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Variations in the timing of first sexual experiences among populations with physical disabilities in the United States

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Abstract

Background—Timing of first sex has important implications for later sexual health, but little research has considered this in populations with physical disabilities.

Objective/Hypothesis—The purpose of this paper was to examine timing of sexual experiences among populations with physical disabilities in the United States from adolescence to early adulthood, and how timing varies by biological sex, race/ethnicity, and sexual orientation. We hypothesized that those with physical disabilities would exhibit earlier initiation of each type of sexual activity compared to those without disabilities, but the degree of differences would depend on disability severity. We further hypothesized that these associations would be moderated by biological sex, race/ethnicity, and sexual orientation.

Methods—Data were from 13,458 respondents to Waves I and IV of the National Longitudinal Study of Adolescent to Adult Health. Cox proportional hazards models assessed differences in timing of vaginal, oral, anal, and first sex by disability severity.

Results—Populations with the most severe physical disabilities had a significantly slower progression to first vaginal sex, oral sex, and their first sexual experience compared to those without disabilities (aHR: 0.74–0.77). Timing also differed by biological sex, race/ethnicity, and sexual orientation, though the direction and degree of these differences varied by disability severity.

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Conflicts of Interest

None of the authors have any relevant conflicts of interest associated with this submission.

Prior Presentations

Portions of this paper were presented at the American Public Health Association 2017 Annual Meeting and Expo, November 4–8, 2017; Atlanta, GA.

Conclusions—Results fill an important gap in the literature by considering variations in sexual timing among populations with physical disabilities using a longitudinal, nationally representative sample. Future research should continue to promote inclusion of populations with disabilities to inform future policies and programs for healthy sexual development.

Keywords

physical disability; sexual experiences; adolescence; longitudinal; Add Health

Introduction

Timing of first sex, or sexual debut, is a common focus of adolescent sexuality research because of its implications for later health (1). Although research on sexual timing is growing, this literature often relies on cross-sectional or short-term longitudinal data. Importantly, little research considers sexual timing among populations with physical disabilities, which is critical for guiding the timing and content of sexuality education curriculums (2).

Of the few studies focused on sexual timing in populations with disabilities, findings suggest differences by disability type (3–5). In their cross-sectional study in Germany, Wienholz and colleagues (6) found that among sexually experienced 14–17 year olds, those with physical disabilities and vision or hearing impairments reported earlier sexual debut than those without disabilities. Sexual timing also varies by biological sex, race/ethnicity, and sexual orientation. For example, studies indicate that women engage earlier in vaginal intercourse (7), while men experience oral and anal sex earlier (1). Among populations with disabilities, Shandra and colleagues (4) found males with learning or emotional conditions were more likely, and those with sensory conditions were less likely, to report earlier sexual debut than males without disabilities. In a similar paper, Shandra and Chowdhury (5) found no differences in mean age at first sex for females. Research also shows that Black youth engage in vaginal intercourse earlier than Whites, but experience oral and anal sex later (1,7). Finally, studies show that sexual minorities experience sex earlier than heterosexuals (8,9). Unfortunately, no such research considers how sexual timing varies by race/ethnicity and sexual orientation in populations with disabilities.

Overall, the limited literature suggests populations with disabilities may experience vaginal sex earlier than peers without disabilities, though this relationship is moderated by disability type and biological sex. However, a major limitation of this literature is that most studies focus on vaginal sex or sexual intercourse, broadly defined. This issue was further illustrated by Kahn and Halpern (10), who found populations with severe disabilities were less likely to experience vaginal sex, oral sex, and to have any sexual experience, whether vaginal, oral, or anal, compared to peers without disabilities. Although this study focused on prevalence rather than timing, these results indicate the importance of focusing on a variety of behaviors. This literature also tends to focus on adolescence. Although important, cross-sectional research cannot provide information about long-term implications of sexual behaviors, thus limiting our ability to make recommendations with lasting health impacts. Furthermore, this research does not consider how sexual experiences may also vary by race/

ethnicity and sexual orientation. This is particularly important when identifying and eliminating health disparities, because populations with multiple marginalized identities (e.g., disability and sexual minority) may experience worse outcomes. More broadly, this research is important for identifying sexual health needs of populations with disabilities and ways to approach sexuality education to better meet those needs (11).

Accordingly, our study fills these gaps in the literature by examining 1) timing of various sexual experiences among populations with physical disabilities in the United States from adolescence to early adulthood, and 2) how timing further varies by biological sex, race/ethnicity, and sexual orientation. We frame our analyses within the *life course perspective*, which considers sequences of statuses and roles people assume throughout life, and how these sequences are affected by changing societal norms (12). Regarding sexual development, social norms exist around sexual initiation and departures from these norms have implications for future health outcomes (13,14). Since populations with physical disabilities have different life experiences than peers without disabilities (15), the life course suggests they also experience different outcomes. The life course is also concerned with *intersectionality*, which proposes that individuals with multiple marginalized identities may experience greater disadvantage than those who only identify with one minority group (16). Based on previous research (6), we hypothesize that those with physical disabilities will exhibit earlier initiation of each sexual experience compared to those without disabilities, but the degree of differences will depend on disability severity. Additionally, consistent with intersectionality (17–19), we hypothesize that relationships between physical disability and sexual timing will be moderated by biological sex, race/ethnicity, and sexual orientation.

Methods

Sample

Our data are from the National Longitudinal Study of Adolescent to Adult Health (Add Health), a large, nationally representative study of over 20,000 U.S. adolescents who were in 7th-12th grade in 1994–1995 (20). Four waves of data are currently available, including one in-school and one parent interview during adolescence and four in-home interviews spanning from adolescence into early adulthood. This paper uses data from Waves I and IV, which capture important life course transitions from adolescence to early adulthood. Wave I included the original 20,745 respondents aged 12–18 in 1994–1995, and Wave IV included 15,701 of the original respondents who were 24–34 in 2008–2009 (response rate=80.3%) (20). We focus on respondents with valid sampling weights (n=14,800) and complete data on all variables of interest. To decrease the amount of missing data, we used multiple imputation by chained equations (21), yielding a final sample of 13,458.^a

Measures

Physical disability—We used the Physical Disability Index (PDI), which was developed by Cheng and Udry using data from the Wave I survey (22). We focus on disabilities

^aWe initially collapsed smaller non-Hispanic (NH) races (i.e., Asian, Native American) into one group to yield a larger sample; however, estimates were unstable and difficult to interpret given within-group diversity. We thus limited analyses to Hispanic, NH Blacks and NH Whites.

identified in Wave I since the sexual experiences we studied are part of a normative developmental task during adolescence. Relatedly, this helps to ensure a clear temporal relationship between our predictor (disability) and outcome (sexual timing) variables.

