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Suicidal ideations and attempts among adolescents subjected to childhood sexual abuse and family conflict/violence: The mediating role of anger and depressed mood

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A B S T R A C T

Based on a sample of 9085 16- to 19-year-old students attending all high schools in Iceland in 2004, the current study examines depressed mood and anger as potential mediators between family conflict/violence and sexual abuse, on the one hand, and suicidal ideations and suicide attempts on the other. Agnew's general strain theory provides the theoretical framework for the study. Structural equation modelling (SEM) was conducted allowing explicit modelling of both direct and mediating effects using observed and latent variables. The findings showed that both depressed mood and anger mediated the relationship between family conflict/violence and sexual abuse and suicidal attempts. However, when testing the mediating pathways between sexual abuse and family conflict/violence and suicidal ideations, only depressed mood but not anger turned out to be a significant mediator. The authors discuss how these finding may inform and facilitate the design and development of interventions to reduce the likelihood of suicide attempts among young people.

Introduction

Individuals subjected to childhood adversities such as sexual abuse and family conflict are at increased risk of a wide range of medical, psychological and behavioural problems in adolescence and adulthood (Dube et al., 2001; Maniglio, 2009, 2010; Pagura, Cox, Sareen, & Enns, 2006). Studies have for example shown that child sexual abuse increases the likelihood of depression, aggression, self-destructive behaviours and deviance (for a review see, Kendall-Tackett, Williams, & Finkelhor, 1993). Also, a link has been established between sexual abuse and deviant behaviour, including property crimes, aggressive behaviour and violence (Garnefski & Arends, 1998; Swanston et al., 2003). Another major source of strain for children and adolescents is family conflict, that is, arguments and physical violence in the home, increasing the likelihood of depression, anger, delinquency and suicidal behaviour (Amato & Sobolewski, 2001; Asgeirsdottir, Sigfusdottir, Gudjonsson, & Sigurdsson,

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2011; Henning, Leitenberg, Coffey, Bennett, & Jankowski, 1997; Horwitz, Widom, McLaughlin, & White, 2001; Jekielek, 1998; Sigfusdottir, Asgeirsdottir, Gudjonsson, & Sigurdsson, 2008; Sigfusdottir, Farkas, & Silver, 2004).

Of all the negative emotional and behavioural outcomes of sexual abuse and family conflict, suicides are of gravest concern. Adolescent suicidal ideations in Western countries range from 15% to 25%, with adolescent females at the higher and males at the lower end (Grunbaum et al., 2004). The lifetime incidence of attempted suicide ranges from 1.5 to 10 percent among female adolescents and from 1.3 to 3.8 percent among their male peers. Completed suicides, however, are much more common among adolescent males than females in most Western countries (Andrews & Lewinsohn, 1992; Fergusson & Lynskey, 1995; Haavisto et al., 2005; Lewinsohn, Rohde, & Seeley, 1996).

Suicides have increased by 60% worldwide during the last four decades and are now among the three leading causes of death in this age group (Wasserman, Cheng, & XinJiang, 2005). Studies have shown that diverse childhood adversities are important risk factors for adolescent suicidal behaviour, including suicidal ideations, suicidal plans and suicide attempts (Bebbington et al., 2009; Bridge, Goldstein, & Brent, 2006; Brown, Cohen, Johnson, & Smailes, 1999; Fergusson, Woodward, & Horwood, 2000; Johnson et al., 2002; Maniglio, 2011; Martin, Bergen, Richardson, Roeger, & Allison, 2004; Nelson et al., 2002). Studies have specifically revealed a strong relationship between both sexual abuse and family conflict and suicidal ideation and repeated suicide attempts (Brown et al., 1999; Garnefski & Arends, 1998; Luster & Small, 1997; Martin et al., 2004). Despite robust findings on the association between adverse childhood experiences and suicidal behaviour, exactly how sexual abuse and family conflict translate into suicidal behaviour is not well understood. In an extensive study recently published in JAMA psychiatry, the authors call for such an analysis (Nock et al., 2013), arguing that too much attention may hitherto have been given to preventing suicidal behaviour through reducing depression, while other emotions, such as anger, may be of equal or even greater importance.

