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A Study of the Long-Term Consequences of Incest

Hélène Lamoureux

A Thesis
in
The Department
of
Psychology

Presented in Partial Fulfillment of the Requirements
for the Degree of Master of Arts at
Concordia University
Montréal, Québec, Canada

December 1985

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ABSTRACT

A Study of the Long-term Consequences of Incest

Hélène Lamoureux

The impact of incestuous abuse on the health, psychological, and sexual adjustment of university women was examined. Subjects in this questionnaire study were recruited from undergraduate classes at Concordia University. Eighteen women who reported incest experiences (Incest group) were compared to a group of women who had been physically mistreated by their parents in childhood (Assault group) and to a group with no history of sexual or physical abuse. The design made it possible to distinguish the particular effects of incest from a second form of child maltreatment. In comparison to the Control group, both the Incest and Assault groups were found to be suffering from impaired psychological functioning. Measures of sexual adjustment did not differentiate the three samples. The two abused groups differed only with respect to the degree of social support they perceived from their family, with the Assault group feeling less supported. A trend toward greater incidence of health problems was observed in the Incest group. The results add to our understanding of the nature of the detrimental effects of each form of child maltreatment, and confirm that both sexual and physical abuse have negative consequences which persist in adulthood.
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<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Method</td>
<td>23</td>
</tr>
<tr>
<td>Results</td>
<td>28</td>
</tr>
<tr>
<td>Discussion</td>
<td>43</td>
</tr>
<tr>
<td>References</td>
<td>50</td>
</tr>
<tr>
<td>Appendices</td>
<td>57</td>
</tr>
</tbody>
</table>
# TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Demographic Characteristics of Subjects</td>
<td>29</td>
</tr>
<tr>
<td>2</td>
<td>Family Background Characteristics</td>
<td>30</td>
</tr>
<tr>
<td>3</td>
<td>Characteristics of the Incest Relationship</td>
<td>32</td>
</tr>
<tr>
<td>4</td>
<td>Characteristics of the Offender and the Offense</td>
<td>33</td>
</tr>
<tr>
<td>5</td>
<td>SCL-90 (GSI) by Group: Cell means and Standard Deviations</td>
<td>38</td>
</tr>
<tr>
<td>6</td>
<td>SCL-90 subscales by Group: Cell means and Standard Deviations</td>
<td>39</td>
</tr>
<tr>
<td>7</td>
<td>Self-esteem by Group: Cell means and Standard Deviations</td>
<td>41</td>
</tr>
<tr>
<td>8</td>
<td>Social Support by Group: Cell means and Standard Deviations</td>
<td>42</td>
</tr>
</tbody>
</table>
APPENDICES

Appendix A
Consent Form and Questionnaires .......................... 57

Appendix B
Statistical Tables ............................................. 75
INTRODUCTION

Unlike the topic of physical assault and neglect of children, the topic of sexual abuse has received very little attention from researchers. For a variety of methodological, emotional, cultural, and political reasons, social scientists have traditionally ignored the systematic study of the causes, dynamics, and effects of incest (Pinklehor, 1979). There seems to be a persisting ambivalence on the part of professionals and laypersons to acknowledge the existence of incestuous abuse (Sgroi, 1975). Freud's (1954) original formulations concerning childhood sexuality testify to the long-dated ambivalence toward incest. His skepticism, which led to the development of the Oedipus complex theory, stemmed from his reluctance to believe that sexual abuse of children could be as prevalent as his own clinical experience had initially suggested to him (Van Buskirk & Cole, 1983).

No attempt will be made here to confirm or disconfirm the validity of Freud's theory of childhood sexuality. Rather, the point being made is that his skeptical attitude toward incest was influential in the development of the ambivalence observed in our culture today. For a society reluctant to accept that such a strong taboo might be frequently violated, Freud provided a less emotionally and morally disturbing explanation: women's reports of incestuous abuse are more likely a reflection of their childhood fantasies (Herman and Hirschman, 1977). In spite of the prominent attitude of disbelief which still pervades therapeutic and lay milieus, the
women's movement jointly with child protection agencies have succeeded in reviving the interest of the professional community. As a result, the last two decades have been fruitful in making the phenomenon of incest a legitimate and recognized area of research (Summit, 1983).

Among the issues studied by researchers in the area of sexual abuse are questions concerning the nature of the incestuous relationship (Pinklehor, 1979), the characteristics of the perpetrator and the victim (Meiselman, 1980; Van Buskirk & Cole, 1983), the family environment in which it takes place (Herman & Hirschkranz, 1981; Kaufman et al., 1954; Myer, 1984-85) and therapeutic approaches in the treatment of the abused child (Adams-Tucker, 1984; Furniss, 1983; Lutz & Medway, 1984) and of the adult victim (Faria & Belohlavek, 1984; Fortin, 1984; Tsai & Wagner, 1978). Intrafamilial sexual victimization typically occurs in prepubertal and early pubertal years (Silver et al., 1983) and consequently most of the literature concerning its impact has focused on the immediate effects on the child (Summit, 1983). Much less documented are the long-lasting consequences that such an experience may produce. Whether there are indeed persisting adjustment problems in adult victims of childhood incest is the major question posed by the present study. Prior to reviewing the literature in this domain, information pertaining to the prevalence and characteristics of incest will be presented.

Prevalence of Incest

The traditional legal definition of incest is restricted to sexual intercourse between blood relatives. The inadequacy of
such a limited definition has been discussed previously by Herman (1981) and by Silver et al. (1983). In recent years, the increased attention to the phenomenon of child sexual abuse has led to the realization that wide variations exist in the patterns of sexual interactions between children and adult relatives. Because social scientists are concerned with the psychological rather than the reproductive consequences of intrafamilial sexual abuse (van den Berghe, 1983), they have extended the meaning of incest to refer to sexual contacts other than intercourse. For the same reason, the criterion of biological link has been eliminated so that a sexual offense committed by any adult from whom the child would normally expect family care and protection (e.g. stepfather or mother's companion) is often considered incest as well. Throughout this paper, this broader definition of incest, as it is used by researchers in the area, will be adopted.

A variety of additional definitional criteria have been suggested. Westermeyer (1978) has proposed that incest be defined as any sexual relationship occurring between a child and another individual living in the same household. The adoption of an age discrepancy criterion of at least five years has been proposed by Finkelhor (1979). Finally, exhibitionistic displays by a relative and sexual overtures which are not acted upon, are defined as incest by some authors (Finkelhor, 1979) while others include only cases where explicit sexual contact took place. Keeping in mind the fact that the criteria vary from one study to the next, research conducted on the extent of incestuous behavior will now be reviewed. Whenever reported
by the investigator, the definition used will be mentioned.

Because of the infrequency with which the offense is reported, legal and social service agencies can only estimate the actual prevalence of incest (James & Meyerding, 1977). In recent years however, several surveys have been undertaken which provide more reliable data than those gathered by official sources. Herman (1981) reviewed a series of five surveys conducted in the United States and found that between 4 and 12% of all women interviewed reported a childhood sexual encounter with a relative. Kinsey (1953) documented an incest prevalence rate of 5% among his sample of female subjects. Another American survey of college women showed that 26% of 795 participants reported a sexual experience with a relative before they reached 17 years of age (Finkelhor, 1979). The finding of a 26% rate is much higher than that obtained in other surveys and is probably due to this author's use of a broad definition of sexual abuse. The criteria included experiences such as exposure to an adult's genitals and invitations to sexual contacts by an older person in the family environment.

The most representative survey to date was conducted by Russel (1983). The investigator used a large random sample of women from a variety of socioeconomic strata. In contrast to most surveys which are based on questionnaire techniques, the data in Russel's survey were gathered by means of interviews. The definition used to estimate the prevalence rate of intrafamilial sexual abuse excluded sexual contact between individuals with less than a five years difference in age. Thus, exploitive sexual contacts occurring between family
members before the victim turned 18 years old were considered in the final analysis. On the basis of these criteria, a prevalence rate of 16% was found among the random sample of 930 American women. In spite of the discrepancy in prevalence rates reported by various researchers, it is clear that intrafamilial sexual abuse is a widespread phenomenon.

Characteristics of Incest

Incest is typically initiated when the victim is between 4 and 12 years old with a high risk period between four and nine (Herman & Hirschman, 1981). Sexual contact usually ends when the victim reaches age 14 or 15. While men constitute approximately 98% of incest offenders, the ratio of female to male victims is reported to be around eight to one (Gélinas, 1983). Most researchers find that in 40% of cases, the duration of sexual abuse is one year or longer (Silver et al., 1983). Surveys indicate that paternal incest occurs in 1 to 2% of the female population (Finkelhor, 1979) and accounts for 42% of incest cases, other relatives making up the remaining 58% (Russell, 1983).

The nature of the sexual act may take several forms, including body fondling, oral-genital contact and intercourse. The latter is said to be more common in the early adolescent victim who is less at risk to sustain physical damage produced by penetration than the prepubertal child (Gélinas, 1983). The means of coercion used by the offender involve primarily nonforceful approaches (e.g., threats to withhold affection, offering rewards and privileges) although physical
violence is occasionally reported by victims. Finally, it has been repeatedly found that the great majority of ongoing sexual abuse is never disclosed, especially not outside the immediate family (Gagnon, 1965; Herman, 1981). Of the cases where disclosure or discovery of incest occurs, very few will be reported to outside agencies. No more than two percent of Russell's (1983) sample of incest cases were ever reported to the police.

With respect to demographic variables, there is no evidence to support the commonly held belief that incest is more prevalent among families with lower income (Westermeyer, 1978). On the contrary, there is consistency in the findings of several investigators to show that incest occurs among all economic and occupational strata, in families of all religious persuasions and ethnic backgrounds (Butler, 1978; Goodwin, 1982; Herman, 1981; Russell, 1983).

Long-Term Effects of Incest

Several forms of maladjustment are consistently noted in women who experienced incest as children. Sexual problems (McGuire & Wagner, 1978; Kilpatrick & Best, 1984; Rychtarik et al., 1984), negative self-image (Gelinas, 1983; Summit, 1983), interpersonal difficulties (Gelinas, 1983; Silver et al., 1983), somatic complaints (Pennebaker, 1985) and depression (Jehu et al., 1984-85; Meiselman, 1980) comprise the cluster of symptoms typically associated with early incestuous experiences. The majority of writings which document these damaging effects in adult women are based on clinical observations of
psychotherapy clients who seek treatment in adulthood. This literature will be presented prior to reviewing the available empirical research in this domain.

Clinical Observations

Sexual Adjustment. In their therapeutic work with sexually dysfunctional patients, McGuire and Wagner (1978) have noted that molestation appears to be a common finding in the history of women seeking treatment for sexual problems. The authors observed a pattern of dysfunction which involves a lack of sexual desire prior to sexual contact and minimal arousal level during lovemaking in spite of the fact that the woman is easily orgasmic. Women who display this pattern rarely initiate sexual encounters and report experiencing feelings of disgust and revulsion about their own and partner’s body. The pattern of low arousal paired with good orgasmic capacity has been observed by Tsai & Wagner (1978) as well. Interestingly, they claimed that, in their years of experience in sex therapy, such a pattern was encountered only in molested women.

