

Sexual Risk-Taking Among Recently Emancipated Female Foster Youth: Sexual Trauma and Failed Family Reunification Experiences

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Foster youth evidence shows elevated rates of risk behaviors, including sexual risk-taking (e.g., unprotected sex). Some studies have identified child maltreatment, particularly sexual abuse, as a risk for later sexual risk-taking, but none have examined how child welfare placement experiences relate to youth's sexual risk-taking. This study investigated relations among child maltreatment, child welfare placements, and sexual risk-taking among 114 recently emancipated female foster youth. Sexual abuse and failed reunifications with parents were associated with greater sexual risk-taking. Moreover, dissociative symptoms exacerbated the relation between sexual abuse and sexual risk-taking. These findings highlight the need for greater consideration of risks associated with emancipated youth's sexual risk-taking and for more research to understand how youth experience unsuccessful family reunifications.

Sexual risk behaviors, such as lack of contraceptive use and early coital debut, can result in negative health outcomes, including sexually transmitted infection and unintended pregnancy (Centers for Disease Control and Prevention [CDC], 2012). Relative to their peers who are not in the child welfare system, foster youth evidence disproportionately high rates of health risk behaviors, including sexual risk-taking (Auslander et al., 2002; James, Montgomery, Leslie, & Zhang, 2009; Leslie et al., 2010; Love, McIntosh, Rosst, & Tertzakian, 2005; Taussig, 2002). Although sexual risk-taking generally increases across adolescence (CDC, 2012), foster youth engage in disproportionately high rates of sexual risk-taking behavior (Courtney, Charles, Okpych, Napolitano, & Halsted, 2014). Specifically, relative to youth who do not have histories of out-of-home placement, foster youth become sexually active an average of 7.2 months earlier (i.e., Carpenter, Clyman, Davidson, & Steiner, 2001), engage in more unprotected sex (i.e., 34% vs. 12.9%; Risley-Curtiss, 1997; James et al., 2009), are 2.5 times more likely to become pregnant by age 19 (National Campaign to Prevent Teen and Unplanned Pregnancy, 2010), and experience higher rates of sexually transmitted infection (15% vs. 9.2%; Risley-Curtiss, 1997; James et al., 2009).

Although limited, research on *former* foster youth suggests sexual risk behaviors remain elevated across the transition to adulthood (Carpenter

et al., 2001) with particularly high rates expected among the 11% of foster youth who remain in care until they age out or emancipate from the system (Ahrens, Katon, McCarty, Richardson, & Courtney, 2012; Ahrens, McCarty, Simoni, Dworsky, & Courtney, 2013; Child Welfare Information Gateway, 2013; Dworsky & Courtney, 2010). Efforts to elucidate factors associated with sexual risk-taking in this population are necessary to inform practice and policy approaches to reduce these behaviors and promote positive health outcomes among these uniquely vulnerable youth. Yet, the few extant studies of sexual risk-taking among emancipated foster youth have focused on specific risk behaviors, such as transactional sex (Ahrens et al., 2012), sexually transmitted infection risk (Ahrens et al., 2013), and teen pregnancy (Dworsky & Courtney, 2010), rather than on the continuum of sexual risk behaviors. Moreover, across samples, there has been little consideration of potential moderating mechanisms that may qualify relations between antecedent risks and sexual risk-taking. This investigation sought to fill these gaps by evaluating the relations of child maltreatment and child welfare placement experiences with late adolescent sexual risk-taking as moderated by dissociative symptoms in a sample of recently emancipated female foster youth.

Researchers have identified an array of risk factors associated with adolescent sexual risk-taking in the general population (e.g., Luster & Small, 1994; Raj, Silverman, & Amaro, 2000; Saewyc,

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Magee, & Pettingell, 2004), and, to a lesser degree, among youth in foster care (i.e., Ahrens et al., 2012; Auslander et al., 2002; Carpenter et al., 2001; James et al., 2009; Leslie et al., 2010; Taussig, 2002). Among both youth in and outside the child welfare system, child maltreatment is a prominent risk factor for later sexual risk-taking (Hussey, Chang, & Kotch, 2006; Luster & Small, 1994), with particularly strong and consistent relations observed between child sexual abuse and sexual risk behavior (Auslander et al., 2002; Luster & Small, 1994; Saewyc et al., 2004; Zurbriggen & Freyd, 2004).

