SEXUAL CONTACT BETWEEN CHILDREN AND ADULTS: A LIFE COURSE PERSPECTIVE*

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We adjudicate between two competing models of the long-term effects on women of sexual contact in childhood. The psychogenic perspective conceptualizes adult-child sexual contact as a traumatic event generating intense affect that must be resolved. Behavioral attempts to deal with the trauma of adult-child sexual contact can take opposing forms—some victims will engage in compulsive sexual behavior while others withdraw from sexual activity. The more severe the sexual contact, the more adverse the long-term effects (including sexual dysfunction and diminished well-being). From our alternative life course perspective, sexual contact with an adult during childhood provides a culturally inappropriate model of sexual behavior that increases the child's likelihood of engaging in an active and risky sexual career in adolescence and adulthood. These behaviors, in turn, create long-term adverse outcomes. Using data from the National Health and Social Life Survey, we find evidence of heightened sexual activity in the aftermath of adult-child sex (predicted by both perspectives), but we find no evidence of a tendency to avoid sexual activity (predicted by the psychogenic perspective). Moreover, we find little evidence to support the hypothesis that the severity of the sexual contact increases the likelihood of long-term adverse outcomes. In contrast, we find strong evidence that sexual trajectories account for the association between adult-child sex and adult outcomes.

Research interest in the long-term effects of sexual contact between female children and adults has increased dramatically in the last two decades. Two sets of issues have driven this enhanced attention. The first concerns the nature and extent of the impact these experiences have on subsequent well-being in adulthood. Empirical research has offered evidence of the severe and wide-ranging effects of adult-child sex by documenting its associations with a host of later "symptoms," such as low self-esteem, depression, anxiety, and sexual dysfunction. With few exceptions, however, efforts to develop models to explain *why* adult-child sex leads to long-term negative outcomes have not proceeded apace. Researchers are now focusing on a second set of questions—what processes link adult-child sexual contact with subsequent outcomes, and what accounts for the variation in negative effects in adulthood?

To address these questions, scholars initially developed what we might term the "psychogenic" model of the long-term effects of adult-child sexual contact. This perspective views adult-child sex primarily as a traumatic event—an emotional shock with psychic consequences that may have ramifications throughout the life course. Accordingly, the degree of trauma the child experiences during the sexual contact explains the

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extent of negative symptoms in adulthood. Events involving more severe features (e.g., penetrative sexual activities, multiple sexual contacts, or experiences with closely related adults) are hypothesized to induce high levels of psychic disturbance. In turn, this disturbance may impact social and emotional functioning well into adulthood. Subsequent models—notably Finkelhor's (1988) traumagenic dynamics perspective—have expanded on the psychogenic framework by taking into account factors such as adult reactions to the disclosure of the event and the cognitive impact of adult-child sex as important determinants of long-term consequences. Characteristic of the psychogenic perspective, however, Finkelhor's model links the degree of trauma experienced during the adult-child sexual contact directly with negative adult experiences.

In contrast, we offer a life course model of the long-term effects of adult-child sex. In our view, adult-child sex should be understood as an early transition to coupled sexual activity with an adult. The social circumstances of this transition may lead the child involved to inculcate a model of sexual interaction that promotes risky sexual behavior in adolescence and adulthood. From this perspective, the effects of adult-child sexual contact are indirect. That is, patterns of sexual activity established in the *aftermath* of adult-child sex may account for the association between adult-child sex and many of the long-term outcomes scholars have noted (we focus on sexual dysfunction, overall well-being, relationship satisfaction, and level of sexual expressiveness). Adult-child sex may affect "sexual trajectories" in adolescence and adulthood, which in turn affect long-term adult outcomes. We attempt to adjudicate between these perspectives by testing their predictions regarding the behavioral responses to adult-child sex and by evaluating their competing explanations of variation in its long-term effects.

THEORETICAL PERSPECTIVES

The Psychogenic Perspective

Initially, scholars motivated by the "psychogenic" model employed the Post-Traumatic Stress Disorder (PTSD) framework to understand the nature of adult-child sexual contact and its long-term effects (Horowitz 1976; Janoff-Bulman 1985, 1992; Pynoos and Eth 1985). From this perspective, adverse outcomes in adulthood are "symptoms" of a lingering psychic disorder whose etiology is traced directly to characteristics of the original adult-child sexual experience. Based on psychoanalytic theory (Freud [1920] 1962), the PTSD model suggests that the stress experienced during adult-child sex generates powerful psychic energy (memories and affect associated with the event) that, if unresolved, lead to adverse mental health outcomes (Gelinas 1983). Specifically, researchers employing the PTSD framework suggest that the degree of traumatic stress experienced during the original sexual contact situation is the factor that best accounts for variation in the long-term adverse effects of adult-child sex. In testing this hypothesis, scholars have focused on variables describing the event, such as the age of the child when the sexual contact occurred, the relationship of the child to the adult, the sexual activities that occurred, the duration of the sexual contact, the number of adults with whom sexual contact occurred, whether force was involved, and their cumulative association with subsequent emotional and sexual adjustment. A girl, for instance, who had intercourse with her father several times may be more likely to experience acute stress (and therefore to suffer long-term negative consequences) than would a girl who was fondled once by her mother's boyfriend.

The behavioral response to the trauma of adult-child sex is twofold in the PTSD framework. On the one hand, PTSD typically involves the adoption of "avoidance strategies" designed to block all reminders of the traumatic incident (in this case, sexual activity) out of daily experience (American Psychiatric Association 1994). An alternative response to trauma, however, involves confronting stimuli associated with the event. Horowitz (1976) posits an inherent "completion tendency" that victims mobilize to account for experiences that are outside the conceptual categories, self-understanding, or world-view of an individual. In this view, those who experience highly stressful situations repeatedly confront the event until it can be mastered. Part of this process of cog-

nitive and emotional assimilation may be the ongoing behavioral reenactment of the event. The PTSD perspective, then, suggests a polarized response pattern with adverse reactions taking the form of withdrawal from sexual activity or compulsively sexualized behavior (Green 1993).

The PTSD framework has been criticized on several counts. Finkelhor (1988), for instance, questions the theoretical "fit" of PTSD to the case of adult-child sexual interaction. More often applied to survivors of war combat, natural disasters, and other life-threatening experiences, the PTSD framework may be appropriate for cases of abrupt and forceful violation, but may not adequately address adult-child sexual interactions (which tend to involve subtle manipulation over time) (Armstrong 1978; Finkelhor 1988). Second, Finkelhor notes the failure of those employing the PTSD perspective to articulate a more precise theory of the link between adult-child sexual contact and subsequent outcomes. The problem, he contends, lies in the construction of adult-child sexual contact as a discrete episode. Focusing on the trauma of the *event* obscures the cognitive impact of the unfolding *process* of an adult-child sexual relationship. This view exposes a third problem with the PTSD perspective—it fails to integrate more than a fairly restricted range of "symptoms" within its conceptual purview. The presumption that the experience of adult-child sexual contact nearly universally induces high levels of stress in children leads scholars to focus on subsequent disturbances of affect to the exclusion of other potentially significant outcomes.

More recent efforts to conceptualize the effects of adult-child sex have attempted to correct some of the inadequacies of the PTSD framework (Finkelhor and Browne 1985; Wyatt, Newcomb, and Riederle 1993). Finkelhor (1988) has developed an alternative model of long-term effects that attempts to identify qualitatively distinct psychological dynamics that may operate during adult-child sexual relationships. In his traumagenic dynamics model, the effects of adult-child sexual contact stem from the presence or absence of four key dynamics—traumatic sexualization, betrayal, stigmatization, and powerlessness—each of which accounts for a different constellation of long-term outcomes. Finkelhor's focus on the psychosocial dynamics embedded in and surrounding adult-child sexual relationships highlights the contribution of contextual factors to the long-term impact of adult-child sex. For instance, a child may feel stigmatized by the response of parents or agencies to the disclosure of adult-child sex, even though disclosure may occur long after the actual sexual contact has ceased. Another important contribution of the model is its emphasis on the cognitive impact of adult-child sex. Traumatic sexualization, for instance, may result in aversive *affective* reactions to sex-related stimuli as well as distorted *cognitive* models of appropriate sexual behavior. Incorporating the cognitive impact of adult-child sex focuses attention on how the "script" acquired in an early sexual relationship influences the child's future behavior.

