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Perceived Neighborhood Partner Availability, Partner Selection And Risk For Sexually Transmitted Infections Within A Cohort Of Adolescent Females

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Abstract

Purpose—This research examined the association between a novel measure of perceived partner availability and discordance between ideal and actual partner characteristics as well as trajectories of ideal partner preferences and perceptions of partner availability over time.

Methods—A clinic recruited cohort of adolescent females (N = 92), aged 16 -19, were interviewed quarterly for 12 months using audio computer-assisted self-interview. Participants ranked the importance of characteristics for their ideal main sex partner and then reported on these characteristics for their current main partner. Participants reported on perceptions of availability of ideal sex partners in their neighborhood. Paired t-tests examined discordance between ideal and actual partner characteristics. Random-intercept regression models examined repeated measures.

Results—Actual partner ratings were lower than ideal partner preferences for fidelity, equaled ideal preferences for emotional support and exceed ideal preferences for social/economic status and physical attractiveness. Discordance on emotional support and social/economic status was associated with sex partner concurrency. Participants perceived low availability of ideal sex partners. Those who perceived more availability were less likely to be ideal/actual discordant on fidelity [OR = 0.88, 95% CI: 0.78,1.0]. Neither ideal partner preferences nor perceptions of partner availability changed over 12 months.

Conclusions—Current main sex partners met or exceeded ideal partner preferences in all domains except fidelity. If emotional needs are met, adolescents may tolerate partner concurrency

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Implications & Contribution: The present study describes a novel measure of perceived neighborhood partner availability, which directly assesses low-income urban adolescent females' awareness of the low availability of ideal sex partners in their neighborhood. These findings advance our knowledge of the role of perceived partner availability on partner selection and STI risk.

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in areas of limited partner pools. Urban adolescent females who perceive low availability may be at increased risk for STI as they may be more likely to have non-monogamous partners.

Keywords

sex partner selection; STI risk; perceptions; partner availability; cohort studies; adolescents; female

Introduction

Sexually transmitted infections (STI) are endemic in the United States. African American youth bear the largest burden of morbidity.¹ Concurrent or overlapping sexual partnerships have been found to play a critical role in accelerating the spread of STI.² Sex partner concurrency elevates an individual's risk of acquiring an STI, independent of the individual's number of sex partners, as it links the individual to a broader sexual network.³ Sex network structure, formed by sex partner selection patterns has been found to contribute to the disparate rate of STI among African Americans.⁴

While studies have found a high prevalence of concurrency among urban minority youth, further research suggests this is not a result of differences in relationship attitudes or expectations.^{5,6} Qualitative interviews with inner-city black adolescent females found that young black women desire monogamous partnerships; despite often accepting a relationship with a non-monogamous partner.⁷ Rather than a difference in views on relationships, the high prevalence of partner concurrency is thought to result from structural differences in the social and economic environment experienced by black and white youth.⁸ Poor communities of color experience much higher rates of violence and incarceration, which removes adolescent and young adult males from the community resulting in a low male: female sex ratio.^{9,10} Sex ratio and incarceration rates have been found to be associated with male concurrency.¹¹ Thus, in impoverished communities, a limited pool of available men restricts females' choices for male partners.^{5,12}

This limited pool of partners is thought to result in an increase in female tolerance of partner concurrency. Examining ideal vs. actual partner characteristics provides an empirical evaluation of the interplay between tolerance and partner availability. The discrepancy between ideal and actual partner characteristics quantifies the compromise, if any, made by adolescent females in their sex partner selection. Research has shown that compromising on desired sex partner characteristics was associated with STI risk behaviors.¹³ Specifically, this data found that having a sex partner that is less than ideal in the areas of emotional support and fidelity was associated with both individual and partner concurrency.