Based on Kinsey’s (1953) findings that early orgasmic experiences through masturbation appear to facilitate orgasmic capacity in adult women, Tsai & Wagner (1978) hypothesized that the pattern observed in molested women may be related to the fact that, although they had learned to be sexually responsive at an early age, the association between current sexual activity and unpleasant memories of the sexual abuse prevented arousal from taking place. Several incest victims in their therapy groups reported experiencing flashbacks during sexual
encounters which detracted from sexual pleasure. McGuire and Wagner (1978) have suggested that the victim's tendency to respond within her current relationship in terms of the incestuous milieu leads to avoidance of sexual contacts.

Other authors have also conceptualized the sexual adjustment problems of incest victims as the result of conditioned fear and anxiety responses which generalize beyond the original stimuli present in the abusive situation (Kilpatrick & Best, 1984; Rychtarik et al, 1984). The role of guilt arising from the pleasurable sensations possibly experienced during incest has also been implicated in the aetiology of the arousal dysfunction (Tsai & Wagner, 1978).

In addition to specific sexual dysfunctions, it has been frequently mentioned in the literature that many incest victims tend to become "promiscuous" (Gordy, 1983; Lukianowicz, 1972). By "promiscuous" is meant the tendency to engage in repeated casual sexual relationships over short periods of time. In clinical samples of incest clients (Meiselman, 1978), and in victims who were seeking psychological treatment (Tsai et al, 1979), it was found that many women had difficulty in long-term relationships with men and thus were more likely to have numerous sexual encounters of a transient or casual nature. Interestingly, studies of young prostitutes revealed that between 57 and 75% of them were incestuously abused in childhood (Fortin, 1984; James & Meyerding, 1977).

Self-esteem and interpersonal problems. In a review article pertaining to the long-term consequences of incest, Gelinas (1983) provides an account of the dynamics commonly found in incestuous
families. On the basis of her work with victims and their parents, the author remarks that in such families, the nurturance, protection, and care, which normally allow for healthy personality development, are replaced by exploitation, betrayal of trust and skewed family relationships. Gelinas used the term relational imbalance to illustrate the exploitative patterns of such environments.

One of these relational patterns, role reversal or parentification, is a process whereby the child takes the role of a parent in the family unit and assumes responsibility as such. The burden of the mother's traditional duties of housework and/or child care is frequently transferred onto the daughter. Providing sexual favors to the father is seen as an extension of the parentification process. As a result, the child gradually forms her identity around the caretaking of others, primarily fulfilling the needs of family members to the exclusion of her own. In adulthood, the parentified child finds herself unable to form relationships based on reciprocity. The relational imbalance hampers the development of a healthy sense of self. In summary, Gelinas' model predicts that adult incest victims, due to the parentification process, have lower self-esteem and greater difficulties in interpersonal adjustment than women who were never sexually molested. Though the model is based on paternal incest, the detrimental effects are also expected in other cases of intrafamilial adult-child sexual contacts because of the imbalance of power inherent in age-discrepant relationships.

Summit (1983) also observed the role reversal situation in incestuous families seen in clinical practice. He noted that, in
addition to assuming several functions ordinarily carried out by the mother, the child also carries the overwhelming responsibility to keep the family together by complying with the adult's sexual demands and maintaining secrecy about the relationship. As it is emotionally difficult for the child to conceptualize a parent as a ruthless, self-serving individual, she must develop an explanation which is less threatening to her survival within the family. The only acceptable alternative is for her to believe that she provoked the sexual encounter. The child's desperate need for love and acceptance places pressure upon her to accept the incestuous abuse. Given that most incest victims do not disclose their secret until several years after the cessation of abuse, the burden of responsibility for the abuse is unlikely to be alleviated for a long time and sets the foundation for self-hatred in later life. Like Gelinas' (1983) model, SummIt's hypothesis predicts an impairment in self-esteem in the majority of these women.

Silver et al (1983) have also speculated on the link between incestuous experiences and later maladjustment in women. From a developmental perspective, they have argued that the time period during which incest usually takes place parallels the critical stage during which a child formulates her generalized views of the world. The girl's views of men, of authority figures, and of themselves, develop in conjunction with the sexual abuse. The authors have proposed that the betrayal of trust and the transgression of the caretaking role inherent in incest challenges the child's expectations of the world as a safe, predictable and controllable
environment. Consequently, the incestuous relationship may color her perception, processing and interpretation of subsequent life experiences. Given that the sexual and interpersonal aspects are salient components of the incestuous experience, the model predicts that incest victims will show greater impairment in the sexual and interpersonal areas of functioning than the rest of the female population.

In spite of the fact that much of the available knowledge on the long-term consequences of incest is based on clinical observations, a trend emerges in the literature which suggests that intrafamilial sexual abuse has detrimental effects on adult psychological and sexual adjustment. Certainly more rigorous research is warranted before firm conclusions can be established concerning the long-term consequences of childhood sexual abuse. In recent years, some studies have emerged which attempted to verify in an empirical fashion the validity of the clinical literature on incest. These studies are presented in the following section.

**Empirical Studies on Incest**

Several methodological flaws exist in the studies investigating the long-term effects of incest. One major problem is that subjects are frequently recruited among psychotherapy clients (Jehu et al., 1984-85; Meiselman, 1978; 1980) or psychiatric patients (Westermeyer, 1978). While these samples are interesting in themselves, by definition they comprise women who have emotional problems requiring professional attention and thus, may not be representative of the
general population of incest victims. Another recruiting method consists of requesting the participation of women with a history of incest through media announcements (Tsai et al, 1979). While the samples obtained in this fashion may more closely approximate the general population of incest victims, there may still be a bias toward women who are more greatly affected by incest and who look for opportunities to discuss their experience.

Another methodological issue, already mentioned earlier, relates to the lack of consistency in definitional criteria among studies. For example, while some investigators include sexual invitations by a cousin in their definition of incest, others have restricted the use of this term to describe explicit sexual contact between people of closer blood relations.

In addition to sampling issues and definitional problems, the lack of comparison groups has plagued much of the research. Moreover, those researchers who have included control subjects in the design have not always selected appropriate comparison groups. For example, incest victims seeking therapy are compared to those not seeking therapy. Women who never experienced incest but who are seeking psychological help would perhaps constitute a more appropriate control group.

In the majority of studies, the issue of family environment and its effects on later adjustment has been ignored. The importance of assessing family attributes is suggested by the literature on child maltreatment. Empirical findings have shown that children who are battered tend to show lower self-esteem (Piers, 1977), more physical
illnesses (Lynch, 1976), deficits in emotional (Green, 1978) and interpersonal functioning (Barahal et al, 1981). There is also evidence that these disturbances persist in adulthood (Azar, 1984; Lewis et al, 1979). In view of the striking similarities between the observed impacts of physical abuse and the alleged effects of incest, the omission of information pertaining to family environment in incest research makes it impossible to rule out the possibility that observed negative effects are due to factors other than incest. Finally, the measuring instruments are rarely identified which makes it difficult to evaluate the quality of the design. In summary, the following studies pertaining to long-term consequences of incest are poorly controlled and often not representative of the incest population in general.

Sexual problems. Fritz et al (1981) conducted a survey of 542 college women in the United States in order to determine the incidence of childhood molestation and to assess which proportion of the molested subjects were currently suffering from sexual problems. Sexual molestation was defined as having had at least one sexual encounter with a post-adolescent individual before the subject reached puberty. This criterion allowed for cases of extrafamilial sexual abuse to be included in the molested sample. However, given that the great majority of sexual offenses against children are committed by individuals within the victim's proximate environment (Badgley, 1984), it is unlikely that sexual contacts with non-family members accounted for a significant proportion of molestation cases. Sexual encounter was defined as a situation where
overtly sexual contact such as breast and genital fondling or oral sex took place. The following measures were used to evaluate sexual adjustment: level of satisfaction with current sexual functioning, perceived sex problems and the need for therapy to deal with such problems, and finally current sexual attitudes and behavior. No information is provided concerning the specific instruments used to assess sexual attitudes and behavior. According to these criteria, it was found that 42 (7.7%) of the 542 subjects had been sexually abused and that 10 (23%) of these molested women had current problems in sexual adjustment. Unfortunately, no data are reported about the comparative incidence of problems in the non-molested sample.

In another study conducted by Becker et al (1982) to determine the incidence and types of sexual problems in rape and incest victims, subjects consisted of 83 women who had been molested and/or raped. These women were recruited through advertising, contacts with various institutions as well as from private practitioners. Subjects were classified as either sexually functional or dysfunctional. However, the measures used to perform this classification are not described by the authors. Of the total sample of rape and incest victims, 56% were classified as sexually dysfunctional. Of the 12 incest victims who belonged to this category, 4 reported a lack of desire and 5 reported arousal problems during sexual activity. Five subjects also reported difficulty in reaching climax during sexual encounters. The original number of subjects in the incest sample is not reported. It is thus impossible to know what proportion of the incest group these 12 subjects represent. Moreover, without a comparison group,
the significance of Becker et al's findings remains uncertain.

In a study conducted by Tsai et al (1979), two groups of 30 subjects each were recruited through media-advertisements requesting the participation of women who had been sexually molested as children. One of these groups was currently seeking therapy (clinical group) while women in the other group considered themselves to be well adjusted and not requiring therapy (non-clinical group). In 90% of the clinical group, and in 83% of the non-clinical group, the sexual abuse was committed by a relative. A third group of 30 non-molested subjects was also recruited who were similar to the molested groups in terms of relevant demographic characteristics. Frequency of orgasm during intercourse and satisfaction with sexual relations were assessed. On the basis of the subject's own response distributions, the data were partitioned in two categories: either subjects reached orgasm at least 20% of the time, or less than 20% of the time during intercourse. The analysis revealed that, in comparison to the control and non-clinical groups, a significantly greater proportion of the clinical group reached orgasm less than 20% of the time during intercourse. It was also found that members of the clinical group were significantly less satisfied with their current sexual relations than were women of either the nonclinical or the control group. The latter two groups did not differ from each other. Information about the total number of sexual partners that the subject had had was also obtained in this study. Responses were partitioned to form two groups: those who had 15 or more partners and those with less than 15. The results revealed that 43% of the clinical group and 17% of
the non-clinical reported having had 15 or more partners. Only 9% of the control group belong to this category. An examination of specific parameters of sexual abuse revealed that in the clinical group, the duration of incest was longer, the age of termination older, and the frequency of molestation higher than in the nonclinical group. While completed intercourse took place in an equal proportion of the two samples, attempted intercourse was reported more frequently by women in the clinical group. These findings suggest that not all sexually molested children will experience problems in sexual adjustment and that specific characteristics of the incestuous abuse may be associated with greater maladjustment.

In a controlled study of two groups of psychotherapy clients (Meiselman, 1978), 20 (87%) of the 23 father-daughter incest victims reported a current sexual problem or having had one previously. In contrast, only 20% of 100 women in the psychotherapy control group reported current or past sexual problems. Of the 23 incest clients, 17 (74%) women reported having difficulty in reaching orgasm during sexual activity with a partner. Four women reported having gone through a period of "promiscuity" subsequent to their incest experience. No information is provided concerning the corresponding proportion of control subjects with orgasmic problems or "promiscuous" behavior.

