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Kimberly Tyler University of Nebraska - Lincoln, ktyler2@unl.edu

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Social and emotional outcomes of childhood sexual abuse: A review of recent research

Kimberly A. Tyler

Department of Sociology, University of Nebraska-Lincoln, Lincoln, NE 68588-0324, USA

Abstract

A total of 41 articles examined the social and emotional outcomes of childhood sexual abuse. The outcomes examined included suicide and substance use, gang involvement, pregnancy, running away, post-traumatic stress disorder (PTSD), risky sexual behavior, and behavioral problems. Results for each of these outcomes tended to vary by developmental period. However, problems of internalizing and externalizing behavior appeared to be specific to sexually abused children of all age groups. Some studies found differences in outcome according to gender, race, and age. Although findings related to abuse characteristics were found to vary from study to study, severity of the abuse, use of force, and victim's relationship to the perpetrator were found to be especially important. Other factors, such as family support and parental monitoring, were found to mitigate a negative outcome. Limitations are discussed along with suggestions for future research.

Keywords: childhood sexual abuse, social and emotional outcomes

1. Introduction

The number of children who experience child sexual abuse has sharply increased in recent years. According to the third national incidence study of child abuse and neglect (Sedlak & Broadhurst, 1996), over 300,000 children were sexually abused in 1993. Although there are no reliable statistics on how many cases of childhood sexual abuse occur that each year, it is estimated that one in four girls and 1 in 10 boys will suffer from victimization (Finkelhor, 1993). The risk for sexual abuse rises in pre-adolescence and girls are at higher risk compared to boys. Statistics on childhood sexual abuse only exist for

those cases that are reported to child protection agencies or law enforcement offices. According to Finkelhor (1994), the actual number of cases being reported to child abuse authorities is 2.4/1000.

While only 15% of child sexual abuse cases has been substantiated (Finkelhor, 1994), the actual number of cases is expected to be much higher since sexual abuse is under-reported by both male and female children (Becker, 1988). Studies report a range anywhere from 12% (Bayatpour, Wells, & Holford, 1992) to percentages as high as 54% among females vs. 15% of males (Kellogg & Hoffman, 1997). Although the estimated rates vary across studies, the clear pattern is for high rates of abuse.

The purpose of this paper is to review recent research on the short-term effects of childhood sexual abuse and also to examine the extent to which previous methodological concerns noted in prior reviews of the literature (cf., Beitchman et al., 1991; Browne & Finkelhor, 1986; Kendall-Tackett, et al., 1993; and Trickett & Putnam, 1998) have been addressed in more recent studies.

In the present review, the majority of respondents used in these studies are between 12 and 18 years of age. It is important to note that, occasionally, samples overlap in terms of the outcome variables. A few studies include findings on both sexual abuse and physical abuse. In these cases, only the results associated with sexual abuse are presented. Studies in which physical and sexual abuses were combined into a single abuse category were excluded. Only quantitative studies were reviewed with, the majority being published within the last 4 or 5 years. Studies that employed very few subjects, case studies, or both children and adults in their sample were also excluded. Only those investigations that included social and/or emotional outcomes were reviewed. These studies drew their samples from a variety of sources such as detention centers, inpatient centers, children's hospitals, and prenatal clinics.

Results of the studies are presented by outcome variable and listed separately due to the diversity of findings. Results are then summarized by developmental period, and then the use of intervening variables is examined. Finally, the limitations of existing findings are discussed followed by direction for future research.

2. The current literature on childhood sexual abuse

2.1. Suicide and substance use

Many investigations have focused on substance use and suicide as potential outcomes of early sexual abuse. Two studies, which focused exclusively on females, were reviewed. Bayatpour et al. (1992) examined the association between abuse and drug use and suicidality among a sample of 352 racially diverse pregnant teens ages 12–19 years enrolled in a prenatal clinic. Their results indicated that those who were sexually abused were at increased risk for suicide as well as suicide ideation compared to their non-abused counterparts (Bayatpour et al., 1992).

Watts and Ellis (1993) evaluated the association between sexual abuse and drug/alcohol abuse among 670 White female adolescents in a wealthy school district. Just over 14% of the sample reported being molested at some time, and 7% reported being raped or molested while on a date. With the exception of designer drugs and cocaine, those who re-

ported sexual molestation had a higher score on drug/alcohol use than those who did not report molestation. With the exception of those in the 11th grade, sexual abuse is correlated with alcohol and drug use. Although their results are cross-sectional, the authors conclude that the use of drugs is a response to the pain associated with the abuse. Therefore, drugs do not "cause" the abuse (Watts & Ellis, 1993). These results should be interpreted with caution due to their reliance on correlational results.

Two studies that focused only on males were also examined. Chandy, Blum, and Resnick (1997) studied the effects of early sexual abuse on suicide and substance use in a sample of predominately White males, averaging 15 years of age. Of the total sample, 370 males reported a history of sexual abuse. They were matched with a random sample of males who had not been sexually abused. Compared to the control group, those with a history of sexual abuse were significantly more likely to have ever attempted suicide, have thoughts about suicide, and were at high or very high risk for suicide. Boys with a history of sexual abuse also used significantly more tobacco and marijuana compared to their non-abused counterparts (Chandy et al., 1997).

Another study, which focused exclusively on males who were in treatment for chemical dependency, found that approximately 7% of the total 1227 respondents reported experiencing sexual abuse. Those who had been sexually abused were significantly more likely to have suicidal thoughts and to have reported a suicide attempt in the previous year before entering treatment. Victims of sexual abuse were twice as likely to be drinking daily, and more likely to report regular use of stimulants, compared to their non-abused counterparts (Harrison, Edwall, Hoffman, & Worthen, 1990).

The remainder of the studies in this section included males and females in their sample. Evans, Albers, Macari, and Mason (1996) considered suicide ideation and sexual abuse among gang and non-gang incarcerated youth. The racially diverse sample included 395 youth (334 males, 61 females) ages 12–18 years. Nineteen percent of their sample reported sexual abuse. Females were found to report more suicide attempts and sexual abuse compared to males. Females who were members of gangs reported attempting suicide and were more likely to report sexual abuse than male gang members. Female non-gang members were also more likely to report sexual abuse compared to their male counterparts. Gang members who experienced sexual abuse only were more likely to have reported higher levels of suicide ideation and attempting suicide (Evans et al., 1996).

