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Sexual Double Standards in White and Asian Americans: Ethnicity, Gender, and Acculturation

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Abstract

This study compares attitudes of sexual double standards (beliefs that grant more sexual freedom to men than to women) in White and Asian Americans. 506 heterosexual participants living in the U.S. (334 Whites and 172 Asians aged 18-45) answered questions assessing their attitudes towards men and women displaying various liberal sexual behaviors. Asian participants also indicated their levels of American acculturation and Asian cultural affiliation. The study found significant evidence of sexual double standards in both Whites and Asians, with certain ethnically different patterns. Whites and Asians did not differ significantly in their levels of sexual double standards when it concerned casual sexual and multiple sexual partners at the same time. However, Asians expressed stronger support for double standards than Whites when evaluating people for taking the initiative in sex and for having a large accumulated number of sexual partners. In both ethnic groups, men demonstrated stronger double standards than did women. Both Whites and Asians, regardless of gender, reported more conservative sexual attitudes for choosing marriage partners than in judging people in general. In the case of Asians, American acculturation and Asian cultural affiliation had limited and gender-specific effects on endorsement of sexual double standards. This study not only addresses an important gap in the sexual double standards literature but also brings new insights to the general discussion of ethnic differences in sexual attitudes.

Keywords Sexual attitudes \cdot Sexual behavior \cdot Sexual double standards \cdot Ethnic differences \cdot Gender differences \cdot Acculturation \cdot White American \cdot Asian American

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Introduction

Traditional sexual double standards that grant more sexual freedom to men than to women constitute an important dimension of gender inequality and are well documented in multiple human societies (e.g., Bordini and Sperb 2013; Smith 2010; Lee et al. 2010; Sierra et al. 2010). At the same time, the specific rules and degrees of sexual double standards seem to vary across cultures and ethnic groups, reflecting different social norms of gender and sexuality (Sprecher and Hatfield 1996; Haavio-Mannila and Kontula 2003). However, while substantial research has investigated sexual double standards in different cultures and ethnic groups, only a few studies have engaged in direct cross-cultural or cross-ethnic comparisons (Sprecher and Hatfield 1996; Haavio-Mannila and Kontula 2003; also see the reviews of Bordini and Sperb 2013; Fugère et al. 2008; Crawford and Popp 2003). More comparative research on sexual double standards would thus be beneficial for better understanding how societies and cultural groups differ in this key aspect of gender inequality.

This study examines support of sexual double standards among White and Asian Americans. On the one hand, Asians are the minority group growing most rapidly in the U.S., predicted to account for nearly 10% of the American population in 2060 according to the Census Bureau (Colby and Ortman 2015). On the other hand, research has found significant cultural differences in sexuality between Asians and Westerners. For example, Asians are considerably more conservative and traditional than Whites in sexual attitudes and behavior (e.g., Tong 2013; Gillmore et al. 2011; Meston and Ahrold 2010; Cavazos-Rehg et al. 2009; Ahrold and Meston 2010). Given the growing number of Asian Americans and the documented cultural differences between Asians and Whites, it would be especially valuable to investigate how the two ethnic groups compare with each other in their endorsement of sexual double standards.

The study particularly builds on the recent literature on sexual double standards and examines the types of liberal sexual behavior that people still tend to find more acceptable for men than for women, including taking the initiative in sex, having casual sex, having multiple sexual partners at the same time, having a history of many sexual partners, and accepting someone with a liberal sexual history as the marriage partner. This study investigates whether White and Asian Americans hold double standards in judging these types of sexual behavior among men and women respectively and whether the two ethnic groups present different levels and patterns in their endorsement of sexual double standards. It also analyzes how adopting American mainstream culture and remaining close to Asian traditional culture shapes Asians' attitudes of sexual double standards.

This study not only provides new empirical evidence for testing the existence of sexual double standards in the mainstream American culture, it also adds cultural diversity to the field by analyzing sexual double standards both within Asians and comparing Asians to Whites. This study further contributes to the broader discussion of sexual attitudes in the context of ethnic differences and acculturation, because it brings nuances into the measurement of sexual attitudes by specifying the gender of the target towards whom the attitudes are directed. In the rest of the section, I first briefly introduce the concept of sexual double standards and the aspects of sexuality where traditional double standards still appear to hold. I then review the current status of cultural comparative studies in the field of sexual double standards and demonstrate the need of more research in this direction. After reviewing the relevant research on sexuality in Asian cultures, I develop a set of hypotheses regarding how White and Asian Americans might compare to each other regarding their sexual attitudes in general and their endorsement of sexual double standards in particular.

Sexual Double Standards

Sexual double standards refer to notions that people judge sexual behavior differently depending on whether the sexual actor is a woman or a man (Kreager and Staff 2009). With traditional sexual double standards, it is more socially acceptable for men to engage in sexually permissive behavior, while women tend to receive stigma for expressing or pursuing their sexual desires (Bordini and Sperb 2013; Petersen and Hyde 2011; Fugère et al. 2008). Reiss (1967) conducted the first systematic study on sexual double standards and found gender inequality in people's judgment of premarital sexual activity. At the same time, Reiss (1967) predicted that these double standards would decrease over time with social changes in factors such as women's participation in the labor force, liberalized attitudes toward sexuality in general, and better health resources for preventing pregnancy and sexually transmitted diseases (Crawford and Popp 2003).

After almost five decades, however, sexual double standards seem to remain at work. While people appear to have accepted premarital sex for men and women equally (DeLamater and MacCorquodale 1979; King et al. 1977), perceptions of other facets of sexuality continue to indicate double standards (Bordini and Sperb 2013). For example, the expectation is still that men rather than women should initiate sexual activity (Reid et al. 2011; Aubrey 2004; Hartley and Drew 2002; Eder et al. 1995); people still rate women more negatively than men for having casual sex (Katz et al. 2012; Ronen 2010; Smith et al. 2008; Kulkarni 2007; Hillier et al. 1998; Sprecher and Hatfield 1996); people still expect women to have fewer sexual partners than men (Kreager and Staff 2009; Marks 2008; Marks and Fraley 2007; Feldman et al. 1999; Sheeran et al. 1996); and, men still seem to prefer women with more conservative sexual histories for long-term relationships (Fromme and Emi-hovich 1998; Oliver and Sedikides 1992; Moffat 1989).

Scholars generally agree that complete gender egalitarianism in sexuality has not yet been achieved (for reviews and some counter-evidence, see Crawford and Popp 2003; Fugère et al. 2008; Bordini and Sperb 2013). Sexual double standards, or at least people's belief of their existence, continue to have serious implications for sexuality of both men and women. They can lead to difficulty in consent communication (Jozkowski et al. 2017), discourage women from asserting their sexual agency (Greene and Faulkner 2005; Measor et al. 2000), increase risky sexual behavior under certain circumstances (Kelly and Bazzini 2002; Loxley 1996; Hynie and Lydon 1995; Muehlenhard and Quackenbush

1996), perpetuate rape myths (Lee et al. 2010; Sierra et al. 2010), and result in unjust judgment of sex offenses (Sahl and Keene 2010). Given the continuous relevance of sexual double standards, research will be valuable in continuing to assess the prevalence of the double standards and particularly the ways in which they vary across cultures and ethnic groups.

Cultural Comparisons of Sexual Double Standards

Research has mostly investigated sexual double standards in a context of cultural homogeneity. On the one hand, studies focusing on sexual double standards within Western society tend not to analyze racial or ethnic differences systematically. In Crawford and Popp's review of the past 20 years of research (2003), only four quantitative studies "mentioned the racial or ethnic composition of their sample, and none reported analyses by race or ethnicity of participant. Not one manipulated the race or ethnicity of targets" (2003: 19). Bordini and Sperb (2013) made a similar observation 10 years later. The quantitative research they reviewed on sexual double standards published between 2001 and 2010 "investigated similar samples and most of them did not consider participants' ethnicity" (Bordini and Sperb 2013: 702). Although qualitative studies related to sexual double standards have used more racially diverse samples or paid exclusive attention to minority groups (e.g., Fasula et al. 2014; Devries and Free 2010; Fasula et al. 2007; Thompson 1995; Orenstein 1994; Ward and Taylor 1994; Fullilove et al. 1990), the research has not allowed for systematic comparisons across groups (Crawford and Popp 2003).

On the other hand, studies have examined sexual double standards outside of Western society (e.g., Smith 2010; Lee et al. 2010; Sierra et al. 2010), although rarely with the goal of cross-cultural comparisons. Two exceptions are Sprecher and Hatfield (1996) and Haavio-Mannila and Kontula (2003). Sprecher and Hatfield (1996) collected data on college students' attitudes about premarital sex in the U.S., Japan, and Russia. They found that Russian students supported sexual double standards more than Japanese and American students and that, among Americans, men endorsed double standards more than women regarding sex at an early dating stage. Haavio-Mannila and Kontula (2003) compared gender equality in sexuality in Finland at three points in time (1971, 1992, and 1999) and in two former Soviet areas, Estonia (in 2000) and St. Petersburg (in 1996). Their results showed that Finland in the 1990s had a more egalitarian sexual culture than St. Petersburg, Estonia, and Finland in 1971.

