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University of Windsor

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IMPACT OF CHILDHOOD SEXUAL ABUSE
IN THE DEVELOPMENT OF AN
EATING DISORDER IN ADULTHOOD

by

Thomas A. Ruttan

M.A.Sc. University of Waterloo, 1988

A Dissertation
Submitted to the Faculty of Graduate Studies
through the Department of Psychology
in Partial Fulfilment of the
Requirements for the Degree
of Doctor of Philosophy at the
University of Windsor

Windsor, Ontario, Canada
1995
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ABSTRACT

The relationship between childhood sexual abuse (CSA) and the later development of eating disordered symptomatology in 74 women undergoing psychotherapy is examined in this exploratory study. Many of the studies in this area have treated CSA as a dichotomous variable. Others have assessed levels of CSA, but have employed only objective measures of CSA severity. This study assesses the relationship of both objective and subjective levels of CSA severity to the later development of eating disordered symptomatology. Self-report measures were developed and employed to assess (a) the objective severity of the CSA, (b) the subjective severity and impact of the CSA, and (c) subjective impressions of dysfunction within the participant's families of origin. Four measures derived from the Eating Disorder Inventory were employed to assess weight preoccupation. Based on their own reports, the 74 women were grouped according to the presence or absence of a diagnosed eating disorder (ED/non-ED) and/or a history of CSA. Of the 74 women, 50 (67.6%) reported a history of CSA, and 35 (47.3%) reported a diagnosis of eating disordered. The main findings were as follows. The ED women were no more likely than the non-ED women to report a history of CSA. However, among the women who reported a history of CSA, ED symptomatology was related to both objective and subjective measures of CSA severity. Objective CSA severity related
directly to the desire to lose weight and to dissatisfaction with one's body size and shape. One measure of subjective CSA severity (subjective distress at the time of the CSA) related directly to both bulimic symptomatology and weight preoccupation. The objective and subjective measures of CSA severity, though closely related, were somewhat differentially predictive of ED symptomatology. The need to assess both subjective and objective CSA severity, implications of the findings regarding the relationship between CSA and eating disordered symptomatology, and the need for further validation of the measures developed for this study, are discussed.
Acknowledgements

Ah, the Acknowledgement section of the dissertation process. This is indeed a unique and interesting place to be with respect to this process for it is this section that is written by the student, solely by the student, not accompanied by thoughts, comments, and suggestions from one's committee, and, in many ways, solely for the student. I may be the only one who ever reads this section and that is alright with me. In many ways, this section is truly an enviable place to be, and a place that I have dreamt and thought about for over four years. I want to complete this section very slowly, with great thought and introspection, for this section is not altered except by my own hand and it will represent a reflection upon many aspects of this process.

My purpose in writing this acknowledgment section is twofold. One, I want to acknowledge the assistance and support that I have received from several people, both on my committee and otherwise. However, I also want to acknowledge what this process has been like for me as an individual, what challenges I faced, how I have changed through the process, and how I am now that it is complete.

Still, there are difficulties with such a plan for one's acknowledgements, especially with respect to the latter of the two. For someone can possess feelings that are so strong and pronounced, so powerful and intense, that
when it comes time to put these feelings into words, their intensity and their power simply dwindle to the point where one may begin to cry and scream with the frustration of trying to communicate. Yet, such a task remains very important to me.

Foremost, it is very important to me that I formerly acknowledge the women who chose to participate in this study. They took risks, the extent of which I cannot ever know, to reach inside of themselves and respond to my very personal and intimate queries on the questionnaires. I am humbled by their strength of character and emotion in their choices to assist me in this study. My dissertation will eventually be over and the pain and confusion that I have felt during this episode in my life will eventually fade to the point of minor discomfort. However, those women who are battling with the pain and suffering of childhood sexual abuse and/or eating disorders will not find such an easy end to their pain. To these women, I wish you speed, strength, support, and love in your future battles with whatever hell you are standing up against. Though forever nameless to me, their pain has permanently effected my life and I shall never be the same. Please accept my acknowledgement, my gratitude, and my appreciation.

My immediate dissertation committee was composed of Dr. Jim Porter, my advisor, and Dr.'s Kathy Lafreniere, Dick Moriarity, and Charlene Senn. Dr. Howard Steiger of McGill
University provided a number of thoughtful comments as my external reader. The members of my immediate committee were an interesting mix of skills and personalities. Individually, they treated me with respect and thoughtfulness, both towards myself as well as to my task. I appreciated that treatment. How they felt about each other may have been another matter and you would have to speak to them to understand their perception of the committee dynamics. Jim provided me with direction and guidance about everything from the occasional comma and syntax, through to insight into the political underbelly of the dissertation process at this University. The knowledge one gains during the completion of a dissertation is rarely solely confined to research. I thank him for his energy, his time, his direction, and his patience, especially early on in the process.

There is a clarity about Charlene that is difficult to describe. Sometimes it is difficult to see and understand, as many clear things are, but nonetheless crystalline. She provided me with direction and assistance in so many areas, especially in the confusing realm of numbers and rational linear thought, a place that I travelled only infrequently. For me, this dissertation would not have been completed without her assistance and zen-like patience for my spectrum of confusion and my myriad of questions.

Kathy L.’s warmth of understanding was soothing for me.
She was able to skillfully combine a thoughtful understanding of the very sensitive aspects of my dissertation topic as well as test development, with ample support and encouragement for me. Her calmness and ability to answer my queries without becoming caught in my lattice of anxiety was appreciated greatly.

Dick was able to demonstrate consistent support, encouragement, assistance, and direction. He had a cerebral stroke near the end of my dissertation. Still, through a great deal of inner strength and determination, not only did this man sit at my defence and pose challenging questions and erudite comments, he continued to present the warm encouragement that is his trademark at this University. I remain very concerned about Dick’s health and wish him strength, vigour, vitality, happiness, and well-being.

The completion of a dissertation presents an interesting dichotomy, actually several interesting dichotomies, but one of these is the intimate flurry of involvement with one’s committee members and their direction and guidance, with a sense of loneliness. I have never undertaken anything of this magnitude before, neither physically nor emotionally. I have lacked a template with which to compare this experience and many times I felt very lonely without others able to understand or appreciate the many faceted feelings of pain and inadequacy. Genuine support outside my committee has been sparse. Yet, one very
special friend of mine, Peter Swartzentruber, continued to ask about the process and, more importantly, continued to ask in a concerned manner about how the process was effecting me. This support was very strengthening for me, especially during the times that I had felt very lonely in this struggle. I thank this man greatly.

For the lucky ones in this world, there are always people in their life whose support, love, and sacrifice can never be measured nor ever fully appreciated. In my world, one such person is my wife, Kathy Ruttan. Kathy has continued to be very sensitive, patient, and encouraging of my travels through the university. She has understood the times that I chose to close myself off from others in my attempts to stay focused on the task, the times that my frustrations and low self-esteem mounted to hurt me, the times that my stress reached crushing heights. She has sighed many times as she has given up choices and turned down options in her own life in an effort to remain supportive of my journey. She has felt her pain as my pain has mounted throughout this process. She has seen the growth in me as well as the changes. Neither one of us are entirely pleased with all of the changes but we will manage. This entire dissertation and indeed my journey through undergraduate and graduate studies is due to a great part to this woman’s patience and her strength of character. We have become soul mates and we have become...forever. Thank x
you my love.

I have noticed as I write this acknowledgement section that as soon as I begin to try to put my thoughts and feelings of what this experience has been like for me into actual words, I see that it is an impossible task. For whatever words I use, their meaning is still left for you to choose. As soon as I try to put it into words, my powerful and painful emotions feel minimized and demeaned. The feelings lose their weight, their meaning, and their power. I should go no further with this act of writing. Yet, I hope the act itself will be helpful for me, so I shall continue.

Everything that I have written academically and professionally for the last 18 years has been reviewed and revised by more than 16 supervisors. And I have at least one more year of this supervision during my registration year. What have I learned during these 18 years? I have learned some writing and organizational skills. But mostly I have learned how to simply write differently to meet the needs of those doing the revising.

As I write this section, the final copy of my dissertation sits quietly on my desk beside me, so small, so still, and so unassuming. It does not appear at all to be the dispenser of immense feelings of pain, fear, anxiety, confusion, and inadequacy.

This dissertation has been a marathon of fatigue,
upheaval and sacrifice for me. A marathon where I never knew where the finish line was or how much further there was to travel. There were many times when I felt that I had been successful in a small way and had completed another part of the journey only to find out that I was wrong and that I was no where near the point where I thought I was. My country’s Inuit people have many names for snow because snow is such a fundamental part of their life. For me, Fatigue has reached such proportions and has become fundamental to my life. Fatigue has come to mean much more than tiredness to me. Fatigue has been exhaustion that was palpable in my face, in my chest, and in my bones. It has been a demon that sat beside my bed at night, the last thing that I felt as I went to sleep and the first thing to jump on my back in the morning. If it was feeling particularly disgruntled, it would poke and prod me through the night and it would bring me nightmares. Fatigue has been a thick, heavy, old leather cloak that hung down over my neck and my back, down to below my waist. It would occasionally douse itself with water to swell, making it difficult for me to breathe and to move, all the while adding to its own weight. Fatigue was searing pain behind my eyes. It was a 12 foot stare in a 10 foot room. Fatigue was a raspy voice behind me telling me that I was never going to finish, that I was inadequate and not up to the task, that no one else was taking as long, having as many difficulties, or making as
many mistakes. It was convincing. Fatigue abused my emotions, frightened them and threatened them. Many times, it felt as though I had a wall of tears inside me that would take only a whisper to cascade forth, washing me away. I have skirted newspapers and news broadcasts to avoid hearing those whispers in the pain and suffering of others around the world. A great deal of my energy over the past few years has gone into controlling that wall.

There were many times when I had strong doubts that I would finish this task, strong doubts about my own abilities, about my self. This process has shaken me to my core. It will take a long time for my wounds to heal, for my balance to come back again.

This process has brought forth many things for me: feelings of anger, of sadness, a very shaken sense of self-esteem, feelings of inadequacy and ineptitude, wondering if others have had problems and fears any where near those which I have felt, feeling stupid and not capable, not able, feeling not good enough and like I don’t belong here, fear of not being able to complete this while so many others can, being emotionally exhausted and numb, getting precious little encouragement and understanding, fear in the very bottom of my stomach, having to keep moving by typing or reading, anything to slow the anxiety that pooled in my feet making it so very difficult to move, sacrificing my relationships, my marriage, my health, my self, crying
easily and often, a low tolerance for frustration that was chronic, pain, afraid to tell others of my pain because they were probably doing okay and they would not understand, exhaustion like huge weights on my ankles pulling me under, hard to keep my head above, hating weekends over and over because it meant watching others rest and enjoy while I chained my brain and my soul to my desk, emotions like mercury that ran all over the floor as I tried to gather them into a pool and put them back inside me where others wouldn’t see them or step on them. My spirit suffered many blows during this time.

For the last seven years, I have traded in my dreams for a Ph.D. in clinical psychology. I hope this will turn out to be a temporary exchange. It is now time for me to begin to carefully nurture my soul again that I have ignored and forgotten so. I need to see if care, warmth, love, and hope will help my wrinkled and withered spirit start to grow and unfurl itself once again to the blossoming, vibrant, fullness that it has been.

Life is about balance. Not the balance between things but of things. My balance has been greatly smashed out of true by this process. The next part of my life will be to attempt to regain my balance.

A short time ago, an old woman saw me sitting alone and tired with my drooped shoulders, my puffy eyes, my dishevelled clothes. She turned her head slightly to one
side and said only,

"Was it worth it?"

I stared at her for a moment, then looked at the ground and thought for a long while. Then I answered her. I can’t remember what I said.
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CHAPTER I

INTRODUCTION

Is there a relationship between childhood sexual abuse (CSA) and the later development of eating disorders in adulthood? The literature fails to present a clear answer to this question. Such a relationship is reported in anecdotal case studies but empirical research has failed to find consistent confirmation.

Many of the studies that have examined the possible relationship between CSA and eating disorders in women have treated the variable of CSA as dichotomous. Participants were simply asked whether or not they had been sexually abused during their childhood and grouped accordingly. Thus, individuals with a wide range of childhood sexual abuse experiences could be assigned to the same experimental group. A study's CSA group could include both a woman who experienced one incident of genital exposure by a stranger in a park and a woman who experienced several years of ongoing sexual abuse perpetrated by both her father and mother. It is clear that placing these two women in the same "sexually abused" group may be inappropriate.

Consequently, it is important to distinguish between various levels of severity of sexual abuse. Recently, many researchers examining CSA have begun to examine objectively the various levels of severity reported by the women who have been sexually abused. In these studies, it is the
professional researcher who has determined the objective hierarchy of severity of the sexual abuse behaviours reported by the women.

However, this method of the researcher determining the objective level of CSA severity does not take into consideration the individual's subjective perception of her sexual abuse experience and the impact that she felt that it had for her. While the researcher may decide that a woman who had endured one incident of genital exposure by a stranger would be rated as least severe in the objective hierarchy of CSA experiences, such a method would not consider the personal impact of this experience on the woman. It may be that one woman would experience the genital exposure as irritating, but with no powerful repercussions, while another woman who experienced a very similar event would be profoundly affected. If so, the placement of these two women into the same group on the assumption of equivalent CSA severity could be quite misleading.

Additionally, there are a number of clinicians who advocate strongly the need to assess and understand the individual's subjective impression of her sexual abusive experiences before any healing can begin and before any treatment can be effective.

This chapter begins by examining a number of issues related to women's unwanted sexual experiences during
childhood including definition, prevalence, and after effects. This is followed by an investigation of the possibility of a link between CSA and the development of an eating disorder in adulthood. One of the issues that may mediate this relationship could be the impact of severity of the sexual abuse experience. Various studies that have used an objective hierarchical approach to CSA severity are examined. This is followed by a discussion of whether women's subjective perception of their unwanted sexual experiences during childhood may mediate the relationship between their CSA and the later development of an eating disorder.

One of the challenges inherent in the examination of the subjective impact of any event is measurement. An exploration of a measure utilized in pain research designed to assess the subjective impact of physical pain is undertaken. Such an instrument may be a viable measure to be used in the attempt to assess the subjective level of severity of CSA impact.

Eating Disorders

The Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) characterizes eating disorders as severe disturbances in eating behaviour, and contains specific diagnoses including anorexia nervosa and bulimia nervosa. In the former diagnostic category, the individual "refuses to maintain a minimally normal body weight, is intensely
afraid of gaining weight, and exhibits a significant disturbance in the perception of the shape or size of his or her body" (p. 539). Its course and outcome are highly variable where some people recover after only a single episode but others may continue to exhibit a pattern of weight gain followed by relapse.

In bulimia nervosa, the person engages in repeated binge eating followed by behaviours to prevent weight gain including self-induced vomiting, misuse of laxatives, diuretics, fasting, and/or excessive exercise. The disturbed eating behaviours often persist for several years and the course of the disorder may be chronic or intermittent (DSM-IV, p. 550).

In addition to aberrant eating patterns and concerns about body shape and size, there are several psychological aspects of eating disorders to be considered. There is some psychological literature that has suggested that anorexics who restrict their caloric intake are often avoidant of social contact and introverted (Piran, et al., 1986), their families are overprotective, and their relationships are enmeshed (Minuchin, Rosman, & Baker, 1978). Those individuals who exhibit more bulimic symptoms tend to be more extroversionate (Levin & Hyler, 1986), have a more problematic sex life (Frankenburg et al., 1982, Russell, 1979), their families demonstrate more dysfunction (Humphrey, 1989), and they suffer through more experiences
of extrafamilial sexual abuse (Steiger & Zanko, 1990).

As well, the restrictor anorexics have reported less experience with sexual intercourse and less frequency of sexual traumata than the bulimic group. However, this latter group has reported more frequent and varied sexual experiences along with suffering a greater frequency of sexual abuse (Piran et al., 1988; Steiger & Zanko, 1990, Vanderlinden et al., 1993).

Still, there are a number of studies which have suggested that both diagnostic categories (i.e., anorexics and bulimics) present with similar clinical and psychometric features including comparable attitudes towards food, weight, and body shape (Fairburn & Cooper, 1984; Garner, Garfinkel, & O'Shaughnessey, 1985; Norman & Herzog, 1983). In addition, a study completed by Breaux (1993) whose purpose was to examine the differences between subtypes of eating disorders found that there were more similarities than differences. She found that there were no differences between different subtypes of eating disorders in the areas of mood disorders such as anger, depression, and anxiety. Such variation in mood is often cited as common sequelae of sexual abuse (Browne, & Finkelhor, 1986).

Most current models of the etiology of eating disorders suggest that they are multidimensional (Garfinkel & Garner, 1982). Johnson and Connors (1987) presented a biopsychosocial perspective that suggested that a number of
factors including biological, psychological/familial, and sociocultural variables (e.g., propensity for thinness and fitness) may combine to produce eating pathology.

Childhood Sexual Abuse

Defining Childhood Sexual Abuse

An operational definition of the term "childhood sexual abuse" must be arrived at prior to studying CSA and the possible sequelae resulting from such personal intrusion. Obviously, differing definitions would result in differing incidence and prevalence rates, impact effects, and short-term and long-term aftereffects.

Modifications to the Canadian Criminal Code and the Canada Evidence Act changing the criminal laws affecting sexual abuse of children were introduced into the Canadian Parliament as Bill C-15. These changes came into effect and were made law in Canada on January 1, 1988. The Criminal Code divides all offenses into two general categories of summary conviction offenses and indictable offenses. There is an additional category of hybrid offenses in which the crown prosecutor has the option of deciding whether to proceed with a summary conviction or an indictment. A summary conviction offence is punishable by a maximum incarceration of six months and/or a fine of up to two thousand dollars. An indictable offence is a more serious crime, and the punishment is greater.

The legal definition of childhood sexual abuse
according to the Criminal Code would include the following categories of child sexual abuse offenses. The numbers in the brackets following each offence are the Criminal Code section number for that specific offence.

Summary Conviction:
- exposing genitals to a child (173(2))
- vagrancy (179(1)(b))
- indecent acts (173(1))

Hybrid:
- sexual interference (151)
- invitation to sexual touching (152)
- sexual exploitation of a young person (153)
- anal intercourse (159)
- bestiality (160)
- sexual assault (271)

Indictable:
- parents or guardian procuring sexual activity of a child (170)
- owner, manager, or occupier of premises permitting a child to engage in illegal sexual activity (171)
- living off the avails of child prostitution (212(2))
- attempting to obtain the sexual services of a child (212(4))
- incest (155)
- corrupting children (172)
- sexual assault with a weapon, threats to a third party or causing bodily harm (272)
- aggravated sexual assault (273)

(Department of Justice Canada, 1990)

Peters, Wyatt, and Finkelhor (1986) indicated that sexual abuse researchers have utilized several different definitions of what minimum criteria of CSA would include. Some researchers, like Ney et al. (1986), presented a brief description of their definition; "exposure, titillation, incest, etc." (p. 512). Others, such as Surrey et al. (1990) simply presented the question concerning childhood sexual abuse that was provided to their subjects; "Have you ever been pressured into doing more sexually than you wanted to do or were too young to understand? By sexually we mean being pressured against your will into forced contact with the sexual part of your body or his/her body" (p. 413).

Still other researchers restricted their definition of CSA to bodily contact prior to age 18 years by someone of any age or relationship to the participant which included the unwanted fondling of the child’s genital area, attempted or completed vaginal or oral intercourse (Wyatt, 1985; Badgley, 1991).

Other studies have included more specific age parameters in their definition such as actual sexual contact
between someone under 15 years of age and another person who was 5 years or more older (e.g., Briere & Runtz, 1988).

However, some studies have not limited themselves to actual body contact. Nelson (1989) defined CSA as any behaviour between a minor and someone at least 5 years older that is perceived by either participant or by society as sexually stimulating. Goodman (1991) suggested that CSA "was defined as unwanted sexual experiences with relatives or with persons unrelated by blood or marriage, ranging from petting to rape, before the victim turned 18 years" (p. 493). Russell (1984) was both more global and more specific. She defined sexual abuse as any unwanted sexual experiences before age 14 years, or attempted or completed rape by age 17 years, or any attempted or completed sexual act that occurred between relatives before the survivor of the abuse turned 18.

Wyatt (1985) added more specificity with her definition encompassing several components. She defined CSA as "requiring contact of a sexual nature, ranging from those involving non-body contact such as solicitations to engage in sexual behaviour and exhibitionism, to those involving body contact such as fondling, intercourse, and oral sex" (p. 510). Wyatt continued adding other facets to her definition including the need for the sexual abuse to occur prior to age 18 years and that the age of the perpetrator had to be at least 5 years older than the victim. If the
perpetrator was less than 5 years older, only those situations that included coercion and were not wanted by the participant were included. She had no barriers as to who the perpetrator could be (e.g., strangers, acquaintances, family members). In addition, Wyatt suggested that the "willingness of the subject to participate" (p. 511) was an important component of the definition. She noted that if the victim was 12 years of age or younger and the perpetrator was older than the victim, the sexual experiences were deemed abusive because "children do not understand what they are consenting to and are not really free to say no to an authority figure" (p. 511). If the victim was between 13 and 17 years of age, the sexual experiences were considered abusive if the perpetrator was older and the experiences were unwanted. If the perpetrator was the same age as the victim, regardless of the age of the victim, the sexual experiences had to be unwanted by the victim for Wyatt to consider them to be abusive. Thus, exploratory and consensual sexual experiences between minors were not included in Wyatt's definition of CSA.

