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**CASUAL SEX AMONG YOUNG ADULTS: EDUCATION DIFFERENTIALS**

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**Context:** Sexual behavior outside of committed relationships (casual sex) has received increased public attention and lead to concerns about young adult sexual health. Virtually all recent research on casual sex relies on samples of college students. Moving beyond prior studies, this study includes the casual sexual behavior of young adults who have the full spectrum of education experiences.

**Methods:** We draw on the Toledo Adolescent Relationships Study (TARS) which was collected in 2006-2007 and includes young adults (ages 18-24) with diverse educational trajectories (N=973). We use three indicators of number of casual sex partners: lifetime vaginal; recent vaginal; and lifetime oral. We estimate OLS regression models to assess education differentials in the mean number of casual sex partners.

**Results:** The majority (59%) of young adults have had some casual sex experience. They report having 3.2 lifetime casual vaginal sex partners, 1.4 recent casual vaginal sex partners, and 2.1 lifetime casual oral sex partners. Young adults with less than a high school degree and those who had some college experience but are currently not enrolled have significantly more casual sex partners than respondents enrolled in four-year programs.

**Conclusions:** Respondents enrolled in four-year institutions are less likely to have casual sex and have fewer partners than their peers. Thus, much of the current research on young adult casual sex is omitting those who are facing some of the highest levels of risky sexual behavior. Future work on casual sex should be expanded to consider diverse samples of young adults.

Most single young adults in the United States are sexually active. One recent study found that 77% of young adults reported that they had sex during the last 12 months (Mosher, Chandra, and Jones 2005). Some of these sexual relationships occur outside of committed, romantic relationships and typically are termed casual sex. Research based on college samples indicates that casual sex is a common experience with well over half of respondents reporting that they had sex with a friend or acquaintance or what is sometimes called ‘friends with benefits’ (England, Fitzgibbons Shafer, and Fogarty 2007; McGinty, Knox, and Zusman 2007). However, the majority of 18-24 year-olds (59%) are not currently enrolled in higher education (U.S. Census Bureau 2007). Thus, college-based samples may misrepresent the sexual experiences of many young adults.

The current study draws on a sample of young adults who are pursuing varying educational trajectories including, but not limited to, four-year college bound young adults. We examine how higher education enrollment is associated with the casual sexual experiences of male and female young adults. Additionally, young adults face high levels of sexually transmitted infections and unplanned pregnancies (Weinstock, Berman, and Cates 2004; Finer and Henshaw 2006), and prior work indicates that casual sex is associated with lower rates of contraceptive and condom use (Manlove, Ryan, and Franzetta 2007; Manning, Longmore, Giordano 2000). Exploring the nature of varying sexual experiences, especially casual sex, may lead to a better understanding of the relational and associated health consequences for young adults. A more comprehensive understanding of who experiences casual sex can help in developing targeted programs and public policy on sexual health behavior for a group at high risk for STIs and unplanned pregnancy.

## **Background**

Much empirical work on casual sex relies on university students enrolled in four-year programs (e.g., Bogle 2008; England et al. 2007; Grello, Welsh, and Harper 2006; Paul 2006;

Owen, Rhoades, Stanley, and Fincham 2010). This emphasis on college students limits the representativeness of such studies given that the majority of young adults are not enrolled in four-year programs (U.S. Census 2007). Bogle (2008) argues that the higher education environment is conducive to casual sex. She reports that many students view their college years as a time of sexual experimentation including participating in casual sex before entering the 'real world' of responsible adulthood. This is due in part because college students have ample opportunity to interact with many potential sex partners of similar age and socioeconomic status. Although there are few empirical comparisons, an underlying assumption is that casual sex is more frequent among four-year college students relative to young adults enrolled in community colleges and those not enrolled in school. We argue that research based on a more general sample of young adults is necessary because college student samples likely bias results toward more advantaged young adults.

To date, two empirical studies of casual sex among American young adults have relied on a broad spectrum of respondents, and not just those enrolled in college (e.g., Bailey, Fleming, Henson, Catalano, and Haggerty 2008; Eisenberg, Ackard, Resnick, and Neumark-Sztainer 2009). Bailey et al.'s (2008) findings are based on a longitudinal sample of 938 first and second graders (in 1993) from the Pacific Northwest who were young adults in 2003-2004. They report that college attendance is negatively related to ever having casual sex. Bailey et al. (2008) argue that young adults' sexual behavior is a continuation of adolescent behavior and that college appears to have a protective effect on risky sexual behavior during the six months following high school graduation. Eisenberg et al. (2009) rely on a sample of young adults who were enrolled in Minnesota public high schools during the 1998-1999 school year, and do not find a significant relationship between recently experiencing casual sex and education status. Thus,

contrary to popular treatments of casual sex, these findings suggest that such experiences may *not* be more frequent among a college-based sample. However, one limitation of both studies is the measure of casual sex; both studies use dichotomous indicators of whether a recent partner was a casual sex partner (e.g., Eisenberg et al. 2009) or whether the respondent ever had a casual sex partner (e.g., Bailey et al. 2008). This strategy does not capture the full range of experiences involving casual sexual partners, since prior research has shown that a majority of sexually active adolescents and young adults eventually gain at least some experience with casual sex (Manning, Longmore, Giordano 2005). Thus, the current study contributes beyond prior work by focusing on the *number* of casual sexual partners reported by respondents, and the role of educational status as an influence on the frequency of casual sex partners.