Garnefski and Diekstra (1997) compared 745 sexually abused boys and girls with a matched group of 745 non-sexually abused children ages 12–19 years on mental health problems including suicide in a large general population in the Netherlands. Sexually abused individuals reported more suicidal thoughts and suicide attempts compared to their non-abused counterparts. Gender interactions revealed that males who were sexually abused made significantly more suicide attempts compared to sexually abused females. No gender differences were found in suicidal thoughts and behavior for individuals who were not sexually abused (Garnefski & Diekstra, 1997).

Among a sample of over 120,000 students in grades 6, 9, and 12, females were found to report sexual abuse more often than males in all three grades surveyed. A history of sexual abuse was associated with an increased likelihood of multiple substance use in the general adolescent population (Harrison, Fulkerson, & Beebe, 1997).

Shaunesey, Cohen, Plummer, and Berman (1993) studied suicidality in 117 males and females (predominately White) ages 13–18 years admitted to an inpatient service. They found that approximately 31% of adolescents had experienced sexual abuse, with females experiencing abuse more often than males. Those who suffered sexual abuse experienced more severe maladaptive effects than their non-abused counterparts. However, a long duration and high frequency of sexual abuse produced no more severe consequences than were found for the non-abused group.

A sample of 65 sexually abused children (59 females, 7 males) ages 5-17 years referred for psychological evaluation were examined by Wozencraft, Wagner, and Pellegrin (1991). Results indicated that suicide ideation was associated with being abused by a family member. Older children were more likely to be depressed and had mothers who were less compliant. As a whole, those who were sexually abused experienced high levels of depression, whereas 42% of the sample indicated some degree of suicide ideation. Due to the fact that the data are cross-sectional, it is uncertain whether depression and suicide ideation are the aftermath of sexual abuse or whether depression and suicidal children are at greater risk for sexual abuse (Wozencraft et al., 1991).

The relationship between sexual abuse and alcohol abuse and suicide ideation was examined by Luster and Small (1997b) in sample of over 40,000 predominantly White adolescents in grades 7 through 12 in the Midwest. The sample was divided evenly by gender and about 1% (n = 443) of adolescents reported currently experiencing sexual abuse. Females were more likely to report ever being sexually abused compared to males. Results indicated that a history of sexual abuse was associated with both alcohol abuse and suicide ideation. Males were more likely to engage in binge drinking compared to females. Males with a history of sexual abuse had higher rates of suicide ideation compared to their female counterparts. However, regardless of sexual abuse history, closely monitored teens who had a very supportive relationship with at least one parent had lower binge drinking scores (Luster & Small, 1997b). The strengths of this research include the large sample size and equal numbers of males and females, which allowed for gender comparisons.

2.2. Gang involvement

Only one study that determined gang involvement was found. Based on a sample of over 2300 predominately White students in grades 6 through 12, Thompson and Braaten-Antrim (1998) found that just over 8% of the sample reported being sexually abused. Girls were eight times more likely to have experienced sexual abuse compared to boys. Those who had been sexually abused were more likely to be involved in a gang as well as participating more frequently in gang fights (Thompson & Braaten-Antrim, 1998).

2.3. Pregnancy

The relationship between early maltreatment and teenage parenthood was studied longitudinally by Herrenkohl, Herrenkohl, Egolf, and Russo (1998). Results indicated that 38% of adolescents had experienced sexual abuse, whereas 49% of the teen parents

had been sexually abused. Self-esteem was found to be a predictor of teenage parent-hood both by itself and in combination with maltreatment. Therefore, although sexual abuse was related to teenage parenthood, the authors concluded that the relationship was ambiguous.

Mason, Zimmerman, and Evans (1998) looked at the relationship between early abuse among incarcerated youth and its association with contraceptive use and teenage pregnancy. Approximately 19% of youth reported sexual abuse, with females significantly more likely to experience sexual abuse compared to males. No race differences were found for sexual abuse. Those who were sexually abused were less likely to use birth control compared to non-abused youth. However, no evidence of increased pregnancy and parenthood was found among those who were sexually abused. Finally, no significant differences were found for number of sexual partners and age at first intercourse.

Two studies focused exclusively on females. Boyer and Fine (1992) examined sexual abuse as a risk factor for adolescent pregnancy. Based on retrospective reports, sexually abused teenagers began having sex a year earlier, were less likely to practice contraception, and were more likely to have used alcohol and drugs compared to young women who had become pregnant but had not been abused. Those who had been abused were also more likely to have been physically victimized by a partner and to have engaged in survival sex. The highest rates of victimization were found among Whites, whereas the lowest rates were found among Hispanics (Boyer & Fine, 1992).

A final study found that early sexual abuse was indirectly associated with pregnancy. Among a predominately White sample of over 3000 females in grades 8, 10, and 12, controlling for grade level revealed that those who reported sexual abuse were over three times more likely to have had intercourse, twice as likely to have had first intercourse by age 15, and not to have used birth control during their last sexual encounter compared to those without a history of abuse. Stock, Bell, Boyer, and Connell (1997) note the indirect influence that sexual abuse has on adolescent pregnancy via high-risk sexual behaviors. Due to the cross-sectional nature of this study, it cannot be determined whether the abuse or the pregnancy came first.

2.4. Running away

The following studies include samples of homeless and runaway youth only, many of whom have experienced sexual abuse in their family of origin. Although these youth experience behavior problems similar to non-runaways (e.g., post-traumatic stress disorder (PTSD), suicide attempts, depression, substance use, risky sexual behaviors), they are separated here due to their runaway status, and only the relationship between sexual abuse and running away is reported.

Although retrospective in nature, many studies find that runaway and homeless youth report leaving home due to their experiences with abuse (physical and/or sexual; cf. Cauce et al., 1998; Terrell, 1997; Whitbeck & Hoyt, 1999; and Whitbeck & Simons, 1990). However, the decision to leave is often a combination of abuse and family conflict. Regardless, many homeless and runaway youth report high rates of sexual abuse (Janus et al., 1997; Rotheram-Boras, 1996; and Whitbeck & Hoyt, 1999). In very few studies has the

relationship between early sexual abuse and running away been tested longitudinally. The following investigation makes an important contribution due to the strengths of both its sample and methodology.

Kaufman and Widom (1999) assessed the relationship between child victimization and running away using a prospective cohort design of over 1000 respondents who were sexually abused 20 years ago and matched with a control group of approximate social class background. Only court-substantiated cases of sexual abuse were included. Their study supported the hypothesis that victims of sexual abuse are more likely to run away from home compared to a control group. This study is unique in that its longitudinal design allowed the researchers to tease out the relationship between abuse and running away as well as test for mediating and moderating effects of running away (Kaufman & Widom, 1999).