The existing literature has accounted for sex ratio at the population level; however, at the individual level, we do not know whether adolescents consider partner availability when they are selecting sex partners.^{11,14} The perceived neighborhood partner availability scale was developed for this study to assess adolescent females' awareness of the low availability of ideal sex partners. The scale items were created based on a review of this literature and inferences about the mechanisms by which population level data were functioning at the individual level. We hypothesized that perceiving low availability of ideal sex partners

would be associated with compromising on sex partner characteristics, demonstrated by discordance between ideal and actual sex partner characteristics. Further, there may be a developmental component where perceiving low availability of ideal sex partners changes over time as adolescents gain experience with additional sex partners.¹⁵ Using data from a prospective cohort of urban, African American adolescent females, the objectives of this study were to: 1) examine the association between perceptions of partner availability and discordance between ideal and actual partner characteristics, 2) examine the association between STI risk factors and discordance between ideal and actual partner characteristics, and 3) examine whether ideal partner preferences and/or perceptions of partner availability change over time.

Methods

Study Population

A prospective cohort of adolescent females was recruited from two urban health clinics: a hospital-based adolescent medicine clinic and a public STD clinic, and community venues in Baltimore, MD. Eligibility criteria included age between 16 and 19, sexually active defined as having vaginal or anal intercourse with an opposite sex partner in the preceding 3 months, English-speaking, and residence in the Baltimore metropolitan area. Between December 2009 and August 2010, 122 adolescent females were enrolled in the Perceived Risk for Sexually Transmitted Diseases (PRSTD) study. Sixty-two percent (122/196) of eligible females agreed to participate. The majority (95%) of females cited lack of time or interest as reasons for declining participation in the study. There were no differences in age, years of school completed, maternal education, sexuality, condom use at last sex, STI history, and number of sex partners in the past 3 months between those who participated and those who did not; however, those who did not participate had a greater mean number of lifetime sexual partners (5.5 vs. 2.0, $p < 0.05$). Consent was obtained from eligible participants 18 and older. Participants under 18 who were recruited from clinical settings were able to provide consent for themselves under CFR 46 Subpart D. For participants under 18 recruited from community venues, study staff contacted parents/guardians to obtain consent. Participants assented to study participation. The Johns Hopkins University Institutional Review Board approved the study protocol.

Procedures

Participants completed quarterly interviews over a 12 month follow-up period for a total of five interviews. Interviews were completed using audio computer-assisted self-interview (ACASI) software on laptop computers in a private setting.¹⁶ The interviews included questions on demographics, sexual history, sex partner preferences, and perceived availability of ideal sex partners. Participants were also asked a set of questions that were specific to each of their sex partners in the previous 3 months, including partner characteristics and partner-specific sexual behaviors. Urine samples were collected at quarterly interviews and tested for gonorrhea and chlamydia using nucleic acid amplifying tests (NAAT).¹⁷ Participants received a \$20 Visa gift card as remuneration for completing the interviews.

Measures

Participants were asked to describe qualities of their ideal main sex partner and their actual main sex partner. These qualities were chosen as a result of previous qualitative work and the measures were published previously.^{7,13} An ideal main sex partner was defined as “a main sex partner you would like to have, whether this describes your current main partner or not. An ideal partner has everything you could possibly want in a man.” An actual main sex partner was defined as “someone that you have sex with, and you consider this person to be the person you are serious about.”

Ideal Main Sex Partner Characteristics—Participants were asked to rate the importance of 17 qualities in their ideal main sex partner. Participants were asked “How important to you are the following qualities in an ideal main sex partner?” with responses using a 5-item Likert scale (not at all important, a little important, somewhat important, very important, extremely important). The 17 partner qualities are listed in Table 3 and include such qualities as, trustworthy, wants a long term commitment, is mature, values education, has a nice body, and only has sex with me.

Actual Main Sex Partner Characteristics—Participants were asked to describe what their main sex partner was like using the same 17 qualities. Using a 4-item Likert response, participants were asked to agree or disagree that each of these qualities described their main sex partner. Likert responses were quantified on an ordinal scale represented from 1 (strongly disagree) to 4 (strongly agree).

