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The Association Between Developmental Assets and Sexual Enjoyment among Emerging Adults in the United States

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Abstract

Purpose—To examine the associations between three key developmental assets and an aspect of sexual health, sexual enjoyment, which has rarely been studied in young adults, although its importance is stressed in all recent sexual health policy statements.

Methods—Using data from Wave III (2001 – 2002) of the National Longitudinal Study of Adolescent Health, and multiple logistic and ordered logistic regression, we explored the associations between sexual pleasure and autonomy, self-esteem and empathy among 3,237 respondents ages 18–26 in heterosexual relationships of three or more month duration. We also examined the distribution of sexual pleasure across various socio-demographic groups.

Results—Compared to young women, young men reported more regular orgasms and more enjoyment of two kinds of partnered sexual behavior. Sexual enjoyment was not associated with age, race/ethnicity or socioeconomic status. Among women, autonomy, self-esteem, and empathy co-varied positively with all three sexual enjoyment measures. Among men, all associations were in the same direction, but not all were statistically significant.

Conclusions—A substantial gender difference in enjoyment of partnered sexual behavior exists among emerging adults in the United States. This study is the first to use a representative population sample to find a relationship between developmental assets and a positive aspect of sexual health - sexual pleasure.

10 Key words (MeSH terms)

Adolescent; Adult; Female; Humans; Male; Orgasm; Pleasure; Sexual Behavior*/statistics and numerical data; Sexual Behavior*/psychology; United States

Additional key words (MeSH terms) that may be relevant

Empathy; Growth and Development; Health Surveys; Human Development; Personal Autonomy; Self Concept

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Portions of these analyses were presented at the 2009 meeting of the Population Association of America in Detroit.

Introduction

Sexual pleasure is a key aspect of sexual health across the lifespan, according to national and international health policy documents (1–3). Recent research on adolescent and young adult sexual experiences suggests that by this standard, many young women, and perhaps some young men, do not experience a crucial aspect of sexual health (4–8). In 1995, the National Commission on Adolescent Sexual Health (NCASH) released a document asserting that the process of becoming a sexually healthy adult is inextricably linked with the processes of healthy psychological and social development, and calling for more research into the links among these domains. Meanwhile, the demand has grown for rigorous study of the positive aspects of sexual health among young people (9–14). This article answers both calls, presenting and testing a conceptual framework that links specific developmental assets with enjoyment of sexual behavior among emerging adults in the United States.

Adolescents' Subjective Experiences of Partnered Sex

Although studies are limited, the existing literature suggests that substantial gender differences exist in adolescents' experiences of partnered sex. Qualitative studies have found that young women struggle to recognize their sexual feelings and communicate their wishes assertively, and as a result, often voluntarily engage in sexual behavior without necessarily enjoying it (7,8,15). These studies suggest that peer-reinforced social norms, particularly those related to appropriate behavior for girls, contribute to this phenomenon. Quantitative studies, most retrospective and focused specifically on first sex, have supported these findings (4,16). Young men, in contrast, are more likely to report that their sexual experiences are pleasurable, but they also report that these experiences are highly anxiety provoking (16). Qualitative studies have found that adolescent males worry a great deal about their sexual "performance"—both their ability to please their partner and their ability to meet the standards for normative heterosexual behavior enforced by their male peers (5,6,17,18). Even after leaving the insular high school social context, sexual scripts may persist and interfere with sexual enjoyment.

Developmental Assets and Sexual Enjoyment

There is consensus that successful transition to adulthood is more likely among youth who possess the assets whose cultivation is the goal of positive youth development (19). In particular, a recent set of literature reviews found that a number of these assets were associated with reduced risk of some negative sexual health outcomes (9). These reviews focused on developmental assets drawn from Pittman and colleagues' four categories: Connectedness, Competence, Confidence, and Character (9,20). To these, Lerner and colleagues have added a fifth category, Caring (21). Just as developmental assets may be protective against negative sexual health outcomes, they may also promote or be promoted by positive sexual health outcomes.

To test this, we identified three assets that may be expected to co-vary with sexual enjoyment and for which multi-item measures were available in a nationally representative dataset that also contained measures of sexual enjoyment. These assets were autonomy, self-esteem, and empathy. The first two of these assets belong to the category Confidence, while the third has been alternately assigned to Caring or to Competence (19,22,23)

Autonomy, defined as having the strength to follow personal convictions even if they go against conventional wisdom, may increase in emerging adulthood as agency increases (24). We hypothesize that it co-varies with sexual enjoyment because it may enable communication, experimentation and reactions that social norms would otherwise inhibit.