Based on cross-sectional data, Rotheram-Borus et al. (1996) found that 37% of their racially diverse sample of 190 runaways had a history of sexual abuse, but found no significant difference for males and females. Their results indicated that early sexual abuse was significantly associated with a number of high-risk behaviors such as trading sex and unprotected sexual intercourse. Even though it cannot be determined here, it is possible that early sexual abuse may be indirectly associated with such high-risk behaviors through running away. Those who were sexually abused after the age of 13 were found to experience more negative outcomes compared to their younger counterparts (Rotheram-Borus et al., 1996). Although these youth appear to be at risk for the same types of social and emotional outcomes as their non-runaway counterparts, they may experience added risks because of their experiences with street survival.

2.5. PTSD

The relationship between sexual abuse and PTSD was studied by Ackerman, Newton, McPherson, Jones, and Dykman (1998) in 204 children ages 7–13 years. A total of 62% experienced sexual abuse. Allegations of abuse were substantiated by the caregiver. Behavioral disorders were more prevalent in those who were both sexually and physically abused compared to those who experienced sexual abuse only. Thirty-six percent of the sample met criteria for PTSD. Children who experienced both physical and sexual abuses were at greatest risk for psychiatric disturbance. Those who experienced sexual abuse only had a better psychiatric status compared to the physical abuse only group or the combined abused group. These results should be interpreted with caution due to the very low response rate (16%).

Based on a nationally representative sample of 2000 youth ages 10–16 years and their adult caretakers, Boney-McCoy and Finkelhor (1995) examined prior victimization as a risk factor for child sexual abuse. The number of children who had experienced sexual abuse in the past year was 132; of these, 95 were female. Prior sexual abuse and prior physical assault by a family member were associated with an increased risk for sexual abuse. Females, those over the age of 12, and those with poor parent–child relationships reported experiencing sexual abuse in the past year more than other children. Prior victimization is not only a risk factor for sexual abuse, it also increases symptoms of PTSD (Boney-McCoy & Finkelhor, 1995).

Wolfe, Sas, and Wekerle (1994) investigated the prevalence of PTSD-related symptomatology in a sample 90 sexually abused children (69 girls), with a mean age of 12 years, who had to appear before a court to testify regarding allegations of sexual abuse. The sample was divided between those who met the PTSD criteria (n=44) and those who did not (n=46). Those who met the PTSD criteria were abused over a longer period of time compared to non-PTSD children. Children who were threatened or forced to comply with the offender were more likely to meet the PTSD criteria compared to children abused in the absence of force or threats. Even in controlling for such factors as IQ, age, sex, and nature of abuse, children's reported feelings of guilt significantly contributed to PTSD (Wolfe et al., 1994).

2.6. Risky sexual behavior

Chandy, Blum, and Resnick (1996) examined the relationship between early sexual abuse and later sexual risk taking among more than 3000 sexually abused middle and high school youth. Results revealed that males engaged in more sexual risk taking compared to their female counterparts. That is, young men were more likely to report ever having intercourse, having intercourse almost every day, and reporting an earlier age of onset compared to young women. Males also reported less frequent use of contraception. However, maternal education and parental concern for boys, and high emotional attachment to family, religion, and both parents at home for girls, were found to mitigate the negative effects of sexual abuse (Chandy et al., 1996).

The relationship between sexual victimization and HIV risk behaviors was examined by Cunningham, Stiffman, Dore, and Earls (1994). They interviewed 602 youth at three different time periods. The age of respondents ranged from 13 to 18 years with a mean of 16 years at time 1. The sample is 75% female and 70% of respondents are Black. Results revealed that approximately 9% of the sample had been sexually abused or raped. Gender differences revealed that non-White females were 20 times more likely to be raped and 13 times more likely to be sexually abused compared to non-White males. No race differences were found for sexual abuse or rape. Those who were sexually abused were more likely to engage in prostitution as young adults. In summary, a history of sexual abuse or rape is related to a variety of HIV risk behaviors and to an increase in the total number of such behaviors between adolescence and young adulthood. Although this study is longitudinal in nature, data are self-reported and no theory was used to explain their results.

Cohen, Deblinger, Maedel, and Stauffer (1999) focused on a sample of 30 sexually abused children (26 females), ages 9–13 years, participating in a treatment outcome study. Twenty-six of the respondents were White. These 30 children were matched with a control group of non-abused children recruited from a general pediatric clinic. Results of their study indicated that children who were sexually abused reported greater levels of sexual anxiety and increased levels of sexual abuse fears compared to their non-abused counterparts. Age was significantly associated with sexual anxiety and sex-associated fears in both groups of children. The authors conclude that as children become older, they become less upset by sex-related issues whether they were sexually abused or not. Although this study used a control group, the sample size was small and the measures used did not encompass a wide range of sexual abuse behavior.

Widom and Kuhns (1996) examined 1196 individuals of substantiated cases of child-hood abuse. These children were matched with non-abused children prospectively into young adulthood. Results revealed that sexual abuse significantly predicted prostitution in female subjects. However, childhood sexual victimization was not found to be a significant risk factor for promiscuity or teenage pregnancy. Due to the prospective nature of this study design and the use of a control group, the authors were able to disentangle some of the effects of childhood victimization from other potential confounding effects. The sample was skewed toward the lower end of the socioeconomic spectrum. Therefore, the sample is not representative of the larger population and cannot be generalized to all cases of abuse.

Finally, two studies that included only female subjects were reviewed. The relationship between sexual abuse and sexual behavior was examined by Fergusson, Horwood, and Lynskey (1997) in a sample of 520 New Zealand-born young women from birth to 18 years. At age 18, respondents gave retrospective reports of their exposure to sexual abuse from 0 to 16 years of age, whereas from 14 to 18 years of age, measures of sexual behavior were obtained at regular intervals. Results indicated that those with a history of sexual abuse involving attempted or completed intercourse had the highest rates of pregnancy, early initiation of sexual activity, unprotected intercourse, sexually transmitted diseases, and higher rates of sexual victimization after the age of 16. Those who experienced noncontact sexual abuse had similar outcomes to those who did not experience sexual abuse. Even after controlling for family factors, such as social disadvantage and family instability, childhood sexual abuse was still significantly associated with multiple sexual partners, unprotected intercourse, consensual sexual intercourse before age 16, and rape or attempted rape. It appears that those exposed to sexual abuse have family environments that place them at greater risk for sexual behaviors during adolescence, independent of childhood sexual abuse.