Physical disabilities were identified and grouped by severity using information regarding limb difficulties, blindness, and deafness. Adolescent respondents were screened during the in-school interview, which identified 989 adolescents with disabilities to receive an extended in-home interview regarding their disabilities. During the in-home interview, both the adolescent and his/her parent were asked about the adolescent's disabilities, and responses were coded independently to calculate a PDI score for each respondent. More specifically, scores started at zero and increased by one point for each of the following:

1. Having limb difficulties
2. Using medical equipment
3. Needing assistive care
4. Perceiving or believing others perceived the adolescent to have a disability
5. Difficulty walking, standing, extending, grasping, or holding things
6. >3 body parts affected (parent interview only)

After selecting the higher of the two scores (adolescent or parent), interviewer reports of blindness and deafness were incorporated as follows:

- If deaf or blind in one eye/ear and had an initial score <3, the adolescent received a score of 3.
- If blind in one eye and deaf and had an initial score <4, the adolescent received a score of 4.
- If blind in both eyes and had an initial score <5, the adolescent received a score of 5.

Because few respondents had scores = 4, these adolescents were grouped into the “3” category, creating the final 0–3 scale, indicating no (0), mild (1), moderate (2), and severe (3) disability (22).

Timing—Respondents answered the following items regarding lifetime experiences of vaginal, oral, and anal sex at Wave IV:

- Have you ever had vaginal intercourse? (Vaginal intercourse is when a man inserts his penis into a woman's vagina.)
- Have you ever had oral sex? That is, has a partner ever put his/her mouth on your sex organs or you put your mouth on his/her sex organs?
- Have you ever had anal intercourse? (By anal intercourse, we mean when a man inserts his penis into his partner's anus or butt hole.)

Age at first sex was determined using the following items and recoded to a floor of 10 years:

- How old were you the first time you ever had vaginal intercourse?
- How old were you the very first time you had oral sex?
- How old were you the very first time you had anal intercourse?

Controls and moderators—In main effect analyses, we controlled for biological sex, race/ethnicity, socioeconomic status (SES) during adolescence, age at Wave IV, sexual orientation, cognitive ability, and history of sexual violence. In moderation analyses, biological sex, race/ethnicity and sexual orientation were moderators; age, SES, cognitive ability, and sexual violence were controls.

Biological sex was indicated by the interviewer at Wave IV. Race/ethnicity was self-reported at Wave I. Age at Wave IV was calculated by finding the difference between interview and birth dates. Parent education at Wave I is a proxy for adolescent SES, and was the highest education level of either parent. Sexual orientation was measured at Wave IV. The *sexual minority* group included respondents who endorsed fully or mostly homosexual, bisexual, mostly heterosexual, or asexual identities, while the *heterosexual* group included those who identified as fully heterosexual.

Past research suggests populations with low cognitive abilities are less sexually experienced than their peers (23,24). Since physical and cognitive disabilities often co-occur, we controlled for cognitive ability using the Add Health Picture Vocabulary Test (AHPVT) from Wave I (25). The AHPVT is an abridged version of the Peabody Picture Vocabulary Test (26), which is moderately correlated with measures like the Stanford-Binet Intelligence Scale (27) and the Wechsler Intelligence Scale for Children (28). AHPVT scores were standardized to approximate an intelligence quotient metric with a mean of 100 and standard deviation of 15, resulting in four categories (<85, 85–99, 100–114, >114) (29).

Since populations with disabilities are shown to be more vulnerable to sexual violence (30), we measured history of non-parental coerced and forced sex, and sexual abuse by a parent/caregiver using retrospective reports from Wave IV. More specifically, dichotomous variables (yes, no) were created using responses to the following items:

- Forced sex: “Have you ever been physically forced to have any type of sex against your will?”
- Coerced sex: “Have you ever been forced, in a non-physical way, to have sexual activity against your will?”
- Sexual abuse: “How often had one of your parents or other adult care-givers touched you in a sexual way, forced you to touch him or her in a sexual way, or forced you to have sexual relations?”

Analyses

After examining descriptive statistics, we used Cox proportional hazards models to compare sexual timing among disability severity groups to those without disabilities for each type of sex and first sexual experience, whether vaginal, oral, or anal. For each type, the first model only included disability, and the second model included disability and all covariates. For

moderation analyses, we repeated analyses after interacting disability with the moderator of interest (biological sex, race/ethnicity, sexual orientation). Because estimates for covariates in moderation analyses were consistent with those from main effects, we excluded these from the moderation results table. We used the Holm-Bonferroni method (31) to report only statistically significant differences at the 0.05 level after correction for multiple tests. Our analyses used sampling weights and adjusted variance estimates for the Add Health complex survey design and were completed using Stata 15.0 (32). All study procedures were approved by the Institutional Review Board for the Protection of Human Subjects at [blinded], and present analyses were deemed exempt due to our use of existing, de-identified data.

Results

Sample Characteristics

Table 1 presents descriptive statistics for all variables by disability severity. The majority of respondents had no disability (94.4%), followed by mild (3.4%), moderate (1.2%), and severe (1.0%) disabilities. The sample was almost evenly split between males and females, and the mean age was 28.3 years. Seventy percent were NH White, 12.8% were Hispanic, and 17.1% were NH Black. Approximately 60% of parents completed at least some college, and 86.6% of respondents were heterosexual. Finally, among the sexually experienced, mean ages were 16.6 years for first vaginal sex, 17.3 years for first oral sex, 21.4 years for first anal sex, and 16.3 years for first sexual experience.

Cox Proportional Hazards Models

Table 2 presents hazard ratios comparing timing of first sex by disability severity. The hazard rate for vaginal sex among respondents with severe disabilities was 0.74 times that of respondents without disabilities, indicating a significantly slower progression to first vaginal sex among this group. Similarly, the hazard rate for oral sex among respondents with severe disabilities was 0.77 times that of respondents without disabilities. Finally, for first sexual experience, the hazard rate for respondents with severe disabilities was 0.75 times that of those without disabilities. Although no statistically significant differences emerged for other disability groups or for anal sex, there was a decreasing trend in timing for each type of sex, such that estimates decreased as disability severity increased.