In a later study, Meiselman (1980) analysed the MMPI records of 16 incest victims prior to the beginning of psychotherapy. The MMPI profiles of a matched group of 16 non-incest psychotherapy clients were compared to those of the incest group. An examination of
responses to items pertaining to sexuality revealed that the incest group answered more of these items in the direction of sexual disturbance.

Taken together, these findings suggest that women with a history of sexual abuse may be more vulnerable to difficulties in sexual adjustment than women without such a history. However, the methodological limitations of the above studies and the predominance of incest psychotherapy samples preclude firm conclusions concerning the extent of sexual problems in incest victims in the general population.

Depression. Jehu et al. (1984-85) administered the Beck Depression Inventory to 21 psychotherapy clients who had been sexually molested by a relative in childhood. The findings revealed that 18 women showed some degree of depression and 13 of them (61% of the total sample) showed moderate or severe depression. In another study of 40 incest psychotherapy clients, 24 women (60%) were found to be severely depressed (Herman, 1981). A comparison group was not used in either of these studies.

In Meiselman's (1978) study of father-daughter incest victims, 9 clients (35%) were diagnosed as suffering from depression. In the non-Incest psychotherapy control group, only 5 women (23%) received this diagnosis. In contrast to the above findings, Meiselman's (1980) study of MMPI profiles of psychotherapy clients revealed no significant difference between the incest and the non-incest clients on the Depression scale. None of the above studies provide information concerning the incidence of depression in incest victims.
who are not undergoing therapy.

The study by Tsai et al (1979) previously described sheds some light on the incidence of depression in the general population of incest victims. The results showed that molested women who were currently seeking therapy (clinical group) scored significantly higher on the Depression scale of the MMPI than either the non-molested control group or the group of molested women who never sought therapy. Given the differences in molestation experiences between the two sexually abused groups, these findings suggest that certain parameters of sexual abuse may be associated with greater vulnerability to psychological maladjustment in adulthood. The study underscores the importance of distinguishing between psychotherapy and non-psychotherapy samples and suggests that studies conducted with the former population may not yield information applicable to the latter. At present, empirical studies which have shown that incest is associated with depression in later life are based mainly on psychotherapy samples.

Somatic complaints. In a survey of 716 females enrolled in American universities (Pennebaker, 1985), subjects were asked whether they had experienced any of three types of traumas prior to the age of 17. The sample was divided in four groups. A traumatic sexual experience was reported in 58 cases (8%), the death of a parent in 41 cases (6%) and the divorce of parents in 81 cases (11%). Sexual trauma was defined as "molestation or rape" and the number of incest cases was not reported in this group. The remaining 536 subjects comprised the control group. The participants filled out a
questionnaire pertaining to somatic symptoms (e.g. headaches, heart or chest pain, numbness in muscles, etc.), family history and social network. The findings showed that women in the sexual trauma group were more likely to report experiencing symptoms than women in the other groups. The four groups were similar with respect to age, family education, income. The degree of social support, as measured by the number of close friends reported by subjects, was found to be similar in all groups.

A second study based on readership response to a health questionnaire published in Psychology Today (Rubinstein, 1982) was conducted by Pennebaker (1985). A random sample of 2,020 respondents was selected from the original sample of 24,000 participants. The design of this study differed from the one previously described with respect to the following factors: the sample consisted of both males (34%) and females (68%) and the list of symptoms was extended to include psychological symptoms as well (e.g. irritability, nightmares, irrational fears, depression, etc.). The results confirmed Pennebaker's previous findings that subjects who experienced a sexual trauma (rape or molestation) were more likely to report both physical and psychological symptoms than subjects in the other three conditions. Subjects did not differ in terms of income or education.

In two other surveys of 115 college students, a similar design was used. In addition to completing a health inventory, subjects who had experienced a trauma were asked whether they had confided the event to others. It was found that traumatic sexual experiences were
the least likely to be discussed with others. When the data were collapsed across trauma, an interesting picture emerged. Subjects who had experienced a trauma that they had not confided to others reported more health problems than either the group who had experienced a trauma but had confided a great deal or the group who had reported no traumatic event (Pennebaker, 1985).

Based on these findings, Pennebaker (1985) has proposed that disclosure rather than the nature of the traumatic event per se, may be the critical variable mediating the relationship between traumatic experiences and later health problems. Due to the social stigma attached to experiences such as rape and incest, victims of such traumas are least likely to discuss them with anyone. According to the author, lack of disclosure could account for the findings that traumatic sexual experiences are associated with greater symptomatology than other types of traumatic events.

In an attempt to explain the positive relationship between the act of confiding and better health reports, Pennebaker (1985) proposed that discussing a traumatic event can help the victim by providing social comparison information and reducing feelings of isolation about the experience. In addition, disclosure may help the victim to learn coping skills to deal with the negative event. Organizing, structuring and finding meaning in one's experience usually result from disclosure (Horowitz, 1976). On the other hand, not discussing a traumatic experience may increase ruminations which, because they are painful, are likely to be suppressed. It is the process of actively inhibiting unpleasant thoughts which Pennebaker
hypothesized is stressful and disease-relevant. According to his model, incest victims who discuss their experience would be less at risk to develop health problems than those who do not disclose to anyone.

The Present Study

Research on the harmfulness of incestuous experiences is inconclusive. However, there is a trend in the literature to suggest that early sexual victimization is associated with a variety of clinical symptoms. When detrimental effects are observed, the relationship between incest and later adjustment problems remains unclear for several reasons. Firstly, most studies have employed samples of incest victims who are undergoing psychotherapy and thus, who may be more disturbed than incest victims in general. Secondly, many of them lack any sort of control or comparison groups. In addition, a variety of family attributes which may also contribute to adult psychopathology have been largely overlooked by researchers. At present, the effects of incestuous abuse, independent of other negative family experiences, remain largely unknown.

This research project was undertaken in order to assess the effects of early sexual abuse on adult psychological, health, and sexual adjustment in women. The study was designed to control for a range of possibly confounding variables. Subjects were recruited from a population of university students. Information gathered on family background characteristics allowed for control over the effects that other family pathology may have had on later
adjustment. A sample of women with a history of incest (Incest group) was compared to two other groups, one of which had been physically abused in childhood (Assault group) and another reporting no physical or sexual abuse (Control group). The inclusion of a physical abuse group permitted differentiation between the effects of an unhealthy childhood environment and those of sexual abuse per se.

On the basis of theoretical formulations, and of clinical and empirical findings concerning the long-term consequences of incest, it was hypothesized that sexual molestation experiences would be associated with impairment in the areas of sexual, health, and psychological functioning in adult women.
METHOD

Subjects

Women enrolled in undergraduate courses of various disciplines at Concordia University participated in this project. Students were verbally informed that an anonymous questionnaire study was being conducted to investigate the relationship between various patterns of sexual experiences and psychological functioning in women. All female students attending a class at the time of recruitment were asked to take home a copy of the questionnaire. They were encouraged to fill it out and to return it as soon as possible to a designated location in the Department of Psychology. Two envelopes were provided so that the Consent Form (see Appendix A) could be returned separately from the questionnaire. Of 464 women who were given the material, 209 completed and returned it, yielding a 45% return rate.

Material

Five instruments were developed for the purpose of this study. A Background Information Form collected sociodemographic data and a Health Questionnaire was designed to elicit subjects' medical and psychiatric history. In addition, the Early Sexual Experience Questionnaire was developed to gather data on the nature of any incestuous relationships and on the subject's emotional reactions to her experience. The fourth measure was an Assault Questionnaire designed to assess whether subjects had ever been physically or
sexually assaulted during the course of their life. Finally, a Sexual Functioning Inventory was developed. This measure included items pertaining to sexual experience and satisfaction and items tapping sexual dysfunctions. Some of the questions on this measure were borrowed from Nowinski & LoPiccolo's (1979) Sexual Inventory and were modified for the purpose of this study. These instruments appear in Appendix A.

Three standardized instruments were also included in the test battery.

The Symptom Checklist. The Symptom Checklist (SCL-90-R), revised by Derogatis (1975) was originally published by Derogatis et al. (1973). It is a multidimensional self-report inventory designed to assess symptoms of psychological distress. The scoring system categorizes 90 items into nine symptom constructs (see Appendix A). Three of these nine constructs are especially pertinent to this study. The Somatization subscale comprises items which reflect bodily symptoms associated with functional disorders. A second dimension, Interpersonal Sensitivity, taps feelings of personal inadequacy and inferiority, particularly in interpersonal interactions. The third subscale, Depression, consists of symptoms of dysphoric mood and associated cognitive and somatic correlates. In addition to construct categorization, the instrument yields a global index of distress called the Global Severity Index (GSI). This index combines information on the number of symptoms reported and the intensity of perceived distress. The 14-day time referent used in this study is the maximum referent recommended by the authors. The psychometric
properties of the SCL-90-R have been shown to be very good, with internal consistency and test-retest reliability coefficients of .84 and .83 respectively. The scale has good concurrent validity with the MMPI and the Middlesex Hospital Questionnaire (Derogatis, 1976). The instrument has been used extensively in the areas of sexual disorders (Derogatis, 1980) and, of particular relevance to the present study, as a measure of psychological distress in a population of incest victims (Silver et al, 1983).

The self-esteem questionnaire. This is a ten-item scale which yields a single score reflecting attitude toward the self (Rosenberg, 1965). A high score implies self-rejection, self-dissatisfaction and self-contempt while a low score indicates a sense of worth and respect or self-acceptance. The measure has good psychometric properties and correlates well with the Coopersmith Self-Esteem Inventory and with peer ratings of self-esteem (Demo, 1985).

Perceived social support (PSS). This instrument was developed by Procidano and Heller (1983) and is designed to assess the extent to which an individual perceives that her/his needs for support are fulfilled. Two forms are available, one of which taps family support (PSS-FA) and the other, support from friends (PSS-FR). Each measure consists of 20 items yielding a global score for family and a global score for friends. The internal consistency coefficients for the PSS-FA and the PSS-FR are .88 and .90 respectively and the test-retest reliability coefficient is .83 (Procidano & Heller, 1983).
Procedure

All data were collected in the Fall of 1985. Subjects who reported having been raped or sexually assaulted by a non-family member were not considered in the analysis. This exclusion criterion was established in order to assess the impact of incest without the confounding effect which rape or other forms of sexual assault experiences could have on measures of psychological and sexual functioning. Of the total sample, 55 women reported having been sexually assaulted by a non-family member; 4 of them had also been molested by a relative. These 55 participants were excluded from the analyses. Six additional subjects were discarded because of incomplete questionnaires. Thus 61 participants were excluded from the original sample.

