Applications of the Scientific Method in Recent Studies Pertaining to Survivors of Incest

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APPLICATIONS OF THE SCIENTIFIC METHOD
IN RECENT STUDIES
PERTAINING TO SURVIVORS OF INCEST

A THESIS SUBMITTED TO
THE FACULTY OF THE GRADUATE SCHOOL
IN CANDIDACY FOR THE DEGREE OF
MASTER OF ARTS

DEPARTMENT OF
COUNSELING PSYCHOLOGY

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CHICAGO, ILLINOIS
JANUARY, 1996
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ABSTRACT

A review of the literature demonstrated the need for more empirical studies concerning survivors of incest. Eight recent empirical studies were examined with respect to their adherence to a procedural framework based upon the scientific method. It was hypothesized that various specific threats to internal, external, construct and statistical conclusion validity would be present in the studies. The hypothesis was supported. All expected threats to validity (except threats to internal validity) were found in the studies. The results were summarized in table form. A lack of communality was observed across studies. Suggestions were offered for improvements in the problem areas identified.
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INTRODUCTION

Abundant research exists on the topic of incest. This paper begins with a review of the literature that highlights the historic, inherent problems of dealing with the sensitive nature of incest. The studies involving survey results verified the incidence and prevalence of the problem and more recently, detailed case studies of individuals who were victims of incest stressed the need for treatment for the survivors. The many different theories of how to treat this population accented the necessity for clear empirical analysis of the personality disturbances that are evident in the adult incest survivor.

This paper presents a careful examination of eight recent empirical studies concerning survivors of incest, with respect to the methodologies utilized. A framework based on the required steps of the scientific method was developed in order to systematically review potential threats to validity present in the studies. The specific threats to validity which were scrutinized included: external validity (quality of hypothesis and ultimate adherence to the hypothesis, representative nature of samples and their controls, interactions between sample and treatment and treatment, and treatment and treatment setting); internal validity (history, maturation, selection and mortality); construct validity (preoperational explication of terms, interactions between different treatments, and evaluation apprehension); and statistical conclusion validity (sample size, quality of instruments, and choice and application of statistical procedures).
It was hypothesized that this examination would reveal several of the threats to validity delineated above. The areas of deficiencies were highlighted. The apparent problem areas were discussed with an eye toward methodological guidelines for future research that could increase accuracy, validity and overall confidence in the results.
CHAPTER I

LITERATURE REVIEW

History

The perceptions of incest have fluctuated wildly over time. From ancient Egyptian times when "... sexual relationships between members of the same family were not only acceptable, but sometimes even required" (Serrano & Gunzburger, 1983, p. 72) (the famous example given is Cleopatra), to religiously enforced laws prohibiting sexual contact between even distant relatives in the first century. "The fear of incest was so deeply rooted that a point was reached when even the two baptismal witness of the same child could not marry" (Serrano & Gunzburger, 1983, p. 73). Malinowsky’s anthropological theory (as cited in Serrano & Gunzburger, 1983) presented the possibility that incest was identified as a threat to the functioning of the family in that it corrupted the individual’s concept of role in the generational family, and laws developed to prohibit it. Levi-Strauss (as cited in Serrano & Gunzburger, 1983) offered a social/financial reasoning behind the laws governing incest. He suggested that inter-marriage limited the opportunities for trade with neighboring communities. Because women were considered chattel, the women owned would be best utilized as a basis for trade. Lindsey (as cited in Serrano & Gunzburger, 1983) felt that eventually, the biological damage created by repeated incestuous mating became a dominant factor in legally limiting
brother/sister and parent/child sexual relations.

The psychological ramifications of incest were not even considered until late in the twentieth century when Freud (as cited in Kirschner, Kirschner & Rappaport, 1993; Simon, 1991; Russell, 1986; Serrano & Gunzburger, 1983) contributed the Oedipal theory to explain the large number of female clients with a diagnosis of hysteria who reported being sexually abused by their fathers and/or brothers. He quickly recanted this theory and replaced it with the seduction theory, in which he attributes the reports of abuse to the fantasies and libidinous yearnings of the young female to be close to her father. Perhaps Freud felt that society (or he) was not ready to look at the reality of incest, or that he could not document the reality outside of his own practice. Others, specifically Ferenczi (as cited in Simon, 1991), continued to maintain that incest was the central theme in female clients’ neuroses. Freud was his harshest critic especially surrounding the fact that his methods reportedly included sexual and/or romantic contact with his clients (Simon, 1991).

The acceptance of incest as a problem in the medical field was validated in 1967 when the Index Medicus included six items under the heading of incest. That number has gradually grown, to eighteen by 1979 and to several dozen in 1989. Also in 1967, however, Sidney Furst’s Psychic Trauma presented the opinion that "trauma depends on the psychic reaction to an event, rather than on the event itself" (as cited in Simon, 1991, p. 980). Furst also discussed both Bender and Blau and Irving and their evidence of children who had been sexually abused by their parents with no apparent ill-effects (cited in Simon, 1991). In response to her psychoanalytic
colleagues' trivializing the sexual event as not worthy of being considered traumatic, but still emphasizing the significance of the underlying Oedipal fantasy, Greenacre opined that in "... cases where actual seduction has occurred, ... the child has less sense of being able to control what happens ..." (as cited in Simon, 1991 p. 981), putting the emphasis on the effects of event of incest, rather than the intrapsychic connection to the Oedipal desires.