Table 3 presents results of moderation analyses by biological sex, for which males without disabilities are the referent. Hazard rates for oral sex among females at every disability severity level were significantly different from the referent. Specifically, rates for oral sex among females without disabilities was 0.74, with mild disabilities was 0.78, with moderate disabilities was 0.58, and with severe disabilities was 0.55 times that of the referent. For anal sex, only the hazard rate for females without disabilities was significantly lower than the referent. Females without disabilities and those with moderate disabilities also had significantly lower hazard rates for first sexual experience compared to the referent. There were no statistically significant differences between females and the referent for vaginal sex, or when comparing males with disabilities to the referent group for all sexual acts. However, comparisons of confidence intervals suggested females with moderate disabilities had a

lower hazard rate for vaginal sex and first sexual experience compared to females without disabilities.

Table 4 shows moderation analyses by race/ethnicity, for which NH Whites without disabilities are the referent. NH Blacks without disabilities differed from the referent for every type of sex. Specifically, hazard rates for this group were 1.18 times for vaginal, 0.68 times for oral, 0.80 times for anal, and 1.20 times for first sexual experience compared to the referent. Also, the hazard rate for oral sex among NH Blacks with mild disabilities was 0.52 times that of the referent. In contrast, the hazard rate for anal sex among Hispanics without disabilities was 1.26 times that of the referent group. There were no other significant differences when comparing the racial/ethnic interaction groups to the referent. Comparisons of confidence intervals suggested no differences by disability severity within racial/ethnic groups, but did show racial/ethnic differences within disability groups. In particular, there were differences between all racial/ethnic groups for oral sex among groups without disabilities and with mild disabilities. In addition, hazard rates for Hispanics and NH Blacks without disabilities differed for both anal sex and first sexual experience.

Moderation analyses by sexual orientation are in Table 5, where heterosexuals without disabilities are the referent. Hazard rates for sexual minorities without disabilities were 0.85 times for vaginal, 1.26 times for oral, 1.97 times for anal, and 1.15 times for first sexual experience compared to the referent group. The only other significant difference was among sexual minorities with severe disabilities, whose hazard rate for vaginal sex was 0.24 times that of the referent. Comparisons of confidence intervals suggested within-group differences, such that sexual minorities with severe disabilities had lower hazard rates for vaginal sex and first sexual experience compared to sexual minorities without disabilities. In addition, within the severe disability group, sexual minority respondents had a lower hazard rate for vaginal sex compared to heterosexuals.

Discussion

This paper demonstrates significant differences in sexual timing for populations with physical disabilities from adolescence through early adulthood. While past research has focused on vaginal sex or only the adolescent period, this paper goes further by examining various sexual experiences, how timing varies throughout the early adult years, and how these trends differ by other demographic factors. Specifically, those with severe disabilities during adolescence had a significantly slower progression to first vaginal sex, oral sex, and first sexual experience compared to peers without disabilities. We also found significant differences between disability groups by biological sex, race/ethnicity, and sexual orientation.

Our first hypothesis was that respondents with disabilities would exhibit earlier timing of each type of sex, but the degree to which they differed would vary by disability severity. This hypothesis was not supported. Contrary to previous studies which showed that respondents with disabilities exhibited earlier timing of vaginal sex than peers without disabilities (6), we found no significant differences for either the mild or moderate disability groups for any type of sex. We did, however, find differences for the severe disability group,

who exhibited a significantly slower progression to first vaginal sex, oral sex, and first sexual experience compared to those without disabilities. Although not significant, we also observed decreasing trends in hazard ratios, suggesting slower progression to each type of sex with increasing disability severity. These results conflict with previous research, which may be due to sample differences. For instance, Wienholz and colleagues' (6) study used a small, cross-sectional sample of adolescents, and thus could not examine how sexual experiences may change as this population enters adulthood. Future research should continue exploring how sexual timing varies across the life course in populations with disabilities and consider how these timing patterns are related to later health outcomes.

Our second hypothesis was that there would be variation in timing among disability groups by biological sex, race/ethnicity, and sexual orientation. This hypothesis was partially supported. For biological sex, we found males and females had similar hazard rates for vaginal sex, while males had a faster progression to first oral sex, anal sex, and first sexual experience. Although this did not support previous literature for vaginal sex (7), patterns were consistent for oral and anal sex (1). These differences, however, were driven by particular subgroups. Females at every disability severity level had a slower progression to oral sex than males. For anal sex, only females without disabilities had a significantly lower hazard rate than males without disabilities. Finally, females without disabilities and with moderate disabilities had significantly slower progressions to first sexual experience compared to males without disabilities. When comparing confidence intervals, we also found females with moderate disabilities had a slower progression to vaginal sex and first sexual experience compared to females without disabilities. These moderation results conflict with past longitudinal research by Shandra and colleagues (4,5), who found males with disabilities differed from those without disabilities, but females with disabilities were no different from females without disabilities. Such conflicting results may be due to differences in the items used to assess sexual experiences. Specifically, Shandra and colleagues used an item from the National Longitudinal Survey of Youth (NLSY) that assessed experiences of "sexual intercourse," but did not provide a specific definition. In contrast, we used items from Add Health, which included items for each type of intercourse and provided detailed definitions. Our differing results could also be related to variations in our definitions of disability. Despite differences across studies, these results indicate noteworthy differences by disability status and biological sex, which have important implications for planning future research.

For race/ethnicity, we found significant differences by racial/ethnic group, but these differences were largely driven by respondents without disabilities. Our results align with previous research showing NH Blacks engage in vaginal sex earlier but experience oral and anal sex later than NH Whites (1,7). We also found Hispanics experienced anal sex significantly earlier than NH Whites and NH Blacks, and NH Blacks progressed faster to first sexual experience overall. In moderation analyses, we only found a difference among NH Blacks with mild disabilities, who also progressed more slowly to oral sex than NH Whites without disabilities. Finally, confidence interval comparisons suggested differences within the no disability and mild disability subgroups that mirrored racial/ethnic differences in the general population. The fact that we did not see differences in more severe disability groups may be because these individuals substitute different sexual acts to accommodate

disabilities (33). A much more likely explanation, however, is insufficient statistical power. Overall, these results suggest a need for more studies focused on sexuality among populations with disabilities and greater inclusion of minority groups in such research

Finally, for sexual orientation, we found sexual minorities had a slower progression to first vaginal sex, but a faster progression to oral sex, anal sex, and first sexual experience compared to heterosexuals. While this was largely driven by those without disabilities, we did find that sexual minorities with severe disabilities had a significantly slower progression to vaginal sex compared to heterosexuals without disabilities, heterosexuals with severe disabilities, and sexual minorities without disabilities. Our results for oral sex, anal sex, and first sexual experience are consistent with general findings from previous work (8,9), but differ for vaginal sex. This could be due to lack of specificity in the definition of sexual acts in past studies compared to those used in the Add Health survey. The Add Health survey item defines vaginal sex as an act between a man and a woman, thus specifying a heterosexual encounter. In contrast, less specific items in surveys like the NLSY that ask about “sexual intercourse” more broadly may elicit different responses from sexual minority respondents. Future research with this population should continue to ask about various sexual experiences and provide clear definitions of each act to create a more accurate portrait of sexual experiences in populations with disabilities and among sexual minorities.