Agnew's (1992) general strain theory offers an ideal framework for understanding these associations between childhood adversities, emotions and suicidal behaviour. The theory proposes that adolescents are pressed into deviant behaviour, including suicidal behaviour, by negative emotional responses due to being trapped in an aversive environment. This leads to frustration and possibly to desperate avoidance and/or anger-based deviance (Agnew, 1985, 1992). Hence, the theory proposes that anger energizes the individual for action, lowers inhibitions, and increases the likelihood of acting out. Tests of the theory have found that both depression and anger are important mediators in the relationship between childhood adversity and deviant behaviour (Molnar, Berkman, & Buka, 2001; Sigfusdottir et al., 2008). However, while anger and depression frequently co-occur (Curran, 1987; Renouf & Harter, 1990; Rutter, 1989), these emotions do not relate in the same way to behavioural outcomes (Asgeirsdottir et al., 2011; Sigfusdottir et al., 2004, 2008). While anger has been shown to increase the likelihood of acting out, for example by stealing, vandalizing or committing violent acts, depression is not related to such behaviour (Sigfusdottir et al., 2004). Recent studies have shown that the relationship between these phenomena is even more complex than that. Hence, while anger energizes the individual for actions, and increases the likelihood of acting-out behaviour, depression increases the likelihood of behaviour directed to oneself. Thus, depressed mood has turned out to be an important mediator between childhood adversities and self-injurious behaviour as well as having twice as strong an effect as anger on suicidal behaviour (Asgeirsdottir et al., 2011; Sigfusdottir et al., 2008).

Prior studies have not distinguished between forms of suicidal behaviour, such as suicidal ideation or suicide attempts triggered by stressful experiences. Also, they have not included both anger and depressed mood as mediators between childhood adversities and suicidal behaviour. Hence, studies that have revealed a predictive effect of depression (Dube et al., 2001) or anger (Giegling et al., 2009) on suicidal behaviour, have not controlled for possible comorbid effects of these emotions. In light of the very complex nature of the effects of childhood adversities on emotions and behaviour, showing that particular emotions are conducive to certain types of behaviour, it is important to examine whether childhood adversities are differently associated with suicidal ideation and suicide attempts.

Suicidal ideation and suicide attempts are different phenomena, where suicide attempts warrant special attention because it is a stronger predictor of successful suicides than suicidal ideation. Suicidal ideation is defined as thoughts or wishes to be dead or to kill oneself, while suicide attempts are self-inflicted behaviours intended to result in death (Lewinsohn et al., 1996). Those suffering from suicidal ideation and those attempting suicide are distinct groups, although overlapping (Farberow, 1981; Linehan, Charles, Egan, Devine, & Laffaw, 1986). Suicidal ideation is relatively common, but past suicide attempts represent the strongest risk factor for future suicide attempts and completions (Farberow, 1989; Lewinsohn et al., 1996).

Gender differences

Prior studies have indicated that the relationship between childhood adversities, emotions and behaviour is gender specific, where adolescent females and males experience somewhat different types of adversities and the effects of adversities associate differently with emotions and behaviour among females and males (Sigfusdottir & Silver, 2009). Whereas adolescent females have consistently been found to be more likely to respond to stress with internalizing emotions (Broidy, 2001; Cyranowski, Frank, Young, & Shear, 2000; Piquero & Sealock, 2000), the relationship between adversities and anger turns out to be similar in strength for adolescent males and females (Sigfusdottir & Silver, 2009). Emotions also seem to associate differently with behaviour for adolescent females and males, with the link between anger and delinquent behaviour, for example in the form of stealing and vandalizing being much stronger for males than females (Sigfusdottir et al., 2004). In line with these prior findings showing that the association between childhood adversities, emotions and behaviour differ for adolescent males and females, we tested the models separately for gender.