Unfortunately, Finkelhor does not extend the traumagenic dynamics framework far enough in this theoretical direction. The notion of trauma, as defined by the PTSD framework, remains an essential element of Finkelhor's model. Accordingly, he hypothesizes a tendency either to avoid sexual stimuli or to experience heightened sexual interest and activity (reproducing the hypothesis of a polarized pattern of behavioral responses to adult-child sex). Second, Finkelhor still focuses primary attention on the *characteristics* of the sexual contact situation to explain its long-term effects (Finkelhor 1988). Subsequent events, including aspects of the child's initiation into sexual activity with peers and modes of sexual association developed during adolescence and young adulthood, are not taken into account. By failing to locate early sexual experiences within an unfolding life course, Finkelhor is constrained to explain the wide-ranging consequences of adult-child sex as direct effects of one or another traumagenic dynamic, often resulting in awkward conceptual links. For instance, he draws a direct connection between feelings of inefficacy traumatically instilled through the dynamic of powerlessness and later employment problems. We suggest that a more plausible explanation of this outcome links adult-child sexual experiences with early adolescent sexual initiation and increased likelihood of teenage pregnancy.

The latter outcome, in turn, leads to reduced educational and employment prospects for women (Furstenberg 1980; Hayes 1987).

Finally, as in the PTSD framework, Finkelhor considers the severity of the sexual contact (as measured by characteristics of the event) to be a key variable explaining variation in long-term effects (Browne and Finkelhor 1986). The life course approach explains the myriad effects of adult-child sexual contact by exploring its impact on the subsequent sexual careers of women rather than forcing an artificial link between an induced psychic condition and multiple, diverse, and temporally distant outcomes.

A Life Course Perspective

Adult-child sexual contact as life course transition. Researchers employing the life course perspective seek to recognize the interdependence of historical events, social structure, and individual biographies. Two key concepts are employed to analyze life course dynamics. *Trajectories* are substantively demarcated pathways through the age structure (e.g., marital or employment histories). *Transitions* are key turning points embedded in trajectories (e.g., the *event* of marriage or getting hired) that describe an unfolding trajectory (Elder 1985).

Within the context of a child's unfolding life course, adult-child sexual contact can be seen as a transition to coupled sexual activity with an adult. An adult who engages in sexual activity with a child, however, exploits a physical and cognitive advantage over the child as well as sexual knowledge that children are typically denied. Because such activity is highly stigmatized, an adult perpetrator must isolate sexual relations with a child from social interference to avoid disruption of the relationship (if it is ongoing) and subsequent retribution. Having few if any alternative sources of knowledge regarding sexuality, the child in a socially isolated sexual relationship assimilates a model of sexual interaction—a "sexual script" (Gagnon and Simon 1973; Laumann et al. 1994) on which future relationships are based (Wyatt et al. 1993). Even if the adult-child sexual relationship is experienced as highly negative, it may be difficult for a child with no alternative model of sexual interaction to "rewrite" the original sexual script enacted with the adult. Thus adult-child sex may not only "eroticize" the child, but may link pleasure with the socially produced dynamics of the relationship (power inequality and loss of control through age differentiation and social isolation).

The eroticization of the child (the process by which specific acts are cognitively linked to sexual arousal [Gagnon and Simon 1973]), and the particular social form it takes, may induce vulnerability to subsequent sexual experiences that, in turn, determine adverse effects in adulthood. We focus specifically on transitions and events constituting what we term a "sexual trajectory." These include the transition to coupled sexual activity in adolescence, teen childbirth, the number of sexual partners in adulthood, and the occurrence of harmful events associated with sexually active careers such as sexually transmitted infections (STI's) and forced sexual experiences.

Sexual trajectories in the aftermath of adult-child sexual contact. Focusing on eroticization and the inappropriate scripting of sexual interaction as principal effects of adult-child sex leads to the prediction that children who experience it will be more likely to engage in their first adolescent sexual activity at an early age. Girls who experience adult-child sex may have a heightened interest in sexual activity or be less inclined to block the sexual advances of others (Wyatt et al. 1993). Detrimental or exacerbating effects may result from early adolescent sexual activity in at least two ways. First, rather than providing a counter to the premature and inappropriate sexual socialization acquired as a child, early sexual activity may reinforce the sexual script established during childhood. Evidence exists, for instance, that those girls who are young when they experience first intercourse are more likely to report that they were pressured or forced into sexual activity (Laumann et al. 1994:328). Second, early sexual initiation may further attenuate (or constitute a barrier to) the effectiveness of normative and social sanctions against subsequent sexual activity during adolescence. These early conditions may set the stage for a sexual career marked by teen pregnancy, multiple sexual partnerships, and the attendant risks of forced sex and STI's.

Social structural forces may also guide individuals who have experienced adult-child sexual contact into unstable sexual careers. The continuity of childhood behavioral patterns with those established in adolescence and adulthood may be a function not only of a latent propensity (Gottfredson and Hirshi 1990), but also of interactional and cumulative continuity (Caspi, Elder, and Bem 1987; Sampson and Laub 1993). *Interactional continuity* refers to the process by which reactions of significant social network members or agents of social control (e.g., police or teachers) contribute to the maintenance of a child's emerging behavioral pattern or self-understanding. For instance, peers may respond to the perceived flirtations or sexualized interactional styles of girls who have experienced adult-child sex with behavior that encourages sexual activity. Moreover, reactions of family members, social workers, or police to the disclosure of adult-child sexual contact may lead the child to feel culpable for the role he or she played in the event. These feelings may encourage self-attributions (sexual precociousness, moral inferiority) that promote active sexual careers in adolescence. Even if the sexual contact remains undisclosed, family members may react negatively to patterns of subsequent sexual activity actually *caused* by adult-child sex. *Cumulative continuity* refers to the accretion of negative consequences over time as a result of sustained risky behavior. Girls who experience adult-child sex may be at high risk of early and extensive sexual activity during adolescence, which, in turn, increases the likelihood of teenage pregnancy and childbirth, multiple sexual partnerships, and their associated adverse effects, all of which may have a cumulative impact on sexual functioning and the capacity to establish stable sexual partnerships in adulthood. Both processes, then, may serve to crystallize and maintain patterns of sexual activity initiated by childhood sexual contact with an adult (Downs 1993).

In summary, the psychogenic (represented by both the PTSD and traumagenic dynamics models) and life course conceptualizations of adult-child sexual contact and its long-term effects differ in three related ways. These differences stem, fundamentally, from the central concepts used to describe the event in the two perspectives. First, while the psychogenic perspective sees adult-child sexual contact principally as *sexual trauma,* the life course perspective views it as a *sexual transition.* Accordingly, the two perspectives emphasize different post-contact psychic and behavioral responses. The psychogenic perspective points to the importance of emotional disturbances[1] in the aftermath of sexual contact with an adult. Efforts to resolve these disturbances take opposing behavioral forms, either compulsive sexual activity or avoidance of sexual stimuli. The life course perspective emphasizes the model for future sexual interaction inculcated through sexual contact with an adult. This sexual "script" produces a unidirectional tendency toward increased sexual activity in adolescence and adulthood.

Second, the two perspectives differ with respect to the process by which these psychic conditions are expected to lead to long-term adverse effects. The psychogenic model claims that the mental condition resulting from adult-child sexual contact has *direct* effects on adult outcomes: The psychic disturbances that result from adult-child sex are carried into adulthood and produce a variety of adverse effects. The life course perspective, on the other hand, suggests that the effect of adult-child sex is *indirect.* Adult-child sexual contact increases the likelihood that the child will engage in potentially harmful sexual behavior in adolescence or early adulthood, which, in turn, creates adverse long-term consequences.

Third, the two models offer different explanations for why some children who experience adult-child sex are more adversely affected in adulthood than others. The psychogenic explanation emphasizes the degree of trauma experienced during the sexual contact—more traumatic contacts are hypothesized to generate more intense psychic disturbance and, in turn, more severe long-term consequences. The life course perspective focuses attention on the extent to which adult-child sexual contact reinforces a sexual script that encourages high-risk sexual activity in adolescence and early adulthood.

[1] The traumagenic dynamics model stresses both emotional and cognitive disturbances, and in this sense it represents an important advance over the PTSD framework.