Overall, our research is critical for guiding future studies, practice, and policies that support healthy sexual development and the provision of sexual health education. Past research indicates that populations with disabilities have been historically excluded from sexuality education, leading to disparities in their sexual knowledge (34,35). In contrast to the unfounded assumptions of the past (36,37), our results suggest populations with disabilities start having sex at similar ages to their peers without disabilities, supporting their needs for similar sex education. Thus, evidence from our study can be used to support practice and policies focused on age- and developmentally appropriate sex education for populations with disabilities.

Strengths and Limitations

Our study used a large, nationally representative sample of adolescents, including those with physical disabilities, who have been followed through early adulthood. The majority of past research on sexual experiences and disability has used convenience samples or cross-sectional data, which limits the generalizability of their findings to the population and over time. A particular strength of Add Health was the deliberate oversampling of respondents with a broad range of physical disabilities, who have been historically excluded from sexual health research (38). In addition, this broad definition of physical disability helps provide evidence that informs policies and programs to improve outcomes for the largest number of people. Therefore, our study provides a significant contribution to this literature by documenting unique experiences of an understudied population in a longitudinal, nationally representative sample.

While the Add Health design is a major strength, statistical power and sample size are still important considerations for future research with this population. Disability experts have identified a number of best practices for including special populations, including using in-

home surveys and computer-assisted technologies (39). The Add Health study used many of these practices (20), including sampling from special schools and following up at home using computer-based techniques. Although a number of our findings were not statistically significant, the trends we identified support greater inclusion of this population in future research.

Data limitations also affected our ability to determine if first sexual experiences were consensual. This is important because past research indicates this population is more vulnerable to sexual violence (30). While we included experiences of sexual violence as covariates in our analyses, future work is needed to directly examine the extent to which the first sexual experiences of populations with disabilities are consensual.

Conclusion

Our results fill important gaps in the literature by considering variations in sexual timing among populations with physical disabilities using a nationally representative sample that has been followed for almost 15 years. Information regarding sexual timing patterns of populations with physical disabilities, as well as variations in these patterns by biological sex, race/ethnicity, and sexual orientation, can be used to critically inform the design and implementation of sexuality education programs. Future research should continue to encourage inclusion of populations with disabilities in order to further promote their healthy sexual development.

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Table 1.

Descriptive statistics by physical disability severity

	None	Mild	Moderate	Severe	Total
% (95% CI)	94.4 (93.8–95.0)	3.4 (2.9–3.9)	1.2 (0.9–1.5)	1.0 (0.8–1.3)	100.0
Biological Sex					
Male	50.5 (49.2–51.9)	50.1 (43.3–56.9)	50.4 (39.8–60.9)	49.1 (38.4–59.9)	50.5 (49.2–51.8)
Female	49.5 (48.1–50.8)	49.9 (43.1–56.7)	49.6 (39.1–60.2)	50.9 (40.1–61.6)	49.5 (48.2–50.8)
Race/Ethnicity					
Hispanic	13.0 (9.3–16.7)	9.2 (5.1–13.4)	9.7 (2.6–16.8)	10.1 (3.5–16.7)	12.8 (9.2–16.5)
NH Black	17.2 (12.7–21.7)	13.4 (8.5–18.3)	23.3 (12.3–34.2)	16.2 (7.7–24.7)	17.1 (12.7–21.6)
NH White	69.8 (64.0–75.5)	77.3 (71.1–83.6)	67.1 (55.5–78.6)	73.7 (62.7–84.6)	70.0 (64.4–75.7)
Parent Education (SES)					
<HS	12.5 (10.0–14.9)	12.1 (7.0–17.2)	19.9 (8.9–30.8)	15.7 (7.1–24.3)	12.6 (10.1–15.1)
HS/GED	27.9 (25.6–30.2)	24.1 (18.6–29.6)	15.2 (8.2–22.2)	33.4 (22.9–43.8)	27.7 (25.4–30.0)
Some College	29.8 (28.1–31.5)	29.3 (22.6–35.9)	32.4 (23.0–41.7)	29.7 (20.0–39.3)	29.8 (28.1–31.6)
College Grad	29.8 (26.3–33.3)	34.5 (26.8–42.2)	32.5 (22.2–42.8)	21.3 (13.7–28.8)	29.9 (26.4–33.4)
Sexual Orientation					
Heterosexual	86.7 (85.7–87.7)	87.0 (83.1–90.9)	81.7 (73.5–89.8)	79.1 (69.7–88.6)	86.6 (85.6–87.6)
Sexual Minority	13.3 (12.3–14.3)	13.0 (9.1–16.9)	18.3 (10.2–26.5)	20.9 (11.4–30.3)	13.4 (12.4–14.4)
Cognitive Ability Score					
<85	13.9 (11.2–16.5)	11.3 (6.8–15.8)	14.2 (4.3–24.1)	19.9 (11.2–28.5)	13.8 (11.2–16.4)
85–99	33.4 (31.4–35.4)	39.0 (32.2–45.8)	33.4 (24.1–42.8)	30.7 (20.7–40.7)	33.6 (31.6–35.6)
100–114	35.6 (33.4–37.8)	34.3 (28.1–40.6)	30.5 (21.2–39.8)	31.9 (21.5–42.3)	35.5 (33.3–37.7)
>114	17.1 (14.9–19.3)	15.3 (11.0–19.6)	21.8 (12.7–31.0)	17.5 (9.7–25.4)	17.1 (15.0–19.3)
Coerced Sex					
No	87.8 (86.9–88.6)	83.2 (78.2–88.2)	74.6 (64.8–84.4)	83.8 (76.0–91.6)	87.4 (86.6–88.3)
Yes	12.2 (11.4–13.1)	16.8 (11.8–21.8)	25.4 (15.6–35.2)	16.2 (8.4–24.0)	12.6 (11.7–13.4)
Forced Sex					
No	92.2 (91.5–92.8)	87.1 (82.9–91.4)	83.8 (76.8–90.7)	87.5 (80.7–94.2)	91.9 (91.2–92.5)
Yes	7.8 (7.2–8.5)	12.9 (8.6–17.1)	16.2 (9.3–23.2)	12.5 (5.8–19.3)	8.1 (7.5–8.8)
Sexual Abuse					
No	95.2 (94.6–95.8)	92.4 (88.8–95.9)	91.4 (85.9–96.8)	91.7 (85.1–98.3)	95.0 (94.4–95.6)
Yes	4.8 (4.2–5.4)	7.6 (4.1–11.2)	8.6 (3.2–14.1)	8.3 (1.7–14.9)	5.0 (4.4–5.6)
Ever Had Vaginal Sex					
No	6.0 (4.9–7.2)	5.2 (1.7–8.6)	8.3 (2.6–14.0)	19.3 (10.1–28.4)	6.2 (5.1–7.2)
Yes	94.0 (92.8–95.1)	94.8 (91.4–98.3)	91.7 (86.0–97.4)	80.7 (71.6–89.9)	93.8 (92.8–94.9)
Ever Had Oral Sex					
No	7.0 (5.5–8.5)	7.0 (3.0–10.9)	12.2 (2.0–22.5)	15.8 (7.7–23.9)	7.2 (5.7–8.6)
Yes	93.0 (91.5–94.5)	93.0 (89.1–97.0)	87.8 (77.5–98.0)	84.2 (76.1–92.3)	92.8 (91.4–94.3)
Ever Had Anal Sex					
No	56.0 (54.2–57.7)	54.4 (48.2–60.6)	52.5 (41.0–63.9)	61.8 (51.6–72.1)	55.9 (54.2–57.7)
Yes	44.0 (42.3–45.8)	45.6 (39.4–51.8)	47.5 (36.1–59.0)	38.2 (27.9–48.4)	44.1 (42.3–45.8)