For more recent examples of the extreme viewpoints within the psychological arena I quote Wardell Pomeroy (a Kinsey Report researcher) "... we find many beautiful and mutually satisfying relationships between fathers and daughters. These may be transient or ongoing, but they have no harmful effects" (cited in Russell, 1986, p. 1). Another well known expert, Sgroi stated an opposing view that she has "never knowingly talked to a happy, well-adjusted, unconcerned incest victim" (as cited in Russell, 1986, p. 39).

Feminists have reconceptualized incest by naming it rape, not the imagined lust of a child or mutually satisfying encounter between parent and child. Best expressed by Courtois, (1988):

Feminists challenged a main tenet of the psychoanalytic tradition, the oedipal theory, as a misconstruction. They argued that Freud's original theory (... relabeled the trauma theory by Miller, 1984) was accurate and that its replacement was nothing short of a coverup which denied the reality of the abuse while excusing the perpetrators (Rush, 1977). They argued against the sexism of psychoanalysis, best exemplified by the position of blaming the child
and the colluding mother for the development of incest while exonerating the abusing father. And they held that the oedipal theory had the effect of perpetuating incest and its negative effects rather than ameliorating them by reinforcing dynamics of denial, disbelief, and blame of the victim. (p. 119)

Whatever Freud’s reasons for discarding his seduction theory in 1897, the preponderance of the research being done today returns us to the study of the relationship between the trauma of incest and the later development of psychopathology.

**Case Studies**

Over the years, case presentations of individuals and their personal responses to incest have made it essentially undeniable that harm can be done with incestuous abuse (Bass & Davis, 1992; Armstrong, 1978; Brady, 1979 (cited in Kirschner, Kirschner & Rappaport, 1993); Russell, 1986; Anonymous, 1985). However, the information acquired from a case study is limited. The information garnered depends entirely on the questions posed, and the methods by which the answers are obtained, and unless there is some similarity in these areas, it is difficult to recommend a direction for future studies. These case studies reviewed from the last ten years have shown little communality, with little indication of current focus or direction.

**The nature of incest.** Nachmani (1987) described four cases of father/daughter incest. Each of the girls were post-pubescent at the beginning of the abuse, and the duration of incest was a period of less than six months. Since previous research has shown that the mean age for onset of incestuous abuse ranges from 11.5 (Russell,
1986) to 9.9 (Finklehor, 1979), and that only 35% of reported multiple incidence of incest had a duration of less than six months (Russell, 1986), the results of these four cases present little to take forward into the research.

Both Nachmani (1987) and Laviola (1989, 1992) examined incest in terms of the family structure, but in very different manners. Nachmani "[did] so by psychoanalytic methods, and not the methods of family therapy" (p. 621), examining the transference and countertransference issues alone; whereas, Laviola's studies described the dynamics of the dysfunction in the families of origin as the possible cause of the incest, but not dismissing the possibility that the incestuous relationship created the dysfunction (Fromuth, 1986; MacFarlane & Korbin, 1983; Smith & Israel, 1987 (cited in Laviola, 1992)). Also of note is that Laviola's research was exclusively related to sibling incest, while Nachmani's related to father/daughter incest.

Shapiro (1987) interviewed eleven women who were victims of father or father-figure/daughter incest before the age of 18. The focus of each interview was the amount and the nature of self-blame and self-mutilation experienced by these women. All of the women interviewed had openly acknowledged the incest. The women were asked to complete an unnamed protocol developed for this study, the validity of which was not discussed. In the description of the study, the author states, "Six of the eleven subjects mutilated themselves . . . [which] certainly suggests more than a casual association with incest" (p. 48). He goes on to state in the discussion, "This study indicates that there is a crucial connection between violent incest and self-
mutilating behavior" (p. 53). This is an irresponsible statement of causality, with no data to back it up.

**Methods of treatment.** An individual case study by Oestrich (1992), while being every bit as focused on one aspect of incest as Shapiro (1987), represented the heuristic nature of the work that has been done in the area of Cognitive-Behavioral treatment of panic disorders by applying it to a survivor of incest. The paper demonstrated a successful application of cognitive-behavioral techniques in conjunction with the psychodynamic methods of uncovering of unconscious processes.

Roth & Batson (1993) examined the male therapist/female client therapeutic relationship and its effective use in the resolution of issues. They also made suggestions for the use of hypnosis in the integration of memories and clarification of themes presented by the client. The male/female element alone in the counseling of incest survivors makes this work uniquely interesting, but not easily integrated with other work in the field.

Four case studies by Nelson (1991) looked at the use of empowerment in the treatment of incestuously abused women. The classifications of perpetrators included were: (1) father, (2) step-father, (3) uncle and (4) elementary aged cousin, and the definitions of abuse ranged from sadistic abuse to intergenerational pedophilia, both very broad definitions compared with other definitions found in the literature. Also, each of the subjects, at the time that they entered the empowerment program, had been in either individual or group therapy for an unspecified amount of time.
Definitively isolating the effects of the empowerment program from the subjects’ previous counseling, type of abuse and/or identification of perpetrator is quite suspect.