Three groups were then assembled in the following way. The Incest group was composed of women who reported having had one or more "unwanted" sexual encounters with a relative during childhood or adolescence. The term unwanted was specified in order to distinguish sexual abuse from noncoercive sexual exploration between peers. Incest was defined as an explicit sexual contact with an individual within the family circle. Exposure to an adult's genitals or sexual overtures which were not acted upon were not considered incest. Of the 30 women reporting unwanted sexual encounters with a relative, 12 subjects did not meet the above criteria of incest and thus 18 women remained in this group.

A second group was formed consisting of women who reported
having been physically assaulted by one or both parents during childhood. The criterion defining this group was derived from subjects' scores on a rating scale of severity of the assault from mild (score of 1) to severe (score of 7). Eighteen subjects reported moderate (4) to severe (7) abuse and comprised the Assault group. Ten subjects reported that the assaulting parent was the father and six reported that it was the mother. In two cases, women had been physically abused by both parents. According to the criterion selected, three of the eighteen subjects in the Incest group had also been assaulted in childhood. Finally, of the remaining 100 participants who never experienced physical or sexual assaults, 18 subjects were selected to match the other two groups in terms of age.

In summary, 54 women divided into three groups of 18 subjects each (Incest, Assault, and Control) provided the data analyzed for this study. These women ranged in age from 19 to 51 years with a mean age of 24.5 years. The level of education ranged from 12 to 18 years with a mean of 14.8 years. The majority of subjects came from a Catholic background and were from middle-class families.
RESULTS

Subjects Characteristics

There were 18 subjects in each group (i.e., I, A, and C). Statistical analyses were carried out on several demographic parameters in order to assess whether the three groups differed with respect to these characteristics (Table 1). One-way analyses of variance revealed no significant difference between the groups with respect to age, $F(2, 51) = 0.01$, $p = n.s.$ and years of education, $F(2, 51) = 0.96$, $p = n.s.$ Chi-square analyses yielded no significant differences among groups for the variables of marital status, $\chi^2(4, N = 54) = 6.82$, religion, $\chi^2(6, N = 54) = 3.80$, cultural background, $\chi^2(4, N = 54) = 5.50$, income, $\chi^2(4, N = 54) = 4.91$, and children, $\chi^2(2, N = 54) = 0.24$. Analyses were also performed on characteristics pertaining to the subjects' family background. The family's economic resources were measured on a scale ranging from very poor (score of 1) to financially advantaged (score of 7). The ANOVA revealed no significant difference between the groups on this variable, $F(2, 51) = 0.72$, $p = n.s.$ and indicated that subjects came mainly from middle-class backgrounds ($M = 4.20$). An ANOVA on number of siblings also failed to yield a significant difference between the groups, $F(2, 51) = 2.13$, $p = n.s.$ The mean number of siblings was 1.87.

A series of chi-square analyses were performed on additional family characteristics and yielded no difference between the groups on the following variables: caretakers, $\chi^2(2, N = 54) = 1.31$; current
Table 1

Demographic Characteristics of Subjects

<table>
<thead>
<tr>
<th></th>
<th>Incest</th>
<th>Assault</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Marital Status</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>10</td>
<td>15</td>
<td>9</td>
</tr>
<tr>
<td>Married/Cohabiting</td>
<td>8</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Separated/Divorced</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Religion</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jewish</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Catholic</td>
<td>12</td>
<td>13</td>
<td>16</td>
</tr>
<tr>
<td>Protestant</td>
<td>3</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td><strong>Cultural Background</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>French</td>
<td>9</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>English</td>
<td>4</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td><strong>Yearly Income</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$15,000 or less</td>
<td>4</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td>$16,000 to $25,000</td>
<td>3</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Over 25,000</td>
<td>11</td>
<td>5</td>
<td>10</td>
</tr>
</tbody>
</table>

N = 54
### Table 2

#### Family Background Characteristics

<table>
<thead>
<tr>
<th></th>
<th>Incest</th>
<th>Assault</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Parents</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caretakers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural parents</td>
<td>15</td>
<td>17</td>
<td>15</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Still married</td>
<td>13</td>
<td>13</td>
<td>14</td>
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<tr>
<td>Separated/Divorced</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Widowed</td>
<td>3</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td><strong>Drug/Alcohol abuse</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>7</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>No</td>
<td>11</td>
<td>43</td>
<td>16</td>
</tr>
<tr>
<td><strong>Psychological Illness</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>3</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>No</td>
<td>15</td>
<td>14</td>
<td>16</td>
</tr>
</tbody>
</table>

N = 454
marital status of parents, $\chi^2(4, N = 54) = 1.30$; parental drug and 
alcohol abuse, $\chi^2(2, N = 54) = 3.60$; parental psychological illness, $\chi^2$
$(2, N = 54) = 3.20$. Thus, subjects in all three groups were
homogeneous with respect to both demographic and selected family
background characteristics. The information pertaining to subjects'
families is summarized in Table 2.

The incest group. Information concerning the nature of the
incestuous relationship is presented in Tables 3 and 4. The mean
age of onset of the sexual abuse was 8.5 years and the mean age
of termination was 12.3 years. On average, the incestuous
relationship lasted for a period of 3.8 years. In 38.8% of cases, the
offender was the biological father. The mean age difference between
the victim and the perpetrator was 27.8 years. Physical violence as
such was never present in any of the sexual encounters. However, the
perceived degree of coercion used by the offender was rated on a scale
from 1 (not coercive) to 7 (very coercive) and responses to this item
yielded a mean of 4.2. The most frequently reported type of approach
used by the offender involved nonviolent physical coercion. Finally,
for most subjects, the nature of the sexual act consisted of fondling
of the body and manual or oral stimulation of the victim's genitals.
There were no cases of completed intercourse but three cases where
this was attempted.

Data elicited on the degree of subjects' emotional reactions
to their experience were measured on a scale from 1 (not at all) 
to 7 (very much). Feelings of disgust and of anger ($M = 5.8; 5.8$)
were predominant, and unpleasant flashbacks, feelings of shame and of
### Characteristics of The Incest Relationship

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>Range in years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age of onset</td>
<td>8.55</td>
<td>3.11</td>
<td>3 - 13</td>
</tr>
<tr>
<td>Termination</td>
<td>12.38</td>
<td>4.04</td>
<td>4 - 18</td>
</tr>
<tr>
<td>Duration</td>
<td>3.83</td>
<td>3.16</td>
<td>&lt; 1 - 12</td>
</tr>
<tr>
<td>Age difference</td>
<td>27.88</td>
<td>14.28</td>
<td>2 - 52</td>
</tr>
</tbody>
</table>

N = 18
Table 4

Characteristics of The Offender and The Offense

<table>
<thead>
<tr>
<th>Relationship to victim</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural father</td>
<td>7</td>
<td>38.8</td>
</tr>
<tr>
<td>Stepfather/Mother's boyfriend</td>
<td>2</td>
<td>11.1</td>
</tr>
<tr>
<td>Uncle</td>
<td>4</td>
<td>22.2</td>
</tr>
<tr>
<td>Grandfather</td>
<td>2</td>
<td>11.1</td>
</tr>
<tr>
<td>Brother</td>
<td>3</td>
<td>16.6</td>
</tr>
</tbody>
</table>

Method of influence

<table>
<thead>
<tr>
<th>Method of influence</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Withholding affection/ offering rewards</td>
<td>3</td>
<td>16.6</td>
</tr>
<tr>
<td>Physical coercion</td>
<td>13</td>
<td>72.2</td>
</tr>
<tr>
<td>Threat of violence</td>
<td>2</td>
<td>11.1</td>
</tr>
</tbody>
</table>

Nature of sexual act

<table>
<thead>
<tr>
<th>Nature of sexual act</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fondling of body</td>
<td>5</td>
<td>27.7</td>
</tr>
<tr>
<td>Manual/oral stimulation of victim's genitals</td>
<td>8</td>
<td>44.3</td>
</tr>
<tr>
<td>Mutual masturbation</td>
<td>2</td>
<td>11.1</td>
</tr>
<tr>
<td>Attempted intercourse</td>
<td>3</td>
<td>16.6</td>
</tr>
</tbody>
</table>

N = 18
guilt, were reported to a lesser extent (M = 4.2; 3.6; 2.3). Subjects were asked whether they thought that incest had a positive, negative, or no effect on a number of variables. More than half of them reported that the sexual abuse experience had a negative effect on their sex life, their relationship with men, and their self-image. The remaining subjects felt that incest had no effect on these variables.

Fifteen subjects reported that they had disclosed about their experience. The mean time between the onset of incest and disclosure was 9.2 years. One of the 18 incest cases was reported to social/legal services.

Measures of Adjustment

Correlation coefficients were first computed in order to verify whether variables to be subjected to ANOVA were sufficiently independent of each other to justify separate analyses. The magnitude of the correlation coefficients indicated that separate ANOVAs would be appropriate (Table B-1).

Sexual functioning. One woman in the Incest group reported being a lesbian and another in the Assault group reported being bisexual. The remaining subjects reported a heterosexual orientation. To assess whether the groups differed in the total number of male partners reported, a chi-square analysis was performed. On the basis of subjects' own response distribution, the data were partitioned in two categories: 10 partners or less and 11 partners or more. The analysis failed to yield a significant
difference, \( \chi^2(2, N = 53) = 1.27 \), and indicated that 88.7% (\( N = 47 \)) of subjects had had 10 or less partners (Table B-2). Of the total sample, only four women reported having had one or more female partners.

Forty-five subjects who provided answers to questions 11 to 24 of the Sexual Functioning Inventory (Appendix A) were considered in analyses pertaining to sexual satisfaction and dysfunctions. The remaining 9 subjects who had never had sex were distributed in the groups as follows; 4, 3, and 2 for the Incest, Assault, and Control groups respectively.

The assessment of sex problems was done in the following manner: A global score was derived from a combination of responses to 6 items of the questionnaire. Any response between 1 and 4 on questions 14 (orgasmic dysfunction) and 19 (arousal dysfunction) were given a score of 1. Similarly, any response between 4 and 7 on questions 17 (vaginismus), 18 (dyspareunia), and 20 (aversion to sex) were given a score of 1. A response of 4 or 5 on question 10 (lack of desire) was also given a score of 1. Thus, the global score on the variable "sexual problems" had a possible range of 0 to 6. The cut-off values for each item were chosen because they indicated that subjects experienced a particular problem at least 50% of the time. Of the 45 sexually active subjects, 9 Incest, 8 Assault, and 8 Control subjects reported one or more sex problems. The mean number of problems were 1.9, 2.2, and 1.2 for the Incest, Assault, and Control groups respectively. A chi-square analysis revealed no significant difference among the groups in the proportion of subjects reporting at
least one sex problem, $\chi^2(2, N=45) = 0.94$, $p = n.s.$ (Table B-3). One-way ANOVAS were also performed on sexual problem variables separately and yielded results similar to those obtained with the Chi-square test. That is, none of these variables differentiated between the groups.

The frequency of occurrence of arousal experienced during sexual activity was measured on a scale from 1 (never) to 7 (always). Similarly, sexual satisfaction was measured on a scale from 1 (very satisfied) to 7 (very dissatisfied). Mean scores on these items were subjected to ANOVA and failed to yield a significant difference among the groups, $F(2,42) = 2.59$, $p = n.s.; F(2,42) = 2.82$, $p = n.s.$ (Tables B-4 and B-5).