Perceived Neighborhood Partner Availability Scale—Table 1 presents the six items used to assess participants' perceived availability of ideal sex partners in their neighborhood. Participants were asked to agree or disagree with the following statements using a 4-item Likert response from 1 (strongly agree) to 4 (strongly disagree). It is hard to find a good single man in this neighborhood. Many of the good single men in this neighborhood are in jail. In this neighborhood, there aren't enough good men to go around. Good men in this neighborhood often die young. Women in this neighborhood don't have many good single men to choose from. It's hard to find a man in this neighborhood that would make a good father.

Sex Partner Concurrency. For each main partner, participants were asked, “To the best of your knowledge, did this partner ever have other sex partners while you two were having a sexual relationship?”.

Statistical Analysis

The current analysis was restricted to the ninety-two participants who reported having at least one main sex partner over follow-up. As has been done previously, quality preferences for ideal and actual sex partners were summarized into clusters.¹³ Partner characteristic clusters were divided into four domains – emotional support (5 qualities): makes me feel wanted, trustworthy, tells me about feelings, mature, wants long term commitment; social/economic status (6 qualities): makes good money, legally employed, values education, gets respect, self-confident, powerful; physical attractiveness (3 qualities): sexy, nice body,

attractive; and fidelity (1 quality): has sex only with me. The reliability of both the partner characteristic clusters was examined for both ideal and actual partners using Chronbach's alpha. Factor analysis was used to determine that the perceived availability scale was unidimensional. Reliability was also assessed for the perceived availability scale using Chronbach's alpha.

The ratings participants assigned to each trait within a trait cluster were totaled to obtain a partner characteristic cluster score. The Likert scales used to rank real and ideal sex partners were not equivalent; the scale to rate ideal sex partners had five items, whereas the scale for real main sex partners had four items. To compare real and ideal partners, the two most positive response categories for ideal main sex partners were collapsed into one category as has been done previously.¹³ Higher scores in each partner characteristic cluster domain indicate higher value placed on the partner qualities that make up that domain.

Paired t-test was used to assess the discordance between mean ideal and actual partner characteristics. For the regression analyses, discordance was a dichotomous outcome, defined when the actual sex partner score was less than the ideal sex partner score separately for each participant characteristic cluster. We modeled the unadjusted odds of discordance between ideal and actual partner characteristics for STI, STI risk factors, and the perceived neighborhood availability scale. Mixed models with random intercept was used to examine the trajectory of ideal partner characteristics, separately for each participant characteristic cluster, while accounting for repeated measures per participant.¹⁸ Mixed models with random intercept was also used to model the individual trajectories of perceived neighborhood availability. The regression techniques used to address both study aims allowed for multiple partner observations per participant. Summary statistics and regression modeling were conducted using SAS (v.9.2, SAS Institute Inc. Cary, NC).¹⁹

Results

Participant Characteristics

Overall retention of the cohort was high. There was 78% retention at 3 months. Of those who were retained to 3 months, over 90% were retained in the study for months 3-18. Participant characteristics at baseline are shown in Table 2. Participants were on average (standard deviation (sd)) 17.8 (1.0 yrs) years old; 94% were African American. The mean age at sexual debut was 14.5 yrs old. Sixty-nine percent of participants reported that their mother had less than or equal to a high school education. The mean number of sexual partners in the 3 months preceding the baseline interview was 1.6 (1.2). Four percent of the sample tested positive for gonorrhea and 18% tested positive for chlamydia at baseline.

Relationship Characteristics

Ninety-six percent of participant's reported that their partner's were African American race. On average (sd) their partners were 19.5 (3.6) years old. Seventy-three percent of participants reported using condoms at first sex in these relationships.

Ideal vs. Actual Sex Partner Characteristics

As shown in table 3, each of the partner characteristic clusters showed high reliability for both ideal and actual sex partners (Chronbach's $\alpha > 0.70$) with the exception of social and economic status for ideal sex partners, which had a moderate reliability (Chronbach's $\alpha = 0.64$). Table 3 reports the mean (sd) for each domain separately for ideal and actual sex partners. The possible score range for each domain is determined by the number of partner qualities that make up that domain. The minimum and maximum scores for each domain are listed in Table 3 in order to facilitate interpretation of the mean values. Discordance between mean ideal and actual partner characteristics is shown in table 3. There were no differences for mean emotional support between ideal and actual partners (17.4 vs. 16.8, $p=0.14$). The mean social and economic status of actual partners exceeded that of ideal partners (18.5 vs. 17.2, $p=0.001$). The mean physical attractiveness of actual partners exceeded that of ideal partners (10.4 vs. 7.8, $p<0.001$). Actual partner fidelity was lower than ideal partner fidelity (3.2 vs. 3.7, $p<0.001$).

