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The Development of Conventional Sexual Partner Trajectories among African American Male Adolescents

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Abstract

African American male youth disproportionately report involvement with multiple sexual partners, which increases their risk for sexually transmitted infections (STIs) and initiation of unplanned pregnancies. Little is known about the developmental precursors of sexual partner trajectories among African American male youth. Moreover, few studies focus on the many African American youth who evince highly conventional sexual partner trajectories, i.e., youth who have only one partner or abstain from sexual activity across time. Using four waves of data from a longitudinal study, we hypothesized that an accumulation of social and economic disadvantages in early adolescence would negatively influence youths' conventional sexual partner trajectories in late adolescence. We expected these disadvantages to affect youths' receipt of protective family processes and their reports of a set of intrapersonal processes (self-regulation, hope, and low levels of anger) linked to generally conventional behavior. Hypotheses were tested with data from 315 African American male youth from 11 to 18.5 years of age and their primary caregivers. Our results supported the hypotheses. Socioeconomic disadvantages during preadolescence predicted less involvement in conventional sexual partner trajectories from ages 16 to 18.5 years. This association was mediated by protective family processes and a set of interrelated intrapersonal protective processes. Preventive interventions designed to promote protective parenting and intrapersonal processes can be expected to promote sexual behavior trajectories characterized by abstinence or relations with very few partners.

Keywords

adolescents; African American; HIV; male; sexual risk behaviors

INTRODUCTION

Involvement with multiple sexual partners places adolescents and young adults at risk for sexually transmitted infections (STIs) and unplanned pregnancies (Centers for Disease Control and Prevention, 2010). Among African American youth and young adults, in particular, multiple sexual partnerships have been implicated in disproportionate rates of STIs, including HIV (Adimora, Schoenbach, & Doherty, 2006). Multiple sexual partnerships are particularly problematic among African Americans living in rural areas. In isolated rural areas, sexually transmitted pathogens are more easily spread throughout a community due to a limited and highly interconnected dating pool (Adimora et al., 2001). Involvement with multiple partners not only increases risks for disease but is also linked to unplanned

pregnancies and low rates of stable committed relationships and marriage (Manlove, Logan, Ikramullah, & Holcombe, 2008; Taylor, Adimora, & Schoenbach, 2010).

These data underscore the importance of understanding the developmental precursors of sexual partner trajectories among African American youth and young adults in general and those living in rural areas in particular. Recent evidence indicates that sexual partnering patterns and behavior formed in adolescence and young adulthood have prognostic significance for sexual partner trajectories in adulthood (Furman & Shaffer, 2003; Kan, Cheng, Landale, & McHale, 2010; Lansford et al., 2010). In this research, we focused specifically on male African Americans. African American male youth, especially those living in socioeconomically disadvantaged contexts, report disproportionate rates of sexual activity with multiple partners (Centers for Disease Control and Prevention, 2008; Doherty, Schoenbach, & Adimora, 2009). Few data are available on the developmental precursors of sexual partner trajectories among male African Americans, despite findings that indicate that the predictors and correlates of sexual behavior vary by gender (Kogan et al., 2010). Furthermore, despite the high rates of involvement in multiple sexual partnerships observed among this group, many African American male adolescents do not have multiple sexual partners, reporting only one partner or very few partners across time or abstaining from sexual activity. Little attention has been given to the processes that forecast youths' involvement in these low-risk partner trajectories, which we term conventional sexual partner trajectories. Knowledge of these factors is critical for informing policy and interventions designed to reduce STIs and unplanned pregnancies and to reduce multiple partner fertility in rural African American communities.