**Surveys**

The survey research over the last 15 years was somewhat more focused as to purpose than were the case studies. Most studies compiled data pertaining to the prevalence of incest and/or the characteristics and effects of incest.

**Prevalence.** Prevalence estimates in recent years have varied rather dramatically. Russell (1986), in her comprehensive review of large survey studies, attributed the differences to the methodologies used, the size and type of population sampled, the various definitions of abuse and the attitudes of the researchers. Russell was very critical of the early Kinsey Report from 1953, which reported that only 3% of the subjects reported incestuous abuse; she felt that "[the researchers’] bias against recognizing the abusiveness of incest" may have negatively effected the respondents’ willingness "to reveal their experiences to them" (Russell, 1986, p. 64). The attitude of the researcher also played a role in Kilpatrick and Amick’s 1984 study of households in North Carolina (cited in Russell, 1986). Of the women who responded, only 1% reported incestuous relations. The method of garnering the information was held responsible for this low reporting. Women were contacted by telephone by female researchers who had no expertise in the area of incest. Russell (1986) again attributed the low percentage to the fact that "Few women are likely to be willing to disclose experiences about which there is frequently a great deal of self-blame to a
strange interviewer who might convey in one way or another that victims are responsible for what happens to them" (p. 21).

Two large surveys by Sapp and Carter in 1978, and Kercher and McShane in 1984 (as cited in Russell, 1986) utilized a questionnaire, sent to 2,000 holders of valid driver’s licenses in Texas. Both studies included males in their random sampling and reported only on "child sexual abuse" reports. The percentages of sexual abuse reported (5% and 11% respectively) were not analyzed as to the breakdown of identity of perpetrator or by the sex of the victim.

Finkelhor (1979) indicated that 10% of a female college student sample (N=530) reported incestuous abuse before the age of 17. His definition of incestuous abuse included non-contact experiences, such as sexual proposition and exhibition, which is more inclusive than most of the other studies reported. A probability study of white and Afro-American women by Wyatt (cited in Russell, 1986) (N=248) did include statistics of non-contact incestuous experiences, in addition to statistics for contact experiences only. Wyatt’s findings (in Russell, 1986) were higher (23% before the age of 18) than Finkelhor’s (1979) for non-contact experiences. In the case of contact experiences Wyatt’s finding of 21% was higher than Russell’s (1986) reported 16%. A key difference between these studies was the composition of the samples.

Russell (1986) stated that the study by Wyatt utilized interviewing methods like those in her own study. Interviewers were well trained in methods for dealing with survivors of incest and ostensibly those methods promoted greater levels of trust
and disclosure from the subjects. Wyatt and Russell (1986) found amazingly similar results. The estimates of 16% to 18% prevalence have been frequently quoted in the literature since The Secret Trauma was published in 1986 (Kirschner, et al., 1993; Lundberg-Love, Marmion, Ford, Geffner, & Peacock, 1992; Edwards & Donaldson, 1987). In summarizing her discussion of prevalence statistics, Russell called for a "well-designed national probability sample survey" (1986, p. 73) to support and substantiate the regional studies done to date.

Characteristics and effects. Recently, Kirschner, et al. (1993) presented an "incest survivor syndrome" (p. 5-17) which divided the commonly found characteristics and effects of incest into four categories: cognitive, emotional, physical/somatic and interpersonal. Most of the characteristics encountered in the research were easily incorporated into this organizational structure. Significant evidence of cognitive problems in incest survivors, variously referred to as stigmatization, feelings of being damaged or inherently bad, and self-esteem issues was presented in the literature (Finkelhor & Browne, 1985; Herman, 1981; Courtois, 1988; Lundberg-Love et al., 1992; Russell, 1986). Courtois (1988) also identified that trusting one’s own perceptions is a cognitive problem for survivors.

The emotional problems exhibited by survivors included depression, suicidal thoughts or attempts and self-mutilation (Briere & Runtz, 1986; Sedney & Brooks, 1984; Herman, 1981, Lundberg-Love, Crawford & Geffner, 1987 (cited in Kirschner et al., 1993)) anxiety, fear of abandonment (Kirschner et al., 1993), the propensity to dissociate in the face of anxiety (Finklehor, 1986; Briere, 1984 and Lundberg-Love
et al. (cited in Kirschner et al., 1993), as well as shame and symptoms of Seligman's learned helplessness (cited in Kirschner et al., 1993).

Although the complaints of a somatic/physical nature were similar in terms of their description across the subjects of survivor research (gastro-intestinal complaints, pain, headache, insomnia, nervousness, etc.), Kirschner et al. (1993) identified these disorders as "physical reactions to extreme stress" (p. 8), whereas, Courtois (1988), Lundberg-Love et al. (cited in Kirschner et al., 1993) and Sedney & Brooks (1984) all identified these disorders as conversion symptoms.