Still, the issue of whether or not to include non-contact sexual experiences in the definition of CSA is not clear. Herman (1981) suggested that the majority of victims whose experiences involved no physical contact did not suffer ill aftereffects. As well, Groth and Burgess (1979) submitted that unwanted sexual acts that did not involve any
physical contact were less traumatic for the survivor. However, Finkelhor (1979) included non-contact unwanted sexual experiences in his definition of CSA because he believed that exhibition was a type of assault that was not consented to and that the purpose was often to frighten, surprise, or shock the victim. In his study, Finkelhor noted that the victims of exhibition reported their encounters to be highly unpleasant (p. 55). In addition, the Badgley Report (1984) presented detailed data on acts of exposure but was unable to draw any clear conclusions about the impact of these non-contact experiences. Still, it is noteworthy that this report recommended amendments to the Criminal Code to protect citizens from acts of exposure.

Valentine et al. (1984) presented a multidisciplinary approach to the definition of child maltreatment. They suggested that three type of definitions exist in this area:

1. those to guide legal intervention
2. those to be used in case management
3. those to study causal relationships and characteristics in research.

Besharov (1981) wrote that any definitional problems would affect research comparability, reliability, and taxonomies. Jason (1984) added that the wide variations in the definitions of child maltreatment presented a serious impediment to valid research. Such variation in the definition of CSA would undoubtedly result in fluctuations
in the incidence and prevalence rates. In addition, such differences in the definition would also result in variations in abuse-related symptoms and sequelae. Thus, researchers who utilize a more restrictive definition of CSA may find lower prevalence and incidence rates, and they may detect more extreme consequences and sequelae than those individuals who use a more encompassing definition (Peters, 1988). Krugman (1985) suggested that the definition of abuse encompasses many local and societal differences and thus is a continuing task. Given these differences, Krugman proposed that such a definitional task should not be actually completed.

Therefore, there is a major issue of definition of sexual abuse in children in both the research and clinical domains. Given the variations in the operational definition of CSA, the studies examining this area must be evaluated with regard to their individualized specific definitions. In addition, there is often confusion and uncertainty for the professionals whose job it is to identify, treat, and prevent CSA (Misener, 1986). Future researchers would benefit from a standardized definition of what constitutes CSA.

Prevalence of Sexual Abuse in the General Population

Prevalence rates of sexual abuse in the general population have fluctuated greatly over the past two decades. As late as 1979, a report in the Comprehensive
Textbook of Psychiatry indicated that the rate of incest was approximately one in one million cases (Henderson, 1985). However, this estimate was based on court records and was unduly low due to selection biases. The following decade of research has suggested very different as well as widely varying prevalence rates. Several studies (Badgley, 1984; Finkelhor, 1979; Finkelhor, 1984; Finkelhor et al. 1989; Painter, 1986; Russell, 1984; Russell, 1986; Wyatt, 1986) have indicated that perhaps one third of women and one sixth of men in North American culture had experienced unwanted sexual contact with someone substantially older than themselves by the time they had reached their mid-adolescence. However, the prevalence rates in these studies have ranged from 12% (Finkelhor, 1984) to 54% (Russell, 1983).

Such variation in rates would appear to depend on several factors, including the definition of sexual abuse as well as methods of data collection and analyses. For example, in Canada there is no nationally organized method of gathering data on child abuse occurrences. Child welfare statistics are gathered by all of the provinces but, when one examines the data collected, one finds that there are variations in the definitions, distinctions between categories, and age ranges, between provinces. As well, provincial statistics for sexual abuse are not always distinguished from those for physical abuse and neglect, and
gender differences are not always reported (Painter, 1986).

However, there are several studies that have suggested high rates of sexual abuse during childhood in the general population. Badgley's (1984) national survey of 2,008 Canadians drawn from over 200 communities across the country found that about 33.8% of the sample had suffered some form of unwanted sexual experience that included physical contact. However, when non-contact unwanted sexual experiences (e.g., genital exposure/exhibition, requests for sexual involvement) were included in the analyses, about 53% of the sample were counted as sexually victimized (as reported in Painter, 1986). Finkelhor (1990) gathered data on 1,481 women and 1,145 men by a national telephone survey in the United States. When the data on the females in the study were examined, it was found that 27% of the sample reported sexual contact experiences and this figure rose to 31% when non-contact sexual experiences were included. Russell (1983, 1984, 1986) found that 357 (38%) of their sample of 930 women reported incestuous and/or extrafamilial sexual abuse involving physical contact before the age of 18. This figure rose to 504 (54%) when non-contact sexual experiences were included. However, when analysis was restricted to women 18 to 36 years of age, an age range that is more comparable typically to that of eating-disordered patients, the rates are even higher: 43% for sexual contact experiences and 59% for non-contact experiences.
Wyatt (1985) found similar prevalence rates of CSA after she examined 248 Afro-American and caucasian women in the age range of 18-36: 45% reported sexual contact experiences and 62% reported non-contact experiences. When the data gathered only on the caucasian women in Wyatt's study are examined (Wyatt pointed out that most women with eating disorders are caucasian), the reported contact rates are 51% and the non-contact rates are 67%. As Painter (1986) noted, extrapolations from some of these studies suggested a prevalence rate far in excess of the numbers of cases identified by child protection agencies. Finkelhor & Hotaling (1984) indicated that as many as two-thirds to three-fourths of actual cases are not included in national statistics. As well, as many as 50% of cases known to professionals leave the system before official reports are completed (Finkelhor, 1983b).

Many clinicians and researchers have suspected that a strong desire on the part of numerous survivors of CSA not to disclose the abuse to anyone has interfered with the collection of data and the accurate understanding of the statistics of prevalence. Badgley's (1984) survey revealed that 75% of the female sample who had suffered unwanted sexual experiences prior to the age of 18 years did not report their experiences to anyone. Many of the survivors did not disclose their abuse because they felt that the experiences were too personal or sensitive to divulge or
because they were too ashamed to tell anyone.

Thus, a query can be presented: given this high rate of prevalence of CSA in the general female population, especially when non-contact experiences are included, is there any reason or indication that the prevalence of CSA would be different for an eating disordered population compared with a non-eating disordered one? If the prevalence rates were significantly higher in an eating disordered sample, this would suggest a relationship between CSA and eating disorders.

Effects of Sexual Abuse

There is a general supposition within the literature that negative early experiences, such as unwanted sexual experiences during childhood, may be related to a number of behaviours, cognitions, affective states, and disorders that are manifested in some adults' lives. A number of contemporary theorists have concurred that adverse early experiences may create psychological vulnerability, in the form of negative self-perceptions and increased risk of psychopathology in adulthood (Blatt & Homann, 1992; Brewin, 1989; Safran, 1990). Several community studies have reported a relationship between sexual abuse in childhood and increased risk for depression and anxiety in adulthood (Badgley & Ramsey, 1985; Bifulco, Brown, & Adler, 1991; Sedney & Brooks, 1984).

Other research has suggested that sexual abuse
occurring in childhood is associated with both short-term and long-term psychological difficulties in both genders and in both clinical and nonclinical samples. Browne & Finkelhor (1986) defined their symptoms of long-term aftereffects as those which develop two years or more post abuse. These aftereffects may be chronic manifestations of acute aftereffects or develop in a delayed fashion. They also may appear sporadically and spontaneously. Tufts (1984) reported that, in the time period immediately after being sexually abused, about one-fifth to two-fifths of abused children seen by clinicians manifest pathological disturbance. Browne and Finkelhor (1986; p. 72) wrote that when such children are studied as adults, these CSA victims demonstrate impairment when compared with nonvictimized individuals. The authors cautioned that, while about one-fifth of the victims did not appear to evidence serious psychopathology, the risk for initial and long-term mental health impairment for victims of CSA should be taken very seriously. Sedney and Brooks (1984) examined a nonclinical sample of adult women who had experienced CSA and found that they reported significantly greater symptoms of depression, anxiety, and self-abusive behaviours. These authors added that women whose experience of sexual abuse occurred within the family appeared to be at greater risk for disturbance than women whose perpetrator was outside the family.

Several researchers have indicated that symptoms
typically associated with CSA include post-traumatic stress, low self-esteem, guilt, anxiety, depression, somatization, dissociation, interpersonal dysfunction, sexual problems, substance abuse, suicidality, and eating disorders (Briere, 1989; Briere & Runtz, 1988; Brown & Finkelhor, 1986). Other authors have suggested that many individuals who were sexually abused as children continue to experience difficulties throughout their lifespan (Gold, 1986; Silver, Boon, & Stones, 1983; Kendall-Tackett, Williams, & Finkelhor, 1993). Commonly reported symptoms in survivors' later life include anxiety and fear, somatic complaints, aberrant eating patterns, intrusive thoughts, suicidal ideation and gestures, guilt and depression, learning and behavioural problems associated with distractibility and hyperarousal, and difficulties in sexual and interpersonal adjustment (Wolfe & Wolfe, 1988). Gelinas (1983) suggested that many psychological and behavioural symptoms in adulthood are secondary elaborations of the untreated negative effects of sexual abuse.

Anecdotally, Courtois (1988, p. 98) elaborated upon this list of aftereffects by speaking with adult CSA survivors. Courtois wrote that many of her sample reported feelings of worthlessness, hopelessness, passivity, lethargy, helplessness, lack of personal efficacy, inability to concentrate, withdrawal, isolation, anhedonia, self-injurious behaviours including self-mutilation, suicidal
ideation as well as gestures, and eating disturbances resulting in weight gain or loss.

**Relationship of Childhood Sexual Abuse and Eating Disorders**

**Prevalence.**

During the last decade, there have been increasing suggestions in the literature that there is a connection between unwanted sexual experiences in childhood and adult eating disorders in females. In young adult women, the prevalence of anorexia nervosa has been estimated to be between 1-4%. The prevalence of bulimia in the same age women has been estimated as being between 6-18%. The etiological factors of anorexia and bulimia are not known but there is a general understanding in the literature that the disorders are multidetermined with the suggestion that a number of factors including biological, psychological, familial, and sociocultural variables (e.g., propensity for thinness and fitness) may combine to produce eating pathology (Garner & Garfinkel, 1985; Johnson & Connors, 1987). However, prevalence studies using community samples have indicated that up to a quarter of the women sampled experienced some form of eating problem (Button & Whitehouse, 1981; Cooper, Waterman, & Fairburn, 1984). As well, studies examining the prevalence of sexual abuse have indicated levels of abuse as high as 54% (Russell, 1983, 1984, 1986). Given the high prevalence rates of both childhood sexual abuse and eating problems, it would be
important to determine if any systematic relationship exists between these two variables. A relationship between CSA and eating disorders would have theoretical as well as clinical implications, contributing both to the further comprehension of the etiology of eating disorders and to the development of appropriate assessment and treatment methods for people diagnosed with such disorders.

The literature is far from conclusive in its attempt to confirm a relationship between CSA and eating disorders. There are individual case reports and anecdotal studies that have supported a link between these two factors (e.g., Beckman & Burns, 1990; Goldfarb, 1987; Hall et al., 1989; Kearney-Cooke, 1988). Yet, the research literature has confirmed no empirical support for such a relationship, and the apparent relationship between these two factors may simply be the result of the joint occurrence that one would expect by chance (Pope et al., 1992; Finn et al., 1986).

There are several studies which suggest some empirical support for a relationship between eating disorders and CSA. McClelland et al. (1991) examined a sample of females referred to an eating disorder clinic and found that 30% had a history of CSA. Sloan and Leichner (1986) and Goldfarb (1987) utilized case histories that suggested about 30% to 40% of female eating disorder patients are CSA victims. Bulik and colleagues (1989) indicated in their study that 28.6% of their bulimic sample reported being sexually abused
as a child. McClelland et al. (1991) noted that 30% of their sample of patients attending an eating disorder clinic had a history of CSA. Gartner et al. (1989) found that 34% of their bulimic sample had been sexually abused or had a sister who had been sexually abused.

However, even though these various authors have suggested that such prevalence rates of CSA in their samples of females with eating disorders is worthy of concern, these rates appear to represent what others (e.g., Badgley, 1984; Painter, 1986) have reported reflects the frequency of CSA in the general population.

Hall and colleagues (1989) found that 50% of those who met their criteria for anorexia nervosa and bulimia nervosa reported they had suffered sexual abuse compared with only 28% of the patients admitted with other eating disorder diagnoses (e.g., obesity).

Calam and Slade (1989) found that, in their undergraduate sample, a general pattern of co-occurrence of unwanted sexual experiences and scores for types of eating disorder symptomatology was higher than expected by chance. The authors further noted that both their dieting and bulimia groups were exposed to significantly more sexual experiences involving force. Additionally, they found that those individuals in their dieting group who had experienced CSA were significantly more likely to experience the abuse intrafamilially. The authors found no significant
relationship between the type of eating disorder (anorexia nervosa, bulimia nervosa, or both) and sexual abuse.

Oppenheimer and colleagues (1985) noted a high incidence of reported sexual abuse by their patients with eating disorders. These authors postulated a relationship between the two factors with CSA causing disgust with femininity and sexuality which they suspected could be manifested in the individual’s concern with her body image leading her to develop anorexia nervosa. Their results indicated that 29.5% of their sample reported episodes that met the study’s original criteria for sexual abuse (i.e., older perpetrator and clear coercion). However, the incidence escalated to 64.1% when they removed the age difference criterion from their definition of sexual abuse. They found no significant relationship between the type of eating disorder (i.e., anorexia nervosa, bulimia nervosa, or both) and sexual abuse.

Kearney-Cooke’s (1986) study indicated that more than half (58.7%) of her sample of bulimic women had been sexually abused, 38.7% before the age of 14 years, and 42.7% were victims of rape after the age of 14 years. Miller (1992) described how 61% of her sample of patients referred to an eating disorder clinic had reported incidents of sexual abuse which had occurred before the age of 18.

There are several other factors suggesting a relationship between child sexual abuse and eating disorders
in the literature. The characteristics typically associated with eating disorders are also common to those who had experienced sexual abuse as a child. Finkelhor (1984) suggested that any form of forced sexual experience was likely to have a negative impact on the victim's body image for at least the short term. Such a person may have had a strong negative reaction to bodily manifestations of femininity or her sense of sexuality which may have led her to pursue aberrant eating patterns (e.g., excessive caloric restriction or compulsive eating) in an attempt to alter her body shape. Additionally, variables such as lower personal effectiveness, loss of control, boundary issues, feelings of inadequacy and guilt, pronounced sadness, and interpersonal distrust have been found in both eating disordered individuals and CSA survivors (Beckman & Burns, 1990; Finkelhor, 1984; Finkelhor & Browne, 1986; Heilbrun & Bloomfield, 1986; Mizes, 1988; Polivy & Herman, 1987; Schechter, 1987; Shisslak et al., 1990).

Several studies have suggested that as many as 50% of victims of child sexual abuse develop long-term behavioural problems. These hypothesized long-term effects include an increased risk for anorexia nervosa and/or bulimia nervosa (Browne & Finkelhor, 1986; Finkelhor & Browne, 1986; Kearney-Cooke, 1986; Kempe & Kempe, 1984; Oppenheimer et al., 1985; Root & Fallon, 1988). Smolak, Levine, and Sullins (1990) examined the hypothesis that CSA victims
would be more likely than nonvictims to develop the attitudes and behaviours associated with eating disorders. They found a significant difference between victims and nonvictims of CSA on their eating disorder measure, suggesting that those individuals who demonstrated the attitudes and behaviours of an eating-disordered population were more likely to have experienced CSA. Beumont, Abraham, and Simpson’s (1981) study indicated that 60% of their patients with anorexia nervosa believed that their sexual difficulties either precipitated or maintained their disorder. Studies of sexually abused women have indicated a range of habit disorders (Briere, 1984) and a substantial number of children who have experienced sexual abuse have shown disturbances in their eating patterns (Anderson et al., 1981; Browne & Finkelhor, 1986; Peters, 1976).

**Theoretical Issues**

Kearney-Cooke (1988) noted that it is not surprising that disturbance in an individual’s body image would be the symptom developed by many sexually abused women as the body was the site of the initial trauma. Supportive of this view, Cole (1985) suggested that the violation of the victim’s bodily integrity and safety taught her that she had no control over her physical body. Bruch (1978) also discussed the issue of control in the etiology of anorexia nervosa, and wrote that such individuals may attempt to control their body rigidly through restrictive dieting in an
effort to reestablish the control they lost through their abusive experiences. Rayfield and colleagues (1991) discussed the theoretical premise supporting a relationship between eating disorders and CSA. They suggested that, for those people who binge, food may serve as a distraction and an avoidance from their emotional pain. As well, it may have the power to be self-medicating as the individual uses the bingeing to numb her feelings or to serve as a punishment for those victims of CSA who feel a strong sense of guilt and blame for the abuse. These authors proposed that, for CSA victims who developed anorexia, the act of starving assisted them in focusing on their weight loss, body image distortion, and on obsessive-compulsive food and behavioural rituals, which could serve to distract them from their emotional suffering.

In addition, Rayfield and colleagues (1991) (as well as Kearney-Cooke, 1988), suggested that CSA victims may often experience a pronounced sense of powerlessness and a loss of control in their lives as a result of the lack of power and control that they had to endure as victims of sexual abuse. Such individuals may find it very difficult to trust others and may encounter problems and barriers in the development of their intimate relationships. The behaviour of fasting and/or bingeing and purging their food may serve these people by providing them with the illusion of control as well as the perception of safe emotional boundaries between
themselves and others. In this sense, these authors suggested that the disordered eating patterns could serve the victim of CSA as an adaptive means of coping with the sexual abuse experiences and may even generalize to assist the victim in dealing with other anxiety-provoking experiences that occur in their life.

Another concern that individuals with eating disorders may have to cope with is dysfunctional families of origin. Munuchin, Rosman, and Baker (1978) suggested that anorexics often have to deal with increased pressures from their family in the form of rigidity, enmeshment, and overprotectiveness. Such pressures may serve to dispose anorexics towards increased feelings of introversion and avoidance. Strober and Humphrey (1987) suggested that incohesion or hostility may be characteristic of bingers’ families. As well, retrospective studies have found that individuals with eating disorders tend to report overprotection and/or hostility with one or both of their parents (Palmer, Oppenheimer, & Marshall, 1988; Steiger, Van Der Feen, Goldstein, & Leichner, 1989).

Calam and Slade (1989) noted that it was important to consider the presence/absence of force in the relationship between unwanted sexual experience and eating problems. The impact of sexual abuse may be just one facet of a greater association between coercion, especially where violence is present, and eating problems. Thus, victimization,
including aversive sexual and physical experiences, may be an additional abusive factor to be considered. Root and colleagues (1988) noted similarities between their sample of female bulimics and physically victimized women on their coping patterns, defences, and affect. The authors found that in their sample of 172, 66% were physically victimized, 23% had been raped, and 29% had been sexually molested.

Complicating Factors

Smolak, Levine, & Sullins (1990) suggested that the characteristics of the abuse, such as the victim's familiarity with the perpetrator and degree of sexual contact, may have influenced the outcome of the CSA and its possible long-term aftereffects. Additionally, the broader models of stress and coping (e.g., Brown & Harris, 1978; Dohrenwend, 1978) as well as the more specific models (e.g., Lazarus & Folkman, 1984) have suggested that the victim's appraisal of the meaning and the causes of a CSA experience may mediate the outcomes and long-term aftereffects. Herman, Russell, & Trocki (1986) have suggested that the likelihood of a good recovery from unwanted sexual experiences during childhood appeared to be highly related to the nature of the abuse experience. These authors proposed that sexual contact that was not forced, did not involve intrusive physical violation, and that occurred only once (or very infrequently) was least likely to result in lasting harm to the survivor. The survivors who had
experienced forceful or repeated, prolonged abuse or severe physical violation, and especially those abused by fathers or step-fathers, were more likely to have reported persistent difficulties in their adult lives.

Courtois (1988) cautioned clinicians that the aftereffects of incest do not result solely from the sexual nature of the abuse, and they cannot be separated from other personality factors, family characteristics, and life events. Instead, the short-term and long-term effects of CSA were a result of the entanglement of the numerous factors before, during, and after the abuse that served to influence the impact and severity of the aftereffects. Premorbid factors such as the child's health, personality, and family functioning could contribute to the victim's vulnerability to abuse and to the intensification of her traumatic response. Courtois added that specific characteristics of the CSA such as age at onset and termination, use of coercion or force, protraction of the abuse, family functioning, and relationship of the participants all interacted and affected the outcome. As well, factors such as how protected, nurtured, and supported the child perceived herself as being by family members, both pre-abuse and post-abuse, in addition to the extent of support that she felt at time of disclosure (if disclosure occurred), were components that had the potential for affecting outcome. Many of these factors can only be
determined subjectively.

Kearney-Cooke (1988) has suggested that sexual abuse alone probably did not cause an eating disorder nor was an eating disorder always an outcome of experiencing sexual abuse. However, she wrote that abusive sexual experiences, as well as the feelings of powerlessness which can result from such abuse, could be important contributing factors in the development of an eating disorder and thus required consideration in the individual's treatment program. Slade (1982) suggested that if the victim of CSA had other difficulties such as unresolved adolescent conflict, lack of consistent sources of support, nurturance, and protection, and/or distress in her relationship with her intimate partner, problems associated with eating could arise.

Smolak, Levine, and Sullins (1990) suggested that there was no straight-forward, simple relationship between CSA and eating disordered attitudes and behaviours. The authors noted that, for women in their sample who had experienced CSA, a direct relationship was found between measures of parental unreliability and higher scores on three subscales of their eating measure (i.e., Eating Disorders Inventory; Garner, Olmstead, & Polivy, 1983). Other factors may have to be considered such as the child's reaction to other stressors in his or her life such as the death of a parent or divorce (Garmezy, 1983; Werner & Smith, 1982).