The present research is unique in its focus on the developmental antecedents of conventional sexual partner trajectories among rural African American male adolescents. In contrast to the bulk of the literature in this area that focuses on a single time point (see, for example, O'Sullivan, Hoffman, Harrison, & Dolezal, 2006; Senn, Carey, Vanable, Urban, & Sliwinski, 2010), we model both conventional sexual partner trajectories and developmental antecedents using longitudinal data spanning ages 11 to 18.5 years. To provide a conservative estimate of male youth who avoid multiple sexual partnerships in late adolescence, we defined a conventional sexual partner trajectory as having either 0 or 1 sexual partner in the past year as indicated by three waves of data collected approximately annually from the ages of 16 to 18.5 years. In the following sections, we describe the conceptual model that guided our hypotheses regarding the development of conventional sexual partner trajectories and the theoretical and empirical evidence that supports the hypotheses.

Conceptual Model and Study Hypotheses

Study hypotheses regarding the contextual and intrapersonal precursors of conventional sexual partner trajectories, as well as hypothesized directions of effect, are summarized in the model pictured in Fig. 1. This model was informed, in part, by theory regarding childhood experiences and the development of reproductive strategies (Belsky, 2010); models of the influence of contextual disadvantage on men's sexual behavior (Giordano, Longmore, Manning, & Northcutt, 2009); and longitudinal studies of the development of competence and avoidance of risk behavior among rural African American youth (Brody, Dorsey, Forehand, & Armistead, 2002; Brody, Kim, Murry, & Brown, 2004; Kogan et al., 2011). As illustrated in Fig. 1, we hypothesized that socioeconomic disadvantage in early adolescence would affect the development of conventional sexual partner trajectories in late adolescence by influencing youths' receipt of protective parenting and development of a set of interrelated intrapersonal protective processes. Below, we discuss in detail the theoretical and empirical support for these predictions.

Socioeconomic disadvantage and reproductive strategies—Socioeconomic disadvantage plays a central role in the development of sexual partner trajectories. Belsky, Steinberg, and Draper (1991) proposed that, in low-resource contexts, male adolescents are more likely to develop a reproductive strategy based on quantity of partners rather than investment in a single partner. Conversely, youth living in well-resourced, predictable circumstances are more likely to seek committed, long-term relationships. We operationalized socioeconomic disadvantage in terms of inadequate family resources, singleparent family structure, low parental education, poor parental mental health, and deviance in the school context. The accumulation of these risk factors has been found to predict youth outcomes, including internalizing problems, externalizing problems, and substance use (Evans, Kim, Ting, Tesher, & Shannis, 2007; Forehand, Biggar, & Kotchick, 1998). Sociodemographic risk factors, such as resource inadequacy, single-parent status, and low parental education, individually and in combination have also been linked with adolescent involvement in risk behaviors, including risky sex (Ickovics et al., 2002; Moore & Chase-Lansdale, 2001; Scaramella, Neppl, Ontai, & Conger, 2008). Parental depression, which may result from socioeconomic circumstances as well as being exacerbated by them (Cutrona, Russell, Hessling, Brown, & Murry, 2000; Cutrona, Wallace, & Wesner, 2006), forecasts adolescent maladjustment (Cortes, Fleming, Mason, & Catalano, 2009; Frye & Garber, 2005) and risk behavior (Hops, 1992). A final disadvantage that we considered involves attending schools in which youth risk behavior is highly prevalent, a situation that families of lower SES are likely to encounter (Aneshensel & Sucoff, 1996). A high proportion of risk-taking classmates has proven to be critical in the development of adolescent problem behaviors, including early sexual activity, teen pregnancy, substance abuse, and conduct problems (Alexander, Piazza, Mekos, & Valente, 2001; Kotchick, Shaffer, & Forehand, 2001).

Protective parenting and reproductive strategies—Difficult contexts also undermine the types of parenting required to guide youth toward success in conventional paths and to facilitate youths' development of the self-regulatory capacity necessary for academic and vocational success (Brody & Flor, 1997; Brody, Flor, & Gibson, 1999). Studies have supported the key role family processes play in youths' development of reproductive strategies; however, most of this research has focused on the timing of puberty and first intercourse among female adolescents (Belsky, 2010). To our knowledge, little research has addressed the influence of socioeconomic disadvantages on conventional sexual partner trajectories among African American youth or the family and psychological mechanisms that account for this link.