Table 4 presents results of the regression analysis for discordance between ideal and actual partner characteristics. Participants reporting a concurrent main sex partner (their partner had other sex partners) were more than four times more likely to report that their actual main sex partner did not achieve their ideal levels of emotional support (OR=4.38, 95% CI: 1.54, 12.4) and three times more likely to report that their actual main sex partner did not achieve their ideal levels of social/economic status (OR=3.12, 95% CI: 1.08, 8.95). A participant reporting having more than 1 sex partner in the previous three months was more than twice as likely to report that their actual main sex partner did not achieve their ideal levels of emotional support (OR=2.68, 95% CI: 1.09, 6.58). There was no association between testing positive for an STI (gonorrhea and/or chlamydia) and ideal/actual discordance for any of the partner characteristic clusters.

Perceived Neighborhood Availability

The perceived neighborhood availability scale showed relatively high reliability (Chronbach's $\alpha = 0.69$). Adolescent females in this study reported perceiving relatively low availability of ideal sex partners in their neighborhood (mean (sd) = 12.4 (3.7)). Each additional increase in the scale represents the participant's increasing perception that ideal sex partners are available in their neighborhood. Perceived availability of ideal sex partners was associated with discordance on partner fidelity. As shown in table 4, for each additional increase in perceived availability of ideal sex partners, participants were 12% less likely to report discordance on partner fidelity (OR=0.88, 95% CI: 0.78, 1.00).

Changes Over Time in Ideal Sex Partner Characteristics and Perceived Neighborhood Availability

Neither perceived availability nor ideal partner characteristics changed over 1 year. As shown in table 5, none of the slopes for the partner characteristic clusters or for perceived partner availability were different from zero. To be certain that there was no unobserved effect resulting from some participants moving to different neighborhoods, we performed a sensitivity analysis. Sixty-seven (73%) of the participants did not report moving to a new neighborhood over the 12-month follow-up period. The slope for perceived availability was

not significantly different from zero for those 67 participants, thus our inferences remain the same that perceived availability of ideal sex partners did not change over time.

We conducted additional sensitivity analyses to examine whether actual partner experience had an effect on trajectories of ideal partner preferences or perceived partner availability. We examined these trajectories separately for participants who reported having no partner at one or more follow-up interviews as well as for those participants who reported the same main partner over the 12-month period. Results from these sensitivity analyses did not change our findings. There was no change over time observed in either ideal partner preferences or perceived partner availability for either participants who had a period without a main relationship or for those who had a single main partner.

Discussion

Despite perceiving low availability of ideal partners, urban adolescent females in this cohort did not compromise their ideal preferences for most partner characteristics. For participants in this study, actual main sex partners met or exceeded ideal partner characteristics in all domains except fidelity. Our data further show that the lack of discrepancy between ideal and actual characteristics was not a result of young women lowering their ideals over time. Despite experiences with non-monogamous partners, we did not see changes over time in adolescents' preferences for monogamous main partners. These findings are consistent with previous work, which suggests that if emotional needs are met, adolescents may tolerate partner concurrency in areas of limited partner pools.²⁰

We created the perceived neighborhood availability scale as way to assess adolescent females' awareness of the low availability of ideal sex partners. This measure is a more direct assessment of partner availability than calculating gender ratio from census block data. The imprecision of census measures has limited our ability to understand the realized availability of ideal partners.²¹ Using the perceived neighborhood availability measure, we found that urban adolescent females report low availability of ideal sex partners in their neighborhood. We confirmed our hypothesis that perceiving low availability of ideal sex partners would be associated with compromising on sex partner characteristics. Specifically, we found that perceiving low availability of ideal partners was associated with discordance on partner fidelity. As male concurrency has been the most discussed consequence of low male: female gender ratios, we expected to find perceived neighborhood availability to be associated with fidelity discordance among all the partner qualities.

