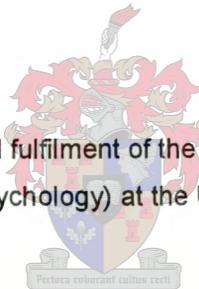


**DEMOGRAPHIC AND FAMILY VARIABLES AS RISK FACTORS IN SEXUALLY
AND NON-SEXUALLY TRAUMATISED CHILDREN AND ADOLESCENTS**

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(ii)

DECLARATION

I, the undersigned, hereby declare that the work contained in this assignment is my own original work and that I have not previously in its entirety or in part submitted it at any university for a degree.

(iii)

ABSTRACT

This study investigated demographic and family variables as possible risk factors for child sexual abuse within a sample of children and adolescents who have been exposed to a range of life-threatening traumas. A total of 94 traumatised children and adolescents were interviewed about their sexual abuse history. Forty females (42.56%) and 10 males (10.63%) reported sexual abuse. Family and demographic variables that were found to be significantly associated with increased risk of sexual abuse were female gender ($\chi^2 = 13.575$, $p < 0.05$), family structure (growing up with parents who are single, divorced or widowed) ($\chi^2 = 6.327$, $p < 0.05$) or a family with a member who receives a disability grant ($\chi^2 = 4.657$, $p < 0.05$).

(iv)

OPSOMMING

In hierdie studie is ondersoek ingestel na demografiese en gesinsveranderlikes as moontlike risiko-factore vir kindermolestering in 'n steekproef kinders en adolessente wat aan 'n breë spektrum lewensbedreigende traumas blootgestel was. Onderhoude oor 'n moontlike geskiedenis van seksuele misbruik is met 94 kinders en adolessente gevoer. Veertig dogters (42.56%) en 10 seuns (10.63%) het seksuele molestering gerapporteer. Gesins- en demografiese veranderlikes wat betekenisvol met verhoogde risiko vir kindermolestering verband gehou het, was vroulike geslag ($\chi^2 = 13.575$, $p < 0.05$), gesinstruktuur (om op te groei in 'n gesin met 'n enkel-ouer, 'n geskeide ouer of met een ouer oorlede) ($\chi^2 = 6.327$, $p < 0.05$), en 'n gesin waarin 'n familie-lid 'n ongeskikheidstoelaag ontvang het ($\chi^2 = 4.657$, $p < 0.05$).

(v)

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1. INTRODUCTION

Child sexual abuse (CSA) is a widespread problem both locally and internationally. It has serious, potentially devastating effects in the short- and long-term for the individual survivors and their families, as well as for communities and broader society. Research into the prevalence and incidence of CSA has attempted to document how many children are sexually abused while research into risk factors has examined which children are more at risk of being sexually abused.

Research into CSA is problematic for a number of reasons. Firstly, there are no accurate figures of the prevalence of CSA within South Africa or in any other country (Levett, 1989a; Peters, Wyatt, & Finkelhor, 1986), as it is often not reported because the child is usually threatened by the perpetrator, feels ashamed, and fears social stigma and the possible disintegration of the family (Bergner, Delgado, & Graybill, 1994; Madu & Peltzer, 2000). Secondly, definitions of CSA vary from one study to the next making it difficult to compare results and draw conclusions from the body of research that has been built up over the past 30 years (Jones & McCurdy, 1992). Magwaza (1997) pointed out that the problem with defining CSA is further complicated by different concepts of childhood within different cultures.

Studies that have examined risk for CSA have yielded mixed results with researchers unable to draw definite conclusions about the majority of potential factors. Very little research into CSA risk factors has been conducted in South Africa (Madu & Peltzer, 2000). However, crime statistics and prevalence rates show that CSA affects many thousands of South African children. Effective prevention and intervention strategies are needed and thus a better understanding of the profile of those children most at risk is necessary.

By investigating whether any demographic and familial differences exist between sexually traumatised and non-sexually traumatised children and adolescents, this study aims to examine whether there are CSA risk factors within a sample of participants who have been exposed to a life-threatening trauma.

1.1 Definitions of child sexual abuse

Researchers typically differentiate between contact and non-contact forms of sexual abuse (Bolen, 2001; Peters et al., 1986; Salter, 1992). Non-contact abuse refers to acts of voyeurism, exhibitionism and verbal sexual harassment or propositions

(Peters et al., 1986; Salter, 1992; Wyatt & Peters, 1986a). Contact sexual abuse includes all acts in which the child's body was violated in some way, including fondling, kissing, and penetrative acts. It also includes acts in which the child is forced to touch the perpetrator in a sexual manner (Peters et al., 1986; Salter, 1992; Wyatt & Peters, 1986a).

A further differentiation frequently used in CSA research is between intra- and extrafamilial abuse (Bolen, 2001; Fleming, Mullen, & Bammer 1997; Peters et al., 1986; Salter, 1992; Vogeltanz et al., 1999). Historically, research has tended to focus more on intrafamilial sexual abuse, resulting in a greater amount of information and knowledge about this form of abuse (Bolen, 2001). Even in studies that focus specifically on intrafamilial abuse, the type of relationship between perpetrator and child varies from all male family members whether related by blood, marriage, or common law, for example, brother-in-law, mother's boyfriend (Vogeltanz et al., 1999) to specifically father-daughter relationships (Herman & Hirschman, 1981). However there may still be considerable conceptual variation between studies that use a highly restrictive definition of intrafamilial abuse. Bolen (2001) pointed out that the definition of father is sometimes extended to include stepfathers, father figures who are not legally or biologically related to the child, or biological fathers who do not have custody over their children, while in other studies it refers only to the biological father. The situation is somewhat less confusing when extrafamilial forms of abuse are also included into the data as this is the most inclusive way of defining the victim-perpetrator relationship.

Most studies employ an upper age limit on the child in order to narrow the definition of CSA further. This is frequently used in conjunction with specific criteria on the age difference between the perpetrator and child. The majority of studies cited in the present review set the upper age limit of the child at 18 years (Brown, Cohen, Johnson, & Salzinger, 1998; Dube et al., 2001; Finkelhor, Hotaling, Lewis, & Smith, 1990; Jones & McCurdy, 1992; Levett, 1989a; Vogeltanz et al., 1999), while others set it slightly lower at 17 years (Collings, 1991; Madu & Peltzer, 2000; Madu, 2001), or 16 years (Bergner et al., 1994; Fleming et al., 1997). A few researchers do not set specific upper age limits in their methodology, but prefer to ask about experiences during childhood or while growing up (MacMillan et al., 2001).

The main reason for setting criteria about age differences between child and perpetrator is to exclude peer perpetrated sexual experiences from the definition of

abuse (Peters et al., 1986; Wyatt & Peters, 1986a). To include these acts might result in an overinclusive definition of CSA to the extent that normal sexual exploration and play would be inaccurately labelled as abuse (Bolen, 2001). This is a somewhat contentious issue as it can be argued that children and adolescents can and do experience violent and intrusive sexual acts committed by their peers (Bolen, 2001; Peters et al., 1986; Salter, 1992; Wyatt & Peters, 1986a).

1.2 Prevalence and incidence of child sexual abuse

Numerous prevalence studies have been conducted in countries around the world over the past two decades. Results of this body of research vary enormously with prevalence rates for CSA in the USA ranging between 3% and 31% for males and between 6% and 62% for females (Peters et al., 1986). Finkelhor's (1994) review of prevalence studies conducted in countries outside North America indicates similar CSA rates in a number of countries. Prevalence ranges between 7% (Ireland and Finland) and 36% (Austria) for females and between 3% (Sweden and Switzerland) and 29% (South Africa) for males (Finkelhor, 1994). The prevalence rates to emerge from these studies are much greater than the numbers of reported CSA cases in each country (Finkelhor, 1994).

In South Africa, very few studies on the prevalence of CSA have been conducted. In her study using a sample of female university students in Cape Town, Levett (1989a) reported that 43.6% of respondents experienced at least one incident of contact and/or non-contact abuse. Using a similar sample of female university students, Collings (1997) obtained a prevalence rate of 34.8%. While this is somewhat lower than the rate obtained in the Cape Town study, Collings (1997) employed a very different methodology, and the definition of CSA was limited to contact abuse. In an earlier study Collings (1991) administered questionnaires to a sample of male university students and obtained results indicating that 28.9% of the respondents reported contact and/or non-contact sexual abuse experiences during childhood. When a more restrictive definition of CSA was used the rates dropped to similar rates found in American studies using college samples (Collings, 1991).

Another study using a university student sample obtained somewhat lower prevalence rates of 23.7% for females and 21.7% for males (Madu, 2001). This latter study included only contact sexual abuse and was conducted at the University of the North (Northern Province) where a number of geographical and social factors may have played a role in lowering the prevalence of CSA. Madu (2001) hypothesised the

existence of more protective factors because the Northern Province is largely rural as compared to the urban settings of the studies conducted by Levett (Cape Town) and Collings (Durban). For example, there is likely to be less substance abuse, more parental availability and stronger adherence to cultural values within the families of the respondents (Madu, 2001).

However, an earlier study conducted in the Northern Province with a sample comprising Standard 9 and 10 pupils from three high schools found much higher rates for contact sexual abuse: 53.2% for females and 60% for males (Madu & Peltzer, 2000). The authors of this study proposed that the possible reasons for their significantly higher prevalence rates included the younger age group of their sample and factors related to the geographical location of their study. Madu (2001) proposed that the widely different prevalence rates obtained by these two studies in the Northern Province can possibly be explained by the average age difference (5 years) between the two samples.

Two potential mechanisms are linked to the age difference. Firstly, the actual prevalence of childhood sexual abuse may have increased in the 5 years prior to the more recent study. Secondly, the university student sample is reporting on incidences that occurred further back in time and there may be stronger repression and denial of abuse and thus less willingness to report abusive incidents than amongst the school-going sample (Madu, 2001). Another explanation for these seemingly discrepant results is that fewer adolescents who have been sexually abused go on to study at university, either as a consequence of the abuse or because of other socio-economic and demographic factors. These factors may be unrelated to the abuse or may operate as risk factors for sexual abuse. Further research needs to be done to explore these possibilities in more detail.

