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# *Get Yourself Tested* (GYT) Campaign: Investigating Campaign Awareness and Behaviors Among High School and College Students

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# Abstract

Adolescents and young adults are disproportionately affected by sexually transmitted diseases (STDs). This study examined the association of *GYT: Get Yourself Tested* (GYT), a sexual health social marketing campaign, with several sexual health behaviors on a nationally representative sample of high school (HS) and college students (n = 2,329) recruited through an online panel survey. Behaviors examined were STD testing, HIV testing, and whether students had communication with health care providers and their romantic partners about STDs and STD testing. Rao-Scott chi-square tests and multivariable logistic regression models were conducted. The results indicated college students were more aware of GYT than HS students. Awareness of GYT was significantly associated with STD testing (p < .05), HIV testing (p < .01), and talking with romantic partners (p < .01) for college students but only with STD testing (p < .05) and talking to a provider (p < .05) for HS students. The differences between HS and college students provide insight for those developing and implementing interventions across such a broad age range of youth.

## Keywords

college health; health communication; health promotion; HIV/AIDS; sex behavior; STDs

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Authors' Note

The findings and conclusions in this article are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

Declaration of Conflicting Interests

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Adolescents and young adults ages 15 to 24 are at an increased risk for sexually transmitted diseases (STDs) compared with older adults (Ahrens et al., 2006; Centers for Disease Control and Prevention [CDC], 2015a, 2015b) and account for nearly half of all STDs reported in the United States (Satterwhite et al., 2013). Since many STDs are asymptomatic, testing is critical to prevent further transmission and allow time for treatment. Several reasons—including individual, social, and structural challenges—prevent this population from accessing sexual health services (Friedman, Brookmeyer, et al., 2014). Despite national recommendations that sexually active individuals younger than 25 years of age be screened annually (CDC, 2015c), many youth acknowledge barriers to accessing STD testing such as the inability to pay, lack of transportation, and concerns about confidentiality (Leichliter, Copen, & Dittus, 2017; Tilson et al., 2004). Combined, these factors result in low STD testing among adolescents and young adults (Mathur, Mullinax, & Santelli, 2017).

Social marketing campaigns may be useful in addressing low awareness and STD testing behaviors among adolescents and young adults. Numerous social marketing campaigns focused on sexual health have demonstrated efficacy (Ahrens et al., 2006; Martinez-Donate et al., 2010; Oh et al., 2002; Plant et al., 2014; Stephens, Bernstein, McCright, & Klausner, 2010), with national campaigns largely focused on HIV testing and prevention (Fleming & Wasserheit, 1999; Habel et al., 2015). STD testing campaigns have traditionally been localized efforts until the launch of the *GYT: Get Yourself Tested* (GYT) campaign (Friedman, Kachur, Noar, & McFarlane, 2016). GYT was the first national effort to promote STD testing among sexually active youth younger than the age of 25 years. The campaign also encouraged open communication about sexual health with partners and health care providers through "get yourself talking" messaging. The campaign was a public–private partnership among MTV Networks, Planned Parenthood Federation of America, and the Kaiser Family Foundation. More information on the campaign can be found elsewhere (Habel et al., 2015; McFarlane et al., 2015).

While the GYT campaign has been proven effective on a national scale among youth 18 to 25 years (Grier & Bryant, 2005) and for a select number of institutions (Friedman, Bozniak, et al., 2014), an evaluation exploring the impact specifically on students enrolled in high school (HS) and college has not been conducted. This examination is critical as health campaigns often segment by sociodemographics using different communication channels (Moran, Walker, Alexander, Jordan, & Wagner, 2017; Noar, 2006; Slater, 1996). Messaging developed for individuals 18 and older may not resonate with younger adolescents because different context and socioenvironmental factors may be influencing them. For example, HS students typically live at home (Laughlin, 2014), may be less aware of health issues, may not able to access health care without parental/guardian involvement, and may use different channels of media. In contrast, college students are typically 18 years of age and older, are legally considered adults, and are able to access health care more easily through health centers on campus. Given that GYT targeted youth regardless of age, race, or ethnicity, it is important to examine if any differences in campaign impact exist between the HS and college populations. With these subpopulations contributing many of the newly diagnosed STD cases, findings could be critical to future adaptations of the campaign in settings that serve these groups.