Experiences of child maltreatment, and particularly sexual abuse, are associated with insecure attachment patterns that may contribute to distrustful and dependent relationships with romantic partners, which, in turn, render youth more likely to engage in multiple, brief sexual relationships and unsafe sexual behaviors (Briere, 2002; Cicchetti & Toth, 2005; Fraley & Shaver, 2000; Senn & Carey, 2010). Some researchers suggest that disproportionately strong relations between child sexual abuse and later sexual risk-taking may reflect the dual contributions of attachment disruptions and mental health problems that compromise healthy decision-making during sexual encounters (DePrince, Combs, & Shanahan, 2009; Finkelhor & Browne, 1985; Senn & Carey, 2010). Extending these works to examine sexual risk-taking among newly emancipated female foster youth, the first aim of this study was to evaluate associations of child neglect, child physical abuse, and child sexual abuse with sexual risk-taking, with the expectation that relations with child sexual abuse would be especially robust.

Relative to studies of child maltreatment and sexual risk-taking, few studies have evaluated if and how patterns of caregiving, particularly disrupted caregiving, may contribute to adolescent sexual risk behavior, and none have done so in a sample of foster youth. Although some evidence points to the salience of disrupted caregiving experiences in the etiology of sexual risk behavior among other high-risk youth groups (e.g., children of incarcerated mothers; Johnston, 1995), studies have yet to examine the unique role that child welfare placement experiences may play in the etiology of sexual risk behavior among foster youth. Placement permanency is a central goal of the child welfare system (National Association of Social Workers, 1997; Newton, Litrownik, & Landsverk, 2000), and the negative implications of placement transitions for development are widely recognized (Fanshel, Finch, & Grundy, 1990; Smith, Stormshak,

Chamberlain, & Whaley, 2001). Placement transitions are related to the presence and severity of varied child behavioral and emotional problems (Leslie et al., 2010; Newton et al., 2000; Stott & Gustavsson, 2010), and they also increase youth's risk for further placement disruptions in the future (Smith et al., 2001).

Moreover, the type of placement (e.g., group home, foster home, placement with kin) may influence youth's adjustment with some evidence suggesting that kin placements may be related to youth conduct problems (e.g., theft, truancy, curfew violations; Taussig & Clyman, 2011), although not necessarily to sexual risk-taking. Failed family reunification experiences constitute a potentially unique risk for many youth in the child welfare system, particularly for those who eventually age out. Although the central goals of the child welfare system, namely placement permanency and safety (Newton et al., 2000), can be achieved via adoption or guardianship, family reunification remains the most frequent disposition in child welfare with an average rate of 55% of exiting youth returning to one or more biological parents (Webster et al., 2015). Thus, the second aim of this study was to evaluate relations between youth's child welfare experiences (i.e., temporary reunifications with one or both biological parents, placements with extended kin, foster home placements, and group home placements) and sexual risk-taking.

Associations of child maltreatment and placement experiences with youth's sexual risk-taking behavior may be magnified in the context of dissociative symptoms. As a breakdown in the "normal integration of consciousness, memory, identity, emotion, perception, body representation, motor control, and behavior" (American Psychiatric Association, 2013, p. 291), dissociation may facilitate youth's efforts to cope with overwhelming life experience, including the interpersonal trauma and loss associated with foster care (Liotti, 2004). At the same time, however, dissociation may interfere with healthy decision making and experiential processing in later development (Carlson, Yates, & Sroufe, 2009). Research has shown that dissociative symptoms are elevated among individuals with a history of child maltreatment (DePrince et al., 2009), particularly sexual abuse (Putnam, 2003), or caregiver disruption (Liotti, 2004). Moreover, some research supports the role of dissociation in relations between these childhood adversities and health risk behaviors, including HIV risk behaviors (e.g., using needles, unsafe sexual practices; Miller, 1999), nonsuicidal self-injury (Yates, Carlson, &