Self-esteem, belief in one's own worth, has also been found to increase during emerging adulthood (24). We hypothesize that it co-varies with sexual enjoyment because it may enhance a young adult's ability to acknowledge, communicate about, and negotiate for his or her sexual preferences. Previous studies have found that self-esteem is inversely associated with susceptibility to peer pressure and positively associated with sexual communication and refusal to have unprotected sex (25,26).

Empathy is defined as the cognitive capacity to take another's perspective, often leading to an emotional response involving congruence with another's emotional state (27). We hypothesize that it co-varies with sexual enjoyment because it may increase motivation to give a partner sexual (and other kinds of) pleasure. That pleasure may be enjoyed vicariously by the empathic person, and may also inspire the partner to provide pleasure in return.

To summarize, according to our conceptual model, these three developmental assets may enable young people to experience higher levels of sexual pleasure. This study is the first to use a population sample to test for associations between developmental assets and sexual enjoyment among emerging adults.

Methods

Data

Data for these analyses came from Wave III of the National Longitudinal Study of Adolescent Health (Add Health). Add Health is an ongoing study of a nationally representative cohort of youth who were in grades 7–12 in the 1994–1995 school year. Of the 20,745 students interviewed in their homes in 1994–1995 in Wave I, 15,197 were re-interviewed in Wave III during 2001 and 2002, when they were 18–26 years old.

The interviews took place in the respondents' homes. The interviewer read the less sensitive questions aloud and entered the responses into a computer. The more sensitive questions, including those used in this study, were administered via Audio-Computer-Assisted Self-Interview (ACASI); the respondent listened to the prerecorded questions using earphones and then answered the questions by keying directly into the computer.(28)

Sample

The 15,197 respondents in Wave III were asked to list all sexual or romantic relationships they had been in since June of 1995. For each relationship listed, respondents indicated if that relationship had included sex, defined as vaginal, oral, or anal intercourse. Respondents were then asked to order their sexual relationships by date of most recent sex and to indicate if they were still in the relationship.

If the respondent was still in that relationship, and the relationship had lasted at least three months, and the partner was not the same sex as the respondent, the respondent was eligible for a special subsample. The survey administered to this subsample included additional items that measured developmental assets and aspects of sexual enjoyment. (Of the 6,979 respondents currently in a relationship with their most recent sex partner, over 95% had been in the relationship for at least three months, and more than 98% were in relationships with other-sex partners.) About half of these eligible respondents were randomly selected for inclusion in the special subsample. A small fraction of these respondents were excluded because their relationship did not meet extra criteria intended to select the respondents' "two most important relationships." The final subsample consisted of 3,488 respondents. In this study we examined the 93 percent of the 3,488 with complete sexual enjoyment data

(N=3,237). Respondents who were missing data were less likely to have attended college and were more likely to be Black than those who had complete data.

The following weighted statistics describe the sample. Females comprised 58.6 percent of the respondents. The mean respondent age was 22, with more than 98 percent of the sample between the ages of 19 and 25. About seven tenths of respondents (71.2%) described themselves as White, Non-Hispanic, 13.1 percent described themselves as Black non-Hispanic and almost the same percentage (11.6%) described themselves as Hispanic. A tenth (10.2%) had not graduated from high school, a third had graduated from high school and were not currently in school (32.9%), and the rest were distributed about equally between two other groups described by their educational attainment, enrollment, and work status. Consistent with other research that examined this demographic group, nearly all (more than 96% of both the men and women) had had vaginal sex with their partner, most (more than 86% of both men and women) had received oral sex from their partner, and most (more than 82% of both men and women) had performed oral sex for their partner (29). Over 90 percent of both men and women had had at least one kind of oral sex with their partner.

Measures

Sexual Pleasure—One measure of sexual enjoyment that we used was regularity of orgasm. This measure asked, “When you and your partner have sexual relations, how often do you have an orgasm?” The answer options were *most of the time/every time*, *more than half the time*, *about half the time*, *less than half the time*, and *never/hardly ever*. This measure’s wording did not specify the kind of sexual relations, although as noted above, sex was defined earlier in the interview as vaginal, oral, or anal sex and nearly all respondents had had vaginal sex with their partner. The meaning of the term “sexual relations” in this question was left open to respondent interpretation.