Another concern in the literature is that as many as
50% of CSA victims have not reported long-term negative effects of the abuse experience (Browne & Finkelhor, 1986; Conte, J. & Schuerman, J., 1987). There are several possible explanations as to why so many individuals have appeared to be asymptomatic. As Kendall-Tackett, Williams, & Finkelhor (1993) suggested, one possibility may have been that researchers were not using sensitive enough instruments or they did not include measures of all appropriate symptoms. Another possibility may be that asymptomatic individuals were those who have not begun to manifest their symptoms and they may have been effective at suppressing the thoughts, reactions, and symptoms of the abuse. Thus, while the overt manifestations of the trauma may be easily masked, the underlying trauma may not be resolved. Another possible explanation may be that asymptomatic individuals are truly less affected by the abuse. These persons may have perceived the sexual abuse as less damaging and impactful. They also may have been individuals who were very resilient and who have had many psychological, social, and treatment resources available to assist them in coping with the abuse.

What are the conclusions that one may draw from this literature? Researchers studying the long-term effects of CSA have suggested that the experience of abuse alone is probably not sufficient to cause a discernable, long-term pathological outcome (Browne & Finkelhor, 1986; Finkelhor & Browne, 1986). The definition of CSA that a study employs
will affect strongly the incidence and prevalence rates, impact effects, and aftereffects found. Specific characteristics of the abuse such as the age at onset and termination, the use of coercion or force, the relationship of the participants, the presence or absence of overall family pathology, and support systems all interact and influence the outcome of sexual abuse (Courtois, 1988).

High rates of both eating disorders and childhood sexual abuse have been found in women (Finn et al., 1986). Does this suggest that there is a relationship between these two variables, or is this simply an illusory correlation given that many females suffer through eating disorders and through sexual abuse? As a review of the literature by Connors and Morse (1993) pointed out, it is clear that CSA is neither a necessary nor sufficient factor in the development of an eating disorder, but it may be an important etiological factor in many cases. Many clinicians have reported anecdotally that they believe there is evidence of a relationship and that their clients have developed an eating disorder in an effort to cope with their sexual abuse (Courtois, 1988; Kearney-Cooke, 1986, 1988). A person who is trying to cope with painful affect and memories may choose to utilize food in an effort to calm and soothe themselves in the absence of other healthier coping strategies. However, as Connors and Morse (1993) suggest, sexual abuse appears to have limited explanatory power for
the development of eating disorders in general and the causal links between these factors are complex and multifaceted rather than direct. At best, sexual abuse might be regarded as one of many possible risk factors in the multidimensional approach to the etiology of eating disorders.

Still, are there other considerations that should be advanced? Most of the literature attempting to unearth a possible link between CSA and eating disorders has focused on: (1) prevalence rates of both factors and, (2) the presence/absence of a history of CSA in the subject. But is the question of prevalence the most important variable to be considered in the discussion of a possible relationship between CSA and eating disorders? Additionally, is the determination of presence/absence of a history of CSA sufficient distinction to fully appreciate the possible ramifications, interactions, and long-term effects of abuse? Methodological Issues.

There are methodological concerns in some of the published literature attempting to discern a relationship between CSA and eating disorders. For example, given that bulimia and anorexia nervosa begin commonly in adolescence (Hudson, 1987), it is important to determine what portion of a study’s sample experienced their sexual abuse after the age of 18. As well, an attempt to correctly match experimental groups and controls on gender may have changed
the level of significance of interpretations in some studies (e.g., Hall et al., 1989).

Another concern has been that it was difficult to know what interpretations to glean from the use of anecdotal studies or experiments which have had no control groups. Oppenheimer et al. (1985), Sloan and Leichner (1986), and Goldfarb (1989) all presented such concerns.

Other studies have been difficult to scrutinize because they have not been published in full or they have not presented enough data to permit a thorough examination of the overall prevalence of CSA in their target eating-disorder groups (e.g., Grace, Emans, & Woods, (1988); Kearney-Cooke, (1988); Lucido & Abramson, (1988); Pyle et al., (1988)).

Another methodological issue is that of blind assessment. Only one study to date (Bulik, 1989) attempted to have their eating-disordered subjects (i.e., bulimic) assessed for sexual abuse by an individual who was blind to their eating-disorder diagnosis. If many researchers have suspected a relationship between eating disorder and CSA, studies where there has been no blind rating may have risked the experimenter unconsciously eliciting or rating more sexual abuse for an eating disordered participant than for a person known to be from their control group, especially in studies that have employed an interview format to gather data (Pope & Hudson, 1992).
An additional issue of concern presented by Pope & Hudson (1992) includes that of "effort after meaning". The authors contended that many patients with psychiatric disorders have searched their past frequently for some explanation of their perceived distress (Tennant, 1983). In one study (Cassidy et al., 1957) examining depressed patients, 50% of the sample described at least one incident or stressor that they perceived as contributing greatly to their condition. However, Pope and Hudson (1992) suggested that upon detailed evaluation, these stressors were found to be a plausible cause in only 9% of the cases. Pope and Hudson have contended that by analogy, eating disordered patients, particularly those who have become aware of the hypothesized relationship between CSA and eating disorders, may have been more likely to remember and report CSA than the individuals in a control group who may have had less need and/or desire to search their past to discern such a stressor.

The literature suggests other prominent concerns. Finn, Hartman, Leon, and Lawson (1986) suggested that the apparent relationship observed between the high incidence of reported CSA (e.g., Finkelhor, 1979; Russell, 1983) and of females with eating problems (e.g., Button & Whitehouse, 1981; Cooper et al. 1984) may be no more than a chance occurrence and thus may be an illusory correlation. The correlations may also be affected by another variable of
pathology within the family which may increase the risk for both the development of an eating disorder and CSA. In addition, many of the correlational studies have relied exclusively on clinical samples without psychiatric or non-clinical control groups. Arkes (1981) examined bias in clinical judgement and noted that people tend to base their estimate of covariation on observed instances of co-occurrence of their variables and they tend to ignore those situations where one variable occurs while the other variable is absent.

Undoubtedly, one of the more appropriate strategies to utilize in rectifying a number of these methodological concerns would be to design and complete a prospective study. Theoretically, such a study could recruit a large sample of children, control for confounding variables, and follow these children through to adulthood while documenting which members of the sample had been sexually abused. At that point, the sample would be examined to discern whether the abused portion of the sample of children ultimately displayed a higher prevalence for an eating disorder than the non-abused children. However, such a challenging and expensive prospective study has not been completed to date. As well, it is probable that such a study would present other complexities. For instance, if the hypothesis of a relationship between CSA and an eating disorder was being examined, would there not be an ethical obligation to
intervene and treat the subject’s trauma stemming from their unwanted sexual experiences, thus obscuring this hypothesized relationship?

Clearly, while there are some studies that are supportive of a relationship between CSA and eating disorders, the literature is not free of methodological concerns, sampling issues, lack of appropriately reported analyses, and varying interpretation of data.

**Measurement of Childhood Sexual Abuse**

**Dichotomy vs. hierarchy of severity of abuse.**

The literature examining women who were sexually abused as children has suggested that individual differences in response to the abuse relate to more than the dichotomous question of whether or not the person experienced some form of sexual abuse during her childhood. Several studies (Gold, 1986; Painter, 1986; Seidner & Calhoun, 1984; Silver et al., 1983) have suggested that individual differences in the responses to CSA may have be mediated by several variables. These authors suggested that one such variable may be the severity of the abuse.

In examining the factors related to an increased impact of CSA, Conte & Schuerman (1987) underscored the importance of the level of severity of the abuse in the prediction of long-term effects. Wolfe, Gentile, and Wolfe (1989) noted that severity of abuse factors were significant in predicting a CSA victim's negative feelings concerning her
sexuality. As well, their regression analyses suggest that the victims' individual differences in adjustment following the CSA were related to a number of mediators including abuse severity. The question of whether or not someone had experienced sexual abuse in her childhood was not thorough enough to understand any possible relationships between CSA and later long-term effects. They concluded that the more severe the abuse was, the more extensive and protracted the long-term effects arising from the abuse would be.

Authors in the literature on sexual abuse in childhood have moved past the dichotomous question of simply whether or not CSA occurred; they have begun to distinguish between the various levels of severity of abuse in their subjects. However, most researchers have differed in their definitions of severity of abuse. Wyatt (1985) suggested that since the range of sexual behaviours was great, a distinction could be made by a division of these behaviours into two categories. Wyatt defined incidents which involved body contact (e.g., fondling to vaginal or oral intercourse) as "contact abuse" and those which did not involve direct body contact (e.g., verbal propositions, exposure, and masturbation) were specified as non-contact abuse. Kendall-Tackett (1991) coded the severity of sexual acts in her sample based on whether the molestation included phallic acts. Each participant received a rating of either 1, 2, or 3 for the severity of sexual acts (1 = fondling from the waist up or
waist down, and no other sexual acts; 2 = attempted or simulated intercourse, and no oral, anal, or vaginal intercourse; and 3 = oral, anal, or vaginal intercourse).

Walters, Smolak, & Sullins (1987) used type and frequency of CSA behaviours to assign each individual in their sample with a score from three categories. These categories consisted of least severe (e.g., exposure, single act of fondling), moderately severe (e.g., single act of intercourse, multiple acts of fondling), to most severe (e.g., repeated rape). Pellegrin & Wagner (1990) designed a severity scale that consisted of four groupings: 1 - fondling; 2 - digital penetration; 3 - fellatio/cunnilingus; and 4 - penile penetration. Margolin and Craft (1989) coded various levels of severity of CSA with the following scheme: 1 - sexual exhibitionism; 2 - nonviolent sexual abuse without intercourse; 3 - intercourse (i.e., oral, anal, or vaginal) which took place without physical threats or overt injury; 4 - intercourse preceded by threats; 5 - sexual aggression without intercourse resulting in severe physical injury; and 6 - sexual intercourse which involved severe physical injury.

Russell (1986) defined severity of CSA as consisting of one of three groups. The category of "Least severe sexual abuse" included experiences that ranged from forcible kissing and intentional sexual touching to nonforcible kissing or touching. "Severe sexual abuse" consisted of
experiences that ranged from forced digital penetration of the vagina to nonforcible attempted breast contact (unclothed) or simulated intercourse. "Very severe sexual abuse" encompassed experiences that ranged from forcible, nonforcible, or attempted fellatio, cunnilingus, analingus, or anal intercourse. Russell (1986) defined "force" as "physical force, threat of force, or assault when the victim is unable to consent because she is unconscious, severely drugged, or in some other way totally helpless" (p. 99).

Kendell-Tackett, Williams, and Finkelhor (1993) suggested simply that abuse which contained some form of penetration was more likely to produce symptoms than molestation did not.

These definitions of CSA severity are objective in nature. It has been the professionals (i.e., researchers) who have decided on the various classification and components of the differing levels of severity of sexual abuse. It was the researcher(s) who specified how many categories would be utilized, what form of sexual behaviour would be included and excluded, and how the hierarchy of severity would be defined. A review of the literature has suggested that these decisions attempted to reflect the current understanding of the sexual abuse literature. However, several studies have not indicated how the authors arrived at their objective classification of levels of severity of abuse. Others, like Wolfe, Gentile, and Wolfe
(1989), have reported that they had based their conception of the levels of severity on their own perceptions and previous research relating sexual abuse seriousness to outcome and assigned a numerical value accordingly. Margolin and Craft (1989) validated their objective scales by demonstrating a significant relationship between the level of severity of the abuse and the legal responses to the perpetrator of the abuse. Thus, the more severe the CSA was (i.e., the higher the numerical code assigned to each form of abuse), the greater was the possibility that a criminal charge would be filed against the perpetrator.

**Subjective Severity of CSA**

There are very few studies where there are indications that the individuals who had actually experienced the sexual abuse during their childhood were ever consulted to define what the experience of CSA was like for them. Ney, Moore, McPhee, and Trought (1986) and Ney (1988) attempted to measure their subjects' impressions of their experience of the frequency and severity of CSA as well as physical and verbal abuse, and emotional and physical neglect. Yet, their reported definition of sexual abuse was very brief ("Sexual Abuse e.g., expose, force, rape"; Ney, 1988, p. 155). As well, there are no studies which have indicated any relationship between a researcher's objective classification of the severity of sexual abuse and the subject's perception of the abuse.
In examining the factors affecting a sexually abused victim's removal from his or her home, Pellegrin & Wagner (1990) noted that although their objective hierarchy of levels of sexual abuse reflected increasing levels of physical violation, the emotional impact of a specific act of sexual abuse on a victim could vary considerably from child to child.

Russell (1986) found considerable range in the degree of her subjects' reported trauma. Chiefly, her study of a community sample of women suggested that the specific characteristics of her subjects' perceptions of the sexual abuse were found to be associated with more severe aftereffects of the abuse. It was found that the subjects' descriptions of characteristics such as longer duration and frequency, abuse involving closer relatives (e.g., father figures), sexual behaviour that involved penetration, greater use of force and coercion, and multiple abuse experiences all appeared to be associated with the participant reporting greater symptomatology.

Many clinicians believe that it is not whether a specific traumatic event (e.g., sexual abuse in childhood) has occurred or whether researchers can determine how severe they believe the event was for an individual, but instead it is the perception and interpretation of the event by the individual himself or herself that determines the impact as well as the short-term and long-term aftereffects. Several
authors (e.g., Cahill, Llewelyn, & Pearson, 1991; Courtois, 1988, p. 91; Jehu, 1988) have argued that the clinician's willingness to assess individually, and to believe the client's account of specific abusive incidents was essential if one was to gain a subjective perspective on the severity and extent of the abuse.

In their work with survivors of CSA, Bass and Davis (1988) and Courtois (1988) added that the clinician should not attempt to judge the impact of the CSA based on an objective and/or clinician based hierarchy of severity. These authors suggested that it is only with a thorough understanding of the client's personal perception of the impact of the CSA that the clinician can begin to understand the short-term and long-term effects. As well, the clients' personal perception of the abuse affects their attempts to develop coping methods to deal with trauma and the therapist must be able to understand and appreciate both the need for these survival skills and how the development of these individual skills are currently affecting the clients' personal lives. Thus, these authors have suggested that it was the clients' subjective perception of their own abusive experiences that has determined the extent of the impact of the abuse upon them as individuals as well as any effects that may have occurred both short- and long-term.

Still, if one is to approach the challenge of the empirical determination of a clients' perception of their
own abusive experiences, it would be necessary to utilize a measure that is designed to assess individuals' personal impressions of the impact of their own unwanted childhood sexual experiences. To date, there have been no studies in the sexual abuse or eating disorders literature that have attempted to obtain a reliable and valid measurement of a person's impression of their emotional pain resulting from how intense and powerful the abusive experience was for them as an individual.

**Visual analogue scales.**

A field of study that has attempted to examine an individual's subjective impressions of distress and anguish has been that of research into physical pain. In an effort to understand more thoroughly the elements of physical pain and to develop more appropriate, efficient, and successful programs of pain management, it has been necessary to obtain a more complete perception of the various subjective dimensions of physical pain including affect, intensity, length, expectations of relief, as well as treatment efficacy and outcome measures.

One of the methods often used in the field of pain research to obtain a more thorough understanding of the subjective experience of pain is the visual analogue scale (VAS) (Chapman et al., 1985; Huskisson, 1983; McGrath, 1990; Syrjala & Chapman, 1984; Wallenstein, Heidrich, Kaiko, & Houde, 1980). The VAS consists of a straight line (usually
100 mm. in length) which represents a continuum of a specific aspect of pain. For example, if one was attempting to measure pain intensity, one may place a verbal anchor of "no pain" at one extreme end of the continuum scale and "pain as bad as it can be" as the anchor for the other extreme end of the scale. The participant is then asked to report their subjective level of pain intensity by drawing a mark across the VAS line at the place where they feel it would reflect accurately their severity of pain. The pain intensity score is determined by measuring the number of millimetres from the one end of the continuum line to the place marked by the subject.

The VAS has been validated as a useful tool for the assessment of several different physical and psychological symptoms (Bruera et. al, 1989; Elliot & Foley, 1990; McGrath, 1988; Price et. al, 1983). In physical pain research, the VAS have been found to be inexpensive, easy to use, and easily understood by most people including children as young as six years old. The instrument appears to place little response burden on fatigued individuals, requires only a few minutes to explain and administer, and can be repeated as often as needed (Funk, Tornquist, Champagne, Copp, & Wiese, 1989; McGrath, 1990). McGrath (1990, p. 86) noted that of the many methods available currently for assessing pain, VASs have represented versatility for evaluating pain developmentally and for assessing different
dimensions and types of pain. As well, VASs could be used in a variety of settings where the assessment of subjective impressions of pain are important (e.g., medical, dental). McGrath added that VASs are important tools in the assessment of physical pain experienced by children, a population in which it is often particularly difficult to assess and measure the extent of pain because of the many complexities of the developing child.

With respect to scales of rating physical pain, the correlations among categorical, numerical, and VAS are generally high (r > .80) (Kremer, Atkinson, & Ignelzi, 1981; Lee & Kreckhefer, 1989). Subjective ratings of pain using a VAS have been found to be related to both behavioural and verbal indicators of pain (Abu-Saad, 1984). McGrath (1990, p. 316) noted that children’s pain ratings on a VAS increased with actual physiological increases in their disease activity.

A VAS is considered to be a more sensitive and reliable method of measuring subjective appreciation of pain intensity than a numerical rating (Chapman et al., 1985; Syrjala & Chapman, 1984; Wallenstein et al., 1980). Wright (1992) noted that since a VAS could be measured and scored to the nearest millimetre, it may be more sensitive than either a numerical or categorical scale. In addition, Price, McGrath, Rafii, & Buckingham (1983) suggested that a VAS pain estimate has the properties of a ratio scale rather
than an interval scale and thus, may be more responsive to changes in ratings of pain.

Pain scores on a VAS were also found to be very similar to scores on a descriptive pain scale (Scott et al., 1977) and to scores on a brightness scale (McGrath et al., 1985). Callahan and colleagues (1987) found that VAS’s had a high degree of reliability and validity when used with rheumatoid arthritis patients. McGrath (1990, p. 78, 82) suggested that children as young as six years old were able to use VASs in a reliable and valid manner to describe subjective perceptions of their pain, regardless of their sex, age, or health status. Additionally, a two stage validation procedure indicated that participants’ responses to a VAS were consistent over time.

An additional important variable in pain research is the level of anxiety and distress experienced by the patient related to painful invasive procedures (e.g., finger pricks, injections, venous stabs, lumbar punctures, etc.). McGrath (1990, p. 245, 372) advocated the use of a VAS to obtain a more thorough understanding of the patient’s experience of anxiety at various points in a pain management program. In addition, VASs have been utilized to obtain more information about the anxiety level of parents who were about to have their child undergo an invasive procedure as well as how the child perceives the level of support they are receiving from their parents. McGrath also employed VASs to assess
patients' levels of affect (i.e., anger, sadness, fear) during these same medical procedures. Although a VAS can be presented in either a horizontal or vertical form, Watt-Watson & Donovan (1992, p. 64) suggested that the horizontal form is considered to be best for research purposes. Thus, VASs have been utilized with some success in the area of physical pain research to obtain a quantitative understanding of the subject's impression of not only pain intensity, but duration and quality of the pain, as well levels of affect and perceived support. A VAS could be used to obtain a more thorough understanding of a woman's perception and subjective impression of the impact that her unwanted sexual experience during childhood had on her.

The use of a set of VASs to obtain an assessment of the impact of CSA is not completely new. Ney, Moore, McPhee, and Trought (1986) and Ney (1988) used VASs to measure subjects' impressions of their experience of the frequency and severity of CSA, physical and verbal abuse, and emotional and physical neglect. These authors reported that the VAS was sensitive to small amounts of mistreatment and abuse, and the measure made it possible to assess on a continuous scale all types of abuse that occurred on a continuum of severity and frequency. Additionally, they found that their subjects had very little difficulty understanding and completing the set of VASs. Unfortunately, their reported definition of sexual abuse was
brief and did not attempt to examine a thorough range of abusive experiences ("Sexual Abuse e.g., expose, force, rape"; Ney, 1988, p. 155).

It is important to remember that all self-report measures are vulnerable to response bias and inaccurate responding by the participant (Vandereycken & Vanderlinden, 1983) which may be even more likely in the sensitive area of recalling childhood sexual abuse. However, as Garner & Olmsted (1984) pointed out, self-report information does have the advantages of economy, actuarial scoring, and access to information that may be unavailable through conventional clinical assessments or more oblique tests (p.10).

Conclusions

This review of the literature examining the areas of eating disorders in adulthood and its possible link with sexual abuse that occurred in childhood has indicated the various factors, issues, and methodological concerns that are present. There are discrepant points of view between the clinicians’ reports suggesting a relationship between these two factors and the researchers who cannot discern such a link. However, it is important to remember that the range of symptoms, the lack of a single predominant symptom pattern, and the absence of symptoms in so many victims has suggested clearly that the diagnosis of sexual abuse is complex (Kendall-Tackett, Williams, & Finkelhor, 1993).
Some clinicians and researchers are sceptical of the ability of an adult who had been abused sexually during childhood to recall such incidents, especially when some individuals attempt to deal with the abuse by suppressing or repressing the related facts and affect. However, there is other research which has suggested that adult retrospective reports of their childhood were reasonably accurate. It appears that this matter will remain vague and equivocal for the time being as there is no absolute answer available and currently, there are no reliable and valid methods of inquiry into this area of concern. Many of the studies which have attempted to determine a relationship between these factors have operationally defined their sexually abused grouping by the dichotomous query: have you ever been sexually abused? Unfortunately, such a question can serve to group those individuals who experienced one incident of stranger exposing his genitals in their presence with another individual who experienced protracted and painful intercourse with a parent figure(s). Such a grouping is not homogeneous.

Thus, it has become important to determine whether there are levels of severity of CSA. Some researchers have attempted to examine this issue by deciding on an objective hierarchy of CSA severity. However, this method has not taken into consideration the individual woman’s perception of her sexual abuse experience and the impact that she felt.
Such a subjective perception is paramount in many clinicians' views as they believe that it is this perception that needs to be assessed and understood before treatment can begin.