Egeland, 2008), and suicide (Kisiel & Lyons, 2001). These relations are consistent with evidence indicating that youth who have a history of child maltreatment and dissociative symptoms may be less sensitive to violations of social contracts (e.g., clues that people may be lying or unsafe; DePrince et al., 2009), less able to track their internal feelings and so more susceptible to contextual pressures (Fraley & Shaver, 2000), and better able to separate their risk activities from their sense of self (DePrince et al., 2009; Finkelhor & Browne, 1985; Senn & Carey, 2010). Thus, the third aim of this study was to evaluate the moderating impact of dissociative symptoms on expected relations of child maltreatment and child welfare placement types with late adolescent sexual risk-taking in a sample of recently emancipated female foster youth.

As discussed by Kendall-Tackett, Williams, and Finkelhor (1991), this study focused on female foster youth to avoid masking gender-specific developmental patterns that may underlie the phenomenology of sexual risk-taking and the processes that influence it (see Carpenter et al., 2001; Dworsky & Courtney, 2010; Love et al., 2005 for additional studies using female subsamples to investigate sexual risk behavior). Rates of sexual risk behaviors were expected to be elevated in this sample of emancipated foster youth relative to rates observed in samples of adolescents who do not have a history of out-of-home placement. We hypothesized that child maltreatment (i.e., child sexual abuse, physical abuse, and neglect) would be associated with later sexual risk-taking, and that the observed relations with child sexual abuse would be especially pronounced. Although overall placement disruption (i.e., total number of placements) was expected to predict heightened sexual risk-taking, hypotheses regarding relations between specific placement experiences (i.e., failed reunifications with one or both biological parents, placements with extended kin, foster home placements, and group home placements) were exploratory. Finally, we hypothesized that dissociative symptoms would magnify the expected relations of child maltreatment, specifically child sexual abuse, and child welfare placement experiences with sexual risk behavior in later adolescence.

METHOD

Participants

The sample included 114 female youth ($M_{\text{age}} = 19.608$ years, $SD = 1.109$) who emancipated from

foster care and were participating in a longitudinal study of adapting to aging out. Participants were ethnographically diverse with 12.3% identifying as European American, 25.4% as African American, 28.1% as Hispanic, and 34.0% as multiracial. On average, participants entered foster care at 9.018 years of age ($SD = 5.460$), had emancipated 18.259 months ($SD = 0.649$) prior to the time of interview, and had experienced an average of 7.104 ($SD = 5.079$) distinct living situations while in care, including family foster care, group care, kin care, and temporary reunifications with one or both biological parents.

Procedures

Participants were recruited via social workers, independent living program providers, and flyers distributed to service agencies targeting transition-aged foster youth. After a brief screening by phone, youth were invited to participate if they were between the ages of 18 and 21 and had been placed in foster care due to abuse or neglect prior to the age of 17. Male participants ($n = 58$) were excluded from these analyses. Youth who were incarcerated or hospitalized during the initial data recruitment period did not have an opportunity to participate.

Face-to-face interviews were conducted by research assistants who had at least a bachelor's degree in psychology (45.9% of interviews) and doctoral students in developmental psychology (54.1% of interviews). Interviews were conducted in a university laboratory (87.2%) or in a private community setting (e.g., agency offices, libraries; 12.8%). In the context of a 3-hr in-person assessment, youth completed a structured interview regarding their child welfare experiences and a series of computerized questionnaires to measure their child maltreatment experiences, sexual risk behaviors, and dissociative symptoms. Participants were compensated with \$75. The Human Research Review Board of the participating university approved all procedures.

Measures

Sexual risk-taking. Youth completed a modified version of the Adolescent Health Survey (Blum, Harris, Resnick, & Rosenwinkle, 1989) to assess sexual risk-taking. A composite measure of sexual risk-taking was created by summing five dichotomized individual risk behaviors, including (1) 15 years or younger at coital debut, (2) never used birth control, (3) ever diagnosed with a

sexually transmitted infection, (4) six or more sexual partners in youth's lifetime, and (5) ever exchanged sex for material goods in youth's lifetime.