Sexual scripts are also influenced by gender, and this is true of casual sex (Maccoby 1998). Male adolescents are more likely to experience casual sex than their female counterparts (Manning et al. 2005). Studies based on college samples indicate that this gender gap in casual sex experiences continues into early adulthood (e.g., Grello et al. 2006; Paul, McManus, and Hayes 2000). However, the extent of the gender gap may depend on educational enrollment. For example, women currently outnumber men in higher education enrollment with 56% of undergraduate students being women (Davis and Bauman 2008). This skewed sex ratio suggests greater potential opportunities for men to engage in casual sex. It may also be true that as women enter college and gain power and skills in the academic sphere, there may be a shift in traditional sexual scripts, which could translate into fewer distinctions in casual sexual behavior between men and women at higher levels of education. Additionally, it remains unknown whether there is a gendered pattern in casual sex among young adults who are not in school or who are enrolled in community college. Our provisional hypothesis is that the gender distinction

in casual sex may exist among young adults who do not benefit from the potential power women gain through higher education.

### **Current Investigation**

This study examines the association between higher education enrollment and the number of casual sex partners among both men and women and moves beyond prior work in four key ways. First, school-based sampling frames (e.g., Add Health) potentially exclude individuals who are not enrolled in school as youths. In the current sample, being enrolled in school at the time of interview was not a requirement to be included in the initial sampling frame.

Second, the measurement of education should distinguish community college from four-year students. Bailey et al. (2008) combine all young adults enrolled in higher education and do not differentiate between individuals in two-year versus four-year colleges. Students enrolled in each type of educational institution may have different experiences. For example, young adults enrolled in community college report lower rates of using contraception and face high rates of unplanned pregnancy (National Campaign to Prevent Teen and Unplanned Pregnancy 2009; Centers for Disease Control and Prevention 1997) compared to students in four-year programs. Similarly, Eisenberg et al. (2009) classify their sample as “not in school,” “full-time at four-year college,” and “other postsecondary school;” as such, their measure does not distinguish between individuals who did not graduate high school and those with a high school degree. Individuals who do not have a high school degree are some of the most disadvantaged. These socioeconomic differences between respondents with a high school degree or more and those without a high school degree are expected to be associated with casual sexual behavior. As noted above, some research would suggest that casual sex would be more common among individuals in four-year institutions. However, other research (e.g., Anderson 1989; Manning et

al. 2005) suggests that casual sex behavior would be most common among the most socioeconomically disadvantaged. One marker of extreme disadvantage would be not obtaining a high school diploma. In this study, we differentiate between young adults who did not graduate from high school, high school graduate but not currently enrolled in post-secondary education enrolled in community college, some college experience but not enrolled currently, and enrolled in a four-year college or university. We expect that differences in casual sex across education groups may be in part explained by variation in structural factors (i.e. family structure, parental education, race and ethnicity) and sexual attitudes.

Third, prior work has emphasized a limited conceptualization of casual sex; typically it is a simple dichotomous distinction, which does not include the number of casual sex partners. Thus, important variation in young adult sexual activity is excluded and individuals are grouped together who may face quite different levels of exposure to risk. Moreover, oral sex is a common experience during young adulthood; 83% of 20-24 year old women and 82% of men report that they have had oral sex (Mosher et al. 2005). Using a sample of college students, England et al. (2007) report that by college students' senior year, 76 % of respondents have engaged in some form of casual sex behavior that may or may not include vaginal intercourse. Furthermore national data sources (e.g., Add Health) have excluded a large share of casual sex relationships (see below) or focused on the relationship status with just first or recent sexual partner (e.g., NSFG). The current study draws on a more nuanced measure of casual sex experience by using the continuous measure of number of recent casual sex partners. In addition, we measure the number of lifetime vaginal and oral casual sex partners.

A final benefit of this study is that we consider how structural and attitudinal factors (i.e., employment status, attitudes, family background, and demographic characteristics) that have

been found in the literature to be related to sex among adolescents or subgroups of young adults. These correlates are associated with educational enrollment and represent mediators potentially explaining the relationship between education status and casual sex experiences. Specifically, employment status may matter because young adults who are enrolled in school are less likely to be employed (Bureau of Labor Statistics 2010) and may be in more age varied environments presenting fewer opportunities for casual sex. Prior work based on college samples suggests that a key factor associated with whether young adults have casual sex is their attitudes and beliefs about these behaviors (Owen et al. 2008). Drawing on a sample of college students, Lefkowitz (2005) reports that as individuals transition into college, their sexual attitudes significantly change with an increased number of students stating that they became less judgmental and more open-minded regarding sex. As attitudes toward sex become more liberal in college, it is expected that the frequency of casual sex will increase among young adults in four-year universities. Similarly, religious young adults who likely hold more conservative views are expected to have fewer casual sex partners (Owen et al. 2008). Family structure and parenting influences young adult romantic and union formation behavior (Conger, Bui, Bryant, and Elder 2000; Cunningham and Thornton 2005; Axinn and Thornton 1992), but no attention has been paid to how family structure and parenting might influence young adults' casual sex behavior. Family structure and family processes are associated with greater likelihood of casual sexual behavior during adolescence (Manning et al. 2005) and this may extend into young adulthood. It is expected that when young adults live with parents they will report fewer casual sex partners because of greater parental monitoring and thus, fewer opportunities to engage in casual sex behavior. We expect that families may matter more for young adults who are in school than those who may be less financially dependent on their families of origin. Parental education is an