DATA AND METHODS

The analyses presented below are based on the National Health and Social Life Survey (NHSLS), a probability sample of 3,159 noninstitutionalized adults ages 18 to 59 residing in the United States. We restrict our analysis to the 1,749 women surveyed.[2] The NHSLS is currently the only national probability sample to combine information on childhood sexual experiences with detailed accounts of the respondent's subsequent sexual history and current sexual practices. The richness of the NHSLS thus offers a unique opportunity to contextualize adult-child sexual experiences within a life history. Indeed, the tendency of previous studies to ignore experiences occurring in the aftermath of adult-child sex may derive from the limited quality of the available data.

One drawback to the information on childhood sexual experiences collected in the NHSLS is its retrospective nature. There are at least two potential problems with collecting information on adult-child sexual contact through retrospective self-reports. First, respondents may not be able to recall aspects of their childhood experiences, especially if they are reporting on events that occurred 40 to 50 years earlier. Second, because the highly sensitive nature of adult-child sexual contact and the social stigma that surrounds such experiences, some respondents may choose not to disclose the event or some component of it.

The potential for measurement error must be acknowledged in any analysis based on retrospective accounts of childhood or forced sexual experiences. The NHSLS, however, was designed and administered with the goal of maximizing accuracy and candor in respondent's reports of their early sexual experiences. First, questions regarding early sexual experiences were asked after respondents had already discussed other intimate details of their sex lives, thus lowering the marginal social cost of further revelations. Second, while memory problems are difficult to surmount, the survey avoided unduly taxing or ambiguous questions concerning the details of the event. It also avoided morally charged questions frequently asked in other surveys of adult-child sexual experiences, such as inquiries about the respondent's willingness to engage in the activities (i.e., whether "force" was involved).

Respondents were generally willing to discuss sensitive issues relating to sexuality. Nearly 80 percent of the initial sample responded to the survey—a high response rate even for surveys not oriented toward sensitive behavior. Interviewers were asked to rate each respondent's level of "frankness" in responding to the questionnaire. Interviewers' assessments of the candor of respondents were almost universally positive. Consequently, despite the retrospective nature of the reports and the inevitably lower-bound estimates derived from them, we feel confident that the accuracy of the data gathered in the NHSLS is exceptionally high.

Definition of "Adult-Child Sexual Contact"

Researchers' definitions of "sexual abuse" have varied considerably. We employ the term "adult-child sexual contact" to highlight key elements of the specific type of interaction we are studying (i.e., physical sexual contact between prepubescent children and significantly older partners). Our decision to exclude adolescents from the analysis does not reflect a belief that adolescents do not experience sexual abuse. Rather, we felt that the dynamics of adult-child sexual contact may be different for younger children. Analyses of the long-term

[2] We decided to omit men for two reasons. First, the small number of cases meeting the definition of adult-child sexual contact (81 or only 6 percent of the men surveyed) posed problems, particularly for the analysis of the effect of the severity of the sexual contact on adult outcomes (which requires decomposing adult-child sexual contacts into more and less severe instances). Second, the effect of adult-child sexual contact on subsequent sexual trajectories is, no doubt, gender-specific. Men, for instance, are significantly less vulnerable to forced sex, and they experience different consequences from the birth of a child during their teenage years. Indeed, the impact of adult-child sex on men may be felt primarily in other trajectories requiring an examination of educational, employment, and delinquency-related outcomes. Given space limitations, these problems precluded an adequate analysis of men. Our investigations of male patterns have yielded several surprising results that will be reported elsewhere.

impact of adult-child sex should take into account the stage of the life course during which the events occur.

The NHSLS asked respondents whether they had been touched sexually before puberty or (if the respondent was unclear when he or she reached puberty) the age of 12 or 13. If a positive response was given, the respondent was asked several questions about the experience, including the age of the respondent when the sexual contact began and ended, the age of the person who touched the respondent, what happened sexually (specific acts), the number of times he or she was touched, what relationship the respondent was to the toucher (relative, friend, etc.), whether anyone else knew about the incident(s) during the respondent's childhood and, if so, who and how they knew (from the respondent or from another source). Finally, the respondent was asked whether he or she experienced sexual contact with anyone else during childhood. If the respondent was touched by more than one person, interviewers requested comparable summary information regarding those other experiences. In cases in which the respondent was touched by more than one person, however, the summary method of data collection rendered any clear connection between reported acts and particular persons impossible. In these cases, then, we were only able to determine that isolated events (say, oral sex) occurred during the respondent's childhood, but not with whom they occurred.

This constraint clearly limits our knowledge of the experiences of those respondents who had multiple sexual contacts during childhood. We are confident, however, that our definition of "adult-child sexual contact" ensures that, for the vast majority of these cases, relatively advanced sexual contact occurred with at least one substantially older individual. We included only those cases in which genital fondling, oral, vaginal, or anal sex occurred with a partner who was at least four years older than the respondent and no younger than 14. In some cases, the respondent reported sexual contact with an adolescent or adult (at least 14 years of age) as well as another child (13 years old or younger). Because only a small percentage of cases involving older partners did *not* involve at least fondling of the genitals,[3] we included these cases despite the ambiguity regarding the content of the sexual interactions. And because a small number of respondents reported that they reached puberty at ages well into adolescence (15, 16, 17), some sexual experiences that began after the respondent had reached the age of 13 were reported. We excluded these cases from the analysis.

Finally, we constructed a variable indicating whether the respondent reported experiencing childhood sexual contact with a peer but not with an adult. We coded the respondent as having experienced "peer" or "moderately asymmetric" contact if he or she reported sexual interaction with another individual under the age of 14 while also a child. These events were distinguished only by the age of the parties involved, not by any other aspect of the sexual contact. Thus, respondents who report peer sexual contacts may report multiple partners, sexual relationships that extend over a significant period of time, or, in some cases, fairly elaborate sexual activities.

Prevalence of Adult-Child Sexual Contact

Estimates of the prevalence of "sexual abuse" in the United States have varied because of data limitations and the lack of a consistent definition of the phenomenon. A 1985 telephone survey based on a national probability sample of U.S. adults age 18 or older asked respondents whether they had experienced anything they "would now consider sexual abuse" before age 18, including oral sex or sodomy, attempted or successful intercourse, inappropriate sexual touching or exposure, "or anything like that" (Finkelhor et al. 1990). Based on this expansive definition, 27 percent of women disclosed a history of sexual abuse. Russell's (1983) analysis of a probability sample of women from the San Francisco area estimated the rate of abusive sexual experience before age 14 among her respondents. Sexual abuse was defined as any form of threatening or coercive sexual contact. Of the 930 women in this urban sample, 28 per-

[3] Of those cases in which a respondent had some childhood sexual contact with an individual who was 14 years old or older, 3 percent reported that only "kissing" occurred.

cent reported at least one experience of intra- or extrafamilial sexual abuse. Employing a probability sample of 18- to 26-year-old women residing in Los Angeles County, Wyatt (1985) found that 45 percent reported some experience of unwanted sexual contact, or sexual contact with a partner at least five years older before the age of 18. More restrictive definitions of sexual abuse, however, have yielded rates as low as 6.8 percent (Siegel et al. 1987).

Taking into account differences in the age range considered, our estimates of the prevalence of "adult-child sexual contact" fall within the range of previous estimates of the prevalence of "sexual abuse," variously defined. Using our definition of adult-child sexual contact, we found that 12 percent of women report having had such an experience. (Table 1 presents univariate descriptive statistics on variables used in the analysis.) Of these women, 92.3 percent reported sexual contact only with an older man (or men), 2.4 percent reported sexual contact only with an older woman (or women), and 5.3 percent reported sexual contact with both sexes (at least one of whom was older).

HYPOTHESES

We test four guiding hypotheses regarding the long-term effects of adult-child sexual contact. First, we consider the extent to which adult-child sex is positively associated with subsequent sexual activity, an outcome predicted by both the psychogenic and life course perspectives. Second, we consider hypotheses specific to the psychogenic perspective: (1) that the behavioral response to adult-child sex is bipolar, and (2) that variation in long-term effects is explained by the severity of the sexual contact. Finally, we test the explanation for variation in long-term effects offered by the life course perspective—that the effect of adult-child sex on adverse outcomes in adulthood is mediated by intervening sexual trajectories.