The interpersonal problem addressed most frequently in the literature was the inability of the survivor to develop trusting relationships, both with men and women (Russell, 1986; Finkelhor & Browne, 1985; Lundberg-Love et al. (cited in Kirschner et al., 1993); Courtois, 1988 and Briere, 1984). Any relationship with a man presents the expectation of re-victimization; interactions with women present the expectation of denial and betrayal (Courtois, 1988).

In addition to the four categories Kirschner et al. (1993) used to describe the incest survivor syndrome, Post-Traumatic Stress Disorder (PTSD) was presented as a possible theoretical framework for understanding survivor characteristics. Other researchers (Graziano, 1992; Green, Wilson and Lindy, 1985; Donaldson and Gardner (cited in Graziano, 1992)) might have incorporated PTSD into one of the four categories. For example, Graziano (1992) described Post-traumatic Stress Disorder as a "phenomenon of human cognition" (p. 71) (the cognitive category), and Green et al. (1985) referred to PTSD as "a dynamic process by which a survivor
attempts to integrate a traumatic event into his or her self-structure" (p. 71) (the emotional category).

I employed the theoretical structure proposed by Kirschner et al. (1993) to organize the results unearthed in the survey research. Kirschner et al. (1993) went on to offer a treatment application of this theory for people who exhibit an incest survivor syndrome. This theory and others with their applications are presented in the following section.

Theory and Application

Most of the quasi-empirical studies reviewed proposed theories primarily applicable to group therapy situations, however, there was little agreement as to the time period required for healing, the population the therapies would benefit, and most importantly, precious little replicable research supporting the theories. Those studies which proposed non-group formats included Kirschner et al. (1993), who put forth a couples orientation, wherein the individual works initially with the therapist on Family of Origin issues and the survivor’s partner is invited to join the process later.

Urbancic (1992) incorporated Orem’s Theory of Nursing, which proposed the empowerment of the individual and stressing the necessity of autonomy and personal responsibility. Also, in Healing the Incest Wound, (Courtois, 1988), a blend of feminist, traumatic stress, developmental and loss theories were presented as Retrospective Therapy for both the individual and for the group. One of the key concepts of Retrospective Therapy for the individual is the individualization of the
treatment. Each client's incest experience was unique, as were the defenses that were
developed, hence treatment must address those issues on an individual basis.

**Group therapy - time limited.** Axelroth (1991) implemented Retrospective
Therapy with a group of University women. The stated goals of the group reflected
Courtois' (1988) blend of other theories and added specific developmental needs of
college-age women, including the isolation the survivor of incest feels when asked to
develop intimate relationships or share a family history. The other developmental
issue Axelroth addressed specific to this college population was that of separation/
individuation.

Axelroth's (1991) model was an eight-week format that repeated each
semester, providing the regularly attending student the opportunity for continuing
support throughout their college tenure. It also provided the group with a
heterogeneous make-up consisting of "old" and "new" members. However, this
format did not provide for follow-up for those who, for whatever reason, did not
continue in school, or graduate. As the author mentioned, "short-term treatment may
actually exacerbate symptomatology" (p. 97).

Goodman and Nowak-Scibelli (1985) also proffered a short-term application
for incest survivors, based on the contextual theory of Boszormenyi-Nagy and Sparks
(as cited in Goddman & Novak-Scibelli, 1985). Paraphrased, the three basic
assumptions of contextual theory are that (a) the adult is responsible in any sexual
contact involving child and adult, (b) that the offender be held accountable without
scapegoating and (c) that the child's motivation may be partially based on the loyalty
felt toward the family member (Goodman & Nowak-Scibelli, 1985, p. 536-7). While these assumptions might have been useful in the development of an incest therapy group, the authors' description of those who would best benefit from this type of therapy stated that she is "psychologically minded . . . involved in an ongoing relationship with at least one significant individual and is having some success in work or school" (p. 541). The short-term nature of the treatment requires that the client be on her way to recovery in order to get into the group.

**Group therapy - time-unlimited.** The long-term approach theory papers reviewed placed no previous treatment requirements on participants. Courtois (1988) incorporated Retrospective Therapy into long-term group treatment as a necessary extension of the individual's therapy, stating, "Concurrent or sequential individual and group treatment with the same therapist has some clear advantages" (p. 269). One advantage referred to is that of the therapeutic alliance developed between survivor and therapist. Courtois (1988) also noted that one of the survivor's needs is to expand the individual encounter and to "adjust to the non-exclusive nature of the therapy relationship and to shar[e] her therapist's attention with others" (p. 269).

Incest survivors shared many characteristics, including a reticence to speak of the secrets of the family. Gold-Steinberg and Buttenheim stated that, "Many survivors enter a group never having told anyone other than a therapist about the incest" (1993, p. 175). Abell and Sommers (1991) spoke of a "Metaphor of Voice and Growth" in which, as the survivor is "provided a safe setting for . . . creat[ing] new experiences through speaking with others about the incest experience and about
the family context of the abuse" (p. 75), growth becomes possible. The telling of the
story contributed opportunities for the corrective interpersonal experience (Yalom,
1985). Draucker (1991) presented the metaphor of construction of a personal
residence, which effectively utilizes speaking of the incest and recovery from it in
terms of building, rather than remodeling the survivor's life. Kreidler (Kreidler &
three-phase, long-term interactional group for survivors of incest.