Child maltreatment. The Child Abuse and Trauma Scale (CATS; Sanders & Becker-Laussen, 1995) assessed the frequency and extent of youth's child maltreatment experiences, including child neglect ($\alpha = .904$), child physical abuse ($\alpha = .753$), and child sexual abuse ($\alpha = .876$). Youth reported on the frequency of each item (e.g., "Did your parents verbally abuse each other?," "Did your relationship with your caregivers ever involve a sexual experience?," and "When you didn't follow the rules of the house, how often were you severely punished?") on a 5-point scale from *never* (0) to *always* (4). The CATS has been used widely in prior studies of child maltreatment (e.g., Arens, Gaher, Simons, & Dvorak, 2014; Oshri, Sutton, Clay-Warner, & Miller, 2015) and demonstrates congruent validity with both interview- and questionnaire-based measures of child maltreatment (Baker & Festinger, 2011; Higgins & McCabe, 2001; Rankin, 1999).

Child welfare placements. Drawing on life course narrative techniques (e.g., Dworsky, Napolitano, & Courtney, 2013; Fanshel et al., 1990; Hook & Courtney, 2011; Lee, Courtney, & Hook, 2012; McAdams & de St Aubin, 1992), youth completed a structured interview to chart their history of distinct living situations from the time they entered the child welfare system to the time of their emancipation. These techniques rely on anchors or markers to help the participant orient to time and place in recounting their experiences (Fanshel et al., 1990) and have been used in prior studies because of their robust predictive validity and clinical utility or accessibility, relative to administrative data (e.g., McAdams & de St Aubin, 1992). Prior studies of emancipated foster youth support the validity of narrative placement assessments with regard to later experiences of homelessness (Dworsky et al., 2013), earnings (Hook & Courtney, 2011), and arrest records (Lee et al., 2012).

Youth provided information about each of their living situations from the time they first entered the child welfare system to the point of emancipation. Placement features were probed to assess the age at each placement, the reason for each placement (or move), and the type of living situation (e.g., family reunification, kin placement, family foster care, group home). Variables included in these analyses were total placements within and across each category. By definition, returns to one or more biological parents constituted a failed

family reunification experience given that these emancipated youth remained in the child welfare system at the time of their 18th birthday.

Dissociative symptoms. Dissociative symptoms were assessed using the dissociation scale of the Trauma Symptom Checklist-40 (TSC-40; Elliott & Briere, 1992). Youth reported the frequency of dissociative symptoms in the last 2 months across six items (e.g., "Flashbacks or sudden, vivid, distracting memories," "Spacing out or going away in your mind") on a 4-point scale from *never* (0) to *very often* (3), and items were summed to yield a composite index of dissociative symptomatology ($\alpha = .853$).

Data Preparation and Analyses

Missing data for one or more forms of child maltreatment (0.9%), one or more placement variables (4.4%), dissociative symptoms (1.8%), and sexual risk-taking (1.8%) were estimated using the EM algorithm in SPSS 20.0 (IBM, Armonk, NY, USA) as supported by Little's MCAR test, $\chi^2(842) = 818.053$, $p = .717$. We conducted moderation analyses in SPSS 20.0 via hierarchical linear regressions. Regression models were informed by exploratory bivariate analyses with covariates entered in the first step, child maltreatment and placement main effects in the second step, and two interaction terms reflecting (1) the product of youth's dissociative symptomatology and childhood sexual abuse, and (2) the product of youth's dissociative symptomatology and failed reunification experiences with biological parents. Continuous predictors were centered to minimize collinearity (Kraemer & Blasey, 2004). Significant interaction terms were probed to evaluate simple slopes (Preacher, Curran, & Bauer, 2006) at the mean level of dissociation and one standard deviation above and below it.

RESULTS

Descriptive Analyses

A one-way analysis of variance (ANOVA) of the composited sexual risk-taking variable and of each individual sexual risk-taking behavior by race-ethnicity revealed no significant differences across European American, African American, Hispanic, and multiracial participants ($ps = .130-.645$). Chi-square analyses further indicated there were no significant racial-ethnic differences in the absolute presence or absence of the individual sexual risk behaviors ($ps = .086-.490$).