One of the challenges inherent in the examination of the subjective impact of any event is measurement. Contemporary studies in the field of physical pain have used Visual Analogue Scales in a successful attempt to understand and measure a person's subjective perception of their physical pain. Such a tool could be used to determine a woman's subjective perception of the impact of her sexual abuse during childhood.

Present Investigation

The present study will examine the relationship between the subjective experience of severity of unwanted sexual experiences during childhood, the objective severity of the CSA, and eating disorders among adult women in therapy. The two main groups will be adult women who have been diagnosed as having an eating disorder (ED) and adult women who have not been diagnosed as having an eating disorder (non-ED).

Women who have been diagnosed as eating disordered by a physician or a psychologist and referred for treatment will meet this study's criteria for inclusion into the eating disorder group. Information about any unwanted sexual experiences prior to the age of 15 years will be solicited from all women involved in the study. Both eating disorders
and CSA will be treated at times as dichotomous (i.e., with or without a diagnosis of eating disorder/with or without CSA) and at times as continuous (i.e., tendency towards or severity of eating disorders as measured by heightened scores on the Eating Disorders Inventory / subjective experience of the severity of the CSA). The potentially confounding effects of several family of origin variables (i.e., family conflict, verbal aggression, physical aggression, and lack of trust in the family) will be controlled statistically. All of the women in the study will be asked to complete three questionnaires: a demographic/family dysfunction questionnaire (Appendix A); an adapted version of the Eating Disorder Inventory (Garner, Olmstead, & Polivy, 1983; Appendix B); and a questionnaire about their most important occurrence of an unwanted sexual experience and its consequences. This questionnaire will concern itself with both thoughts/feelings retrospectively at the time of the abuse, and currently in their life (Appendix C).

Hypotheses

It is expected that:

1) Factor patterns will emerge among the items found in the demographic/family dysfunction questionnaire and in those items found in the questionnaire of the participants’ subjective perception of CSA. Items loading on the same factor, as determined by analyses, will be grouped together
to form subscales on their respective questionnaires.
2) A greater proportion of ED women than non-ED women will report experiencing CSA.
3) ED women who report CSA will perceive their unwanted sexual experience during childhood as being more severe, will manifest more severe objective ratings of childhood sexual abuse, and will experience their family as being more dysfunctional and conflictual than non-ED women who report CSA.
4) Among those women who report CSA, their subjective perceptions of the severity of their CSA will be a better predictor of the presence or absence of a diagnosed eating disorder than will either their objective ratings of CSA severity or their ratings of family dysfunction/conflict.
5) Among ED women, those who report CSA will demonstrate higher scores on the three subscales of the EDI (i.e., Drive for Thinness, Bulimia, and Body Dissatisfaction) than those who do not report CSA.
6) Among ED women, there will be a direct relationship between the scores on the three subscales of the EDI and the total score from the data on the subjective perception of CSA. As well, there will be a direct relationship between the scores on the three subscales of the EDI and the scores on the various subscales derived from the data on the subjective perception of CSA.
CHAPTER II

METHOD

Solicitation of Participants

Females 18 years of age and over who were in outpatient psyctherapy were solicited to participate in this research. Participants were solicited from the active case loads of several agencies in Ontario. Agencies in Windsor included the Windsor Western Hospital Outpatient Department, Bulimia Anorexia Nervosa Association (BANA), and the Psychological Services Centre, University of Windsor. Agencies outside Windsor included the Eating Disorders clinic at Kingston General Hospital, Guelph Wellington Counselling Centre, Community Mental Health in Brantford, the Downtown Clinic in London, Eating Disorder Clinic in Sudbury, and several independent therapists.

Participation was completely voluntary and none of the women were compensated in any form for participating.

Participants

A total of 256 sets of questionnaires were requested by therapists throughout southern Ontario for distribution to their clients. Therapists gave a total of 214 of these sets to their clients and a total of 74 (34.6%) of these were completed and returned. These data were collected over a span of 8 months (February - September 1994). The mean age for the total sample was 33.41 (SD=10.19) and the range was 18 to 63 years.
Materials

Cover letter. A cover letter was supplied with the set of questionnaires sent to each participant (Appendix D). This letter familiarized the participant with the researcher, outlined the purposes of the study, and provided instructions necessary for completion of the questionnaires. It also clearly informed the participants of the procedures being undertaken to ensure the confidentiality of their responses and explained the method used to ensure their anonymity in obtaining their consent. The letter informed the participant of the support that was available if she becomes distressed either during or following the completion of the questionnaires. In addition, the participants were informed how they could obtain general overall results once the study was completed.

The participants were not asked to sign a consent form for participation in this study as such a form would have dissolved their anonymity. Instead, it was made clear in this letter that the completion of any items and the return of the questionnaires by mail to the researcher was understood as consent to participate.

Written consent was obtained from each agency/therapist before the materials were presented to the participants. The Agency Consent form (Appendix E) outlines the purposes and procedures involved in this study as well as the responsibilities the Agency assumed if its personnel chose
to participate.

Demographic/family dysfunction questionnaire. Participants were asked to complete a two-part 30-item paper and pencil questionnaire created by the author (Appendix A). This questionnaire began with a description and an example of a Visual Analogue Scale (VAS) as many questionnaire items were in VAS format. The VAS consisted of a horizontal straight line (100 mm. in length) which represented a continuum. At one extreme end of the continuum was a verbal anchor (e.g., "always") and at the other extreme end of the continuum there was another verbal anchor opposite in nature to the initial one (e.g., "never"). The participant was asked to indicate her subjective level of severity of each VAS item by drawing a short vertical mark across the continuum line. The item severity score was determined by measuring the number of millimetres from the left end of the continuum line to the participant's vertical mark across the line.

Part A of this questionnaire consisted of demographic questions including age, marital status, involvement in intimate relationships, sexual orientation, current living arrangements, religion, employment status, ethnic background, education, previous involvement in therapy, and whether the participant had ever been diagnosed by a physician and/or a psychologist as having an eating disorder.

Part B contained items, many of which are in a VAS
form, that asked the participants to recall the general functioning of their families of origin before they were 15 years of age. Some items asked whether the person had felt safe, supported, and accepted, if there were many distressing feelings and conflicts in the family, and whether any one had used physical blows towards anyone else in the family. The essence of those items concerning physical aggression within the family (items # 24 - 29) was adapted from Finkelhor (1979). The last item on this questionnaire (#30) asked the participants to provide in a written narrative form any additional information about their family life before the age of 15 years that would help the researcher better understand what they had recorded on this questionnaire. Twelve percent of the participants provided some narrative.

The Eating Disorder Inventory. The Eating Disorder Inventory (EDI) is a 64-item paper and pencil questionnaire developed by Garner, Olmsted, and Polivy (1983). It is a measure of eight attitudinal and behavioural dimensions relevant to anorexia nervosa and bulimia. While this instrument should not be utilized as a sole means of diagnosing anorexia nervosa or bulimia nervosa in the absence of clinical judgement, it has been useful as a screening instrument to indicate which people are very preoccupied with their weight and/or exhibit bulimic behavioural tendencies (Garner & Olmsted, 1984).
The EDI is a widely used measure of eating disordered symptomatology (e.g., Garner, Olmsted, & Polivy, 1983; Garner et al., 1984; Garner et al., 1990; Norring, 1990; Raciti & Norcross, 1987; Smolak, Levine, & Sullins, 1990). It contains eight subscales: Drive for Thinness, Bulimia, Body Dissatisfaction, Ineffectiveness, Perfectionism, Interpersonal Distrust, Interoceptive Awareness, and Maturity Fears. The three subscales that measure the attitudes and behaviours related to eating and body shape are Drive for Thinness, Bulimia, and Body Dissatisfaction (Garner & Olmsted, 1984). Only the 23 items from these three scales were used in an adapted version of the EDI for this study (Appendix B)\(^1\) to assess weight preoccupation and bulimic behavioural tendencies.

All EDI items are answered on a six-point forced-choice scale by rating each item "always", "usually", "often", "sometimes", "rarely", or "never". With each item, the most extreme eating-disordered response is assigned a value of 3, with the immediate adjacent response a 2, and the next response as a 1. All other responses for that item are assigned a value of 0. The score for each subscale is then calculated by summing the item scores from that subscale.

\(^1\)Permission to alter and copy the EDI to reflect only these three scales has been obtained from R. Bob Smith III Ph.D., Psychological Assessment Resources Inc., Odessa, Florida, USA, 33556.
The Drive for Thinness subscale, containing seven items, is a measure of an excessive concern with dieting, a preoccupation with weight, and an extreme pursuit of thinness. These items indicate both a fear of gaining weight as well as a pronounced desire to lose weight. This subscale has shown high internal consistency in both anorexic and normal groups and has demonstrated a Cronbach's alpha of .85 for both groups (Garner, Olmsted, & Polivy, 1983). With regard to convergent validity, these authors found a significant correlation between this subscale and the Eating Attitudes Test (Garner & Garfinkel, 1979).

The Bulimia subscale, composed of seven items, assesses a tendency towards uncontrollable overeating (bingeing) which may be followed by the impulse to engage in self-induced vomiting (Garner, Olmsted, & Polivy, 1983). These authors reported a Cronbach's alpha of .90 in an anorectic group and .83 in a non-eating disordered group. With respect to convergent validity, this subscale was most related to a lack of self-control, restraint, and body dissatisfaction when compared with the Eating Attitudes Test (Garner & Garfinkel, 1979).

The Body Dissatisfaction subtest, containing nine items, is designed to assess the dissatisfaction a woman has with the shape and/or size of specific parts of her body (e.g., stomach, hips, thighs, buttocks). With respect to
internal consistency, Garner, Olmsted, & Polivy (1983) reported a Cronbach’s alpha of .90 in an anorectic group and .91 in their group of normal women. This subscale was found to be most related to dissatisfaction with some of the maturational regions of the female body (i.e., hips, buttocks).

In their use of a comparison group of women with post-secondary education, Garner, Olmsted, & Polivy (1983) found on their Drive for Thinness subscale that their female anorexic group (N=113) obtained a mean of 13.8 and the female comparison group (N=577) obtained a mean of 5.1. On the Bulimia subscale, the anorexics obtained a mean of 8.1 and their comparison group had a mean of 1.7. On the Body Dissatisfaction subscale, the anorexics obtained a mean of 15.5 and the comparison group obtained a mean of 9.7.

**Subjective perception of severity of childhood sexual abuse questionnaire.** The participants were asked to complete a two-part 41 item paper and pencil questionnaire created by the author (Appendix C). This questionnaire was designed to obtain both objective information concerning their unwanted sexual experiences during childhood as well as their subjective perception of how the CSA affected them, both retrospectively at the time of the occurrence of the abuse and currently as an adult.

This questionnaire began with a reiteration of the
instructions contained in the first questionnaire regarding how to respond to both the objective questions as well as the items in VAS form. If a participant recalled an unwanted sexual experience prior to the age of 15 years and she wished to respond to the items concerning this experience, she was encouraged to respond while thinking of the most important and significant experience that she could recall. If she encountered an item(s) to which she could not recall a relevant response, she was asked to mark the "cannot remember" box at the end of the item.

The first part of the questionnaire, Part C, solicited practical information concerning the abuse (e.g., age of participant; age, gender and relationship of the perpetrator; elements of the abusive experience; items # 1 - 8). Part C of the questionnaire also asked the participant (with items #9 - 23 in VAS form) to recall when the experience occurred and then to respond as to how the experience affected them.

Part D of this questionnaire asked the participant to respond to VAS form items (item # 24 - 40) concerning how the unwanted sexual experience during their childhood was affecting them currently as an adult. The essence of these items concerning their most personally significant unwanted sexual experience before age 15 years (items # 5 - 10, 15, 20 - 23, 25, 33) was adapted from Finkelhor (1979).
At the end of this questionnaire, item # 41 asked the participant to respond in a written narrative form if there was additional information about their unwanted sexual experiences that would help the researcher better understand what they had recorded on this questionnaire. It was noted that 13% of the respondents added a narrative.

The severity score on the items using a VAS format were scored in the same manner as the Demographic/family dysfunction questionnaire (i.e., measuring the number of millimetres from the left end of the continuum line to the participant’s vertical mark across the line).

Item #6 on this questionnaire asked the participant to indicate what had occurred physically during their most significant unwanted sexual experience prior to the age of 15 years. Data gleaned from this item was used to determine an objective rating of severity of the CSA. This item was scored according to Russell (1986) who defined severity of CSA as encompassing three categories. Russell’s category of "Least severe sexual abuse" included experiences ranging from kissing or touching in a sexual way to exposure of genitalia. This category was scored 1 in the present study. Russell’s classification of "Moderately severe sexual abuse" consisted of experiences ranging from fondling to simulated intercourse. This category was scored 2 in the present study. Russell’s "Very severe sexual abuse" classification
included experiences ranging from oral contact with genitals to vaginal and/or anal intercourse. This category was scored a 3 in the present study. Thus, if a participant records that two physical events from category 1, one event from category 2, and two events from category 3 occurred during her most significant unwanted sexual experience, she would receive a score of 10 (i.e., 1+1+2+3+3=10) (see Appendix F).

**Procedures**

The researcher contacted various agencies and therapists by telephone. The main purposes of this study were outlined to agency personnel, instructions for therapists provided (see Appendix G) and they were requested to give the package of questionnaires to the appropriate clients on their active therapy case list. The identity of the clients was kept anonymous but the number of questionnaire packages sent by each agency was known.

Each package contained the cover letter, demographic/family dysfunction questionnaire, Eating Disorder Inventory (adapted version), and subjective perception of severity of CSA questionnaire. In addition, each package contained a stamped envelope addressed to the researcher at the University of Windsor. This envelope was used by the participant to return her materials to the researcher. In this way, the researcher did not know the
identity of the participants to whom the materials were sent and no agency/therapist knew which participants returned the materials. All mailing charges incurred were absorbed by the researcher.

**Risk Control**

Research in this area may have posed a risk to some participants as they may have become distressed due to upsetting feelings, memories, flashbacks, thoughts etc. arising from the process of completing the questionnaires. Therefore, it was important that such participants were clearly directed in the package of materials to seek out support from the therapist/ counsellor with whom they were involved.

A telephone number was listed for those participants who had questions or concerns regarding their completion of the questionnaire materials. This telephone number connected the participant with the secretary at the Psychological Services Centre, University of Windsor. The secretary was requested to ask only for a first name or a pseudonym from the participant as well as a telephone number where they could be reached by the researcher. In this way, the confidentiality of the participant was hopefully less threatened. In addition, the telephone numbers for the Project Director as well as the Department of Psychology Ethics Committee were enclosed for any participants who
wished to contact them regarding any concerns they may have about this study.

Feedback

Information in the package of materials explained that general overall results would be made available to the various agencies or therapists where the participants were involved. The participants were invited to obtain a copy from their agency/therapist if they wished. In addition, if they did not wish to obtain feedback information from their respective agency/therapist, they were invited to mail their request to the researcher at the Psychology Department, University of Windsor. Information on specific participants was not made available to any agency or therapist. Rather, a general overall profile of each agency’s or therapist’s group of participants was made available. It was made clear to all participants that copies of general overall results of this study were available to any one who wished to obtain them whether or not they had taken part in the study.
PAGINATION ERROR.

TEXT COMPLETE.

NATIONAL LIBRARY OF CANADA.
CANADIAN THeses SERVICE.

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SERVICE DES THeses CANADIENNES.
CHAPTER III

RESULTS

All statistical analyses were done by microcomputer, using the SPSS for Windows V6.0 statistical software (SPSS Inc., 1992). The choice of statistical decision rules is discussed in Appendix H.

Participants Reporting Childhood Sexual Abuse

In this sample of 74 participants, 50 (67.6%) reported unwanted sexual experiences prior to 15 years of age (CSA). Their mean age at the time of the CSA was 8.58 years (SD = 3.64). Twenty-seven (54%) of the women reporting CSA indicated the frequency of their CSA experiences. They reported from 1 to 98 CSA episodes, with a mean of 16.73 (SD = 30.88) and a median of 1.5. The sizable difference between the mean and the median number of CSA episodes is due to the large number of episodes reported by 6 participants (mean number of episodes = 62.0). Forty-two of the 50 women reporting CSA (84%) indicated the duration of their abuse. They reported a duration of 1 to 200 months, with a mean of 46.44 (SD = 55.23), and a median of 24.0. Thirty-five (70%) of the 50 women with a history of CSA reported that they had not told anyone about their abuse at the time of its occurrence. Table 1 describes to whom the remaining women disclosed their abuse.

The participants in this study were asked to describe their perceptions concerning the one unwanted sexual
Table 1

**Individuals to Whom the Participants Disclosed their Unwanted Sexual Experiences (N=50)**

<table>
<thead>
<tr>
<th>Relationship</th>
<th>N</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No one</td>
<td>35</td>
<td>70%</td>
</tr>
<tr>
<td>Mother</td>
<td>8</td>
<td>16%</td>
</tr>
<tr>
<td>Father</td>
<td>1</td>
<td>2%</td>
</tr>
<tr>
<td>Other adult</td>
<td>1</td>
<td>2%</td>
</tr>
<tr>
<td>Brother/sister</td>
<td>1</td>
<td>2%</td>
</tr>
<tr>
<td>Friend</td>
<td>2</td>
<td>4%</td>
</tr>
<tr>
<td>Cannot remember who</td>
<td>2</td>
<td>4%</td>
</tr>
<tr>
<td>was told</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
experience prior to the age of 15 which had been most significant to them. When queried whether they had had unwanted sexual experiences other than the one that they had reported on, 34 (68%) answered yes. See Table 2 for information regarding the participants' unwanted sexual experiences other than the one most significant to them.

Sixteen (32%) of the 50 women reported that the perpetrator of their abuse was their biological father. The demographics of the perpetrators of the participants are shown in Table 3.

**Participants Reporting an Eating Disorder**

Thirty-five of the 74 participants (47.3%) reported that they had been diagnosed by a psychologist and/or a physician as having an eating disorder: 10 with anorexia nervosa, 13 with bulimia nervosa, 10 with both anorexia nervosa and bulimia nervosa, and 2 with "other" (not specified). Participants were divided into eating disordered (ED) and non-eating disordered (non-ED) groups on the basis of the respondents' reporting of such a diagnosis. The mean age of the ED participants was 30.46 years (SD = 8.76), compared with 35.41 years (SD = 10.73) for the non-ED participants. These ages were not significantly different (t(73)=1.58, p = n.s.).

The groups of ED and non-ED were also compared on the presence or absence of reported CSA and not found to differ. Thus, ED participants were no more likely than non-ED
Table 2

<table>
<thead>
<tr>
<th>Number of Participants who Experienced Other Unwanted Sexual Experiences (N=42)</th>
<th>Number of Experiences</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( \bar{X} )</td>
</tr>
<tr>
<td>Prior to Age 15 years only</td>
<td>2.0</td>
</tr>
<tr>
<td>(N=8)</td>
<td></td>
</tr>
<tr>
<td>Age 15 years and Older only</td>
<td>3.87</td>
</tr>
<tr>
<td>(N=16)</td>
<td></td>
</tr>
<tr>
<td>Both Prior to Age 15 and Older</td>
<td>4.40</td>
</tr>
<tr>
<td>(N=10)</td>
<td></td>
</tr>
</tbody>
</table>
Table 3

Demographics of Perpetrators (N=50)

Mean Age: 30.04 (SD=15.09)
Gender: 48 male 2 female

<table>
<thead>
<tr>
<th>Relationship to Participant</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stranger</td>
<td>4</td>
</tr>
<tr>
<td>Acquaintance</td>
<td>5</td>
</tr>
<tr>
<td>Friend of Parents</td>
<td>1</td>
</tr>
<tr>
<td>Cousin</td>
<td>1</td>
</tr>
<tr>
<td>Uncle/aunt</td>
<td>2</td>
</tr>
<tr>
<td>Grandfather</td>
<td>2</td>
</tr>
<tr>
<td>Brother</td>
<td>8</td>
</tr>
<tr>
<td>Sister</td>
<td>1</td>
</tr>
<tr>
<td>Father</td>
<td>16</td>
</tr>
<tr>
<td>Mother</td>
<td>1</td>
</tr>
<tr>
<td>Step-father</td>
<td>6</td>
</tr>
<tr>
<td>Other*</td>
<td>3</td>
</tr>
</tbody>
</table>

* None of the participants who endorsed the perpetrator item of "Other" indicated what relationship they had with this person.
participants to have experienced CSA ($\chi^2(1) = 0.216$, $p = \text{n.s.}$; see Table 4). Demographic comparisons are presented in Appendix I and no significant differences between groups were found.

**Weight Preoccupation in Sample**

Weight preoccupation in this study was measured by examining the participants’ scores on the three EDI subscales of Drive for Thinness, Bulimia, and Body Dissatisfaction. In addition, a total score was calculated by summing the participants’ scores across the three EDI subscales. Thus, there were four scores forming the concept of weight preoccupation in this study with higher scores indicating a greater presence of symptoms.

The ED sample had significantly higher scores than the non-ED sample over all four weight preoccupation measures (see Table 5).