We also used two other measures of sexual enjoyment: liking to receive and provide sexual stimulation, as measured by the items, “How much do you like for your partner to perform oral sex on you?” and “How much do you like to perform oral sex on your partner?” The answer options were *like very much*, *like somewhat*, *neither like nor dislike*, *dislike somewhat*, and *dislike very much*. Only respondents who had engaged in each of those behaviors were asked the corresponding question about degree of “liking.”

Similar questions were also asked about vaginal sex and anal sex, but were not used in this analysis because of data problems. More than one-third of the data about vaginal sex was missing as the result of a computer programming error. The remaining sample varied systematically from the full sample, making an analysis of enjoyment of vaginal sex subject to bias. For example, those who were missing this measure differed markedly in their frequency of vaginal sex and likelihood of using birth control at last sex. The anal sex enjoyment measure was not used because only about one-fifth of the sample had anal sex.

Developmental Assets—The autonomy and empathy scales were each comprised of four items taken from the Bem Sex Role Inventory instrument (30). The items were preceded in the survey instrument by the introduction, “How often is each of the following statements true of you?” The autonomy items were: I defend my own beliefs, I am independent, I am willing to take a stand, and I am assertive (Cronbach alpha=0.70). The empathy items were: I am sympathetic, I am sensitive to the needs of others, I am understanding, and I am compassionate (Cronbach alpha=0.86). The seven answer options for all eight items ranged from *never or almost never true* to *always or almost always true*. We developed these scales using a conceptually-driven item selection process, followed by a factor analysis (31).

Self-esteem was measured using four items that were similar to those found in Rosenberg's Self-Esteem Scale (32). The scale formed from the mean of these items had acceptable internal consistency (Cronbach alpha=0.78).

The scores of the 67 respondents missing an empathy score and the 78 respondents missing an autonomy score were imputed using the mean score for their gender. All respondents had complete self-esteem data.

Sociodemographic Characteristics—The multivariate analyses controlled for age, race-ethnicity, and socioeconomic status (SES). Age was measured in years and was centered. Race/ethnicity was coded as Non-Hispanic White, Non-Hispanic Black, Non-Hispanic Asian, Non-Hispanic Native American, and Hispanic. SES was measured by a variable that combined educational attainment, employment status, and whether or not they were currently attending college (31). All respondents had complete sociodemographic data.

Analyses

We first tested for differences in sexual enjoyment by gender, age, race/ethnicity, and socioeconomic status. Next, we used logistic and ordered logistic regression to separately model the association of each measure of sexual enjoyment with each developmental asset measure, adjusting for age, race/ethnicity, and socioeconomic status. We chose the regression model types based on the distribution of the sexual enjoyment variables and results from preliminary bivariate analysis.

We used collapsed versions of the sexual enjoyment measures where necessary to ensure sufficient cell size. We used a dichotomous indicator for the enjoyment of receiving oral sex analysis, which was set to one if the respondent reported liking it very much and set to zero otherwise. The transformed "like performing oral sex" measure combined the "dislike" and "dislike very much" categories.

All analyses were conducted separately for men and women, because preliminary analysis revealed significant interaction terms between gender and developmental assets. Also, in the orgasm analysis, the form of the outcome measure differed for men and women, because the distribution of the measure differed substantially by gender. For men, we used a dichotomous indicator set to one if the respondent reported orgasms most of the time or every time, and zero otherwise. For the women's analyses, we used the measure in its original form. All analyses were adjusted for the complex sampling design, specifically clustered data collected with unequal probability of selection (33). All analyses were conducted using Stata, version 9.

Results

Gender Differences in Sexual Enjoyment and Developmental Assets

The distributions of the sexual pleasure variables are shown in Table 1. Men were far likelier than women to report having orgasms most or all of the time: 87 percent versus 47 percent. A full 15 percent of young women reported having orgasms less than half the time or never, while only 2.6 percent of young men reported having orgasms with that regularity. Men who had performed oral sex for their partner were also much likelier than women who had done so to report liking it very much: 61 percent versus 37 percent. There was also more variability among women in their enjoyment of performing oral sex and in their regularity of orgasms, compared to men. In contrast, the distribution of the measure of enjoying receiving oral sex was more uniform across gender, though men were still more likely to select the most positive response option: 84 percent versus 71 percent. In contrast to these consistent

gender differences, no pattern of differences in sexual enjoyment emerged by age, race/ethnicity or SES (not shown).