	<u>None</u>	<u>Mild</u>	<u>Moderate</u>	<u>Severe</u>	<u>Total</u>
% (95% CI)	94.4 (93.8–95.0)	3.4 (2.9–3.9)	1.2 (0.9–1.5)	1.0 (0.8–1.3)	100.0
Ever Had Any Sex					
No	3.0 (2.0–4.0)	4.0 (0.7–7.2)	4.7 (0.1–9.3)	10.4 (3.6–17.3)	3.1 (2.1–4.0)
Yes	97.0 (96.0–98.0)	96.0 (92.8–99.3)	95.3 (90.7–99.9)	89.6 (82.7–96.4)	96.9 (96.0–97.9)
MEANS					
Age at Wave IV	28.3 (28.1–28.6)	28.4 (28.0–28.8)	28.7 (28.3–29.1)	28.7 (28.3–29.2)	28.3 (28.1–28.6)
Age at Vaginal Sex	16.6 (16.5–16.8)	16.2 (15.7–16.7)	16.9 (16.1–17.7)	16.4 (15.7–17.1)	16.6 (16.5–16.7)
Age at Oral Sex	17.3 (17.2–17.5)	16.8 (16.3–17.2)	17.3 (16.6–18.0)	17.5 (16.8–18.2)	17.3 (17.2–17.4)
Age at Anal Sex	21.4 (21.2–21.6)	20.9 (20.2–21.7)	22.4 (21.2–23.5)	20.9 (19.7–22.1)	21.4 (21.2–21.6)
Age at First Sex	16.3 (16.1–16.4)	15.8 (15.4–16.3)	16.6 (15.9–17.4)	16.5 (15.9–17.1)	16.3 (16.1–16.4)

Notes: CI = confidence interval; NH = Non-Hispanic; SES = socioeconomic status; HS = high school; GED = General Educational Development

Table 2.

Adjusted hazard ratios (and 95% confidence intervals) from Cox proportional hazards models comparing the timing of each type of sex by physical disability

aHR (95% CI)	Vaginal		Oral		Anal		First	
	Disability Only	Full Model	Disability Only	Full Model	Disability Only	Full Model	Disability Only	Full Model
Physical Disability (None)								
Mild	1.11 (0.95–1.30)	1.06 (0.90–1.25)	1.11 (0.95–1.30)	1.02 (0.85–1.22)	1.09 (0.91–1.31)	1.03 (0.86–1.23)	1.06 (0.89–1.27)	0.99 (0.82–1.20)
Moderate	0.88 (0.72–1.07)	0.83 (0.67–1.03)	0.86 (0.64–1.16)	0.85 (0.68–1.07)	1.03 (0.75–1.41)	0.91 (0.68–1.22)	0.86 (0.70–1.05)	0.81 (0.66–1.00)
Severe	0.74 (0.56–0.97)*	0.74 (0.57–0.96)*	0.79 (0.62–1.01)	0.77 (0.61–0.98)*	0.90 (0.63–1.28)	0.87 (0.60–1.24)	0.78 (0.62–0.98)*	0.75 (0.59–0.95)*
Biological Sex (Male)								
Female		1.05 (1.00–1.10)		0.74 (0.71–0.78)*		0.73 (0.67–0.79)*		0.90 (0.86–0.95)*
Race/Ethnicity (NH White)								
Hispanic		0.99 (0.90–1.08)		0.92 (0.85–1.00)*		1.27 (1.14–1.41)*		0.99 (0.90–1.07)
NH Black		1.17 (1.07–1.28)*		0.68 (0.62–0.75)*		0.80 (0.70–0.91)*		1.19 (1.10–1.29)*
Parent Education (SES; College Grad)								
<HS		1.22 (1.11–1.35)*		0.93 (0.83–1.04)		1.02 (0.89–1.16)		1.19 (1.07–1.32)*
HS/GED		1.30 (1.23–1.39)*		1.12 (1.05–1.19)*		1.09 (0.99–1.19)		1.27 (1.20–1.34)*
Some College		1.19 (1.12–1.26)*		1.05 (0.99–1.12)		1.02 (0.92–1.14)		1.11 (1.05–1.18)*
Age at Wave IV		0.98 (0.96–0.99)*		0.96 (0.95–0.98)*		0.95 (0.93–0.97)*		0.97 (0.95–0.98)*
Sexual Orientation (Heterosexual)								
Sexual Minority		0.84 (0.78–0.91)*		1.25 (1.15–1.36)*		1.93 (1.75–2.12)*		1.14 (1.05–1.22)*
Cognitive Ability Score (100–114)								
<85		0.72 (0.62–0.85)*		0.58 (0.50–0.68)*		0.65 (0.56–0.75)*		0.72 (0.60–0.86)*
85–99		1.04 (0.97–1.11)		0.96 (0.89–1.02)		0.92 (0.85–0.99)*		1.05 (0.98–1.12)
>114		0.86 (0.81–0.91)*		0.92 (0.87–0.97)*		0.98 (0.89–1.09)		0.88 (0.83–0.93)*
Coerced Sex (No)								
Yes		1.40 (1.28–1.52)*		1.35 (1.24–1.47)*		1.63 (1.45–1.84)*		1.36 (1.25–1.49)*
Forced Sex (No)								