Finally, Luster and Small (1997a) focused on a sample of over 10,000 predominately White female adolescents (grades 7–12), hypothesizing that those with a history of sexual abuse would have more sexual partners compared to those without a history of abuse, even after controlling for family factors. Approximately 10% of the sample was either currently experiencing sexual abuse or had experienced sexual abuse at some point in the past. Sexually abused respondents reported more sexual partners compared to their non-abused counterparts. However, the risk of having multiple sex partners was reduced if the parents closely monitored the youth, if the youth had high parental support, and if parents disapproved of their youth having sex. The authors conclude that family support can mitigate the negative effects associated with sexual abuse (Luster & Small, 1997a).

2.7. Behavior problems

Two studies that focused exclusively on males were reviewed. Kuhn, Arellano, and Chavez (1998) compared a non-clinical sample of 1385 Mexican–American males and White males, grades 7 through 12, on problematic functioning. Of the total sample, 27 Mexican–Americans and 27 Whites reported being sexually abused. Sexually abused males (n=54) reported more depression, feeling more socially isolated, and engaged in more deviant behaviors compared to their non-abused counterparts. No ethnic differ-

ences were found. Males who were sexually assaulted were more likely to come from families where their parents used drugs and to have friends who encouraged drug use compared to non-abused males (Kuhn et al., 1998).

Sixty sexually abused Black and Latino males, ages 13–18 years, recruited from numerous facilities were evaluated in terms of differences in circumstances of abuse, depression, and anger scores. Results indicated that Black males were more likely to be abused by an immediate family member, whereas Latino males were abused by an extended family member. Many youth were abused by more than one perpetrator as well as perpetrators of the same ethnicity. No significant group difference was found in terms of depression, but Black males had higher anger scores. Due to the fact that the data are cross-sectional, no baseline for symptoms of anger and depression was available. Therefore, the results should be interpreted with caution (Moisan, Sanders-Phillips, & Moisan, 1991).

Four studies focused exclusively on females in terms of predicting behavioral problems. Mennen's (1995) study was designed to look at the influence of race/ethnicity on the experience of sexual abuse. The sample included 134 girls from three facilities who had been sexually abused. Ages ranged from 6 to 18 years. Racial/ethnic composition included 38% White, 28% Latinas, 26% African–American, 6% Asian, and 2% other. Results revealed no race/ethnic differences in the kind of abuse experienced, whether the perpetrator was a father, use of force, whether the child was removed from the home, age of onset of the abuse, and age of the respondents. However, a significant race effect was found for duration of abuse whereby White girls were abused longer than their Latina or African–American peers. No race/ethnic differences were found in terms of symptom level. Therefore, only a slight relationship exists between race and sexual abuse outcome according to this study. The distress that victims suffer appears to be unrelated to race/ethnicity, but rather to the sexual abuse itself (Mennen, 1995).

Mennen and Meadow (1995) examined a racially diverse sample of 135 sexually abused girls, ages 6–18 years, recruited from three facilities to determine if their level of depression, anxiety, and self-esteem differed by abuse characteristics. Results indicated that the most significant predictor of outcome was whether penetration occurred when the perpetrator was a father figure. When the perpetrator was not the father, the use of force was the strongest predictor of the severity of symptoms. Factors not related to levels of symptoms included age, age at onset, race, and whether the child was removed from the home. Although this study included many relevant factors related to the abuse, their sample size was small and was over-represented by girls who had serious and ongoing abuse by someone in a close relationship.

Sanders-Phillips, Moisan, Wadlington, Morgan, and English (1995) studied a sample of 42 Black and Latino sexually abused girls, ages 8–13 years, to determine if differences in ethnicity exist in terms of psychological functioning. Data were abstracted from social work reports. Sexually abused Latinas were more likely to be abused by a natural father, whereas Blacks were more likely to be abused by a stepfather. Latinas received higher scores for depression, which was related to earlier onset of abuse and abuse by a relative. High levels of family conflict were related to poorer outcome following the abuse for Latino girls. These findings do suggest ethnic differences in outcomes for sexually abused children, particularly in levels of depression.

Finally, Mian, Marton, and LeBaron (1996) examined the short-term effects of intrafamilial and extrafamilial sexual abuse on 70 girls ages 3–5 compared to a normal nonabused group of 42 girls matched for age. The sample was almost exclusively White. Disclosure of sexual abuse had to be validated in order for participants to be included in the abused group. Reports were based on information given by the mothers and on direct observations of the children. Results indicated that mothers of girls who experienced intrafamilial sexual abuse were more likely to blame the child, to be protective of the offender, to be more concerned about how the abuse affected them, to minimize the act of abuse, and to deny that it ever happened. Sexually abused girls had significantly more internalizing problems and exhibited more inappropriate sexual behavior compared to the control group. Inappropriate sexual behavior was associated with father's alcohol abuse, lower education, and mother's history of sexual abuse. Those who experienced repeated sexual abuse, and abuse that was intrusive, experienced more behavior problems.

Several studies included both males and females. Garnefski and Arends (1998) compared emotional and behavioral problems of 745 sexually abused boys and girls, ages 12–19 years, randomly selected from secondary schools in the Netherlands with a control group of 745 adolescents without a history of sexual abuse matched for age and sex. Results indicated that sexually abused boys and girls reported significantly more emotional problems including feeling more lonely, more anxious, more depressed, and lower self-esteem compared to the control group. No gender differences were found for emotional problems. Sexually abused adolescents also reported significantly more behavioral problems compared to their non-abused counterparts including drinking more alcohol, being more aggressive, and using more drugs. Gender interactions revealed that sexually abused boys had significantly more behavioral problems compared to sexually abused girls.

Mennen and Meadow (1994) examined a sample of 83 predominantly White and Hispanic sexually abused children (75 females) recruited from two facilities to evaluate the extent of depression, anxiety, and self-concept. The average age of respondents was 13 years. Compared to a standardized sample, sexually abused females were found to have higher levels of depression and anxiety and lower self-esteem compared to the general population. No differences were found for boys when compared to the "normal" groups. However, this finding may be due to the very small number of boys (n=8) in the study.

A total of 127 children (83 males, 44 females), ages 6–12 years, who had engaged in a sexual behavior that was viewed as problematic were examined by Gray, Pithers, Busconi, and Houchens (1999). Of the 127 referred, 90 had experienced contact and non-contact sexual behaviors. A higher percentage of females experienced sexual abuse. The majority of the perpetrators were male (72%). Of the total sample, 96% met criteria for at least one DSM-IV disorder, most commonly being conduct disorder found more frequently in males compared to females. The 127 children engaged in problematic sexual behavior (e.g., inappropriate grabbing or touching) with 264 victims, with the majority of victims being their siblings and friends. Those who were sexually abused by more perpetrators had more victims and more psychiatric diagnoses. Almost half of the families had incomes of less than US \$15,000 per year and most lived at or below the poverty level.