Specifically, this study investigated the following research questions: (1) Are there differences in GYT campaign awareness between HS and college students? (2) Are there differences between HS and college students in marketing consumption? (3) Are college and HS students who saw the GYT campaign more likely to engage in four key outcome behaviors: (a) STD testing, (b) HIV testing, (c) talking about STDs and STD testing with a health care provider, and (d) talking about STDs and STD testing with romantic partners?

#### **Materials and Method**

#### **Procedures and Participants**

U.S. youth and emerging adults were surveyed through a national online panel designed to represent the U.S. population. The GfK Knowledge Panel® consists of more than 50,000 pre-consented participants who were recruited using address-based sampling and random-digit dialing methods. Panelists' households were provided Internet access by GfK if it was not already available. The CDC purchased survey services from GfK for this study, and the specific questions in this survey were reviewed by the CDC's institutional review board.

The online survey was pilot-tested for usability and acceptability. Data were collected online via a survey consisting of 65 questions during August and September 2013. Per GfK's protocol, the respondents were offered a cash-equivalent \$5 incentive, which was increased to \$10 during the final week of recruitment in order to improve participation. Due to the sensitivity of some survey questions as well as the age of the participants, the survey included a question regarding the presence of an adult in the room. For the purposes of this study, panelists between 18 and 25 years of age were directly solicited. Additionally, youth ages 15 to 17 were solicited through their empaneled parent. If the parent consented for their child to participate, then the child could complete the survey. Of those screened in by parents, 90% of youth completed the survey. More information about participant recruitment has been previously reported (McFarlane et al., 2015). For this study, only individuals who indicated that they were in college or HS were included.

#### Measures

Six outcome variables were relevant to the research questions. Two questions assessed participant exposure of the GYT campaign. The first question presented a list of several health campaigns (one of which was fake and included as a measure of the degree of error in self-reported awareness), and asked whether the participant had "heard of these campaigns." Response options included the following: yes, have heard of; no, have not heard of; and don't know. The second question asked whether respondents had "ever seen this campaign image" and were provided a logo of the GYT campaign. Response options included the following: yes, no, and don't know. These items were used to compute a combined measure that indicated whether the participant had seen or heard of the GYT campaign. Two additional items asked about media exposure and channels for GYT delivery. Because MTV was a campaign partner and an important source of exposure to GYT materials, participants were asked how often they watched MTV on TV, computer, tablet, smartphone, or other platforms. Possible responses were the following: every day, a couple times a week, once a week, about once a month, less than once a month, and never. Those who had seen the

campaign were asked if they had seen it on MTV; other television network; Internet; school including school health centers; doctor's office or health clinic, like Planned Parenthood; special event (e.g., a neighborhood party or concert); or other. Response options were "yes," "no," "don't know" for each of these campaign channels.

Four target behaviors of the GYT campaign were assessed by two items related to communication, asking if students had "talked to a health care provider about STDs or getting tested for STDs" and "talked with someone you were involved with romantically about STDs or getting tested for STDs" (responses dichotomized as yes/no) and two items related to testing: "Have you ever been tested for STDs other than HIV, such as chlamydia or gonorrhea?" and "Have you ever been tested for HIV?" Participants indicated if testing had occurred in the past 12 months, occurred more than 12 months ago, occurred at an unknown time, did not occur, or uncertain. The categories were collapsed into "ever/never" for the analyses.

The survey also assessed a variety of sexual health–related behaviors, knowledge, attitudes, and perceptions. For this study, items asking about oral sex (giving and receiving), vaginal sex, and anal sex were analyzed. Health insurance status was included because of its relation to testing behaviors with "don't know" responses recoded as "no." Other relevant demographic items included gender (male/female), age, race/ethnicity (White/non-Hispanic, Black/non-Hispanic, Other/non-Hispanic, 2+ Races/non-Hispanic, Hispanic), and sexual orientation (straight or heterosexual, gay or lesbian, bisexual, transgender, "queer," not sure, other).