Outcomes Predicted by Both the Psychogenic and Life Course Perspectives

H_1: Adult-child sexual contact increases the likelihood of experiencing a sexual trajectory marked by early onset of sexual

Table 1. Means and Standard Deviations for Variables in the Analysis: U.S. Women Ages 18 to 59

Variable	Mean	S.D.
INDEPENDENT VARIABLES		
Background Characteristics		
Black	.140	.347
Age 18–29 (reference category)	.292	.455
Age 30–44	.450	.498
Age 45–59	.258	.438
Mother high school graduate	.622	.485
Intact family structure	.724	.447
Childhood Sexual Experience		
None (reference category)	.862	.345
Peer contact	.017	.128
Adult-child, no severe characteristics	.020	.139
Adult-child, one severe characteristic	.041	.199
Adult-child: two or more severe characteristics	.061	.239
Adult-child sexual contact (all severity levels)	.120	.326
Intervening Sexual Career Variables		
First intercourse before age 16	.141	.348
Childbirth before age 19	.236	.425
Number of sexual partners after age 18:		
0 or 1 (reference category)	.345	.476
2 to 10	.563	.496
11 to 20	.060	.237
More than 20	.032	.176
Adverse Sexual Experiences		
Sexually transmitted infection	.177	.382
No forced sex after age 13	.850	.357
Forced sex once after age 13	.109	.312
Forced sex more than once after age 13	.041	.199
DEPENDENT VARIABLES		
Sexual Dysfunction Class		
Low dysfunction (reference category)	.690	.462
Sexual desire dysfunction	.175	.380
Sexual response dysfunction	.067	.250
High dysfunction	.068	.252
Low overall well-being	.429	.495
Low relationship satisfaction with primary partner	.237	.425
Number of sexual activities found appealing	3.8	2.2
Number of cases	1,749	

activity in adolescence, teenage childbirth, instability in sexual partnerships during adulthood and the attendant risks of a sexually active career, including sexually transmitted infection and forced sex.

Hypotheses Specific to the Psychogenic Perspective

H_2: Adult-child sexual contact has a polarizing effect on subsequent sexual activity; it leads to heightened levels of subsequent sexual activity for some women and *reduced* levels of sexual activity for others (a tendency to avoid sexual stimuli).

H_3: The likelihood of experiencing long-term effects from adult-child sexual contact (in the form of sexual dysfunction, relationship satisfaction, overall well-being, and level of sexual expressiveness) depends on the "severity" of the sexual contact.

Competing Life Course Explanation of Long-Term Effects

H_4: Sexual trajectories (including teenage childbirth, numbers of sexual partners in adulthood, sexually transmitted infections, and forced sexual experiences) *mediate* the impact of adult-child sex on long-term adult outcomes. Thus, controlling for the occurrence of these intervening events, we should find no differences between women who experienced adult-child sexual contact and those who did not in their likelihood of reporting the long-term effects noted above.

MEASURES

Dependent Measures

Sexual trajectory events. Table 1 reports descriptive statistics on our measures of sexual trajectory events. These include age at first intercourse (15 or younger versus over 15 or never), the occurrence of teen childbirth (at age 18 or younger versus over age 18 or never), the number of sexual partners since age 18 (0 or 1, 2 to 10, 11 to 20, or more than 20), the lifetime occurrence of sexually transmitted infection, and the experience of forced sex after puberty (never, once, twice or more). The NHSLS asked respondents who were touched sexually during childhood to report the date of their last sexual contact with the adult involved. Using this information, we were able to ensure that none of the sexual trajectory outcome variables measured events that occurred with the original adult perpetrator.

Sexual dysfunction. The NHSLS asked a number of questions designed to tap the respondent's level of dysfunction along both physical and emotional dimensions of sexual adjustment. We performed a latent class analysis of a subset of these items in an effort to identify typical categories of sexual dysfunction (see Appendix A). The four-class solution proved to be the most efficient balance between parsimony and goodness of fit. The analysis yielded a class characterized by little or no dysfunction (coded 1), a class characterized by a lack of interest in sex and some problems with orgasm (sexual *desire* dysfunction, coded 2), a class reporting little decrease in level of sexual interest but who experienced problems with lubrication and pain during intercourse (sexual *response* dysfunction, coded 3), and finally a highly dysfunctional class characterized by both physical problems (pain, poor lubrication) and emotional problems (stress and emotions interfering with sex) during sexual activity (coded 4) (Wincze and Carey 1991; American Psychiatric Association 1994).

Overall and relational well-being. A second set of outcomes assesses the respondent's well-being both generally and with respect to current intimate relationships. The overall measure of well-being was based on a question asked frequently in the General Social Survey that inquires into the general level of happiness the respondent experienced in the last year. The respondent was asked "Generally, how happy have you been with your personal life during the past 12 months? Have you been . . . extremely happy, very happy most of the time, generally satisfied/pleased, sometimes fairly unhappy, or unhappy most of the time."[4] The

[4] As a measure of psychological well-being, the GSS question has been shown to have a high de-

measure of relationship satisfaction was based on responses to the question "How emotionally satisfying did you find your relationship with (PARTNER) to be? Extremely satisfying, very satisfying, moderately satisfying, slightly satisfying, or not at all satisfying?" The dichotomized dependent variable combined those reporting "moderately," "slightly," and "not at all" satisfying relationships in a measure of low relationship satisfaction. Respondents who reported having no sexual partner in the last 12 months were excluded from the analysis.

Elaboration of sexual profile. Finally, we constructed a measure of the diversity and extensiveness of the respondent's interest in sex by counting the number of separate sexual acts she reported as "very" or "somewhat" appealing.[5] Relying on the *appeal* of sexual acts rather than on a behavioral indicator frees the measure from the potentially misleading constraints of another partner's preferences.

Independent Measures—Construction of "Severity" Variable

Our measure of adult-child the severity of adult-child sexual contact assigns each respondent a score based on the number of the following characteristics reported: (1) type of sexual contact—oral, vaginal, or anal sex versus only fondling of the genitals; (2) the relationship of the child to the adult involved—father or stepfather versus a nonpaternal relative, friend, or stranger; (3) how many times sexual contact occurred—many times versus a few times or only once; (4) number of individuals with whom sexual contact occurred—two or more versus one; and (5) age at which the sexual contact began—9 or younger versus 10 to 13. We created a three-category variable: those cases in which none of the above characteristics were reported (N = 33), cases in which one characteristic was reported (N = 69), and cases in which two or more characteristics were reported (N = 97).

ANALYSES AND RESULTS

Childhood Sexual Interactions and Subsequent Trajectories

We describe the association between coupled sexual experiences during childhood (including both peer contacts and adult-child sexual contacts) and aspects of subsequent sexual trajectories. We separate sexual trajectories into two components: (1) "sexual career" variables, including age at first intercourse, teenage childbirth, and numbers of sexual partners in adulthood; and (2) "adverse sexual experience" variables, including sexually transmitted infection and experiences of forced sex in adolescence and adulthood. Both the psychogenic and life course perspectives predict that adult-child sexual contact will lead to heightened sexual interest and activity, although for different reasons.

Figures 1 and 2 display the chain of associations between early childhood sexual interactions and intervening sexual trajectory events controlling for background characteristics (including race, age, class background, family structure, and age at menses).[6] Figure

gree of validity (Bradburn 1969). The NHSLS question differs only slightly from the GSS construction. The final dichotomized, dependent variable combined those reporting "generally satisfied/pleased," "sometimes fairly unhappy," and "unhappy most of the time" in a measure of low overall well-being in the last year.

[5] Respondents were asked to report whether they found the following 14 activities very, somewhat, not, or not at all appealing: having sex with more than one person at the same time, having sex with someone of the same sex, forcing someone to do something sexual that he/she doesn't want to do, being forced into doing something sexual that you don't want to do, seeing other people doing sexual things, having sex with someone you don't personally know, watching a partner undress, vaginal intercourse, using a dildo or vibrator, having a partner perform oral sex on you, performing oral sex on a partner, partner stimulating your anus with his/her fingers, stimulating partner's anus with your fingers, and passive anal intercourse.