Madu and Peltzer's results are also unusual in that the prevalence of reported sexual abuse incidents is higher for males than females. However, they go on to show that when more "serious" forms of sexual abuse, such as oral, anal, and vaginal penetration, are examined the prevalence rates change to 18.8% for females and 15.1% for males (Madu & Peltzer, 2000).

When the results of South African studies are compared with those conducted in the U.S., it becomes apparent that the rates are at least similar to the higher rates reported in American studies if not higher in some cases (e.g. Madu & Peltzer, 2000).

The wide variation in reported prevalence rates is mainly due to different methodologies utilised in the various studies (Finkelhor, 1994). The most important methodological factors that effect prevalence rates include type of sample, method of data collection, the number of probe questions about CSA, and the definition of CSA (Bolen, 2001; Fergusson & Mullen, 1999; Finkelhor, 1994; Peters et al., 1986; Salter, 1992; Vogeltanz et al., 1999; Wyatt & Peters, 1986b).

While prevalence rates refer to the number of people who have experienced sexual abuse during their childhood, incidence rates refer to the number of new cases that occur during a specified time period, usually a year (Bolen, 2001; Peters et al., 1986; Wyatt & Peters, 1986a). The calculation of incidence rates for CSA has proved problematic in studies around the world for a number of reasons. Incidence studies primarily rely on obtaining figures of new cases reported to official agencies such as the police and child protection agencies (Bolen, 2001). These figures cannot be relied on, as many cases remain unreported (Bergner et al., 1994; Fergusson & Mullen, 1999; Peters et al., 1986). In her random survey of community respondents, Russell (1983) found that only 2% of intrafamilial CSA and 6% of extrafamilial CSA cases were ever reported to the police.

The majority of CSA cases remain unreported for a variety of reasons. Victims are young and are usually still dependent on parents or caretakers and thus lack the ability to report the abuse independently of adult assistance (Peters et al., 1986). Furthermore, disclosure of the abuse is frequently disbelieved by parents or authority figures (Russell, 1986). Some degree of physical force or verbal threats of future harm are often used by the perpetrator. This leaves the victim feeling too afraid to report the incident (Bergner et al., 1994). In cases of intrafamilial sexual abuse, the victim often chooses not to report the abuse for fear of breaking up the family unit or out of a sense of family loyalty (Russell, 1986). In addition, the social stigma of having been sexually abused often results in feelings of shame and the abuse remains secret (Bergner, et al., 1994; Madu & Peltzer, 2000).

In her review of incidence studies that have been conducted in the United States, Bolen (2001) assesses the Third National Incidence Study of Child Abuse and Neglect (NIS-3), conducted in 1993, as being one of the most extensive studies. Data was obtained from a variety of child protection agencies and community professionals. This study used weighted estimates and obtained an incidence rate of

4.5/1000 children (cited in Bolen, 2001). Other incidence studies have obtained very different rates but have used different definitions of CSA and utilised unofficial sources for CSA cases (Bolen, 2001).

No incidence studies of CSA in South Africa could be located. However, a review of the figures reported to various organisations and agencies during specific time periods gives an indication of the incidence in this country. A spokesperson of RAPCAN (personal communication, June 2002) reported that crime statistics of the South African Police Services (SAPS) revealed that a total of 21 438 cases of rape and attempted rape to children of 17 years and younger were reported from January to December 2000. In the category of indecent assault for the same age group during this period of time 2 400 cases were reported to have occurred against females and 1 627 against males. A total of 113 cases of incest involving a child 17 years and younger were reported. It is unclear whether there is an overlap of cases in these different categories. Nevertheless, the national total for rape and attempted rape cases that come to the attention of the police services is very high. The extent of the problem is highlighted when one takes into consideration the estimates made by organisations like Rape Crisis that only 56% of the women they assist ever report the rape to the SAPS (Marshall & Herman, 2000).

1.3 Risk factors in child sexual abuse

Research into CSA risk factors offers valuable knowledge that can be utilised in a variety of ways. Clinicians, educators and policy-makers who are aware of the demographic and familial factors that increase a child's vulnerability to sexual abuse are better equipped to identify high-risk children and families. All too frequently the abuse is not reported and the offender remains undetected. Accurate identification means that appropriate and effective intervention strategies can be implemented (Bergner et al., 1994; Vogeltanz et al., 1999). This is important for both the victim and other children (e.g. siblings) who might become victims if the offender is able to continue his/her sexual exploitation.

In clinical settings, CSA risk factor research has led to improved understanding of the aetiology of the problem (Shah, Dail, & Heinrichs, 1995). Knowledge about CSA risk factors also enables clinicians to identify those individuals who have already been sexually abused but have not disclosed this information. Greater accuracy with regards to the diagnosis allows for the formulation of a more effective treatment plan

which can possibly reduce the negative impact of abuse (Fleming et al., 1997; Vogeltanz et al., 1999).

Ideally, risk factor research would be able to inform preventative strategies aimed at children, families, and broader communities, making these strategies more effective and thereby reducing the numbers of children who experience sexual abuse (Bergner et al., 1994; Bolen, 2001; Fleming et al., 1997; Madu & Peltzer, 2000).

Studies that have examined risk for CSA have yielded mixed results, with researchers unable to draw definite conclusions about the majority of potential factors. Research in this field is also hampered by many of the same methodological problems that occur in prevalence research. In South Africa, very little research into CSA risk factors has been conducted (Madu & Peltzer, 2000). However crime statistics and prevalence rates show that CSA affects many thousands of South African children annually. Effective prevention and intervention strategies are needed and thus a better understanding of the profile of those children who are most vulnerable is also necessary.

The present study aimed to investigate whether any demographic and familial differences exist between two subgroups of sexually traumatised and non-sexually traumatised children and adolescents. The demographic and family variables that were examined in the present study were chosen on the basis of previous CSA risk factor research. The findings of this body of research are described in the following section. South African findings on CSA risk factors are then reported.

1.3.1 Gender of child

The sex of the child appears to be one of the most conclusive factors with most studies finding that females are at greater risk of CSA than males (Bolen, 2001; Brown et al., 1998; Collings, 1991; Finkelhor & Baron, 1986). Finkelhor and Baron (1986) examined the results from eight random sample community surveys that included both male and female respondents, and calculated the mean ratio for CSA to be 2.5 females for every male. The repeated finding that girls are at higher risk than boys for CSA has meant that very few studies have examined male CSA in much detail (Finkelhor & Baron, 1986). Research has tended to focus mainly on female CSA, resulting in more information about the prevalence, risk factors, and effects of CSA on females with relatively little information regarding sexual abuse of boys (Chandy, Blum, & Resnick, 1997; Collings, 1991; Finkelhor & Baron, 1986).

A review of studies conducted in the past two decades reveals only one study with a female-male ratio that differs from the usual findings. Madu and Peltzer (2000) found higher prevalence rates of CSA among their male subsample than among the female respondents in their study (60% and 53.2% respectively). However, the researchers showed that when only "serious" forms of sexual abuse, such as oral, anal, and vaginal penetration, are examined the prevalence rates change to 18.8% for females and 15.1% for males (Madu & Peltzer, 2000).

1.3.2 Age of onset of abuse

The majority of studies that specifically inquired about the age at which the sexual abuse started showed that children are most vulnerable in the pre-adolescent stage, (ages 8 to 12 years) (Finkelhor & Baron, 1986). Finkelhor et al. (1990) reported a median age of 9.9 years for males and 9.6 years for females. Wyatt's (1985) study showed that White women reported more CSA experiences occurring between the ages of 6 and 8 years whereas Afro-American women reported more abuse incidents between the ages of 9 and 12 years. Vogeltanz et al. (1999) found that more than 50% of the women who had been sexually abused in childhood reported that their first experience of CSA occurred before the age of 12 and approximately one third of the women had experienced CSA by the age of 9 years. Russell's (1983) findings showed that 72% of the women who reported CSA experienced the initial incident before the age of 14 years.

Finkelhor and Baron (1986) have organised the age of onset findings from a number of survey studies into percentages per year from ages 1 to 18 and found that risk for CSA first increases at the age of 6 to 7 years, rising dramatically at age 10 with children between 10 and 12 years appearing to be most at risk. These conclusions are drawn from survey studies using only female samples and thus may not be applicable to males who have been sexually abused.

1.3.3 Race

The majority of studies failed to find any association between ethnicity, or race, and CSA (Brown et al., 1998; Fleming et al., 1997; McCloskey & Bailey, 2000; Paveza, 1988; Vogeltanz et al., 1999). In her community study, Wyatt (1985) specifically examined two ethnic groups, Afro-American and White women, in terms of CSA experiences, and found no difference in the prevalence rates of CSA between these two groups. The only distinguishing feature between the two ethnic groups was that

the abuse started at a later stage in childhood in the Afro-American group of participants than in the White group of participants (Wyatt, 1985). A study conducted by Finkelhor et al. (1990) found there was a higher CSA risk among men who were of English or Scandinavian heritage, but no ethnic association with CSA was found among women.

1.3.4 Employment status and income of parents

Research into risk factors for physical abuse and neglect has found a strong association between low-income levels and the abuse of children (Brown et al., 1998). However, the majority of studies examining risk factors for CSA found no significant associations between socio-demographic factors, such as parental income level, social class or type of occupation, and CSA (Brown et al., 1998; Fleming et al., 1997; McCloskey & Bailey, 2000). Mixed findings have emerged from the few studies that found significant links between CSA and social class.

One study to document this type of association found, that at the time of the study, an annual family income of less than \$10 000 was the only risk factor out of eight potential factors that discriminated between sexually abused and nonabused respondents (Bergner et al., 1994). A study that compared families in treatment for father-daughter sexual abuse with a control group of families where no intrafamilial CSA was suspected also found low income level to be a significant risk factor for CSA (Paveza, 1988). In contrast, Russell (1986) found that respondents raised in families with a higher income level were more likely to have experienced intrafamilial sexual abuse than those who had grown up in families with a lower income level.