Feiring, Taska, and Lewis (1999) investigated 169 confirmed cases of sexual abuse (121 girls, 48 boys) among a racially diverse sample ages 8–15 years. Adolescents (ages 12–15 years) were likely to be abused more often, more likely to experience force, and to have a parental figure as the perpetrator, but less likely to experience threat compared to children (ages 8–11 years). Females were more likely to experience abuse by a parent compared to males. Adolescents experienced higher depressive symptoms and lower global self-worth compared to children. Children, in contrast, expressed more sexual anxiety. Regardless of abuse characteristics, psychological distress is related to age and gender. It appears that the stress of being a victim of sexual abuse, in combination with the normal stresses of being an adolescent, makes this group particularly vulnerable to experiencing psychological problems (Feiring et al., 1999).

Calam, Horne, Glasgow, and Cox (1998) studied 144 children (105 girls, 39 boys), 16 years of age and younger, allegedly or suspected of experiencing sexual abuse. Results indicated that psychological problems were not associated with age of onset of the abuse or gender. No relationship was found between ethnicity of the child, SES of the family, and number of problems. However, use of verbal threats by boys and use of bribes by girls were significantly associated with a greater number of problems. However, attrition was extremely high such that data from both 4 weeks and 9 months were only available for 40 children. At 9 months, anxiety and depression were a problem for 36% of the children. Over time, there was also an increase for suicide attempts, substance abuse, and sexualized behavior. The authors conclude that there does not appear to be a significant decrease in problem behavior over time.

Garnefski and Diekstra (1997) compared 745 sexually abused boys and girls with a matched group of 745 non-sexually abused children ages 12–19 years on mental health problems in a large general population in the Netherlands. Sexually abused girls reported more emotional problems compared to non-abused girls. Sexually abused boys were also higher on such problems compared to their counterparts. Sexually abused boys were also likely to report more behavioral and emotional problems compared to sexually abused girls. These findings differ from earlier results because they suggest that sexually abused boys experience more mental health problems such as suicidal thoughts and behavior, but also that they exhibit more problems than their sexually abused female counterparts. This suggests that the aftermath of sexual abuse may be worse for boys compared to girls.

A longitudinal design was employed by Tebbutt, Swanston, Oates, and O'Toole (1997) to examine what factors predicted the functioning of children over time in 68 sexually abused children (contact abuse) ages 5–15 years. Children and the non-offending parent were re-assessed at 18 months and 5 years after intake. Although children self-reports of depression and self-esteem were correlated, the parent and child reports of depression were not. There was no evidence of change in average levels of self-reported depression and self-esteem from intake to 5 years. Although some children improved, an equal number deteriorated at follow-up. However, contact with the abuser between the 18th-month and final follow-up was associated with higher depression scores and lower self-esteem. Older children (13 years and older) were more likely to have higher depression and lower self-esteem at 5 years. Depression, self-esteem, and behavior problems did not significantly improve over a 5-year period. Therefore, treatment had no effect. Abuse characteristics were not associated with a negative outcome after 5 years.

McClellan, Adams, Douglas, McCurry, and Storck (1995) reviewed the medical records of 499 predominantly male patients, ages 5–18 years, treated over a 5-year period to determine which variables were associated with sexual abuse in a sample of severely mentally ill children and adolescents. Of the total sample, 55% had experienced sexual abuse. Those who experienced sexual abuse had significantly higher rates of PTSD, substance abuse disorders, sexually inappropriate behavior, and antisocial behavior. Respondents who had chronic abuse histories were also abused by more perpetrators. Those who experienced chronic sexual abuse were exposed to other risk factors related either to abuse or family and environmental stressors.

Black, Dubowitz, and Harrington (1994) investigated the behavior and self-perceptions of 44 children ages 4 through 12 suspected of having been sexually abused with a comparison group of 41 children who had not been sexually abused. Results indicated that those who were suspected of experiencing sexual abuse had significantly more internalizing and externalizing problems compared to non-abused children, according to parent reports. Those who experienced sexual abuse did not see themselves as less competent or less accepted compared to the matched group. However, adding the variable age revealed that parents of abused children reported high rates of problem behavior regardless of age, whereas parents of non-abused children were more likely to report problem behavior among school-age children compared to preschoolers.

Tremblay, Hebert, and Piche (1999) looked at the effects of coping strategies and social support on psychological symptoms following sexual abuse. Respondents included 50 children (39 girls, 11 boys), ages 7–12 years, referred to a child protection clinic who allegedly experienced sexual abuse in the past 6 months. The sample was predominately White. Information was gathered from both child and mother. Results revealed that a significant portion of the children exhibited problems of internalizing and externalizing behavior compared to clinical norms. Avoidance coping strategies were related to lower self-worth, more internalizing and externalizing problems, and more aggressive and delinquent behavioral problems. However, support from parents and friends was associated with a more positive self-worth and less externalizing problems. Those who experienced intrafamilial sexual abuse were found to have more internalizing problems compared to those abused by an acquaintance or a stranger. Severity of the abuse, duration, and relationship with the perpetrator were not associated with externalizing behavior or self-worth. The effects of coping and social support on children's symptoms were found to be direct.

3. Summary by developmental period

The research findings are summarized below by developmental period. The three developmental periods include: infancy and early childhood (birth to age 6), middle childhood (6-12 years), and adolescence (approximately 13-17 years; see Trickett & Putnam, 1998). Many of the studies reviewed encompassed larger age ranges than those listed above. In such cases, the mean age of the group was used for placement within a particular developmental period.

3.1. Early childhood

As indicated in Table 1, very little research exists for this age group. Only one study met the criteria for inclusion. This study looked at girls, almost exclusively White, ages 3–5 years. Social and emotional outcomes included inappropriate sexual behavior and internalizing and externalizing problems (Mian et al., 1996). The strengths of this paper included the use of a control group, direct observations of the children, multivariate analyses, and included only those cases in which sexual abuse was verified. The weaknesses lie in the use of cross-sectional data, no use of theory, and a small sample size, which make generalizations difficult.