indicator of socioeconomic class and measures opportunities available to respondents. Similar to adolescents (Manning et al. 2005) we expect to find little relationship between parental education and casual sex experiences in early adulthood. Male adolescents, older youths, and Black and Hispanic young adults engage in casual sex more often than their white counterparts (Bailey et al. 2008; Manning et al. 2005). As such, we expect these subgroups to report a greater number of casual sex partners.

## **Methods**

### **Data-The Toledo Adolescent Relationship Study (TARS)**

To investigate our research questions, the fourth wave of the Toledo Adolescent Relationship Study (TARS) is used. TARS is a longitudinal, four wave dataset originally collected to investigate family, peer, and romantic partners' influence on romantic and sexual behaviors of adolescents. The first wave was collected in 2000, and included a random sample derived from the school records of youths in 7th, 9th, and 11th grades in Lucas County, Ohio. Although school records were used as the sampling frame, being currently enrolled in school was not a criterion for participation in the original study. The analyses are based on respondents in Wave IV which was collected in 2006-2007. Wave I includes a sample of 1,316 youths, and in wave IV, there are 1,092 valid respondents with an excellent retention rate of 82%. Most of the interviews occurred in the respondents' homes using laptops to ensure confidentiality. There is an oversampling of racial minority youth.

The TARS is an appropriate dataset to address our research questions for several reasons. First, the TARS data provide detailed measurement regarding different types of casual sex behavior (oral and vaginal). Second, the casual sex question in the TARS directly asks how many casual sex partners respondents have had in their lifetime and in the last two years. In

contrast, the third wave of The National Longitudinal Study of Adolescent Health (Add Health) asks respondents to list all of their sexual and romantic partners. However, casual relationship status can only be determined for a subsample of relationships. More specifically, for a relationship to be included in the relationship detailed section of the Add Health that asks casual sex status, the relationship had to be in the couple sample or the important relationship sample. The couple sample criteria was that the relationship had to be opposite sex, current, duration of three months and the partner had to be over the age of 18. To be included in the important relationship sample the respondent picked two of the “most important” relationships. Casual sex relationships may be left out because they are often not the most important. Finally, all sexual relationships in the Add Health were supposed to be included in the detailed relationship section but an error in the skip patterns resulted in many respondents not being asked about relationships. Taken together, the casual sex status of over 17,000 relationships cannot be determined relying on the Add Health data.

We restrict the analytic sample to respondents who are in early young adulthood, ages 18-24 (N=1,066). Respondents excluded from the analyses include individuals who are still in high school (N=45) or already graduated with a Bachelors degree (N=48). The sample is further restricted to respondents who provided valid responses to questions about number of casual sex partners (N=973). The final analytic sample consists of 463 male and 510 female respondents.

## **Measures**

**Dependent Variables-Casual Sex-**Three dependent variables are used to measure casual sex experiences. To measure lifetime casual sex partners (mean=3.2, range 0-97), we use the following question: “How many different people of the opposite sex have you had vaginal sex with that you weren’t really dating or going out with?” To measure recent casual sex

experiences (mean = 1.4, range = 0-75), we use the following question: “In the last two years, how many people of the opposite sex have you had vaginal sex with that you were not really going out with?” Finally, to measure the number of lifetime casual oral sex partners (mean=2.1; range 0-80), we use the following question: “How many different people of the opposite sex have you had oral sex with that you weren’t really dating or going out with?”

**Independent Variables**-*Gender*-The simple measure of gender is a dummy variable where 1=female and 0=male. *Higher Education Status*-The education question is asked of the wave IV respondents: “How far have you gone in school?” Responses range from 1 (dropped out of high school) to 10 (graduate school) and are categorized into the following five categories: less than high school; high school graduate, but not enrolled in higher education; two-year institution; some college not enrolled; and four-year institution (omitted). *Employment Status* is classified as currently unemployed (omitted), part-time, or full-time. *Liberal Sex Attitudes* are based on the following four questions: “A person should only have sex with someone they love” (reverse coded); “A person should only have sex if they are married” (reverse coded); “I would have to be committed to a girl/guy in order to have sex with her/him” (reverse coded); and “I would feel comfortable having sex with someone I was attracted to, but did not know very well” (alpha=.78). The response categories range from 1= Strongly Disagree to 5=Strongly Agree, so higher numbers equal more liberal attitudes toward sex. *Currently Live with Parents* is a dichotomous indicator equal to “0” if they are currently not living with their parents and “1” if they currently live in the parental home. *Family Structure* is a wave I measure indicating whether the respondent lived with two biological parents, single parent, step-parent, or ‘other’ family form. *Parental Education* is a wave I variable and is categorized into four dummy variables: less than high school, high school, some college, and Bachelor’s degree or more

(omitted). *Age* is coded as a continuous variable with responses ranging from 18 to 24. *Race and Ethnicity* is a measure that relies on a series of dummy variables where white is the omitted group and compared to Black, Hispanics, and 'Other' racial and ethnic groups.