Figure 1 presents our hypothesis that youth who experience fewer socioeconomic disadvantages in early adolescence will be more likely to receive specific parenting behaviors that foster intrapersonal protective processes and discourage multiple sexual partnerships. Protective parenting processes, such as consistent discipline, monitoring, and warm, involved parent-youth relationships, are robust predictors of African American youths' risk behavior (Brody et al., 2002; Kogan et al., 2011). The absence of harsh, punitive parenting (Dodge, Greenberg, & Malone, 2008) has also been identified as a key factor in determining youths' likelihood of avoiding risk behavior, including substance use and risky sex (Belsky, Steinberg, Houts, Halpern-Felsher, & NICHD Early Child Care Research Network, 2010). Parents from impoverished socioeconomic backgrounds and those with low educational levels tend to report less frequent nurturing behaviors and discipline that is more harsh than consistent (Bornstein & Bradley, 2003). The stresses of work, scarce economic resources, and single parenthood often make consistent disciplining and monitoring of youth difficult (Brody & Flor, 1998; Hill & Herman-Stahl, 2002). We thus expected socioeconomic disadvantage to predict low levels of the protective parenting that supports conventional sexual partner trajectories.

Intrapersonal protective processes in the development of conventional sexual partner trajectories—We hypothesized that protective parenting processes in early adolescence (age 11) would affect conventional sexual partner trajectories indirectly, via a set of protective intrapersonal characteristics. The construct *intrapersonal protective processes* shown in Fig. 1 represents an interrelated set of emotions, attitudes about the future, and self-regulatory capacities that constitute a proximal, positive influence on the establishment of a conventional sexual partner strategy. Several studies have documented the close associations among negative emotions, self-regulation, and youths' attitudes toward setting and pursuing goals for the future (Deater-Deckard, Petrill, & Thompson, 2007; Wills, Sandy, & Yaeger, 2001). In the present study, we confirmed the hypothesized unidimensionality of this construct prior to investigating its mediating role as illustrated in Fig. 1.

According to reproductive strategy theory and studies of mate commitment and marriage (Belsky et al., 1991), the ability to acquire material resources and a sense of personal efficacy are associated with long-term romantic commitments. Although male youth typically are not required to support families during adolescence, belief in the capacity to achieve goals and the self-regulatory competence to do so are developing during this time. Youth who believe that they can achieve personal goals and evince the self-regulatory competence to pursue the life paths they choose are likely to be more conventional in general and, as proposed in reproductive strategy theory, more likely to report few or no sexual partners. Conversely, disadvantages and a lack of protective parenting lead male adolescents to become discouraged, angry, and impulsive (Repetti, Taylor, & Seeman, 2002). For these youth, conventional pathways to marriage and monogamy and their precursors in young adulthood are likely to seem unattainable or undesirable (Bolland, 2003; Brown & Jones, 2004). Negative emotions, such as anger and hostility, which living without adequate resources induces, further undermine male adolescents' beliefs in their ability to achieve goals or control their environments (Crockett, Raffaelli, & Shen, 2006). Such youth can be expected to eschew monogamy and seek the immediate gratification of casual sexual encounters rather than stable relationships.

In the conceptual model presented in Fig. 1, we included an important control variable: early adolescent externalizing behavior. Externalizing behaviors strongly predict family relationships, discouragement, and sexual activity across adolescence (Stice & Barrera, 1995; Wright, Zakriski, & Drinkwater, 1999). Thus, we controlled for a significant potential confound.