3.2. Middle childhood

More research exists on middle childhood compared to early childhood. The outcome variables examined varied from study to study. Depression, suicide ideation, PTSD, sexual anxiety, inappropriate sexual behavior, and internalizing and externalizing problems were found to be associated with early sexual abuse. Internalizing and externalizing problems were found to be outcomes of sexual abuse in two studies (Black et al., 1994; Tremblay et al., 1999). However, neither study tested a formal theory, both had small sample

Table 1. Summary of effects by developmental period

Developmental period	Domain	Findings
Early childhood	Social and emotional development	inappropriate sexual behavior ¹ ; internalizing ¹ ; externalizing ¹
Middle childhood	Social and emotional development	depression ² ; suicide ideation ² ; PTSD ^{3,4} ; sexual anxiety ⁵ ; inappropriate sexual behavior ⁶ ; internalizing ^{7,8} ; externalizing ^{7,8}
Adolescence	Social and emotional development	risky sexual behavior ^{9,29} - ^{31,34,36} - ³⁸ ; depression ^{10,11,13,15,17,18,39,40} ; suicide thoughts ^{19-22,24,25,27} ; suicide ^{19,22,24,25} ; internalizing (e.g., low self-esteem) ^{10,11,13,17-19,39,40} ; PTSD ^{16,33} ; externalizing (e.g., anti-social behavior) ^{10-12,14,16,18,19,40} ; substance use ^{16,21,23,24,26,27,29} ; gang involvement ²⁸ ; pregnancy ^{31,35,37} ; running away ³²

¹Mian et al. (1996). ²Wozencraft et al. (1991). ³Ackerman et al. (1998). ⁴Wolfe et al. (1994). ⁵Cohen et al. (1999). ⁶Gray et al. (1999). ⁷Black et al. (1994). ⁸Tremblay et al. (1999). ⁹Luster and Small (1997a). ¹⁰Garnefski and Arends (1998). ¹¹Kuhn et al. (1998). ¹²Mennen (1995). ¹³Mennen and Meadow (1994). ¹⁴Moisan et al. (1991). ¹⁵Sanders-Phillips et al. (1995). ¹⁶McClellan et al. (1995). ¹⁷Feiring et al. (1999). ¹⁸Calam et al. (1998). ¹⁹Garnefski and Diekstra (1997). ²⁰Bayatpour et al. (1992). ²¹Chandy et al. (1997). ²²Evans et al. (1996). ²³Harrison et al. (1997). ²⁴Harrison et al. (1990). ²⁵Shaunesey et al. (1993). ²⁶Watts and Ellis (1993). ²⁷Luster and Small (1997b). ²⁸Thompson and Braaten-Antrim (1998). ²⁹Boyer and Fine (1992). ³⁰Mason et al. (1998). ³¹Stock et al. (1997). ³²Kaufman and Widom (1999). ³³Boney-McCoy and Finkelhor (1995). ³⁴Cunningham et al. (1994). ³⁵Fergusson et al. (1997). ³⁶Widom and Kuhns (1996). ³⁷Herrenkohl et al. (1998). ³⁸Chandy et al. (1996). ³⁹Mennen and Meadow (1995). ⁴⁰Tebbutt et al. (1997).

sizes, and were cross-sectional in nature. On the other hand, these two investigations used standardized measures and utilized reports from multiple sources. Black et al. (1994) also employed a control group and compared different age groups. Finally, two studies found that PTSD was associated with sexual abuse (Ackerman et al., 1998; Wolfe et al., 1994).

Despite these negative outcomes, some positive findings also exist for this developmental period. That is, having supportive parents and friends was associated with a more positive self-worth and fewer externalizing problems (Tremblay et al., 1999). Also, as children become older, they become less upset by sex-related issues whether they were sexually abused or not (Cohen et al., 1999).

3.3. Adolescence

The vast majority of studies reviewed fell into this developmental period. However, many of the studies employed a wide age range, although the mean was typically around 15 years of age. Similar to school-aged children, adolescents experienced depression, PTSD, internalizing and externalizing behaviors, and suicidal thoughts. Additional outcomes for this age group included risky sexual behaviors, substance use, suicide attempts, gang involvement, pregnancy, and running away.

Although numerous negative outcomes exist for these young people, supportive families can exert a positive influence. Specifically, Luster and Small (1997b) found that regardless of sexual abuse history, teens who were closely monitored and had a very supportive relationship with at least one parent had lower binge drinking scores. Their research was based on a very large sample size drawn from the general population. Chandy et al. (1996) also found that maternal education and parental concern for boys and high emotional attachment to family, religion, and both parents for girls mitigated the negative effects of sexual abuse. Finally, parental support and monitoring were found to reduce the risk for multiple sexual partners among sexually abused adolescents (Luster & Small, 1997a).

3.4. Mediators and moderators

Possible mediators and/or moderators of the impact of early sexual abuse on social and emotional outcomes include gender, age, race, abuse characteristics, and family support. Although two thirds of the studies reviewed included both males and females (27 studies), caution should be used since the sample size for one particular sex was often too small to allow for comparisons or to make generalizations. The majority of research efforts reviewed here found that females were more likely to report ever being sexually abused compared to males (Cunningham et al., 1994; Gray et al., 1999; Harrison et al., 1997; Luster & Small, 1997b; Thompson & Braaten-Antrim, 1998). The risk for abuse was also found to increase between grades 6 and 9 for females, but not for males according to one study (Harrison et al., 1997).

In terms of gender, two studies found that sexually abused boys made significantly more suicide attempts (Garnefski & Diekstra, 1997) and had higher rates of suicide ideation (Luster & Small, 1997b) compared to sexually abused girls. In contrast, Evans et al. (1996) found that females, who were members of gangs, reported attempting suicide

and were more likely to report sexual abuse than male gang members. Luster and Small (1997b) also found that sexually abused males were more likely to engage in binge drinking compared to their female counterparts.

Gender differences also revealed that sexually abused males engaged in more sexual risk taking, such as earlier initiation of intercourse and less frequent use of contraception, compared to their female counterparts (Chandy et al., 1996). Two studies found that sexually abused boys had significantly more behavioral problems compared to sexually abused girls (Garnefski & Arends, 1998) and suffered from more emotional problems (Garnefski & Diesktra, 1997), suggesting that the aftermath of sexual abuse may be worse for boys compared to girls. However, Calam et al. (1998) did not find a significant association between psychological problems and gender.