1.3.5 Education level of parents

Studies that explored the influence of level of parental education as a potential risk factor for CSA asked either about the number of completed school years of the mother (Bergner et al., 1994; Paveza, 1988), or about the highest level of education obtained by either parent (Finkelhor et al., 1990; Vogeltanz et al., 1999). There appears to be consensus among the findings of these studies that the variable of parental education is not able to differentiate between those respondents who reported CSA and those respondents who were not abused (Bergner et al., 1994; Finkelhor et al., 1990; Vogeltanz et al., 1999). In terms of risk of father-daughter incest, Paveza (1988) also found that maternal education was not a significant risk factor.

1.3.6 Family Structure

Numerous factors such as high rates of divorce, remarriage, cohabitation with new partners, and an increase in the number of single mothers, have contributed to the dramatic decline in the number of children growing up in nuclear families in many countries, including South Africa. Researchers in the area of CSA have become increasingly interested in whether the structure of a child's family has any influence on the risk of that child being sexually abused (Bolen, 2001).

Brown et al. (1998) conducted a prospective study of risk factors for child abuse and neglect and found sexual abuse to be significantly associated with four family factors, namely, the presence of a stepfather, harsh punishment, maternal sociopathy, and negative life events. In their large national survey of adults, Finkelhor et al. (1990) found that living without a natural parent during childhood was a significant risk factor for CSA. More specifically, girls were more vulnerable in all family circumstances except when living with two natural parents, whereas boys were vulnerable when living with only their mothers or with two non-natural parents (Finkelhor et al., 1990). Vogeltanz et al. (1999) found amongst their sample of women respondents that living without both biological parents before age 16 was significantly associated with an increased risk of CSA. Examining a variety of family structures in a large sample of reported cases of sexual abuse, Shah et al. (1995) found that children living in a family with divorced parents were the most likely to be sexually abused.

Examining risk factors for father-daughter incest, Herman and Hirschman (1981) found that a significantly greater number of respondents in the incest group grew up in families where the mother was absent for some period of time. A related finding was that 45% in the incest group but only 5% in the comparison group, reported having to assume some or all of the maternal responsibilities within their families (Herman & Hirschman, 1981).

In contrast to these results, Bergner et al. (1994) found no significant association between sexual abuse and family structure variables, such as presence of a step-parent, or separation from the mother during a period of childhood. McCloskey and Bailey (2000) interviewed both mothers and daughters about CSA and found that the presence of a stepfather, or boyfriend not biologically related to the child, did not differentiate between the sexually abused and non-abused groups of children. Similarly, in a study conducted by Fleming et al. (1997) the presence of a stepfather

was not a significant factor at the multivariate level. However this study did find that the death of a mother placed a child more at risk of CSA before age 12 and that maternal mental illness was a significant risk factor for CSA after the age of 12 years (Fleming et al., 1997). This suggests that an absent mother increases her child's vulnerability to CSA.

1.3.7 Social isolation and quality of relationships

Clinicians and researchers working in the field of CSA have speculated that poor relationships with family and peers may increase a child's vulnerability to sexual abuse (Bolen, 2000; Finkelhor & Baron, 1986). Mixed findings have emerged from studies that explored aspects of the child's relationships and degree of social isolation. Vogeltanz et al. (1999) found that women who reported a rejecting rather than loving relationship with their parents during childhood have an elevated risk of CSA. Similarly, Paveza (1988) found that families where mothers reported a distant relationship with their daughters were at higher risk of father-daughter incest than families where there was a close bond between mother and daughter.

The initial statistical results of Fleming et al.'s (1997) study led to the formulation of a single variable known as social isolation. This was comprised of a number of correlated variables that measured how many friends the respondent had while growing up, school performance, and degree of satisfaction with their adolescent social life (Fleming et al., 1997). Statistical analysis revealed that social isolation was a significant predictor of abuse that started before the age of 12 (Fleming et al., 1997). Finkelhor et al. (1990) found that being raised in an unhappy family environment was a strong risk factor for abuse. This particular study did not ask respondents about the level of domestic violence or physical abuse during childhood. It is thus unclear to what extent the variable of growing up in an unhappy family overlaps with these other factors. Bergner et al. (1994) measured aspects of childhood relationships such as emotional closeness to mother, physical affection from father, and number of friends. In contrast to findings from other studies, none of these variables were found to be significantly associated with risk of CSA (Bergner et al., 1994). Similarly, Shah et al. (1995) found that despite the natural father being identified most frequently as the intrafamilial perpetrator of sexual abuse, more than half of the sexually abused children in their sample described the relationship with their father as normal.

1.3.8 Violence in the home

A study examining risk factors in cases of father-daughter incest found that in families with a mother who has experienced violence at the hands of her husband, the daughter is at 6.51 times greater risk of sexual abuse than where no parental violence exists (Paveza, 1988). Although not directly linked to violence, the quality of the marital relationship has also been investigated as a risk factor in some studies. Paveza (1988) found that families where the marital relationship was rated as unsatisfactory were 7.19 times at greater risk of father-daughter sexual abuse than in families where the marriage was rated as satisfactory. Herman and Hirschman (1981) found that violent fathers were reported by 50% of the respondents in the incest group compared to 20% of the women in the comparison group.

Fleming et al. (1997) reported that physical abuse was a significant predictor of childhood sexual abuse. Women who had experienced physical abuse during childhood were 11 times more likely to be sexually abused than women reporting no physical abuse (Fleming et al., 1997). Research examining the link between prior victimization and CSA found that previous physical assault by a family member was a significant predictor of sexual abuse (Boney-McCoy & Finkelhor, 1995).

1.3.9 Parental substance abuse

Studies that have explored the links between parental substance abuse and sexual abuse of their children have also yielded mixed results. In their study examining the links between various adverse events in childhood and parental alcohol abuse, Dube et al. (2001) reported a CSA odds ratio of 3.1 and 1.3 for women and men respectively, if they grew up in a household where both parents abused alcohol. Similarly, Vogeltanz et al. (1999) found parental alcohol abuse was significantly associated with greater risk of CSA. Shah et al. (1995) reported that in 75.2% of the families in their sample of sexually abused children there was a history of chemical dependency.

Research focusing only on father-daughter incest showed no difference between the incest and comparison groups in terms of the father's drinking patterns (Herman & Hirschman, 1981). McCloskey and Bailey (2000) found both maternal and paternal alcohol abuse to be unrelated to the sexual abuse (both extrafamilial and intrafamilial) of daughters. Paternal drug use was also not a significant variable but

maternal drug use was a significant predictor of the sexual abuse of daughters (McCloskey & Bailey, 2000).

1.3.10 Other risk factors

A study in which both mothers and daughters were interviewed about CSA found that a history of maternal CSA puts the daughter at 3.6 times the risk for sexual abuse than other girls included in the sample (McCloskey & Bailey, 2000). Boney-McCoy and Finkelhor (1995) examined various types of prior victimization and found prior sexual assault to be the strongest predictor of subsequent CSA. Previous physical assault at the hands of a family member and indirect victimization, i.e. having a family member who has been assaulted in some way, are also risk factors for CSA (Boney-McCoy & Finkelhor, 1995).

Two studies to document the number of times the respondent moved home while growing up found this to be significantly linked to CSA with victims reporting a greater number of moves than non-victims (Fleming et al., 1997; McCloskey & Bailey, 2000). However in both these studies this variable did not remain significant at the multivariate level of statistical analysis, implying that there is some association with CSA but it is not a significant predictor on its own. It is unclear how this leads to an increased risk of CSA but seems to indicate that being raised in circumstances characterised by instability places a child in a vulnerable position in terms of sexual abuse. Frequent moves to new locations will also render a child more socially isolated among his/her peers. This factor may overlap with other variables measuring number and quality of relationships

1.4 South African findings on risk factors

In terms of the age of onset of abuse, a slightly different pattern has emerged from the South African studies compared to the findings of North American studies. It appears that there is a more even distribution of initial CSA incidents occurring in the pre-adolescent period and during adolescence. Collings (1991) reported a mean age of 11,5 years in a male sample and found 46.6% reported CSA incidents before age 11 years and 53.4% reported incidents occurring between ages 12 to 17 years in a female sample (Collings, 1997). Levett (1989b) reported that 39.3% of CSA cases occurred before the age of 13 years and 54.1% occurred between the ages of 14 to 18 years.

Only two South African studies that specifically set out to examine a number of potential risk factors could be located. Collings (1991) investigated the risk factors for male CSA among a sample of university students and found the following variables to be significant: being black, having punitive parents, experiencing emotional rejection from parents, and having an absent natural father during childhood.

Madu and Peltzer (2000) used Finkelhor's Risk Factor Checklist and found four factors that were able to differentiate at a significant level between the respondents who reported CSA and those who did not. Belonging to an ethnic group other than Northern Sotho, having a mother employed at a level above that of a labourer, having a step-parent present during childhood and growing up with domestic violence were all associated with reported CSA (Madu & Peltzer, 2000).

Cole (1995) conducted research into the family structure of reported cases of CSA and found that a large majority of the female subsample had been raised in families without a biological father. Furthermore, 86.7% of the girls in the sample were abused by the mother's new partner or by his friends or relatives (e.g. stepbrother of victim) which appears to confirm Finkelhor's finding that the presence of a stepfather increases a girl's risk of sexual abuse (Cole, 1995). While not explicitly aimed at examining risk factors of CSA, a second study in the Northern Province found that many respondents who reported CSA rated their childhood as being happy or average (Madu 2001).