Although somewhat limited, the research literature on understandings and endorsements of sexual double standards shows some variation across cultures and ethnic groups. Building on this literature, this study directly compares sexual double standards among White and Asian Americans and responds to scholars' call for more cultural diversity and comparison in research on sexual double standards (Kreager and Staff 2009; Fugère et al. 2008; Marks and Fraley 2005; Crawford and Popp 2003; Bordini and Sperb 2013; Fugère et al. 2008; Crawford and Popp 2003).

Sexuality and Sexual Double Standards in Asian Americans

Asian Americans trace their origins to one or more of 28 Asian countries or ethnic groups and constitute a highly heterogeneous group in terms of histories and cultures (Okazaki 2002). As of 2015, there were 21 million Asian residents in the U.S., and the largest Asian groups were Chinese (23% not counting Taiwanese), Asian Indian (19%), Filipino (18.6%), Vietnamese (9.5%), Korean (8.6%), and Japanese (6.7%) (United States Census Bureau 2017). Despite such heterogeneity, however, Asian Americans share certain Asian cultural traditions and tend to present similar patterns in values and practices related to sexuality.

The most prominent feature of Asian Americans' sexuality concerns its relative conservatism compared to other ethnic groups. Studies using adolescent or college student samples consistently find Asian Americans to initiate sexual intercourse at an older age, report fewer sexual partners and casual sexual encounters, and show less knowledge about sexual wellbeing than other groups (Tong 2013; Gillmore et al. 2011; Meston and Ahrold 2010; Cavazos-Rehg et al. 2009; Ahrold and Meston 2010; Regan et al. 2004; Kennedy and Gorzalka 2002; for research prior to 2000, see the review of Okazaki 2002). Studies involving adult samples also indicate that Asian Americans report less sexual activity and lower rates of intercourse than other racial and ethnic groups (Laumann et al. 2005; Cain et al. 2003).

Scholars attribute the relatively conservative sexual attitudes and behavior among Asian Americans partly to traditional Asian cultures that stress sexual conservatism, including emphasizing modesty and constraint as appropriate codes for sexual conduct, stigmatizing non-marital or recreational sexual activity, and controlling members' sexuality in a collectivist cultural context that ties the sexuality of an individual, especially a woman, to family honor (e.g., Tsunokai et al. 2012; Kim 2009; Kim and Ward 2007; Laumann et al. 2005; Brotto et al. 2005; Okazaki 2002; Zhang et al. 1999). Indeed, as Asian Americans become more immersed in Western cultures, they tend to adopt sexual attitudes and practices that are more "Western" and more liberal (Tong 2013; Meston and Ahrold 2010; Ahrold and Meston 2010; Meston et al. 1998). At the same time, Asian Americans who remain close to their Asian cultural heritage do not necessarily develop liberal sexuality even with high levels of American acculturation (Meston and Ahrold 2010; Ahrold and Meston 2010; Berry et al. 2006; Brotto et al. 2005).

In addition to their general sexual conservatism, Asian Americans also seem to endorse traditional sexual double standards (e.g., Morton and Gorzalka 2013; Lee et al. 2010). While Asian cultures stipulate sexual restriction for both men and women, women's sexuality is regulated more strictly (Ebrey 2006; Okazaki 2002; Ng and Lau 1990). For example, Asian societies highly value women's premarital virginity and often associate the sexual conduct of women to family reputation (Lee et al. 2005, 2010; Kim 2009; Kim and Ward 2007; Inman et al. 2001; Lam et al. 2002; Espiritu 2001; Luo 2000; Gupta 1999; Liu 1997; Wong 1987; Stacey 1983). Even within marriage, female sexuality is suppressed and perceived as to be under the control of a woman's husband for reproduction or his pleasure (Luo 2000; Abraham 1999; Gil and Anderson 1999). Moreover, although communication about sex within Asian American families is uncommon and implicit, Asian parents tend to convey more prohibitive messages to daughters and regulate their activities more strictly than in the case of sons (e.g., Trinh et al. 2014; Tong 2013; Kim 2009; Kim and Ward 2007; Talbani and Hasanali 2000).

Similar expressions of sexual double standards also appear in other ethnic groups (e.g., Flores and Barroso 2017; Brown et al. 2014; Heisler 2014; Sneed et al. 2013; Akers et al. 2010; Martin and Luke 2010; Murphy-Erby et al. 2011; Stauss et al. 2011; Wilson and Koo 2010; Averett et al. 2008; Aronowitz et al. 2007). But some indirect evidence suggests that Asian cultures may endorse sexual double standards more strongly than other ethnic groups, especially White Americans. For instance, Morton and Gorzalka's study (2013) on the sexual beliefs among female undergraduates in Canada found that, compared to Euro-Canadian women, East Asian women agreed more with the ideas that sex is a male activity and that women's sexual urges are sinful and in need of control. And Asian women more acculturated in Canadian culture were less likely to hold dysfunctional sexual beliefs (Morton and Gorzalka's study 2013).

Moreover, some research finds that Asian Americans accept rape myth and sexual harassment more than other groups, such as holding women responsible for preventing sexual assault and perceiving male sexual drive as the main motivation behind rape (Devdas and Rubin 2007; Lee et al. 2005; Kennedy and Gorzalka 2002; Mori et al. 1995). This may reflect stronger support of sexual double standards among Asian than other Americans, given that research has found belief in rape myths and acceptance of violence against women to be associated with endorsement of traditional gender roles and misogynistic attitudes across cultures (Lin et al. 2016; Lee et al. 2010, 2012; Süssenbach and Bohner 2011; White and Kurpius 2002; Xenos and Smith 2001). At the same time, Asian Americans' tolerance of sexual assault tends to reduce with longer residency in Western society and increasing level of Western acculturation (Ho et al. 2018; Koo et al. 2012; Devdas and Rubin 2007; Kennedy and Gorzalka 2002).

Hypotheses

Based on the literature, I propose three sets of hypotheses regarding Asian Americans' sexual attitudes and endorsement of sexual double standard as compared to White Americans. First, because Asian Americans in previous studies have demonstrated more conservative sexual attitudes than White Americans regarding relatively standard sexual behavior, I expect to identify similar differences when it concerns liberal sexual behaviors relevant to the contemporary discussion of sexual double standards, including sex initiative of women, casual sex, having multiple sexual partners at the same time, having a large accumulated number of sexual partners, and accepting someone with a liberal sexual history as the spouse.

Hypothesis 1: Asian Americans will report more conservative sexual attitudes than White Americans regarding the liberal sexual behaviors.

Second, Research has found the continuous existence of sexual double standards in mainstream American society, and Asian cultures also seem to grant more sexual freedom to men than to women. At the same time, there is indirect evidence suggesting that Asian Americans endorse traditional gendered sexual beliefs more than White Americans. Therefore, I predict that:

Hypothesis 2a: Both White and Asian Americans will demonstrate support of traditional sexual double standards.

Hypothesis 2b: Asian Americans will demonstrate stronger support of traditional sexual double standards than White Americans.

Third, building on the foregoing hypotheses, I predict that:

Hypothesis 3a: Higher level of American acculturation and lower Asian cultural affiliation will be associated with more liberal sexual attitudes among Asian Americans.

Hypothesis 3b: Higher level of American acculturation and lower Asian cultural affiliation will be associated with less endorsement of sexual double standards among Asian Americans.

In addition to ethnicity and acculturation, this study also takes into account the influence of gender, sexual experience and education on sexual attitudes and double standards. Although I do not make specific predictions about these factors due to complicated mechanisms, I explore their effects in the empirical analyses.

Gender consistently plays a significant role in the discussion of sexuality. Studies on Western societies generally find men to report more sexual activity and more liberal sexual attitudes, although the gender differences tend to be small and declining across time (see the reviews of Petersen and Hyde 2011 and Fugère et al. 2008). Men have also expressed stronger sexual double standards than women (e.g., Fugère et al. 2008; Haavio-Mannila and Kontula 2003; Sprecher and Hatfield 1996). Among Asian Americans, young women often report more liberal sexual behaviors than young men, although Asian young men (e.g., Meston and Ahrold 2010). The effect of acculturation on Asian Americans' sexuality also appears to be gendered, as Asian women are found to be more strongly affected by acculturation than Asian men (Tong 2013; Hahm et al. 2006; Brotto et al. 2005, 2007). Given the significant role played by gender in various aspects of people's sexuality, this study does not just compare sexual attitudes and sexual double standards across the two ethnic groups but consider ethnicity-by-gender differences.

Some research has also found sexual experience to be associated with both sexual attitudes in general and attitudes about sexual double standards particularly (Kelly and Bazzini 2002). According to what Sprecher et al. (1991) called "similarity effect", one's sexual attitudes toward other people tend to reflect one's own sexual

standards. People with more sexual experience report more permissive sexual attitudes (Kelly and Bazzini 2002; Zuckerman et al. 1976), and people who are more sexually experienced also seem to demonstrate less support for sexual double standard in certain cases (Kelly and Bazzini 2002; Kelley 1979; for a counter-case, see O'Sullivan 1995). Having found Asian Americans to feel more conservative about casual sex than other ethnic groups, Meston and Ahrold (2010) posed the question of whether this was due to Asians' having less practice of casual sex. It is thus important to take sexual experience into account when comparing sexual attitudes and sexual double standard between White Americans and Asian Americans.