Perceived neighborhood availability was shown to be temporally stable. We did not observe a change in adolescent females' perceived availability of ideal partners in their neighborhood over a one-year period. This was contrary to our hypothesis, as we would have expected to see a decrease over time in perceived availability of ideal partners as adolescents had increasing experience with non-monogamous partners. However, these findings are consistent with the literature, which suggests a shift in cultural norms with respect to partner concurrency.²² The persistence of structural and economic disparities over generations has resulted in adolescents exposure to the non-monogamous partners of mothers, aunts, and others in their neighborhood. These cultural norms may buffer an adolescent's experience in

that these maintained levels of concurrency over time in the community may account for adolescent females' unchanged reports of perceiving relatively low availability of ideal sex partners in this study.

Our findings were similar to those of Polk and colleagues, but there were some differences.¹³ Similarly, we found that having a partner who had other sex partners as well as participants having more than one recent sex partner were both associated with discrepancy in emotional support between ideal main sex partners and actual main sex partners. However, in our sample, we also found that partner concurrency was also associated with discrepancy between ideal and actual main partners social/economic status. Surprisingly, we did not replicate the findings of Polk in that neither partner concurrency nor participants having more than one recent sex partner was associated with discordance on partner fidelity. This could be an issue of precision as the point estimates were similar, but the confidence intervals in our study were wider. However, differences in neighborhood or cultural norms could also explain the dissimilarities between the household and clinic samples. Lastly, while not statistically significant, our findings suggested that participants who reported having more than one recent partner were more likely to report discordance between ideal and actual partner's social/economic characteristics. These findings are similar to what was found by Polk and colleagues. It is difficult to speculate on the implications of these collective findings. It may be that young women are having more partners because they are not finding their preferred partner. However, it merits further exploration as discordance may indicate a driver of partner selection.

While these data provide novel insight into the impact partner availability has on main sex partner characteristics, there are limitations that argue for future research. While our analyses observed stability of ideal partnership preferences and perceived partner availability within the neighborhood over a 12-month period, either or both may show change if assessed over a much longer time trajectory. These findings come from a relatively small sample of adolescent females. This was a clinic sample of women that tend to be at higher risk for STIs compared to a school-based or other non care-seeking sample. Our sample represents the population who bear the greatest burden of disease, African American female adolescents.¹ We do not mean to imply that our findings will be generalizable to suburban or rural African Americans nor to adolescents of other race/ethnicities; however, our findings should be relevant to other African American urban populations.

There are major strengths of this study. Our measure of perceived partner availability represents a more direct assessment compared to calculating gender ratio from census block data. We found evidence of both internal validity and temporal stability of the perceived neighborhood availability measure. Findings from this study suggest that urban adolescent females who perceive a restricted choice of male partners may be at increased risk for STI as they may be more likely to have non-monogamous partners. Future interventions should address the social and economic context of STI risk, including structural interventions aimed at reducing rates of incarceration and increasing opportunities for employment for youth.