## **Results**

Table 1 shows the mean number of casual sex partners according to gender and education status. Among the total sample, the mean number of lifetime casual vaginal sex partners is 3.2 (SD=7.9) and the average number of lifetime casual oral sex partners is 2.1 (SD=5.8). On average, 59% of the sample experienced some form casual sex behavior. More specifically, 54% had casual vaginal sex and 43% had casual oral sex (results not shown). In the last 24 months, 39% of our sample had casual vaginal sex and the mean number of casual vaginal sex partners is 1.4 (SD=4.2).

In Table 1, t-tests are used to assess statistically significant differences between men and women regarding mean number of casual sex partners. Overall, men report significantly more lifetime casual vaginal sex partners ( $M = 4.37$  versus  $M = 2.03$  for men and women, respectively;  $t = 4.53$ ;  $p < .001$ ), lifetime oral sex partners ( $M = 3.16$  versus  $M = 1.18$  for men and women, respectively;  $t = 5.18$ ;  $p < .001$ ), and recent casual vaginal sex partners ( $M = 2.01$  versus  $M = .81$  for men and women, respectively;  $t = 4.36$ ;  $p < .001$ ). In the last 24 months, 44% of male and 33% of female respondents had a casual vaginal sex partner (results not shown). Thus, overall men are more likely than women to have casual sex partners and to have a greater number of casual sex partners. However, as will be noted below the pattern differs according to education.

*Casual vaginal sex and higher education status.* Table 1 shows a significant gender gap in vaginal casual sex among respondents who do not have post-secondary education experience. More specifically, men with less than a high school degree have more casual lifetime vaginal sex

partners compared to their female counterparts ( $M=8.49$  versus  $M=3.03$  for men and women, respectively;  $t=2.56$ ;  $p<.05$ ). Similarly, men with a high school degree have more casual lifetime vaginal sex partners ( $M=3.24$  versus  $M=1.45$ ;  $t=3.47$ ;  $p<.001$ ) compared to women with a high school education. We find only a marginally significant gender difference in lifetime casual vaginal sex partners among young adults with some post-secondary education ( $t=1.78$ ;  $p<.1$ ) and bachelor's degree programs ( $t=1.69$ ;  $p<.1$ ) with men relative to women reporting more vaginal casual sex partners.

Analysis of the gender gap in recent casual vaginal sex partners (past 24 months) indicates that there is only a significant gender gap among young adults with a high school degree. That is, men ( $M=1.80$ ) with a high school degree have significantly more recent casual sex partners than women with comparable education ( $M=.69$ ;  $t=3.29$ ;  $p<.01$ ). There are marginal gender differences among young adults with less than a high school degree ( $t=1.84$ ;  $p<.1$ ) and individuals with some post-secondary education but not enrolled ( $t=1.89$ ;  $p<.1$ ). We do not find significant gender differences in the number of recent casual sex partners among young adults enrolled in bachelor degree programs. We observe similar education and gender patterns of results when the dependent variable is a dichotomous indicator of ever experiencing casual sex, with one exception being a greater proportion of male respondents with some post-secondary education but not enrolled reporting a higher number of casual vaginal sex partner than their female counterparts (analysis not shown).

*Casual oral sex partners and higher educational status.* Similar to the casual vaginal sex findings, there is a gendered pattern of lifetime casual oral sex partners. The gender gap in casual oral sex exists among young adults with less than high school ( $M=5.45$  vs  $M=1.16$  for men and women, respectively;  $t=2.95$ ;  $p<.01$ ) and a high school degree and not currently

enrolled in school ( $M=2.73$  vs  $M=.60$ ;  $t=4.28$ ;  $p<.001$ ). We find that men at the lowest education levels have significantly greater numbers of casual oral sex partners than women. Male respondents who have some post-secondary education but are not enrolled in school currently ( $t=1.70$ ;  $p<.1$ ) or enrolled in bachelor's degree programs ( $t=1.95$ ;  $p <.1$ ) have marginally significant greater numbers of casual oral sex partners than their female counterparts. Overall, there are significant gender differences in casual oral sex behavior at lower levels of the education gradient.