**Psychological functioning.** Subjects were asked whether they had ever sought professional help for psychological problems and if so, for how many months. The number of women in each group who had undergone psychotherapy was 6, 5, and 4, for the Incest, Assault and Control groups, respectively. An ANOVA on duration of therapy showed no difference among the three groups, $F(2, 12) = 0.65$, $p = n.s.$ (see Table B-6).

Mean T-scores on the Global Severity Index of the Symptom Checklist (SCL-90) were subjected to an ANOVA and did yield a significant difference between the groups, $F(2,51) = 7.34$, $p < .001$ (Table B-7). The assumption of homogeneity of variance was violated in this analysis, Cochran's $C = .55$, $p < .03$. However, given that the $F$ test is considered robust against this type of
violation when equal sample sizes are used (Tabachnick and Fidell, 1983), the analysis was considered meaningful. Tukey post-hoc tests revealed that both the Incest ($M = 65.3$) and the Assault ($M = 65.5$) groups scored significantly higher than the Control group ($M = 57.3$), indicating higher symptomatology in the former two groups (Table 5).

Mean T-scores were computed for three subscales of the SCL-90: Somatization, Depression and Interpersonal sensitivity. As can be seen in Table 6, the means of both the Incest and Assault groups are considerably higher than those of the Control group on all three scales.

In order to determine whether the nature of the abuse was related to the degree of maladjustment, subjects in the Incest group were divided into two categories: those whose abuse consisted of genital contact ($N = 13$) and those whose abuse involved body fondling without genital contact ($N = 5$). The SCL-90 mean scores for these two groups were 64.4 and 65.6 respectively. Subjects were also asked to rate on a scale from 1 (not at all) to 7 (very much) the degree of upset that the experience had caused them. The mean score for women who had had genital contact was 5.3, and for those whose experience involved body fondling, the mean was 4.8. The frequency of flashbacks were also measured on a scale from 1 to 7. The mean scores for the two groups (genital contact and body fondling) were 4.0 and 4.8 respectively.

Physical health. Subjects were asked whether they currently, or had in the past, suffered from a major physical illness. A chi-square
Table 5

SCL-90 (Global Severity Index) by Group: Cell Means and Standard Deviations

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incest</td>
<td>65.3</td>
<td>5.28</td>
</tr>
<tr>
<td>Assault</td>
<td>65.5</td>
<td>6.54</td>
</tr>
<tr>
<td>Control</td>
<td>57.3</td>
<td>9.40</td>
</tr>
</tbody>
</table>

Note. The range of this score is from 30 to 81. The higher the score, the more symptomatic.

N = 18 for each group
### SCL-90 subscales by Group: Cell Means and Standard Deviations

<table>
<thead>
<tr>
<th>Group</th>
<th>Somatization Mean</th>
<th>Somatization SD</th>
<th>Depression Mean</th>
<th>Depression SD</th>
<th>Interpersonal Sensitivity Mean</th>
<th>Interpersonal Sensitivity SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incest</td>
<td>58.6</td>
<td>7.12</td>
<td>64.7</td>
<td>5.37</td>
<td>66.6</td>
<td>5.90</td>
</tr>
<tr>
<td>Assault</td>
<td>59.3</td>
<td>9.82</td>
<td>65.1</td>
<td>5.62</td>
<td>65.6</td>
<td>7.80</td>
</tr>
<tr>
<td>Control</td>
<td>52.9</td>
<td>11.71</td>
<td>58.6</td>
<td>7.42</td>
<td>59.2</td>
<td>10.22</td>
</tr>
</tbody>
</table>

**Note.** The range of these scores area: SOM (35-81), DEP (34-75), INT (39-81). The higher the score, the more symptomatic.

N = 18 for each group.
analysis on this item yielded marginal significance, $\chi^2(2, 54) = 5.03, p < .08$. It was found that physical illness was reported by a greater proportion ($N = 10$) of subjects in the Incest group than of subjects in either the Assault ($N = 5$) or Control ($N = 4$) groups (Table B-8).

**Self-esteem.** Mean scores on the Rosenberg Self-esteem measure were subjected to an ANOVA. The results showed no significant difference among the groups, $F(2,51) = 1.11, p = n.s.$ (Table B-9). The means and standard deviations for each group are presented in Table 7.

**Perceived social support.** Analyses of variance were carried out for the two forms (Friends and Family) of this measure. On the Pss-Fr, the ANOVA revealed no significant difference among the groups, $F(2,51) = 0.14, p = n.s.$ (Table B-10). On the second form (PSS-FA), the ANOVA yielded a significant difference, $F(2,51) = 3.50, p < .03$ (Table B-11). Tukey post-hoc tests indicated that the mean of the Assault group ($M = 8.0$) was significantly lower than the means of the Incest and Control groups ($M = 11.2; M = 13.1$), indicating that the former group perceived less family support. The latter two groups did not differ significantly from each other on this measure (Table 8).
Table 7

Self-esteem by Group: Cell Means and Standard Deviations

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incest</td>
<td>2.00</td>
<td>1.60</td>
</tr>
<tr>
<td>Assault</td>
<td>2.11</td>
<td>1.93</td>
</tr>
<tr>
<td>Control</td>
<td>1.33</td>
<td>1.49</td>
</tr>
</tbody>
</table>

Note. The range of this score is from 0 to 6. The higher the score, the lower the self-esteem.

N = 18 for each group
Table 8

Social support by Group: Cell Means and Standard Deviations

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friends</td>
<td></td>
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<tr>
<td>Incest</td>
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<tr>
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<td>4.01</td>
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<tr>
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<tr>
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<td>6.06</td>
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<tr>
<td>Control</td>
<td>13.11</td>
<td>5.54</td>
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Note. The range of this score is from 0 to 20. The higher the score, the greater the support.

N = 18 for each group
DISCUSSION

The major goal of this study was to evaluate the long-term consequences of childhood incestuous abuse on the sexual, health, and psychological adjustment of adult women. It will be recalled that, on the basis of theory, clinical observations, (McGuire & Wagner, 1978; Tsai & Wagner, 1978; Silver et al, 1983) and empirical findings with psychotherapy samples (Meiselman, 1978;1980), workers in this area had converged on the proposition that incestuous abuse increased vulnerability to problems in sexual adjustment. In particular, arousal dysfunctions (McGuire & Wagner, 1978; Tsai & Wagner, 1978), dissatisfaction with sexual relationships (Tsai et al, 1979) and "promiscuity" (Gordy, 1983; Lukianowicz, 1972; Meiselman, 1978) have been highlighted in clinical samples of incest victims.

In this study, none of the variables pertaining to sexuality yielded differences among the groups. The incest group was similar to the other two groups with respect to the frequency of occurrence of sexual arousal as well as satisfaction with their sexual relationships. The total number of male sexual partners reported was not greater in incest victims than in other subjects. The proportion of women reporting one or more sexual problems was not significantly different in the three groups. While the evidence has accumulated to show that sexual problems are common in psychotherapy samples of incest victims (Meiselman, 1978; 1980), the results obtained with
nonclinical populations have been less consistent (Browne and Finkelhor, 1986). For example, Finkelhor (1979) found that incest victims reported lower levels of sexual self-esteem than their non-abused classmates, and Courtois (1979) found that 80% of incest victims reported sexual adjustment problems. On the other hand, the present study and another by Fromuth (1983, in Browne and Finkelhor, 1986) have found no correlation between sexual abuse and later sexual adjustment problems in college student populations. More research is needed to determine the impact of incest on adult sexual functioning. Both clinical and nonclinical studies should gather systematic information on the parameters of the incest experiences in order to clarify the reasons for the discrepancies obtained thus far.

In this study, only three of the incest victims reported that the offender had attempted intercourse. Recall Tsai et al's (1979) finding that incest victims were more likely to report sexual difficulties when the abuse consisted of attempted intercourse rather than "milder" forms of sexual acts. Due to the infrequency of intercourse attempts reported by the present sample, the relationship proposed by Tsai et al (1979) could not be tested in this study.

It has also been proposed that incestuous experiences may have detrimental effects on adult physical and psychological adjustment. Based on their observations of the dynamics of incestuous families, Celinas (1983) and Summit (1983) have hypothesized that incest victims would show impairment in self-esteem and difficulties in interpersonal relationships. Other researchers have proposed that
incest is associated with depression (Herman, 1981; Jehu et al., 1985; Meiselman, 1978) and somatic problems (Pennebaker, 1985) in adulthood. The results obtained here with the Derogatis Symptom Checklist (SCL-90) indicated that incest victims were significantly more disturbed psychologically than Control subjects. Recall that this instrument measured several dimensions of psychological functioning, including somatization, depression, interpersonal sensitivity, anxiety, etc. This finding confirms and extends the results of previous studies employing samples of women undergoing psychotherapy which have suggested that incest victims were susceptible to a variety of psychological problems. That similar results are obtained with this sample, where only two women were currently in therapy, demonstrates that psychological problems in sexually abused women are not an artifact of sample selection. Moreover, the results are even more sobering when one considers that the Incest sample was comprised of women with a wide range of incestuous experiences, from "mild" sexual acts to attempted but not completed intercourse.

With respect to health adjustment, recall Pennebaker's hypothesis that victims of sexual trauma would be more at risk to develop illnesses than the general population, particularly if they never disclosed about their experience. In the present study, it was found that the great majority of incest victims had confided in someone about their experience. Although the analysis of group differences in physical illness yielded only marginal significance, there was a trend indicating that a greater proportion of the Incest group than the
other two groups currently or had in the past suffered from a major physical illness. It appears that disclosure failed to inoculate incest victims against health problems. On the other hand, it is possible that a study comparing incest victims who disclose versus those who do not, would find better health reports in the former group than in the latter.

The results obtained with the Rosenberg self-esteem measure failed to yield differences between the groups and hence, do not support clinical observations that incest victims suffer from impairment in this area.

Measures of social support indicated that all three groups perceived equal and adequate support from friends. Evidently, a supportive social environment does not appear to be sufficient to prevent psychological difficulties in women who have been physically or sexually abused in childhood. In spite of the fact that they reported adequate support, the elevated scores of these women on the Interpersonal Sensitivity scale of the SCL-90 suggest that they nevertheless experience discomfort and feelings of inadequacy in interpersonal relationships.

A second goal of this study was to assess whether detrimental effects observed in incest victims were specific to the sexual nature of the abuse or whether they could arise as a result of another form of childhood maltreatment, namely physical abuse. While it is not usually claimed that incest leads to unique adjustment problems in adulthood, the issue of the specificity of the harm caused by sexual abuse has not been addressed by previous researchers.
This study found that, on the measure of psychological adjustment (SCL-90), women in the Assault group showed the same degree of impairment as did women in the Incest group. The two groups differed only with respect to two variables. Firstly, subjects who had been physically assaulted as children perceived their family as being less supportive in adulthood than subjects who had been sexually abused. Secondly, there was a trend for a greater proportion of women in the Incest group than in the Assault group to report having suffered from a major physical illness. This difference merits further exploration.