All of the studies reviewed thus far have contributed to our pool of knowledge
of the effects of incest on adult female survivors of incest. However, as we have
seen, each type of study had its own inherent limitations. The case studies, the
surveys and the quasi-empirical applications of theory, each leave us with questions
that call for a more scientific approach, an approach that allows us to make statements
of certainty, of verifiable and replicable results, as well as results that may be
generalized to the population being studied. The empirical approach, with scientific
methodologies rigorously applied can ultimately yield these desired credible results.
What follows is a careful analysis of several studies representative of the current pool
of empirical research.
CHAPTER II

METHODOLOGY

Documents Included

The eight articles included for examination in this study were: "Intrafamilial Sexual Abuse: Family-of-Origin and Family-of-Procreation Characteristics of Female Adult Victims" (Carson, Gertz, Donaldson and Wonderlich, 1991); "PTSD in a Nonclinical and Nonstudent Sample of Adult Women Sexually Abused as Children" (Greenwald and Leitenberg, 1990); "Long-Term Effects of Incestuous Child Abuse in College Women: Social Adjustment, Social Cognition, and Family Characteristics" (Harter, Alexander and Neimeyer, 1988); "Young Adult Women Who Report Childhood Intra-familial Sexual Abuse; Subsequent Adjustment" (Jackson, Calhoun, Amick, Maddever and Habif, 1990); "Psychiatric Correlates of Incest In Childhood" (Pribor and Dinwiddie, 1992); "MMPI Correlates of College Women Who Reported Experiencing Child/Adult Sexual Contact With Father, Stepfather, or With Other Persons" (Roland, Zelhart and Dubes, 1989); "Ego Deficits in Anorexia Nervosa Patients and Incest Victims: An MMPI Comparative Analysis" (Scott and Thoner, 1986); and "Research in Group Work Participants’ Perception of Therapeutic Factors 1992 in Groups for Incest Survivors" (Wheeler, O'Malley, Waldo, Murphey, and Blank, 1992).
Selection of Documents

The documents examined included recently published (since 1985), empirical studies utilizing adult (over 18 years), female survivors of childhood sexual abuse, specifically incestuous in nature. By choosing recent studies, the intention was to present a fair picture of what is currently considered work of value in the field. Although there was significant literature dedicated to the initial effects of incest during childhood, male survivors of incest, and research into the personalities of perpetrators, the author’s personal interest is in the area of adult, female survivors. Due to the vast number of recent studies that would fit even these criteria, further limitations were applied. Studies employing populations defined as alcoholic or substance abuser, or borderline personality disorder were not included.

Inclusion in this study further required that a clear research question was stated somewhere in the article. The research question must have involved more than simple incidence of the problem of incest. Also, since some research teams have generated several articles based on the same data pool, the choice of specific articles was influenced by a desire to present studies by different research teams.

Procedure

The various current empirical studies were analyzed by means of the hypothesis testing format described by Minium (1978) and more recently, Hayes (1988). This format is a clear step-by-step decision making approach. Each step of the process was reviewed with attention paid to the study’s adherence to strict scientific methodology and to any potential threats to the validity of the results. The
four broad areas of potential threat to inference making which were considered were: construct validity, statistical conclusion validity, internal and external validity (Cook & Campbell, 1979). Although any obvious violations of validity requirements of the research were identified, this inquiry focused on those types of validity threats that may have been more likely to occur because of the nature of abuse being studied.

The research question

The beginning of any empirical inquiry is the statement of the null and alternative hypotheses that will answer the current research question. Therefore, the first task in the review of a chosen article was to identify the statement of the research question and the corresponding hypotheses. Since the requirements of style and presentation of information were not uniform across publications, the expectation was that the research question would not always be clearly identified in terms of hypotheses. However, when the hypotheses were clearly evidenced in the statement of the problem or the goals of the study, an attempt was made to restate the research question in terms of hypotheses. The risk in so doing was that this author's choice of hypotheses may not have matched identically with those intended.

One threat to construct validity that was examined at this developmental stage of the research question was the preoperational explication of constructs (Cook & Campbell, 1979). The definitions of the constructs being measured were reviewed for their comprehensibility and for their similarity to definitions used previously in the incest literature.
The question of to whom the results of the study would generalize was also addressed at this stage of development of the study. The challenge for the researcher in studies of incest is first to identify the intended subpopulation to whom the results of a study will generalize, and then to assure that the samples utilized properly represent them. The external validity threats identified by Cook and Campbell (1979) that were contemplated were the interaction between the selection of sample population and treatment, and the interaction of treatment setting with treatment.

The design. Once the research question was clearly identified, the next task was to review the design of the study in terms of how well it supported the research hypothesis. The potential threats to construct validity which were screened for at this stage of the review were chosen for their expected occurrence when dealing with survivors of incest. They included the interaction of different treatments and the subjects' evaluation apprehension. Also, the related internal validity requirements of history, maturation, selection and mortality were considered.

The number and type of instruments chosen for each study were examined in terms of their appropriateness, validity and reliability (Cook & Campbell, 1979). A primary source of commentary on the instrument choices was Test Critiques (Keyser & Sweetland, 1983 - 1993).

