Acculturation, Sexual Behaviors, and Health Care Access Among Hispanic and Non-Hispanic White Adolescents and Young Adults in the United States, 2006–2010

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Abstract

Purpose—To examine national estimates of sexual behaviors and health care access by acculturation among adolescents.

Methods—Using the 2006–2010 National Survey of Family Growth, four acculturation groups of Hispanic and non-Hispanic whites aged 15–24 years were analyzed by sexual behaviors and health care access.

Results—In analyses adjusted for demographics, English-speaking immigrants, Hispanic natives, and non-Hispanic white youth were less likely to have a partner age difference of 6 years (adjusted odds ratio [AOR], .28; 95% confidence interval [CI], .13–.60; AOR, .13; 95% CI, .07–.26; AOR, .16; 95% CI, .08–.32, respectively) and more likely to use a condom at the first vaginal sex (AOR, 1.99; 95% CI, 1.10–3.61; AOR, 2.10; 95% CI, 1.33–3.31; AOR, 2.39; 95% CI, 1.53–3.74, respectively) than Spanish-speaking immigrants. Non-Hispanic white youth and Hispanic natives were more likely to have a regular place for medical care (AOR, 2.07; 95% CI, 1.36–3.16; AOR, 3.66; 95% CI, 2.36–5.68, respectively) and a chlamydia test in the past 12 months (AOR, 3.62; 95% CI, 1.52–8.60; AOR, 2.94; 95% CI, 1.32–6.54) than Spanish-speaking immigrants.

Conclusions—Interventions to reduce risk and increase health care access are needed for immigrant Hispanic youth, particularly Spanish-speaking immigrants.

Keywords

Adolescents; Sexual behavior; Sexually transmitted diseases; Access to health care

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Hispanic youth face many sexual and reproductive health challenges including unplanned pregnancy and a disproportionate burden of sexually transmitted infections (STIs) compared with non-Hispanic white youth [1,2]. Hispanics are the fastest growing demographic in the United States, the largest and youngest ethnic minority group, and many are immigrants [1,2]. Hispanic youth may be at higher risk for STIs because of a combination of acculturation (as defined by language and nativity), sexual behaviors (e.g., condom use, age discordance with partner at first sex), and access to health care services (e.g., health insurance, regular place for medical care) [2–4]. Increased acculturation among Hispanic youth is associated with not only increased risk of earlier sexual debut and sexual risk taking but also more positive condom beliefs and use of condoms [5–8]. However, few studies on acculturation, including nationally representative studies, have compared Hispanic and non-Hispanic white youth, the majority racial/ethnic group in the United States [5–9]. The purpose of this study was to describe national estimates of sexual behaviors and health care access for STIs by acculturation among Hispanic and non-Hispanic white youth.

Methods

Data are from the 2006–2010 National Survey of Family Growth, a national household probability sample of men and women in the United States. Interviews were conducted in English and Spanish; Hispanics and youth (ages 15–24 years) were oversampled. Demographics and health care access were collected through computer-assisted personal interviews. Sexual behavior and self-reported chlamydia testing were collected through audio computer-assisted self-interviews. The response rate was 75% for males and 78% for females. Analyses were restricted to 6,091 Hispanic and non-Hispanic white youth, ages 15–24 years.

We created a proxy for acculturation, similar to previous acculturation studies, using three variables: race/ethnicity (Hispanic and non-Hispanic white), language of the audio computer-assisted self-interviews survey (English speaking or Spanish speaking), and nativity (U.S. native or non-U.S. native) [7–9]. The four acculturation groups were Hispanic, Spanish-speaking, non-U.S. native (Spanish-speaking immigrants), n = 262; Hispanic, English-speaking, non-U.S. native (English-speaking immigrants), n = 297; Hispanic, English-speaking, U.S. native (Hispanic natives), n = 1,367; and non-Hispanic white, English-speaking, U.S. native (non-Hispanic white youth), n = 4,165. Non-U.S. native and non–English-speaking non-Hispanic white youth were excluded from analyses.