Furthermore, Education promotes political and social liberalism and tolerance for nonconformity in general (e.g., Hjerm et al. 2018; Hello et al. 2006; Bobo and Licari 1989; Weil 1985; Nunn et al. 1978). More specifically, education is found to be positively associated with liberal sexual attitudes (Treas 2002) and endorsement of gender egalitarianism (see the review of Davis and Greenstein 2009; Valenzuela 1993). This study thus also includes education in the analyses of sexual attitudes and sexual double standards of White and Asian Americans.

Methods

Participants

I collected data through conducting a survey on Amazon's Mechanical Turk (MTurk). MTurk is an online labor market where researchers post their research requests and workers choose to participate for pay. It has become popular in experimental and survey-based social science research in recent years (Krupnikov and Levine 2014; Chandler et al. 2014; Berinsky et al. 2012; Mason and Suri 2012). Researchers have repeatedly attested to the quality of data from MTurk (Hauser and Schwarz 2015; Berinsky et al. 2012; Summerville and Chartier 2012; Behrend et al. 2011). MTurk participants and other (e.g., student) samples are also similar in terms of personality dimensions and decision-making biases (Goodman et al. 2013). Moreover, MTurk samples are more representative of the U.S. population than inperson convenience samples (Berinsky et al. 2012), even though MTurk participants are less representative than subjects in national probability samples (Huff and Tingley 2015). Given the fact that many studies on sexuality used convenient student samples, using MTurk meant both compatible conversations with the literature and an improvement toward national representativeness.

Anticipating the difficulty of recruiting Asian participants on MTurk (Ross et al. 2010), I first carried out a pre-screening survey on MTurk that targeted people who identified themselves as Asian and heterosexual. The pre-screening survey contained four simple questions asking about the participants' race or ethnicity, age, sexuality, and American citizenship, and I paid each respondent 80 cents. Two hundred people responded to the pre-screening survey, among which 16 people were either not Asian or not heterosexual but entered the survey by mistake. I contacted the remaining 184 participants who fit the profile through anonymous system IDs provided by MTurk and invited them to participate in the full survey.

Variables	White male (N=182)	White female (N=152)	Asian male (N=103)	Asian female (N=69)
Mean age in years (SD)	32.8 (6.9)	34.1 (7.7)	29.8 (6.5)	30.7 (7.3)
Education (% of each group)				
High school or less	19.2	11.2	0.0	7.2
Some college	24.2	25.7	23.3	20.3
Bachelor's degree	44.0	54.6	61.2	58.0
Master's degree or higher	12.6	8.6	15.5	14.5
In a relationship now (%)	48.9	74.3	48.5	63.8
Have child/children	23.6	48.7	13.6	20.3

 Table 1 Demographics of the Sample

Including the Asians recruited through the pre-screening survey, 597 individuals in total responded to the full survey posted on MTurk for two dollars. The study kept responses from 525 participants who identified their race/ethnicity as Asians or Whites and identified their sexual orientation as heterosexual. I further excluded 19 cases due to missing data on key variables. The final sample had 506 participants ranged from 19 to 45 years old. There were 334 White Americans (152 female, 182 male) and 172 Asians (69 female, 103 male). The Asian sub-sample included 40.7% Chinese, 19.2% South Koreans, 14% Indians, 10.5% Japanese, 6.4% Taiwanese, and 9.3% others. Table 1 describes the demographics of the sample.

Measures

Dependent Variables: Sexual Attitudes and Sexual Double Standards

The survey used three blocks of questions to assess participants' attitudes towards the sexuality of women and men respectively. In the first block, participants read a hypothetical scenario. "Imagine that you meet an unmarried young girl in her 20s. You can imagine meeting her in your class, at your workplace, or just in your daily life. She seems to be a decent person, responsible in her work and nice to people. You like her generally as a person. Then, one day, you learn something about the girl's sex life. Given each of the following new information about the girl, how will you adjust your impression of her?"

Four statements then followed describing the girl's sex life: (1) she sometimes makes the first move when it comes to having sex; (2) she has casual sex; (3) she has multiple sexual partners; (4) over the years, she has had many sexual partners, more than she can remember. Participants indicated their response to each statement on a seven-point scale ranging from "strongly approve" to "strongly disapprove", with "neutral" being the mid-point. I reversed the scales in analysis for higher values to represent more support for women's sexual freedom.

The second block looked identical to the first block, except that the scenario and the statements described a young man. The two blocks of questions appeared on the survey in a random order. Based on the differences between the scores on the female and male versions of the four statements, I calculated four indexes of sexual double standards. A positive value on a double-standard index indicated traditional double standards—supporting liberal sexual behaviors of men more than that of women. The larger the value, the greater the sexual double standards. In contrast, a negative score indicated reversal sexual double standards—granting more sexual freedom to women than to men.

Previous studies have found that people, especially men, may express favorable attitudes towards sexual liberalization in general but still prefer partners with less sexual experience for long-term relationships or marriage (Fromme and Emihovich 1998; Oliver and Sedikides 1992; Moffat 1989). The third block of questions sought to capture this layer of possible sexual double standards. Female participants followed the instruction to "\imagine that you are now looking for a husband, which statement below will make a certain man a desirable husband to you?" Male participants read a similar instruction to "imagine that you are now looking for a wife, which statement below will make a certain woman a desirable wife to you?"

Three statements followed describing the sexual history of the potential husband/ wife: (1) he/she had experience of having casual sex; (2) he/she had experience of having more than one sexual partners at the same time; (3) he/she has rich sexual experience and knows good sex techniques. Participants then indicated their attitudes about each statement on a seven-point scale ranging from "very desirable" to "very undesirable", with "doesn't matter" as the mid-point. I also reversed the scales in analysis so that higher values represented more liberal sexual attitudes in choosing a marriage partner.

I generated two extra indexes of sexual double standards based on the differences between one's evaluation of a potential spouse and of a person of the opposite sex in general. Two aspects of sexuality—casual sex and multiple sexual partners at the same time—entered the calculation of the indexes, because the questions were phrased in a comparable way across the two scenarios. Positive scores on the indexes for male participants indicated traditional sexual double standards—greater sexual conservatism in choosing a wife than judging a woman in general. Positive scores for female participants also indicated double standards but not of the traditional type.

Independent Variables: American Acculturation and Asian Cultural Affiliation

This study used the Vancouver Index of Acculturation (VIA) to assess Asian participants' cultural orientations (Ryder et al. 2000). This scale contains 20 statements and reflects two coexisting dimensions of acculturation, i.e., the extent to which an individual identifies with the heritage culture of origin and the extent of identification with American mainstream culture. All odd-numbered statements reflect affiliation with Asian culture (e.g., "I often participate in my Asian cultural traditions"), and all even-numbered statements reflect American culture identification (e.g., "I believe in mainstream American values"). The responses are on a seven-point scale ranging from "strongly disagree" to "strongly agree". The statements address several areas of cultural identification, including social activities, friendship, dating, humor, entertainment and cultural traditions. Means on the mainstream and heritage items

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represented the measures of American acculturation and Asian cultural affiliation respectively. The VIA is internally consistent in cross-cultural samples for both the heritage domain (Cronbach's $\alpha = .91-.92$) and the mainstream domain (Cronbach's $\alpha = .87-.89$). Concurrent and factorial validity have also been demonstrated for the VIA (Ahrold and Meston 2010). The VIA showed reliability in my sample (heritage subscale, Cronbach's $\alpha = .90$; mainstream subscale, Cronbach's $\alpha = .88$)

Covariates: Sexual Experience and Education

Four questions on the survey measured participants' sexual experience. "How old were you when you first had sexual intercourse?" "How many people have you had sex with?" "Have you ever had casual sex" "Have you ever had a one-night stand?" I transformed the answers into four binaries: whether the respondent had sex for the first time at 18 or younger, had more than five sex partners so far, had casual sex, and had a one-night stand. I then constructed an index of sexual experience by assigning 1 to positive answers and 0 to negative answers and summing up the four items. The value of the index of sexual experience ranged from 0 to 4, with higher values representing a more liberal sexual history. There were four categories of education level: having high school or less, having some college education, having a bachelor's degree, or having a master's degree or higher. I transformed it into three dummy variables with having high school or less as the reference category.

Analyses and Results

Sexual Attitudes of White and Asian Americans

Hypothesis 1 predicted that Asians would report more conservative attitudes than Whites towards all the liberal sexual behaviors considered in this study. To test this prediction, I conducted a 2 (ethnicity) \times 2 (gender) ANCOVA with all of the measures of sexual attitudes as the dependent variables, controlling for sexual experience, age, and education. I also carried out a similar analysis that did not control for sexual experience. The results are presented in Table 2.¹

When sexual experience was held constant, Asians were not significantly different from Whites on most of the measures of sexual attitudes. Asians reported significantly more conservative attitudes (i.e., higher levels of disapproval) than Whites only when it concerned women having a large accumulated number of sexual partners, F(1, 506)=6.00, p=.015,² $\eta_p^2=0.012$, and a potential spouse having

¹ The analyses met the requirements of ANCOVA. The measures of sexual attitudes were approximately normally distributed within each group, as indicated by the Shapiro–Wilk test of normality. All the covariates were linearly related to the measures of sexual attitudes across groups, as indicated by scatter-plots and lines of best fit. And the covariates did not interact with either ethnicity or gender. Levene's test for equality of variances was carried out to determine that the assumption of homogeneity of variances was met.