Regarding sexual risk behaviors, 30.6% ($n = 30$) of the participants were 15 years or younger at coital debut, 32.3% ($n = 32$) never used birth control during their sexual encounters, 18.2% ($n = 18$) had been diagnosed with a sexually transmitted infection, 33.7% ($n = 34$) reported having sex with six or more partners, and 7.8% ($n = 8$) had exchanged sex for material goods at least once. As composited, 33.4% ($n = 38$) of the youth endorsed no sexual risk behaviors, 25.4% ($n = 29$) endorsed one sexual risk behavior, 25.6% ($n = 29$) endorsed two behaviors, 11.5% ($n = 13$) endorsed three behaviors, 3.5% ($n = 4$) endorsed four behaviors, and 0.9% ($n = 1$) endorsed all five sexual risk behaviors.

Regarding child welfare experiences, 31.6% ($n = 42$) of the participants were returned to one or both biological parents at least once (i.e., failed family reunifications), 51.7% ($n = 59$) were placed with extended kin on one or more occasions, 90.3% ($n = 103$) were placed in at least one foster home, and 45.6% ($n = 52$) were placed in at least one group home. Importantly, nearly all of these youth (94.4%, $n = 108$) experienced more than one category of placement while under the supervision of the child welfare system. Although most participants (62.4% and $n = 73$) experienced one or more family reunifications and/or extended kin placements, 37.6% ($n = 41$) of the participants were never returned to a biological parent, nor were they placed with kin. A one-way ANOVA revealed no significant differences in the total number of placement transitions, nor in the specific types of placement across racial-ethnic groups; Wilk's λ , $F(15, 324) = 1.309$, $p = .189$.

Bivariate Analyses

Bivariate relations among study variables are shown in Table 1. Participant age was not significantly correlated with the study variables. Older age at system entry was significantly related to fewer total placement transitions as well as to fewer categories of placement, such that youth who entered the child welfare system at younger ages reported a higher number of total placement transitions, as well as a greater number of types (i.e., biological parent, extended kin, foster home, and group home). Sexual risk-taking was positively correlated with child sexual abuse, number of failed reunifications with a biological parent, and dissociative symptoms. Child sexual abuse was related to more total placements and dissociative symptoms. Failed family reunification experiences were related to more dissociative symptoms.

TABLE 1
Correlations, Means, and Standard Deviations Among Variables

Variables	1	2	3	4	4.1	4.2	4.3	5	5.1	5.2	5.3	5.4	6
1. Age at Interview	—												
2. Age at 1st Placement	-0.08	—											
3. Sexual Risk-Taking	-0.04	-0.04	—										
4. Child Maltreatment	0.1	-0.07	0.12	—									
4.1 Child Sexual Abuse	0.08	0.01	0.22*	0.723***	—								
4.2 Child Physical Abuse	0.03	-0.04	-0.15	0.648***	0.27**	—							
4.3 Child Neglect	0.09	-0.08	0.13	0.926***	0.55**	0.48***	—						
5. Total Placement Transitions	0.07	-0.36***	0.07	0.31***	0.18	0.19*	0.27**	—					
5.1. Failed Reunifications	-0.08	-0.37***	0.21*	-0.01	-0.01	0.01	0.01	0.59***	—				
5.2. Extended Kin	0.18	-0.47***	-0.09	0.02	0.06	0.02	-0.03	0.31***	0.31**	—			
5.3. Foster Home	-0.02	-0.06	0.01	0.25**	0.13	0.11	0.25**	0.64***	0.21*	-0.05	—		
5.4. Group Home	0.05	-0.17	0.09	0.22*	0.12	0.18	0.18	0.66***	0.26**	-0.01	0.2	—	
6. Dissociative Symptoms	0.04	-0.11	0.20*	0.28**	0.19*	0.17	0.28**	0.21*	0.26**	0.03	0.1	0.11	—
M	19.61	9.05	1.24	12.94	18.54	43.25	7.18	7.2	0.59	1	3.24	1.28	9.63
SD	1.11	5.45	1.17	7.01	3.99	12.8	5.08	5.08	1.2	1.33	2.62	2.01	4.17

* $p < .05$; ** $p < .01$; *** $p < .001$.