Statistical choices. Threats to statistical conclusion validity included a review of the sample population, its size, random assignment and the use of a control sample. The next steps of the decision making process were determination of the level of significance that would have been acceptable in order to reject the null hypothesis and
the choice of the appropriate statistic for the research question. The choice of statistic for each study was assessed according to its appropriateness to the sample size and data type. Also, the assumptions necessary for the particular statistic to be valid were checked (Cook & Campbell, 1979).

**The decision rule.** The decision rule is developed by specifying the sampling distribution, assuming the null hypothesis is true, and applying the specified \( \alpha \) (level of significance). The statistic chosen was applied to the sample data. It was not expected that each (or any) of the studies would provide the reader enough information to duplicate its sample data findings. Therefore, a review of the procedures and their apparent applications was performed.

**The decision to reject or not reject the null hypothesis.** It is incumbent upon the researcher to clearly state the decision to reject or not reject the null hypothesis(es). The task of this review was to identify the results that related to the null hypothesis. If other results were presented, the presence or lack of post-hoc procedures utilized were also reviewed.

**The conclusions.** Each of the Conclusions/Discussion sections of the studies were examined for their adherence to the original research question(s). The limitations presented were weighed against the specific threats to validity discovered in the analysis of the study.

**Summary of Data.** A table summarized the presence or absence of the anticipated threats to validity found in each of the studies. However, two of the
categories selected did not easily lend themselves to the table format. The definitions of constructs were scrutinized only in the text, as were the instruments employed.
CHAPTER III

RESULTS

Research Question

Hypotheses. Of the eight studies reviewed, five of them (Scott & Thoner, 1986; Harter et al., 1988; Roland et al., 1989; Greenwald & Leitenberg, 1990; Jackson et al., 1990) satisfied the three requirements for a good hypothesis. All of these studies introduced the theory bases from which their hypotheses were developed with the research question as a logical extension of those theories. The research questions as well as the specific measures that would be utilized to answer those questions were stated in a clear, unambiguous manner. And lastly, the questions that were proposed made good sense and the answers could serve as an aid toward future research.

Those studies that did not satisfy these three requirements varied in their strengths and weaknesses. Pribor and Dinwiddie (1992) began well by citing many studies that have shown some relationship between psychiatric illness and early incestuous abuse, however, they did not present any particular theory upon which they were basing their research. Their statement of objective presented in the abstract was to "describe more precisely the type of psychiatric illness associated with incest during childhood" (p. 52). This research question was vague; it was possible, only by means of inference and statements of "expectation" in the discussion of the results,
to come up with a working hypothesis to fit the ensuing statistical presentation. The questions posed, if answered competently within the framework of rigorous hypothesis testing, would be useful, and a good basis for further research.

Carson et al. (1991, p. 580) presented several potential research questions surrounding the family-of-origin, family-of-procreation and intergenerational aspects of incest. In fact, so many questions were posed in a few short paragraphs, and summed up so vaguely in the statement of the research questions, it was impossible to know what was to be measured and what specific outcomes were expected. The study was designed to investigate (1) "... the association between victims' family-of-origin and family-of-procreation characteristics," and (2) the association "between those characteristics and various indicators of individual adjustment" (p. 580). Expectations for the results were (1) "support [of] the assumption that some of the dynamics of incestuous families and consequences of victimization become manifest in the incest victim's own family-of-procreation" and (2) "that various indicators of psychological adjustment would be significantly related to family-of-origin and family-of-procreation characteristics" (p. 580). Because the questions that were posed were vague, the value of the information gathered was not great.

Wheeler et al. (1992) presented theories supporting (1) time-limited group treatment, and (2) long-term group treatment; (3) open groups, and (4) closed groups; and groups in general. The research question: "to compare therapeutic factors reported in a closed, time-limited incest survivor group to those in Bonney, Randall
and Cleveland (1986) open long-term survivor group, and to Yalom's (1975) therapy groups," and "to explore possible differences in therapeutic factors between early and late group sessions" (Wheeler et al., 1992, p. 90) was clear. Unfortunately, the comparisons proposed were meaningless due to the myriad differences in the groups and methods of treatment that were compared. Many threats to validity was present in the design. The sizes of the groups were not equal (statistical conclusion validity threat); the composition of the groups were not comparable (or not presented) (selection -- internal validity threat); group A was led by female co-therapists, group B was led by a male-female therapist team, and group C leadership was not discussed (construct validity threat); the three groups took place over a 15 year time period, nearly a generation during which time (1975 until 1992) societal attitudes concerning the taking of personal responsibility and the acceptability of seeking help for personal problems changed significantly. The study asked questions, but the answers were useless.

Preoperational explication of terms. Inadequate, and partial definitions undermined the construct validity of the subject studies. The worst definition was no definition, as in Wheeler et al. (1992) who simply stated that their sample subjects were "women who had experienced father-daughter incest as children" (p. 91), with no further explanation.