 $^{^2}$ p values are two-tailed throughout the text.

Sexual attitudes	White				Asian				F ratio ^a		F ratio ^b	
	Male		Female		Male		Female		Ethnicity	Gender	Ethnicity	Gender
	M	SD	M	SD	M	SD	M	SD				
Women's sexual behaviors												
Sex initiative	5.73	1.11	5.38	1.50	5.27	1.42	5.29	1.42	1.70	1.10	3.67	1.61
Casual sex	4.18	1.80	4.00	1.86	3.79	1.76	3.71	1.76	1.49	0.60	4.75*	0.49
Multiple partners	3.99	1.81	4.30	1.89	3.70	1.76	3.67	1.76	3.17	1.71	9.69***	0.62
History of many partners	3.63	1.90	3.55	1.90	3.04	1.67	2.99	1.71	6.00*	0.17	13.22***	0.10
Men's sexual behaviors												
Sex initiative	5.66	1.22	5.60	1.25	5.39	1.37	5.64	1.24	0.26	0.91	0.12	0.38
Casual sex	4.65	1.70	3.97	1.87	4.15	1.73	3.83	1.82	0.25	5.48*	4.64*	8.36***
Multiple partners	4.47	1.77	4.30	1.90	4.15	1.77	3.84	1.81	0.73	0.74	5.97*	2.07
History of many partners	3.92	1.97	3.41	1.92	3.61	1.83	3.20	1.94	0.07	4.03*	2.44	6.06*
Potential spouse's histories												
Casual sex	3.54	1.52	3.36	1.41	3.08	1.46	2.88	1.61	2.62	0.38	11.63^{***}	1.63
Multiple partners	3.68	1.52	3.87	1.54	3.28	1.57	3.23	1.61	5.30*	1.00	14.31^{***}	0.17
Rich sexual history	5.63	1.29	5.45	1.40	5.39	1.39	4.91	1.60	1.45	4.00*	6.89^{**}	6.21^{*}
Z	182		152		103		69					

were not reported ucany significant in any analysis titus Eulinerly by genuer interactions were not statis

p < .05; p < .01; p < .01; p < .005. All p values are two-tailed throughout the article

^aModels that control for sexual experience

^bModels that do not control for sexual experience

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Sexual attitudes	White				Asian			
	Male		Female		Male		Female	
	t	SE	t	SE	t	SE	t	SE
Judging people in general								
Sex initiative	-0.78	0.09	2.06*	0.11	0.91	0.13	3.09**	0.11
Casual sex	5.08***	0.09	-0.45	0.07	3.05**	0.12	0.86	0.14
Multiple partners	5.27***	0.09	-0.08	0.08	3.96***	0.11	1.27	0.14
History of many partners	3.18**	0.09	-1.82	0.08	4.60***	0.13	1.69	0.13
Choosing a spouse								
Casual sex	5.20***	0.12	5.33***	0.12	5.49***	0.13	5.17***	0.18
Multiple partners	2.80**	0.11	3.80***	0.11	2.68**	0.16	3.09**	0.20
Ν	182		152		103		69	

Table 3 Sexual double standards within ethnic groups

p* < .05; *p* < .01; ****p* < .005

the history of having multiple sexual partners at the same time, F(1, 506) = 5.30, p = .022, $\eta_p^2 = 0.011$. Thus, when controlling for sexual experience, Hypothesis 1 was generally not well supported.

However, when the analysis did not control for sexual experience, not only did the differences between the sexual attitudes of Asians and of Whites become larger on the two items significantly different when controlling for sexual experience, Asians were also significantly more conservative than Whites on almost all other measures of sexual attitudes. Ethnic differences on only three of the eleven comparisons were not statistically significant—taking sex initiative for both women and men and having a large accumulated number of sexual partners for men. In all cases, whether or not I controlled for sexual experience, mean scores were in the direction of more conservative attitudes among Asian participants. On balance, then, results in general provided relatively strong support for Hypothesis 1.

Sexual Double Standards in White and Asian Americans

Double Standards Within Each Ethnic Group

Hypothesis 2a predicted the presence of sexual double standards in both Whites and Asians. I tested the hypothesis through a Paired-Samples *t* test, and results are displayed in Table 3.

According to the t test results, attitudes of sexual double standards existed in both White and Asian men. For both White and Asian men, the only item that did not show a significant difference in evaluations of women and men was sex initiative. In my sample, male participants, whether Asian or White, did not view women who sometimes initiated sex significantly less favorably than men who engaged in the same behaviors.

Otherwise, White men reported significantly more conservative attitudes when they judged the liberal sexual behavior of women than when they judged that of men, including casual sex (towards men, M=4.65, SD=1.70; towards women, M=4.18, SD=1.80; t=5.08, p<.0005), multiple partners at the same time (towards men, M=4.47, SD=1.77; towards women, M=3.99, SD=1.81; t=5.21, p<.0005), a large accumulated number of sexual partners (towards men, M=3.92, SD=1.97; towards women, M=3.63, SD=1.90; t=3.18, p=.002). White men also judged the sexuality a potential spouse significantly more conservatively than when they judged women's sexuality in general, in the case of both casual sex (towards women, M=4.18, SD=1.80; towards a potential wife, M=3.54, SD=1.52; t=5.20, p<.0005) and multiple sexual partners at the same time (towards women, M=3.99, SD=1.81; towards a potential wife, M=3.54, SD=1.52; t=5.20, p<.0005) and multiple sexual partners at the same time (towards women, M=3.99, SD=1.81; towards a potential wife, M=3.68, SD=1.52; t=2.80, p=.006).

Asian men demonstrated similar patterns as White men and expressed significantly more conservative attitudes towards the liberal sexual behavior of women than towards that of men on the exact same measures, i.e., casual sex (towards men, M=4.15, SD=1.73; towards women, M=3.79, SD=1.76; t(102)=3.05, p=.003), multiple partners at the same time [towards men, M=4.15, SD=1.77; towards women, M=3.70, SD=1.76; t(102)=3.96, p<.0005], a large accumulated number of sexual partners [towards men, M=3.61, SD=1.83; towards women, M=3.04, SD=1.67; t(102)=4.60, p<.0005]. Similar to White men, Asian men were also more conservative in their sexual attitudes when choosing a wife than when judging women in general, concerning both casual sex [towards women, M=3.79, SD=1.76; towards a potential wife, M=3.08, SD=1.46; t(102)=5.49, p<.0005] and multiple sexual partners [towards women, M=3.70, SD=1.76; towards a potential wife, M=3.70, SD=1.76; towards a potential wife, M=3.08, SD=1.76; towards a potential wife, M=3.70, SD=1.76; towards a potential wife, M=3.70, SD=1.76; towards a potential wife, M=3.70, SD=1.76; towards a potential wife, M=3.08, SD=1.76; towards a potential wife, M=3.28, SD=1.57; t(102)=2.68, p=.009].

The pattern of significant and non-significant differences for women participants was a perfect mirror image from those of men. For both White and Asian women, the only item that did show a significant difference in evaluations of women and men was sex initiative. While women participants expressed favorable attitudes about women's initiating sex in general with mean scores on the item in the favorable range, the results nevertheless indicated significant preferences for men to take sex initiative among both White women (towards men, M=5.60, SD=1.25; towards women, M=5.38; SD=1.50; t=2.06, p=.041) and Asian women (towards men, M=5.64, SD=1.24; towards women, M=5.29; SD=1.42; t=3.09, p=.003). Except for this relatively mild support of traditional double standards, neither White women nor Asian women showed other endorsement of traditional sexual double standards.

At the same time, like men, women adopted significantly more conservative standards in judging the sexuality of a potential husband than when they judged men's sexuality in general. This applied to White women on the items of casual sex (towards men, M=3.97, SD=1.87; towards a potential husband, M=3.36, SD=1.41; t=5.33, p < .0005) and multiple sexual partners (towards men, M=4.30, SD=1.90; towards a potential husband, M=3.87, SD=1.54; t=3.78, p < .0005). It also applied to Asian women in terms of casual sex (towards men, M=3.83, SD=1.82; towards a potential husband, M=2.88, SD=1.61; t=5.17, p < .0005)

and multiple sexual partners (towards men, M = 3.84, SD = 1.81; towards a potential husband, M = 3.23, SD = 1.81; t = 3.09, p = .003).

Overall, the results supported Hypothesis 2a that sexual double standards existed in both White and Asian Americans. But the analyses also highlighted that men showed stronger support of double standards than women across the ethnic groups. And the patterns were more similar for the same gender than for the same ethnic group.

Comparing Double Standards Across the Two Ethnic Groups

Hypothesis 2b predicted that Asian Americans would demonstrate stronger support of traditional sexual double standards than White Americans. I conducted an OLS multiple linear regression to test the hypothesis,³ and the results are presented in Table 4.