We analyzed acculturation groups by demographics, sexual behaviors, and health care access using bivariate analyses. We examined acculturation groups adjusted for demographics in association with selected behavioral and health care access outcomes identified from previous research [3,5,6,8,9]. SAS-callable SUDAAN 11.0.0 (Research Triangle Institute, Research Triangle Park, NC) was used for analyses.

Results

English-speaking immigrants reported living in the United States for an average of 12.6 years compared with 4.8 years for Spanish-speaking immigrants (Table 1). When comparing

the four acculturation groups by demographics, they varied by age, income-to-poverty ratio, and metropolitan residence but did not vary by gender. Spanish-speaking immigrants were more likely to be older, live in urban areas, and report a household income below the federal poverty level compared with other acculturation groups.

The majority (62.9%) of Hispanic and non-Hispanic white adolescents and young adults reported ever having vaginal sex (data not shown in tables). However, in bivariate analyses, reports of ever having vaginal sex were significantly higher among Spanish-speaking immigrants (76.2%) compared with other acculturation groups (61.7%–65.8%). Age difference with a partner at the first vaginal sex varied significantly by acculturation group with 27.2% of Spanish-speaking immigrants reporting an age difference of 6 years compared with <10% among other groups (4.2%–8.2%). Among youth who ever reported vaginal sex, significantly fewer Spanish-speaking immigrants used a condom at first sex (52.6%) compared with the other groups (70.6%–73.6%). However, condom use at the most recent vaginal sex did not significantly differ in acculturation group. Among other sexual behaviors, more non-Hispanic white youth (57.3%) reported ever having oral sex compared with Hispanic youth (47.5%–47.9%) but there was no significant difference in reporting ever having anal sex.

For health care access, most Spanish-speaking immigrants (64.8%) reported no health insurance coverage as opposed to most non-Hispanic white youth reporting private health insurance (70.2%). Similar to trends of health insurance coverage, 70.2% of Spanish-speaking immigrants reported a gap in insurance during the past 12 months compared with only 22.8% of non-Hispanic white youth. For health care utilization, among females, reporting receipt of a chlamydia test (past 12 months) was significantly higher for U.S.-native youth (Hispanic and non-Hispanic white) compared with Hispanic immigrants. Among males, reporting receipt of an STD test (past 12 months) did not differ in acculturation groups.

After controlling for demographics in adjusted analyses, English-speaking immigrants, Hispanic natives, and non-Hispanic white youth did not differ significantly in ever having vaginal sex compared with Spanish-speaking immigrants, but they were less likely to have an age difference of 6 years with their partner at the first vaginal sex (Table 2). For protective sexual behavior, English-speaking immigrants (adjusted odds ratio [AOR], 1.99; 95% confidence interval [CI], 1.10–3.61), Hispanic natives (AOR, 2.10; 95% CI, 1.33–3.31), and non-Hispanic white youth (AOR, 2.39; 95% CI, 1.53–3.74) were more likely to have used a condom at the first vaginal sex than Spanish-speaking immigrants. For health care access and utilization, Hispanic natives and non-Hispanic white youth were more likely to have a regular place for medical care (AOR, 2.07; 95% CI, 1.36–3.16; AOR, 3.66; 95% CI, 2.36–5.68, respectively) and a chlamydia test, for females, in the past 12 months (AOR, 3.62; 95% CI, 1.52–8.60; AOR, 2.94; 95% CI, 1.32–6.54, respectively).

Discussion

Sexual behavior and health care access varied by acculturation groups within this nationally representative sample of Hispanic and non-Hispanic white youth. Similar to previous

literature, condom use at the first sex was higher among Hispanic subgroups considered more acculturated, and Hispanic youth were less likely to report access to health care [3,5]. Limitations of this study include using language preference as a proxy for acculturation and potential bias because of self-report.