While most of the studies did state a definition of incest, several defined it in terms of "sexual abuse" (Greenwald & Leitenberg, 1990), "sexual molestation" (Jackson et al., 1990), or "sexual activity" (Pribor & Dunwiddie, 1992) without
defining those terms. Pribor and Dunwiddie (1992) also stated in their abstract that "More severe types of incestuous abuse were associated with a higher risk for the development of psychiatric disorders" (p. 52), however, no explication of "severity" was offered anywhere in the article.

The authors of two studies created their own definitions of incest. Scott and Thoner's (1986) was, "any sexual contact and involved various combination of fondling, oral sex, and or intercourse" (p. 840); Roland et al.'s (1989) was, "as a child or pubescent child, unwillingly experienced sexual intercourse; genital, anal, or breast fondling; oral-genital contact, forced observation of masturbation or nudity, with someone at least five years older than they" (p. 1159).

Two studies cited earlier definitions used by Finklehor (1978 and 1979). Carson et al. (1991), used the definition of incest that Finklehor used in 1978, "sexual experiences between immediate or extended family members (biological or by marriage), including sexual propositions, exhibition, sexual fondling, hand-genital or oral-genital contact, mutual masturbation or intercourse" (p. 280). Harter et al. (1988) used Finklehor's 1979 study as a rationalization for the following, broader definition since "even relatively mild noncoercive incidents can be quite distressing" (Harter et al., 1988, p. 6). Harter's resulting definition became, "any report of physical contact that the subject interpreted as having been sexual in intent between a subject before she was 18 years of age and a significantly older family member (more than a 5-year age difference)" (p. 6).
In eight studies, seven definitions of incest were utilized. While all of the studies purported to be researching various aspects of the lives and personality traits of adult survivors of incest, the differing (albeit similar) definitions of the primary term, "incest" made it difficult to see the pool of research as a whole.

Representative nature of samples. The problem of finding a representative sample from which one can generalize when dealing with any specific population is a difficult one. This threat to external validity was repeatedly evidenced in the articles studied. Pribor and Dinwiddie (1992) came closest to identifying their sample subjects objectively. The subpopulation they identified was "... women who are troubled and have brought themselves to treatment. Thus, this population focuses on those women who are most likely to both need and seek help" (p. 55). They did not attempt to generalize beyond those who had voluntarily brought themselves to treatment.

Most of the studies fell into the trap of the "hypothetical population" wherein researchers identified a group they wanted to study, but settled for a convenient group with hopes that it would approximate the characteristics of the desired group. For example, Harter et al. (1988) ("Long-Term Effects of Incestuous Child Abuse in College Women: ...") and Roland et al. (1989) ("MMPI Correlates of College Women Who Reported Experiencing Child/Adult Sexual Contact with Father, Stepfather, or with Other Persons") both used undergraduate psychology classes as the pool for volunteer subjects. In each case, the titles of the studies belied the desired
population. Similarly, Jackson et al. (1990) used young adult women in a university community, while attempting to characterize the results as all young adult women.

It was the intention of Greenwald & Leitenberg (1990) to present results for a nonclinical and nonstudent sample. The subpopulation utilized was nurses. Although the article stated that there was no particular interest in the characteristics of nurses versus other nonclinical/nonstudent subpopulations, the fact remained that nurses have their own particular characteristics (including the fact that all nurses have been students) that may have effected the results of the study.

The remaining studies pertained specifically to incest victims in treatment. Both Wheeler et al. (1992) and Carson et al. (1991) created groups to study which consisted of survivors of incest, whereas Scott and Thoner (1986) chose to work with already existing groups. These authors discussed the limitations of their samples, and they did not attempt to generalize beyond their parameters. Nevertheless, "If we do limit the population to what we can sample with reasonable adequacy, the outcome may, . . . be generalizable only to a trivial population" (Minium, 1978, p. 263). In a study of survivors of incest, limiting the population to those already in therapy presents the possibility that the results may be generalized only to a "trivial population."

Interaction between sample population and treatment. Two different sources of threat to external validity were found in the studies in connection with possible interactions between the sample population and the treatment. First, four of the studies (Harter et al., 1988; Roland et al., 1989; Jackson et al., 1990; Carson et al.,
1991) utilized either payment or extra-credit as incentive for students to volunteer for the treatment, which may limit the findings to those who were short of cash or needed a boost in their class grade (Cook & Campbell, 1979).

A second type of threat was not as obvious, so I called it a hidden threat. Two studies artificially limited participation in the treatment creating a less representative population. Greenwald and Leitenberg (1990) sent out 1,500 questionnaires to the targeted nursing population, but received only a 3.4% return. It was not clear what caused the low response rate, but the possibility that the questionnaire was too long, too explicit or not clear about confidentiality aspects for 96.6% of the potential subjects led me to believe that those who chose to respond may not have been representative of the population. Pribor and Dinwiddie (1992) illustrated this hidden threat as well. All subjects were volunteers found in programs for sexual abuse or were solicited from independent therapists and only 64% of all potential subjects who reported being victims of incest responded positively to the request to participate. The means of solicitation was not addressed, so we have no way of knowing why only 64% chose to participate, or more importantly why 36% chose not to.