aHR (95% CI)	Vaginal		Oral		Anal		First	
	Disability Only	Full Model	Disability Only	Full Model	Disability Only	Full Model	Disability Only	Full Model
Yes		1.13 (1.01–1.26) *		1.21 (1.10–1.33) *		1.12 (0.96–1.31)		1.27 (1.16–1.39) *
Sexual Abuse (No)								
Yes		1.05 (0.91–1.22)		1.07 (0.95–1.21)		1.26 (1.10–1.45) *		1.08 (0.93–1.26)

Notes: Referent groups for categorical variables are in parentheses next to the variable names; aHR = adjusted hazard ratio; CI = confidence interval; NH = Non-Hispanic; SES = socioeconomic status; HS = high school; GED = General Educational Development

* p<0.05 with Holm-Bonferroni correction for multiple comparisons

Table 3.

Adjusted hazard ratios (and 95% confidence intervals) from Cox proportional hazards models comparing the timing of each type of sex by the interaction between physical disability and biological sex

aHR (95% CI)	Vaginal			Oral			Anal			First		
	Interaction Only	Full Model	Interaction Only	Interaction Only	Full Model	Interaction Only	Interaction Only	Full Model	Interaction Only	Full Model	Interaction Only	Full Model
Physical Disability/Biological Sex Interaction (None/Male)												
None/Female	1.10 (1.05–1.15) *	1.05 (1.00–1.11)	0.80 (0.76–0.83) *	0.74 (0.71–0.78) *	0.93 (0.86–1.00)	0.74 (0.68–0.81) *	0.98 (0.94–1.03)	0.90 (0.86–0.95) *				
Mild/Male	1.04 (0.83–1.30)	1.04 (0.83–1.29)	1.03 (0.77–1.36)	0.99 (0.74–1.34)	1.10 (0.88–1.38)	1.10 (0.87–1.39)	0.97 (0.75–1.27)	0.96 (0.73–1.25)				
Mild/Female	1.30 (1.09–1.54) *	1.13 (0.92–1.38)	0.94 (0.80–1.11)	0.78 (0.65–0.92) *	1.00 (0.75–1.33)	0.71 (0.54–0.95)	1.14 (0.95–1.37)	0.93 (0.75–1.15)				
Moderate/Male	1.04 (0.82–1.32)	1.05 (0.81–1.36)	0.78 (0.45–1.36)	0.93 (0.66–1.32)	0.94 (0.56–1.58)	1.00 (0.62–1.60)	1.01 (0.79–1.29)	1.03 (0.80–1.32)				
Moderate/Female	0.81 (0.62–1.07)	0.71 (0.54–0.93)	0.74 (0.56–0.98)	0.58 (0.44–0.77) *	1.04 (0.70–1.53)	0.62 (0.42–0.92)	0.72 (0.54–0.96)	0.59 (0.45–0.78) *				
Severe/Male	0.75 (0.51–1.09)	0.73 (0.50–1.07)	0.78 (0.55–1.11)	0.80 (0.56–1.14)	1.01 (0.60–1.69)	1.00 (0.61–1.65)	0.71 (0.49–1.02)	0.66 (0.45–0.97)				
Severe/Female	0.80 (0.58–1.11)	0.79 (0.58–1.07)	0.64 (0.45–0.90)	0.55 (0.40–0.76) *	0.73 (0.44–1.22)	0.55 (0.32–0.93)	0.85 (0.65–1.11)	0.76 (0.58–1.00)				
Race/Ethnicity (NH White)												
Hispanic		0.99 (0.90–1.08)		0.92 (0.85–1.00) *		1.27 (1.14–1.41) *		0.99 (0.90–1.07)				
NH Black		1.17 (1.07–1.28) *		0.68 (0.62–0.75) *		0.80 (0.70–0.91) *		1.19 (1.09–1.29) *				
Parent Education (SES; College Grad)												
<HS		1.22 (1.11–1.35) *		0.93 (0.83–1.04)		1.02 (0.89–1.16)		1.19 (1.07–1.32) *				
HS/GED		1.30 (1.23–1.39) *		1.12 (1.05–1.19) *		1.09 (0.99–1.19)		1.27 (1.20–1.34) *				
Some College		1.19 (1.12–1.26) *		1.05 (0.99–1.12)		1.02 (0.92–1.14)		1.12 (1.05–1.18) *				
Age at Wave IV		0.98 (0.96–0.99) *		0.96 (0.95–0.98) *		0.95 (0.93–0.97) *		0.97 (0.96–0.98) *				
Sexual Orientation (Heterosexual)												
Sexual Minority		0.84 (0.78–0.92) *		1.25 (1.15–1.36) *		1.93 (1.75–2.12) *		1.14 (1.05–1.22) *				
Cognitive Ability Score (100–114)												
<85		0.72 (0.62–0.84) *		0.58 (0.49–0.68) *		0.65 (0.56–0.75) *		0.72 (0.60–0.86) *				
85–99		1.04 (0.97–1.11)		0.96 (0.90–1.02)		0.92 (0.85–0.99) *		1.05 (0.98–1.12)				
>114		0.86 (0.81–0.91) *		0.92 (0.87–0.97) *		0.98 (0.89–1.09)		0.88 (0.83–0.93) *				

aHR (95% CI)	Vaginal		Oral		Anal		First	
	Interaction Only	Full Model	Interaction Only	Full Model	Interaction Only	Full Model	Interaction Only	Full Model
Coerced Sex (No)								
Yes	1.40 (1.29–1.52)*	1.35 (1.24–1.47)*	1.63 (1.45–1.84)*	1.37 (1.25–1.49)*				
Forced Sex (No)								
Yes	1.13 (1.01–1.26)*	1.21 (1.10–1.34)*	1.12 (0.96–1.31)	1.27 (1.16–1.39)*				
Sexual Abuse (No)								
Yes	1.05 (0.90–1.22)	1.07 (0.95–1.21)	1.26 (1.10–1.45)*	1.08 (0.93–1.26)				

Notes: Referent groups for categorical variables are in parentheses next to the variable names; aHR = adjusted hazard ratio; CI = confidence interval; NH = Non-Hispanic; SES = socioeconomic status; HS = high school; GED = General Educational Development

* p<0.05 with Holm-Bonferroni correction for multiple comparisons

Table 4.