Results show that Asians endorsed sexual double standards more strongly than Whites when it concerned the liberal sexual behavior of initiating sex move and having a large accumulated number of sexual partners. Being White was associate with a significant decrease of .25 on the index of double standards for the measure of sex initiative (p=.048). Being White was also associated with a significant decrease of .39 on the double-standard index of having a large accumulated number of sexual partners (p=.001). Whites and Asians were not significantly different from each other in their endorsement of sexual double standards on other measures of liberal sexual behavior. Hypothesis 2b was thus partially supported, because Asians reported stronger endorsement of sexual double standards than Whites only for certain aspects of sexuality (sex initiative and history of many partners) but not for the others (casual sex and multiple partners at the same time).

Effects of Cultural Orientations on Sexual Attitudes and Sexual Double Standards

Effects of Cultural Orientations on Sexual Attitudes

Hypothesis 3a predicted that higher levels of American acculturation and lower levels of Asian cultural affiliation would be associated with Asian Americans showing more liberal sexual attitudes. I conducted multiple linear regressions on the subsamples of Asian men and Asian women with all the measures of sexual attitudes as the dependent variables. I carried out two versions of analyses for each model, one

³ ANCOVA was not appropriate for this set of analyses, because the double-standard indexes were not normally distributed within the groups and also did not meet the assumption of equality of error variances. The models met the assumptions for linear regression. A scatterplot was plotted of each doublestandard index against sexual experience and age. Visual inspection and line-fitting of the scatterplots indicated that the indexes had linear relationships with both sexual experience and age. The independence of residuals was assessed by the Durbin-Watson statistic, the values of which ranged from 1.86 to 2.10 for the models. The residuals were approximately normally distributed with slight positive kurtosis, as indicated by the normal probability plots. There was homoscedasticity based on the results of Koenker test for heteroscedasticity, the p values of which ranged from .1114 to .7851 for the different models.

	Double standa	ırds in judging	people		Double stan choosing a s	
	Sex initiative	Multiple partners	Casual sex	History of many partners	Casual sex	Multiple partners
White	25*	15	02	39**	15	11
	(.13)	(.11)	(.12)	(.12)	(.15)	(.15)
Male	25*	.40***	.40***	.39***	05	15
	(.11)	(.10)	(.10)	(.10)	(.14)	(.14)
Some college	08	14	01	29	06	05
	(.20)	(.18)	(.18)	(.19)	(.24)	(.25)
Bachelor's degree	.02	15	08	28	.04	.03
	(.18)	(.17)	(.17)	(.17)	(.22)	(.23)
Master's degree	14	13	.16	30	14	12
	(.23)	(.21)	(.21)	(.22)	(.28)	(.28)
Sexual experi- ence	.04	.05	.03	.04	03	.01
	(.04)	(.03)	(.03)	(.03)	(.04)	(.04)
Age	.02	.01	00	.00	00	01
	(.01)	(.01)	(.01)	(.01)	(.01)	(.01)
Constant	12	07	.06	.38	.94	.91
Ν	506	506	506	506	506	506

 Table 4
 Multiple linear regressions on indexes of sexual double standards

ANOVA analysis did not find ethnicity by gender interactions to be significant, so they were not included in the regression models

Adjusted R^2 were smaller than 0.1. They were not reported because the purpose of the models was not to account for variations in the dependent variables as best as possible but to test whether sexual double standard differed based on ethnicity and gender

p* < .05; *p* < .01; ****p* < .005

with and one without the interaction terms between American Acculturation and Asian Cultural Affiliation.⁴ These results are presented in Table 5 (for men) and 6 (for women).

Table 5 presents the models on Asian men's sexual attitudes with the cultural interaction terms. When it concerned Asian men's attitudes towards liberal sexual behavior of women, both American acculturation and Asian cultural affiliation had significant independent effects as well as significant interaction effects on the measures of casual sex, multiple partners, and history of many partners. As visualized in

⁴ I checked the assumptions for linear regression and they were met except for the assumption of homoscedasticity. When the models met the assumption of homoscedasticity, the ordinary least square approach to linear regression was taken. And when the models showed heteroscedasticity, the weighted least square approach was adopted instead.

saiday calcel	SIOII OII ASIAI	IdDIE D REGRESSION ON ASIAN MEN & DEXUAL AUMURES	Autudes							
Sexual atti-	Towards women	omen		Towards men				Choosing a wife	wife	
tudes	Casual sex Multiple partners	Multiple partners	Had many partners ^a	Initiate sex ^a	Initiate sex ^a Casual sex	Multiple partners ^a	Had many partners ^a	Casual sex	Multiple partners	Rich history
American	-1.17*	-1.26*	-2.22***	1.04^{***}	73	95*	95	66	51	.43
Acculturation	(.57)	(.61)	(.36)	(.27)	(.57)	(.37)	(.52)	(.50)	(.56)	(.37)
Asian culture	-2.03^{***}	-1.94^{**}	-2.78^{***}	.80*	-1.68*	-2.49***	-2.20^{***}	-1.24*	-1.40*	.32
Affiliation	(.68)	(.73)	(.44)	(.35)	(.67)	(.36)	(.49)	(09.)	(99)	(.55)
Cultural	.37***	.34**	.49***	10	.29*	.39***	.38**	.17	.18	02
Interaction	(.12)	(.13)	(.08)	(90)	(.12)	(.07)	(.10)	(.11)	(.12)	(60.)
Sexual	.35***	.32**	.26***	.16*	.32***	.45***	.36***	.33***	.27**	.166*
Experience	(.10)	(.11)	(60.)	(90.)	(.10)	(90)	(.08)	(60.)	(.10)	(.07)
Age	00.	02	00	00.	02	.02	.02	01	03	.01
	(.02)	(.03)	(.02)	(.01)	(.02)	(.01)	(.02)	(.02)	(.02)	(.02)
Master's	.10	07	30	.14	.14	26	27	.39	.11	.40
Degree	(.43)	(.46)	(.34)	(.27)	(.42)	(.38)	(.45)	(.38)	(.42)	(.22)
Some	.06	.10	60.	34	17	29	31	.16	.15	.57
College	(.37)	(.40)	(.37)	(.28)	(.37)	(.26)	(.36)	(.33)	(.36)	(.30)
Constant	9.36	10.80	14.8	-1.82	8.37	9.95	9.99	7.70	8.17	2.08
Adjusted R ²	.28	.16	.52	.54	.26	.86	.60	.17	.13	.28
Z	103	103	103	103	103	103	103	103	103	103
No Asian man identified himself	dentified him	Iself as having hi	as having high school or less. There are thus only two education dummy variables in these models	There are thus c	uly two educ	ation dummy ve	ariables in these n	nodels		

^aModels using the approach of weighted least square Due to limited space, only the models including at least one significant coefficient were presented

p < .05; **p < .01; ***p < .005

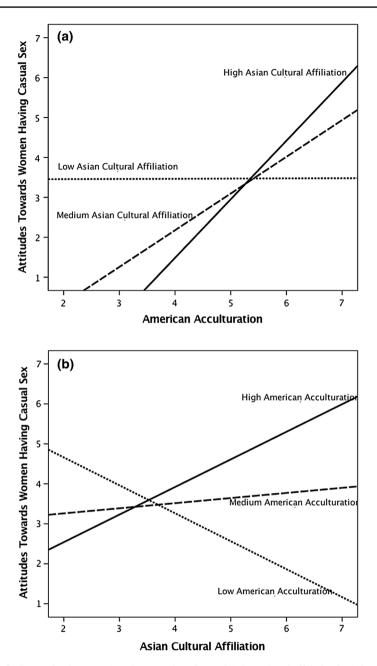


Fig. 1 (a, b) Interaction between American acculturation and Asian cultural affiliation in Asian males in predicting attitudes towards women having casual sex

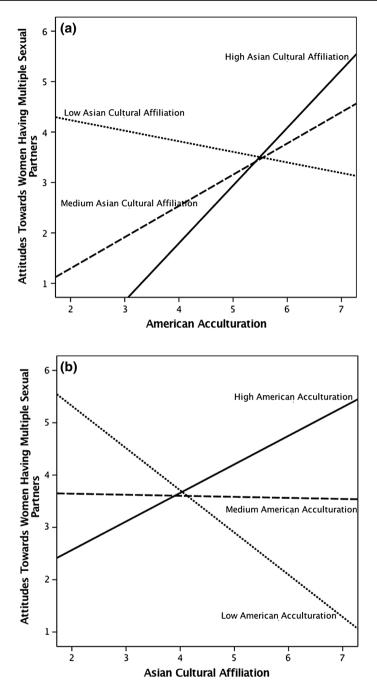


Fig. 2 (**a**, **b**) Interaction between American acculturation and Asian cultural affiliation in Asian males in predicting attitudes towards women having multiple sexual partners