In comparison to research in other countries, findings from South African studies are similar to that of international studies showing that disrupted family structures and relationships are associated with increased risk for CSA (Collings, 1991; Madu & Peltzer, 2000). However, local findings differ from international results in that both South African studies found ethnicity to be a significant risk factor whereas this has not been found in the majority of risk factor research carried out in other countries (Finkelhor & Baron, 1986). However, there is a striking discrepancy between the two South African studies with regard to the variable of ethnicity. Collings (1991) found that being black was associated with higher risk, while Madu and Peltzer (2000) found that all ethnic groups apart from that of Northern Sotho (the predominant black ethnic group in the Northern Province) were at increased risk for CSA. This highlights the need for further research to be conducted in South Africa in order to gain greater knowledge about the risk factors present within local communities and to gain clarification about discrepant findings.

1.5 Problems with research into risk factors

Researchers in the field of CSA risk have pointed out that it is sometimes difficult to determine whether a variable is a risk factor or whether it has emerged as a result of sexual abuse in childhood (Brown et al., 1998; Fergusson & Mullen, 1999; Finkelhor & Baron, 1986; Fleming et al., 1997). Most studies have employed adult samples and ask retrospective questions about childhood experiences. It is not always possible for adults to identify the specific temporal sequence of events that took place in childhood (Fergusson & Mullen, 1999; Fleming et al., 1987). Examples of such potentially problematic risk factors include poor relationships with parents, social isolation from peers, and an unhappy childhood. These factors may not have been present prior to the abuse but may have emerged as a result of the abuse impacting upon family relationships, peer interaction and the child's self-esteem (Finkelhor & Baron, 1986). In particular, family life might be remembered as being negative because sexual abuse took place within the family, or because the child's disclosure of extrafamilial sexual abuse was not believed or supported by family members (Collings, 1991; Finkelhor & Baron, 1986).

Linked to this is the problem of recall bias whereby the experience of childhood sexual abuse colours all memory of childhood events in a negative light leading to a greater recall of adverse experiences and relationships (Fergusson & Mullen, 1999). Fergusson and Mullen (1999) also pointed out that participants who are willing to disclose CSA experiences may be more willing to disclose other negative experiences of childhood. These biases in recall and reporting of childhood events could give rise to results indicating connections between CSA and negative childhood events when in fact these apparent associations emerge because of methodological problems (Fergusson & Mullen, 1999).

Finkelhor and Baron (1986) argued that certain risk factors could be a proxy for the real risk factor. For example, in studies where "few friends in childhood" emerged as a risk factor, the actual risk factor might be "feeling lonely" (Finkelhor & Baron, 1986). Linked to this is the imprecise nature of the variables that are commonly examined in risk factor research (Finkelhor & Baron, 1986; Fleming et al., 1987). Many variables are very broadly defined and could be broken down into smaller, more specific variables leading to a precise understanding of what constitutes risk for sexual abuse.

Another methodological issue linked to the widespread use of adult samples is the possibility that risk factors for CSA may change over time as other social changes take place. The use of adult samples informs us of factors that placed a child at risk for CSA a decade, or more earlier. These factors may not hold true for the present generation of children.

A somewhat different problem with risk factor research is that most studies tend to overlook cases where numerous risk factors were present but no CSA took place. These types of cases could provide valuable information on protective factors. The quantity and particular constellation of protective factors present in a child's life may be more important than the number and type of risk factors present. An improved understanding of protective factors would greatly assist in the correct identification of high-risk children and could be utilised in the design and implementation of preventative strategies.

The various problems in risk factor research point to the need for more methodologically sound studies to be conducted. Variables need to be unambiguous and questions structured in such a way that temporal sequencing of childhood events can be done (Finkelhor & Baron, 1986). Prospective and longitudinal studies would overcome many of the problems discussed here and would allow researchers a more in-depth understanding of the complex processes that place a child at risk for sexual abuse (Vogeltanz et al., 1999). Studies utilising both adult and child, or adolescent subsamples could limit the possibility that historical trends and changes affected the risk factors. Finally, it is also important to determine the protective factors in conjunction with enquiries into risk factors.

1.6 Summary

Research into risk factors for CSA provides valuable information for prevention and intervention strategies. Studies into the prevalence and risk for CSA are plagued by a number of definitional and methodological issues. Mixed findings have emerged from studies that have examined the factors that increase a child's vulnerability to sexual abuse. Nevertheless, the body of research has increased the knowledge and understanding of the circumstances that place a child at higher risk.

Two demographic variables that consistently emerged as risk factors for CSA were female gender (Bolen, 2001; Brown et al., 1998; Collings, 1991; Finkelhor & Baron, 1986), and the pre-adolescent age group (8 to 12 years) (Finkelhor & Baron, 1986).

In terms of familial characteristics, poor or violent family relationships (Herman & Hirschman, 1981; Paveza, 1988; Vogeltanz et al., 1999) and a history of physical abuse (Boney-McCoy & Finkelhor, 1995; Fleming et al., 1997) have also consistently emerged as risk factors for CSA.

Conflicting results have emerged from studies that examined various factors related to family structure and psychopathology. Increased vulnerability to CSA has been found in families where one or both parents were absent for a substantial period of the child's life (Finkelhor et al., 1990; Fleming et al., 1997; Herman & Hirschman, 1981; Vogeltanz et al., 1999), and where a stepfather was present (Brown et al., 1998). However, other studies found no significant association between sexual abuse and variables related to family structure (Bergner et al., 1994; McCloskey & Bailey, 2000).

Some research has shown parental substance abuse to be a significant risk factor (Dube et al., 2001; Shah et al., 1995; Vogeltanz, 1999) while other studies showed no links between parental alcohol abuse and CSA (Herman & Hirschman, 1981; McCloskey & Bailey, 2000).

Finally, no support has emerged for race (Brown et al., 1998; Fleming et al., 1997; McCloskey & Bailey, 2000; Paveza, 1988; Vogeltanz et al., 1999) as being a CSA risk factor. In addition, the majority of studies failed to find socio-economic status, as measured by employment status and income level of parents, to be a significant risk factor (Brown et al., 1998; Fleming et al., 1997; McCloskey & Bailey, 2000).

Only two South African studies that specifically examined a range of potential risk factors could be located. The results of these studies are similar to international findings, showing that disrupted family structures and relationships are associated with increased risk for CSA (Collings, 1991; Madu & Peltzer, 2000). The finding from both these studies that ethnicity was a significant risk factor is not consistent with the results of research carried out in other countries (Finkelhor & Baron, 1986).

The results of numerous studies into risk factors for CSA are mixed and often contradictory. The picture of who is most at risk is still very unclear and incomplete, leading one to conclude that the current body of findings cannot be utilised in practical ways, such as in clinical assessment or legal situations (Bergner et al., 1994). Despite these problems, continued research into risk factors is important in

that it can provide valuable information for various types of intervention and prevention strategies (Bergner et al., 1994; Bolen, 2001; Fleming et al., 1997; Madu & Peltzer, 2000; Vogeltanz et al., 1999).

The present study aimed to investigate whether any demographic and familial differences existed between children and adolescents who were sexually traumatised and children and adolescents who were non-sexually traumatized. In addition, the study also explored whether any demographic and familial differences existed between children and adolescents who experienced extrafamilial sexual abuse and those who experienced intrafamilial sexual abuse.

2. METHOD

2.1 Research Design

The present study made use of an ex post facto research design. The sample was self-selected, no control group was used, and no intervention was implemented. Information was gathered by means of a structured interview format.

2.2 Participants

Participants were 94 children and adolescents who attended interviews at the Bathuthuzele Youth Stress Clinic, which is based at the MRC Unit for Anxiety and Stress Disorders, Department of Psychiatry, University of Stellenbosch. All participants resided within the urban areas of Cape Town and had been exposed to at least one life-threatening trauma as defined by the DSM IV criteria for post-traumatic stress disorder (PTSD) (APA, 1994). Participants did not necessarily meet the full criteria for PTSD or any other DSM IV diagnosis.

The total sample consisted of 59 females (62.77%) and 35 males (37.23%). Ages for the sample ranged from 8.25 years to 19.0 years (mean age = 14.25 years; SD = 2.63 years). Participants were fairly evenly divided between primary school and high school level, with 45 (47.9%) in Grades 1 to 7, and 43 (45.7%) in Grades 8 to 12. Six participants did not indicate their school grade at the time of the study.

Of the 94 participants, 50 reported at least one incident of contact sexual abuse that had occurred before the age of 18 years, giving a prevalence rate of 53%. Of the female participants, 40 (42.56%) were sexually traumatised, and of the males 10 (10.63%) were victims of sexual trauma.

Participants who were not sexually traumatised were exposed to the following types of trauma: car accident, physical violence, natural disaster, fire, witnessing a violent crime, being a victim of a violent crime, being confronted by traumatic news, and witnessing domestic violence. Many participants had been exposed to more than one type of trauma.

The mean age of participants, who were sexually traumatised, at the time of the interview, was 14.56 years ($SD = 2.51$ years). Mean age at time of interview of participants who were non-sexually traumatised was 13.9 years ($SD = 2.74$ years). There was no significant difference in mean age between the two subgroups ($t(91) = -1.215, p > 0.05$).

Table 1 displays the demographic variables of both the sexually traumatised and non-sexually traumatised subgroups.

Table 1
Demographic Variables of Participants ($N = 94$)

Variables	Total Sample ($N = 94$) N (%)	Sexually Traumatized ($n = 50$) n (%)	Non-sexually Traumatized ($n = 44$) n (%)
Ethnicity			
Coloured	78 (82.98)	41 (82)	37 (84.09)
Black	10 (10.64)	6 (12)	4 (9.09)
White	6 (6.38)	3 (6)	3 (6.82)
Religion			
Protestant	37 (39.36)	20 (40)	17 (38.64)
Catholic	18 (19.15)	9 (18)	9 (20.45)
Muslim	15 (15.96)	8 (16)	7 (15.91)
Other	15 (15.96)	8 (16)	7 (15.91)
Missing info	9 (9.57)	5 (10)	4 (9.09)
Grade			
1-7	45 (47.87)	24 (48)	21 (47.73)
8-12	43 (45.74)	23 (46)	20 (45.45)
Missing info	6 (6.38)	3 (6)	3 (6.82)

Of the total sample, 78 (82.98%) of the participants were Coloured, 10 (10.64%) were Black (Xhosa), and 6 (6.38%) were White. According to data from the 1999 October Household survey, this sample is over-representative of the Coloured population which makes up 56.06% of the Western Cape population and under-

represents both the Black and White population groups which make up 21.9% and 21% respectively of the Western Cape population (Hirschowitz, Sekwati, & Budlender, 2001). Three (50%) of the White participants, six (60%) of the Black participants, and forty-one (52.6%) of the Coloured participants were sexually traumatised.