Few sexual health interventions have been developed and systematically evaluated to reach Hispanic youth [10]. These findings suggest that public health efforts in STD prevention among Hispanic youth may need to be tailored for specific subgroups based on acculturation. Finally, research focusing on unique cultural contexts among subgroups of Hispanic adolescents may aid in understanding the role of acculturation on risky and protective sexual behaviors, reducing health disparities, using culturally tailored programs, and improving health care access and utilization [1,8].

Acknowledgments

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IMPLICATIONS AND CONTRIBUTION

This study describes national estimates of sexual behaviors and health care access among three acculturation groups of Hispanic adolescents and young adults and non-Hispanic white youth. Findings from this study are generalizable and may benefit interventions to reduce risk and improve access to health care among Hispanic youth.

Table 1

Demographic characteristics, sexual behaviors, and health care access and utilization of Hispanic and non-Hispanic white adolescents and young adults, age 15–24 years, by language of interview and nativity, National Survey of Family Growth 2006–2010 (n = 6,091)

Unweighted sample size (weighted %)	Racial/ethnic groups by language and nativity				p value[a]
	Hispanic, *Spanish, non-U.S. native*, n = 262 (4.0%); % (SE)	Hispanic, *English, non-U.S. native*, n = 297 (3.3%); % (SE)	Hispanic, *English, U.S. native*, n = 1,367 (15.6%); % (SE)	Non-Hispanic white, *English, U.S. native*, n = 4,165 (77.1%); % (SE)	
Population total estimate	1,296,000	1,052,000	5,023,000	24,874,000	
Time in U.S. (years), mean (SE)	4.8 (.4)	12.6 (.5)	—	—	<.0001
Demographic characteristics					
Age (years)					<.0001
15–19	28.2 (3.8)	52.9 (3.8)	58.6 (1.9)	49.9 (1.7)	
20–24	71.8 (3.8)	47.1 (3.8)	41.4 (1.9)	50.1 (1.7)	
Gender					.9347
Female	46.1 (4.7)	49.1 (4.3)	49.2 (1.8)	49.0 (1.1)	
Male	54.0 (4.7)	50.9 (4.3)	50.8 (1.8)	51.0 (1.1)	
Income–poverty ratio					<.0001
0%–133% federal poverty level	70.6 (3.5)	49.4 (4.1)	46.3 (2.5)	30.2 (1.3)	
134% federal poverty level	29.4 (3.5)	50.6 (4.1)	53.7 (2.5)	69.8 (1.3)	
Residence					.0002
MSA, central city	41.2 (4.6)	38.9 (4.9)	41.5 (3.8)	29.5 (3.8)	
MSA, other	46.2 (5.2)	50.3 (5.5)	50.9 (4.4)	45.1 (3.0)	
Non-MSA	12.6 (5.1)	10.8 (4.3)	7.6 (2.2)	25.4 (2.7)	
Sexual behaviors[b]					
Ever had vaginal sex					.0024
Yes	76.2 (3.3)	65.8 (3.8)	64.7 (1.7)	61.7 (1.7)	
No	23.8 (3.3)	34.2 (3.8)	35.3 (1.7)	38.3 (1.7)	
Only had vaginal sex once					.1654
Yes	1.8 (1.0)	4.6 (1.7)	5.0 (.9)	3.8 (.5)	
No	98.3 (1.0)	95.4 (1.7)	95.0 (.9)	96.3 (.5)	
Age difference at the first vaginal sex					.0004
5 years	72.9 (4.1)	91.8 (2.8)	95.8 (.8)	94.9 (.8)	