With respect to methodological issues, it will be recalled that, in this study, the recruiting method made no mention of incest and merely requested the participation of female university students. A 46% return rate was obtained. This is comparable to other studies, e.g. Russel (1983) who reported a 50% response rate. It was felt that the sampling procedure employed had an advantage over procedures requesting specifically the participation of abused women. It decreased the probability of a sampling bias toward women who are more distressed and who search for opportunities to discuss their experience with a professional. As noted in the introduction, the bulk of the literature is based on women with an incest background who have been identified by their seeking help. On the other hand, it could be the case that selecting a sample from a university population produces a bias in the opposite direction. In other words, it is possible that women who succeed in entering university have more personal resources and greater coping skills. Such qualities may have
helped abused women to deal with the difficulties associated with their childhood experience. If so, the results obtained with this sample may underestimate, rather than overestimate the impact that both types of abuse may have on later adjustment.

Another limitation of this study relates to the possibility that the Control group included women who had experienced incest but whose memories of the abuse were not available for recall. Indeed it has been reported by clinicians that recollections of incest experiences occasionally emerge during the therapeutic process. The questionnaire method employed in this study does not rule out such a possibility.

The above findings extend our knowledge of the impact of each form of child maltreatment and suggest that both physical and sexual abuse produce detrimental effects which persist into adulthood. The non-experimental nature of this study does not permit definitive causal inferences concerning the relationship between sexual or physical abuse and later maladjustment. However, analyses pertaining to demographic parameters indicated that all three groups were similar in this respect. Moreover, the homogeneity of the three samples on these variables strengthened the inference that differences found between the groups could be related to incest and/or assault experiences. The findings that subjects in all three groups came primarily from middle-class families, and that the incidence of parental drug abuse and psychological illness was not greater in the Assault or Incest groups relative to Controls ruled out the possibility that such factors contributed to the effects observed.
These findings also weaken the stereotype that incestuous abuse tends to occur in poor families where paternal alcoholism and maternal depression are common.

In conclusion, the results strongly suggest the need for effective preventive measures against child maltreatment as well as the necessity of therapeutic interventions with physically and sexually abusive parents. Clinicians should be particularly alert to the potentially additive effects of both forms of maltreatment.

It is hoped that this research will contribute to a greater awareness among professionals of the difficulties experienced by women who were physically and sexually abused as children and that the knowledge acquired will benefit this significant segment of the population.
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Appendix A

Consent Form and Questionnaires
CONSENT FORM

We are interested in the relationship between various patterns of sexual experiences and psychological adjustment in women. In order to study this relationship, we are asking you to respond to questionnaires which deal with a range of personal issues. For example, there are detailed questions about emotional and physical well-being, life-long sexual activity including child-adult sexual experiences, and current attitudes toward sexuality.

Given the very personal nature of the topic, all information gathered will be kept strictly confidential. To ensure anonymity, we request that you detach this signed consent form from the questionnaires prior to filling them out. Only the consent form should be signed. You should return both this form and the questionnaires in the two envelopes provided.

Approximately one hour is required to complete the questionnaires. You may discontinue completion at any time if you feel the need to do so. If you have questions or wish to discuss your reactions to this study, please do not hesitate to do so by contacting the experimenter, Helene Lamoureaux, at the Applied Psychology Center of Concordia University (Telephone: 848-7549 or 279-7577).

We are grateful for your cooperation in this research project. We are concerned with understanding more about women's psychological and sexual functioning. Your participation helps us to acquire information which may at a later date be very useful in counseling women.

I have carefully read the above information and agree to participate in this study.

Signature ........................................

Please detach this page immediately after signing.

The questionnaires and consent form should both be returned as soon as possible in the two envelopes provided at the following location:

Psychology Department
Room H-663
6th floor, Hall Building
1455 De Maisonneuve Ouest
Montreal

We have placed a box at the entrance for this purpose. The box is labeled:

Helene Lamoureaux
Research Project
Psychology of Women
BACKGROUND INFORMATION

1. Age: ......

2. Marital status:
   ( ) Single (not living with mate) ( ) Separated / divorced 19 ......
   ( ) Married 19 .... ( ) Living with mate since 19 ....

3. Religion of upbringing:
   ( ) Jewish ( ) Catholic ( ) Protestant ( ) Other ......................

4. Cultural background: (e.g. French Canadian, Italian) ......................

5. How many years of education have you completed? ....... years

6. What is the income of your present household? (i.e. yourself and
   mate or parents)
   ( ) Under $6000 ( ) Between 16-20,000
   ( ) Between 6-10,000 ( ) Between 21-25,000
   ( ) Between 16-15,000 ( ) Over 25,000

7. How many siblings do you have? ( ) None or ....... siblings

8. How many children do you have? ( ) None or ....... children

9. How old were you when you first gave birth? ( ) Never or age .......

10. Indicate the financial situation of your household when you were a
    child. (Circle a number)
    1 2 3 4 5 6 7
    Very poor Middle class Financially
         advantaged

11. By whom were you raised?
   ( ) Natural mother and father ( ) Adopted parents
   ( ) Natural mother and stepfather ( ) Natural mother + boyfriend
   ( ) Natural father and stepmother ( ) Natural father + girlfriend
   ( ) Other (specify) .................................

   Answer all questions about parents in relation to those who raised you


13. Marital status of parents:
   ( ) Still married ( ) Mother deceased 19 ....
   ( ) Separated / Divorced 19 .... ( ) Father deceased 19 ....

14. How happy were your parents together when you were a child?
    1 2 3 4 5 6 7
    Very happy

59
HEALTH QUESTIONNAIRE

1. Are you currently taking medication? ( ) Yes ( ) No
   If yes: What type (e.g. painkillers, sleeping pills): .......... For what reason: ......................

2. Do you currently suffer from a major physical illness? ( ) Yes ( ) No
   If yes, specify: Type ..................... Duration .....................

3. In the past, have you suffered from a major physical illness? ( ) Yes ( ) No
   If yes, specify for each illness:
   Type Duration
   ........................................... ...........
   ........................................... ...........
   ........................................... ...........

4. Have you ever been hospitalized for physical illness?
   ( ) Never or A) Total number of hospitalizations: ( )
   B) Total time spent in hospital: ..........
   C) Total number of surgeries: ( )

5. In the past year, how many times have you been to a physician for a medical consultation? ..........

6. In the past year, how many days of school or work have you missed because you were sick? ..........

7. How many abortions have you had? ( ) None ( ) 1 ( ) 2 ( ) 3 or more
   If you have had abortion(s), please specify your age at the time
   First abortion: ...... Second abortion: ...... Third abortion: ......

8. How many miscarriages have you had? ( ) None ( ) 1 ( ) 2 ( ) 3
   How old were you at the time of your miscarriage(s)?
   First: ...... Second: ...... Third: ......

9. How often do you have gynecological exams (e.g. breast, pelvic)?
   ( ) Once or twice a year ( ) Once every 4 to 6 years
   ( ) Once every 2 to 3 years ( ) Never

10. Which means of contraception are you currently using?
    ( ) None or Specify type: .....................

60
11. How much pain do you experience during your menstruation?

1. Not at all
2. A
3. B
4. C
5. D
6. E
7. Very severe

12. Indicate whether or not and how often you have had the following problems:

- Vaginal infections: ( ) Yes ( ) No
- Venereal disease: ( ) Yes ( ) No
- Pelvic inflammatory disease: ( ) Yes ( ) No

13. Do you currently or have you in the past had a problem with alcohol abuse?

If Yes: A) is the problem still present? ( ) Yes ( ) No
B) how old were you when the problem began? ......y.old
C) how long did the problem last? ..............

14. Do you currently or have you in the past had a problem with drug abuse?

If Yes: A) is the problem still present? ( ) Yes ( ) No
B) how old were you when the problem began? ......y.old
C) how long did the problem last? ..............
D) what type of drugs did you use? ..............

15. Did you ever engage in self-injurious behaviour (e.g. cutting and slashing, bruising, scratching, burning, etc.) during your childhood, adolescence or at present?

( ) Yes ( ) No
If Yes: specify your age(s) at that time
(C) duration (specify months or years)

16. Did you ever attempt to end your life? ( ) Yes, # of times .... ( ) No

17. Did you ever consult a professional for psychological or emotional problems (e.g. depression, marital problems, drug problems)?

( ) Yes ( ) No
If Yes, provide information concerning this(these) consultation(s):

Type of problem Type of professional Your age then For how long?

............. .............. ........ ......
............. .............. ........ ......
............. .............. ........ ......
............. .............. ........ ......
18. Are you currently undergoing therapy for psychological (emotional) problems?  
   ( ) Yes  ( ) No

19. Were you ever hospitalized for a psychological (emotional) problem?  
   ( ) Yes  ( ) No
   If yes, specify:  
   Type of problem  
   Total number of hospitalizations  
   Total time spent in hospital

20. Have your parents ever suffered from a major psychological problem when you were a child or adolescent?  
   A) Mother: ( ) Yes ( ) No  
      If yes, specify:  
      Type of illness  
      Hospitalization(s): ( ) Yes, how many:..... ( ) No
   B) Father: ( ) Yes ( ) No  
      If yes, specify:  
      Type of illness  
      Hospitalization(s): ( ) Yes, how many:..... ( ) No

21. Did your parents ever have alcohol or drug problems when you were a child or adolescent?  
   A) Mother: ( ) Yes ( ) No  
      If yes: Your age at the time the problem began: ......... years old  
      How long did the problem last? ...............  
      Rate the severity of the alcohol or drug problem:
      Mild 2 3 4 5 6 7  
      Moderate  
      Severe
   B) Father: ( ) Yes ( ) No  
      If yes: Your age at the time the problem began: ......... years old  
      How long did the problem last? ...............  
      Rate the severity of the alcohol or drug problem:
      Mild 2 3 4 5 6 7  
      Moderate  
      Severe
EARLY SEXUAL EXPERIENCE

1. Indicate below (✓) the individuals in your family circle with whom you have had unwanted sexual encounters as a child or adolescent. By encounters, we mean a variety of acts such as kissing, body fondling, genital stimulation, etc.

( ) father ( ) grandfather
( ) mother ( ) uncle
( ) stepfather ( ) brother
( ) mother's boyfriend ( ) other (specify): .........................
( ) none

If none, please turn to page 12.

If unwanted sexual encounters occurred with more than one individual in your family circle, answer the following questions with respect to the person with whom there was the most frequent sexual contact. Indicate who this person was by checking one of the items below

( ) father ( ) grandfather
( ) mother ( ) uncle
( ) stepfather ( ) brother
( ) mother's boyfriend ( ) other (specify): .........................

2. How old were you when you first had sexual contact with this person?

Age: ........
Age of the person: ........

3. Estimate the frequency of these sexual contacts:

( ) only once ( ) total of 2 to 5 times ( ) total of 6 to 10 times

If more frequent than this, answer per month or per year, whichever is easiest for you.

...... times per month over ...... years
OR ...... times per year over ...... years
OR other (specify) .........................