2.3 Assessment

Information was obtained through an intake interview conducted by a clinical psychologist. Firstly demographic information was gathered. This information included date of birth, ethnicity, religion, grade, parental marital status, parental occupation, income level, whether a family member receives a disability grant from the government, who currently resides in the participant's home, whether the participant smokes cigarettes, drinks alcohol and/or smokes marijuana and whether the participant's parents smoke cigarettes, drink alcohol and/or smoke marijuana. A clinical interview was undertaken to assess for the presence of PTSD or any other DSM IV diagnosis. The interview also focused on physical and sexual abuse experiences. Information about the following areas of the participant's childhood experiences was gathered: primary caretaker, separation from the primary caretaker, discipline and punishment at home, physical abuse, domestic violence, and sexual abuse. Previous research into risk factors of sexual abuse guided the choice of questions used in the interview.

All participants were asked a broad question about whether they had ever had any upsetting sexual experiences. They were then asked two questions that specifically enquired about extrafamilial and intrafamilial sexual abuse incidents. Only the participants who answered "yes" to one or both of these questions were asked to give details about the perpetrator and incident(s). The format of the interview allowed for a wide range of sexually abusive experiences to be recorded. Only incidents that fell within the following definition were counted as sexual abuse experiences: contact abuse that occurred at or before the age of 18 years; any abuse by a family member, all forms of abuse by extrafamilial perpetrators who were five years older than the victim regardless of whether actual or threatened force was used and extrafamilial abuse with peers where some form of force or threat of force was used by the perpetrator.

Throughout the interview, participants were encouraged to ask for explanations if necessary. Participants were also given the choice of whether they wanted their

caretaker to sit in the same room while the interview was being conducted or to wait outside of the interview room. Interviews were conducted in either English or Afrikaans according to the participant's preference.

2.4 Procedure

Information regarding trauma, PTSD, and the Bathuthuzele Youth Stress Clinic was disseminated to members of the public in various ways. Adverts were placed in community based newspapers in the target region. Leaflets containing the relevant information were distributed to staff at community health clinics, private health practices, and in the child psychiatry wards of two large academic teaching hospitals. In addition, members of the research team undertook educational visits to various schools, religious organisations such as youth groups, and children's homes. The staff members of these institutions were informed about the research project as well as the definitions and effects of trauma, and the signs of PTSD.

Thus all participants were referred to the clinic by an adult in a position of responsibility, either a teacher, health practitioner, parent, or guardian. Telephonic contact was consequently made with the primary caretaker of each potential participant and a brief screening interview was conducted over the phone. If the participant met the inclusion criteria, an appointment was arranged. The inclusion criteria for the present study were as follows: fluency and a basic literacy in English or Afrikaans and exposure to at least one trauma as defined by the PTSD criteria in the DSM-IV (APA, 1994). In addition the participant could not be older than 19 years. Participants were expected to be accompanied by a caretaker and to utilise private or public transport to attend an appointment at the clinic. Participants were reimbursed for any travel expenses upon attending the first appointment.

Informed consent was obtained from all participants and their caretakers at the beginning of the individual interview. Participants and their caretakers were informed that they could refuse participation in the interview at any stage. Individual interviews were held with each participant. Five qualified clinical psychologists, each with at least three years experience in child and adolescent assessment and diagnosis conducted the interviews. At the end of the interview, clinicians offered feedback and made appropriate referrals where necessary. The interview was conducted within one session and each interview lasted approximately two hours.

Participants who were diagnosed as currently having PTSD were referred to a drug trial conducted at a nearby psychiatric institution. If psychotherapy was indicated, participants were referred to private practitioners or to the child psychiatry departments of government hospitals for follow-up and therapy. Clinicians also made use of other available resources, such as psycho-educational leaflets, referrals to non-governmental organisations that specialise in family therapy, trauma counselling and sexual abuse counselling. Participants were given the contact number of the clinician and told that they could phone for more information, feedback or to raise any other concerns.

Clinicians were prepared to report all cases of child abuse to the relevant office of the Department of Social Services. This duty to inform was clearly explained to participants and their caretakers. However, all participants who reported on sexual abuse had previously disclosed the abuse to a caretaker or teacher and in many cases the abuse had also been reported to the police. In all cases the sexual abuse had stopped at some point prior to participation in the study.

All data was entered into a computer program using participant identification numbers. Thus the names of participants were available only to the clinicians and the person who conducted the initial telephonic screening interview.

2.5 Statistical procedures

Statistical analysis by means of SPSS (version 10.0), comprising descriptive statistics, chi square tests and logistic regression was conducted. The sample was divided into two groups depending on the presence or absence of sexual abuse experiences. Chi square tests were performed on a number of variables to ascertain whether any significant differences emerged between the two groups. The same variables were then used in a further set of chi square tests to compare the subsample that had experienced only extrafamilial sexual abuse with the group who had experienced intrafamilial sexual abuse.

In order to ascertain whether certain variables could predict the occurrence of sexual abuse, a logistic regression analysis was run on the variables that had emerged as significant in differentiating between the sexual abused and non-sexually abused groups. A number of demographic variables were controlled for in this analysis.

3. RESULTS

3.1 Family Variables

Family variables, for both subgroups, are shown in Table 2. In terms of family structure, Table 2 indicated that 39 (41.49%) participants reported that their parents are still married or cohabiting, while 17 (18.09%) participants' parents were never married or never lived together, and 26 (27.66%) were divorced. A minority, 11 (11.7%) have one deceased parent. Information regarding remarriage was not consistently collected and therefore has not been reported.

Of the non-sexually traumatised group, the majority 24 (54.5%) had parents who were still married or living together whereas only 15 (30%) of the sexually traumatised group reported that their parents were married or cohabiting. In this latter group 18 (36%) reported that their parents were divorced or separated and 14 (28%) were raised in families where the parents had never married and were not cohabiting. In contrast, of the non-sexually traumatised participants only 8 (18.18%) had divorced or separated parents and 3 (6.82%) reported that their parents had never married. A higher proportion of widowed parents were found among the non-sexually traumatised group, 8 (18.18%) compared to 3 (6%) of those who were sexually traumatised.

With regards to maternal employment status of the total sample, 11 (11.7%) participants reported unemployed mothers while 19 (20.21%) described their mothers as housewives. Slightly fewer fathers were reported as unemployed (7.45%). A fairly equal number of semi-skilled mothers: 23 (24.47%), and fathers: 22 (23.4%), were reported within this sample. Similarly, in the skilled/professional categories a total of 15 (15.96%) mothers and 18 (19.15%) fathers were employed in these types of positions. The most noticeable difference between the sexually and non-sexually traumatised subgroups was in the skilled category for paternal employment with 4 (8%) and 12 (27.27%) reported respectively.

Table 2
Family Variables (N = 94)

	Total Sample (N = 94) N (%)	Sexually Traumatized (n = 50) n (%)	Non-sexually Traumatized (n = 44) n (%)
Marital Status of Parents			
Married/ Living together	39 (41.49)	15 (30)	24 (54.5)
Divorced/ Separated	26 (27.66)	18 (36)	8 (18.18)
Never Married	17 (18.09)	14 (28)	3 (6.82)
Widowed	11 (11.7)	3 (6)	8 (18.18)
Missing Information	1 (1.06)	0 (0)	1 (2.27)
Maternal Employment Status			
Unemployed	11 (11.7)	8 (16)	3 (6.82)
Housewife	19 (20.21)	8 (16)	11 (25)
Pensioner	1 (1.06)	1 (2)	0 (0)
Semi-skilled	23 (24.47)	14 (28)	9 (20.45)
Skilled	10 (10.64)	4 (8)	6 (13.64)
Professional	5 (5.32)	2 (4)	3 (6.82)
Other	4 (4.26)	2 (4)	2 (4.55)
Missing Information	21 (22.34)	11 (22)	10 (22.73)
Paternal Employment Status			
Unemployed	7 (7.45)	4 (8)	3 (6.82)
Pensioner	3 (3.19)	3 (6)	0 (0)
Semi-skilled	22 (23.4)	9 (18)	13 (29.55)
Skilled	16 (17.02)	4 (8)	12 (27.27)
Professional	2 (2.13)	2 (4)	0 (0)
Other	8 (8.51)	4 (8)	4 (9.09)
Missing Information	36 (38.3)	24 (48)	12 (27.27)
Disability Grant			
yes	8 (8.51)	7 (14)	1 (2.27)
no	80 (85.12)	38 (76)	42 (95.45)
Missing Information	6 (6.38)	5 (10)	1 (2.27)

A total of 21 (22.34%) participants were unable to describe their mother's occupation and 36 (38.3%) could not provide information regarding their father's occupation. This is possibly linked to the number of participants who have spent the majority of their childhood living in households headed by their biological mother, or by other relatives such as, aunts, grandparents, or in other situations such as residential homes. Participants living in these types of circumstances may well have little or no contact with their biological parent(s) not currently residing in their home.

The vast majority of participants were unable to provide information about the income level of their parents (or primary caretakers). Thus the closest variable pertaining to socio-economic level is the employment status and type of work that parents and primary caretakers do. However, this variable provides limited information mainly because many participants were unable to describe the type of work undertaken by their parents.

A total of 8 (8.51%) participants reported that their immediate family receives a disability grant. The majority of these participants, 7 (14%) were sexually traumatised and only 1 (2.27%) non-sexually traumatised participant reported a family member receiving a disability grant.