Summary of Hypotheses and Developmental Pathways

In the present study, we investigated multiple pathways to conventional sexual partner trajectories through parenting and intrapersonal protective processes. In Fig. 1, we modeled three paths with dotted lines that represent *indirect* or mediated hypotheses. First, we expected socioeconomic disadvantages to affect conventional sexual partner trajectories indirectly and negatively by undermining parenting and intrapersonal processes. Thus, although we expected a significant effect between disadvantages and partner trajectories, we expected this effect to be attenuated in the presence of the mediators. Similarly, we expected the influence of socioeconomic disadvantages on intrapersonal processes to be mediated by protective parenting; we also expected intrapersonal protective processes to mediate the influence of protective parenting on conventional sexual partner trajectories.

METHOD

Participants

Study hypotheses were tested with data from 315 African American male adolescents and their primary caregivers participating in a family-based intervention trial. Random assignment to the prevention or control condition was controlled in all data analyses. Youth and their primary caregivers were recruited from public school lists in seven rural Georgia counties when the youth were in the fifth grade. These communities were representative of a region in the rural South characterized by persistent poverty among African Americans (Wimberly & Morris, 1997). At baseline, participants' mean household gross monthly income was \$2,095 (SD = \$1,422) and mean monthly per capita gross income was \$525 (SD = \$416). Although 78% of the mothers were employed outside the home and worked an average of 39.9 hours per week, 44.7% of the families lived below federal poverty standards and another 23.4% lived within 150% of the poverty threshold; they could be described as working poor (Boatright, 2005). A majority (58.7%) of the families were headed by single mothers. Primary caregivers' modal level of education was a high school diploma or GED (52.9%).

Four waves of data from this project were used in this analysis. Youth were 11 years of age at Wave 1, 16 at Wave 2, 17 at Wave 3, and 18.5 at Wave 4. Of the 315 male participants at Wave 1, 85.7% participated at Wave 2, 69.8% at Wave 3, and 82.2% at Wave 4. We examined attrition status at Wave 4 (yes/no) according to the elements of socioeconomic disadvantage described in the Measures section and youth externalizing problems. No significant differences by attrition status emerged for sociodemographic variables. Baseline levels of externalizing problems were associated with attrition; youth who exhibited more externalizing behaviors at baseline were more likely to leave the study; t(313) = 3.00, p = 0.004. Externalizing problems were controlled in all data analyses to correct for this attrition bias.

Procedure

Trained African American field researchers conducted computer-based interviews in participants' homes at each of the four waves of data collection. Youth and primary caregivers were interviewed individually and privately; they were told that their answers were strictly confidential and would not be disclosed to anyone within or outside the family. For sensitive questions, such as those concerning sexual behavior, youth were provided with a remote keypad to enter their responses privately. Each family was paid \$100 after each of the four assessments. All project protocols were approved by the University IRB.

Measures

Control—Wave 1 externalizing behavior as reported by youths' homeroom teachers on the Teacher's Report Form (Achenbach, 1991) was used as a control variable on all dependent measures. The Externalizing measure includes items from the Aggressive Behavior and Rule Breaking Behavior subscales; Cronbach's alpha was .95.

Socioeconomic and contextual disadvantage risk index—A risk index was developed for each youth at Wave 1 based on five variables: single-parent family status, low parental education level, parental depression, few family resources, and the presence of many risk-taking peers in school. Youth received a score of 1 or 0 to indicate the presence or absence of each risk factor; the sum of risk factors comprised the index. This strategy is consistent with the observation that socioeconomic and contextual risks tend to function in an additive manner, on the basis of the number of risks experienced, rather than the extensiveness of particular risk factors (Sameroff & Fiese, 2000). Caregivers self-reported