### *Multivariate Results*

Table 2 shows the results for the zero-order and multivariate models predicting the number of lifetime casual vaginal sex partners. Similar to the Table 1 findings, at the zero-order, women report significantly fewer casual sex partners than men. Respondents with less than a high school degree and those with some post-secondary education experience but are not currently enrolled have significantly more lifetime casual vaginal sex partners compared to individuals enrolled in four-year institutions. These relationships remain statistically significant in the full net of control variables. However, when liberal sex attitudes and the family factors (family structure and mother's education) are included in the model the effect of education remains significant, but reduced. The inclusion of the indicator of liberal sex attitudes mediates the gender gap, reflecting that men have significantly more liberal sex attitudes than women. Further, as expected, liberal sex attitudes are a strong predictor of sexual behavior in general. Respondents who are from step families have more lifetime casual sex partners than young adults from two married parent families. Lastly, older respondents have more partners and respondents who are classified as "other race" have more partners compared to their white counterparts.

Table 3 shows the OLS regression models predicting the number of recent casual sex partners (past 24 months). The zero-order model shows that women report significantly fewer recent partners compared to men. As with the lifetime measure of casual vaginal sex, respondents who did not graduate high school have significantly more recent partners compared to young adults enrolled in four-year programs. Young adults with some post-secondary education but not currently enrolled have marginally more casual sex partners than students attending four-year institutions. Again, liberal sex attitudes mediate the gender relationship as seen in model 1 of Table 3. Liberal sex attitudes also mediate the education relationship such that once attitudes are accounted for individuals without a high school degree and young adult with some post-secondary education not enrolled no longer have more recent casual vaginal sex partners. The remaining control variables are associated with the number of casual oral sex partners in a similar manner as the lifetime measure of number of casual vaginal sex partners.

Finally, Table 4 shows the zero-order and full models for lifetime casual oral sex partners. Similar to the findings in the previous three tables, women report significantly fewer lifetime casual oral sex partners compared with men. Similarly, young adults with less than a high school degree and respondents with some post-secondary education but not currently enrolled in school, report significantly more casual oral sex partners than respondents attending four-year institutions. Liberal sex attitudes, again, are an important mediator for both gender and educational differences. When liberal sex attitudes are included in the model the effect of gender is reduced but remains statistically significant, suggesting that liberal sex attitudes do not completely explain the gender difference in lifetime casual oral sex partners. Similarly, when liberal sex attitudes are included in the model the education differentials are reduced but remain related to number of casual oral sex partners. We find the relationship between the control

variables and the number of casual oral sex partners mirrors the associations observed for number of vaginal sex partners.

### **Discussion**

The number of casual sex partners increases as individuals enter young adulthood. We find that the mean number of casual vaginal partners is 3.15. This aligns with prior research (e.g., England et al. 2007; Bogle 2008) that reports that casual sex behavior is a common experience for young adults. The high level of casual sex experience is consistent with the emerging adulthood literature in that young adulthood is a time for sexual exploration (Arnett 2004). Also similar to prior research, vaginal sex is more common for young adults compared to oral sex (Mosher et al. 2005).

Much of the public discourse on young adult casual sex rests on college-based samples and there has been a recent call for research on intimate partners to include more diverse samples (Sassler 2010). The current study addresses this important limitation in the literature and these findings illustrate the importance of moving beyond college samples. Our results indicate that young adults with lower education levels have more frequent casual sex experiences than young adults with higher educational attainment. Bogle (2008) claims that much of the young adult casual sex behavior results from the college lifestyle, such as high substance use and the fact that male and female college students live in close proximity to each other in dorms. While the college life may provide enhanced opportunities, we find that college students' casual sex experiences do not mirror their peers with lower educational attainment. In fact, we find that individuals attending four year colleges and universities report some of the lowest levels of casual sex regardless of how casual sex is measured. This means that much of the prior literature on casual sex that uses college-based samples are underestimating the prevalence of casual sex



behavior. Furthermore, sexual health programs targeted at young adults need to target those who are not pursuing higher education.

Our results confirm prior research which finds that men more often than women engage in casual sex. The bivariate and multivariate results support the hypothesis that young adult males have more casual sex experience regardless of type (oral or vaginal) or timing (lifetime or last 24 months) compared to females. We find the gender gap is greater among young adults at the lower educational levels. However, there is not a significant gender gap in casual sex between young adult males and females in four-year institutions. The hypothesis that women will become more similar to males in terms of casual sex behavior as they gain education experience is supported. Thus, to better understand gender distinctions in sexual behavior research needs to include diverse samples of young adults, not just people enrolled in four-year institutions.

An important predictor of casual sex experiences is liberal sex attitudes. Liberal sex attitudes either mediated or significantly reduced the relationship between casual sex and education. As supported in the literature on casual sex (Lefkowitz and Gillen 2006), liberal sex attitudes are one of the more important predictors of casual sex behavior. Prior research (Anderson 1989; Cuffee, Hallfors, and Waller 2007) has suggested that the most disadvantaged youth, particularly young men, have some of the highest permissive attitudes toward sex. If society wants to decrease casual sex behavior, changing adolescents' liberal sex attitudes before they reach young adulthood would be one possible target for public policy with a specific focus of youth who are at risk of not graduating from high school.