**Reliability - Internal Consistency of EDI subscales**

Reliability coefficients (i.e., Cronbach’s Alpha; Cronbach, 1951) were calculated on the three EDI subscales used in this study (i.e., Drive for Thinness, Bulimia, and Body Dissatisfaction) as well as the Total EDI score. The four EDI subscales possessed high reliability (Drive for Thinness = .90, Bulimia = .88, Body Dissatisfaction = .96, and Total EDI = .96). The reliability coefficients were consistent with those of the three EDI subscales previously reported for the EDI (i.e., Drive for Thinness = .86,
Table 4

Prevalence of CSA among ED and non-ED participants (N=74)

<table>
<thead>
<tr>
<th>Reported Unwanted Sexual Experience During Childhood</th>
<th>Non Eating Disordered</th>
<th>Eating Disordered</th>
<th>Chi-Square (1 df)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>N 13 (17.6%)</td>
<td>11 (14.9%)</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>N 26 (35.1%)</td>
<td>24 (32.4%)</td>
<td>.216 (n.s.)</td>
</tr>
</tbody>
</table>
Table 5

Comparison of the means of the subscales of the four EDI scales between the ED and the non-ED groups (N=74)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Non-ED (N=39)</th>
<th>ED (N=35)</th>
<th>df</th>
<th>t</th>
<th>p &lt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive for Thinness</td>
<td>7.18 (6.70)*</td>
<td>12.53 (6.50)</td>
<td>72</td>
<td>3.37</td>
<td>.001</td>
</tr>
<tr>
<td>Bulimia</td>
<td>3.42 (4.29)</td>
<td>7.03 (6.47)</td>
<td>72</td>
<td>2.79</td>
<td>.01</td>
</tr>
<tr>
<td>Body Dissatisfaction</td>
<td>13.66 (9.15)</td>
<td>18.41 (8.87)</td>
<td>72</td>
<td>2.27</td>
<td>.05</td>
</tr>
<tr>
<td>Total EDI</td>
<td>25.26 (17.08)</td>
<td>37.97 (18.28)</td>
<td>72</td>
<td>3.13</td>
<td>.01</td>
</tr>
</tbody>
</table>

* Standard Deviations are shown in parentheses
Bulimia = .88, Body Dissatisfaction = .90; Garner & Olmstead, 1984). There is no previously published reliability score for the Total EDI based on the sum of these three EDI subscales.

Development of Composite Variables

All 74 participants had completed Parts A and B of the questionnaire package (the family dysfunction questionnaire), whereas only the 50 participants who reported CSA completed Part C (retrospective subjective impressions of severity of impact of CSA) and Part D (current subjective impression of severity of impact of CSA). Therefore, composite variables were generated separately for Parts A and B than for Parts C and D.

A factor analysis was calculated on data found in Parts A/B and in Parts C/D of the self-report questionnaires. These analyses revealed clear factor patterns. The procedures followed in the two factor analyses were similar. Initially a principal components analysis was undertaken to reveal the factor patterns. Then, an oblique rotation of the data was used to form composite variables, or subscales, because it was found that most of the correlations between the factors were above 0.30.\(^1\) The resultant factor pattern matrices were examined to decide which items loaded on factors. Items with factor loadings greater than ± .35 were

\(^1\)Tabachnick and Fidell (1989, p. 637) have suggested that, if factor correlations exceed .30, there is 10% or more overlap in variance among the factors and an oblique rotation is warranted.
considered meaningful.²

On the item data from the family dysfunction questionnaire, all 14 items were supported by the principal components analysis and three factors were extracted. An investigation of a scree test of eigenvalues (Cattell, 1966) plotted against the factors supported the maintenance of a three factor solution for these item data. The total variance accounted for by the three factors equalled 73.1%. These rotated factors were labelled: Family Environment, Parental Physical Abuse, and Other Physical Abuse. The items loading on each factor are presented in Table 6. The Pearson product-moment correlations between the factors of the family dysfunction questionnaire are presented in Table 7.

A second principal components analysis was conducted to reveal the factor pattern among the 29 items of the child abuse section of the questionnaire package. It was found that 28 of the 29 items were supported by the principal components analysis. One item did not load over ± .35 on any of the factors and so was eliminated from further analyses.³

²Several studies in the literature have selected a range of anywhere from .30 to .40 as their cutoff (Garner, Olmstead, & Polivy, 1983; Welch, Hall, & Walkey, 1988; Welch, Hall, & Norring, 1990).

³The item eliminated was "40) Now as an adult, what are the chances that you will experience another unwanted sexual experience in your life? (None-Great)" (Loading = .19)
Table 6

Oblique Rotated Factor Pattern Matrix on Items from Family Dysfunction Questionnaire*

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor Pattern</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Factor One: &quot;Family Environment&quot;</td>
<td></td>
</tr>
<tr>
<td>22<strong>There was a lot of trust in my family (Always-Never)</strong></td>
<td></td>
</tr>
<tr>
<td>23 We confided in each other in our family (Always-Never)</td>
<td></td>
</tr>
<tr>
<td>21 We could turn to each other for support during crisis (Always-Never)</td>
<td></td>
</tr>
<tr>
<td>17 I felt safe in my family (Always-Never)</td>
<td></td>
</tr>
<tr>
<td>18 I enjoyed the time spent with my family (Always-Never)</td>
<td></td>
</tr>
<tr>
<td>24 I would describe my family as (Accepting-Rejecting)</td>
<td></td>
</tr>
<tr>
<td>20 There were lots of bad feelings in my family (Never-Always)</td>
<td></td>
</tr>
<tr>
<td>19 How much conflict was present between members of your family. (None-Extensive)</td>
<td></td>
</tr>
<tr>
<td>30 Did anyone in your family (except you) ever use physical blows towards anyone else in your family? (Never-A Lot)</td>
<td></td>
</tr>
<tr>
<td>Factor Two: &quot;Parental Physical Abuse&quot;</td>
<td></td>
</tr>
<tr>
<td>25 Did either of your parents ever use physical blows towards you? (Never-A Lot)</td>
<td></td>
</tr>
<tr>
<td>26 As a result of the blows, how much physical pain did you experience? (None-Intense)</td>
<td></td>
</tr>
<tr>
<td>28 As a result of the physical blows, how much physical pain did you experience? (None-Extensive)</td>
<td></td>
</tr>
<tr>
<td>Factor Three: &quot;Other Physical Abuse&quot;</td>
<td></td>
</tr>
<tr>
<td>27 How often did anyone else living in your home (other than parent figures) ever use physical blows towards you? (Never-A lot)</td>
<td></td>
</tr>
<tr>
<td>29 Did you ever use physical blows towards anyone else in your family (Never-A lot)</td>
<td></td>
</tr>
</tbody>
</table>

Percent of Variance Explained

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>52.5</td>
<td>11.8</td>
<td>8.7</td>
</tr>
</tbody>
</table>

* Higher scores reflect more negative functioning and perceptions
** All items referent the time in the participant's life when she was younger than 15 years of age.
*** The phrases in the brackets denote the opposite ends of the Visual Analogue Scale for that particular item.
# Table 7

Correlations between Family Dysfunction Factors (N=74)

<table>
<thead>
<tr>
<th></th>
<th>Family Environment</th>
<th>Parental Physical Abuse</th>
<th>Other Physical Abuse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Environment</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parental Physical Abuse</td>
<td>.65*</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Other Physical Abuse</td>
<td>.52*</td>
<td>.44*</td>
<td>1.00</td>
</tr>
</tbody>
</table>

*p < .01
Eight factors were initially extracted with factor pattern loadings greater than $\pm .35$. A scree test of the eigenvalues supported a four factor solution and the total variance accounted for by the four factors was 60.3%. The four factors were labelled: Current Distress, Past Distress, Disclosure-Responsibility and Experience of Abuse. The items loading on each factor are presented in Table 8.

One of these factors was composed mostly of items asking about the participant's disclosure of her CSA. However, 35 of the 50 participants (70%) who had a history of CSA did not disclose their abuse to anyone. Thus, it would be important to interpret this factor cautiously.

The Pearson product-moment correlations between the factors in the Child Abuse Section are presented in Table 9.

**Reliability - Internal Consistency of the Composite Variables**

Table 10 presents the reliability coefficients for the rotated factors of the family dysfunction questionnaire as well as the Child Abuse section. These reliability coefficients are Cronbach Alpha's (Cronbach, 1951). The coefficients of these factors possess a moderate to high degree of reliability ranging from .70 (Experience of Abuse) to .93 (Family Environment).

**Relationship Between Objective Severity and Subjective Impact of Sexual Abuse**

A Total Objective Severity score was obtained by
Table 8

Oblique Rotated Factor Pattern Matrix on Items from Parts C and D of the Unwanted Sexual Abuse Questionnaire*

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor Pattern</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td><strong>Factor One: &quot;Current Distress&quot;</strong></td>
<td></td>
</tr>
<tr>
<td>24 How often do you think about this experience? (Not at All-All the Time)** .94</td>
<td></td>
</tr>
<tr>
<td>28 How much do you think the experience affects you now? (Not at All-A Lot)  .93</td>
<td></td>
</tr>
<tr>
<td>26 How much impact do you think the experience had on your life? (None-Extensive) .82</td>
<td></td>
</tr>
<tr>
<td>35 How much emotional distress do you feel currently as a result of the experience? (None-Extensive) .87</td>
<td></td>
</tr>
<tr>
<td>27 Does the memory of this experience interfere with your daily life? (Not at All-Extensively) .80</td>
<td></td>
</tr>
<tr>
<td>31 How much does thinking about the experience affect your sleep now? (Not At All-Extensively) .70</td>
<td></td>
</tr>
<tr>
<td>32 How much does thinking about the experience affect your eating now? (Not At All-Extensively) .53</td>
<td></td>
</tr>
<tr>
<td>25 If you have any feelings now about this experience, how do you feel? (Very Happy-Very Upset) .52</td>
<td></td>
</tr>
<tr>
<td>34 How much physical pain do you feel currently as a result of the experience? (None-Intense) .40</td>
<td></td>
</tr>
<tr>
<td>36 How much have you thought about hurting yourself as a result of this experience? (Not At All-A Lot) .37</td>
<td></td>
</tr>
<tr>
<td><strong>Factor Two: &quot;Experience of Abuse&quot;</strong></td>
<td></td>
</tr>
<tr>
<td>11 How did you feel about the experience? (Very Happy-Very Upset) .88</td>
<td></td>
</tr>
<tr>
<td>10 What was this experience like for you? (Enjoyable-Terrible) .82</td>
<td></td>
</tr>
<tr>
<td>9 At the time that it happened, did the experience affect you? (Not at All-A Lot) .76</td>
<td></td>
</tr>
<tr>
<td>37 How much control do you feel you have in your life? (None-Complete) .40</td>
<td></td>
</tr>
<tr>
<td>17 How much emotional distress did you experience? (None-Extensive) .36</td>
<td></td>
</tr>
</tbody>
</table>

*(table continues)*
Table 8 continues

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor Pattern</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factor Three: Disclosure-Responsibility</strong></td>
<td></td>
</tr>
<tr>
<td>22 If you did tell someone, how much emotional help did you receive?</td>
<td>-.95</td>
</tr>
<tr>
<td>(A Lot-None)</td>
<td></td>
</tr>
<tr>
<td>23 If you did tell someone, how much real practical help did you</td>
<td>-.94</td>
</tr>
<tr>
<td>receive? (A Lot-None)</td>
<td></td>
</tr>
<tr>
<td>21 If you did tell someone, how much do you think they believed you?</td>
<td>-.82</td>
</tr>
<tr>
<td>(Totally-Not At All)</td>
<td></td>
</tr>
<tr>
<td>29 What was this experience like for you? (Enjoyable-Terrible)</td>
<td>.57</td>
</tr>
<tr>
<td>30 How responsible do you feel about the experience? (Not At All-</td>
<td>-.36</td>
</tr>
<tr>
<td>Completely)</td>
<td></td>
</tr>
</tbody>
</table>

**Factor Four: "Past Distress"**

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor Pattern</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 How much did you think about hurting yourself as a result of the</td>
<td>.79</td>
</tr>
<tr>
<td>experience? (Not at All-A Lot)</td>
<td></td>
</tr>
<tr>
<td>13 Did thinking about the experience have any effect on your sleep</td>
<td>.78</td>
</tr>
<tr>
<td>patterns? (None-A Lot)</td>
<td></td>
</tr>
<tr>
<td>14 Did thinking about the experience have any effect on your eating</td>
<td>.77</td>
</tr>
<tr>
<td>patterns? (None-A Lot)</td>
<td></td>
</tr>
<tr>
<td>12 How responsible did you feel for the experience? (Not at All-</td>
<td>.65</td>
</tr>
<tr>
<td>Completely)</td>
<td></td>
</tr>
<tr>
<td>19 How much stress did you feel existed in your family? (None-Extensive)</td>
<td>.56</td>
</tr>
<tr>
<td>15 How much threat or coercion did you feel was associated with the</td>
<td>.45</td>
</tr>
<tr>
<td>experience? (None-A Lot)</td>
<td></td>
</tr>
<tr>
<td>16 How much physical pain did you experience? (None-Intense)</td>
<td>.41</td>
</tr>
</tbody>
</table>

Percent of Variance Explained

|                     | 25.8 | 16.6 | 10.8 | 6.8 |

* Higher scores reflect more negative functioning and perceptions
** The phrases in the brackets denote the opposite ends of the Visual Analogue Scale for that particular item.
Table 9

Correlations between Factors Found in Parts C and D (N=50)

<table>
<thead>
<tr>
<th></th>
<th>Current Distress</th>
<th>Past Distress</th>
<th>Disclosure-Responsibility</th>
<th>Experience of Abuse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Distress</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Past Distress</td>
<td>.38*</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disclosure-Responsibility</td>
<td>.20</td>
<td>.45**</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Experience of Abuse</td>
<td>-.05</td>
<td>.47**</td>
<td>.03</td>
<td>1.00</td>
</tr>
</tbody>
</table>

* * P < .05
** ** P < .01
Table 10

Reliability Coefficients for the Oblique Rotated Factors

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Cronbach Alpha</th>
<th>( \bar{X} )</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Family Dysfunction Questionnaire (N=74)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family Environment</td>
<td>.93</td>
<td>61.33</td>
<td>24.74</td>
</tr>
<tr>
<td>Parental Physical Abuse</td>
<td>.85</td>
<td>26.78</td>
<td>20.67</td>
</tr>
<tr>
<td>Other Physical Abuse</td>
<td>.72</td>
<td>20.22</td>
<td>20.59</td>
</tr>
<tr>
<td><strong>Part C and D of Questionnaire #3 (N=50)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current Distress</td>
<td>.90</td>
<td>53.34</td>
<td>24.89</td>
</tr>
<tr>
<td>Past Distress</td>
<td>.83</td>
<td>51.92</td>
<td>27.02</td>
</tr>
<tr>
<td>Disclosure-Responsibility</td>
<td>.76</td>
<td>34.34</td>
<td>21.62</td>
</tr>
<tr>
<td>Experience of Abuse</td>
<td>.70</td>
<td>64.09</td>
<td>23.10</td>
</tr>
</tbody>
</table>
summing the individual participants’ scores on their reporting of the actual physical events that occurred during their sexual abuse. The relationship between this Objective score and the four subjective impact subscales revealed two significant results. It was found that Current Distress ($r(50) = .31, p < .05$) and Disclosure-Responsibility ($r(50) = .32, p < .05$) were significantly related to the Total Objective Severity score (see Table 11). These correlations suggest that the more objectively severe the sexual abuse was during childhood (i.e., the more physically intrusive the abuse was including intercourse), the more likely the abused participants were to feel distraught and upset in adulthood, and the less they were supported emotionally if they had disclosed their abuse to anyone.

**Effects of Subjective Impressions of CSA**

Hypothesis 3 predicted that ED women who reported CSA would perceive their unwanted sexual experience during childhood as more severe, would manifest more severe objective ratings of CSA, and would experience their family as being more dysfunctional and conflictual than non-ED women who reported CSA. Multivariate analyses of variance (MANOVA) were calculated on groups of theoretically related variables. Hotelling’s $T^2$, a special case of MANOVA, was used when the independent variable contained only two groups and there were several dependent variables. The initial use of the MANOVA before the use of univariate statistics was
<table>
<thead>
<tr>
<th></th>
<th>Objective Severity</th>
<th>p &lt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Distress</td>
<td>.31</td>
<td>.05</td>
</tr>
<tr>
<td>Past Distress</td>
<td>.18</td>
<td>n.s.</td>
</tr>
<tr>
<td>Disclosure-Responsibility</td>
<td>.32</td>
<td>.05</td>
</tr>
<tr>
<td>Experience of Abuse</td>
<td>.08</td>
<td>n.s.</td>
</tr>
</tbody>
</table>
preferable to employing univariate analyses given the intercorrelations between the dependent variables and the possibility of inflating the Type I error rate.

The four subscales of the subjective perceptions of sexual abuse (i.e., Current Distress, Past Distress, Disclosure-Responsibility, and Experience of Abuse), objective severity, and the three family dysfunction subscales (i.e., family environment, parental physical abuse, other physical abuse,) were used as the dependent variables in one-way between-subjects multivariate analysis of variance (MANOVA) (Hotelling’s $T^2$) in the calculations for this hypothesis. The independent variable was the presence/absence of an eating disorder. However, while all respondents completed the family dysfunction items, not everyone reported a history of CSA. Thus, two separate MANOVA’s were completed: (1) MANOVA with independent variable of presence/absence of an eating disorder with three dependent variables of Family Environment, Parental Physical Abuse, and Other Physical Abuse, (N=74); and (2) MANOVA with the independent variable of presence/absence of an eating disorder with five dependent variables of Current Distress, Past Distress, Disclosure-Responsibility, Experience of Abuse, and Objective Severity of Abuse (N=50).

The results of the first MANOVA (Hotelling’s $T^2$) indicated that, contrary to Hypothesis 3, (i.e., that ED women who report CSA will perceive their unwanted sexual
experience during childhood as being more severe, will manifest more severe objective ratings of childhood sexual abuse, and will experience their family as being more dysfunctional and conflictual than non-ED women who report CSA) the combined dependent variables of the family dysfunction subscales (N=74) were not significantly affected by the presence/absence of an eating disorder (F(3,70)=.764, p=n.s.). In the second MANOVA (Hotelling’s T²), again contrary to Hypothesis 3, the combined dependent variables of the sexual abuse subscales (N=50) were not significantly affected by the presence/absence of an eating disorder (F(4,45)=.662, p=n.s.).

Hypothesis 4 predicted that, among those women who reported being sexually abused during childhood, the ratings on their subjective impact subscales would be better predictors of the presence/absence of an eating disorder than either their ratings on the objective severity subscale or their ratings on the family dysfunction subscales. A logistic regression analysis was undertaken to determine the relationship between the dichotomous criterion variable of eating disordered/non-eating disordered with the eight predictor variables of Family Environment, Parental Physical Abuse, Other Physical Abuse, Objective Severity of Abuse, Current Distress, Past Distress, Disclosure-Responsibility, and Experience of Abuse. Computation of the variance proportions, tolerance, and correlation matrix of regression
coefficients revealed that the predictor variables were not multicollinear. However, the logistic regression analysis for determining the best predictor in the eating disorder/non-eating disorder category among the eight predictor variables was not significant ($X^2(8, N=50) = 8.05$, $p = n.s.$) (see Table 12). Therefore, the contributions of the individual independent variables were not analyzed.

**Effects on Weight Preoccupation**

The level of the participants’ weight preoccupation was determined by their four EDI scores (i.e., Drive for Thinness, Bulimia, Body Dissatisfaction, and Total EDI). Hypothesis 5 predicted that, among women who were eating disordered ($N=35$), those who reported CSA would have higher scores on the four EDI scores than those women who did not report CSA. A MANOVA was calculated on the 35 participants who had reported an eating disorder with the independent variable of the presence/absence of a history of CSA with only the three dependent variables of Drive for Thinness, Bulimia, and Body Dissatisfaction. The Total EDI was not used in this analysis as it is comprised of summing the other three EDI subscales and would therefore be linearly dependent.

The results of the MANOVA (Hotelling’s $T^2$) supported the hypothesis that the combined dependent variables of the three EDI subscales were significantly affected by the presence/absence of a history of CSA ($F(3,31) = 3.31$, $p = .03$).
Table 12

Logistic Multiple Regression of the predictor variables of Family Dysfunction, CSA, and Objective Severity on the criterion variable of the Presence/absence of an Eating Disorder (N=50)

<table>
<thead>
<tr>
<th>Variables</th>
<th>FE</th>
<th>PPA</th>
<th>OPA</th>
<th>CD</th>
<th>PD</th>
<th>D-R</th>
<th>ExpAb</th>
<th>B</th>
<th>R</th>
<th>Exp(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Environment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.03</td>
<td>.00</td>
<td>1.03</td>
<td></td>
</tr>
<tr>
<td>Parental Physical Abuse</td>
<td>.39</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.01</td>
<td>.00</td>
<td>1.01</td>
<td></td>
</tr>
<tr>
<td>Other Physical Abuse</td>
<td>.41</td>
<td>.05</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.01</td>
<td>.00</td>
<td>.99</td>
<td></td>
</tr>
<tr>
<td>Current Distress</td>
<td></td>
<td></td>
<td>.09</td>
<td></td>
<td></td>
<td></td>
<td>-.03</td>
<td>.17</td>
<td>.97</td>
<td></td>
</tr>
<tr>
<td>Past Distress</td>
<td>.03</td>
<td>-.26</td>
<td>-.22</td>
<td>-.14</td>
<td></td>
<td></td>
<td>.00</td>
<td>.00</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Disclosure-Responsibility</td>
<td>.01</td>
<td>-.20</td>
<td>-.10</td>
<td>.07</td>
<td>.10</td>
<td></td>
<td>-.03</td>
<td>.10</td>
<td>.97</td>
<td></td>
</tr>
<tr>
<td>Experience of Abuse</td>
<td>.13</td>
<td>.11</td>
<td>.09</td>
<td>.16</td>
<td>.20</td>
<td>.17</td>
<td>.12</td>
<td>.06</td>
<td>.24</td>
<td></td>
</tr>
<tr>
<td>Objective Severity</td>
<td>.02</td>
<td>.17</td>
<td>-.02</td>
<td>-.36</td>
<td>.03</td>
<td>-.39</td>
<td>.07</td>
<td>.17</td>
<td>.16</td>
<td>1.18</td>
</tr>
</tbody>
</table>

Intercept = -1.09

FE=Family Environment, PPA=Parental Physical Abuse, OPA=Other Physical Abuse, CD=Current Distress, PD=Past Distress, D-R=Disclosure-Responsibility, ExpAb=Experience of Abuse, OS=Objective Severity
However, an examination of the univariate tests failed to reveal a significant effect on any of the individual EDI subscales (see Table 13).