The means, medians, and standard deviations of the developmental asset scores are shown in Table 2. Consistent with the literature, female respondents scored higher than male respondents, on average, on empathy and lower on self-esteem (27,34)

Association of Sexual Enjoyment and Developmental Assets

Each cell in Table 3 contains the coefficient for the developmental asset term from a logistic or ordered logistic regression of that column's sexual enjoyment measure on that developmental asset. All models controlled for age, race/ethnicity, and SES. In these models, a positive coefficient indicates a positive relationship.

Among men, autonomy was found to be positively associated with the likelihood of having an orgasm most of the time or every time during sex with his partner, but was not associated with enjoyment of performing or receiving oral sex with his partner. Similarly, self-esteem was found to be positively associated with enjoyment of performing oral sex, but was not associated with the other two measures of sexual enjoyment among men. Empathy was the one developmental asset measure that was consistently (positively) associated with all three sexual enjoyment measures, among men.

Among women, the same significant associations were found, with approximately the same magnitudes, but all the other developmental asset coefficients were also statistically significant at the $p < 0.05$ level as well. Thus, among women, autonomy, self-esteem, and empathy were all positively associated with all three measures of sexual enjoyment.

As a final check of the results, we re-estimated the orgasm models twice, limiting the sample each time to the respondents who had had each kind of oral sex. There were no differences between the results thus obtained and the coefficients from the original models [not shown]. We also regressed an indicator of liking vaginal sex very much on each of the developmental asset measures (controlling for the demographic factors) for men and women separately, using the sample of respondents whose data for this measure was not missing. The results paralleled those obtained from the enjoyment of receiving oral sex models [not shown]. This was expected, as the distribution of the like vaginal sex measure was very similar to the distribution of the like receiving oral sex measure, among those with complete data for both.

Discussion

Emerging adults' enjoyment of partnered sexual behavior, as measured in this study, does not differ along racial/ethnic, age, or SES lines, but it clearly differs by gender. Less than half of young women in established opposite-sex relationships have an orgasm most or all of the times they have sex with their partner. In contrast, nearly 9 out of 10 young men in such relationships have orgasms this regularly. Young women are also five times as likely as young men to have orgasms less than half the time they have sex with their partner. Though orgasm represents only one kind of sexual pleasure, it is highly valued in American culture (35). Significant, though not as large, gender differences are also found in enjoyment of providing and receiving sexual stimulation with a partner, in the form of oral sex.

These results are largely consistent with previous research, although the 1992 National Health and Social Life Survey (NHSLs) survey found even lower orgasm regularity among women ages 18–24 (35). This latter study found that this gender difference in sexual enjoyment persists through middle age, though it appears to diminish slightly in the later

decades of life (35). Future work can explore whether or not this difference contributes to the recently-identified gender disparity among older adults in problems related to sexual pleasure (36).

Among both young men and women, there is an association between three key developmental assets and three kinds of sexual enjoyment, although this association is more consistent among women than among men. The two assets that we hypothesized would enable youth to overcome barriers to sexual communication and exploration (autonomy and self esteem) are consistently associated with all three types of sexual enjoyment among women, but with only one measure each of sexual enjoyment among men. These assets may be more important for young women because they face more barriers to sexual expression than men (37,38). Conversely, because young women face more barriers, the achievement of sexual enjoyment may do more to boost young women's than young men's self-esteem and feelings of autonomy.

In contrast, for both men and women, empathy is associated with all three types of sexual enjoyment. This is consistent with our hypothesis that empathic individuals are more responsive to their partner's needs and thus initiate a positive feedback cycle.

Limitations

The two primary limitations of this study are its cross-sectional design, which prevents us from ascertaining the direction of causality, and the restricted set of measures of sexual enjoyment available in Add Health. These measures included only self-reports of orgasm regularity and enjoyment of giving and receiving oral sex; valid data on enjoyment of vaginal sex and other partnered sexual activities such as sexual touching were not available. Since more than four-fifths of young adults in established relationships in the United States have oral sex with their partner, however, these measures of enjoyment are appropriate for a study of this demographic group. Furthermore, the data quality of the focal measures is likely to be very high since by measuring enjoyment in the current relationship and using ACASI to do so, the Add Health investigators minimized recall and social desirability bias. (39,40) Finally, these results may not be generalizable to emerging adults in short term or same-sex relationships (since data are only available for emerging adults in relationships with opposite gender partners that had lasted at least three months).