The current project utilized three measures of casual sex: lifetime vaginal, recent vaginal (past 24 months), and lifetime oral. As stated above, females have significantly fewer casual sex

partners compared to males for each dependent variable and education plays a similar role for the casual sex indicators. The findings from this study highlight the importance of measurement of casual sex. There is more variation both males and female and along the education gradient when the casual sex was measured as lifetime casual vaginal sex partners. This suggests that prior studies that only use dichotomous indicators of casual sex, such as have you ever had casual sex, are not capturing the true variation that occurs within the young adult casual sex experience. Further, the lifetime indicator of casual sex differentiates young adults with high numbers of casual sex partners facing the highest exposure of partners and potentially the highest risk of unintended pregnancy and STI's.

This study has a few limitations. First, casual sex relationships are diverse. For example, some respondents may only have sex with their casual sex partner once, and others may have casual sex at the beginning of a committed relationship. The current project does not differentiate between different types of casual sex relationships, such as casual sex that occurs with two people that just met versus a casual sex relationship that occurs with a friend or ex-boyfriend. Second, the TARS is an excellent dataset that has similar characteristics to the national population; however, the TARS are a regional sample, and exact national estimates of casual sex behavior cannot be determined using this sample. However, there is no recent national dataset that provides a measure of the total number of lifetime casual sex partners. Lastly, it is possible that males over estimate and female underestimate the number of casual sex partners. Dinkelman and Lam (2009) do show that it is mathematically possible to have true gender difference in the number of sex partners. Also, if older men are having sex with young women then we may observe differences in casual sex partners that are 'real' and not artifacts of

measurement. A next step in studying casual sex behavior is to explore couple level data to determine if there is bias in reporting between males and females.

The findings from the current project can be used as a launching point for future research on casual sex behavior of young adults. Future research can investigate how the type of casual sex behavior is related to other covariates, outcomes, and health behaviors. Additionally, empirical studies can analyze the dynamic or sporadic nature of casual sex among young adults. For example, some young adults may have casual sex once, and stop, while others may develop a long-term relationship pattern of engaging in casual sex. To help encourage healthy behaviors, it may be important to study individuals who have casual sex once and stop to understand why and how young adults move away from risky sexual behavior.

While there is extensive public commentary on casual sex, our findings highlight the need for scientific research on the topic, because the findings are often more complex than public opinion would suggest. Much of the prior attention to casual sex behavior has focused on the casual sex that occurs on college campuses. Nevertheless, individuals enrolled in four-year institutions cannot be generalized to the larger young adult population and, in fact, have some of the lowest levels of casual sex. This study calls for new scientific research on casual sex that documents the contemporary experiences and behaviors of all young adults.

## References

- Anderson, Elijah. 1989. "Sex Codes and Family Life among Poor Inner-City Youths." *Annals of the American Academy of Political and Social Sciences*. 501: 59-78.
- Arnett, Jeffrey Jensen. 2004. *Emerging Adulthood: The Winding Road from the Late Teens through the Twenties*. Oxford, UK: Oxford Press.
- Axinn, William and Arland Thornton. 1992. "The Relationship Between Cohabitation and Divorce: Selectivity or Causal Influence?" *Demography* 29: 357-374.
- Bailey, Jennifer, Charles Fleming, Jessica Henson, Richard Catalano, and Kevin Haggerty. 2008. "Sexual Risk Behavior 6 Months Post-High School: Associations with College Attendance, Living with a Parent, and Prior Risk Behavior." *Journal of Adolescent Health* 42: 573- 579.
- Bogle, Kathleen. 2008. *Hooking Up Sex, Dating, and Relationships on Campus*. New York, NY: New York University Press.
- Bureau of Labor Statistics. 2010. "College Enrollment and Work Activity of 2009 High School Graduates." Bureau of Labor Statistics. Retrieved June 11, 2010 (<http://www.bls.gov/news.release/pdf/hsgec.pdf>).
- Centers for Disease Control and Prevention. CDC Surveillance Summaries, November 14, 1997; 46 (No. SS-6).
- Conger, Rand, Ming Cui, Chalandra Bryant, and Glen Elder. 2000. "Competence in Early Adult Romantic Relationship: A Developmental Perspective on Family Influence." *Journal of Personality and Social Psychology* 79: 224-237.
- Cuffee, Juanita, Denise Hallfors, and Martha Waller. 2007. "Racial and Gender Differences in Adolescent Sexual Attitudes and Longitudinal Associations with Coital Debut." *Journal of Adolescent Health* 41: 19-26.
- Cunningham, Mick and Arland Thornton. 2005. "The Influence of Union Transitions on White Adults' Attitudes Toward Cohabitation." *Journal of Marriage and Family* 67: 710-720.
- Davis, Jessica and Kurt Bauman. 2008. "School Enrollment in the United States: 2006." US Census Bureau. Retrieved September 14, 2008 (<http://www.census.gov/prod/2008pubs/p20-559.pdf>).
- Dinkelman, Taryn, and David Lam. 2009. "A Model for Understanding Gender Discrepancies in Sexual Behavior Reports." Working Paper Population Studies Center 09-669.