#### Analysis

Using 2010 U.S. Census data, the sample was weighted to account for sociodemographic factors such as age, race, household income, as well as nonresponse rates and Internet access. For the entire sample, we calculated basic descriptive statistics via weighted frequencies. To determine if there were differences in exposure to the GYT campaign between HS and college students, Rao-Scott chi-square analysis was used. To determine if there were any differences between HS and college students in marketing consumption, both General Linear Model (reporting Wald's F) and Rao-Scott chi-square analyses were conducted. For chi-square tests, phi is reported as a measure of association. Finally, an examination of college and HS students and their likelihood of engaging in the four key outcome behaviors was conducted using both chi-square analyses and logistic regression. Logistic regression models examined targeted behavioral outcomes against GYT awareness and other correlates, specifically gender (male/female), race/ethnicity (White/non-White), insurance status (none-don't know/yes), and MTV viewership. These were selected based on previous literature indicating differences (Cuffe, Newton-Levinson, Gift, McFarlane, & Leichliter, 2016; Mathur et al., 2017) and campaign components (e.g., MTV as campaign channel). This yielded estimates of the associations between exposure to the campaign and behavior adjusted for potential confounders. Effect sizes are presented as adjusted odds ratios. Unless otherwise noted, all analyses were run using the Complex Samples function of SPSS v21 (IBM SPSS, Chicago, IL).

# Results

A total of 4,017 adolescents and young adults agreed to and completed the survey for a 51.2% response rate for 18 to 25 year olds and 32.9% for 15 to 17 year olds. Of those surveyed, 1,111 reported currently attending HS and 1,232 were attending college. Fourteen individuals were identified as outliers based on age (e.g., 25 year olds in HS) and were removed from the sample; therefore, the analyses focus on the responses of the remaining 2,329 young adults. Sex of the respondents was more evenly distributed within the HS sample compared with the college students (Table 1). Overall, the majority of the respondents from both HS and college were White, non-Hispanic with Hispanic, and Black, non-Hispanic being the second and third most commonly reported race/ethnicity. The majority of the respondents identified as heterosexual and reported having insurance. Significant differences between HS and college respondents existed. The college sample included a higher percentage of females, non-heterosexual individuals, and individuals who had engaged in sexual behaviors. Additionally, college students were significantly more likely to engage in the targeted behaviors compared to HS students. More college students had been tested for STDs (36.4%) and HIV (33.7%) than HS students (4.2% and 3.8%, respectively). While not as dramatic a discrepancy, college students were also more likely to have talked with a romantic partner (17.8%) and a health care provider about STDs and STD testing (22.0%) compared with HS students (2.6% and 7.9%, respectively). Table 1 shows demographic characteristics of the participants and differences between the two groups.

Overall, 24.4% (n = 542) of all respondents had seen or heard of the GYT campaign; the percentage was higher for participants in college (28.3%) than those in HS (19.4%, p < . 001). Significant differences emerged regarding where the two groups saw the campaign (Table 2). College students were more likely to see the campaign on MTV (58.0% vs. 38.2%) and "other" channels (6.3% vs. 0.7%), whereas more HS students reported seeing the campaign at school (49.0% vs. 26.3%). HS students reported seeing or hearing about GYT on more campaign channels (estimated mean = 2.12) than college students (estimated mean = 1.94), but this difference was not significantly different (Wald F = .735, p = .392). However, there was a skewed frequency distribution for college students' responses, and as a result, these responses were examined via categorization. When comparing if students saw the campaign through 0, 1, or 2+ channels, there was a significant difference between HS and college students overall (p < .05). Pairwise comparisons showed HS students were more likely to report seeing GYT on one channel (p < .05). There was no significant difference when comparing other responses.

Given the differences between the proportion of HS and college students who reported the outcome variables (the factors targeted by the GYT campaign), subsequent analyses were conducted separately for HS and college students. When examining differences in targeted behaviors between those who were aware of GYT and those who were not (Table 3), both HS and college students who saw the campaign were significantly more likely to have spoken with a romantic partner and a health care provider compared with those who had not seen the campaign. For the items regarding testing, only individuals who had engaged in oral, vaginal, or anal sex were included in the analyses. For HS students, ever being tested

for STDs was significantly associated with GYT awareness (p < .01) but not HIV testing (p = .063). For college students, both ever being tested for STDs and HIV were significant with moderate effect sizes (ranging from .017 to .21).