3.2 Risk factors

The sexually traumatised participants were compared with the non-sexually traumatised participants on 3 demographic (see Table 1) and 15 family variables (see Table 2) by means of a 2 x 2 chi-square analysis. The family variables entered into the chi-square analysis are displayed in Table 3. Of these, 2 proved to be significant discriminators between the sexually traumatised and the non-sexually traumatised groups. The significant family variables were marital status of parents – Single, divorced, widowed, ($\chi^2 = 6.327$, $df = 1$, $p < 0.05$) and family receives disability grant, ($\chi^2 = 4.657$, $df = 1$, $p < 0.05$).

As shown in Table 4 for demographic variables, gender (female) ($\chi^2 = 13.575$, $df = 1$, $p < 0.05$) proved to be significant in discriminating between the between the two groups.

The odds ratios of the three significant factors are displayed in Table 5. This shows that the female participants have a 1.853 chance of being sexually abused while participants from families that receive a disability grant have a 6.689 odds ratio and those from families with single, divorced or widowed parents have a 1.584 odds ratio of being sexually abused.

Table 3

Comparison of Sexually Traumatized and Non-sexually Traumatized Participants in terms of Family Variables by means of Chi-square Tests

	Sexually Traumatized	Non-sexually Traumatized	Chi-square	p
Parental marital status: married/living together	15	24	6.327	0.012*
Parental marital status: single/divorced/widowed	35	19		
Family receives disability grant: yes	7	1	4.657	0.031*
Family receives disability grant: no	38	42		
Mother employed	31	31	1.939	0.164
Mother unemployed	8	3		
Father employed	22	29	0.488	0.485
Father unemployed	4	3		
Mother alive	44	39	0.239	0.625
Mother deceased	4	4		
Father alive	39	41	2.226	0.136
Father deceased	8	3		
Violence between parents	19	18	0.083	0.773
No violence between parents	31	26		
Medical attention self	10	5	1.198	0.274
No medical attention	40	38		
Separated from primary caretaker	14	12	0.006	0.937
Not separated from primary caretaker	36	32		
Suspect substance abuse in family member	23	18	0.161	0.689
No substance abuse family member	27	25		
Substance abuse primary caretaker	2	4	1.077	0.299
No substance abuse primary caretaker	48	39		
Stepfather in home	3	4	0.324	0.569
No stepfather in home	47	40		
Institutional setting	9	6	0.332	0.564
No institutional setting	41	38		
Maternal drug abuse	1	1	0.019	0.891
No maternal drug abuse	45	37		
Paternal drug abuse	8	3	2.999	0.083
No paternal drug abuse	28	35		

* Significant

Table 4
Comparison of Sexually Traumatized and Non-sexually Traumatized Participants in terms of Demographic Variables by means of Chi-square Tests

	Sexually Traumatized	Non-sexually Traumatized	Chi-square	p
Gender: Female	40	19	13.575	0.000*
Gender: Male	10	25		
Ethnicity: White	3	3	0.026	0.871
Ethnicity: Non-White	47	41		
Grade: 1-7	24	21	0.059	0.808
Grade: 8-12	23	20		

* Significant

Table 5
Odds Ratios for Risk Factors Associated with Child Sexual Abuse

Variable	Odds Ratio
Gender: Female	1.853
Parental Marital Status: Single/ Divorced/ Widowed	1.584
Family Receives Disability Grant: Yes	6.689

The three significant risk factors were then entered into a step-wise logistic regression model. The results displayed in Table 6 show that being female and coming from a family where the parents are single/ divorced/ widowed are both significant predictors of CSA in this sample.

Table 6
Logistic Regression of Significant Risk Factors

Risk Factors	B value	S.E.	p
Gender: Female	1.567	0.515	0.002*
Parental Marital Status: Single/ Divorced/ Widowed	1.326	0.521	0.011*
Family Receives Disability Grant: Yes	2.225	1.193	3.481

* Significant

The sample of sexually abused participants was divided into two groups: those who experienced extrafamilial abuse only and those who experienced intrafamilial abuse. Four cases where both extra- and intrafamilial sexual abuse had occurred were grouped with those who had experienced intrafamilial abuse only. This was done because the intrafamilial abuse had been the most repetitive and pervasive type of

sexual abuse experienced by these four participants. These subgroups were compared in terms of family variables by means of chi square tests (Table 7).

Table 7

Comparison of Extrafamilial Sexually Traumatized Participants and Intrafamilial Sexually Traumatized Participants in terms of Family Variables by means of Chi-square Tests

	Extrafamilial Sexually Traumatized	Intrafamilial Sexually Traumatized	Chi-square	p
Parental marital status: married/living together	13	2	3.431	0.064
Parental marital status: single/divorced/ widowed	21	14		
Family receives disability grant: yes	4	3	0.338	0.561
Family receives disability grant: no	26	12		
Mother employed	21	10	0.870	0.351
Mother unemployed	4	4		
Father employed	18	4	1.930	0.165
Father unemployed	2	2		
Mother alive	29	15	1.983	0.159
Mother deceased	4	0		
Father alive	26	13	1.378	0.241
Father deceased	7	1		
Violence between parents	11	8	1.438	0.230
No violence between parents	23	8		
Medical attention self	6	4	0.368	0.544
No medical attention	28	12		
Separated from primary caretaker	9	5	0.123	0.726
Not separated from primary caretaker	25	11		
Suspect substance abuse in family member	15	8	0.152	0.697
No substance abuse family member	19	8		
Substance abuse primary caretaker	2	0	0.980	0.322
No substance abuse primary caretaker	32	16		
Stepfather in home	2	1	0.003	0.959
No stepfather in home	32	15		
Institutional setting	5	4	0.781	0.377
No institutional setting	29	12		
Maternal drug abuse	0	1	2.337	0.126
No maternal drug abuse	32	13		
Paternal drug abuse	6	2	0.000	1.000
No paternal drug abuse	21	7		

No significant differences in terms of family variables were found between those participants who experienced extrafamilial sexual trauma and those who experienced intrafamilial sexual trauma.

The subgroups were compared in terms of demographic variables by means of chi square tests (Table 8). No significant differences between the two subgroups emerged on these demographic variables.

Table 8

Comparison of Extrafamilial Sexually Traumatized Participants and Intrafamilial Sexually Traumatized Participants in terms of Demographic Variables by means of Chi-square Tests

	Extrafamilial Sexually Traumatized	Intrafamilial Sexually Traumatized	Chi-square	p
Gender: Female	25	15	2.780	0.095
Gender: Male	9	1		
Ethnicity: White	2	1	0.003	0.959
Ethnicity: Non-White	32	15		
Grade: 1-7	18	6	0.537	0.464
Grade: 8-12	15	8		

3.3 Sexual abuse incidents

3.3.1 Types of sexual abuse

A range of different types of sexual abuse experiences was reported. This information is displayed in Table 9. Severe penetrative abuse, such as rape and sodomy were reported by a large portion of both male and female participants who were sexually abused by a non-relative (90% and 67.5% respectively).

Among the female participants who were sexually abused by a family member, incidents such as sexual touching, fondling, stroking, and frottage were more commonly experienced (42.5%), followed by rape (22.5%). One male participant reported intrafamilial abuse (sodomy).

Table 9
Types of Sexual Abuse

	Female (n=40)	Male (n=10)	Total (n=50)
	n (%)	n (%)	n (%)
Extrafamilial Sexual abuse	25 (62.5%)	9 (90%)	34 (68%)
Touching, fondling, stroking, frottage	15 (37.5%)	6 (60%)	21 (42%)
Kissing	2 (5%)	2 (20%)	4 (8%)
Exposure	0 (0%)	3 (30%)	3 (6%)
Fellatio	0 (0%)	0 (0%)	0 (0%)
Sodomy, Rape	27 (67.5%)	9 (90%)	36 (72%)
Intrafamilial Sexual Abuse	11 (27.5%)	1 (10%)	12 (24%)
Touching, fondling, stroking, frottage	17 (42.5%)	0 (0%)	17 (34%)
Kissing	5 (12.5%)	0 (0%)	5 (10%)
Exposure	3 (7.5%)	0 (0%)	3 (6%)
Fellatio	0 (0%)	0 (0%)	0 (0%)
Sodomy, Rape	9 (22.5%)	1 (10%)	10 (20%)
Other	2 (5%)	0 (0%)	2 (4%)
Extra- & Intrafamilial Sexual Abuse	4 (10%)	0 (0%)	4 (8%)

It is important to note that because the focus of the interview was on trauma experiences and not specifically on sexual abuse, some important qualitative information about the sexual abuse experiences was not collected. While some participants included all aspects of their abuse experiences during the interview, others focused only on the most severe aspect (e.g. rape or sodomy) and did not include other aspects such as touching or kissing that may have occurred before or at the same time as the rape. Therefore, the figures in some categories of sexual abuse (touching, kissing, fellatio) displayed in Table 9 do not represent actual abuse experiences as accurately as the figures in other categories (rape, sodomy).

Thirty-four (68%) of the sexual abuse victims were abused by someone outside of the family (i.e. not a first degree relative), 12 (24%) by a family member, and 4 (%) experienced both extra- and intrafamilial sexual abuse.

The first incident of extrafamilial abuse was reported as having started between the ages of 3 and 18 years ($M = 11.69$ years; $SD = 4.07$ years). Intrafamilial abuse first occurred between the ages of 4 and 16 years ($M = 9.31$ years; $SD = 3.79$ years).

3.3.2 Relationship to perpetrator

Information regarding the relationship to the perpetrator was obtained from all participants for each of the sexual abuse incidents (see Table 10). All the sexual abuse perpetrators in the present study were male. Nine of the sexual abuse victims reported more than one perpetrator. Therefore the 50 participants who were sexually abused reported a total of 60 perpetrators. Of the extrafamilial abuse perpetrators, 22 (36.66%) fell into the "other" category, usually strangers, or gangsters living in the area but not known to the child. The female participants who were sexually abused by a family member reported 8 (16.33%) perpetrators to be uncles. Two perpetrators were cousins, 2 were biological fathers and 2 were stepfathers (4.08% each).