[6] Because the intervening sexual experiences we consider are time-ordered (except for forced sex experiences), we performed a series of independent logistic regressions modeling each outcome on the basis of conditions antecedent to it in the life course. For this analysis, we dichotomized forced sex (forced after puberty: yes, no) and numbers of partners (0 to 10 partners since age 18, 11 or more).

Although associations between background

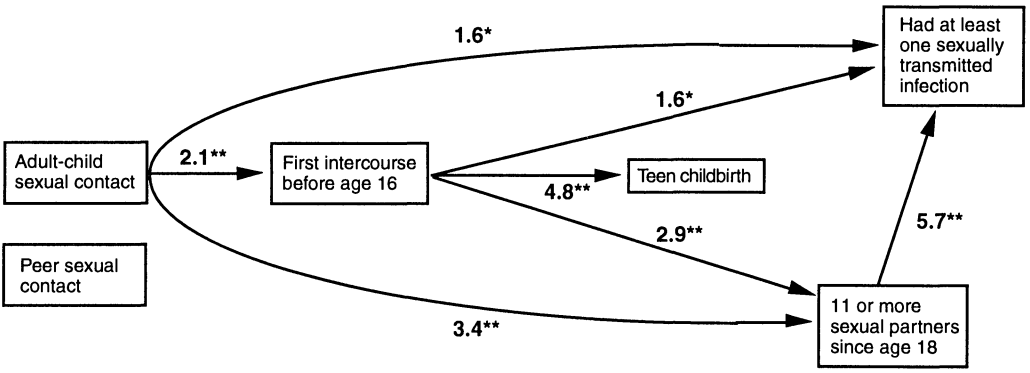

Figure 1. Associations between Adult-Child Sexual Contact and Sexual Career Variables

Note: Numbers are changes in odds. Model also includes background variables.

$^{*}p < .05$ $^{**}p < .01$ $^{**}p < .001$

1 indicates that adult-child sexual contact, for women, is directly associated with all of the sexual career variables considered except teenage childbirth. Compared with women who had no childhood sexual interactions, women who experienced adult-child sexual contact were 2.1 times as likely to report early onset of sexual activity in adolescence, 3.4 times as likely to have 11 or more sexual partners since the age of 18, and 1.6 times as likely to acquire a sexually transmitted infection in their lifetime. Adult-child sexual contact was also *indirectly* associated with subsequent experiences—teenage childbirth, number of partners, and STI's—through its effect on early teenage sexual experience. Similarly, the path from early sex to high numbers of partners constitutes a significant indirect link between adult-child sexual contact and sexually transmitted infection.

Figure 2 illustrates the effects of adult-child sexual contact and early first intercourse on the likelihood of experiencing forced sex in adolescence or adulthood, again controlling for background factors.[7] Women who experienced adult-child sex were 3.4 times as likely to report subsequent forced sex, and again we see the indirect effect of adult-child sex on subsequent forced sex experiences through early first sex. Finally, peer sexual contacts were not associated (at the 95 percent confidence level) with any of the sexual trajectory variables we considered.[8] In accord with the predictions of

factors and subsequent sexual experiences are not shown, we found associations between social characteristics and childhood sexual experiences. Black women were less likely than non-Black women to report sexual contact with an adult as children. Women who were raised in nonintact family structures (in which at least one of the child's natural parents was not present) were more likely to report adult-child sex. Interestingly, birth cohort was not associated with adult-child sex, indicating that this phenomenon has not been increasingly prevalent since the 1930's. Age of menses was not associated with adult-child sex, nor does it explain the association between adult-child sex and early first intercourse (challenging the hypothesis that developmental precociousness explains both the attraction of an adult perpetrator to the child as well as subsequent early sexual activity).

[7] Because we did not have information on the timing of subsequent experiences of forced sex (except that they occurred after puberty), we did not include them in the series of models described by Figure 1. Figure 2 describes the results of two logistic regressions: One predicting early first intercourse by childhood sexual experience and background factors; a second predicting forced sex on the basis of background characteristics, childhood sexual experiences, and early age at first intercourse. Estimates of the effect of adult-child sex on early first intercourse differ slightly from Figure 1 to Figure 2 because of the exclusion of some ambiguous cases in the construction of the forced sex variable.

[8] Some respondents who reported adult-child sexual contact also reported sexual activity with peers during childhood. The method of data collection did not permit us to determine the timing of these events, and thus precluded a direct investigation of the potential effect of prior peer

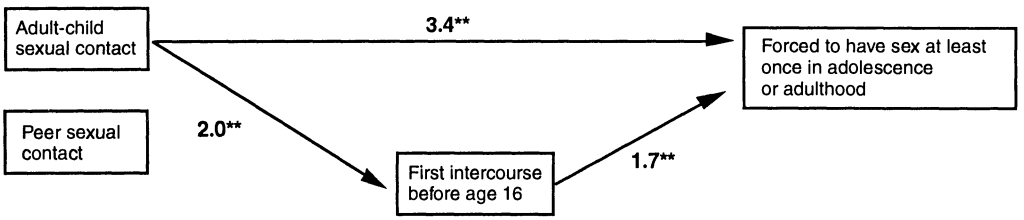

Figure 2. Associations between Adult-Child Sexual Contact and Subsequent Forced Sex Experiences

Note: Numbers are changes in odds. Model also includes background variables.

$^{*}p < .05$ $^{**}p < .01$ $^{**}p < .001$

both the psychogenic and the life course perspectives, then, we find that, compared to women who had no adult-child sexual interactions in childhood, women who had such sexual experiences have more active and riskier sexual careers.

Predictions of the Psychogenic Perspective

Bipolar behavioral tendency. We next consider the psychogenic perspective's hypothesis (not shared by the life course perspective) that the effect of adult-child sex on subsequent sexual trajectories is polarized: Some women who experienced adult-child sex will avoid sexual activity, while others will engage compulsively in sexual behavior. To test this claim, we examined the effect of adult-child sex on several trichotomous outcome variables measuring the extent of sexual activity during specific phases of the respondent's life course. First, we considered the effect of adult-child sex on the age of subsequent first coupled sexual activity (19 or older, age 16 to 18, or before age 16). Older age at first intercourse constitutes the lower sexual activity category. Second, we examined the effect of adult-child sex on the number of sexual partners in the last five years (0, 1 to 3, 4 or more) and, finally, the number of sexual partners in the last year (0, 1, 2 or more). We performed multinomial logit analyses of these outcomes and decomposed the parameters measuring the effect of adult-child sex into a linear and quadratic effect.[9] The linear effect measures the extent to which adult-child sex increases the chances of being in the higher categories of each outcome (compared with the base category). The quadratic effect measures the extent to which adult-child sex increases the likelihood of falling into each of the two extreme categories (compared with the middle category).[10]

We found strong positive linear effects of adult-child sex on all three outcomes considered. In no case, however, was the quadratic effect significant. Likelihood-ratio chi-square tests comparing the model with only the linear effect of adult-child sex (with covariates) to the model fitting both linear and quadratic effects were not significant. These analyses thus do not support the notion that adult-child sex has a polarizing effect on the sexual behavior of women who experience it. In fact, women who report adult-child sex are less likely than those who report no childhood sexual interactions to delay coupled sexual activity in adolescence and to be currently sexually inactive.

sexual activity on the likelihood of experiencing both adult-child sex and more active and risky sexual trajectories in adolescence and adulthood. We did, however, include respondents who reported only peer sexual contacts to see what impact these experiences have on subsequent sexual trajectories. Although the magnitude and direction of the effects of peer sexual contact on subsequent sexual career and adverse sexual experience outcomes were, in some cases, comparable to those for adult-child sex, the sample of women who reported peer sexual contacts was very small. Further research on this potentially significant category of early sexual experience is clearly warranted.

[9] We again controlled for background characteristics including race, age, mother's education, family structure, and age at menses.

[10] Because there are only three outcomes, the model with both linear and quadratic effects is equivalent to the unconstrained multinomial logit model.