In the multivariable regression analyses (Table 4), awareness of the GYT campaign was significantly related to three of the outcome behaviors for college students. Individuals who had seen the campaign were more likely to have ever been tested for an STD (adjusted odds ratio [AOR] = 1.96, 95% confidence interval [CI] [1.2, 3.2], p < .05), ever tested for HIV (AOR = 2.26, 95% CI [1.4, 3.7], p < .01), and talked with romantic partners about STDs or STD testing (AOR = 2.01, 95% CI [1.3, 3.2], p < .01). No effect of GYT awareness was detected for talking with a health care provider for college students; however, college students who watched MTV once or a couple times per week were two times more likely to speak with their provider than those who watched it daily (data included in Table 4). While not the main variable of interest, given the connection of GYT with MTV, this finding is worth noting.

The multivariable regression analyses for HS students (Table 4) showed that those who were aware of the GYT campaign were more likely to report ever testing for STDs (AOR = 2.82, 95% CI [1.1, 7.3], p < .05) and talking with a provider (AOR = 2.12, 95% CI [1.1, 4.2], p < .05). GYT awareness was not associated with talking to a romantic partner or ever being tested for HIV for HS students.

## Discussion

The national GYT campaign was designed to promote testing and talking about STDs among sexually active youth younger than 25 years old. There were significant differences between HS and college students on exposure to the campaign. Additionally, there were differences in the campaign's association with target behaviors. These results can assist health promotion specialists in the development and implementation of similar interventions among youth and young adults, especially interventions attempting to influence such a broad range of ages. Among college students, GYT awareness was associated with three of the four targeted outcome behaviors (STD and HIV testing, and talking with a partner). However, among HS students, the GYT campaign was only associated with STD testing and talking to a health care provider, showing no relationship with HIV testing or talking to a partner.

Regarding campaign exposure, about 30% of college students self-reported GYT awareness, whereas only 19% of HS students recalled the campaign. Interestingly, when examining channels of exposure, HS students were more likely to have heard or seen GYT on two or more campaign channels compared to college students, which seems in contrast to groups' levels of awareness. Further examination of channels indicates that, despite HS students having a higher percentage of those who watch MTV daily, college students were more likely to see the campaign on MTV. The regression analyses indicated that less frequent watchers of MTV (once/few times a week compared to daily watchers) were more likely to talk to their health care provider. Perhaps those who watch MTV on a regular basis "tune out" the messages because of repeated exposure. MTV was the main agent of campaign

content and in fact has its own college-focused network, called MTV-U, which may help explain why college students were more aware in spite of HS students having more and varied modes of exposure. It is also possible that there were reporting errors for this item; students may have misjudged frequency or the specific channel presenting the GYT campaign.

Despite college students' lower levels of health insurance, STD and HIV testing were higher among this group. College students may have greater availability of testing services at health centers on campus, which may be offered for free or at low cost, making it easier for them to get tested. For HS students, a lack of funds or transportation, as well as being a minor and living at home may decrease access to testing, whereas college students have much more autonomy. Differences in impact may also be explained by differences in service offerings to students at the school setting. High schools implementing GYT may not have offered HIV testing since younger adolescents are more likely to be exposed to an STD than HIV, plus the focus of the GYT campaign was STD testing. As a result, the focus on STD testing may have resonated more strongly with the younger HS audiences. For high schools wanting to implement the GYT campaign, having a school-based health center that offers both STD and HIV testing or a partnership with a local clinic or health department within close proximity to the school could potentially bolster testing among students.

The association of GYT with communication differed between HS and college students, specifically GYT was related to communication with partners but not providers among college students, but the reverse association was found among those in high school. Younger adolescents have greater fears and limited skills when communicating about sexual health than older adolescents (Moran et al., 2017) so this result may not be surprising. Additionally, laws or regulations may limit what high schools are allowed to communicate about sexual health, which in turn may increase the likelihood of poor communication among HS students with their partners. Additional emphasis on sexual communication self-efficacy may need to be incorporated in the GYT messaging to more effectively address these issues among HS students. Finally, relationship dynamics and adolescent access to services may drive the findings (or lack thereof) seen here. That is, partnerships among HS students may be uniquely different in terms of characteristics like length, time spent together, and intensity from those of college students and therefore need specialized techniques and strategies to increase communication. Likewise, younger adolescents' access to a provider may differ from those of older adolescents (e.g., frequency, confidentiality issues from parents) and thus drive those communication dynamics as well.