Conclusion

This study adds to the literature that has shown protective effects of developmental assets on negative sexual and reproductive health outcomes (22,23). These existing studies have examined the links between developmental assets and experiencing adolescent pregnancy, acquiring a sexually transmitted infection, and engaging in risky sexual behavior such as having sex without contraception, among other undesirable outcomes. This study is the first to use a representative population sample to examine the relationship between developmental assets and a positive aspect of sexual health—sexual pleasure.

Despite the unanimous agreement in all public sexual health policy documents that sexual health is more than the absence of sexual infection, violence, and other problems, the positive aspects of sexual health have been all but ignored in the literature (1–3). This article is only the first step towards filling this gap in our understanding of the positive aspects of sexual well-being. Future studies using longitudinal data and more nuanced measures of sexual enjoyment can examine the causes and consequences of the gender differences identified in this study. Such studies can also test the direction of causality in the associations found in this study by examining hypothesized mediators. Also, data that include a more complete set of measures of developmental assets can be used to examine

whether or not the stronger pattern of associations of developmental assets with measures of sexual enjoyment among women generalizes to other aspects of development.

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References

1. National Commission on Adolescent Sexual Health. New York: Sexuality Information and Education Council of the United States; 1995. Facing facts: Sexual health for America's adolescents.
2. Pan American Health Organization/World Association for Sexology. Promotion of sexual health: Recommendations for action; Proceedings of a regional consultation convened by Pan American Health Organization, World Health Organization in collaboration with the world association for sexology; Antigua, Guatemala. 2001. 2001
3. United States Department of Health and Human Services. The surgeon general's call to action to promote sexual health and responsible sexual behavior. 2001.
4. Brady SS, Halpern-Felsher BL. Adolescents' reported consequences of having oral sex versus vaginal sex. *Pediatrics*. 2007; 119(2):229–236. [PubMed: 17272611]
5. Hyde A, Drennan J, Howlett E, Brady D. Young men's vulnerability in constituting hegemonic masculinity in sexual relations. *American Journal of Mens Health*. 2009 SEP; 3(3):238–251.
6. Michels TM, Kropp RY, Eyre SL, Halpern-Felsher BL. Initiating sexual experiences: How do young adolescents make decisions regarding early sexual activity? *J Res Adolesc*. 2005; 15(4):583–607.
7. Thompson, S. *Going all the way*. New York: Hill and Wang; 1995.
8. Tolman, D. *Dilemmas of desire: Teenage girls talk about sexuality*. Cambridge, Massachusetts: Harvard University Press; 2002.
9. Catalano RF, Gavin LE, Markham CM. Future directions for positive youth development as a strategy to promote adolescent sexual and reproductive health. *Journal of Adolescent Health*. 2010; 46(3):S92–S96. [PubMed: 20172463]
10. Ehrhardt AA. Our view of adolescent sexuality: A focus on risk behavior without the developmental context. *Am J Public Health*. 1996 Nov; 86(11):1523–1525. [PubMed: 8916513]
11. Fortenberry, D. Adolescent sex and the rhetoric of risk. In: Romer, D., editor. *Reducing Adolescent Risk: Toward an Integrated Approach*. Thousand Oaks, CA: Sage Publications; 2003. p. 293–300.
12. Halpern CT. Reframing research on adolescent sexuality: Healthy sexual development as part of the life course. *Perspectives on Sexual and Reproductive Health*. 2010; 42(1):6–7. [PubMed: 20415876]
13. Kan, ML.; Cares, AC. From “friends with benefits” to “going steady”: New directions in understanding romance and sex in adolescence and emerging adulthood. in: Crouter, AC.; Booth, A., editors. *Romance and sex in adolescence and emerging adulthood: Risks and opportunities*. Mahwah, NJ: Lawrence Erlbaum Associates Publishers; 2006. p. 241–258.
14. Savin-Williams, RC.; Diamond, LM. Sex. In: Lerner, RM.; Steinberg, L., editors. *Handbook of adolescent psychology*. 2nd ed.. John Wiley & Sons, Inc; 2004. p. 189–231.