Regression Analyses

All regression analyses controlled for age at first placement and the total number of placement transitions. Regression analyses revealed significant relations of child sexual abuse ($b = .037$, $\beta = .232$, $p = .021$), failed family reunification efforts ($b = .224$, $\beta = .248$, $p = .046$), and dissociative symptoms ($b = .056$, $\beta = .214$, $p = .036$) with higher sexual risk-taking (see Table 2). The interaction between child sexual abuse and dissociative symptoms was significant ($\beta = .356$, $t(99) = 3.779$, $p < .001$), but the interaction between failed family reunifications and dissociative symptoms was not significant ($b = -.192$, $\beta = -.141$, $p = .185$). Simple slope analyses indicated the relation between child sexual abuse and sexual risk-taking was significant at moderate ($b = .035$, $\beta = .212$, $p = .022$) and high ($b = .093$, $\beta = .571$, $p < .001$) levels of dissociative symptoms, but not at low levels of dissociative symptomatology ($b = -.025$, $\beta = -.152$, $p = .239$; see Figure 1).

DISCUSSION

This investigation examined associations of recently emancipated female foster youth's child maltreatment and child welfare placement experiences with late adolescent sexual risk-taking, and evaluated

the moderating role of dissociative symptoms on these relations. Sexual risk behavior emerged as a prominent concern in this sample with 66.6% ($n = 62$) of the youth endorsing at least one sexual risk behavior. Consistent with prior studies of foster youth (e.g., Auslander et al., 2002; Carpenter et al., 2001; Courtney et al., 2014; James et al., 2009; Leslie et al., 2010; Risley-Curtiss, 1997; Taussig, 2002), sexual risk-taking behaviors were more common in this sample than is typically found in samples of youth who do not have a history of out-of-home placement (CDC, 2012).

Consistent with prior research on youth who are not in the child welfare system (Senn & Carey, 2010) and on youth in foster care (Ahrens et al., 2012; Auslander et al., 2002; Risley-Curtiss, 1997; Taussig, 2002), child sexual abuse was related to increased rates of sexual risk-taking in this sample. Of note, however, foster youth's placement experiences also explained unique variance in sexual risk-taking. Specifically, repeated returns to one or both biological parents followed by reentry into out-of-home placement (i.e., failed family reunifications) were associated with youth's sexual risk behaviors beyond both child sexual abuse and the total number of placement transitions youth experienced from the time they entered the child welfare system to the time of their emancipation.

Youth's dissociative symptoms moderated the relation between child sexual abuse and sexual risk-taking. Significant relations were obtained among youth with average and above average dissociative symptoms, but not among youth with below average levels of dissociative symptoms. Relations between child sexual abuse and sexual risk-taking may be exacerbated by concomitant dissociative symptoms that undermine positive decision-making, particularly in the context of sexual exchanges. In a state of dissociation, experiential memories and feelings may be compartmentalized such that they are not integrated into a coherent narrative of the self (Spiegel & Cardena, 1991). This breakdown facilitates coping with overwhelming life experience in the short term, but may interfere with healthy decision making or experiential processing in later development if left unchecked (Carlson et al., 2009). Evidence suggests that maltreatment may contribute to dissociative symptoms that impair decision making, risk awareness, and self-protection (DePrince et al., 2009; Trickett, Noll, Reiffman, & Putnam, 2001; Zurbriggen & Freyd, 2004). However, such mediation models await further evaluation in the context of longitudinal designs. Moreover, the influence of dissociation

TABLE 2

Coefficients for Regression of Youth's Sexual Risk-Taking on Child Sexual Abuse and Failed Family Reunifications as Moderated by Dissociative Symptoms

Predictor	Sexual Risk-Taking	
	β	F/Δ
Age at 1st Placement	0.018	
Total Transitions	0.074	
Block 1 ΔR^2	0.005	0.234
Child Sexual Abuse	0.232*	
Dissociative Symptoms	0.214*	
Failed Family Reunifications	0.248*	
Block 2 ΔR^2	0.157	5.723***
Dissociative Symptoms \times Child Sexual Abuse	0.356***	
Dissociative Symptoms \times Failed Family Reunifications	-0.141	
Block 3 ΔR^2	0.120	7.669***
Total R^2	0.279***	
$F(7, 109)$	5.079	

* $p < .05$; *** $p < .001$.