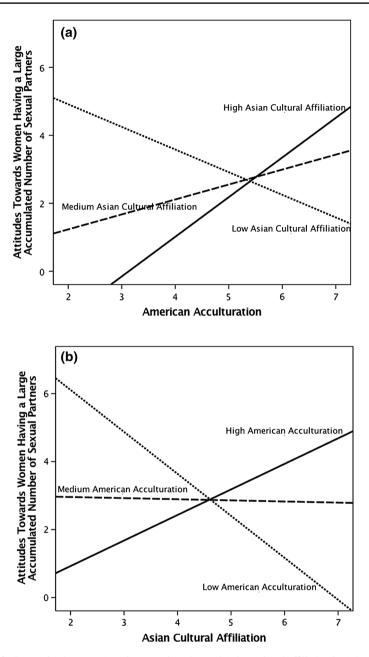


Fig. 3 (a, b) Interaction between American acculturation and Asian cultural affiliation in Asian males in predicting attitudes towards women having a large accumulated number of sexual partners

Figs. 1a, 2b and 3a, American acculturation was positively associated with Asian men's liberal attitudes towards women's sexual freedom when their levels of Asian cultural affiliation were not low (>M - 1 SD). At low levels of Asian cultural

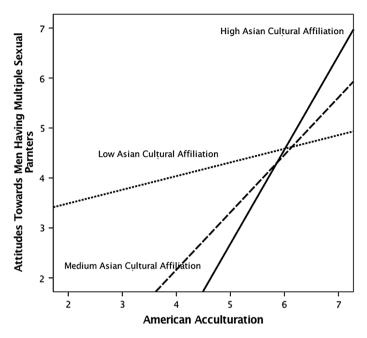


Fig. 4 Interaction between American acculturation and Asian cultural affiliation in Asian males in predicting attitudes towards men having multiple sexual partners

affiliation, increasing American acculturation was actually associated with no change or decreasing liberalism in Asian men's attitudes towards women's sexual freedom. Then, as visualized in Figs. 1b, 2b and 3b, Asian cultural affiliation was negatively associated with Asian men's liberal attitudes towards women's sexual freedom when their levels American acculturation were not high (<M+1 SD). At high levels of American acculturation ($\ge M+1$ SD), instead, increasing Asian cultural affiliation was associated with increasing liberalism in Asian men's attitudes towards women's sexual freedom.

The effects of cultural orientations were less consistent when it came to Asian men's attitudes towards men's sexual freedom. On the one hand, American acculturation had no significant effect on Asian men's attitudes about men having casual sex or having a large accumulated number of sexual partners. American acculturation was positively associated Asian men's more favorable attitudes towards men taking sex initiative (β =1.04, *p*<.0005). American acculturation was also positively associated Asian men's more liberal attitudes about men having multiple sexual partners, but the effects interacted with Asian cultural affiliation and were stronger at higher levels of Asian cultural affiliation (Fig. 4). On the other hand, Asian cultural affiliation was positively associated with Asian men's more favorable attitudes towards men taking sex initiative (β =.80, *p*=.024). Asian cultural affiliation was negatively associated with Asian men's liberal attitudes towards men having casual sex, multiple partners, and a history of many partners when their levels American acculturation were not high (<M+1 SD). At high levels of Asian cultural affiliation

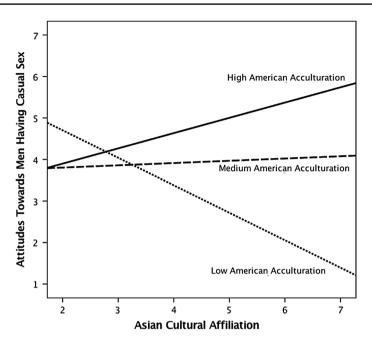


Fig. 5 Interaction between American acculturation and Asian cultural affiliation in Asian males in predicting attitudes towards men having casual sex

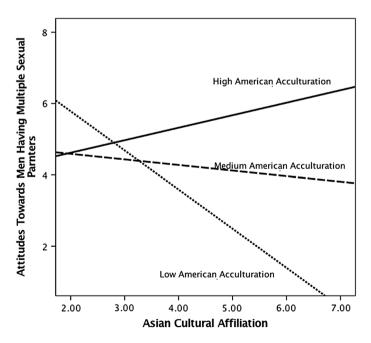


Fig. 6 Interaction between American acculturation and Asian cultural affiliation in Asian males in predicting attitudes towards men having multiple sexual partners

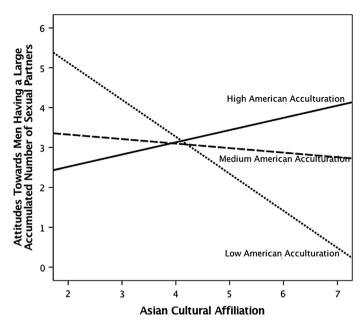


Fig. 7 Interaction between American acculturation and Asian cultural affiliation in Asian males in predicting attitudes towards men having a large accumulated number of sexual partners

 $(\geq M+1 \text{ SD})$, instead, increasing Asian cultural affiliation was actually associated with increasing liberalism in Asian men's attitudes towards men's sexual freedom (Figs. 5, 6, 7).

American acculturation had no effect on Asian men's attitudes in choosing a wife, while Asian cultural affiliation was associated with their more conservative attitudes in judging a potential wife for having had casual sex ($\beta = -1.24$, p = .042) and multiple partners ($\beta = -1.40$, p = .037). Moreover, it is worth pointing out that sexual experience increased Asian men's liberal sexual attitudes on all the measures.

Table 6 presents the regression results on sexual attitudes for Asian women. While the cultural interaction terms were highly significant for Asian men and increased the power of the models, the cultural interaction terms were not significant for any of models for Asian women. Given the small sample of Asian women (N=69), the more parsimonious models were preferable. Therefore, Table 6 presents the models on Asian women's sexual attitudes without the interaction terms.

The results show that, for Asian women, American acculturation was positively associated favorable attitudes towards women having casual sex (β =.65, p=.023), having multiple sexual partners (β =.62, p=.019), and having a large number of accumulated partners (β =.68, p=.022). Similarly, American acculturation led Asian women to have more liberal attitudes towards men taking sex initiative (β =.70, p<.0005), having casual sex (β =.68, p=.029), and having multiple partners (β =.71, p=.016). But American acculturation did not make Asian women more likely to accept men having a large number of accumulated sexual partners. At the same time, American acculturation made it more likely for Asian women to

Sexual attitudes	Towards women	nen			Towards men			Choosing a husband	usband
	Initiate sex ^a	Casual sex	Multiple partners	Had many partners	Initiate sex ^a	Casual sex	Multiple partners	Casual sex	Rich history
American	.34	.65*	.62*	.68*	.70***	.68*	.71*	.56*	.32
Acculturation	(.19)	(.28)	(.26)	(.29)	(.12)	(.30)	(.29)	(.27)	(.25)
Asian culture	.28*	12	13	19	.14	09	38	.11	.17
Affiliation	(.12)	(.20)	(.19)	(.21)	(.11)	(.22)	(.21)	(.19)	(.18)
Sexual	.19*	.34*	.50***	.06	$.10^{***}$.30	.24	.23	.39**
Experience	(.10)	(.15)	(.14)	(.16)	(.03)	(.16)	(.15)	(.14)	(.13)
Age	.03	06	07*	06	00	04	08*	03	11
	(.02)	(.03)	(.03)	(.03)	(.02)	(.03)	(.03)	(.03)	(.03)
Master's	.02	16	1.11	02	60.	03	1.82	.11	98
Degree	(.67)	(86.)	(.91)	(1.00)	(.50)	(1.05)	(1.00)	(70.)	(.87)
Bachelor's	.05	.04	1.44	.07	.29	.168	1.60	.19	-1.09
Degree	(.48)	(.80)	(.74)	(.82)	(.42)	(.92)	(.82)	(.76)	(11)
Some	.05	14	.26	60	82	.17	.61	79	-2.00*
College	(.41)	(.85)	(67.)	(.88)	(.35)	(.92)	(.87)	(.81)	(.76)
Constant	2.54	2.16	1.26	2.03	.58	1.22	2.81	27	3.36
Adjusted R ²	.22	.17	.29	.07	.64	60.	.18	.12	.20
Z	69	69	69	69	69	69	69	69	69

COCINCICIII Due to limited space, only the models including at least one significant *p < .05; **p < .01; ***p < .005 ^aModels using the approach of weighted least square

accept a man as husband who had a history of having casual sex ($\beta = .56$, p = .038). Asian cultural affiliation almost had no effect on Asian women's sexual attitudes, except for making them have more favorable attitudes towards women taking sex initiative ($\beta = .28$, p = .029). Similar to the case of Asian men, sexual experience was also made Asian women more likely to accept various liberal sexual behavior of women, except for having a large accumulated number of sexual partners. Sexual experience did not make Asian women have more favorable attitudes towards men's liberal sexual behavior, except for in the case of sex initiative.

To briefly summarize, the results provide partial and conditional support for Hypothesis 3a depending on the gender of participants and the specific types of liberal sexual behavior in consideration. American acculturation increased Asian men's acceptance of women's liberal sexual behavior but had almost no effect on Asian men's judgement of the sexual freedom of men or a potential wife. Asian cultural affiliation was generally associated with Asian men's conservative attitudes towards the sexual freedom of women, men, and a potential wife. Moreover, the liberalizing effect of American acculturation was reversed when Asian cultural affiliation was also reversed when Asian men's American acculturation level was high. As for Asian women, American acculturation generally led Asian women to have more favorable attitudes about the sexual freedom of women, men, and a potential husband, while Asian cultural affiliation had almost no effect on any aspect of their sexual attitudes.