4. Which of the following best describes this person's approach to obtaining sexual contact (Check all applicable items)

( ) threat of withholding affection or support
( ) pleading and begging
( ) offering reward or privileges
( ) non-violent physical coercion
( ) threat of physical violence
( ) use of physical violence
( ) other (specify) .........................

63
5. Describe the nature of the sexual encounters. (Check all applicable items)
   ( ) kisses and/or hugs
   ( ) exposure of his/her genitalia
   ( ) fondling of your body by the person
   ( ) manual stimulation of your genitals by the person
   ( ) manual stimulation of person's genitals by you
   ( ) oral stimulation of your genitals by the person
   ( ) oral stimulation of person's genitals by you
   ( ) attempted anal/vaginal intercourse (unsuccessful penetration)
   ( ) anal/vaginal intercourse
   ( ) other (specify) .................................................................

6. How coercive was the person's approach to you?

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<td>not coercive</td>
<td>somewhat coercive</td>
<td>very coercive</td>
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7. How often were the sexual encounters accompanied by physical violence

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<tr>
<td>Never</td>
<td>sometimes</td>
<td>always</td>
<td></td>
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8. Were the sexual encounters kept secret for some time?
   ( ) Yes  ( ) No

   If yes, indicate below why secrecy was maintained:
   ( ) I was told to keep it a secret
   ( ) I felt ashamed
   ( ) I had no one to talk to
   ( ) I thought I would break up the family if I told
   ( ) I thought I would be beaten if I told
   ( ) I thought I would be kicked out of the house if I told
   ( ) I was afraid no one would believe me
   ( ) other (specify) .................................................................

9. Do you still have sexual contact with this individual?
   ( ) Yes  If yes, please go to item 12.
   ( ) No

10. How old were you when it stopped?  Age: .......

11. How did the sexual contact with this person end?
   ( ) I refused to continue
   ( ) He/she no longer pursued sexual contact with me
   ( ) I threatened to tell someone
   ( ) I told someone (specify whom) :
   ( ) Someone found out (whom) :
   ( ) other (specify) .................................................................
12. Do you think that some family members were aware of this sexual relationship while it was happening?
   ( ) Yes (specify whom): ........................................
   ( ) No
   ( ) Don't know

13. If at some point, your mother was made aware of the situation, how would you describe her response?
   ........................................................................

14. Did you ever sustain physical harm due to these sexual encounters (e.g. venereal disease, unwanted pregnancy, vaginal tear, ...)?
   ( ) Yes (specify) ..................................................
   ( ) No

15. Was the situation ever brought to the attention of:
   A) legal services ( ) Yes ( ) No
   B) social services ( ) Yes ( ) No

   If yes, what measures were taken by these services?
   ........................................................................

   If measures were taken, do you feel they were adequate?
   ( ) Yes ( ) No

   Why: ........................................................................

16. Did you ever talk about this experience with anyone?
   ( ) Yes ( ) No  If not, please go to Item 21.

17. List the individuals with whom you discussed your experience, starting with the first person you talked to (e.g. mother, spouse, female friend, male friend, therapist, etc.)

   Individual you spoke with                          Your age at the time you first talked with him/her
   ........................................................................
   ........................................................................
   ........................................................................
   ........................................................................

18. Among these individuals, with whom did you talk extensively?
19. Do you feel that discussing your experience was helpful to you?
   1  2  3  4  5  6  7
   not at all              very much so

20. Did you regret, at any time, having talked about your experience?
   ( ) Yes   ( ) No
   If yes, specify with whom and why: ...........................................

21. Do you feel the need to discuss this experience at this point in your life?
   1  2  3  4  5  6  7
   not at all              very much so

22. Indicate the degree of upset that this experience has caused you:
   1  2  3  4  5  6  7
   Not upsetting at all    somewhat    extremely upsetting

23. In relation to this experience, do you:

   Not at all              Very much
   Have unpleasant flashbacks?  1  2  3  4  5  6  7
   Feel ashamed?  ...................  1  2  3  4  5  6  7
   Feel guilty?  .....................  1  2  3  4  5  6  7
   Feel disgusted?  .................  1  2  3  4  5  6  7
   Feel angry?   ......................  1  2  3  4  5  6  7

24. Indicate below the type of effect, if any, that this experience had on you with respect to the items listed below:

   Positive effect  Negative effect  No effect

   your friendships   .................  ............  ............
   your sex life      .................  ............  ............
   your trust in men  .................  ............  ............
   your trust in women .................  ............  ............
   how you feel about yourself  ............  ............  ............

25. Indicate whether there were any feelings of distress in filling out this questionnaire:
   1  2  3  4  5  6  7
   No distress               very distressed
ASSAULT QUESTIONNAIRE

1. As a child or adolescent, were you ever subjected to physical violence or beating of any kind?

A) By your mother:

Never 1 2 3 4 5 6 7 Often

Indicate the severity of the physical violence:

Mild (slapping) 1 2 3 4 5 6 7 Severe (burns, broken bones)

B) By your father:

Never 1 2 3 4 5 6 7 Often

Indicate the severity of the physical violence:

Mild (slapping) 1 2 3 4 5 6 7 Severe

2. Were you ever subjected to physical violence or beating or any kind by a person you were emotionally involved with?

Never 1 2 3 4 5 6 7 Often

Indicate the severity of the physical violence:

Mild (slapping) 1 2 3 4 5 6 7 Severe

3. During the course of your life, have you ever been the victim of sexual assault (excluding sexual assault committed by individuals in your family circle)?

☐ Yes  How many times: ........ times

☐ No  If not, please turn to page

If you have been assaulted more than once, please answer the following questions in relation to the most serious assault.

4. Who was the perpetrator?

☐ stranger  ☐ friend of my family

☐ acquaintance ☐ friend of mine

☐ neighbour ☐ other (specify) ......................

5. How old were you at the time of this assault? Age: ........
SEXUAL FUNCTIONING INVENTORY

1. How many enduring romantic relationships (at least 6 weeks) have you had?
.......
relationships

2. Are you presently romantically involved with someone? ( ) Yes ( ) No
   If yes: A) How long have you been in this relationship? ............
   B) Is this partner ( ) female or ( ) male
   C) How old is this partner? ........... years old
   D) Rate your level of satisfaction within this relationship:

   1  2  3  4  5  6  7
   Very happy

3. How satisfied are you with the way you look?

   1  2  3  4  5  6  7
   Very satisfied

4. What is your sexual orientation?

   ( ) Heterosexual    ( ) Homosexual    ( ) Bisexual

5. Based on your experience, how do you think men would rate the importance
   of the following characteristics in women. Use numbers from 1 (least
   important) to 4 (most important) and rank the items below by assigning
   a different number to each item.

   ( ) Personality
   ( ) Physical attractiveness
   ( ) Intelligence
   ( ) Sexual skills

6. How many consensual male sexual partners have you had in your life?

   ( ) None          ( ) Between 11 and 20
   ( ) Between 1 and 5 ( ) Between 21 and 30
   ( ) Between 6 and 10 ( ) Over 30

7. How many consensual female sexual partners have you had in your life?

   ( ) None          ( ) Between 11 and 20
   ( ) Between 1 and 5 ( ) Between 21 and 30
   ( ) Between 6 and 10 ( ) Over 30

8. How old were you when you first masturbated? ........... years old
   or ( ) I never have
9. How often are you able to reach orgasm through masturbation?

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<tr>
<td></td>
<td>Never</td>
<td>Sometimes</td>
<td>Always</td>
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</table>

10. How frequently do you feel sexual desire? This may include wanting to have sex, planning to have sex, feeling frustrated due to a lack of sex, etc.

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<th>3</th>
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<tbody>
<tr>
<td></td>
<td>a few times a week</td>
<td>once a week</td>
<td>once or twice a month</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>less than once a month</td>
<td>never</td>
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</table>

* The following questions refer to interpersonal sexual functioning between consenting people. If you never engaged in consenting sexual activity with another person, please go to page 19.

11. Did your first consensual sexual experience occur in the context of:

- a casual relationship
- a serious relationship
- other (specify): __________________________

12. Rate the degree of satisfaction with your current sex life:

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Very satisfied</td>
<td>Very dissatisfied</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

13. How frequently do you have sexual activity with a partner?

- a few times a week
- once a week
- once or twice a month

14. How frequently can you reach orgasm during sexual activity with a partner (e.g. during intercourse, oral sex, or manual stimulation)?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never</td>
<td>Sometimes</td>
<td>Always</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

15. If currently you are not able to reach orgasm during sexual activity with a partner:

A) In the past, were you able to? ( ) Yes ( ) No
B) If yes, when did you stop being able to? .......... ago.

16. Who usually initiates having sexual activity?

- I always do
- I usually do
- The other person and I about equally often
- Other person usually does
- Other person always does
17. How often is your vagina so "tight" that insertion cannot occur?

1 2 3 4 5 6 7
Never Sometimes Always

18. How often do you feel pain in your genitals during sexual activity?

1 2 3 4 5 6 7
Never Sometimes Always

19. When you have sex with a partner, how often do you feel sexually aroused (i.e. feeling "turned on", pleasure, excitement)?

1 2 3 4 5 6 7
Never Sometimes Always

20. When you have sex with a partner, how often do you have negative emotional reactions, such as fear, disgust, shame or guilt?

1 2 3 4 5 6 7
Never Sometimes Always

21. How long can you comfortably go without sexual activity of any kind?

1) under a week 2) 1 to 3 weeks 3) 4 to 8 weeks 4) 9 to 20 weeks 5) as long as I have to

22. How difficult is it for you to refuse sex to someone who asks for it?

1 2 3 4 5 6 7
Not difficult Somewhat Very difficult at all

23. Which of the following patterns best reflects your current sex life:

I have sex with:

( ) one regular partner only
( ) a regular partner and occasionally with others
( ) a few regular partners
( ) acquaintances
( ) people I have just met who interest me
( ) Other (specify) ................................