Table 2. Coefficients for Models Predicting Adverse Adult Outcomes from Severity of Childhood Sexual Experience and Background Characteristics: U.S. Women Ages 18 to 59

	Adverse Adult Outcome					
	Type of Sexual Dysfunction[a]			Well-Being[b]		Low Number of Sexual Acts Found Appealing[c]
Independent Variables	Sexual Desire Dysfunction	Sexual Response Dysfunction	High Sexual Dysfunction	Low Overall Well-Being	Emotional Satisfaction with Primary Partner	
Background Characteristics						
Black	.344	−.577	.018	.175	.050	−.667**
	(.204)	(.412)	(.291)	(.154)	(.195)	(.159)
Age 30–44	.044	−.111	−.330	.217	.202	.211
	(.171)	(.261)	(.226)	(.125)	(.153)	(.127)
Age 45–59	−.197	.107	−.606*	.228	−.007	−.561**
	(.213)	(.293)	(.286)	(.145)	(.189)	(.147)
Mother high school graduate	−.029	−.265	−.672**	−.079	−.278*	.559**
	(.158)	(.226)	(.205)	(.110)	(.136)	(.112)
Intact family structure	−.206	.316	−.306	−.103	−.347*	.120
	(.169)	(.279)	(.221)	(.124)	(.149)	(.127)
Age at menses	−.016	−.099	.032	−.039	.012	−.106**
	(.047)	(.072)	(.062)	(.033)	(.041)	(.034)
Childhood Sexual Experience						
Peer sexual contact	−.697	−.411	.479	.762	.562	1.389**
	(.751)	(1.037)	(.639)	(.402)	(.441)	(.418)
Adult-child, no severe characteristics	−.403	.779	.458	.030	.277	.637
	(.624)	(.562)	(.633)	(.365)	(.422)	(.370)
Adult-child, one severe characteristic	.942**	.108	1.394**	.909**	.696*	.809**
	(.315)	(.619)	(.364)	(.261)	(.280)	(.263)
Adult-child, two or more severe characteristics	.387	.944**	.906**	.503*	.569*	1.260**
	(.295)	(.360)	(.331)	(.215)	(.246)	(.222)
Constant	−1.176	−1.198	−1.838**	.019	1.096*	4.667**
R^2	—	—	—	—	—	.097
Number of cases	1,461			1,583	1,355	1,547

Note: Numbers in parentheses are standard errors.

[a] Three multinomial logit models predicting a four-category sexual dysfunction variable. Low sexual dysfunction is the omitted category. Coefficients are log odds ratios.

[b] Logistic regression model; coefficients are log odds ratios.

[c] OLS regression model.

*$p < .05$ **$p < .01$ (two-tailed tests)

Event severity as a predictor of long-term outcomes. We now turn to analyses of the competing explanations of variation in the long-term effects of adult-child sexual contact offered by the psychogenic and life course perspectives. If the long-term effects of childhood sexual contacts with adults are a function of the severity of the event—as the psychogenic perspective suggests—those incidents involving more severe characteristics should lead to more extensive long-term adverse effects and a more elaborate profile of sexual expression than those incidents involving fewer severe characteristics.

Table 2 reports the results of a multinomial logit model predicting membership in

the sexual dysfunction latent classes (columns 1, 2, and 3), logistic regressions predicting well-being and relationship satisfaction (columns 4 and 5), and an OLS regression analysis predicting level of sexual elaboration (column 6). Controlling for the effects of relevant background characteristics including race, age, class background, family structure, and age at menses on the outcomes of interest, we entered our measure of the severity of the adult-child sexual contact and a variable indicating whether the respondent reported any peer sexual contacts before puberty. The coefficients reported for each independent variable in the multinomial logit and logistic regression analyses represent log odds ratios. For example, the coefficients for adult-child sex represent the predicted change in the log odds of reporting the outcomes considered (e.g., sexual response dysfunction versus low dysfunction) compared with respondents who reported no childhood sexual interactions. In the following discussion we present estimates in terms of changes in odds (e^{χ}) rather than log odds. OLS coefficients represent the predicted change in number of sex acts found appealing.

The general trend of the results appears, at first glance, to conform with the expectations of the psychogenic perspective. Cases of peer sexual contact and adult-child contacts with no severe characteristics were not significantly associated with any of the adverse outcomes we considered (although peer contact was associated with the number of sex acts found appealing). However adult-child contacts with multiple severe characteristics (hereafter "high severity") were, *in general*, no more likely to lead to long-term effects than were those with only one severe characteristic ("mild severity"). High severity adult-child sexual contacts were significantly more likely to lead to adverse outcomes only in the case of sexual response dysfunction: Women who reported high severity adult-child contacts were $e^{.944}$ or 2.6 times as likely to experience sexual response problems in adulthood when compared to women who reported no childhood sexual contacts (hereafter, the assumed reference category). No other category of child sexual contact was significantly associated with this outcome. Yet for each of the other adverse outcomes considered, mild severity sexual contacts were just as likely, if not more likely, to lead to problems in adulthood than were high severity cases. Mild severity cases were 2.6 times as likely to lead to sexual desire dysfunction, while high severity cases were not significantly associated with this outcome. Mild and high severity cases were 4.0 and 2.5 times as likely, respectively, to lead to high dysfunction, 2.5 and 1.7 times as likely to lead to low overall well-being, and 2.0 and 1.8 times as likely to lead to low relationship satisfaction.[11]

The lack of a consistent increase in the magnitude of the estimates for high severity cases of adult-child contact (compared with mild severity) indicates that, beyond a certain threshold, severity does not account for differences in adult experience. Note also that adult-child sexual contacts with no severe characteristics accounted for only 15 percent of the total number of adult-child contacts reported, leaving variation in the remaining 85 percent unexplained.

Predictions of the Life Course Perspective: Mediating Effect of Sexual Career

Finally, we examined the extent to which sexual career characteristics account for the association between adult-child sexual contact and the adult outcomes we consider. Tables 3a and 3b report the results of multinomial logit, logistic regression, and OLS regression analyses employed to predict sexual dysfunction, well-being, and sexual

[11] To ensure that our severity scale did not distort the individual effects of event characteristics, we analyzed each characteristic separately to determine its effect on the outcomes considered. Of particular concern was the effect of the age of the respondent. Scholars sympathetic with the psychogenic perspective continue to debate whether older children are more likely to experience trauma during adult-child sexual contact. Some argue that an older age at onset of the contact will be more traumatizing because the child is aware of the inappropriateness of the activity. In analyses not presented here, we replicated the analyses performed in Table 2 for each characteristic (e.g., a model testing the effect of being older at the time of sexual contact, another testing the effect of multiple occurrences of sexual contact, etc.). We found no consistent effect of any single characteristic.

Table 3a. Coefficients for Multinomial Logit Models Predicting Sexual Dysfunction in Adulthood from Childhood Sexual Experience, Sexual Career Variables, Adverse Sexual Experience Variables, and Background Characteristics: U.S. Women Ages 18 to 59

	Type of Sexual Dysfunction[a]								
	Sexual Desire Dysfunction			Sexual Response Dysfunction			High Dysfunction		
Independent Variables	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Background Characteristics									
Black	.279	.314	.28:	−.514	−.382	−.384	−.232	−.280	−.290
	(.212)	(.218)	(.221)	(.415)	(.420)	(.425)	(.322)	(.331)	(.334)
Age 30–44	.010	−.060	−.044	.114	.064	.110	−.266	−.306	−.295
	(.174)	(.176)	(.177)	(.271)	(.273)	(.277)	(.237)	(.240)	(.241
Age 45–59	−.305	−.310	−.263	.106	.096	.236	−.376	−.318	−.263
	(.222)	(.223)	(.224)	(.317)	(.318)	(.324)	(.286)	(.287)	(.289)
Mother high school graduate	−.090	−.158	−.165	−.190	−.270	−.243	−.662**	−.677**	−.686**
	(.163)	(.167)	(.168)	(.237)	(.240)	(.244)	(.212)	(.217)	(.218)
Intact family structure	−.159	−.138	−.132	.209	.171	.138	−.225	−.173	−.168
	(.174)	(.176)	(.178)	(.280)	(.281)	(.286)	(.231)	(.234)	(.237)
Age at menses	−.030	−.038	−.032	−.087	−.094	−.070	.052	.038	.046
	(.048)	(.048)	(.048)	(.072)	(.072)	(.073)	(.063)	(.063)	(.063)
Childhood Sexual Experience									
Adult-child sexual contact (all severity levels)	.455*	.406	.310	.741*	.789**	.499	.874**	.875**	.747**
	(.219)	(.225)	(.230)	(.293)	(.300)	(.313)	(.259)	(.267)	(.274)
Sexual Career									
Childbirth before age 19	—	−.338	−.342	—	−.812	−.839*	—	−.163	−.183
		(.237)	(.239)		(.421)	(.427)		(.296)	(.299)
2–10 sex partners since age 18	—	.282	.189	—	.146	−.099	—	.723**	.623*
		(.175)	(.180)		(.246)	(.259)		(.253)	(.258)
11–20 sex partners since age 18	—	.749*	.474	—	−.014	−.593	—	.692	.434
		(.298)	(.315)		(.517)	(.551)		(.450)	(.469)
21 or more sex partners since age 18	—	.521	.067	—	.327	−.664	—	.303	−.107
		(.416)	(.448)		(.580)	(.655)		(.661)	(.687)
Adverse Sexual Experiences									
Had at least one STI	—	—	.372	—	—	.397	—	—	.277
			(.198)			(.301)			(.265)
Forced sex once after age 13	—	—	.203	—	—	.888**	—	—	.438
			(.244)			(.322)			(.300)
Forced sex more than once after age 13	—	—	.822*	—	—	1.808**	—	—	.860
						(.351)			(.420)
Constant	−.965	−.996	−1.112	−1.463	−1.287	−1.708	−2.184**	−2.508**	−2.661**