There appears to be a movement toward including samples that are racially/ethnically diverse (14 studies), although many still include predominantly White adolescents. While three studies found no race or ethnic differences for sexual abuse (Cunningham et al., 1994; Kuhn et al., 1998; Mason et al., 1998), one found that White females had higher rates of victimization compared to Hispanic females (Boyer & Fine, 1992). And another study found that White girls experienced a longer duration of abuse than their Latina or African–American peers (Mennen, 1995). In one study that included only males, Moisan et al. (1991) found that African–Americans were more likely to be abused by an immediate family member and Latino males by an extended family member. They also found higher anger scores among African–American males. Another investigation that focused exclusively on females (Sanders-Phillips et al., 1995) found that Latinas were more likely to be abused by a natural father, whereas African–Americans were more likely to be abused by a stepfather. They also reported higher scores of depression in Latino girls. Such findings suggest at least some ethnic differences in outcomes for sexually abused children.

Few studies tested for age differences. The ones that did found that older children were more likely to be depressed (Feiring et al., 1999; Tebbutt et al., 1997; Wozencraft et al., 1991) and to have lower self-esteem and self-worth compared to younger children (Feiring et al., 1999; Tebbutt et al., 1997).

Other researches focused on the importance of abuse-specific variables, such as duration and frequency, age of onset, use of force, severity of the abuse, and relationship to perpetrator, as possible mediators between sexual abuse and outcome. Overall, the findings tend to be mixed with one exception. Six studies found no relationship between age of onset of abuse and outcome. Three found duration and frequency of abuse to be associated with outcome, whereas six other studies found no such relationship. In terms of use of force, three studies found support for this variable, whereas three did not. The findings for the respondent's relationship to perpetrator were almost evenly split. Three studies found no relationship, whereas four other articles found an association between perpetrator and outcome. Finally, the severity of the abuse was unrelated to outcome in three studies, but associated with outcome in another four. The influence of abuse-specific variables is discussed below.

Shaunesey et al. (1993) found that a longer duration and higher frequency of sexual abuse produced no more severe consequences than was found for the non-abused group. Similarly, Mennen (1995) found no relationship between race/ethnicity and age of on-

set of abuse, the kind of abuse experienced, use of force, and whether the perpetrator was a father. Mennen and Meadow (1995) also observed no relationship between age at onset and symptom level. However, penetration and having a father figure as the perpetrator were associated with outcome. When the perpetrator was not a father, the use of force was the strongest predictor of the severity of symptoms (Mennen & Meadow, 1995).

Calam et al. (1998) found no relationship between age of onset, being abused by a father, duration and frequency of the abuse, and use of force to psychological disturbances or the number of problems. However, use of verbal threats toward boys and use of bribes toward girls were related to a larger number of problems (Calam et al., 1998). Similarly, one study found that no characteristics of the abuse (i.e., severity of the abuse, duration and frequency, use of force, and age at onset) were related to outcome after 5 years (Tebbutt et al., 1997).

Parents of abused children who experienced genital contact were likely to report behavioral problems compared to children who did not experience such contact. The relationship to the perpetrator was also associated with the child's cognitive competence (Black et al., 1994). Repeated and more severe abuse was found to have more negative effects on children (Mian et al., 1996). Children abused by a family member experienced more internalizing problems (e.g., depression, anxiety) compared to those abused by strangers or acquaintances. Duration and severity were found to have no effect (Tremblay et al., 1999). In another study, age at first abuse and duration of abuse were not associated with the outcome of HIV risk behaviors (Cunningham et al., 1994).

According to Boney-McCoy and Finkelhor (1995), age of onset, relationship to perpetrator, and duration and frequency by the same perpetrator were not significantly related to PTSD outcome. However, severity of the abuse was associated with higher levels of PTSD-related symptomatology (Boney-McCoy and Finkelhor, 1995). Although they only included one abuse-specific component, Wozencraft et al. (1991) found that being abused by a family member was related to suicide ideation. Children with chronic abuse histories were abused by more perpetrators (McClellan et al., 1995) and those sexually abused by more perpetrators were found to have more psychiatric diagnoses (Gray et al., 1999).

As noted previously, some studies also focused on the protective role that some factors play between sexual abuse and specific outcomes. For example, being closely monitored and having a very supportive relationship with at least one parent resulted in lower binge drinking scores (Luster and Small, 1997b) and reduced the risk for having multiple sexual partners among sexually abused adolescents (Luster and Small, 1997a). Parental concern for boys and emotional attachment to family and religion for girls also mitigated a negative outcome (Chandy et al., 1996). Finally, support from parents and friends was associated with a positive self-worth and fewer externalizing problems (Tremblay et al., 1999).

3.5. Summary

Although more recent studies are moving toward including all five major characteristics of abuse, more investigations are needed for comparison before drawing any conclusion. Based on the articles reviewed here, the influence of abuse characteristics was found

to vary across studies. However, at present, it appears that severity of the abuse, use of force, and victim's relationship to the perpetrator are especially important.

In considering the overall findings, bear in mind the wide range of outcomes considered and that, in some cases, only a few studies were found to support a particular outcome. Also, the results should be interpreted in the context of a particular study. That is, many investigations did not employ comparison groups, included very few males or females, utilized small sample sizes, employed different definitions of sexual abuse, and did not test any formal theory. These limitations are discussed in Section 4.

4. Limitations of existing research

Although some of the previous limitations listed in earlier reviews of the literature have begun to be addressed (e.g., including both males and females and more diverse samples), many of the same limitations still exist. Such limitations are organized into the following categories: samples, study design, measures, and theory and are discussed below.

4.1. Samples

Even though the majority of recent research has made an effort to include both males and females within their studies (27 studies in total), gender comparisons are often difficult because some samples had very few males (e.g., n = 8) or very few females. Researchers need to strive for larger sample sizes, with large enough numbers of males and females so that multivariate models can be used to analyze data and to test for gender interactions, which would help tease out possible differences between males and females.

Another concern regarding sampling is that many studies continue to combine a wide range of age groups such as 12–18 years, and do not control for age or test for age interactions. This concern stems from the fact that adolescents typically have higher rates of delinquent behavior (Moffitt, 1997). Consequently, it is difficult to determine how many of the negative outcomes are due to the early sexual abuse and how much is due to their particular developmental stage. Using a narrower age range (e.g., 6–12 years of age) or testing for age interactions between specific age groups would be useful.

Although more studies appear to be including racially/ethnically diverse samples (14 studies in total), the number of non-Whites is sometimes small, making comparisons difficult. Since those from non-White backgrounds are also at risk for sexual abuse (see Moisan et al., 1991, and Sanders-Phillips et al., 1995), more effort is needed to include racially diverse samples with numbers that are large enough to test for possible differences.

The lack of control groups continues to be evident such that only eight of the studies examined used a comparison group. Control groups should be included when possible and matched on age, sex, socioeconomic status, and family structure. Since the effects of poverty and low socioeconomic status on abuse have been documented (Trickett et al., 1991, and Trickett et al., 1998), using controls would allow researchers to distinguish between possible effects.