- Eisenberg, Marla, Diann Ackard, Michael Resnick, and Dianne Neumark-Sztainer. 2009. "Casual Sex and Psychological Health Among Young Adults: Is Having "Friends with Benefits" Emotionally Damaging?" *Perspectives on Sexual and Reproductive Health* 41: 231-237.
- England, Paula, Emily Fitzgibbons Shafer, and Alison C. K. Fogarty. 2007. "Hooking Up and Forming Romantic Relationships on Today's College Campuses." in *The Gendered Society Reader*, edited by M. Kimmel. New York, NY: Oxford University Press.
- Finer, Lawrence and Stanley Henshaw. 2006. "Disparities in Rates of Unintended Pregnancy in the United States, 1994 and 2001." *Perspectives on Sexual & Reproductive Health* 38: 90-96.
- Grello, Catherine, Deborah Welsh, and Melinda Harper. 2006. "No Strings Attached: The Nature of Casual Sex in College Students." *Journal of Sex Research* 43: 255-267.
- Lefkowitz, Eva. 2005. "Things Have Gotten Better: Developmental Changes Among Emerging Adults After the Transition to University." *Journal of Adolescent Research* 20: 40-63.
- Lefkowitz, Eva and Meghan Gillen. 2006. "Sex is Just a Normal Part of Life: Sexuality in Emerging Adulthood." Pp 235-255 in *Emerging Adults in America Coming of Age in the 21st Century* edited by J. J. Arnett and J. L. Tanner. Washington D.C.: American Psychological Association.
- Maccoby, Eleanor. 1998. *The Two Sexes Growing Up Apart, Coming Together*. Cambridge: The Belknap Press.
- Manlove, Jennifer, Suzanne Ryan, and Derry Franzetta. 2007. "Contraceptive Use Patterns Across Teens' Sexual Relationship." *Demography* 44: 603-621.
- Manning, Wendy, Monica Longmore, and Peggy Giordano. 2000. "The Relationship Context of Contraceptive Use at First Intercourse." *Family Planning Perspectives* 32: 104-110.
- Manning, Wendy, Monica Longmore, and Peggy Giordano. 2005. "Adolescents' Involvement in Non-Romantic Sexual Activity." *Social Science Research* 34: 384-407.
- McGinty, Kristen, David Knox, and Marty Zusman. 2007. "Friends with Benefits: Women Want Friends and Men Want Benefits." *College Student Journal* 41: 1128-1131.
- Mosher, William, Anjani Chandra, and Jo Jones. 2005. "Sexual Behavior and Selected Health Measures: Men and Women 15-44 Years of Age." National Center for Health Statistics. Advance Data. No 362.
- National Campaign to Prevent Teen and Unplanned Pregnancy. 2009. "Unplanned Pregnancy and Community Colleges" Washington, DC.

- Owen, Jesse, Galena Rhoades, Scott Stanley, and Frank Fincham. 2010. "Hooking Up Among College Student: Demographic and Psychosocial Correlates." *Archives of Sexual Behavior* 39: 653-663.
- Paul, Elizabeth, Brian McManus, and Allison Hayes. 2000. "Hookups: Characteristics and Correlates of College Students' Spontaneous and Anonymous Sexual Experiences." *The Journal of Sex Research*, 37: 76-88.
- Paul, Elizabeth. 2006. "Beer Goggles, Catching Feelings, and the Walk of Shame: The Myths and Realities of the Hookup Experience." Pp 144-160 in *Relating Difficulty: The Processes of Constructing and Managing Difficult Interaction* edited by D. C. Kirkpatrick, S. Duck, and M. Foley. Mahwah, NJ: Lawrence Erlbaum Associates.
- Weinstock, Hillard, Stuart Berman, and Willanrd Cates. 2004. "Sexually Transmitted Diseases Among American Youth: Incidence and Prevalince Estimates, 2000." *Perspectives on Sexual and Reproductive Health* 36: 6-10.
- U.S. Census Bureau. 2007. American Community Survey. Table B14004. Retrieved November 16, 2008 ([http://factfinder.census.gov/servlet/DTable?\\_bm=y&-geo\\_id=01000US&-ds\\_name=ACS\\_2007\\_1YR\\_G00\\_&-SubjectID=15234489&-lang=en&-mt\\_name=ACS\\_2007\\_1YR\\_G2000\\_B14004&-format=&-CONTEXT=dt](http://factfinder.census.gov/servlet/DTable?_bm=y&-geo_id=01000US&-ds_name=ACS_2007_1YR_G00_&-SubjectID=15234489&-lang=en&-mt_name=ACS_2007_1YR_G2000_B14004&-format=&-CONTEXT=dt)).