Summary Statistics	Model 1	Model 2	Model 3
Log-likelihood	−1,250.2	−1,234.6	−1,224.3
Degrees of freedom	21	33	42
Number of cases	1,381	1,381	1,381

Note: Numbers in parentheses are standard errors.

[a] Three multinomial logit models predicting a four-category sexual dysfunction variable. Low sexual dysfunction is the omitted category. Coefficients are log odds ratios.

*$p < .05$ **$p < .01$ (two-tailed tests)

Table 3b. Coefficients for Models Predicting Well-Being and Number of Sex Acts Found Appealing in Adulthood from Childhood Sexual Experience, Sexual Career Variables, Adverse Sexual Experience Variables, and Background Characteristics: U.S. Women Ages 18 to 59

	Well-Being[b]						Number of Sexual Acts Found Appealing[c]	
	Low Overall Well-Being			Low Emotional Satisfaction with Primary Partner				
Independent Variables	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	Model 1	Model 2
Background Characteristics								
Black	.147 (.158)	.031 (.164)	.027 (.165)	−.011 (.204)	−.132 (.212)	−.133 (.213)	−.748** (.161)	−.778** (.154)
Age 30–44	.229 (.128)	.179 (.130)	.182 (.130)	.143 (.156)	.070 (.160)	.079 (.160)	.272* (.129)	.084 (.121)
Age 45–59	.231 (.149)	.248 (.151)	.266 (.151)	−.022 (.194)	.026 (.198)	.053 (.199)	−.534** (.150)	−.544** (.141)
Mother high school graduate	−.081 (.113)	−.058 (.117)	−.063 (.117)	−.317* (.141)	−.333* (.146)	−.325* (.147)	.665** (.115)	.585** (.110)
Intact family structure	−.157 (.126)	−.079 (.129)	−.073 (.129)	−.324 (.153)	−.253 (.156)	−.267 (.157)	.008 (.129)	.095 (.121)
Age at menses	−.027 (.033)	−.024 (.034)	−.021 (.034)	.024 (.042)	.019 (.043)	.025 (.043)	−.101** (.033)	−.103** (.031)
Childhood Sexual Experience								
Adult-child sexual contact (all severity levels)	.466** (.161)	.301 (.167)	.254 (.171)	.508** (.187)	.355 (.194)	.286 (.199)	1.012** (.165)	.711** (.158)
Sexual Career Variables								
Childbirth before age 19	—	.403* (.159)	.393* .160)	—	.136 .196)	.142 (.198)	—	−.275 (.152)
2–10 sex partners since age 18	—	.421** (.119)	.382** (.122)	—	.703** (.167)	.664** (.170)	—	.967** (.110)
11–20 sex partners since age 18	—	1.030** (.235)	.943** (.246)	—	1.351** (.271)	1.251** (.284)	—	1.793** (.220)
21 or more sex partners since age 18	—	1.117** (.324)	.986** (.342)	—	1.266** (.367)	1.074** (.391)	—	3.550** (.298)
Adverse Sexual Experiences								
Had at least one STI	—	—	.125 (.151)	—	—	.027 (.180)	—	—
Forced sex once after age 13	—	—	.205 (.176)	—	—	.191 (.210)	—	—
Forced sex more than once after age 13	—	—	.183 (.277)	—	—	.550 (.299)	—	—
Constant	−.046	−.509	−.562	−1.192	−1.705**	−1.801**	4.604**	4.014**
Log-likelihood	−1,005.4	−986.4	−985.1	−684.0	−666.4	−664.5	—	—
R^2	—	—	—	—	—	—	.102	.214
Degrees of freedom (vs. model with no covariates)	7	11	14	7	11	14	7	11
Number of cases	1,490	1,490	1,490	1,274	1,274	1,274	1,460	1,460

Note: Numbers in parentheses are standard errors.

[b] Logistic regression model; coefficients are log odds ratios.

[c] OLS regression model.

*$p < .05$ **$p < .01$ (two-tailed tests)

elaboration outcomes respectively. Three models are tested for each outcome: (1) a reduced model (Model 1) including only background characteristics and the experience of adult-child sex (combining levels of severity);[12] (2) a second model (Model 2) that includes subsequent sexual career variables (teen childbirth and numbers of sexual partners in adulthood); and (3) a third model (Model 3) that adds intervening adverse sexual experience variables including the lifetime occurrence of sexually transmitted infection and forced sex.

In each reduced model (Model 1), we see that adult-child sexual contact is significantly associated with the outcome considered. Women who experienced adult-child sexual contact were 1.6 times as likely to report sexual desire dysfunction, 2.1 times as likely to report sexual response dysfunction, 2.4 times as likely to report high dysfunction, 1.6 times as likely to report low overall well-being, 1.7 times as likely to report low relationship satisfaction, and had more sexual activities that they found appealing compared with those who had no coupled sexual experiences as children. For every outcome except high dysfunction and number of sex acts found appealing, the introduction of the sexual trajectory variables (Models 2 and 3) renders the adult-child sexual contact coefficient insignificant, indicating that the effects of adult-child sex on adult outcomes are largely indirect, mediated through sexual trajectories.

As we hypothesized, sexual career and intervening adverse experience variables were significant predictors of current levels of reported sexual dysfunction. Women who reported higher numbers of lifetime sexual partners (11 to 20) were 2.1 times as likely to report sexual desire dysfunction compared with respondents who had 0 or 1 partner (Model 2). This effect, however, is rendered insignificant with the introduction of the adverse sexual experience variables. The effect of number of partners on this form of dysfunction appears, in large part, to be a function of the relationship between number of partners and the occurrence of forced sex after childhood: Women who reported having been forced to have sex more than once since childhood were 2.3 times as likely to report sexual desire dysfunction in adulthood (Model 3).

Intervening experiences of forced sex also mediated the association between adult-child sex and sexual response dysfunction. The association found in Model 1 remained significant when sexual career variables were added in Model 2 but disappeared with the introduction of adverse sexual experience variables in Model 3. Women who reported a single incident of forced sex after childhood were 2.4 times as likely to report sexual response dysfunction in adulthood while women who experienced multiple occurrences of forced sex after childhood were over 6.1 times as likely to do so when compared with women who were never forced to have sex. The association between adult-child sex and high dysfunction remained with the introduction of the sexual career variables (Model 2) but declined somewhat with the addition of the adverse sexual experience variables in Model 3.

In contrast to the sexual dysfunction outcomes, the associations between adult-child sexual contact and our two measures of well-being were mediated by sexual career variables rather than adverse experience variables. The strong association between adult-child sexual contact and overall well-being present in Model 1 was rendered insignificant in Model 2 with the introduction of the sexual career variables. Having a child before the age of 19 and having more than one sexual partner since age 18 were associated with lower levels of well-being in the previous year.[13] Women who had a teenage childbirth were 1.5 times as likely to report low overall well-being (compared to those who did not) and women who had 2 to 10, 11 to 20, and 21 or more lifetime sexual partners were 1.5, 2.8, and 3.1 times as likely, respectively, to report low overall well-being (compared with women who had less than 2 lifetime partners). The introduction of the adverse sexual experience variables in Model 3

[12] The number of peer sexual contacts reported by women was too low to include in the analysis of mediating effects.