4.2. Study design

The selection of respondents is another concern. Although some studies included normal samples, a variety of convenience samples including prenatal clinics, detention centers, incarcerated youth, treatment for chemical dependency, and children's hospitals were used. It is possible that those referred for treatment may come from more supportive backgrounds or less disturbed families since treatment is being allowed. On the other hand, perhaps those who are not referred actually experience fewer negative symptoms; therefore, they do not seek treatment. There are numerous biases inherent in these different samples but at this point, it is difficult to determine if the respondents in the current research are experiencing the worst outcomes or perhaps, it is those who are not being sampled. Future studies that sample from general populations may wind up with samples that include child victims who typically may not seek treatment or be referred for treatment or other types of services. This type of sampling may result in the inclusion of a more diverse group of victims.

The reliance on cross-sectional data is another limitation of child abuse studies. Only seven studies reviewed employed a longitudinal design. In many cases, conclusions about the negative outcomes of sexual abuse cannot be made. It is possible, for example, that depression and suicide ideation are the aftermath of sexual abuse. However, it is also possible that those who are depressed and suicidal are at greater risk for sexual abuse. It is also unclear how long the symptoms are likely to last. Longitudinal research or follow-up studies could provide more conclusive findings in terms of cause and effect as well as teasing out the potential for long-term effects.

Some cross-sectional studies based their results on correlational analysis, which is also problematic. Controlling for the effects of all variables is important since the interaction of such variables can have significantly different results than viewing them at the bivariate level.

4.3. Measures

The lack of standardized measures, especially for measuring sexual abuse, is another concern in the child abuse literature. Although many studies employed standardized measures for outcomes, such as externalization, depression, and self-esteem, many studies differed in their measure of sexual abuse, which makes cross-study comparisons difficult. For example, some measures of sexual abuse utilized scales including both contact and non-contact sexual abuse items, whereas other studies used global indicators such as, "Have you ever been sexually abused?" This latter measure is problematic since it leaves the definition of sexual abuse up to the respondent.

Another problem is that some investigations do not describe how sexual abuse was measured and what exactly the child experienced. It is also possible that certain items may not be sensitive enough to accurately measure the trauma of sexual abuse.

Finally, the use of numerous indicators of sexual abuse may differentially impact outcome variables. It appears that there is a need for more consistent measurement and the development of standardized measures when studying child sexual abuse. It is important to recognize that different scales for disparate developmental stages of life may be required, since research finds that the effects of sexual abuse tend to vary by age.

Reporters of sexual abuse tend to vary by study. For example, many investigations used self-reported measures from respondents. Others, typically those involving very young children, utilized parent reports, typically the mother, as well as reports from teachers. Since some of the studies reviewed here found a poor correlation between mothers' reports and the victims' reports (Tebbutt et al., 1997), researchers should strive to obtain information from multiple sources. It is possible that mothers may minimize certain outcomes, especially if they are trying to protect another family member who perpetrated such acts.

Although some studies looked at the impact of abuse-specific variables as mediators in their research (e.g., frequency of the abuse, use of force, relationship to perpetrator), the evidence is sketchy and somewhat inconsistent at this time. It is possible that such characteristics could lead to differential outcomes for the victim. However, more research is needed before any conclusion can be drawn. Finally, studies that encompass measures of family background, such as parent's use of alcohol/drugs and parenting styles, are likely to provide additional information that may help to explain sexual abuse.

4.4. Theory

Although Kendall-Tackett et al. (1993) highlighted the nearly universal absence of theory in their review of the literature almost a decade ago, very little research to date has addressed this issue. In fact, not one of the single articles reviewed here attempted to test any theoretical model. Even though researchers have documented the numerous negative outcomes that victims of child sexual abuse experience, few explanations have been offered for such effects. A concerted effort by researchers to test existing theories is needed in order to better understand the causes of sexual abuse and the family environment of such children. Beitchman et al. (1991) called for measures of family disturbance to be included in future research. For example, parents' substance use, mental health, and styles of parenting all provide information about family background. Such data are important for determining the type and level of dysfunction and disorganization within such families. Although sexual abuse is related to a number of outcomes, it is also plausible that dysfunctional families and conflict-ridden environments are also related to negative developmental outcomes.

One theory that could prove useful since it takes into account family background characteristics is the work of Patterson (1982). Patterson argued that coercive families provide "basic training" for antisocial behaviors. This first or basic training is the result of continuous failure on the part of the parents to use effective discipline techniques in controlling coercive exchanges between family members. These coercive and abusive behaviors become coping styles that are carried with the adolescent into peer interactions, which results in rejection by normal friend groups (Patterson et al., 1984, and Patterson et al., 1989). Children who learn to expect rejection may withdraw from future interactions, thereby ruling out opportunities to affiliate with prosocial peers and therefore, never having the opportunity to practice conventional social skills (Moffitt, 1993). Although Patterson's theory was originally developed to explain the interactions of parents and their sons, this theory could also be applied to different age groups, racial groups, as well as females since these groups also experience negative outcomes as a result of early sexual abuse (Beitchman et al., 1991) and/or dysfunctional families.

Since research finds that children from different developmental periods experience different outcomes (e.g., Trickett & Putnam, 1998), theories that take such age differences into account could prove beneficial. Moffitt (1997), for example, demonstrates that the majority of males and females between the ages of 7 and 17 experience high rates of antisocial behavior, thereby suggesting that such an outcome may be a result of a person's developmental stage rather than the result of sexual abuse. Such youth are termed "life-course-limited." However, the combination of a vulnerable and difficult infant with an unfavorable family environment sets the stage for "life-course-persistent patterns of antisocial behavior" (p. 17). What results is a process in which the challenges associated with coping with a difficult child induce a continuation of failed parent-child interactions. Such interactions result in the unfolding of antisocial behavior through adolescence (Moffitt, 1997).

This theory suggests that the antisocial behavior that some adolescents experience may exist prior to the abuse rather than the antisocial behavior being the result of the abuse as much of the literature indicates. Since an intergenerational transmission of severe antisocial behavior exists, children who experience problems are likely to have parents with problems. As such, parents with difficult children often do not have the resources to cope effectively with them and as a result, the parents' behavior may actually worsen the children's problem behavior, rather than improve it.

As future research continues to make efforts to address these concerns, the literature in the area of early sexual abuse will continue to advance and provide important information in understanding the causes and consequences of childhood sexual abuse.

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