Effects of Cultural Orientations Sexual Double Standards

Hypothesis 3b predicted that higher level of American acculturation and lower Asian cultural affiliation would be associated with less endorsement of sexual double standards among Asian Americans. Similar multiple linear regression models were produced with the indexes of sexual double standards as the dependent variables. Table 7 presents the results.

The results show that, contrary to the hypothesis, American acculturation either had no effect on Asian men's endorsement of sexual double standards in some aspects (casual sex and a large accumulated number of sexual partners) or significantly increased Asian men's support for sexual double standards in the other aspects, including multiple sexual partners (β =.35, *p*=.009) and sex initiative (β =.33, *p*=.029). More American acculturation also led Asian men to adopt larger double standards in judging a potential wife for having had casual sex as compared to judging any women for having casual sex (β =.40, *p*=.005). Consistent with the hypothesis, Asian cultural affiliation was positively associated with the endorsement of sexual double standards, but only in the aspects of sex initiative (β =.39, *p*=.010) and judging a potential wife's history of having had casual sex (β =.32, *p*=.025).

For Asian women, American acculturation and Asian cultural affiliation interacted to shape their endorsement of double standards in the aspect of sex initiative and a large accumulated number of sexual partners. As demonstrated in Fig. 8, American acculturation increased Asian women's endorsement of sexual double standards in judging sex initiative when their Asian cultural affiliation level was

Double standards	Asian men			Asian wome	n
	General		Choosing a wife	General	
	Multiple partners	Initiate sex	Casual sex	Initiate sex	History of many partners ^a
American	.35**	.33*	.40**	1.91*	1.62**
Acculturation	(.13)	(.15)	(.14)	(.80)	(.60)
Asian culture	21	.39*	.32*	2.02*	2.23**
Affiliation	(.13)	(.15)	(.14)	(.85)	(.76)
Cultural	-	-	-	36*	36**
Interaction	-	-	-	(.15)	(.13)
Sexual	.10	.16*	.07	05	02
Experience	(.07)	(.08)	(.07)	(.09)	(.05)
Age	.03*	.02	.00	.02	01
	(.02)	(.02)	(.02)	(.02)	(.01)
Master's	.18	.02	29	.11	.04
Degree	(.31)	(.36)	(.33)	(.57)	(.22)
Bachelor's	-	-	-	.35	.03
Degree	-	-	-	(.47)	(.15)
Some	.14	22	21	.48	.13
College	(.27)	(.31)	(.28)	(.50)	(.16)
Constant	- 1.58	-1.08	-3.16	-11.17	-9.79
Adjusted R ²	.10	.06	.22	.01	.17
N	103	103	103	69	69

Table 7 Regression on sexual double standards in Asian men and Asian women

Due to limited space, only the models including at least one significant coefficient were presented

No Asian man identified himself as having high school or less. There are thus only two education dummy variables in the models for Asian men

p < .05; **p < .01

^aModels using the approach of weighted least square

not high (<M+1 SD). But more American acculturation led to less double standards in Asian women's judgement of sex initiative at high levels of Asian cultural affiliation ($\ge M+1$ SD). Similarly, as Fig. 9 shows, Asian cultural affiliation also increased Asian women's endorsement of sexual double standards in judging sex initiative when their American acculturation level was not high (<M+1 SD). But more Asian cultural affiliation led to less double standards in Asian women's judgement of sex initiative at high levels of American acculturation ($\ge M+1$ SD). When it came to their attitudes towards having a large accumulated number of sexual partners, American accultural affiliation level was not low (>M - 1 SD). At low level of Asian cultural affiliation, American acculturation was positively associated with double standards in judging having a large accumulated number of sexual

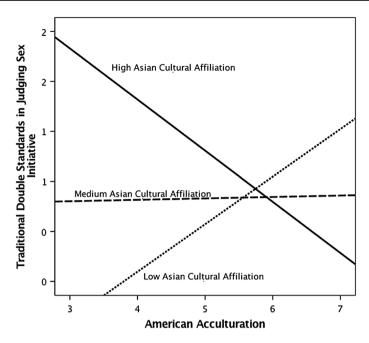


Fig. 8 Interaction between American acculturation and Asian cultural affiliation in Asian females in predicting traditional double standards in judging sex initiative

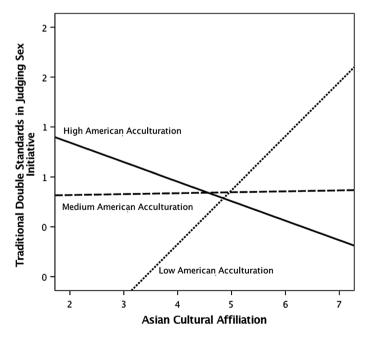


Fig. 9 Interaction between American Acculturation and Asian cultural affiliation in Asian females in predicting traditional double standards in judging sex initiative

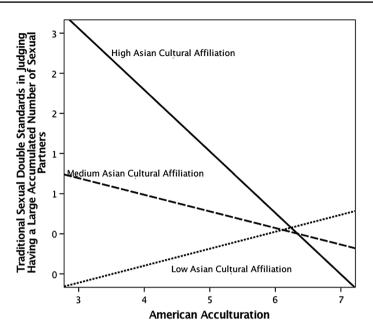


Fig. 10 Interaction between American acculturation and Asian cultural affiliation in Asian females in predicting traditional double standards in judging having a large accumulated number of sexual partners

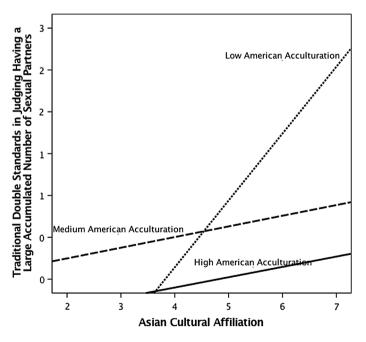


Fig. 11 Interaction between American acculturation and Asian cultural affiliation in Asian females in predicting traditional double standards in judging having a large accumulated number of sexual partners

partners (Fig. 10). Lastly, Fig. 11 shows that a positive association between Asian cultural affiliation and Asian women's endorsement of double standards in judging people having a larger accumulated number of sexual partners, with strong effect of Asian cultural affiliation at low level of American acculturation (< M - 1 SD).

In all, the results showed limited support for Hypothesis 3b. For most of the indexes of sexual double standards, neither American acculturation nor Asian cultural affiliation had any effect. For the small number of models where the two variables of cultural orientations did show significance, American acculturation was actually positively associated with sexual double standards in Asian men, although more Asian cultural affiliation did lead to more sexual double standards as hypothesized. As for Asian women, more American acculturation only reduced sexual double standards as hypothesized when Asian cultural affiliation level was high or at least not low. And Asian cultural affiliation was associated negatively with double standards in certain cases, contrary to the hypothesis.

Discussion

The main purpose of the project was to examine whether and how White and Asian Americans differed in their endorsement of sexual double standards. The study found some similar patterns of double standards in the two ethnic groups. First, both White and Asian Americans presented clear gender patterns. While White and Asian women merely expressed slight preference for men rather than women to initiate sex, White and Asian men approved other men more than women to have casual sex, have multiple sexual partners at the same time, and have a history of many sexual partners. Second, interestingly, neither White nor Asian men expressed double standards regarding sex initiative. Third, both Whites and Asians, regardless of gender, expressed double standards in selecting a marriage partner. They all judged the sexuality of a potential spouse with standards that were more conservative than what they applied to judging a person of the opposite sex in general.

The study also identified some noticeable ethnic differences in the endorsement of double standards. Asians demonstrated stronger attitudes of sexual double standards than Whites in judging men and women for having a large accumulated number of sexual partners. More specifically, Asians did not differ significantly from Whites in their attitudes towards men with a history of many partners, but Asians were less favorable than Whites towards women who had had many sexual partners in the past. Also, although both Whites and Asians expressed rather egalitarian attitudes towards men and women taking sex initiative, Asians showed slightly more preference for men to be the initiators of sex.

These findings not only make a contribution to the research on cultural differences of sexual double standards but also add important insights to the broader literature on ethnic comparisons of sexual attitudes and values. On the one hand, previous studies have found Asians to report considerably more conservative sexual attitudes than other ethnic groups. But these studies normally do not consider the effect of sexual double standards and assess participants' attitudes towards certain sexual behavior without specifying the gender of the actor. This study, however, reveals that Asians did not necessarily express more conservative sexual attitudes than Whites when they evaluated sexual behavior of a male target, while Asians were more conservative than Whites when it came to their attitudes towards the sexual freedom of women.

On the other hand, although Whites have often been described as enjoying more liberal sexual cultures than Asians, this study points to certain elements of conservatism and traditionalism in the sexual attitudes of Whites. The expression of double standards White men indicated their endorsement of gender role traditionality in sexual relationships (Sanchez et al. 2005; Oropesa 1996; Whitley 1988). The finding that Whites did not differ significantly from Asians in adopting more conservative standards of sexuality when selecting marriage partners attests to another aspect of sexual conservatism in Whites. Therefore, the examination of sexual double standards provides a more nuanced understanding of the sexual attitudes of Whites and Asians as well as their relative conservatism and liberalism.