their family structure, 0 (more than 1 parent) or 1 (single parent), and level of education, 0 (high school diploma or more) or 1 (less than a high school diploma), on a demographic questionnaire. Caregivers completed the Family Resources Scale (Dunst & Leet, 1987). The measure begins with the question, "To what extent are the following resources for your family adequate?" Caregivers used a scale ranging from 1 (not all adequate) to 5 (almost always adequate) to respond to items about necessities, bill payments, medical care, and money for extras. Cronbach's alpha for the scale was .93; families in the lowest quartile on this scale were coded as risk-factor present. Caregiver depression was assessed with the Center for Epidemiologic Studies-Depression scale (CES-D) (Radloff, 1977), a widely used measure of depression in community samples. Caregivers reported the frequency during the past week with which they experienced 20 symptoms of depression, using a scale ranging from 0 (rarely) to 3 (most of the time). Cronbach's alpha for the scale was .85; scores at or above the cut score of 16 indicated the presence of the risk factor. Deviance in the school context was assessed by youth report on four items that addressed youths' perceptions of the prevalence of peer substance use and sexual activity. An example item is, "What would you say is the percentage of kids in your grade at your school who smoke cigarettes?" The response set ranged from 1 (none) to 4 (most). Cronbach's alpha for the scale was .81; scores in the highest quartile indicated the presence of the risk factor. The summed risk index ranged from 0 to 5, with a mean of 1.31 (SD = 1.10).

Protective parenting processes—Protective family processes were operationalized as a latent construct with four caregiver-reported indicators assessed at Wave 2 (youth age 16): relationship quality, consistent discipline, parental monitoring, and harsh discipline. Relationship quality was assessed with a 17-item scale, developed for this study, that indexed warmth and involvement between caregivers and youth. Example items include, "I think that it is important to show my child love as well as being strict," "I listen to my child without scolding when he/she comes to me with a problem," and "I spend special time with my child." The response set ranged from 0 (not true) to 2 (very true). Cronbach's alpha for the scale was .69. Consistent discipline, harsh parenting, and parental monitoring were assessed with subscales of a measure by Conger and Elder (1994). Example items include, "How often do you give up when you ask this child to do something and he/she doesn't do it?" (consistent discipline, reverse coded); "How often do you know when this child gets in trouble at school or someplace else away from home?" (parental monitoring); and "When your child does something wrong, how often do you blow up at him/her?" (harsh parenting). The response set ranged from 1 (never) to 5 (always). Cronbach's alphas were .71 for consistent discipline, .73 for parental monitoring, and .62 for harsh discipline.

Intrapersonal protective processes—This latent construct was operationalized with three youth-reported indicators. The State Hope Scale assessed optimism for the future and future goals. The response set ranged from 1 (really false) to 5 (really true). An example item is, "I can think of many ways to reach my current goals"; Cronbach's alpha was .81. For the State Anger Scale, youth were instructed to rate, on a scale ranging from 1 (never) to 5 (always), how often during the past 3 months they had each of 15 different feelings such as "furious," "like breaking things," and "angry." Cronbach's alpha was .92. Self-control was assessed with a six-item measure by Wills and Stoolmiller (2002). An example item is, "You could be described as careless" (reverse coded); the response set ranged from 1 (not at all true) to 3 (very true). Cronbach's alpha was .69.

Conventional sexual partner trajectory—At each wave, male youth reported the numbers of partners with whom they had sexual relations in the past year. To identify clearly youth who were pursuing a conventional sexual partner trajectory versus those who were not, we created a dichotomous variable. Youth were assigned a 1 if they reported

having no more than one sexual partner during the year preceding data collection at Waves 2, 3, and 4. Anyone with two or more partners at any of these time points was assigned a 0. This strategy ensured a conservative test of sexual partner trajectory.