Given the proportion of HS students citing the use of certain channels of communication, public health professionals may want to consider targeting HS students at school and via the Internet when developing future sexual health campaigns. The GYT campaign may benefit from further adaptation at the HS level, in particular, further segmentation such as "peer crowd targeting" may be needed. This macro-level approach targets youth based on their peer crowd affiliation, with the idea that they share values, styles, preferences, and behaviors, and has shown some success in regard to tobacco cessation (Moran et al., 2017). If communication strategies cannot be implemented at the school level, adapting the campaign to direct students to Internet-based (including mobile-friendly) resources about

how to talk to their partners and/or health care providers may help encourage those behaviors.

Regarding limitations, the data used for this study were cross-sectional so the findings do not indicate that campaign awareness directly caused the target behaviors to occur. Similarly, the items related to testing included "ever" language, but the items related to talking did not specify a time-frame or frame of reference (e.g., current or most recent partner). Students may have only been thinking about current or most recent situations could have skewed their responses. Additionally, direct exposure to GYT through their high school or college could not be determined for participants. Moreover, the survey was conducted during a period when no national media promotions of the campaign were occurring so participant recall of the campaign may have been affected. While these are limitations, because of the young age range of the sample, many of the lifetime sexual behaviors more than likely occurred recently and coincided with the campaign release. Additionally, the increased incentive, from \$5 to \$10 during the final week of recruitment, could have caused an increase in responses, possibly skewing the results. At the same time, using a national panel subsequently weighted based on U.S. census data addresses many of the potential concerns about the study population.

This article highlights how exposure to a national sexual health social marketing campaign was more likely to be associated with positive sexual health behaviors among college students than those in high school, despite HS students seeing or hearing the campaign through multiple communication channels. Given the association of the campaign among college students, college health practitioners may want to consider using the GYT brand to reach their students. Additionally, these findings suggest the need for varying intervention approaches for specific age groups of young people. Research and programs should consider why this type of intervention had lower self-reported exposure and impact among the younger cohort of students and possible ways to capitalize on the multiple communication channels used by this group. Partnerships with the School-Based Health Alliance, American School Health Association, National Association of School Nurses, or adolescent-focused community-based organizations that work with HS students may help increase awareness of the campaign among that group. Additionally, these partnerships could provide insight into HS settings and culture to create potential adaptations of GYT to better reach HS students than the broadly focused "youth" campaign. Social marketing campaigns, like GYT: Get Yourself Tested, can be an effective strategy to address sexual health issues particularly to promote STD testing and communication. At the same time, campaigns attempting to affect both HS and college students may need adaptations to successfully influence both these populations.

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Demographics From the GYT: Get Yourself Tested Evaluation Survey.

Demographics	High school $(n = 1, 101), \% (n)$	College $(n = 1,228), \% (n)$
Sex ***		
Male	50.6% (557)	29.2% (358)
Female	49.4% (544)	70.8% (870)
Race/ethnicity *		
White, non-Hispanic	64.2% (707)	58.5% (718)
Hispanic	17.5% (193)	20.8% (255)
Black, non-Hispanic	8.4% (92)	11.0% (135)
Other, non-Hispanic	3.9% (43)	4.9% (60)
2+ Races, non-Hispanic	6.0% (66)	4.9% (60)
Sexuality **		
Straight	94.4% (1,029)	90.6% (1,110)
Not straight	5.6% (61)	9.4% (115)
Sexual behaviors ***		
Ever gave oral sex	14.5% (160)	62.2% (764)
Ever received oral sex	16.3% (179)	63.9% (785)
Ever had vaginal sex	17.3% (191)	64.1% (787)
Ever had anal sex	7.0% (77)	25.3% (311)
GYT awareness (identified campaign or recognized logo $(n = 2,277)^{***}$	17.3% (186)	29.6% (356)
GYT campaign target behaviors ***		
Have ever had an STD test $(n = 2, 314)$	4.2% (46)	36.4% (445)
Have ever had an HIV test $(n = 2, 314)$	3.8% (41)	33.7% (413)
Have talked to a health care provider about STD/STD testing	8.1% (89)	28.6% (351)
Have talked to a romantic partner about STD/STD testing	3.0% (33)	23.6% (290)
MTV viewership		
Never	44.1 % (479)	44.0% (538)
Once a month or less	27.3% (297)	29.2% (357)
Once or twice a week	22.9% (249)	22.8% (279)