Table 1. Mean Number and Significant Difference between Men and Women for Casual Sex by Education Status

	Lifetime Casual Vaginal Sex Partners				Recent Casual Sex Partners				Lifetime Casual Oral Sex Partners			
	Total	Men	Women	Sig	Total	Men	Women	Sig	Total	Men	Women	Sig
Full Sample (N=973)	3.15	4.37	2.03	***	1.38	2.01	0.81	***	2.12	3.16	1.18	***
Less than High School (N=133)	5.94	8.49	3.02	*	2.14	3.15	0.97	†	1.45	5.45	1.16	**
High School Degree (N=335)	2.30	3.24	1.45	***	1.22	1.80	0.69	**	1.62	2.73	0.60	***
Community College (N=120)	2.62	3.00	2.38		1.23	1.83	0.86		1.71	1.98	1.54	
Some Post-Secondary Education Not Enrolled (N=158)	4.91	6.55	3.36	†	1.80	2.70	0.94	†	3.15	4.31	2.04	†
Bachelor's (N=227)	1.81	2.40	1.26	†	0.97	1.17	0.78		1.60	1.98	1.25	†

Note: Males N=463; Females N=510; \*\*\*p<.001; \*\*p<.01 \*p<.05 † p<.1

Source:Toldeo Adolescent Relationship Study Wave Four

**Table 2. OLS Regression on Lifetime Casual Vaginal Sex Partners**

	Zero-Order B	Model 1 B
<b>INTERCEPT</b>		-12.06 ***
<b>INDEPENDENT VARIABLES</b>		
<b>Gender</b>		
Female	-2.34 ***	-0.89 †
<b>Higher Education Status (Bachelor's Omitted)</b>		
Less than High School	4.13 ***	2.64 **
High School Degree Not Currently Enrolled	0.50	0.82
Community College	0.81	0.99
Some Post-Secondary Education Not Currently Enrolled	3.11 ***	2.14 **
<b>Employment Status (Unemployed Omitted)</b>		
Part-time		-0.38
Full-time		-1.18 †
<b>Liberal Sex Attitudes</b>		
<b>Family Factors</b>		
Live with Parents		-0.73
Family Structure (Two Biological Omitted)		
Single		0.52
Step		1.51 *
Other		0.16
Parental Education (Bachelor's Omitted)		
Less than High School		0.02
High School		-0.36
Some College		-0.19
<b>Demographic Characteristics</b>		
Age		0.39 *
Race (White Omitted)		
Black		0.93
Hispanic		0.98
Other		3.49 ***
<b>R<sup>2</sup></b>		0.17

Note: N=973 ; \*\*\*p<.001; \*\*p<.01 \*p<.05 † p<.1

Source:Toldeo Adolescent Relationship Study Wave Four



**Table 3. OLS Regression on Recent Casual Sex Partners**

	<b>Zero-Order B</b>	<b>Model 1 B</b>
<b>INTERCEPT</b>		-1.05
<b>INDEPENDENT VARIABLES</b>		
<b>Gender</b>		
Female	-1.20 ***	-0.28
<b>Higher Education Status (Bachelor's Omitted)</b>		
Less than High School	1.17 *	0.16
High School Degree Not Currently Enrolled	0.26	0.02
Community College	0.27	0.08
Some Post-Secondary Education Not Currently Enrolled	0.83 †	0.33
<b>Employment Status (Unemployed Omitted)</b>		
Part-time		-0.32
Full-time		-0.23
<b>Liberal Sex Attitudes</b>		0.24 ***
<b>Family Factors</b>		
Live with Parents		-0.15
<b>Family Structure (Two Biological Omitted)</b>		
Single		0.11
Step		1.06 **
Other		-0.62
<b>Parental Education (Bachelor's Omitted)</b>		
Less than High School		0.71
High School		0.23
Some College		0.35
<b>Demographic Characteristics</b>		
Age		-0.09
<b>Race (White Omitted)</b>		
Black		0.35
Hispanic		0.06
Other		1.17 *
<b>R<sup>2</sup></b>		0.13

Note: N=973 ;\*\*\*p<.001; \*\*p<.01 \*p<.05 † p<.1

Source:Toldeo Adolescent Relationship Study Wave Four

**Table 4. OLS Regression on Lifetime Casual Oral Sex Partners**

	<b>Zero-Order B</b>	<b>Model 1 B</b>
<b>INTERCEPT</b>		-7.52 **
<b>INDEPENDENT VARIABLES</b>		
<b>Gender</b>		
Female	-1.98 ***	-0.85 *
<b>Higher Education Status (Bachelor's Omitted)</b>		
Less than High School	1.85 **	1.26 †
High School Degree Not Currently Enrolled	0.02	0.23
Community College	0.11	0.35
Some Post-Secondary Education Not Currently Enrolled	1.55 *	1.07 †
<b>Employment Status (Unemployed Omitted)</b>		
Part-time		-0.10
Full-time		-0.48
<b>Liberal Sex Attitudes</b>		
		0.30 ***
<b>Family Factors</b>		
Live with Parents		-0.16
<b>Family Structure (Two Biological Omitted)</b>		
Single		-0.33
Step		1.38 *
Other		0.96
<b>Parental Education (Bachelor's Omitted)</b>		
Less than High School		-1.07
High School		-0.04
Some College		-0.42
<b>Demographic Characteristics</b>		
Age		0.24 *
<b>Race (White Omitted)</b>		
Black		-0.42
Hispanic		0.51
Other		2.55 ***
<b>R<sup>2</sup></b>		0.14

Note: N=973 ;\*\*\*p<.001; \*\*p<.01 \*p<.05 † p<.1

Source:Toldeo Adolescent Relationship Study Wave Four