[13] The effect of having a child before age 19 on adult well-being remained after controlling for the respondent's current level of education and income.

did not result in a significant increase in log-likelihood.

Sexual career variables also mediated the effect of adult-child sexual contact on relationship satisfaction in the last year. Echoing the pattern found for overall well-being, the introduction of the sexual career variables in Model 2 resulted in a nonsignificant coefficient for adult-child sexual contact. While teenage childbirth was not associated with relationship satisfaction, number of lifetime sexual partners had a strong association with this outcome: Women who had 2 to 10 sexual partners since age 18 were twice as likely to report low relationship satisfaction, while those with 11 to 20 and 21 or more partners were 3.9 and 3.5 times as likely to do so (compared with women reporting less than 2 partners). Again, the introduction of the adverse sexual experience variables in Model 3 did not result in a significant increase in the log-likelihood.

Finally, we found that sexual career (number of partners) had strong associations with the number of sexual acts respondent's found appealing. While the addition of sexual career variables in Model 2 did not render the coefficient for adult-child sexual contact nonsignificant, it reduced the magnitude of the coefficient by roughly one-third. Women who reported 2 to 10 sexual partners since age 18 found an additional 1.0 sexual acts appealing on average (compared with women who had fewer than 2 sexual partners), and women who reported 21 or more partners found an additional 3.6 acts appealing. In Model 2, adult-child sexual contact resulted in a .7 increase in the number of sexual acts found appealing.

DISCUSSION

These analyses suggest a number of preliminary conclusions regarding early childhood sexual interaction. First, women who experience adult-child sexual contact are, clearly, more sexually active in both adolescence and adulthood. They have sex at earlier ages during their teenage years and are more likely to bear children before they turn 19. They have substantially higher numbers of sexual partners in adulthood and are more likely to experience sexually transmitted infections and forced sex.

Second, the tendency toward more active sex lives among women who experienced adult-child sexual contact does not appear to be one aspect of a polarized behavioral response pattern. That is, we did not uncover a comparable tendency toward sexual avoidance among the sample of women who reported childhood sexual contact with an adult. This finding runs counter to the predictions of the psychogenic perspective. The theory of adult-child sexual contact as "trauma" followed by compulsive sexual activity *or* aversion to sexual stimuli does not describe the pattern of responses we found among our respondents. Adult-child sexual contact, for women, seems to provide access to sexuality without cultivating the emotional and cognitive skills to manage sexual experiences. Adult-child sexual contact is, in most cases, a child's first introduction to adult sexuality. The sexual script acquired during such relationships forms the basis on which other sexual experiences are assimilated. Even if an adult-child sexual experience is recognized to be "wrong," the process of acquiring new and more appropriate sexual scripts may be difficult for a maturing adolescent. Moreover, the sexual awareness and, in some cases, "pseudomaturity" of children (or emerging adolescents) who have experienced adult-child sex may signal vulnerability to sexual advances. Mausert-Mooney, Trickett, and Putnam (1993) found that girls who had experienced sexual contact with an older male were *perceived* to be older, more personally attractive, and more flirtatious. The social identification of girls as sexually available may initiate processes that "pull" adolescent women into sexual trajectories that pose long-term risks.

Third, beyond a certain threshold, examining the adult-child sexual contact itself for characteristics typically considered more traumatic (at least those commonly referred to in previous studies) does not effectively capture a child's vulnerability to the long-term adverse effects we consider. It may be that these characteristics do not tap the extent to which a given adult-child sexual contact increases the salience of sexuality to a child and forms the basis, through the establishment of an inappropriate sexual script, of future sexual behavior patterns. That is, the extensiveness of a given adult-child sexual

relationship may have little association with its impact on the sexual socialization of the child involved. Even if an adult-child sexual interaction is not extensive, it may involve the induction of beliefs and preoccupations about sexuality that lead to potentially risky sexual trajectories.

Finally, telling evidence of the influence of sexual trajectories was revealed in our analysis of the mediating impact of intervening sexual events on long-term adverse outcomes. When we controlled for intervening sexual career variables (teenage childbirth and number of sexual partners) and intervening adverse sexual experience variables (sexually transmitted infection and forced sex) we found that the direct effect of adult-child sex disappeared in most cases.[14] More active and riskier sexual trajectories were associated with high rates of sexual dysfunction and low well-being in adulthood. It is important to recognize that we examine a limited number of outcomes using measurement strategies that could be improved upon. However, the consistency of the findings across the outcomes we considered suggests that the impact of adult-child sex is a function, primarily, of the sexual pathway taken to adulthood—those who avoid more active and riskier sexual lives are significantly less likely to report adverse outcomes later in life.

Ideally, methods for reliably identifying girls who have experienced adult-child sex could be developed. In the absence of this, generalized sex education that deals with issues of sexual negotiation, rights, and responsibilities may be one of the few ways for young girls who have experienced adult-child sexual contact to rewrite the inappropriate sexual scripts they have learned. For some girls, sex education is sex *re*-education. By establishing the importance of examining childhood sexual contacts within the context of an unfolding life course, the results of these analyses point to the ameliorative potential of redirecting sexual trajectories.

Longitudinal studies of sexual behavior across the life course are needed to better understand the links between childhood sexual interactions and subsequent sexual behavior. Our findings lend support to this claim. Moving away from an "event-centered" approach to the long-term effects of adult-child sexual contact shifts the locus of causation away from aspects of the sexual contact—and an implicit assumption of the inevitability of adverse effects—to the social and temporal structure of adaptation to childhood sexual experiences.

[14] While the significance of the coefficient estimating the effect of adult-child sex on number of sexual acts found appealing remained significant, this finding is consistent with the "eroticization" hypothesis: Heightened interest in sexuality is clearly associated with the experience of adult-child sex. In some cases, sexual preoccupations may contribute to more active and riskier sexual careers.

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Appendix A. Latent Class Analysis of Sexual Dysfunction

Latent-class analysis (LCA) is the categorical data analogue of factor analysis, which is used for continuous variables. LCA identifies a set of mutually exclusive latent classes that account for the association among a set of categorical variables. LCA arrives at a solution of T latent classes such that the observed variables, controlling for the latent variable, are independent (i.e., LCA maximizes *local independence* among a set of observed categorical variables).

The general form of the model is as follows:

$$\pi_{ij\ldots mt}^{AB\ldots EX} = \pi_{it}^{\bar{A}X} \times \pi_{jt}^{\bar{B}X} \times \ldots \times \pi_{mt}^{\bar{E}X} \times \pi_{t}^{X},$$

where $\pi_{ij\ldots mt}^{AB\ldots EX}$ is the probability that a randomly selected case will fall in cell $i, j, \ldots, m, t$; $\pi_{it}^{\bar{A}X}$ is the conditional probability of being at level i of variable A for a case in class t of latent variable X (and so on for each observed variable); and π_{t}^{X} is the

probability of a randomly selected case being at level t of latent variable X (McCutcheon 1987). Using Clogg's Maximum Likelihood Latent Structure Analysis program (Clogg 1977; Eliason 1980), we fit the 1-, 2-, 3-, and 4-class solutions for women. The 4-class solution most efficiently balanced goodness of fit and parsimony ($G^2 = 7.61$, d.f. = 23). In Appendix Table A-1 we report the final estimated latent-class and conditional probabilities (latent-class probabilities are reported in parentheses after each dysfunction class; conditional probabilities are reported in the body of the table:

Appendix Table A-1. Estimated Latent Class and Conditional Probabilities

	Latent Class[a]			
Dysfunction Item	Low Sexual Dysfunction	Sexual Desire Dysfunction	Sexual Response Dysfunction	High Sexual Dysfunction
Stress	.21	.46	.47	.63
Lubrication	.06	.14	.89	.67
Pain	.06	.13	.43	.57
Orgasm problems	.07	.55	.33	.92
Lack of interest	.09	.93	.27	.97
Latent class probability	.66	.17	.09	.08

[a] See text on page 548 for definitions of the four classes of sexual dysfunction.

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