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:	High school	College
Demographics	(n = 1, 101), % (n)	$(n = 1, 228), \sqrt[9]{0} (n)$
Daily	5.7% (62)	3.9% (48)
Insurance status **		
Insurance	80.4% (880)	74.6% (913)
No insurance/don't know	19.6% (215)	25.4% (311)
Adult in the room during survey completion $(n = 2, 316)^{***}$		
Yes	29.4% (321)	18.2% (223)
No	70.6% (772)	81.8% (1,000)
Note. GYT = Get Yourself Tested, STD = sexually transmitted disease.		
* p<.05.		
p = 0.01.		
$p^{***} p < .001.$		

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Campaign channels	High school, % (n)	College, % (n)	x²	d	••
MTV	41.1% (53)	59.6% (152)	11.8 <sup>**</sup>	.001	.18
Other TV channel	37.2% (48)	22.0% (56)	$10.1^{**}$	.001	.16
School	49.6% (64)	27.5% (70)	18.5 ***	.00002	.22
Internet	49.6% (64)	37.6% (96)	$5.0^*$	.025	.12
Doctor's office	25.6% (33)	25.9% (66)	0.004	.949	.003
Event	7.0% (9)	6.3% (16)	0.07	.792	.013
Other	1.6% (2)	4.3% (11)	2.0	.157	.07
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*Note.* N determined by survey skip patterns.  $\mathbf{U}\mathbf{Y}\mathbf{I} = \mathbf{U}\mathbf{e}\mathbf{t}$  *Yourselt Lested.* 

<sup>a</sup>Phi is a measure of association for 2 × 2 tables when using the chi-square test and indicates how much effect this particular variable has on this particular outcome.

p < .05.p < .001.p = .001.p < .001.

Differences in Targeted Behaviors Based on GYT Exposure.

	-	High scho	lo			College		
Target behaviors	( <i>u</i> ) %	$\chi^2$	d	¢	<b>%</b> ( <i>n</i> )	$\chi^2$	d	¢
STD testing $b$	N=223	7.18*	.00	.18	N= 851	24,62 <sup>***</sup>	<.000001	.17
Aware of GYT	25.4% (15)				61.2% (175)			
Unaware of GYT	11.0% (18)				43.2% (244)			
HIV testing $b$	N = 223	3.46	.063	.13	N=853	36.6 ***	<.000001	.21
Aware of GYT	19.0% (111)				58.9% (169)			
Unaware of GYT	9.7% (16)				37.1% (210)			
Talk with romantic partner	N = 1,075	$6.72^{*}$	.010	.08	N = 1,202	41.26 ***	<.000001	.19
Aware of GYT	5.9% (11)				36.0% (128)			
Unaware of GYT	2.4% (21)				18.7% (155)			
Talk with health care provider	N = 1,075	21.52	.000003	.14	N = 1,202	34.66 ***	<.000001	.17
Aware of GYT	16.7% (31)				40.7% (145)			
Unaware of GYT	6.4% (57)				23.9% (202)			

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<sup>a</sup>Phi is a measure of association for  $2 \times 2$  tables when using the chi-square test and indicates how much effect this particular variable has on this particular outcome.

 $b_N$  varies as responses for the testing items limited to sexually active respondents; defined as having engaged in vaginal, oral, or anal sex.

 $_{p < .05.}^{*}$ 

p = .001.p = .001.p < .001.

# Table 4.

Multivariable Logistic Regression Analyses for GYT Targeted Behaviors.