24. Rate the degree of give and take in your sexual encounters:

1 2 3 4 5 6 7
I give far more than I get Equal give and take I get far more than I give
### NOSOCOMIAL AGITATION

<table>
<thead>
<tr>
<th>Item</th>
<th>Obsessive-Compulsive</th>
<th>Interpersonal Isolation</th>
<th>Global Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Regretfulness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Motor's Unintentional Thoughts</td>
<td>That won't leave your mind</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Trouble不用担心</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Wanting to do things very slowly</td>
<td>To inspire decisions</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Wanting to check and double check what you do</td>
<td>To inspire decisions</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Difficulty making decisions</td>
<td>To inspire decisions</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Your mind going blank</td>
<td>To inspire decisions</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Trouble concentrating</td>
<td>To inspire decisions</td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Wanting to repeat the same actions</td>
<td>To inspire decisions</td>
<td></td>
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### PHOBIC ANXIETY

<table>
<thead>
<tr>
<th>Item</th>
<th>Paranoid Ideation</th>
<th>Psychoticism</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.</td>
<td>Feeling afraid to go out of the house alone</td>
<td>Feeling afraid to go out of the house alone</td>
</tr>
<tr>
<td>12.</td>
<td>Feeling afraid to go out of the house alone</td>
<td>Feeling afraid to go out of the house alone</td>
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<tr>
<td>13.</td>
<td>Feeling afraid to go out of the house alone</td>
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<td>14.</td>
<td>Feeling afraid to go out of the house alone</td>
<td>Feeling afraid to go out of the house alone</td>
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<tr>
<td>15.</td>
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<td>Feeling afraid to go out of the house alone</td>
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<tr>
<td>16.</td>
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</table>

### ADDITIONAL ITEMS

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<tr>
<th>Item</th>
<th>Sensation</th>
<th>Global Score</th>
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<tbody>
<tr>
<td>17.</td>
<td>Anorexia</td>
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</tr>
<tr>
<td>18.</td>
<td>Anorexia</td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>Anorexia</td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>Anorexia</td>
<td></td>
</tr>
<tr>
<td>21.</td>
<td>Anorexia</td>
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</tr>
<tr>
<td>22.</td>
<td>Anorexia</td>
<td></td>
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<tr>
<td>23.</td>
<td>Anorexia</td>
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### TOTAL ITEM SCORES

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<td>Depression</td>
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<tr>
<td>Anxiety</td>
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<tr>
<td>Hostility</td>
<td>9</td>
</tr>
<tr>
<td>Phobic Anxiety</td>
<td>7</td>
</tr>
<tr>
<td>Paranoid Ideation</td>
<td>6</td>
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<tr>
<td>Psychoticism</td>
<td>6</td>
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<tr>
<td>Additional</td>
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<tr>
<td>Total</td>
<td>60</td>
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### GLOBAL SCORES

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<th>Score</th>
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</tr>
<tr>
<td>HAD</td>
<td>0</td>
</tr>
<tr>
<td>GBS</td>
<td>0</td>
</tr>
<tr>
<td>RBD</td>
<td>0</td>
</tr>
<tr>
<td>MPZ</td>
<td>0</td>
</tr>
<tr>
<td>OB</td>
<td>0</td>
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</tbody>
</table>
SELF-ESTEEM QUESTIONNAIRE (Rosenberg, 1965)

Using the scale below, choose a number from 1 to 4 which best reflects your degree of agreement or disagreement with each of the following statements.

1 = strongly agree
2 = agree
3 = disagree
4 = strongly disagree

1. ( ) I feel that I am a person of worth, at least on an equal plane with others

2. ( ) I feel that I have a number of good qualities

3. ( ) All in all, I am inclined to feel that I am a failure

4. ( ) I am able to do things as well as other people

5. ( ) I feel I do not have much to be proud of

6. ( ) I take a positive attitude toward myself

7. ( ) On the whole, I am satisfied with myself

8. ( ) I wish I could have more respect for myself

9. ( ) I certainly feel useless at times

10. ( ) At times I think I am no good at all
PERCEIVED SOCIAL SUPPORT - FRIENDS
(Frodiano & Heller, 1983)

The statements which follow refer to feelings and experiences which occur to most people at one time or another in their relationships with friends. For each statement there are three possible answers: Yes (Y), No (N), and Don't know (?). Please indicate the answer you choose for each item by circling one of the symbols Y, N, or ?

1. My friends give me the moral support I need  Y  N  ?

2. Most other people are closer to their friends than I am  Y  N  ?

3. My friends enjoy hearing about what I think  Y  N  ?

4. Certain friends come to me when they have problems or need advice  Y  N  ?

5. I rely on my friends for emotional support  Y  N  ?

6. If I felt that one or more of my friends were upset with me, I'd just keep it to myself  Y  N  ?

7. I feel that I'm on the fringe in my circle of friends  Y  N  ?

8. There is a friend I could go to if I were just feeling down, without feeling funny about it later on  Y  N  ?

9. My friends and I are very open about what we think about things  Y  N  ?

10. My friends are sensitive to my personal needs  Y  N  ?

11. My friends come to me for emotional support  Y  N  ?

12. My friends are good at helping me solve problems  Y  N  ?

13. I have a deep sharing relationship with a number of friends  Y  N  ?

14. My friends get good ideas from me about how to do things or make things  Y  N  ?

15. When I confide in friends, it makes me feel uncomfortable  Y  N  ?

16. My friends seek me out for companionship  Y  N  ?

17. I think that my friends feel that I am good at helping them solve problems  Y  N  ?

18. I don't have a relationship with a friend that is as intimate as other people's relationships with friends  Y  N  ?

19. I've recently gotten a good idea about how to do something from a friend  Y  N  ?

20. I wish my friends were much different  Y  N  ?
PERCEIVED SOCIAL SUPPORT - FAMILY
(Procidano & Heller, 1983)

The statements which follow refer to feelings and experiences which occur to most people at one time or another in their relationships with their families. Please indicate the answer you choose for each item by circling one of the symbols Y, N, or ?

1. My family gives me the moral support I need. Y N ?
2. I get good ideas about how to do things or make things from my family. Y N ?
3. Most other people are closer to their family than I am. Y N ?
4. When I confide in the members of my family who are closest to me, I get the idea that it makes them uncomfortable. Y N ?
5. My family enjoys hearing about what I think. Y N ?
6. Members of my family share many of my interests. Y N ?
7. Certain members of my family come to me when they have problems or need advice. Y N ?
8. I rely on my family for emotional support. Y N ?
9. There is a member of my family I could go to if I were just feeling down, without feeling funny about it later. Y N ?
10. My family and I are very open about what we think about things. Y N ?
11. My family is sensitive to my personal needs. Y N ?
12. Members of my family come to me for emotional support. Y N ?
13. Members of my family are good at helping me solve problems. Y N ?
14. I have a deep sharing relationship with a number of members of my family. Y N ?
15. Members of my family get good ideas from me about how to do things or make things. Y N ?
16. When I confide in members of my family, it makes me feel uncomfortable. Y N ?
17. Members of my family seek me out for companionship. Y N ?
18. I think that my family feels that I am good at helping them solve problems. Y N ?
19. I don't have a relationship with a member of my family that is as close as other people's relationships with family members. Y N ?
20. I wish my family were much different. Y N ?
Appendix B

Tables B-1 to B-11
Table B-1

Correlations: Dependent Variables with Each Other

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex satisfaction (1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sexual arousal (2)</td>
<td>- .14</td>
<td>- .25</td>
<td>- .04</td>
<td>.08</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCL-90 (GSI) (3)</td>
<td>.38</td>
<td>.22</td>
<td>.03</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-esteem (4)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- .14</td>
<td>- .20</td>
</tr>
<tr>
<td>PSS-Fr (5)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.39</td>
</tr>
<tr>
<td>PSS-Fa (6)</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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</tbody>
</table>
Table B-2

Cell Frequencies, Chi-Square Analysis: Number of Male Partners by Group a

<table>
<thead>
<tr>
<th>Group</th>
<th>F b</th>
<th>EF c</th>
<th>%</th>
<th>F</th>
<th>EF</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incest</td>
<td>17</td>
<td>15.9</td>
<td>94.4</td>
<td>1</td>
<td>2.0</td>
<td>5.6</td>
</tr>
<tr>
<td>Assault</td>
<td>16</td>
<td>15.9</td>
<td>88.9</td>
<td>2</td>
<td>2.0</td>
<td>11.1</td>
</tr>
<tr>
<td>Control</td>
<td>14</td>
<td>15.0</td>
<td>82.4</td>
<td>3</td>
<td>1.9</td>
<td>17.6</td>
</tr>
</tbody>
</table>

Note. $\chi^2(2) = 1.27$, p = n.s.

a N = 53

b F = Frequency
c EF = Expected Frequency
Table B-3

**Cell Frequencies, Chi-Square Analysis: Occurrence of Sexual Problems**

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>No</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>EF</td>
<td>%</td>
<td>F</td>
<td>EF</td>
<td>%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incest</td>
<td>9</td>
<td>7.7</td>
<td>64.3</td>
<td>5</td>
<td>6.2</td>
<td>35.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assault</td>
<td>8</td>
<td>7.7</td>
<td>57.1</td>
<td>6</td>
<td>6.2</td>
<td>42.9</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Control</td>
<td>8</td>
<td>9.4</td>
<td>47.1</td>
<td>9</td>
<td>7.5</td>
<td>52.9</td>
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<td></td>
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</tbody>
</table>

*Note: $\chi^2(2) = 0.94$, $p = n.s.$*

aN = 45

bF = Frequency

cEF = Expected Frequency
Table 8-4

Analysis of Variance: Sexual Arousal by Group

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>2</td>
<td>1.8</td>
<td>2.59</td>
</tr>
<tr>
<td>Error</td>
<td>42</td>
<td>.7</td>
<td></td>
</tr>
</tbody>
</table>

\( N = 45 \)
Table B-5

**Analysis of Variance: Sexual Satisfaction by Group**

<table>
<thead>
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<th>Mean Square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>2</td>
<td>7.0</td>
<td>2.82</td>
</tr>
<tr>
<td>Error</td>
<td>42</td>
<td>2.49</td>
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</tbody>
</table>

\(^a\) N = 45
Table B-6

**Analysis of Variance: Duration of Therapy by Group**

<table>
<thead>
<tr>
<th>Source</th>
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<th>Mean Square</th>
<th>F</th>
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</thead>
<tbody>
<tr>
<td>Group</td>
<td>2</td>
<td>20.6</td>
<td>0.65</td>
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<td>Error</td>
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\[N = 15\]
Table B-7

Analysis of Variance: SCL-90 (GSI) by Group $^a$

<table>
<thead>
<tr>
<th>Source</th>
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<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>2</td>
<td>389.5</td>
<td>7.34*</td>
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<tr>
<td>Error</td>
<td>51</td>
<td>53.0</td>
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</tbody>
</table>

$^aN = 54$

*p < .001
<table>
<thead>
<tr>
<th>Group</th>
<th>F</th>
<th>EF</th>
<th>%</th>
<th>F</th>
<th>EF</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incest</td>
<td>10</td>
<td>6.3</td>
<td>55.6</td>
<td>8</td>
<td>11.6</td>
<td>44.4</td>
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<tr>
<td>Assault</td>
<td>5</td>
<td>6.3</td>
<td>27.8</td>
<td>13</td>
<td>11.6</td>
<td>72.2</td>
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<tr>
<td>Control</td>
<td>4</td>
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<td>22.2</td>
<td>14</td>
<td>11.6</td>
<td>77.8</td>
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</table>

Note. $\chi^2(2) = 5.03$, $p < .08$

$^a$N = 54

$^b$F = Frequency

$^c$EF = Expected Frequency
Table B-9

Analysis of Variance: Self-esteem by Group

<table>
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N = 54
Table B-10

Analysis of Variance: Social Support from Friends by Group

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<th>F</th>
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<td>0.14</td>
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<td>18.5</td>
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N = 54
Table B-11

Analysis of Variance: Social Support from Family by Group

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<th>F</th>
</tr>
</thead>
<tbody>
<tr>
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<td>120.6</td>
<td>3.50*</td>
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<tr>
<td>Error</td>
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<td>34.1</td>
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</table>

aN = 54

*p < .03