Data Analysis

The conceptual model in Fig. 1 was tested with logistic structural equation modeling (SEM) as implemented in Mplus (Muthén & Muthén, 1998-2010). Models were estimated using the full information maximum likelihood (FIML) estimator, which tests hypotheses against all available data from Waves 1-4. Thus, missing data did not result in deleted cases. All results predicting the dichotomous partner trajectory outcome were expressed in probit regression coefficients, which are interpreted in a similar fashion to linear regression parameters. Attrition analyses described previously supported the use of the FIML estimator. Prior to testing the model in Fig. 1, we investigated the adequacy of the measurement model with a confirmatory factor analysis of the latent constructs and examined the baseline association of socioeconomic disadvantage with conventional sexual partner trajectory, controlling for externalizing problems. Consistent with advances in modeling procedures, we tested the model in Fig. 1 in one step. Mplus provides parameter estimates for both indirect and direct effects among constructs, allowing us to answer questions regarding the mediating pathways linking socioeconomic disadvantages to conventional sexual partner trajectories.

RESULTS

Table 1 shows the number of sexual partners during the past year by youth age. We defined a conventional sexual partner trajectory as having 0 or 1 partner at each time point. More than half of the sample, 54.1%, reported a conventional sexual partner trajectory. Intercorrelations for the study variables, along with their means and SD, are shown in Table 2.

Prior to testing the hypotheses presented in Fig. 1, we conducted a confirmatory factor analysis of the two latent constructs to be tested as mediators of the association of contextual disadvantages with conventional sexual partner trajectories. The protective parenting construct was indicated by the relationship quality, consistent discipline, parental monitoring, and harsh parenting scales. All scales were expected to load positively on the construct except for harsh parenting, which was expected to load negatively. The intrapersonal protective process construct was indicated by the state hope (positive loading), state anger (negative loading), and poor self-control scales (negative loading). The measurement model fit the data well, $\chi^2(13) = 20.69$, p = .08; CFI = .974; TLI = .958; RMSEA = .047 (.00, .083). All indicators loaded on their respective constructs significantly and in the expected directions. This step also confirmed our hypothesis that high levels of state hope, low levels of poor self-control, and low levels of state anger reflected a single underlying dimension.

Fig. 2 presents the results of the study hypotheses, including the baseline association between socioeconomic disadvantage and conventional sexual partner trajectories (see the parameter in parentheses in Fig. 2). This baseline parameter allows one to observe the reduction in value of the parameter linking socioeconomic disadvantage with conventional sexual partner trajectories when the mediators are considered, suggesting mediation. The model fit the data well, $\chi^2(35) = 43.82$, p = .15; CFI = .975; TLI = .961; RMSEA = .028 (.00, .052). Socioeconomic disadvantages significantly predicted reductions in protective parenting processes and intrapersonal protective processes. Protective parenting processes supported intrapersonal processes, which, in turn, increased the likelihood that youth would evince conventional sexual partner trajectories. These associations emerged with teacher reports of youths' externalizing behavior in early adolescence controlled.

As hypothesized, the significant direct effect of early adolescent socioeconomic disadvantage on late adolescent conventional sexual partner trajectories was mediated by the influences of protective parenting and intrapersonal processes. When parenting and intrapersonal processes were included in the model, the direct effect of socioeconomic disadvantage was attenuated. The indirect effect of socioeconomic disadvantage on conventional sexual partner trajectories via protective parenting and intrapersonal processes was significant (p = .035). The indirect effect of socioeconomic disadvantage on intrapersonal protective processes via parenting was also significant (p = .002), as was the indirect influence of protective parenting on conventional trajectories via intrapersonal processes (p = .028).

DISCUSSION

Research on the development of conventional sexual partner trajectories among African American male adolescents is scarce, despite the potential public impact of programs and policies that support their development. On the basis of theories regarding reproductive strategies and childhood stressors, we tested a model of the developmental processes that forecast highly conventional sexual partner trajectories in adolescence, defined as male adolescents' reporting either 0 or 1 partner during the past year across the ages of 16 to 18.5 years. More than one-half (54%) of the present sample reported either 0 or 1 partner during the past year at annual data collections across 3 years. Given that some male adolescents who reported more than one partner may have had serially monogamous relationships (e.g., two serious girlfriends in one year), this is a conservative strategy for identifying conventional sexual partner trajectories. Study hypotheses regarding the development of conventional sexual partnering strategies were confirmed. Early adolescent socioeconomic disadvantage predicted male youths' partner trajectories in late adolescence. This finding was consistent with prior theories regarding the influence of low-resource contexts on the development of reproductive strategies in young adulthood. As male youth experience more disadvantages as evidenced by high-risk school contexts, few family resources, low parental education levels, and poor parental mental health, they become more likely to evince nonconventional partner trajectories in later adolescence. This link emerged net of the influence of youths' externalizing behavior, a robust and consistent predictor of adolescent sexual behavior.