Adjusted hazard ratios (and 95% confidence intervals) from Cox proportional hazards models comparing the timing of each type of sex by the interaction between physical disability and race/ethnicity

aHR (95% CI)	Vaginal			Oral			Anal			First		
	Interaction Only	Full Model	Interaction Only	Interaction Only	Full Model	Interaction Only	Interaction Only	Full Model	Interaction Only	Full Model	Interaction Only	Full Model
Physical Disability/Biological Sex Interaction (None/Male)												
None/Hispanic	0.94 (0.86–1.03)	0.98 (0.89–1.08)	0.74 (0.67–0.81) *	0.91 (0.83–0.99)	1.09 (0.98–1.21)	1.26 (1.13–1.40) *	0.92 (0.84–1.00)	0.98 (0.89–1.07)				
None/NH Black	1.17 (1.07–1.27) *	1.18 (1.08–1.29) *	0.59 (0.53–0.66) *	0.68 (0.62–0.76) *	0.70 (0.61–0.80) *	0.80 (0.70–0.92) *	1.15 (1.06–1.25) *	1.20 (1.10–1.30) *				
Mild/Hispanic	1.29 (0.93–1.78)	1.29 (0.93–1.80)	1.14 (0.80–1.60)	1.26 (0.87–1.81)	1.16 (0.59–2.26)	1.33 (0.68–2.61)	1.25 (0.87–1.80)	1.27 (0.88–1.84)				
Mild/NH Black	0.89 (0.57–1.40)	0.85 (0.54–1.33)	0.52 (0.36–0.75) *	0.58 (0.41–0.81) *	0.64 (0.42–0.98)	0.64 (0.42–0.98)	0.93 (0.59–1.45)	0.86 (0.54–1.36)				
Mild/NH White	1.15 (0.97–1.35)	1.09 (0.93–1.29)	1.05 (0.86–1.26)	1.01 (0.83–1.23)	1.09 (0.89–1.34)	1.06 (0.86–1.30)	1.08 (0.90–1.30)	1.01 (0.84–1.23)				
Moderate/Hispanic	1.01 (0.60–1.69)	1.17 (0.71–1.92)	0.97 (0.64–1.47)	1.06 (0.70–1.60)	1.73 (0.82–3.64)	1.97 (0.89–4.33)	0.96 (0.61–1.50)	1.10 (0.71–1.68)				
Moderate/NH Black	0.98 (0.67–1.45)	1.11 (0.76–1.62)	0.38 (0.15–1.01)	0.48 (0.22–1.06)	0.62 (0.28–1.35)	0.57 (0.31–1.02)	1.10 (0.68–1.77)	1.21 (0.81–1.81)				
Moderate/NH White	0.85 (0.67–1.09)	0.77 (0.59–1.00)	0.89 (0.71–1.13)	0.85 (0.67–1.07)	1.03 (0.71–1.48)	0.89 (0.63–1.26)	0.80 (0.63–1.01)	0.73 (0.57–0.94)				
Severe/Hispanic	0.54 (0.15–1.90)	0.53 (0.16–1.76)	0.89 (0.50–1.59)	0.87 (0.46–1.67)	1.56 (0.62–3.98)	1.38 (0.48–3.94)	0.89 (0.42–1.89)	0.76 (0.36–1.58)				
Severe/NH Black	0.79 (0.39–1.61)	0.75 (0.36–1.56)	0.61 (0.37–1.02)	0.65 (0.39–1.10)	1.00 (0.46–2.20)	1.10 (0.54–2.24)	0.83 (0.43–1.61)	0.77 (0.38–1.55)				
Severe/NH White	0.77 (0.59–1.01)	0.79 (0.61–1.02)	0.69 (0.50–0.94)	0.72 (0.53–0.97)	0.76 (0.50–1.17)	0.75 (0.48–1.16)	0.77 (0.60–1.00)	0.77 (0.60–1.00)				
Biological Sex (Male)												
Female		1.05 (1.00–1.10)			0.74 (0.71–0.78) *					0.73 (0.67–0.80) *		0.90 (0.86–0.95) *
Parent Education (SES; College Grad)												
<HS		1.22 (1.11–1.35) *			0.93 (0.83–1.04)					1.02 (0.89–1.17)		1.19 (1.07–1.32) *
HS/GED		1.30 (1.23–1.39) *			1.12 (1.05–1.19) *					1.09 (0.99–1.19)		1.27 (1.20–1.34) *
Some College		1.19 (1.12–1.26) *			1.05 (0.99–1.12)					1.03 (0.92–1.14)		1.11 (1.05–1.18) *
Age at Wave IV												
Sexual Orientation (Heterosexual)		0.98 (0.96–0.99) *			0.96 (0.95–0.98) *					0.95 (0.93–0.97) *		0.97 (0.95–0.98) *
Sexual Minority		0.84 (0.78–0.91) *			1.25 (1.15–1.36) *					1.93 (1.75–2.13) *		1.14 (1.05–1.22) *
Cognitive Ability Score (100–114)												
<85		0.72 (0.62–0.85) *			0.58 (0.50–0.68) *					0.65 (0.56–0.75) *		0.72 (0.60–0.86) *

aHR (95% CI)	Vaginal		Oral		Anal		First	
	Interaction Only	Full Model	Interaction Only	Full Model	Interaction Only	Full Model	Interaction Only	Full Model
85-99		1.03 (0.97-1.10)		0.96 (0.89-1.02)		0.92 (0.85-0.99) *		1.05 (0.98-1.12)
>114		0.86 (0.80-0.91) *		0.91 (0.86-0.97) *		0.98 (0.89-1.08)		0.88 (0.83-0.93) *
Coerced Sex (No)								
Yes		1.41 (1.29-1.53) *		1.35 (1.24-1.47) *		1.63 (1.45-1.84) *		1.37 (1.26-1.50) *
Forced Sex (No)								
Yes		1.12 (1.01-1.26) *		1.21 (1.10-1.33) *		1.12 (0.96-1.31)		1.26 (1.15-1.38) *
Sexual Abuse (No)								
Yes		1.05 (0.91-1.22)		1.07 (0.95-1.21)		1.27 (1.10-1.46) *		1.09 (0.94-1.26)

Notes: Referent groups for categorical variables are in parentheses next to the variable names; aHR = adjusted hazard ratio; CI = confidence interval; NH = Non-Hispanic; SES = socioeconomic status; HS = high school; GED = General Educational Development

* p<0.05 with Holm-Bonferroni correction for multiple comparisons

Table 5.

