.
- TSUS Sexual Misconduct Policy (2017) Texas State University Sexual Misconduct Policy and Procedures, Texas State University, San Marcos, TX, 1-33.

- Smith, S. G., Chen, J., Basile, K. C., Gilbert, L. K., Merrick, M. T., Patel, N., ... Jain, A. (2017). The National Intimate Partner and Sexual Violence Survey (NISVS): 2010-2012 state report.
- Vaillant, G. E. (2011). Involuntary coping mechanisms: a psychodynamic perspective, *Dialogues in Clinical Neuroscience*, 13(3), 366-370.
- Wallerstein, S. (2009). 'A drunken consent is still consent'—or is it? A critical analysis of the law on a drunken consent to sex following bree. *The Journal of Criminal Law* 73 318–344.
- Ward, R. M., Matthews, M. R., Weiner, J., Hogan, K. M., Popson, H. C. (2012). Alcohol and Sexual Consent Scale: Development and Validation. *American Journal of Health and Behavior*, 36(6), 746-756.
- Yadav, R. R. (2017). Defense Mechanisms Pattern in Normal Female Adolescents. *Indian Journal of Community Psychology*, 13(1), 161–168.
- Zaikman, Y. (2018). The impact of the sexual double standard on perceptions of sexual assault. *Dissertation Abstracts International: The Sciences and Engineering*, 78(12-B).
- Zaikman, Y., Marks, M. J., Young, B. S., Zeiber, J. A. (2016). Gender role violations and the sexual double standard. *Journal of Homosexuality*, 63(12), 1608-1629.