Unweighted sample size (weighted %)	Racial/ethnic groups by language and nativity				p value[a]
	Hispanic, Spanish, non-U.S. native, n = 262 (4.0%); % (SE)	Hispanic, English, non-U.S. native, n = 297 (3.3%); % (SE)	Hispanic, English, U.S. native, n = 1,367 (15.6%); % (SE)	Non-Hispanic white, English, U.S. native, n = 4,165 (77.1%); % (SE)	
6 years	27.2 (4.1)	8.2 (2.8)	4.2 (.8)	5.1 (.8)	
Condom use at the first vaginal sex					.0022
Yes	52.6 (4.3)	70.6 (4.3)	71.0 (2.5)	73.6 (2.1)	
No	47.4 (4.3)	29.4 (4.3)	29.0 (2.5)	26.4 (2.1)	
Condom use at the last vaginal sex					.1305
Yes	41.0 (4.7)	53.1 (5.4)	51.7 (2.6)	53.3 (1.9)	
No	59.0 (4.7)	46.9 (5.4)	48.3 (2.6)	46.7 (1.9)	
Ever had oral sex					.0066
Yes	47.8 (4.2)	47.9 (3.7)	47.5 (1.8)	57.3 (2.0)	
No	54.2 (4.2)	52.1 (3.7)	52.6 (1.8)	42.7 (2.0)	
Ever had anal sex					.3913
Yes	28.2 (4.2)	26.3 (3.6)	22.7 (1.3)	22.0 (1.4)	
No	71.8 (4.2)	73.7 (3.6)	77.3 (1.3)	78.0 (1.4)	
Health care access and utilization					
Health insurance coverage[c]					<.0001
Private insurance[d]	15.1 (3.6)	35.9 (3.4)	42.8 (2.0)	70.2 (1.8)	
Public insurance[e]	20.1 (3.2)	23.3 (3.1)	32.1 (2.1)	15.0 (1.1)	
No insurance[f]	64.8 (4.2)	40.8 (3.6)	25.1 (2.0)	14.8 (1.0)	
Gap in health insurance, past 12 months					<.0001
Yes	70.2 (3.8)	53.4 (3.8)	33.3 (2.3)	22.8 (1.3)	
No	29.8 (3.8)	46.6 (3.8)	66.7 (2.3)	77.2 (1.3)	
Regular place for medical care[g]					.0001
Yes	48.5 (5.3)	60.2 (4.7)	70.5 (1.9)	80.8 (1.2)	
No	51.5 (5.3)	39.8 (4.7)	29.6 (1.9)	19.2 (1.2)	
Chlamydia test, past 12 months (females)[h]					.0191
Yes	15.1 (4.6)	19.3 (3.8)	28.1 (3.2)	25.5 (1.8)	
No	84.9 (4.6)	80.7 (3.8)	71.9 (3.2)	74.5 (1.8)	

Unweighted sample size (weighted %)	Racial/ethnic groups by language and nativity				
	Hispanic, Spanish, *non-U.S. native*, **n = 262 (4.0%); % (SE)**	Hispanic, *English, non-U.S. native*, **n = 297 (3.3%); % (SE)**	Hispanic, *English, U.S. native*, **n = 1,367 (15.6%); % (SE)**	Non-Hispanic white, *English, U.S. native*, **n = 4,165 (77.1%); % (SE)**	*p* value[a]
STD test, past 12 months (males)[h]					.2059
Yes	14.5 (4.8)	15.5 (4.9)	17.3 (1.9)	12.3 (1.4)	
No	85.5 (4.8)	84.5 (4.9)	82.7 (1.9)	87.7 (1.4)	
STD treatment, past 12 months					.6193
Yes	2.9 (1.1)	2.4 (.9)	3.8 (.6)	3.7 (.4)	
No	91.1 (1.1)	97.6 (.9)	96.3 (.6)	96.3 (.4)	

CMH = Cochran-Mantel-Haenszel; MSA = metropolitan statistical area; SE = standard error; STD = sexually transmitted disease.

[a] *p* Values are estimated for the CMH Test of Association.

[b] The following variables were only asked of respondents that reported ever having vaginal sex: only had vaginal sex once, age difference at the first vaginal sex, condom use at the first vaginal sex, and condom use at the last vaginal sex.