Consistent with our hypotheses regarding the mechanisms that may explain the influence of socioeconomic disadvantage, family processes and a set of intrapersonal protective processes explained the establishment of a highly conventional trajectory. Several studies confirm that socioeconomic disadvantage erodes protective parenting behaviors and a positive family climate (Conger, Conger, & Martin, 2010). Concomitantly, family processes, such as monitoring, consistent discipline, and affective climate, are critical precursors to youths' engagement in risky sexual activity, including multiple partnerships (Perrino, Gonzalez-Soldevilla, Pantin, & Szapocznik, 2000). Youth whose caregivers use consistent discipline, monitor their whereabouts, and remain positively involved with them are more likely to feel hopeful about the future and their ability to achieve goals, experience low levels of anger, and evince self-regulatory competence. These interrelated processes have been linked to sexual behaviors (Hoyle, Fejfar, & Miller, 2000; Raffaelli & Crockett, 2003). Our data indicated that intrapersonal protective processes constituted a proximal antecedent to conventional trajectories and mediated the influence of protective family processes and socioeconomic disadvantage.

Study findings are also consistent with recent research conducted according to Life History theory. This perspective, developed in accordance with evolutionary biology, suggests that youth who live in predictable and stable environments will select reproductive strategies that

focus on fewer partners, fewer children, and higher paternal investment (Belsky, Schlomer, & Ellis, 2011; Stearns, Allal, & Mace, 2008). Conversely, difficult socioeconomic contexts may signal to the developing youth that a reproductive strategy focused on multiple partners and, as an adult, low paternal investment is adaptive. The majority of studies examining this perspective have focused on female adolescents. The extent to which contextual difficulty also affects male adolescents who, from an evolutionary perspective, can more clearly benefit from a promiscuous reproductive strategy is not clear. Our findings support the significance of Life History theory for male adolescents, as it can be applied to explain the likelihood that these youth will focus on a reproductive strategy that avoids promiscuous behavior in general.

The findings have implications for both policy and the development of preventive interventions. Studies consistently indicate that children and youth from economically disadvantaged families exhibit lower levels of cognitive functioning, academic achievement, and social development than do children from more advantaged families (Aber, Bennett, Conley, & Li, 1997). Poverty and economic distress are pervasive and persistent features of life for many of the African American families in the present study who live in the rural South. The influence of these disadvantages on male adolescents' future sexual behavior likely exacerbates the cycle of poverty. Male youth from difficult contexts are more likely to engage in multiple sexual partnerships, not only at one point in time, but as a persistent pattern. This pattern increases the likelihood of nonmarital births and paternal difficulty in providing for children.

The present study, however, also indicates that preventive interventions designed to promote protective parenting and intrapersonal processes will promote conventional pathways. Several efficacious interventions that focus on African American caregivers and family relationships have been developed that affect caregiver-youth relationships during early (Brody et al., 2004) and middle (Kogan et al., 2012) adolescence. Our findings support not only family-centered intervention programming but also the importance of addressing the anger and sense of hopelessness regarding the future that difficult socioeconomic contexts induce. As male youth feel able to reach their future goals, they may become more likely to focus on educational pursuits and seek conventional career pathways that allow them to invest in marriage and childrearing in adulthood.