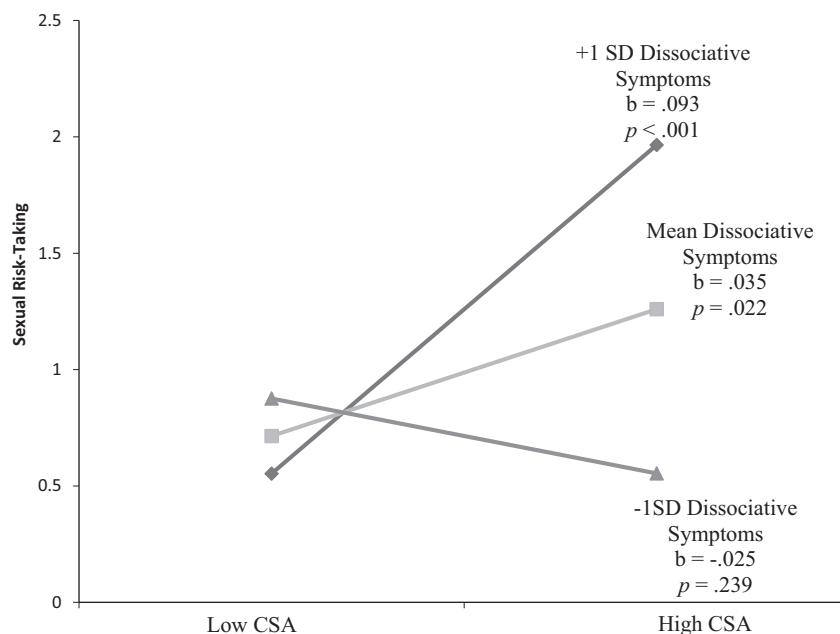


FIGURE 1 The relation between child sexual abuse (CSA) and sexual risk-taking as moderated by dissociative symptoms. Age at Entry ($\beta = .013, p = .500$) and Total Placement Transitions ($\beta = -.093, p = .868$) were entered as covariates.

may take on increasing importance during the transition to adolescence and young adulthood, when sexual activity becomes more normative, and youth with a history of sexual abuse might activate prior dissociative tendencies to cope with sexually charged situations (Rodriguez-Srednicki, 2002; Zurbriggen & Freyd, 2004).

In contrast to relations with child sexual abuse, dissociative symptoms did not moderate the relation between failed family reunification experiences and youth's sexual risk-taking. This study highlights the need for ongoing research to clarify the implications of failed family reunification efforts as a heretofore unrecognized risk for youth in the child welfare system, at least with respect to sexual risk-taking. Failed family reunifications may be more likely to activate the attachment system and engender problematic relational patterns that contribute to sexual risk behaviors. Relative to other placement experiences, youth may experience a failed family reunification as more disruptive because the return to a parent may be attendant with the child's expectation of exiting the child welfare system permanently. In contrast, other placement types, including those with extended kin, may be perceived as temporary and consonant with youth's other out-of-home placements. In addition, family reunifications are more likely to disrupt because of recurrent abuse or neglect, whereas nonfamilial placement transitions may be

due to abuse or neglect, but may also reflect administrative factors, such as sibling placement transitions, retiring foster care providers, or changing youth needs. Thus, the pernicious effect of failed family reunification experiences may follow from attachment disruptions as a result of youth's expectation that reunification is permanent and/or additional trauma that most often precipitates the child's reentry into out-of-home placement. Future research should explore the effects of failed family reunification experiences on youth's multidomain adjustment, as well as youth's meaning making about such experiences.

Although these findings have significant implications for future research and practice, they must be interpreted in light of several limitations. First, these analyses drew on cross-sectional data, which precluded the ability to evaluate the temporal ordering of effects and, by extension, causal models, such as mediation. Sexual risk behaviors may contribute to placement disruptions, as when a child is deemed beyond the parent's control and/or is subject to parental abuse in response to such behaviors. Indeed, nearly a third of the youth in this study had initiated sexual activity prior to their entry into the child welfare system, suggesting that—at least in some cases—sexual risk-taking may have antedated system involvement and/or precipitated its specific features, such as multiple placements.