Given that none of these univariate tests were significant, a t-test was calculated on this sample of ED participants to determine if participants with a history of CSA would have higher Total EDI scores than those who had not reported such a history. The presence/absence of CSA was the independent variable and the Total EDI score was the dependent variable. This t-test was also not significant ($t(33)=.02, p=n.s.$).

Similar MANOVA (Hotelling’s $T^2$) analyses were undertaken on the non-ED (N=39) sample, with the independent variable of the presence/absence of a history of CSA with the three dependent variables of Drive for Thinness, Bulimia, and Body Dissatisfaction. The results indicated that the combined dependent variables of the three EDI subscales were not significantly affected by the presence/absence of a history of CSA ($F(3,31)=0.05, p=.ns$). As well, when similar analyses were completed on the full sample of non-ED and ED, the results indicated that the combined dependent variables of the three EDI subscales were not significantly affected by the presence/absence of a history of CSA ($F(3,31)=1.19, p=.ns$).

Hypothesis 6 predicted that, among women who were sexually abused during their childhood (N=50), there would
Table 13

Effect of the presence/absence of CSA on EDI subscales within the Eating Disordered Sample (N=35)

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Dependent Variable</th>
<th>Univariate F</th>
<th>Degrees of Freedom</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSA</td>
<td>Drive for Thinness</td>
<td>1.73</td>
<td>1.33</td>
<td>n.s.</td>
</tr>
<tr>
<td></td>
<td>Bulimia</td>
<td>.053</td>
<td>1.33</td>
<td>n.s.</td>
</tr>
<tr>
<td></td>
<td>Body Dissatisfaction</td>
<td>.950</td>
<td>1.33</td>
<td>n.s.</td>
</tr>
</tbody>
</table>
be a relationship between the scores on the four scales of the EDI and the scores of the subjective impact subscales. Four multiple regressions were calculated each using one of the four EDI scores as a dependent variable and the four subjective impact subscales as independent variables. None of these relationships was significant (i.e., Drive for Thinness ($F(4,45)=1.17, p=n.s.$); Bulimia ($F(4,45)=1.70, p=n.s.$); Body Dissatisfaction ($F(4,45)=.700, p=n.s.$); and Total EDI ($F(4,45)=1.03, p=n.s.$)).

In an effort to determine whether any relationships existed among these variables, Pearson product-moment correlations were conducted among the four EDI scores (i.e., Drive for Thinness, Bulimia, Body Dissatisfaction, and Total EDI) and the participants’ scores on the subscales of Current Distress, Past Distress, Disclosure-Responsibility, and Experience of Abuse. Two correlations were found to be significant: between Bulimia and Past Distress ($r(50)=.29, p=.05$), and between Total EDI score and Past Distress ($r(50)=.29, p=.05$). A trend was also noted between Past Distress and Drive for Thinness ($r(50)=.27, p=.058$). These results suggest that the more upset and distraught the women who had experienced CSA recalled being at the time of their abuse, the more bulimic symptoms they exhibited in adulthood, and the more concerned they were about their weight. As well, there was a tendency for those women who felt more distressed at the time of their abuse to
demonstrate a greater desire to lose weight and to be thinner as adults. Table 14 presents the correlations.

**Post Hoc Analyses**

**Relationship between Family Dysfunction and CSA**

In post hoc analyses, t-tests were used to compare the means of the three family dysfunction subscales between CSA and non-CSA women over the entire sample of 74 participants. Not surprisingly, women with a history of sexual abuse were found to report significantly higher scores (i.e., more symptomatic) on Family Environment ($t(72)=6.43, p<.001$) and on Parental Physical Abuse ($t(72)=2.61, p<.01$) (see Table 15).

Objective severity of sexual abuse has often been separated into three categories: Least Severe (i.e., minimal physical contact), Moderately Severe (i.e., greater physical contact especially with genitalia), and Most Severe (i.e., oral, anal, and/or vaginal intercourse) (Russell, 1983). In this study, such a separation was undertaken to determine if relationships existed between other variables and any of the single objective severity categories that would not be visible when the total objective score was used. The entire sample of 74 participants was categorized into four groups: no report of CSA, least severe CSA, moderately severe CSA, and most severe CSA. However, it was found that there were only three respondents whose physical events of their sexual abuse fell solely into the Least Severe category. Thus, the
Table 14

Correlations between EDI Subscales, and Current Distress and Past Distress (N=50)

<table>
<thead>
<tr>
<th></th>
<th>Drive for Thinness</th>
<th>Bulimia</th>
<th>Body Dissatisfaction</th>
<th>Total EDI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Distress</td>
<td>.03</td>
<td>.18</td>
<td>.17</td>
<td>.13</td>
</tr>
<tr>
<td>Past Distress</td>
<td>.27</td>
<td>.29*</td>
<td>.20</td>
<td>.29*</td>
</tr>
<tr>
<td>Disclosure-Responsibility</td>
<td>.08</td>
<td>-.06</td>
<td>.16</td>
<td>.09</td>
</tr>
<tr>
<td>Experience of Abuse</td>
<td>.15</td>
<td>.16</td>
<td>.08</td>
<td>.14</td>
</tr>
</tbody>
</table>

*p < .05
Table 15

Comparison of the means of the subscales of Family Environment, Parental Physical Abuse, and Other Physical Abuse on the Presence/Absence of a History of CSA (N=74)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Means</th>
<th>df</th>
<th>t</th>
<th>p &lt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No CSA (N=24)</td>
<td>CSA (N=50)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family Environment</td>
<td>39.91 (22.90)*</td>
<td>71.61 (18.26)</td>
<td>72</td>
<td>6.43</td>
</tr>
<tr>
<td>Parental Physical Abuse</td>
<td>14.87 (21.95)</td>
<td>32.50 (29.34)</td>
<td>72</td>
<td>2.61</td>
</tr>
<tr>
<td>Other Physical Abuse</td>
<td>15.50 (22.82)</td>
<td>22.56 (22.35)</td>
<td>72</td>
<td>1.12</td>
</tr>
</tbody>
</table>

* Standard Deviations are shown in parentheses.
Least Severe and Moderately Severe categories were amalgamated into one category (i.e., Least/Moderately Severe).

Three separate oneway ANOVA’s were performed using each of the three family dysfunction subscales as dependent variables. The independent variables in each of the three calculations were the three categories of objective severity (i.e., no abuse, Least/Moderately Severe, and Most Severe). A significant relationship was found between the family dysfunction subscale Family Environment and Objective Severity ($F(2,70)=20.75$, $p<.001$). Further examination of this finding using a Tukey Range test of Honestly Significant Difference (i.e., significance level set at .05) indicated significant differences between the non-abused group and the moderately severe category ($t(47)=4.81$, $p<.001$), as well as the non-abused group and the most severe category ($t(47)=5.98$, $p<.001$). A significant difference was also found between Parental Physical Abuse and Objective Severity ($F(2,70)=3.49$, $p<.05$). Results from the Tukey Range test revealed a significant difference between the non-abused group and the most severe category ($t(47)=2.47$, $p<.05$) (see Table 16).

These analyses were followed by three separate oneway ANOVA’s which were performed on CSA women only using each of the three family dysfunction subscales as dependent omnibus variables. The independent variables in each of the three
### Table 16

Means and Standard Deviations for Family Dysfunction subscales on Objective Severity Categories for entire sample (N=74)

<table>
<thead>
<tr>
<th>Family Dysfunction subscales</th>
<th>Objective Severity Category</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Non-Abused (N=24)</td>
</tr>
<tr>
<td>Family Environment</td>
<td>39.91(^1,2) (22.90)</td>
</tr>
<tr>
<td>Parental Physical Abuse</td>
<td>14.88(^3) (21.97)</td>
</tr>
<tr>
<td>Other Physical Abuse</td>
<td>15.50 (25.81)</td>
</tr>
</tbody>
</table>

Note: Means with similar superscripts differ from one another at \( p < .05 \).
calculations were the two categories of objective severity (i.e., Least/Moderately Severe, and Most Severe) (N=50). The category of "no abuse" was not included as the subsample for these analyses cannot include such a category. No significant relationships were found. Similar analyses failed to reveal significant relationships among each of the four subjective measures of severity as dependent variable over the three independent variables of objective severity categories. However, when the group of women who had reported CSA was divided into ED and non-ED subsamples, three significant oneway ANOVA's were noted. Within the non-ED subsample (N=26), these included: the dependent variable of Current Distress was significantly lower among women in the Least/Moderately Severe category than among women in the Most Severe category (F(1,24)=7.93, p<.01); the dependent variable of Past Distress was significantly lower among women in the Least/Moderately Severe category than among those in the Most Severe (F(1,24)=10.16, p<.01); and the dependent variable of Disclosure-Responsibility was significantly lower among women in the Least/Moderately Severe category than among those in the Most Severe category (F(1,24)=5.01, p<.05) (see Table 17). This would suggest that those non-ED women who had experienced the most severe CSA (i.e., abuse including penetration) reported having greater feelings of distress currently as an adult, recalled having greater feelings of distress at the time of the
Table 17

Means and Standard Deviations for Subjective Severity Factors on Objective Severity Categories in a non-Eating Disorder Sample (N=26)

<table>
<thead>
<tr>
<th>Subjective Severity subscales</th>
<th>Objective Severity Category</th>
<th>Least/Mod. Severe (N=11)</th>
<th>Most Severe (N=15)</th>
<th>F(1,24)</th>
<th>p &lt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Distress</td>
<td></td>
<td>47.70 (23.87)</td>
<td>66.77 (19.76)</td>
<td>7.93</td>
<td>.01</td>
</tr>
<tr>
<td>Past Distress</td>
<td></td>
<td>35.96 (17.64)</td>
<td>67.97 (29.76)</td>
<td>10.16</td>
<td>.01</td>
</tr>
<tr>
<td>Disclosure-Responsibility</td>
<td></td>
<td>25.04 (15.64)</td>
<td>47.02 (26.60)</td>
<td>5.01</td>
<td>.05</td>
</tr>
<tr>
<td>Experience of Abuse</td>
<td></td>
<td>63.84 (23.80)</td>
<td>69.40 (23.33)</td>
<td>0.06</td>
<td>n.s.</td>
</tr>
</tbody>
</table>


abuse, and experienced less support during their disclosure of their abuse than did the non-ED women who had experienced less objectively severe abusive events. No significant relationships were found when similar oneway ANOVA’s were conducted on the ED group (N=24).

Effects of Objective Severity of CSA on Weight Preoccupation

In post hoc analyses, Pearson product-moment correlations were conducted with the participants who reported a history of CSA (N=50) among the four scores of the EDI and the total Objective Severity of Abuse score. Three correlations were significant: (1) between Drive for Thinness and the Objective Severity of Abuse ($r(50)=.30$, $p=.05$), (2) between Body Dissatisfaction and Objective Severity ($r(50)=.37$, $p=.01$), and (3) between the Total EDI score and Objective Severity ($r(50)=.33$, $p=.05$). Thus, women who reported experiencing more objectively severe sexual abuse tended to be more concerned about losing weight and being thinner, were more dissatisfied with the size and shape of their bodies, and were generally more preoccupied about their weight (see Table 18).
Table 18

Correlations between the four EDI subscales and the Total Objective Severity score (N=50)

<table>
<thead>
<tr>
<th></th>
<th>Objective Severity</th>
<th>p &lt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive for Thinness</td>
<td>.30</td>
<td>.05</td>
</tr>
<tr>
<td>Bulimia</td>
<td>.13</td>
<td>n.s.</td>
</tr>
<tr>
<td>Body Dissatisfaction</td>
<td>.37</td>
<td>.01</td>
</tr>
<tr>
<td>Total EDI</td>
<td>.33</td>
<td>.05</td>
</tr>
</tbody>
</table>
CHAPTER IV
DISCUSSION

The present study examined the relationship between unwanted sexual experiences prior to the age of 15 years (CSA) and the later development of eating disordered symptomatology in 74 adult women undergoing outpatient psychotherapy. Participants were asked to report whether they had a history of childhood sexual abuse and whether they had been diagnosed by a psychologist or physician as having an eating disorder. Predictable differences were found on EDI scales measuring eating disturbances between those women who reported being diagnosed with an eating disorder and those who reported not being so diagnosed. Still, it is important to remember that self-reporting of such diagnoses does not rule out the possibility of false positives or false negatives. Based on their own reports, the women were grouped according to the presence or absence of (a) a diagnosed eating disorder, and (b) a history of CSA. Self-report measures were also employed to assess weight preoccupation, objective severity of CSA, subjective impressions of severity of CSA, and subjective impressions of dysfunction within the family of origin.

Four measures derived from the Eating Disorder Inventory (EDI) were used to assess weight preoccupation: the three EDI subscales measuring weight preoccupation (i.e., Drive for Thinness, Bulimia, and Body
Dissatisfaction) and a total score derived from these three subscales. It was found that, within the subject sample, the three EDI subscales met conventional standards of internal consistency and demonstrated reliability coefficients similar to those obtained by Garner, Olmsted, and Polivy (1983). As well, the total EDI score obtained by summing the scores from these three subscales was found to be internally consistent. Consistent with research by Garner, Olmsted, and Polivy (1983), those women who had been diagnosed with an eating disorder reported significantly greater weight preoccupation than women who had not been so diagnosed, suggesting that self-reported diagnosis is sufficient as a grouping variable.

The psychological literature examining the severity of sexually abusive events has often focussed on researcher-determined (i.e., objective) severity. Objective severity was assessed in this study by asking the women who reported CSA to record the physical events that occurred during their sexual abuse. For some analyses, objective severity was separated into levels (as suggested by Margolin and Craft, 1989; Pellegrin & Wagner, 1990; Russell, 1983, 1986; Walters, Smolak, & Sullins, 1987; Wyatt, 1985) to obtain a more specific understanding of the effects of different degrees of sexually abusive events. Following Russell (1983,1986), four levels or categories were used: No Abuse, Least Severe Abuse (i.e., minimal physical contact),
Moderately Severe Abuse (i.e., greater physical contact especially with genitalia), and Most Severe Abuse (i.e., oral, anal, and/or vaginal intercourse). In the present study, the category of Least Severe Abuse was combined with the moderately severe category for analysis because few women reported abuse at the lowest level.

The women’s subjective impression of the severity of their CSA was measured with a self-report questionnaire developed by the author. This questionnaire used visual analogue scales to obtain an understanding of how distressing and traumatic the sexual abuse was for each woman. It examined the women’s recall of their feelings and thoughts at the time of the abuse as well as their feelings and thoughts currently. Four subscales emerged from a factor analysis of this questionnaire: (1) current level of distress, (2) past level of distress, (3) overall experience of the abuse, and (4) amount of support received if the abuse was disclosed and how responsible they felt for the abuse having occurred. However, it was found that the majority of women did not tell anyone about their abuse. Therefore, any interpretations stemming from this last subscale must be considered with caution.

Maladaptive functioning in the family of origin is common among women who had been sexually abused as children (Browne and Finkelhor, 1986; Courtois, 1988; Sedney and Brooks, 1984). Therefore, a self-report questionnaire was
developed by the author using visual analogue scale items designed to obtain information regarding the women's subjective impressions of their families of origin. Three subscales emerged from the factor analysis of the family dysfunction scale: (1) the women's feelings/thoughts about their family environment when they were growing up, (2) their impressions of parental physical abuse, and (3) their perception of physical aggression with other members of their family.

A high proportion of the women in this study reported CSA (67.6%). This rate is similar to that reported in some previous studies assessing the relationship between eating disorders and CSA (e.g., Oppenheimer, Howells, Palmer, & Chaloner, 1985; Finn, Hartman, Leon, & Lawson, 1986; Palmer et. al, 1990) but higher than that reported in others (e.g., Root and Fallon, 1988; Steiger and Zanko, 1990). This study supports the view that women who have been sexually abused during childhood are more highly represented in a clinical population than in a non-clinical population. However, given the high proportion of CSA in the sample obtained, it may be that the women who chose to participate were more interested in CSA and eating disorders than those women who chose not to participate. Thus, there may be a selection bias in favour of women who had experienced CSA. Therefore, the interpretation of these findings must be undertaken while being cognizant of the possibility of such a bias.
Relationship between CSA and ED

This study did not find that more ED women than non-ED women reported having experienced CSA. Consistent with other studies (e.g., Connors & Morse, 1993; Finn, Hartman, Leon, & Lawson, 1986), it was found that, while both eating disturbance and sexual abuse had very high base rates in the sample, there appeared to be no meaningful association between the two.

Still, some researchers have suggested that there is no difference between women with CSA experience and women without CSA experience in the prevalence of bulimic behaviours (e.g., Finn et. al, 1986). The present study found a relationship between subjective impact of CSA and symptoms of bulimia. Among women who had experienced CSA, those who recalled experiencing more severe distress at the time of their abuse tended to (1) develop more severe bulimic symptoms, and (2) be more weight preoccupied. A trend was also noted among women with CSA experience between their recall of greater distress at the time of their abuse and their current increased drive to lose weight and be thinner. While causality cannot be ascertained from correlational analyses, this study suggests that women who experience greater distress at the time of their sexual abuse are more likely to develop behaviours such as binge eating, intentional vomiting, and increased dieting, later in adulthood.
Objective Severity vs. Subjective Impact of Abuse

A number of studies in the literature have attempted to examine the relationship between CSA and ED have treated CSA as a dichotomous (i.e., present/absent) variable (e.g., Finn, Hartman, Leon, and Lawson, 1986). Such studies have not explored whether factors specific to the abuse may be mediating variables in the link between CSA and ED. More recently, researchers have begun to examine the severity of the sexual abuse by focussing on researcher-determined (i.e., objective) severity. This study explored the objective severity by asking about the details of the women's sexual abuse. Their subjective views of their abusive experiences were also examined.

One query inherent in this study was whether a woman's subjective impression of her sexual abuse would provide information distinct from the objective details of her abuse. If there were no differences between subjective and objective levels of severity of abuse, then one could rely on the objective details of the abuse when attempting to understand the impact of sexual abuse both in research and in treatment. This study found that the more objectively severe the CSA, the more distressed the women were about their CSA in adulthood. However, no relationship was found between how upset and distraught the women recalled feeling at the time of their sexual abuse and the objective details of their abuse. In addition, no relationship was found
between how the experience of the abuse affected these women and how objectively severe it had been for them. Thus, it is important for clinicians and researchers to consider both the objective details of a woman’s sexual abuse and her subjective impressions of the severity of the abuse to more fully understand the overall effects.

When the responses of all of the sexually abused women were explored, the overall objective severity of CSA was found to relate directly to how much anguish and emotional pain was experienced about the CSA in adulthood. Therefore, the more intrusive the abusive events had been for the women when they were in their childhood, the more anguish and emotional pain they were likely to suffer in adulthood. However, it was also found that as the sexual abuse became more intrusive, the survivors had felt less emotional support if they had disclosed their abuse to anyone. Such differences were not found when the women’s subjective levels of abuse were examined.

As well, the relationship between the objective severity level of the CSA and weight preoccupation was explored. It was found that the more physical contact involved in their abuse, including actual intercourse, the more likely the women were to: (1) have a strong desire to lose weight and be thinner, (2) be more dissatisfied with the size and shape of their bodies, and (3) generally be more concerned about their weight. These findings are
consistent with feelings of self-degradation and low-self esteem that several authors have reported are common sequelae of CSA (e.g., Courtois, 1988; Finkelhor & Brown, 1986).

When the overall objective level of abuse severity was examined, there was no difference found between the eating disordered women and the non-eating disordered women. However, when this objective level of severity was explored in a more specific manner (i.e., no sexual abuse, least/moderate abuse, most severe abuse), this study found that non-ED women who reported the most severe abuse were more likely to recall feeling greater distress both at the time when the abuse occurred and currently as an adult, as well as experiencing less support following their disclosure of abuse than those non-ED women who had reported least/moderately severe abuse. Interestingly, similar differences were not found in the group of eating disordered women. Thus, it would appear that in a clinical population of non-ED women, the more objectively severe their sexual abuse, the more distressed and upset they felt about it. However, this study suggests that the eating disordered women may be equally distraught and troubled about their abuse no matter how objectively severe it was. In other words, women with an eating disorder may remember feeling very distressed about their sexual abuse regardless of the actual physical details of the abuse. These findings
support a number of authors (Bass & Davis, 1988; Courtois, 1988; McCann & Pearlman, 1990) who have advocated the exploration and examination of the subjective impact of sexual abuse on the individual client. They warn us not to assume that less objectively severe physical events are necessarily experienced as less traumatic.

Why might there be a direct relationship between objective severity and subjective impact of sexual abuse in women not diagnosed with an eating disorder but no such relationship in those women who were eating disordered? One might speculate that some women who were severely traumatized by their childhood sexual abuse developed an eating disorder in adulthood in an effort to cope with their extensive distress. These women may have been severely traumatized irrespective of how objectively severe the abuse had been. The eating disorder may serve a mediating function in the relationship between the objective severity and subjective impact of CSA.