Strengths and Limitations

The present study used a longitudinal design to test hypotheses regarding the development of conventional sexual partnerships. Data spanned the ages of 11 to 18.5 years. Reports from multiple sources, including caregivers, youth, and teachers, were used to operationalize the model. Such designs increase confidence in the findings, as they are less likely to be confounded by reporter bias that tends to inflate associations among constructs. Unlike past studies, rather than examining a single time point, we operationalized conventional sexual partnering behavior three times on a yearly basis. This increases the likelihood of identifying patterns of monogamous or abstinent behavior over time.

Several limitations in the study must be considered. Although studies suggest that adolescent behavior predicts relationship behavior in young adulthood, some men's trajectories may change after age 18. Thus, research examining long-term trajectories is warranted. Past research also suggests additional processes that may play important roles in partner trajectories. Studies with female adolescents suggest that early puberty may play a key role in sexual partnering patterns (Belsky et al., 2010). Few data are available on puberty in males, however, and the present study did not include such data. These limitations notwithstanding, the present study supports the influence of socioeconomic disadvantages in diverting youth from conventional sexual partnering strategies and the key roles that

protective parenting and intrapersonal protective processes play in promoting conventional sexual partner trajectories in adolescence.

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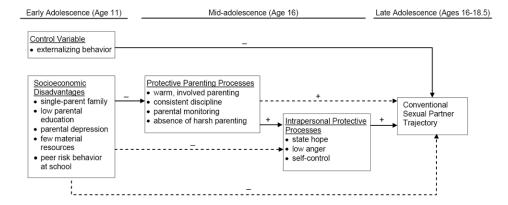


Figure 1.Conceptual model of the contextual and intrapersonal processes that forecast conventional sexual partner trajectories. Dashed lines represent hypothesized mediational pathways that will be attenuated in the presence of intermediary constructs.

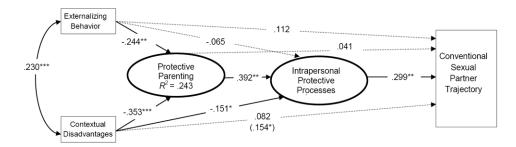


Figure 2. Structural equation model of study hypotheses.

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Table 1

Number of sexual partners during the previous year, by data collection wave and age

			Number of	Number of partners	
		•	1	7	÷
Data collection wave Age (years)	Age (years)	(%) u		n (%) n (%) n (%)	(%) u
2	16	137 (58)	137 (58) 39 (17)	21 (9)	38 (16)
3	17	107 (49)	39 (18)		35 (16) 39 (18)
4	18	85 (33)		57 (22) 40 (16) 73 (29)	73 (29)

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Table 2

Descriptive statistics and correlations among study variables

Variables	1	2	3	4	ક	9	7	8	6	10
1. Conventional partner trajectory	I									
2. Socioeconomic disadvantage	15*	I								
3. Externalizing behaviors	*41	.23 ***								
4. Warm, involved parenting	.03	24 ***	17**							
5. Consistent discipline	.05	27 ***	17**	.34 ***	I					
6. Parental monitoring	.10	20**	28	.46 ***	.30 ***	I				
7. Harsh parenting	13*	.17**	11.	21 **	32 ***	17**	I			
8. State hope	.17**	25 ***	22 **	.22 ***	.22 ***	.17**	20**	I		
9. Anger	21 **	.21 **	60.	17**	20**	13*	.20**	.49***		
10. Poor self-control	15*	.22 ***	.15*	16*	18**	60	.07	40	.47	
M	0.54	1.31	12.52	25.43	16.15	21.48	5.79	25.40	31.79	10.76
SD	0.50	1.10	12.09	2.44	2.80	2.87	1.4	3.10	10.60	2.71
Range	0-1	0-5	0-56	15-28	6-20	10-25	4-12	14-30	15-68	7-20

** p < .01.

; ;* p < .001. Page 17