Table 10
Relationship to Perpetrator

	Perpetrators of female victims (\underline{n} = 49) \underline{n} (%)	Perpetrators of male victims (\underline{n} = 11) \underline{n} (%)	Total Perpetrators (\underline{n} = 60) \underline{n} (%)
Extrafamilial			
Someone living in the house	5 (10.2)	0 (0)	5 (8.33)
Neighbour	4 (8.16)	2 (18.18)	6 (10)
Teacher	0 (0)	1 (9.09)	1 (1.66)
Family friend	5 (10.2)	1 (9.09)	6 (10)
Classmate	3 (6.12)	1 (9.09)	4 (6.66)
Other/stranger	17 (34.69)	5 (45.45)	22 (36.66)
Total number extrafamilial perpetrators	34 (69.39)	10 (90.9)	44 (73.33)
Intrafamilial			
Parent	2 (4.08)	0 (0)	2 (3.33)
Step-parent	2 (4.08)	1 (9.09)	3 (5)
Uncle	8 (16.33)	0 (0)	8 (13.33)
Cousin (male)	2 (4.08)	0 (0)	2 (3.33)
Other family member	1 (2.04)	0 (0)	1 (1.66)
Total number intrafamilial perpetrators	15 (30.06)	1 (9.09)	16 (26.66)

3.3.3 Patterns of sexual abuse

While the majority of participants reported single incidents of sexual abuse, there were many who experienced ongoing abuse and some who had experienced a combination of these at the hands of different perpetrators. When abuse was experienced repeatedly over a period of time it was impossible for the participant to estimate the number of incidents that had occurred.

Table 11 illustrates how many participants experienced various patterns of abuse. Of the sexually abused participants, a total of 21 (42%) experienced one incident with one extrafamilial perpetrator. This occurred most commonly within the subsample that experienced only extrafamilial abuse. A slightly different pattern emerges for those experiencing intrafamilial abuse only. Here the category occurring most frequently is multiple incidents by the same perpetrator with 8 (16%) of the sexually abused participants reporting this type of abuse and 3 (7.5%) reporting one incident with one perpetrator.

Four female abuse victims reported both extra- and intrafamilial abuse. Of these, 3 had been abused on more than one occasion by a family member, and at a different point during childhood had been abused on more than one occasion by someone outside of the family.

Table 11
Incidents reported by each Participant in Sexual Abuse Subsample

	Females (n=40)	Males (n=10)	Total (n=50)
	n (%)	n (%)	n (%)
Extrafamilial			
One incident with one perpetrator	15 (37.5)	6 (60)	21 (42)
One incident with 2 or more perpetrators	1 (2.5)	2 (20)	3 (6)
Multiple incidents with same perpetrator	5 (12.5)	1 (10)	6 (12)
Multiple incidents with same perpetrators (more than 1)	2 (5)	0 (0)	2 (4)
Multiple incidents, different perpetrators	2 (5)	0 (0)	2 (4)
Intrafamilial			
One incident with one perpetrator	3 (7.5)	1 (10)	4 (8)
One incident with 2 or more perpetrators	0 (0)	0 (0)	0 (0)
Multiple incidents with same perpetrator	8 (20)	0 (0)	8 (16)
Multiple incidents, different perpetrators	0 (0)	0 (0)	0 (0)
Both Intra- and Extrafamilial			
Multiple incidents with 1 family member & 1 incident with 1 extrafamilial perpetrator	1 (2.5)	0 (0)	1 (2)
Multiple incidents with 1 family member & multiple incidents with extrafamilial perpetrators	3 (7.5)	0 (0)	3 (6)

4. DISCUSSION

4.1 Prevalence of sexual trauma compared to other non-sexual traumas

A review of prevalence studies conducted in the USA showed that reported prevalence rates ranged between 6% and 62% for females, and between 3% and 31% for males (Peters et al., 1986). Examining prevalence studies conducted in countries outside North America, Finkelhor (1994) found rates range between 7% and 36% for females and between 3% and 29% for males. South African studies using university student samples found prevalence rates ranging from 23.7% (Madu, 2001) to 43.6% (Levett, 1989a) for females and 28.9% (Collings, 1991) for males. Amongst a secondary school sample, Madu and Peltzer (2000) found prevalence rates of 53.2% for females and 60% for males.

In a sample of South African children and adolescents exposed to a broad spectrum of trauma, sexual trauma seemed to be most prevalent with a rate of 53% for contact CSA found among the participants of the present study (42.56% for females, and 10.63% for males). The present study did not make use of a random sample as all of the participants had experienced some form of life-threatening trauma. Because of this specific selection criterion, the rates of sexual trauma were slightly higher than the prevalence rates obtained in other studies that used larger samples, which were more representative of the general population.

4.2 Nature of sexual trauma

Participants in the present study reported a high number of penetrative acts of sexual abuse such as rape and sodomy. All of the male participants who had been sexually abused were sodomised (n=10), and 36 counts of rape were reported by the 40 females who were sexually abused. This is much higher than what has been reported in previous South African research where the figures ranged from 28.9% for oral, anal or vaginal intercourse among a secondary school sample (Madu & Peltzer, 2000) to 5.8% for sexual intercourse among a female student sample (Collings, 1997). The greater prevalence of penetrative forms of sexual abuse found in the present study is possibly due to the research project's focus on trauma. It is likely that only children who had experienced more "severe" and violent forms of sexual abuse came to the attention of the adults who were referral agents to the study. While there is no doubt that an exceedingly large number of children (both female and male) are raped in South Africa, the types of sexual abuse incidents portrayed in the present sample is not necessarily an accurate picture of reality.

The mean age at which sexual abuse first occurred (11.63 years for extrafamilial abuse and 9.31 years for intrafamilial abuse) is in line with what has been found in risk factor research. Children are most vulnerable to CSA during the pre-adolescent stage of 8 to 12 years (Finkelhor & Baron, 1986). Within the present study there is a wide range of ages at which both extra- and intrafamilial abuse started (3 to 18 years). This highlights how susceptible children of all ages are to abuse. Therefore at a practical level, interventions whether clinical or preventative, need to target all age groups.

4.3 Risk factors

In terms of risk factors for CSA, the present study showed that three variables differentiated to a significant degree at the bivariate level of statistical analysis between those children and adolescents who were sexually traumatised and those who were non-sexually traumatised. These variables are gender (female), family structure (having parents who were single, divorced or widowed), and coming from a family that receives a disability grant. The finding that the female participants were at greater risk of being sexually abused than the male participants is in line with the findings of the majority of studies examining CSA risk factors (Bolen, 2001; Brown et al., 1998; Collings, 1991; Finkelhor & Baron, 1986; Shah et al., 1995). The present study has a gender ratio of 3.5 females to every male having been sexually abused. This falls within the range of female to male ratios found in other studies. In their review of various studies looking at CSA risk factors, Finkelhor and Baron (1986) reported that the gender ratio ranges between 4 females to every male and 1.5 females to every male.

While it has been a consistent finding that female children are at greater risk of being sexually abused than males, the rate at which male children experienced forced and violent acts of sexual abuse is still unacceptably high. Interventions and preventative programs should not exclude males merely because they are at slightly lower risk than female children. As other researchers have pointed out, information about all aspects of male CSA is lacking relative to what is known about female CSA (Chandy et al., 1997; Collings, 1991; Finkelhor & Baron, 1986). Thus more research is necessary to enable us to better understand the scope and nature of the problem of male CSA and to enable relevant agencies to implement appropriate intervention strategies.

The second significant risk factor pertains to family structure. It would appear that children are more vulnerable to sexual abuse if they have grown up in circumstances where there is no marital relationship between parents. The relationship has either been non-existent, where the child has been raised by a single parent, or the relationship has been permanently disrupted, through divorce or death. No information about the temporal sequence of parental separation, divorce or death and the sexual abuse incidents was obtained in the present study. Disrupted family relationships have been found to be a risk factor for CSA in other studies (Bolen, 2001), with Shah et al. (1995) finding that out of various family structures, living in a divorced family placed a child at most risk for CSA. Other studies examined aspects of family structure and relationships that differ slightly to those examined in the present study. For example, Vogeltanz et al. (1999) found that not living with both biological parents by age 16 placed children at increased risk. Finkelhor et al. (1990) found girls to be more at risk in all family circumstances except when living with two natural parents, while boys were vulnerable when living with only their mothers or with two non-natural parents.

The pattern of findings in the present study do not lead to a clear understanding of why disrupted marital status of parents should place a child at increased risk for CSA. Other variables that indicate disruption of family structure or relationships were also examined and proved not to have much impact on the risk of CSA. These variables include: separation from primary caretaker for more than three months at any point during childhood, death of biological mother or father, presence of a step-father in the home, and spending any period of time in an institutional setting (e.g. a children's home). No significant differences emerged between the sexually traumatised and non-sexually traumatised participants when compared on these variables.

One possible explanation is that these variables are risk factors for trauma experiences per se, including sexual abuse and therefore no differences between the subgroups of the present sample would emerge because all of the participants had been exposed to at least one serious trauma. However, previous research into these variables as potential risk factors has yielded mixed results. Some studies found that they increased the child's risk for CSA (Brown et al., 1998; Finkelhor et al., 1990; Madu & Peltzer, 2000), while other studies found that these variables do not differentiate between sexual abuse victims and normal control groups (Bergner et al., 1994; Fleming et al., 1997; McCloskey & Bailey, 2000).