Previous research has suggested that sexually abused children often come from homes with a high incidence of family psychopathology (e.g., Einbender & Friedrich, 1989; Friedrich et al., 1987; Krener, 1985). The findings of this study were consistent with the previous research. Women with a history of CSA tended to report more conflict, distress, and physical abuse perpetrated by their parents than women who did not report a history of CSA.
The relationship between the women's report of the objective severity of their sexual abuse and their recall of the functioning in their family of origin was examined. Women who reported no abuse differed from both those who had experienced least/moderately severe abuse and those who had suffered the most severe abuse. The non-abused women reported the least amount of distress in their families of origin, followed by those who suffered least/moderately severe abuse. The group who reported the greatest amount of familial conflict were those women who had experienced the most objectively severe sexual abuse. It appears that, among CSA survivors, the more conflictual and dysfunctional the families of origin had been, the more objectively severe their sexual abuse tended to be. These findings further develop those of other studies which have reported that CSA survivors had had disorganized family lives (e.g., Kremer, 1985), poor parental marital relationships (e.g., Gruber & Jones, 1983), and a higher incidence of alcohol/drug abuse among biological fathers (e.g., Taylor, 1984). However, while Finkelhor and Browne (1986) argued that the connection between CSA and ED may be mediated by abuse characteristics and levels of familial support, this study did not find any differences between the clinical populations of ED women and non-ED women on their perceptions of dysfunction within their families of origin.

Furthermore, while the information gleaned from women's
subjective impressions of their sexual abuse and the functioning of their families of origin is valuable in a therapeutic setting, it did not differentiate between the non-ED and the ED groups of women.

To summarize, there appear to be both similarities and differences between the objective details and the subjective impressions of sexual abuse. A consistent one-to-one relationship was not found between the objective facets of someone’s sexual abuse and the subjective impressions of their abuse. Thus, it is important to consider both the objective aspects of the abuse and the individual’s subjective impressions if one is to more fully understand the overall effects of the sexual abuse on the individual.

While the additional information of a woman’s subjective perception of her sexual abuse may add to the understanding of the effects of her trauma, neither objective details nor subjective perceptions of sexual abuse clearly distinguished an etiological path from childhood sexual abuse to the development of an eating disorder in adulthood among women. Still, it is vitally important that the clinician and the researcher consider both of these factors in attempting to understand the impact of the sexual abuse, the survivors’ reactions, and the development of appropriate treatment.

Limitations and Concerns of Present Study

The findings presented above should be considered
within the parameters of this study and thus, certain limitations need to be addressed. Initially, there is the concern regarding the questionnaire return rate of 34.6%. While this return rate is considered acceptable, given the procedure of mailing the returns to a researcher who had no direct contact with the study’s participants (Dillman, 1978), there remains some question as to the representativeness of the sample and generalizability of the findings. One must be concerned with possible sample bias, differences that may have occurred between the women who responded and those who chose not to participate. It may have been that women who were more interested in childhood sexual abuse and eating disorders may be more apt to respond to this study’s questionnaires because the items tapped issues that these women are concerned about in their lives.

In conjunction with concerns about the return rate is the fact that the overall sample size was only 74 participants. A relationship between CSA and ED in adulthood would only emerge as significant in the current study if it was moderately large. However, if there is a real, but small, relationship between CSA and ED, this study’s sample size might not be sufficient to identify it.

On another issue, the psychological literature is inconsistent as to whether self-report measures lead to accurate reporting of personal issues. This study’s data were collected anonymously using self-report measures. Some
researchers have stated that clinical interview methods are preferable because they yield higher frequencies of sexual abuse (e.g., Wyatt & Peters, 1986). However, this view has been challenged by Koss and Gidycz (1985) who found few disclosure differences on self-report measures compared with a follow-up clinical interview when assessing rape. Still others have suggested that a person may be very reluctant to reveal a history of sexual abuse, sometimes doing so only after years of treatment in a trusting relationship with a therapist (Sloan & Leichner, 1986). Future research should be done with a combination of self-report measures and clinical interviews.

An additional point to remember about the individuals in this study is that they were all involved in outpatient therapy. The extent to which their therapy had dealt with their sexual abuse and/or eating disorders is not known. It is unclear whether participants who had not examined their feelings about their sexual abuse and/or their aberrant eating behaviours in therapy described their subjective impressions any differently than those who had had the opportunity to explore these issues.

The present study investigated the impact of CSA survivors’ single most severe or impactful CSA experience. However, the impact of CSA is multidetermined and multifaceted (Browne & Finkelhor, 1986), and multiple episodes might lead to differing sequelae than single
episodes. The effect of multiple CSA episodes was not explored.

Because of its relatively small sample size, this study grouped eating disordered women together as if they constitute a homogeneous group. However, there are a number of studies suggesting that eating disordered women are heterogeneous. There are at least three subtypes, differing from one another in symptomatology: restrictor anorexics, bulimic anorexics, and normal weight bulimics (Garner, Garfinkel, & O’Shaughnessy, 1985; Piran, Lerner, Garfinkel, Kennedy, & Brouillette, 1988). Eating disordered women also demonstrate varying degrees of concurrent psychopathology, ranging from none at all to quite significant personality disorders (Johnson & Connors, 1987; Wonderlich & Swift, 1990). Steiger & Zanko (1990) reported that, while both incestuous and extrafamilial sexual abuse were frequent among their sample of bulimics, they were unusually infrequent among restrictor anorexics. They also found that, among groups showing mixed anorexic/bulimic symptomatology, the prevalence of sexual trauma falls between that of restrictors and of bulimics. Several other authors (Piran et al., 1988; Vanderlinden et al., 1993) have similarly found that the prevalence of sexual abuse is much higher in a bulimic group of women than in a restrictor group. Thus, if CSA impacts differentially on different subgroups of eating disordered women, the methodology
employed in this study would not enable this to be identified. Therefore, future researchers should obtain a larger sample and analyze their data based on (a) all of the diagnosed eating disorder women together, and (b) the individual eating disorder subgroups. A larger sample must be obtained to have sufficient power in the analyses when the subgroups are separated. This study did not have enough participants to divide the sample into the eating disorder subgroups and still have enough statistical power. Therefore, this study treated the eating disordered group as a homogeneous category.

The non-eating disordered women were also treated as homogeneous. No attempt was made to differentiate among subgroups (e.g., women with mood disorders, anxiety disorders, personality disorders, etc.). Lastly, no group of non-distressed, normative women was employed. It certainly would have been preferable to have had a large enough sample to explore relationships between CSA and eating disorders using subtypes of eating disordered women, subtypes of non-eating disordered distressed women, and nondistressed normative controls.

Future Research

Several directions for future research are apparent. This preliminary study represents a first step in the examination of the subjective impact of CSA on the development of eating disordered symptomatology in
adulthood. It was an initial step in the development of a measure of the subjective impact of CSA, which is something that many clinicians consider very important but empiricists have yet to incorporate into their work. This study marked the first step in such a process as it developed items that appeared to have content validity followed by the determination of internal consistency. The next step for future research would consist of further investigating the psychometric strength of the measures, especially discriminant and convergent validity as well as criterion and construct validity.

Objective CSA severity should be treated as more than a dichotomous variable. Failing to differentiate among levels of objective CSA severity can obscure important relationships. Furthermore, it is important to assess the subjective impact of childhood sexual abuse, not just its objective severity. Although objective and subjective measures of CSA appear to assess related factors, they are far from equivalent.

No relationship emerged between CSA and the presence or absence of an eating disorder. However, several intriguing relationships between CSA and eating disorders were apparent.

This study found that, as the women’s distress at the time of their most significant sexual abusive incident increased, so did their bulimic symptoms in adulthood. Why
would an adult woman who tended to binge and purge her food report being more upset and distraught during her sexual abuse than a woman who had been sexually abused but had not developed bulimic symptoms? Abraham et al. (1985) reported that adult bulimics tend to be more experimental and more experienced sexually as well as being more concerned about their weight than non-bulimic controls. This study’s examination of these variables (i.e., distress at time of sexual abuse, bulimic symptoms, weight concern) was not causal in nature. Future research will have to explore whether there are any causal links between these factors.

The direct relationship between objective and subjective CSA severity among non-eating disordered women, but not among eating disordered women, is worthy of note. This study found that women without an eating disorder diagnosis reported that the more objectively severe their abuse had been for them, the more distressed they had felt. However, no such relationship was found among women with eating disorders. Does this suggest that eating disordered women remember feeling very distressed about their sexual abuse regardless of the actual physical details of the abuse? This study does not clarify this issue, and future research will have to examine this preliminary finding. Such research could include (1) more participants, and (2) different clinical subgroups in the non-eating disordered category (e.g., women with mood disorders, anxiety
disorders,) to determine if the results are a function of non-ED versus ED, or if other clinical subgroups are more similar to the ED grouping by experiencing similar levels of distress regardless of the actual physical details of the sexual abuse.

Future research should address the limitations of the present investigation. Richer data could be obtained in a number of ways. Data could be gathered over a longer term in an effort to obtain more participants. A greater number of participants would allow researchers to secure greater statistical power and to examine the possibility of smaller effect sizes in the relationships between variables. In addition, the use of self-report measures combined with clinical interviews may provide a more thorough understanding of these two very complicated issues. Given that a number of clients do not reveal a history of CSA until a therapeutic relationship has been established (Sloan & Leichner, 1986), a combination of clinical measures and interview may reveal information that is valuable both quantitatively and qualitatively for the further understanding of CSA and of eating disorders.

Data from non-clinical controls would be important to gather to compare with similar and other clinical populations. Such a comparison could focus on the sexual abuse history, eating habits, and early family functioning of women who have not sought out therapy and compare them
with the data gathered from clinical settings.

Another issue of concern is that this study requested that participants describe their subjective impressions of only the most significant sexually abusive incident that they could recall occurring in their lives prior to the age of 15 years. It did not request information that would have allowed the participants’ to expound on their subjective impressions if they could recall being abused on more than one occasion. It also did not examine the impact of any sexually abusive incidents that occurred after age 15 years.

The impact of childhood sexual abuse is both multidetermined and multifaceted (Browne & Finkelhor, 1986) and may be cumulative in nature (i.e., the more incidents of sexual abuse that one experiences, the more distressing and upset they would have recalled being). However, it also may be true that the impact of one incident of sexual abuse for one person may be more overwhelming than the cumulative effect of several such horrific incidents for another woman. Thus, future research will have to examine the subjective impressions of women who had been sexually abused on more than one occasion to determine if subjective impressions vary with the cumulation of distressing thoughts and feelings due to the experience of more than one sexually abusive incident.

One of the groups involved in this study was composed of those women who had been diagnosed with an eating
disorder. This study did not separate this group into the eating disorder subtypes of restrictor anorexics, bulimic anorexics, and normal weight bulims as other studies have done (e.g., Garner, Garfinkel, & O'Shaughnessy, 1985; Piran, Lerner, Garfinkel, Kennedy, & Brouillett, 1988; Steiger & Zanko, 1990, Vanderlinden et al., 1993). Future research with larger samples could examine issues similar to those explored in this study with eating disorder subgroups.

Conclusions

For both clinical and theoretical reasons, it is important to assess whether childhood sexual abuse is a risk factor for the later development of eating disorders. Many of this study's original hypotheses received little or no support suggesting that there appears to be no direct causal connection between sexual abuse during childhood and the later development of an eating disorder during adulthood.

However, this study did reveal several interesting developments. Two self-report questionnaires were designed that begin to explore more thoroughly the areas of family functioning and the individual perceptions of the horrors of childhood sexual abuse. The author will be using these questionnaires with other clinical and non-clinical populations in an effort to further validate them psychometrically.

As well, within a sexually abused population, those women who reported experiencing greater distress stemming
from their abuse were more likely to develop behaviours such as binge eating, intentional vomiting, and pronounced dieting later on in adulthood than those women who recalled being less distressed and upset during their sexual abuse. It was also found that the more physical contact that occurred during their abuse, including actual intercourse, the more likely the abused women were to have a strong desire to lose weight and be thinner, be more dissatisfied with their size and shape of their bodies, and generally be more concerned about their weight.

Neither objective nor subjective information concerning a woman's sexual abuse appeared to be a clear marker in the further understanding of the relationship between CSA and eating disorders. However, this should not be interpreted to mean that the subjective impressions and objective details from a sexual abuse survivor are not important in that person's psychological treatment. Such subjective and objective information should be obtained from those individuals who have a history of sexual abuse during childhood and who are exhibiting behaviours symptomatic of eating disorders in adulthood in order to better understand the difficulties that they face as well as the development of an appropriate treatment regimen. Such issues are almost always very important. This study concurs with a number of authors, including Connors and Morse (1993), Kearney-Cooke (1988), Root and Fallon, (1988), Smolak, Levine, and Sullins
(1990), and Steiger and Zanko, (1990), who suggest that sexual abuse alone probably does not cause an eating disorder nor is an eating disorder always an outcome of the experience of sexual abuse during childhood. Thus, child sexual abuse is neither necessary nor sufficient for the development of an eating disorder. However, as several of these authors added, abusive sexual experiences, as well as the feelings of powerlessness which can result from such abuse, could be important contributing factors in the development of an eating disorder and thus require consideration in an individual’s treatment program. It is very important that the clinician remain cautious and not assume that sexual abuse is necessarily the cause of the eating disorder, nor that treatment addressing the issues of sexual abuse will necessarily alleviate the symptoms associated with the eating disorder.

The precursors leading to the sexual abuse of a child are many and varied. Family dysfunction, a history of physical and/or sexual abuse in the perpetrator’s life, emotional neglect or abandonment of a child, are all part of a list of variables that could fill a book of antecedents. The development of an eating disorder in an adolescent or adult woman also contains a number of markers, some of which are more distinct than others, that lead to the eventual demonstration of aberrant eating behaviours. Both CSA and ED are multidetermined and multifaceted, and both of them
occur primarily in our female population. The impact of each of these factors is horrific and devastating to the person who is subjected to such anguish. There continue to be many aftershocks for the survivor as she moves through the developmental stages in her life (Courtois, 1988; McCann & Pearlman, 1990).

We live in a society that, at several levels, permits the abuse of children and likely plays a prominent role in producing an eating disorder later in a woman’s life. Scientific study may suggest that subjective and objective impressions of childhood sexual abuse are markers along the winding and hilly path towards the manifestation of an eating disorder. Yet, such signposts remain ether-like for now.

Still, it is the continual quest for understanding issues such as CSA and BD that remains a goal of science. From such a scientific perspective, it is hoped that this study will constitute at least one thread in the tapestry of understanding of both sexual abuse and eating disorders - factors that play such a prominent role in the lives of so many adult women.

While this may be one of the aims of science, a more pivotal focus should be confronting society’s role in the development of eating disorders and the permitting of childhood sexual abuse. While the scientific understanding and knowledge of eating disorders and childhood sexual abuse
is vital, it remains our responsibility and obligation to take whatever action is needed to eliminate childhood sexual abuse. The lives and well being of our children are simply too important for us to permit these atrocities to continue one moment longer.
Appendices
Appendix A

Demographic / Family Dysfunction questionnaire
Please answer all questions fully and frankly as possible by filling in your answer, selecting your response by marking a box, or by indicating your answer on a line scale (e.g., from good to bad) by putting a mark across the line at the point which would best describe your assessment of the situation.

For example: If you would describe an experience as being mostly positive for you, you might mark it as follows...

Negative  Positive

If you come to a question that you cannot answer because you don't remember, please mark the "cannot remember"  [c/r]  box at the end of the question.

PART A

1) How old are you now? ________

2) Marital Status: (please circle)

1. single, never married or common-law
2. single, previously married or common-law
3. presently married or common-law
4. separated or divorced
5. widowed
6. other, please state ______________________

3) Are you presently involved in an intimate relationship?

1. Yes [ ]  2. No [ ]

4) Are you presently involved in an intimate sexual relationship?

1. Yes [ ]  2. No [ ]

5) At present, what is your sexual orientation? (please circle)

1. heterosexual
2. lesbian
3. bisexual
4. not sure

6) What are your current living arrangements? (please circle)

1. living with parent(s)/sibling(s)
2. living alone
3. living with roommate(s) in a non- sexual relationship
4. living with partner in a sexual relationship
5. living with partner in a sexual relationship and with dependent children
6. living with dependent children
7. other (please state) ______________________

7) In what religion were you raised?
8) What is your predominant ethnic background?

__________________________________________________________

9) What is the highest level of education you have completed? (please circle)

1. elementary school (public school)
2. junior high school
3. secondary school (high school)
4. community or technical college
5. university (undergraduate)
6. university (graduate)

10) What is your current employment status? (please circle)

1. unemployed
2. disabled
3. retired
4. student
5. part-time (20 hours or less)
6. full time (over 20 hours)
7. homemaker
8. Other

11) How long have you been in therapy with your current therapist?

(about how many months) ________

12) If you have been involved in therapy before now, how long did it last?

(about how many months) ________ About how old were you at the time? ________

13) Have you ever been diagnosed by a physician and/or a psychologist as having an eating disorder?

Yes [ ] No [ ] (if No, please go to Part B)

14) If Yes, how old were you at the time? ________

15) Do you know if the eating diagnosis was... Anorexia Nervosa ______

(please check all that apply) Bulimia Nervosa ______

Other ______

Aren't Sure ______

PART B

We would now like to ask you some questions about your family as it was before you were 15 years old.

16) Please check all that lived in your family home before you were 15 years old.

1. Father ______
2. Mother ______
3. Step-father ______
4. Step-mother ______
5. Older brother(s) ______ (how many? ______)
6. Younger brother(s) ______ (how many? ______)
7. Older sister(s) ______ (how many? ______)
8. Younger sister(s) ______ (how many? ______)
9. Others: ______
17) Before I was 15 years old, I felt safe in my family.

Always | Never | c/r |

18) I enjoyed the time I spent with my family before I was 15 years old.

Always | Never | c/r |

19) How much conflict was present between members of your family before you were 15 years old?

None | Extensive | c/r |

20) There were lots of bad feelings in my family before I was 15 years old.

Never | Always | c/r |

21) In my family before I was 15 years old, we could turn to each other for support during times of crisis.

Always | Never | c/r |

22) There was a lot of trust in my family before I was 15 years old.

Always | Never | c/r |

23) Before I was 15 years old, we confided in each other in our family.

Always | Never | c/r |

24) Before I was 15 years old, I would describe my family as

Accepting | Rejecting | c/r |

Everyone gets into conflicts with other members of their family and sometimes these conflicts lead to physical blows such as hitting really hard, kicking, punching, stabbing, throwing someone down, etc.

25) Before you were 15 years old, did either of your parents (or parent figures like foster parents, step-parents, common law parent etc.) ever use physical blows towards you?

Never | A lot | c/r |

(if Never, please go to question # 27)

26) As a result of the physical blows, how much physical pain did you experience at the time?

None | Intense | c/r |
27) Before you were 15 years old, how often did anyone else living in your home (other than parent figures) ever use physical blows towards you?

Never

(A lot) [c/r]

(If Never, please go to question # 29)

28) As a result of the physical blows, how much physical pain did you experience at the time?

None

(Intense) [c/r]

29) Before you were 15 years old, did you ever use physical blows towards anyone else in your family?

Never

(A lot) [c/r]

30) Before you were 15 years old, did anyone in your family (except you) ever use physical blows towards anyone else in your family?

Never

(A lot) [c/r]

31) Is there anything else that you would like to let us know about your family life before you were 15 years old that will help us to better understand what you have told us on this questionnaire?

__________________________________________________________________________________________________________________________________________________________

__________________________________________________________________________________________________________________________________________________________

__________________________________________________________________________________________________________________________________________________________

__________________________________________________________________________________________________________________________________________________________

__________________________________________________________________________________________________________________________________________________________
Appendix B

Subscale items of the adapted version of the Eating Disorder Inventory*

Drive For Thinness subscale items:

1. I eat sweets and carbohydrates without feeling nervous A**U  O  S  R  N
5. I think about dieting. A  U  O  S  R  N
7. I feel extremely guilty after overeating. A  U  O  S  R  N
9. I am terrified of gaining weight. A  U  O  S  R  N
11. I exaggerate or magnify the importance of weight. A  U  O  S  R  N
14. I am preoccupied with the desire to be thinner. A  U  O  S  R  N
18. If I gain a pound, I worry that I will keep gaining. A  U  O  S  R  N

Bulimia subscale items:

3. I eat when I am upset. A  U  O  E  R  N
4. I stuff myself with food. A  U  O  S  R  N
12. I have gone on eating binges where I felt that I could not stop. A  U  O  S  R  N
15. I think about bingeing (overeating). A  U  O  S  R  N
17. I eat moderately in front of others and stuff myself when they’re gone. A  U  O  S  R  N
19. I have the thought of trying to vomit in order to lose weight. A  U  O  S  R  N
22. I eat or drink in secrecy. A  U  O  S  R  N

Body Dissatisfaction subscale items:

2. I think that my stomach is too big. A  U  O  S  R  N
6. I think that my thighs are too large. A  U  O  S  R  N
8. I think that my stomach is just the right size. A  U  O  S  R  N
10. I feel satisfied with the shape of my body. A  U  O  S  R  N
13. I like the shape of my buttocks. A  U  O  S  R  N
16. I think my hips are too big. A  U  O  S  R  N
20. I think that my thighs are just the right size. A  U  O  S  R  N
21. I think my buttocks are too large. A  U  O  S  R  N
23. I think that my hips are just the right size. A  U  O  S  R  N

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** The instructions for this questionnaire are:
"For each item, please decide if it is true for you by circling
A - ALWAYS, U - USUALLY, O - OFTEN, S - SOMETIMES, R - RARELY, or N - NEVER"
Appendix C

Subjective Perception of Severity of Childhood Sexual Abuse Questionnaire
Questionnaire # 3

It is now generally realized that most people have sexual experiences as children and while they are still growing up. Some of these experiences are with friends and playmates, and some are with relatives and family members. Some are very upsetting and painful, and some are not. Some may influence people’s later lives and sexual experiences, and some are practically forgotten.

We would like you to try to remember the sexual experiences you had while growing up. And we would like you to think about any of these experiences that you did not want to happen.

Please remember to answer all questions fully and frankly as possible by either selecting your response by marking a box or by indicating your answer on a line scale by putting a mark across the line at the point which would best describe your assessment of the situation.