Measures	Ever had STD test, AOR (95% CD	Ever had HIV test, AOR (95% CD	Talked with romantic partner, AOR (95% CI)	Talked with health care provider, AOR (95% CD
College students	$N = 850^{a}$	$N = 852^{a}$	N=1,199	N = 1,199
GYT awareness				
Unaware	Reference	Reference	Reference	Reference
Aware	$1.96[1.2, 3.2]^{*}$	2.26 [1.4, 3.7]**	$2.01 [1.3, 3.2]^{**}$	1.45 [0.9, 2.2]
Gender				
Male	Reference	Reference	Reference	Reference
Female	$2.30 \left[1.5, 3.7 ight]^{***}$	1.23[0.8, 2.0]	$1.89 [1.2, 3.0]^{**}$	$2.60\left[1.7, 4.1 ight]^{***}$
Race/ethnicity				
White	Reference	Reference	Reference	Reference
Non-White	0.78 [0.5, 1.2]	0.65 [0.4, 1.0]	0.97 [0.6, 1.5]	$0.72\ [0.5, 1.1]$
Insurance				
Does not have insurance/unknown insurance status	Reference	Reference	Reference	Reference
Has insurance	$1.99 \left[ 1.2, 3.4  ight]^{*}$	$1.62\ [0.9, 2.8]$	1.44[0.8, 2.5]	1.46 [0.9, 2.4]
MTV viewing				
Daily	Reference	Reference	Reference	Reference
Once/couple times per week	2.60 [0.9, 7.4]	2.51 [0.9, 7.0]	1.92[0.7, 5.1]	$2.04 \ [0.8, 5.3]^{**}$
Monthly or less	1.66 [0.6, 4.7]	1.26[0.5, 3.5]	1.77 $[0.7, 4.7]$	1.64 [0.6, 4.2]
Never	$1.68\ [0.6, 4.8]$	$1.37 \ [0.5, 3.8]$	1.12[0.4, 3.0]	$0.82\ [0.3, 2.1]$
High school students	$N=222^{a}$	$N = 222^{a}$	N = 1,063	N = 1,063
GYT awareness				
Unaware	Reference	Reference	Reference	Reference
Aware	$2.82 \ [1.1, 7.3]^{*}$	$1.63 \ [0.6, 4.3]$	$1.50\ [0.6, 4.0]$	$2.12$ $[11, 4.2]^{*}$
Gender				
Male	Reference	Reference	Reference	Reference
Female	$3.67 \left[ 1.3,  10.3  ight]^{*}$	$1.94 \ [0.6, 6.0]$	0.72~[0.3, 1.9]	1.07 [0.6, 1.9]
Race/ethnicity				

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Measures	Ever had STD test, AOR (95% CI)	Ever had HIV test, AOR (95% CI)	Talked with romantic partner, AOR (95% CI)	Talked with health care provider, AOR (95% CI)
White	Reference	Reference	Reference	Reference
Non-White	0.70 [0.2, 2.1]	0.33 [0.1, 1.0]	0.70 [0.2, 1.7]	$0.93 \ [0.5, 1.7]$
Insurance				
Does not have insurance/unknown insurance status	Reference	Reference	Reference	Reference
Has insurance	2.02 [0.5, 7.9]	$1.18\ [0.2, 5.9]$	$1.88\ [0.5, 6.8]$	1.91[0.8, 4.3]
MTV viewing				
Daily	Reference	Reference	Reference	Reference
Once/couple times per week	0.73 [0.1, 4.5]	0.30[0.1, 1.4]	$0.89\ [0.2, 3.8]$	1.37 [0.5, 3.7]
Monthly or less	0.59 [0.1, 4.3]	0.24 [0.1, 1.2]	$0.31 \ [0.1, 1.3]$	0.94 [0.3, 2.6]
Never	$0.59\ [0.1, 4.5]$	$0.50\ [0.1, 2.7]$	0.25 [0.1, 1.0]	0.63 [0.2, 2.0]

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 $^{a}\!\!\!\!$  Sample restricted to respondents reporting ever having oral, vaginal, or anal sex.

p < .05.p < .01.p < .01.p < .001.