15. Impett EA, Peplau LA. Sexual compliance: Gender, motivational, and relationship perspectives. *J Sex Res.* 2003 Feb; 40(1):87–100. [PubMed: 12806534]
16. Sprecher S, Barbee A, Schwartz P. "Was it good for you, too?": Gender differences in first sexual intercourse experiences. *J Sex Res.* 1995; 32(1):3–15.
17. Janssen E, McBride KR, Yarber W, Hill BJ, Butler SM. Factors that influence sexual arousal in men: A focus group study. *Arch Sex Behav.* 2008 Apr; 37(2):252–265. [PubMed: 18040768]
18. Wight D. Boys thoughts and talk about sex in a working-class locality of Glasgow. *Sociol Rev.* 1994 NOV; 42(4):703–737.
19. Eccles, J.; Gootman, JA. Board on Children, Youth, and Families. Community programs to promote youth development; 2002. Institute of Medicine (NAS), Washington, DC., National Academy of Sciences - National Research Council, Washington, DC.
20. Pittman, KJ.; O'Brian, R.; Kimball, M. Report prepared for the Center for Substance Abuse Prevention. Washington, DC: Center for Youth Development and Policy Research; 1993. Youth development and resiliency research: Making connections to substance abuse prevention.
21. Lerner RM, Fisher CB, Weinberg RA. Toward a science for and of the people: Promoting civil society through the application of developmental science. *Child Development.* 2000; 71(1):11–20. [PubMed: 10836553]
22. House LD, Bates J, Markham CM, Lesesne C. Competence as a predictor of sexual and reproductive health outcomes for youth: A systematic review. *Journal of Adolescent Health.* 2010; 46(3):S7–S22. [PubMed: 20172461]
23. Gloppen KM, David-Ferdon C, Bates J. Confidence as a predictor of sexual and reproductive health outcomes for youth. *Journal of Adolescent Health.* 2010; 46(3):S42–S58. [PubMed: 20172459]
24. Schulenberg, JE.; Zarrett, NR. Mental health during emerging adulthood: Continuity and discontinuity in courses, causes and functions. In: Arnett, JJ.; Tanner, JL., editors. *Emerging Adults in America: Coming of Age in the 21st Century.* Washington, DC: American Psychological Association; 2006. p. 135–172.
25. Salazar LF, DiClemente RJ, Wingood GM, Crosby RA, Harrington K, Davies S, et al. Self-concept and adolescents' refusal of unprotected sex: A test of mediating mechanisms among African American girls. *Prevention Science.* 2004 Sep; 5(3):137–149. [PubMed: 15470935]
26. Zimmerman MA, Copeland LA, Shope JT, Dielman TE. A longitudinal study of self-esteem: Implications of adolescent development. *Journal of Youth & Adolescence.* 1997; 26:117–141.
27. Chase-Lansdale PL, Wakschlag LS, Brooks-Gunn J. A psychological perspective on the development of caring in children and youth: The role of the family. *Journal of Adolescence.* 1995 Oct; 18(5):515–556.
28. Add health research design [homepage on the Internet]. Available from: http://www.cpc.unc.edu/projects/addhealth/files/research_design.pdf
29. Kaestle CE, Halpern CT. What's love got to do with it? Sexual behaviors of opposite-sex couples through emerging adulthood. *Perspect Sex Reprod Health.* 2007 Sep; 39(3):134–140. [PubMed: 17845524]
30. Bem SL. The measurement of psychological androgyny. *J Consult Clin Psychol.* 1974 Apr; 42(2):155–162. [PubMed: 4823550]
31. Galinsky, A. Positive sexual health in emerging adulthood: The association of sexual pleasure with psychological well-being and relationship quality [dissertation]. United States -- Maryland: The Johns Hopkins University; 2009.
32. Rosenberg, M. *Society and the adolescent self image.* Princeton, NJ: Princeton University Press; 1965.
33. Chantala, K. *Guidelines for analyzing add health data.* University of North Carolina at Chapel Hill: Carolina Population Center; 2006.
34. Brown, BV. Key indicators of child and youth well-being: Completing the picture. Brown, BV.; Brown, BV., editors. Mahwah, NJ US: Lawrence Erlbaum Associates Publishers; 2008.
35. Laumann, EO.; Gagnon, JH.; Michael, RT.; Michaels, S. *The social organization of sexuality :Sexual practices in the United States.* Chicago: University of Chicago Press; 1994.