Second, the present study relied on a single source of data in the context of youth's self-report measures of their dissociative symptoms, child maltreatment experiences, and child welfare placement history. This shared method variance may have strengthened apparent associations among study variables. Moreover, memory problems may have biased youth's retrospective reports, and these effects may have been nonrandomly distributed across participants given that dissociative symptomatology can contribute to memory dysfunction (Spiegel & Cardena, 1991). At the same time, however, several studies have documented significant overlap between retrospective and prospective reports of child abuse (Cohen, Brown, & Smailes, 2001; Dube, Williamson, Thompson, Felitti, & Anda, 2004), and self-report data on child maltreatment may be more accurate than administrative data, as many instances of abuse, particularly sexual abuse, may go unreported (Briere, 1992; Cohen et al., 2001; Dube et al., 2004). Likewise, past studies support the use of life course history surveys to assess youth's child welfare placement histories (Dworsky et al., 2013; Hook & Courtney, 2011; Lee et al., 2012; Shaffer, Huston, & Egeland, 2008). In future work, administrative documentation of child abuse and placement experiences, which were not available in this study, would offer supplementary information to children's recalled history of maltreatment and validate their recalled placement experiences.

A third limitation of this investigation was our inability to fully capture additional features of youth's maltreatment experiences (e.g., timing, perpetrator), which may have influenced their sexual risk behaviors (Trickett et al., 2001). Although post hoc analysis comparing mean levels of sexual risk behavior across participants who experienced failed reunifications prior to age 10, after age 10, both pre- and post-age 10, or never, was not significant, it may be that timing and patterning of failed family reunification experiences may have influenced relations with sexual risk-taking in ways that could not be examined here due to the limited sample size. As discussed earlier, youth's own sexual risk-taking behaviors may have precipitated placement transitions (including a failed reunification as a result of a parent's response to the youth's sexual activity). However, the pattern of predictive relations was replicated among the 65.8% ($n = 75$) of girls who became sexually active only after their entry into the child welfare system, which further supports the contribution of child welfare experiences to youth's sexual risk-taking.

Finally, the current sample may have limited generalizability given the nonrandom recruitment of the sample from a restricted geographic area and the current emphasis on female foster youth. There is a pressing need for greater knowledge about males' sexual risk activities. Evidence from typically developing samples suggests that males' sexual risk-taking may follow different trajectories with distinct etiological factors from those implicated in females' sexual risk-taking (Ahrens et al., 2012; Fergus, Zimmerman, & Caldwell, 2007; Huang, Murphy, & Hser, 2012; Kendall-Tackett et al., 1991), but only one study has investigated sexual risk-taking among male foster youth specifically (Ahrens et al., 2012). In addition, there is a need for refined measures of sexual risk-taking that account for gender-specific variants of sexual risk-taking, as well as the timing and context of youth's sexual risk behaviors.

Limitations notwithstanding, the current findings highlight promising directions for future research and practice. Foster youth are at high risk for elevated rates of sexual risk behaviors, and this vulnerability continues as they age out or emancipate from the child welfare system. Emancipated foster youth may be especially at risk as they face difficulties in negotiating multiple challenges (e.g., housing, employment, education, health care), at the same time sexual risk-taking and sexual activity become more normative. The present study identified both child sexual abuse and child welfare experiences, particularly failed family reunification efforts, as salient factors for understanding sexual risk-taking among recently emancipated female foster youth. Given the relation between sexual risk-taking and failed returns to biological parents, future research should investigate the effects of this disruption on youth's relationships and, alongside dissociative symptoms, how such disruptions may lead to sexual risk-taking. In addition to documenting the concomitant risks of child sexual abuse and dissociation, these findings emphasize the need for greater care when making decisions about whether or not to return children to one or both biological parents so as to avoid ill-conceived reunifications that may have heretofore underappreciated negative consequences.

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