[c] Health insurance coverage was current as of the interview date. Several response options were recoded into public, private, and no insurance.

[d] Private health insurance includes private or Medi-Gap.

[e] Public health insurance includes Medicaid, Children's Health Insurance Program, state-sponsored health plan, Medicare, military health care, or other government health care.

[f] No health insurance includes single-service plan, only by the Indian Health Service, or not covered by health insurance.

[g] The regular place for medical care was asked from 2008 to 2010 (n = 4,599).

[h] For males, the STD test is for gonorrhea, chlamydia, herpes, or syphilis, in the past 12 months. For females, the STD test is a chlamydia test in the past 12 months. There is a statistically significant difference in the CMH chi-square test of association for gender and STD test (*p* value <.0001).

Table 2

Adjusted analyses (adjusted odds ratios and 95% confidence intervals) for sexual behaviors and health services by demographic characteristics of Hispanic and non-Hispanic white adolescents and young adults, aged 15–24 years, National Survey of Family Growth, 2006–2010[a]

Correlate	Sexual behaviors and health services				
	Ever had vaginal sex; unweighted n = 6,091	Age difference of ≥6 years at the first vaginal sex; unweighted n = 3,877[b]	Used condom at the first vaginal sex; unweighted n = 3,877[b]	Regular place for medical care; unweighted n = 4,599[c]	Chlamydia test, past 12 months (females only); unweighted n = 3,089
Racial/ethnic group					
Hispanic, Spanish, non-U.S. native[d]	Referent	Referent	Referent	Referent	Referent
Hispanic, English, non-U.S. native[d]	.96 (.54–1.68)	.28 (.13–.60)*	1.99 (1.10–3.61)**	1.30 (.70–2.42)	1.73 (.66–4.55)
Hispanic, English, U.S. native[d]	1.04 (.72–1.48)	.13 (.07–.26)*	2.10 (1.33–3.31)*	2.07 (1.36–3.16)*	3.62 (1.52–8.60)*
Non-Hispanic white, English, U.S. native[d]	.65 (.41–1.04)	.16 (.08–.32)*	2.39 (1.53–3.74)*	3.66 (2.36–5.68)*	2.94 (1.32–6.54)*
Age (years)					
15–19	.12 (.09–.15)*	.73 (.50–1.07)	1.20 (.93–1.54)	1.60 (1.29–1.99)*	.29 (.23–.36)*
20–24	Referent	Referent	Referent	Referent	Referent
Gender					
Female	1.14 (.97–1.34)	2.53 (1.50–4.27)*	.60 (.48–.75)*	1.78 (1.39–2.27)*	—
Male	Referent	Referent	Referent	Referent	—
Income–poverty ratio					
0%–133% federal poverty level	.90 (.70–1.16)	1.47 (.93–2.34)	.89 (.71–1.10)	.84 (.68–1.05)	1.30 (1.01–1.68)**
≥134% federal poverty level	Referent	Referent	Referent	Referent	Referent
Residence					
MSA, central city	.63 (.39–1.01)	.96 (.54–1.69)	.89 (.53–1.52)	.78 (.50–1.24)	1.16 (.67–2.01)
MSA other	.75 (.58–.97)**	.87 (.47–1.63)	1.06 (.72–1.56)	.85 (.56–1.30)	1.25 (.87–1.79)
Non-MSA	Referent	Referent	Referent	Referent	Referent

MSA = metropolitan statistical area.

[a] Analyses were adjusted for age, gender, income–poverty ratio, and residence.

[b] The following variables were only asked of respondents who reported ever having vaginal sex: age difference at the first vaginal sex and condom use at the first vaginal sex.

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[c] The regular place for medical care was asked from 2008 to 2010 (n = 4,599).

[d] Language of the audio computer-assisted self-interviews survey.

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$p < .01$.

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$p < .05$.