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Reference List

1. Center for Disease Control and Prevention. 2011 sexually transmitted diseases surveillance. 2011
2. Morris M, Kretzschmar M. Concurrent partnerships and the spread of HIV. *AIDS*. 1997; 11(5):641–648. [PubMed: 9108946]
3. Fichtenberg CM, Muth SQ, Brown B, Padian NS, Glass TA, Ellen JM. Sexual network position and risk of sexually transmitted infections. *Sex Transm Infect*. 2009; 85(7):493–498. [PubMed: 19700414]
4. Laumann EO, Youm Y. Racial/ethnic group differences in the prevalence of sexually transmitted diseases in the united states: A network explanation. *Sex Transm Dis*. 1999; 26(5):250–261. [PubMed: 10333277]
5. Adimora AA, Schoenbach VJ, Martinson FE, Donaldson KH, Fullilove RE, Aral SO. Social context of sexual relationships among rural african americans. *Sex Transm Dis*. 2001; 28(2):69–76. [PubMed: 11234788]
6. Rosenberg MD, Gurvey JE, Adler N, Dunlop MB, Ellen JM. Concurrent sex partners and risk for sexually transmitted diseases among adolescents. *Sex Transm Dis*. 1999; 26(4):208–212. [PubMed: 10225587]
7. Andrinopoulos K, Kerrigan D, Ellen JM. Understanding sex partner selection from the perspective of inner-city black adolescents. *Perspect Sex Reprod Health*. 2006; 38(3):132–138. [PubMed: 16963386]
8. Adimora AA, Schoenbach VJ. Social context, sexual networks, and racial disparities in rates of sexually transmitted infections. *J Infect Dis*. 2005; 191(Suppl 1):115–122.
9. Geronimus AT, Bound J, Waidmann TA, Hillemeier MM, Burns PB. Excess mortality among blacks and whites in the united states. *N Engl J Med*. 1996; 335(21):1552–1558. [PubMed: 8900087]
10. Thomas JC, Sampson LA. High rates of incarceration as a social force associated with community rates of sexually transmitted infection. *J Infect Dis*. 2005; 191(Suppl 1):55–60.
11. Pouget ER, Kershaw TS, Niccolai LM, Ickovics JR, Blankenship KM. Associations of sex ratios and male incarceration rates with multiple opposite-sex partners: Potential social determinants of HIV/STI transmission. *Public Health Rep*. 2010; 125(Suppl 4):70–80. [PubMed: 20626195]
12. Spanier GB, Glick PC. Mate selection differentials between whites and blacks in the united states. *Soc Forces*. 1980; 58(3):707–725.
13. Polk S, Ellen JM, Chung SE, Huettner S, Jennings JM. Discordance between adolescent real and ideal sex partners and association with sexually transmitted infection risk behaviors. *J Adolesc Health*. 2011; 48(6):604–609. [PubMed: 21575821]
14. Billy JOG, Brewster KL, Grady WR. Contextual effects on the sexual behavior of adolescent women. *J Marriage Fam*. 1994; 56(2):387–404.
15. Regan PC, Joshi A. Ideal partner preferences among adolescents. *Soc Behav Personal*. 2003; 31(1):13–20.
16. NOVA Research Company. Questionnaire development system. 1998; 2:5.
17. Gaydos CA, Quinn TC. Urine nucleic acid amplification tests for the diagnosis of sexually transmitted infections in clinical practice. *Curr Opin Infect Dis*. 2005; 18(1):55–66. [PubMed: 15647701]
18. Hedeker, D.; Gibbons, RD. Longitudinal data analysis. 1st. New York, NY: John Wiley & Sons; 2006. p. 384
19. SAS Institute Inc. SAS/STAT 9.2. 2008; 9:2.

20. Matson PA, Chung SE, Sanders P, Millstein SG, Ellen JM. The role of feelings of intimacy on perceptions of risk for a sexually transmitted disease and condom use in the sexual relationships of adolescent african american females. *Sex Transm Infect.* 2012; 88(8):617–621. [PubMed: 22707479]
21. Campbell A. A few good men: Evolutionary psychology and female adolescent aggression. *Ethol Sociobiol.* 1995; 16(2):99–123.
22. Kerrigan D, Andrinopoulos K, Johnson R, Parham P, Thomas T, Ellen JM. Staying strong: Gender ideologies among African American adolescents and the implications for HIV/STI prevention. *Journal of Sex Research.* 2007; 44(2):172–180. [PubMed: 17599274]

List of abbreviations

STI	sexually transmitted infection
GC	gonorrhea
CT	Chlamydia
NAAT	nucleic acid amplifying test
OR	odds ratio
CI	confidence interval
sd	standard deviation
ACASI	audio computer-assisted self-interview

Table 1
Perceived Neighborhood Partner Availability Scale Items

It is hard to find a good single man in this neighborhood.
Many of the good single men in this neighborhood are in jail.
In this neighborhood, there aren't enough good men to go around.
Good men in this neighborhood often die young.
Women in this neighborhood don't have many good single men to choose from.
It's hard to find a man in this neighborhood that would make a good father.