PART C:
1) Before you were 15 years old, did you experience any unwanted sexual experiences?

[ ] No [ ] Yes

If No, please go on to the Last page of this questionnaire.

If Yes, please think back to the time of this event and answer the next few questions as you may have felt at that time.

When you answer the next set of questions, please think of the most important unwanted sexual experience that you had...the one that has been most significant for you. If you come to a question that you cannot answer because you don’t remember, please remember to mark the “cannot remember” | c/r | box at the end of the question.

2) About how old were you at the time?
(If you cannot remember exactly, please give your best estimation) _________ | c/r |

3) About how old was the other person?
(If you cannot remember exactly, please give your best estimation) _________ | c/r |

4) Was the other person male or female? _________ | c/r |


5) Was the other person: (please check)

<table>
<thead>
<tr>
<th>1) a stranger</th>
<th>2) a person you knew, but not a friend</th>
<th>3) a friend of yours</th>
<th>4) a friend of your parents</th>
<th>5) a cousin</th>
<th>6) an uncle or aunt</th>
<th>7) a grandfather</th>
<th>8) a grandmother</th>
<th>9) a brother</th>
<th>10) a sister</th>
<th>11) a father</th>
<th>12) a mother</th>
<th>13) a stepfather</th>
<th>14) a stepmother</th>
<th>15) a foster father</th>
<th>16) a foster mother</th>
<th>17) a teacher or minister</th>
<th>18) other</th>
</tr>
</thead>
</table>

6) What happened? (please check all that apply)

- An invitation or request to do something sexual
- Kissing and hugging in a sexual way
- Encouraged to view sexually explicit material
- Other person showing his/her sex organs to you
- You showing your sex organs to the other person
- Other person fondling you in a sexual way
- You fondling other person in a sexual way
- Other person touching your sex organs
- You touching other person’s sex organs
- Attempted intercourse without penetration
- Penetration of vagina and/or anus with finger(s) or object(s)
- Other person having oral contact with your genitals
- You having oral contact with other person’s genitals
- Vaginal intercourse with penetration
- Anal intercourse with penetration
- Being forced to participate in pornography (photo, video etc.)

Other (please describe): ____________________________

7) About how many times did you have an unwanted sexual experience with this person? ______ |

8) Over how long a time did this go on?
(please give your best estimate of days, months, or years) ________________ |

9) At the time that it happened, did the experience affect you?

Not at All __________________________________________ A Lot |

10) At the time, what was this experience like for you?

Enjoyable __________________________________________ Terrible |

11) At the time, how did you feel about the experience?

Very Happy __________________________________________ Very Upset |
12) At the time, how responsible did you feel for the experience?

Not at All _______________________________ Completely | c/r |

13) At the time, did thinking about the experience have any effect your sleep patterns?

None _______________________________ A Lot | c/r |

14) At the time, did thinking about the experience have any effect on your eating patterns?

None _______________________________ A Lot | c/r |

15) At the time, how much threat or coercion did you feel was associated with the experience?

None _______________________________ A Lot | c/r |

16) As a result of the experience, how much physical pain did you experience at the time?

None _______________________________ Intense | c/r |

17) At the time, how much emotional distress did you experience?

None _______________________________ Extensive | c/r |

18) At the time, how much did you think about hurting yourself as a result of the experience?

Not at All _______________________________ A Lot | c/r |

19) At the time, how much stress did you feel existed in your family?

None _______________________________ Extensive | c/r |

20) At the time, did you tell anyone about the experience? (please check all that would apply)

1) No one _______ 4) Other adult _______ 7) Other: __________________________ |
2) Mother _______ 5) Brother/sister _______
3) Father _______ 6) Friend _______

If you did not tell anyone about the experience, please go on to Part D:
21) At the time, if you did tell someone, how much do you think they believed you?

Not at All _____________________________________________________  Totally | c/r |

22) If you did tell someone, how much emotional support did you receive at the time?

A Lot __________________________________________________________ None | c/r |

23) If you did tell someone, how much real practical help did you receive at the time?

A Lot __________________________________________________________ None | c/r |

PART D:
The next few questions are similar to some of the earlier ones on this questionnaire. Here, we would like you to consider how you feel now as an adult about the most significant earlier unwanted sexual experience that you had before you were 15 years old.

24) How often do you think about this experience now?

Not at All ____________________________________________________ All the Time

25) If you have any feelings now about this experience, how do you feel?
(*If you have no feelings now about this experience, please leave this question blank)

Very Happy ______________________________________________________ Very Upset

26) How much impact do you think the experience had on your life?

None __________________________________________________________ Extensive | c/r |

27) Does the memory of this experience interfere with your daily life?

Not at All ____________________________________________________ Extensively | c/r |

28) How much do you think the experience affects you now?

Not at All ____________________________________________________ A Lot | c/r |

29) Thinking currently as an adult, what was this experience like for you?

Enjoyable ______________________________________________________ Terrible | c/r |
30) Thinking currently as an adult, how responsible do you feel for the experience?

Not at All ———————————————————————————————————————————— Completely | c/r |

31) How much does thinking about the experience affect your sleep now?

Not At All ———————————————————————————————————————————— Extensively | c/r |

32) How much does thinking about the experience affect your eating now?

Not At All ———————————————————————————————————————————— Extensively | c/r |

33) Thinking currently as an adult, how much threat or coercion was associated with the experience?

None ———————————————————————————————————————————— Extensive | c/r |

34) How much physical pain do you feel currently as a result of the experience?

None ———————————————————————————————————————————— Intense | c/r |

35) How much emotional distress do you feel currently as a result of the experience?

None ———————————————————————————————————————————— Extensive | c/r |

36) Recently, how much have you thought about hurting yourself as a result of this experience?

Not at All ———————————————————————————————————————————— A Lot | c/r |

37) Now as an adult, how much control do you feel you have in your life?

None ———————————————————————————————————————————— Complete

38) Did you have any unwanted sexual experiences in addition to the one that you have reported about in this questionnaire?

| Yes | No |

39) If Yes, approximately how many unwanted sexual experiences have you had?

Before age 15 years? ———— | c/r |

15 years of age and after? ———— | c/r |
40) Now as an adult, what are the chances that you will experience another unwanted sexual experience in your life?

None ___________________________________________________________ Great

41) Is there anything else that you would like to let us know about unwanted sexual experiences in your life that will help us to better understand what you have told us on this questionnaire?

________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
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________________________________________________________________
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________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
We are very grateful for your participation in this survey. Please rest assured that all the information that you have provided will remain in the strictest confidence and that your answers to these questionnaires will remain completely anonymous.
Appendix D

Participant’s Cover Letter
Hello,

I would like to ask you to participate in our study of the family, eating habits, and sexual behaviours by filling out our three questionnaires. To begin, you must be at least 18 years of age to participate in this study. If you are not 18 years old or older, please do not complete these questionnaires. Simply return them in the enclosed stamped addressed envelope.

Some people who have already completed these questionnaires told the researchers that it took them about an hour and others said that they finished in less than 20 minutes. So it would appear that the amount of time required by someone to complete all three questionnaires will vary a lot. Please do not be alarmed if the amount of time you require to complete all the questions is different from these estimates.

Some of the questions here are very personal. But as you are certainly aware, family life has been undergoing profound changes in recent years as have people's eating habits, as well as their attitudes about sex. If social scientists are going to be able to help families to become healthier places to live in and to grow up in, if answers are going to be found to questions about important issues like eating habits, sex education, child abuse and so forth, then personal information has to be shared.

Please remember that **everything you answer here is completely anonymous**. Please do not put your name on any of these questionnaires.

Before you begin, I want to say a little more about the questionnaires. These personal questions include questions about your family, your eating habits, and about your thoughts and feelings about some of your sexual experiences.

Some of the information you will be providing here may be information that you have not shared previously with anyone. Some of it may be personally distressing or painful. Therefore, I want you to feel perfectly safe in participating in this study. So, I want to tell you the steps that I am taking to safeguard your privacy.

First of all, you are under no obligation to participate. As much as I would like your cooperation, you should feel free not to fill out any of the questionnaires. In fact, if at any point while filling out the questionnaires, you decide that you no longer wish to participate, you may stop wherever you are and fill out no more. Moreover, if there are any particular questions which you want to skip, you may do so.

Secondly, all questionnaires are completely anonymous. Nowhere on any of the questionnaires do I ask for your name and I have carefully avoided asking questions that might identify you indirectly. Your set of questionnaires will be one of at least a hundred that I will be collecting so the possibility of anyone identifying your questionnaires is virtually nil. All questionnaires will be guarded by us with the utmost care. No one but the researchers will have access to them.

Thirdly, because of the sensitive nature of the research, it is important that I have your fully informed consent to use your set of questionnaires. If you choose to participate, please complete the items on the attached questionnaires and return them in the enclosed stamped addressed envelope. I will accept the return of your set of questionnaires as your consent to take part in this study. Please do not send this
letter back with the questionnaires as it is your's to keep.

If you choose not to participate, please return the uncompleted questionnaires in the enclosed stamped addressed envelope. Please keep this letter if you wish.

If you would like to receive a copy of the general overall results of this study following its completion, copies will be made available to the agency through which you were initially contacted for this study. If you were not contacted through any agency, copies will be available at the Psychological Services Centre at the University of Windsor. Please understand that you do not have to participate in this study to obtain a final copy of the results.

For some people, filling out these very personal questions may prove to be distressing. And for some, these questions may lead to very disturbing feelings, thoughts, and/or memories. Some people may experience these upsetting emotions while they are completing the questions and others may experience such feelings later on, after they have finished. If you would like to speak to someone because of any disturbing feelings, thoughts, and/or memories that you have as a result of completing these questionnaires, please discuss your feelings with your therapist or counsellor. If you are not currently seeing a therapist or a counsellor, and you are experiencing very distressing thoughts/feelings as a result of completing these questionnaires, and you wish to be referred to a therapist or counsellor for help, contact either Tom Rutten (this study's primary researcher) or Dr. Jeanne Watson, at 519-973-7012. We will be available to speak with you and provide you with names of therapists who you can contact for help. We will be available to speak with you and provide these names for up to six months after you have received these questionnaires. Or, if you would prefer, you can call the Sexual Assault Crisis Centre (519-253-3100) or the 24 Hour Distress Line (519-253-9667).

In addition, if you have any questions regarding this study, please telephone 519-973-7012 and leave a message for Tom Rutten. In the interests of your confidentiality, please leave only your first name or a pseudonym, and a telephone number through which you can be reached, and Tom will return your call.

I, Tom Rutten M.A.Sc., the researcher, am a Doctoral Candidate in the Clinical Psychology Program at the University of Windsor. Dr. Jim Porter (519-973-7012), my research supervisor, is an Associate Professor of Psychology at the University of Windsor. Other University of Windsor professors involved in this research include Dr. Kathy Lafreniere, Dr. Richard Moriarity, and Dr. Charlene Senn.

This research has received approval from the Ethics Committee of the Department of Psychology at the University of Windsor. If you have any concerns or complaints about this study, please call Dr. Ron Frisch (519-973-7012), Head of the Ethics Committee, Department of Psychology, University of Windsor.

The participants in a research study seldom benefit directly from that study. Instead, they provide a gift to others who may have had similar experiences to the participants and who may benefit from the increase in knowledge that comes from the research.

Thank you very much for your cooperation.
Appendix E

Agency Consent Form
I
(please print)
of
(Name of Agency)

hereby consent to allow Mr. Tom Ruttan, M.A.Sc., Doctoral Candidate in the Clinical Psychology Program at the University of Windsor to solicit information from clients of our agency concerning issues of eating behaviours, functioning of family of origin, and unwanted sexual experiences during childhood.

I understand that this solicitation will be only in the form of a set of three questionnaires provided by Mr. Ruttan and sent by us to which ever clients of our Agency that we choose. I understand that our Agency has complete control as to which of our clients Mr. Ruttan's questionnaires are sent. As well, each client's set of questionnaires will contain an information form explaining the purposes and scope of this research that the clients are encouraged to keep for their own records. This information form outlines clearly that each client is asked only to complete the items that they wish (if any) on the three questionnaires provided for them and to return the questionnaires in the stamped addressed envelope enclosed with the package. The questionnaires are then mailed back to Mr. Ruttan at the Psychology Department of the University of Windsor.

I understand that the information form attached to the clients' questionnaires makes it clear to our clients that the completion of the items on the questionnaires is completely voluntary. Our clients are under no obligation to complete all or any of the items on the questionnaires and they may return them to Mr. Ruttan by mail entirely uncompleted if they so wish.

I understand that the questionnaires (in any form of completion) will be returned anonymously by mail to Mr. Ruttan at the University of Windsor. I am also aware that at no time will we or Mr. Ruttan become aware of the identity of any person who chooses to respond to any of the items on the questionnaires.

I am aware that, while data on any specific client will not be made available to our agency, we will have access to data compiled by Mr. Ruttan concerning how the clients from our agency responded as a group. In addition, overall information about the study will be made available to our clients whether or not they took part in the study.

I understand that this research has received approval from the University of Windsor Ethics Committee. I have reviewed the description of the study and questionnaires and I agree to our agency's participation.

________________________________________  _______________________________________
(Signature of Agency Personnel)             (Agency Position)

_______________________________________
(Date)
Appendix F

Sample Calculation for Objective Severity of Childhood Sexual Abuse

Demographic/family dysfunction questionnaire

Score

Item #6) What happened? (please check all that apply)

<table>
<thead>
<tr>
<th>Event</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>An invitation or request to do something sexual</td>
<td>1</td>
</tr>
<tr>
<td>Kissing and hugging in a sexual way</td>
<td>1</td>
</tr>
<tr>
<td>Encouraged to view sexually explicit material</td>
<td>1</td>
</tr>
<tr>
<td>Other person showing his/her sex organs to you</td>
<td>1</td>
</tr>
<tr>
<td>You showing your sex organs to the other person</td>
<td>1</td>
</tr>
<tr>
<td>Other person fondling you in a sexual way</td>
<td>2</td>
</tr>
<tr>
<td>You fondling other person in a sexual way</td>
<td>2</td>
</tr>
<tr>
<td>Other person touching your sex organs</td>
<td>2</td>
</tr>
<tr>
<td>You touching other person’s sex organs</td>
<td>2</td>
</tr>
<tr>
<td>Attempted intercourse without penetration</td>
<td>2</td>
</tr>
<tr>
<td>Penetration of vagina and/or anus with finger(s) or object(s)</td>
<td>3</td>
</tr>
<tr>
<td>Other person having oral contact with your genitals</td>
<td>3</td>
</tr>
<tr>
<td>Your having oral contact with other person’s genitals</td>
<td>3</td>
</tr>
<tr>
<td>Vaginal intercourse with penetration</td>
<td>3</td>
</tr>
<tr>
<td>Anal intercourse with penetration</td>
<td>3</td>
</tr>
<tr>
<td>Being forced to participate in pornography (photo, video, etc.)</td>
<td>3</td>
</tr>
</tbody>
</table>

Other (please describe) ........................................................................... *

The total score for this item will be calculated by summing the scores from every above event listed as occurring by the participant. For example, if she listed that a perpetrator,

- Kissed and hugged her in a sexual way 1
- Showed his sex organs to her 1
- Touched her sex organs 2
- Had oral contact with her genitals 3
- Had vaginal intercourse with penetration 3

Total score for Objective Severity of CSA = 10

*The score for this item will be determined by comparing it to the other items listed. A score will be decided by the researcher by selecting the most similar item above and using its score.
Appendix G

Instructions for Therapists
INSTRUCTIONS FOR THERAPISTS

- I'm looking for women 18 years of age or older who are currently in therapy. They can be involved in group and/or individual therapy. It is not necessary that the client be diagnosed as eating disordered or have had a history of sexual abuse. They are eligible for participation as long as they are not prone to experiencing psychotic breaks and they are not formally scheduled for termination from therapy within the next three months.

- I defer to your own judgement as to which of your clients have sufficient emotional strength to answer these personal questions. Please do not give these questionnaires to any client where you feel doing so would potentially jeopardize your therapeutic relationship.

- Please give the questionnaire packages to all the appropriate female clients whom you see in therapy over a two month period of time. The two months would begin from the time you receive the questionnaire packages.

- Process: I have given you a number of questionnaire packages each contained within a stamped self-addressed envelope. Please give the client one package and inform them that it is part of a study being conducted at the University of Windsor looking at issues of family, sexuality, and eating patterns. Tell them that you have no connection with the study and whether they participate or not will have absolutely nothing to do with their treatment. Please let them know that their participation is completely voluntary and completely anonymous. No one will know whether they chose to participate or not. If they have any questions about the study, please refer them to the telephone numbers contained inside the package.

- The client is to take the package home, look at its contents, decide if they wish to participate, complete the items, and drop it in the mail. All the postage is paid for them.
Appendix H

Statistical Decision Rules

The alpha rate was set at $p < .05$ for all main effect analyses. For the purpose of power calculations in this study, power was set at 0.80. A smaller value than 0.80 would incur too great a risk for a Type II error (Cohen, 1992). The effect size, which is the degree to which the researcher believes the null hypothesis is false, was set at a medium to large effect (i.e., 0.40 for correlations as per Cohen, 1992). There is nothing in the current literature that would clearly support the choice of either a large or a small effect size. The medium effect size represents an effect likely to be visible to the naked eye of the observer (Cohen, 1992). Such a level of power and effect size would require a total sample size of 50 or more participants.

All of the correlations in this study are presented with two-tailed significance levels.
Appendix I

Demographic Characteristics on Eating Disordered vs. Non-Eating Disordered sample (N=74)

<table>
<thead>
<tr>
<th>Group</th>
<th>Non Eating Disordered</th>
<th>Eating Disordered</th>
<th>T-Value (72 df)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variables</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age (in years)</td>
<td>M 34.56 (10.19)*</td>
<td>31.03 (8.91)</td>
<td>ns**</td>
</tr>
<tr>
<td>Marital Status:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single/Never Married</td>
<td>N 15</td>
<td>14</td>
<td>ns</td>
</tr>
<tr>
<td>Married/Common Law</td>
<td>N 15</td>
<td>17</td>
<td>ns</td>
</tr>
<tr>
<td>Separated/Divorced</td>
<td>N 5</td>
<td>7</td>
<td>ns</td>
</tr>
<tr>
<td>Intimate Relationship:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>N 17</td>
<td>10</td>
<td>ns</td>
</tr>
<tr>
<td>Yes</td>
<td>N 23</td>
<td>21</td>
<td>ns</td>
</tr>
<tr>
<td>Intimate Sexual Relation:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>N 17</td>
<td>14</td>
<td>ns</td>
</tr>
<tr>
<td>Yes</td>
<td>N 22</td>
<td>20</td>
<td>ns</td>
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(appendix continues)
Appendix I continued:

<table>
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<tr>
<th>Variables</th>
<th>Group</th>
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<th></th>
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<tbody>
<tr>
<td></td>
<td>Non Eating Disordered</td>
<td></td>
<td></td>
<td>Eating Disordered</td>
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<tr>
<td>Sexual Orientation:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heterosexual</td>
<td>N 34 29</td>
<td></td>
<td></td>
<td>ns</td>
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<td>Lesbian</td>
<td>N 40</td>
<td></td>
<td></td>
<td>ns</td>
</tr>
<tr>
<td>Bisexual</td>
<td>N 1 4</td>
<td></td>
<td></td>
<td>ns</td>
</tr>
<tr>
<td>Not Sure</td>
<td>N 0 2</td>
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<td></td>
<td>ns</td>
</tr>
<tr>
<td>Current Living Arrangements:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Living with parents</td>
<td>N 7 4</td>
<td></td>
<td></td>
<td>ns</td>
</tr>
<tr>
<td>Living alone</td>
<td>N 8 5</td>
<td></td>
<td></td>
<td>ns</td>
</tr>
<tr>
<td>Living with roommate in</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>non-sexual relationship</td>
<td>N 5 5</td>
<td></td>
<td></td>
<td>ns</td>
</tr>
<tr>
<td>Living with partner in</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>sexual relationship</td>
<td>N 6 15</td>
<td></td>
<td></td>
<td>ns</td>
</tr>
<tr>
<td>Living with partner in</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>sexual rel. + children</td>
<td>N 7 6</td>
<td></td>
<td></td>
<td>ns</td>
</tr>
<tr>
<td>Living with children</td>
<td>N 4 0</td>
<td></td>
<td></td>
<td>ns</td>
</tr>
<tr>
<td>Other</td>
<td>N 2 0</td>
<td></td>
<td></td>
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</table>

(appendix continues)
Appendix I continued:

<table>
<thead>
<tr>
<th>Variables</th>
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<th>Eating</th>
<th>T-Value (72 df)</th>
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<td></td>
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<td>Disordered</td>
<td></td>
</tr>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>N</td>
<td>3</td>
<td>6</td>
<td>ns</td>
</tr>
<tr>
<td>Roman Catholic</td>
<td>N</td>
<td>17</td>
<td>11</td>
<td>ns</td>
</tr>
<tr>
<td>Anglican</td>
<td>N</td>
<td>5</td>
<td>3</td>
<td>ns</td>
</tr>
<tr>
<td>Protestant</td>
<td>N</td>
<td>11</td>
<td>12</td>
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(appendix continues)
Appendix I continued:

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* standard deviations are presented in parentheses.

** ns - not significant (p > .05)
References


VITA AUCTORIS

Tom was born in Brantford, Ontario in June, 1955. He completed a Bachelor of Applied Arts in Journalism from Ryerson Polytechnical University in 1980. He then completed a Bachelor of Arts in Psychology from the University of Waterloo in 1985. This was followed by the completion of a Master's of Arts in Science of Psychology at the same University. Tom went on to complete a Ph.D. in 1995 from the University of Windsor. No one is exactly sure where he is headed next.