36. Waite LJ, Laumann EO, Das A, Schumm LP. Sexuality: Measures of partnerships, practices, attitudes, and problems in the national social life, health, and aging study. *Journals of Gerontology Series B-Psychological Sciences and Social Sciences*. 2009; 64:I56–I66.
37. Crawford M, Popp D. Sexual double standards: A review and methodological critique of two decades of research. *J Sex Res*. 2003 Feb;40(1):13. [PubMed: 12806528]
38. Fredrickson BL, Roberts T. Objectification theory: Toward understanding women's lived experiences and mental health risks. *Psychol Women Q*. 1997 Jun; 21(2):173–206.
39. Tourangeau R, Smith TW. Asking sensitive questions: The impact of data collection mode, question format, and question context. *Public Opin Q*. 1996 Summer;60(2):275–304.
40. Turner CF, Ku L, Rogers SM, Lindberg LD, Pleck JH, Sonenstein FL. Adolescent sexual behavior, drug use, and violence: Increased reporting with computer survey technology. *Science*. 1998 May 08; 280(5365):867–873. [PubMed: 9572724]

Table 1

Sexual Enjoyment Distributions, by Gender^a

	Regularity of Orgasm		Receiving Oral Sex		Performing Oral Sex		
	Men	Women	Men	Women	Men	Women	
Most or all of the time***	87.1	46.8	Like it very much***	83.8	71.3	60.9	37.2
More than half the time***	7.4	20.8	Like it somewhat****	14.1	20.9	25.7	36.7
Half the time***	2.9	17.1	Neither like it nor dislike it***	1.9	5.1	9.4	16.6
Less than half the time***	1.5	9.0	Dislike it somewhat***	0.1	2.1	2.8	7.1
Never or almost never***	1.1	6.4	Dislike it very much** b	0.1	0.6	1.2	2.5
N	1,338	1,899		1,191	1,648	1,152	1,566

^aDifferences between men and women significant at the following levels * p<0.05 ** p<0.01 *** p<0.001

^bThe gender difference in percentage who dislike performing oral sex very much is not significant, while the gender difference in the percentage who dislike receiving oral sex very much is significant at p<0.01.

Table 2Developmental Assets, by Gender ^a

Developmental Asset (Range)	Men		Women	
	Mean	Standard Deviation	Mean	Standard Deviation
Autonomy (1-7)	5.5	1.7	5.5	1.4
Empathy (1-7) ***	5.5	1.8	6.0	1.4
Self-Esteem (1-5) ***	4.3	0.9	4.2	0.8
Depressive Symptoms (0-25) ***	3.8	6.0	4.8	6.0

^aDifferences between men and women significant at the following levels * p<0.05 ** p<0.01 *** p<0.001

Table 3
Increase in Log Odds of Sexual Enjoyment per Unit Increase in Developmental Asset, by Gender ^a

		Orgasm most of the time or every time (Logistic Regression, Men)		Like Receiving Oral Sex from Partner Very Much (Logistic Regression)		Like Performing Oral Sex for Partner (Ordered Logistic Regression)	
		Regularity of Orgasm (Ordered Logistic Regression, Women)					
	β	95% CI	β	95% CI	β	95% CI	
Men							
Autonomy	0.47***	(0.27, 0.66)	0.16	(−0.05, 0.38)	0.01	(−0.14, 0.18)	
Self-Esteem	0.19	(−0.14, 0.52)	0.36	(−0.03, 0.75)	0.43**	(0.13, 0.72)	
Empathy	0.31***	(0.14, 0.48)	0.20*	(0.01, 0.39)	0.19*	(0.03, 0.35)	
Women							
Autonomy	0.33***	(0.22, 0.44)	0.14*	(0.01, 0.27)	0.20**	(0.08, 0.32)	
Self-Esteem	0.38**	(0.16, 0.60)	0.35***	(0.09, 0.61)	0.45***	(0.21, 0.68)	
Empathy	0.28***	(0.16, 0.39)	0.24**	(0.08, 0.39)	0.17***	(0.04, 0.29)	

* p<0.05
** p<0.01
*** p<0.001

^aEach cell contains the coefficient or 95% confidence interval from an independent logistic or ordered logistic regression of the sexual enjoyment measure on the developmental asset measure, controlling for age, race/ethnicity, and SES.