Adjusted hazard ratios (and 95% confidence intervals) from Cox proportional hazards models comparing the timing of each type of sex by the interaction between physical disability and sexual orientation

	<u>Vaginal</u>			<u>Oral</u>			<u>Anal</u>			<u>First</u>		
	Interaction Only	Full Model	Interaction Only	Interaction Only	Full Model	Interaction Only	Interaction Only	Full Model	Interaction Only	Full Model	Interaction Only	Full Model
Physical Disability/Sexual Orientation Interaction (None/Heterosexual)												
None/Sexual Minority	0.87 (0.80–0.95) *	0.85 (0.78–0.92) *	1.25 (1.16–1.35) *	1.26 (1.16–1.36) *	1.97 (1.79–2.17) *	2.03 (1.86–2.21) *	1.97 (1.79–2.17) *	1.15 (1.07–1.25) *	1.15 (1.06–1.24) *			
Mild/Heterosexual	1.06 (0.91–1.23)	1.02 (0.86–1.22)	1.10 (0.93–1.30)	1.03 (0.86–1.22)	1.10 (0.90–1.34)	1.14 (0.94–1.39)	1.10 (0.90–1.34)	1.06 (0.89–1.26)	1.00 (0.82–1.23)			
Mild/Sexual Minority	1.34 (0.82–2.20)	1.12 (0.72–1.74)	1.39 (0.81–2.39)	1.23 (0.71–2.15)	1.56 (0.97–2.50)	1.66 (1.02–2.70)	1.56 (0.97–2.50)	1.26 (0.73–2.17)	1.08 (0.66–1.76)			
Moderate/Heterosexual	0.84 (0.69–1.04)	0.80 (0.63–1.01)	0.85 (0.60–1.20)	0.84 (0.65–1.10)	1.02 (0.71–1.47)	1.08 (0.74–1.57)	1.02 (0.71–1.47)	0.84 (0.68–1.04)	0.80 (0.63–1.00)			
Moderate/Sexual Minority	0.96 (0.55–1.67)	0.88 (0.53–1.47)	1.06 (0.69–1.61)	1.10 (0.75–1.61)	1.32 (0.85–2.06)	1.43 (0.92–2.23)	1.32 (0.85–2.06)	1.05 (0.62–1.77)	1.02 (0.65–1.59)			
Severe/Heterosexual	0.94 (0.73–1.21)	0.91 (0.71–1.17)	0.83 (0.63–1.10)	0.84 (0.65–1.09)	0.96 (0.64–1.45)	0.94 (0.62–1.43)	0.96 (0.64–1.45)	0.88 (0.68–1.13)	0.84 (0.64–1.09)			
Severe/Sexual Minority	0.25 (0.11–0.53) *	0.24 (0.11–0.52) *	0.75 (0.45–1.24)	0.71 (0.41–1.24)	1.27 (0.68–2.35)	1.26 (0.66–2.42)	1.27 (0.68–2.35)	0.55 (0.34–0.90)	0.56 (0.35–0.90)			
Biological Sex (Male)												
Female		1.05 (1.00–1.10)		0.74 (0.71–0.78) *			0.73 (0.67–0.80) *		0.90 (0.86–0.95) *			
Race/Ethnicity (NH White)												
Hispanic		0.99 (0.90–1.08)		0.92 (0.85–1.00) *			1.27 (1.14–1.41) *		0.99 (0.90–1.08)			
NH Black		1.17 (1.07–1.28) *		0.68 (0.62–0.75) *			0.80 (0.70–0.91) *		1.19 (1.09–1.29) *			
Parent Education (SES; College Grad)												
<HS		1.23 (1.11–1.35) *		0.93 (0.83–1.04)			1.02 (0.89–1.17)		1.19 (1.07–1.32) *			
HS/GED		1.30 (1.23–1.39) *		1.12 (1.05–1.19) *			1.09 (1.00–1.19)		1.27 (1.20–1.34) *			
Some College		1.18 (1.12–1.25) *		1.05 (0.99–1.11)			1.03 (0.92–1.14)		1.11 (1.05–1.18) *			
Age at Wave IV												
		0.98 (0.96–0.99) *		0.96 (0.95–0.98) *			0.95 (0.93–0.97) *		0.97 (0.96–0.98) *			
Cognitive Ability Score (100–114)												
<85		0.72 (0.62–0.84) *		0.58 (0.49–0.68) *			0.65 (0.56–0.75) *		0.72 (0.60–0.86) *			
85–99		1.03 (0.97–1.10)		0.96 (0.89–1.02)			0.92 (0.85–0.99) *		1.05 (0.98–1.12)			
>114		0.86 (0.81–0.91) *		0.92 (0.86–0.97) *			0.98 (0.89–1.09)		0.88 (0.83–0.93) *			

aHR (95% CI)	Vaginal		Oral		Anal		First	
	Interaction Only	Full Model	Interaction Only	Full Model	Interaction Only	Full Model	Interaction Only	Full Model
Coerced Sex (No)								
Yes	1.40 (1.28–1.52)*	1.35 (1.24–1.47)*	1.63 (1.45–1.84)*	1.36 (1.25–1.49)*				
Forced Sex (No)								
Yes	1.13 (1.01–1.26)*	1.21 (1.10–1.33)*	1.12 (0.96–1.31)	1.27 (1.16–1.38)*				
Sexual Abuse (No)								
Yes	1.05 (0.90–1.21)	1.07 (0.95–1.21)	1.27 (1.10–1.46)*	1.08 (0.93–1.26)*				

Notes: Referent groups for categorical variables are in parentheses next to the variable names; aHR = adjusted hazard ratio; CI = confidence interval; NH = Non-Hispanic; SES = socioeconomic status; HS = high school; GED = General Educational Development

* p<0.05 with Holm-Bonferroni correction for multiple comparisons