Furthermore, taking sexual double standard into consideration brought more complexities to the conversation on the relationship between acculturation and sexual attitudes. Previous studies have found American acculturation to be generally associated with more liberal sexuality among Asian Americans, while Asian cultural affiliation tends to predict sexual conservatism (Ahrold and Meston 2010). And the two dimensions of cultural orientations sometimes interact to shape the sexuality of Asian Americans, especially in the case of Asian women (Ahrold and Meston 2010; Brotto et al. 2005). This study, however, found the effects of American acculturation and Asian cultural affiliation on sexual attitudes to not only differ for Asian men and women but also to vary based on whether the sexual attitudes were directed to a male or a female target. Contrary to other research, this study found the interactions between the two cultural orientations to be significant in predicting the sexual attitudes of Asian men but not those of Asian women. For Asian women, American acculturation significantly increased their acceptance of liberal sexual behaviors of both men and women, with the effects being stronger when it concerned men's sexuality. Asian cultural affiliation had almost no influence on Asian women's sexual attitudes, except for making them more favorable towards female sex initiators.

The cultural dynamics were more complicated for Asian men. First, in terms of Asian men's liberal sexual attitudes towards men's sexual freedom, American acculturation had almost no independent positive effect, probably because Asian men were not considerably more conservative than Whites in this aspect to begin with. And being more affiliated with Asian cultures actually led to more liberal attitudes of Asian men towards men's sexual freedom in the context of relatively high American acculturation. Asian cultural affiliation only predicted conservative attitudes of Asian men towards men's liberal sexuality when they showed distance from American cultures.

These relationships between cultural orientations and Asian men's attitudes about men's sexual freedom seem to suggest that both American mainstream culture and Asian culture are "friendly" towards men's sexual liberty. When Asian men were relatively comfortable with both cultures, their American acculturation and Asian cultural affiliation seemed to reinforce each other to make them more liberal about men's sexuality. But when Asian American men somehow chose to keep a distance from American culture, they might reject greater sexual liberty overall as part of American mainstream cultures and subscribe to sexual conservatism for both men and women that were perceived to be part of Asian cultures. It seems that only in this scenario would Asian Americans men's attitudes towards men's sexual freedom become more conservative with stronger Asian cultural affiliation.

Second, when it came to the relationships between cultural orientations and Asian men's attitudes towards women's sexual liberty, American acculturation increased their acceptance of women's liberal sexual behaviors, but only when they did not report low levels of Asian cultural affiliation. This may appear puzzling at first sight, because Asian cultures are normally associated with conservatism towards women's sexuality. One possible explanation is that Asian men who especially did not want to identify themselves with Asian cultures tended to be more susceptible to the part of American mainstream culture that endorsed sexual double standards. For example, these Asian men might be more likely to be friends with White men who supported sexual freedom of men but not that of women. Whether this was the case and what the social and psychological processes were like requires further research to find out. Furthermore, it was intriguing that Asian men tended to have more liberal sexual attitudes towards both men and women when they demonstrated bicultural orientations. And they tended to express more conservative sexual attitudes when they leaned strongly to only one of the two cultures, be it the mainstream American culture or the traditional Asian culture.

Future Directions

In addition to encouraging more research that compares patterns of sexual double standards in different cultural and ethnic groups, this study also points to some promising directions for future research based on the findings.

First, even though the study found support for overall existence of sexual double standards in mainstream American culture, White Americans did not express double standards concerning whether men or women should take initiative in having sex. Yet more research is needed to interpret such a result and to confirm whether sexual double standards were really declining in this specific aspect of sexuality. For example, the study of Reid et al. (2011) on college hookup behavior sheds light on some nuances in understanding double standards in taking initiative in sex. While women were free to initiate sex during hookup, once the hookup encounter led to serious dating possibility, women felt the need to withhold sex and waited for their male partners to take sex initiative again in order to be reconsidered as suitable for a serious relationship. Therefore, even though this study did not find people to favor men over women for initiating sex based on one survey question, more detailed research needs to explore whether subtler forms of double standards in this aspect still exist.

Second, this study identified some different patterns in the endorsement of sexual double standards among White Americans and Asian Americans, providing directions for further comparative works on the two groups. Asians were similar to Whites in their attitudes towards men having a history of many sexual partners, but Asians evaluated women having such sexual behavior less favorably than Whites. Also, while Asians and Whites supported both men and women for taking sex imitative, Asians showed stronger preferences for men to be the sex initiator. Qualitative studies can further explore why Asians were more concerned about these areas of sexuality than Whites. Such comparisons also attested to the importance of discussing sexual double standards based on different types of sexual behavior.

Third, this study also found the similarity between White Americans and Asian Americans that, regardless of gender, they prefer a marriage partner who were more sexually conservative than what they generally found acceptable in people of the opposite sex. This pointed to a phenomenon that went beyond the specific discussion of sexual double standards. It is especially intriguing that this pattern also emerged in White Americans, who represented a cultural that was supposed to endorse sexual liberty. Future research can explore whether such a phenomenon exists in other cultural and ethnic groups and investigate the reasons why people select marriage partners with more conservative sexual attitudes.

Fourth, the relationship between acculturation and sexual attitudes seem to show certain interesting patterns for Asian men at the two extreme ends on the spectrum of cultural orientations. At one end were Asian men who are not integrated into mainstream American cultures, and they seem to become more sexually conservative the more they get closer to Asian cultures. At the other end were Asian men who keep a distance from Asian cultures, and they seem to show more sexual double standard with American acculturation. It would be interesting to study the sexual attitudes of Asian American men with imbalanced orientation towards mainstream and heritage cultures and to explore the effect of biculturalism on the sexuality of Asian American men. At the same time, the study found complicated relationships between acculturation and the endorsement of sexual double standards in Asians that defied easy interpretation. More research is needed to examine the relationships more closely.

Lastly, though not part of the central discussion, sexual experience turned out to be positively associated with liberal sexual attitudes of Asian Americans and significantly reduce their differences from White Americans. Based on this evidence, the lack of sexual experience might account for part of the conservatism in sexual attitudes previously found in Asian Americans, especially when the samples were drawn from adolescents or college students who were less sexually experienced than adults. Even though this does not provide a direct answer to Ahrold and Meston's question "whether Asians are less likely to engage in casual sex because they have strong attitudes against such behavior, or they have strong attitudes against casual sex because it is infrequently practiced in Asian cultures" (2010: 198), the findings suggest that at least some Asian Americans practice casual sex and other liberal sexual behaviors at some point in their life, probably at a later age than people from other ethnic groups, and that having such sexual experience is positively associated with liberal sexual attitudes. Further research is needed to determine whether it is only Asians with liberal sexual attitudes to begin with who engage in liberal sexual behaviors or sexual experience actually changes Asians' sexual attitudes.

Limitations

The measures of sexual attitudes and sexual double standards in this study were new and not validated, causing certain difficulty in the interpretation of the results. But designing new measures of sexual double standards for the project was rather necessary given the options. Previous studies have used existing scales on the endorsement of sexual double standards, especially the Sexual Double Standard Scale (SDS) developed by Muehlenhard and Quackenbush (2011) and the Double Standard Scale (DSS) designed by Caron et al. (see Fisher et al. 2011). But the scales have the limitation of not differentiating the social perception and the personal acceptance of the sexual double standards (Bordini and Sperb 2013). For example, when a respondent agrees with the statement "it is expected that a woman be less sexually experienced than her partner" on DSS, it could mean either that the respondent perceives society to have such an expectation or that the respondent himself/herself holds such an expectation. The measures designed in this study thus sought to capture more precisely people's personal preferences. Moreover, developing the new measures also allowed the study to build on the recent literature in the field and focus particularly on the aspects of sexuality that remain relevant to the latest studies on sexual double standards. Nevertheless, results of the study should be interpreted with caution and the validity of the measures should be tested by future research.

Another limitation of the study concerned the nature of the sample. Because the MTurk sample was not nationally representative, the findings were not directly generalizable to the entire White and Asian populations in the U.S. But the sample still constituted an improvement of representativeness compared to convenient samples such as university students used in most studies. And the trade-off was necessary, considering that questions related to ethnic differences of sexual double standards were not available in extant nationally representative datasets. Moreover, the size of the Asian subsample was relatively small, especially when further divided based on gender. This could have influenced the statistical power of some analyses. Finally, this study does not engage the cultural heterogeneity of the Asian population. Future studies with larger Asian samples can seek a more nuanced understanding of sexual double standards among Asian Americans by differentiating among Asians who came from different Asian societies and cultures as well as with different immigration status. And it is the hope that this study would encourage more sophisticated works on sexual double standards, culture, and ethnicity.

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Compliance with Ethical Standards

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Conflict of interest There is no potential conflict of interest involved in this study.

Ethnical Approval This study was approved by University of Maryland College Park (UMCP) IRB (Project#: 921365-1). All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed Consent Informed consent was obtained from all individual participants included in the study.

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