Another possible explanation is that the breakdown of the marital relationship is often associated with disrupted care-taking arrangements. This could be associated with increased risk for CSA in two possible ways. Firstly, a lack of adequate resources means that the child is left unsupervised more often and is thus more vulnerable to perpetrators in the community (Fergusson & Mullen, 1999). The second way in which vulnerability to CSA increases is when the primary caretaker, usually the biological mother, is forced to use a variety of people to act as temporary caretakers while she is at work or searching for employment. This brings the child into contact with a greater number of adults who are placed in a position of authority over the child. These adults may be boyfriends, relatives, or friends of the biological parent or primary caretaker. These temporary caretakers usually do not have a well-formed parenting bond with the child and thus may be more predisposed to act on sexual impulses with the child (Fergusson & Mullen, 1999; Finkelhor & Baron, 1986). It is likely that both explanations are pertinent to the present study in that the findings demonstrate the majority of extrafamilial perpetrators were strangers (36.66%), followed by family friends (10%), and neighbours (10%). The majority of intrafamilial perpetrators were uncles (13.33%). Exposure to these groups of perpetrators suggests that disrupted marital relationships lead to circumstances where the child is completely unsupervised for periods of the day or is being inadequately protected from offenders. These explanations cannot be further clarified because the data does not allow for an analysis of whether these perpetrators ever assumed a care-taking role.

The third factor to emerge as significant at the bivariate level of analysis was having a family member who receives a disability grant. This finding was unexpected as "receiving a disability grant" has not been examined in other risk factor studies. A number of possible interpretations can be made. The question was included in the demographic section of the interview as an adjunct to the question on annual income of parents. Very few of the participants were able to respond to the latter question. Many of the participants were too young to know about financial matters such as annual household income. In addition it is not common practice in South Africa for parents to discuss this type of information with their children and many communities consider it improper for children or adolescents to know or even ask about their parents' income.

The question about disability grant was included in the chi-square analysis because there was a good response rate to this question in comparison to the question on parental income. It is one of the few questions available in the data that could possibly indicate the socio-economic status of the family. Government disability grants in South Africa are usually minimal amounts and are only allocated to individuals who cannot find employment because of a specific disability. Only eight participants (8.51%) of the total sample responded "yes" to the question about a family member receiving a disability grant. It is possible that some children gave a false negative answer to the question in the interview simply because they do not know that their parents receive some form of disability grant. However, if it is assumed that the responses are accurate, the significant result could indicate that families where an adult is unable to find employment due to disability are perhaps more at risk for CSA because of inadequate supervision and care-taking arrangements. A second possible explanation is that a disabled parent may not be available (physically or emotionally) to the child. Parental absence or unavailability has been associated with risk for CSA in other studies (Fleming et al., 1997; Herman & Hirschman, 1981). Despite these possibilities, the small number of positive responses implies that there was insufficient power for the chi-square test and thus the significant result could be due to random error.

A number of variables were not able to discriminate between the sexually traumatised participants and those who experienced non-sexual forms of trauma. These include demographic variables such as race and whether the participant was in primary (Grades 1-7) or secondary school (Grades 8-12) at the time of the interview. The latter variable does not reflect the ages at which participants first experienced sexual or non-sexual traumas and thus cannot be compared to research findings that have found certain age groups to be associated with increased risk for CSA.

The finding that race was not a significant risk factor for sexual trauma is consistent with the findings of international studies (Brown et al., 1998; Fleming et al., 1997; McCloskey & Bailey, 2000; Paveza, 1998; Vogeltanz et al., 1999). In contrast to this, findings from two South African studies found ethnicity to be a significant risk factor for CSA (Collings, 1991; Madu & Peltzer, 2000). However, there is a discrepancy between the two South African studies in that Collings (1991) found that being black was associated with higher risk, while Madu & Peltzer (2000) found that all ethnic groups apart from that of Northern Sotho were at increased risk for CSA. The

present study used a sample from the Western Cape and the other South African studies were also located in different geographical regions namely, Durban (Collings, 1991) and the Northern Province (Madu & Peltzer, 2000). In addition to this each of these studies used samples with a different racial composition. This may have contributed to the discrepant findings but further research is needed in order to clarify the role of race as a CSA risk factor in South Africa.

Variables relating to levels of family violence that were examined and found to be insignificant discriminators include the participant witnessing violence between parents, and the participant needing medical attention as a result of physical punishment from one or more caretakers. This finding is inconsistent with findings from both South African and international studies which have looked at variables related to physical abuse and family violence and found these to be significant risk factors for CSA (Boney-McCoy & Finkelhor, 1995; Fleming et al., 1997; Herman & Hirschman, 1981; Madu & Peltzer, 2000; Paveza, 1988; Vogeltanz et al., 1999). One possible explanation for this inconsistent finding is the traumatised sample used in the present study. It is likely that family violence is associated with an increased risk of other non-sexual forms of trauma, such as physical assault or witnessing actual or threatened violence to others. Thus many participants in the present study may have experienced these forms of trauma but were not sexually traumatised. Further research using a control group of non-traumatised participants is needed to explore this possibility further.

The two variables related to family dysfunction that emerged as insignificant discriminators include the participant suspecting substance abuse in a family member, and the participant reporting maternal and/or paternal drug abuse. Other studies that examined these variables yielded mixed findings. Some researchers found parental substance abuse was associated with increased risk of CSA (Dube et al., 2000; Shah et al., 1995; Vogeltanz et al., 1999) while others found no significant association between parental substance abuse and CSA (Herman & Hirschman, 1981; McCloskey & Bailey, 2000).

In the present study, maternal and paternal employment status was also unable to differentiate between the two groups. This finding differs from a South African study which found that CSA was associated with maternal employment at a level above that of a labourer (Madu & Peltzer, 2000). Other studies have used alternative measures of socio-economic status as risk factors for CSA and have yielded mixed

results. The majority of studies found no significant association between factors such as parental income level, social class or type of occupation, and CSA (Brown et al., 1998; Fleming et al., 1997; McCloskey & Bailey, 2000). Russell (1983) found respondents raised in families with a higher income level were more likely to have experienced intrafamilial sexual abuse than those who had grown up in families with a lower income level. In contrast, Paveza (1988) found that low income level was a significant risk factor for intrafamilial CSA. Similarly, Bergner et al. (1994) found, that at the time of the study, an annual family income of less than \$10 000 was the only significant risk factor for CSA.

4.4 Limitations of study

The present study utilised a self-selected clinical sample. All participants had experienced some form of trauma and were referred to the study. The lack of a random selection procedure means that the obtained results cannot be generalised to the general population. In addition the relatively small sample ($N=94$) limits the usefulness of employing statistical analyses at the multivariate level (Hair, Anderson, Tatham, & Black, 1995).

The lack of a normal (non-traumatised) control group means that it was not possible to establish those demographic and family variables that may be associated with increased risk for any type of trauma, whether sexual or non-sexual. Linked to this is the fact that the present study did not consistently gather information about the number and the temporal sequence of the different types of trauma experienced by both the sexually and non-sexually traumatised groups. Therefore the degree of similarity between the two subgroups in terms of other non-sexual traumas, could not be examined.

The use of a child and adolescent sample meant that it was necessary to obtain the informed consent of both the adult caretaker and the participant. For reasons of safety it was also necessary for the caretaker to accompany the child to the interview. These factors may have resulted in various types of reporting biases e.g. underreporting of sexual abuse incidents and of other experiences such as physical abuse incidents. This type of problem was offset by the use of various measures to ensure confidentiality, multiple screening questions, and the presence of a clinically trained interviewer conducting face-to-face interviews.

A further limitation pertains to the limited amount of information gathered about the sexual abuse experiences and the circumstances surrounding the abuse. No information about the temporal sequencing of the abuse episodes and possible risk factors was obtained. This is particularly relevant to the finding that growing up in a family where parents are single, divorced or widowed is a significant discriminator of sexually abused participants. As mentioned by other researchers (Brown et al., 1998; Fergusson & Mullen, 1999; Finkelhor & Baron, 1986; Fleming et al., 1997), this variable may have occurred as a result of the sexual abuse rather than being a risk factor for abuse. Without accurate information about the sequence of these events in the child's life, no definite conclusions can be drawn.

The present study examined a limited number of risk factors. Some of these were defined very broadly (e.g. child suspecting substance abuse in a family member). It is possible that the broad definitions could mask other more specific risk factors. Associated with this problem is the possibility that some of the chosen variables could be standing in as a proxy for other more relevant risk factors (Finkelhor & Baron, 1986). No potential protective factors were examined. It is likely that the number and type of risk and protective factors present in a child's life operate in complex interactions in terms of the child's vulnerability to CSA. Without data on these potential protective factors it is not possible to obtain an accurate picture of high-risk children.

4.5 Recommendations for future research

In order to obtain a clearer picture of the prevalence of CSA within South Africa, large-scale epidemiological studies need to be conducted using random, survey-based methods. Risk factor research using randomly selected general population samples is also lacking in South Africa. Thus patterns of risk that may be unique to South Africa or to certain geographical areas or cultural groups within South Africa have not been identified. This has a direct influence on strategies for intervention and prevention of CSA. Most of the policies and interventions that are currently in place are based on the knowledge and information that has emerged out of research conducted in countries such as the USA. While prevalence and risk of CSA may be relatively similar across various countries (Finkelhor, 1994), community based needs' assessments should also inform local policies and interventions. In addition follow-up evaluations of these programs and strategies need to be conducted.

Improved definitions of potential risk factors need to be incorporated into future studies (Finkelhor & Baron, 1986; Fleming et al., 1987). Previous research has often made use of broadly defined variables. These could be broken down into smaller, more specific variables leading to a precise understanding of what constitutes risk for sexual abuse.

Most studies tend to overlook cases where numerous risk factors were present but no CSA took place. These types of cases could provide valuable information on protective factors. The quantity and particular constellation of protective factors present in a child's life may be more important than the number and type of risk factors present. An improved understanding of protective factors would greatly assist in the correct identification of high-risk children and could be utilised in the design and implementation of preventative strategies.

The various problems in risk factor research point to the need for more methodologically sound studies to be conducted. Variables need to be unambiguous and questions structured in such a way that temporal sequencing of childhood events can be done (Finkelhor & Baron, 1986). Prospective and longitudinal studies would overcome many of the problems discussed here and would allow researchers a more in-depth understanding of the complex processes that place a child at risk for sexual abuse (Vogeltanz et al., 1999). Studies utilising both adult and child, or adolescent subsamples could limit the possibility that historical trends and changes affected the risk factors. Finally, it is also important to determine the protective factors in conjunction with enquiries into risk factors.

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