Table 2
Demographic and Baseline Characteristics of 92 Female Participants and their Main Partners

Participants	
Age in years, mean (sd)	17.8 (1.0)
African American race, %	93.5
Age at sexual debut, mean (sd)	14.5 (1.7)
Maternal education high school, %	68.7
Number of sexual partners past 3 months, mean (sd)	1.6 (1.2)
Perceived partner concurrency, %	23.6
STD history, %	48.9
Chlamydia diagnosis, %	18.4
Gonorrhea diagnosis, %	4.6
Perceived neighborhood partner availability scale, mean (sd) *	12.4 (3.7)
Discordant between ideal and actual partner qualities, by domain (%)	
Emotional support	41
Social/economic status	25
Physical attractiveness	7
Fidelity	68
Main Partners	
Age in years, mean (sd)	19.5 (3.6)
African American race, %	95.7
Condom use at first sex, %	73.0

* 6 item scale, range of score: 6-24

Table 3
Reliability of Partner Characteristic Clusters and Discordance Between Ideal and Actual Main Sex Partner Characteristics Within a Cohort of Adolescent Females (N=92)

Cluster Domain	No. of qualities, score range [†]	Partner Quality	Ideal Main		Actual Main		Delta [^] (Ideal – Actual)	P value
			Alpha	Mean (s.d.)	Alpha	Mean (s.d.)		
Emotional support	5 (5-20)	Makes me feel wanted Is trustworthy Tells me about his feelings Is mature Wants long-term commitment	0.73	17.4 (2.5)	0.86	16.8 (3.2)	0.60	0.14
Social/Economic status	6 (6-24)	Makes good money Is legally employed Values education Gets respect Is self-confident Is powerful	0.64	17.2 (2.9)	0.77	18.5 (3.6)	-1.30	0.0012
Physical attractiveness	3 (3-12)	Is sexy Has a nice body Is attractive	0.92	7.8 (2.7)	0.85	10.4 (1.6)	-2.60	<0.0001
Fidelity	1 (1-4)	Has sex only with me	n/a	3.7 (0.7)	n/a	3.2 (0.9)	0.50	0.0006

* paired t-test

[^] negative indicates actual exceeds ideal

[†] Score range = (Minimum score - maximum score)

Table 4
Unadjusted Odds Ratio Of Ideal And Actual Partner Discordance For Perceived Neighborhood Availability And STI Risk Behaviors Within A Cohort Of Adolescent Females (N=92)

	Emotional Discordance		Social/Economic Discordance		Physical Discordance		Fidelity Discordance	
	OR	95% CI, p-value	OR	95% CI, p-value	OR	95% CI, p-value	OR	95% CI, p-value
Perceived Neighborhood Availability	0.99	(0.88-1.11); 0.80	0.95	(0.83-1.08); 0.41	0.96	(0.76-1.21); 0.73	0.88	(0.78,1.00); 0.049
STI (CT and/or GC)	1.17	(0.39,3.50); 0.78	1.87	(0.59,5.91); 0.29	---	---	0.49	(0.16,1.47); 0.20
Partner concurrency	4.38	(1.54,12.4); 0.006	3.12	(1.08,8.95); 0.03	0.79	(0.08,7.46); 0.84	2.03	(0.66,6.21); 0.21
>1 partner last 3 months	2.68	(1.09,6.58); 0.03	2.36	(0.89,6.27); 0.08	1.02	(0.18,5.90); 0.98	1.78	(0.68,4.65); 0.24

Bold = P < 0.05

Table 5
Trajectory of Ideal Sex Partner Characteristics and Perceived Neighborhood Availability
over 12 Months Within a Cohort of Adolescent Females (N = 92)

	Random Intercept Model	
	Coefficient	p-value
Emotional support	-0.041	0.26
Social/Economic status	0.097	0.05
Physical Attractiveness	0.071	0.07
Fidelity	-0.018	0.12
Perceived Neighborhood Availability	0.019	0.67