Interaction between treatment and treatment setting. The problem encountered in investigating possible interactions between treatment and treatment setting was that none of the eight studies directly discussed how or where the instruments and/or interviews were administered. In two cases (Carson et al., 1991, and Greenwald & Leitenberg, 1990) the respondents to paper and pencil instruments were told to take the instruments with them and return them within a specified time frame. Not only
were the treatment settings ambiguous, there was no control over who was actually completing the instruments. The studies that were undertaken in a university setting (Harter et al., 1988; Roland et al., 1989; Jackson et al., 1990) may have all administered the paper and pencil portions of their testing in similar settings, however, both Harter et al. (1988) and Jackson et al. (1990) included personal interviews in their instruments. Where, when and under what conditions those interviews were held could have had a distinct effect on the responses to the interview. When the methods involved in the administration of the instruments are not clearly identified, we have no way of identifying the potential threats present.

Design

Interaction of different treatments. The construct validity of the design of the study is also threatened by the methods of administration of the instruments. When more than one treatment is involved "we [are not] able to unconfound the effects of the treatments from the effects of the context of several treatments" (Cook & Campbell, 1979, p. 68). While most of the studies limited themselves to one or two instruments, Harter et al. (1988) and Jackson et al. (1991) added a sexual history interview and questionnaire. Because of the sensitive nature of the information being requested in a sexual interview, it would be important to know if the paper and pencil inventories were administered consistently before or after the sexual history information was collected, or if they varied the order of administration. Jackson et al. (1991) set up further potential threat to the construct validity by administering an entire battery of inventories including 10 paper and pencil instruments each
pertaining to a different type of personal adjustment, plus the one hour interview. This series of tests was not only exhaustive, it had to be exhausting for the subjects. The effects of fatigue could be pertinent; the results of those instruments presented last could have been effected by the concentration levels of the subjects as time wore on. Carson et al. (1991) also used five paper and pencil inventories, creating much the same situation. Unfortunately, the studies did not include a description of how, when or in what order the instruments were presented, so the possibility of confounded effects from the interaction of different treatments can not be dismissed.

**Evaluation apprehension.** Evaluation apprehension, another potential threat to the construct validity of the design of the studies, was not discussed at all. Cook & Campbell (1979) stated that "... respondents attempt to present themselves to [persons in authority] as both competent and psychologically healthy" (p. 86). Since incest survivors have spent most of their lives convincing every one around them that they are "normal" in spite of how they feel about themselves (Bass & Davis, 1988), it is imperative that we recognize that this aspect of construct validity is perhaps more of a threat when dealing with an incest survivor population. This threat was exacerbated by Carson et al. (1991) in two separate ways. First, the therapists of the subjects told them that completion of these inventories could be helpful to their therapy process, and the subjects were told about the purpose of the study before the administration of the inventories. It is possible that the propensity to respond in a manner that would please the administrators or the subjects' therapists may have been a factor in the responses to the inventories. Additionally, one of the instruments
chosen by Carson et al. (1991) has been criticized for its susceptibility to those subjects interested in faking good or bad, as discussed below at **Instruments**.

Greenwald & Leitenberg (1990) also may have inadvertently intensified the potential effects of evaluation apprehension simply by the sub-population chosen. Consider the education level of nurses, especially in the area of mental health and familiarity with the Diagnostic and Statistical Manual - III (Revised) (DSM-III-R, the source for the inventory administered), combined with the natural tendency for subjects to try to "present themselves as both competent and psychologically healthy" (Cook & Campbell, 1979, p. 86). As in Pribor and Dinwiddie (1992), a very low percentage of the potential subjects actually chose to participate in the study after the initial presentation of the subject matter. It may be that evaluation apprehension effected the potential subjects' decision to participate or not.

**Internal validity.** None of the studies reviewed involved methodologies that would require controlling for effects due to history, maturation or mortality, that is, changes that may have occurred between the pre-test and post-test. Further, only two of the studies dealt with more than one treatment group. Therefore, the internal validity threats chosen to observe were inappropriate for this group of studies.

**Instruments**

Oddly enough, only three instruments were used in more than one of the considered studies: the Minnesota Multi-Phasic Inventory (MMPI) (or the Mini-Mult, a version of the MMPI) was used in three studies (Jackson et al., 1990; Scott & Thoner, 1986; Roland et al., 1989); the Family Environmental Scale (FES) was used
in two (Carson et al., 1991; Jackson et al., 1990); and the Family Adaptability and Cohesion Valuation Scales (FACES II or III) also appeared in two studies (Carson et al., 1991; Harter et al., 1988). Since there was so little commonality of instruments between studies, each study and its instruments were reviewed separately.

Carson et al. (1991) presented a lengthy discussion of each of the individual instruments chosen for their study, however those discussions did not include the reliabilities of the instruments. A critique by D.L. Streiner (1987) of the Psychological Screening Inventory (PSI), indicated that the instrument was designed to be diagnostic, a predictor of normals who would in the future require hospitalization. Since the population used by Carson et al. (1991) was defined as incest victims in treatment, the use of the PSI was not appropriate. Lanyon also warned that a major limitation of the inventory is that it should be used only "where deliberate response distortion is not a significant concern" (cited in Streiner, 1987, p. 513). A critique of the FES, by J. R. Caldwell (1985), discussed a serious dearth of validity studies to support the instrument, but stated that "The FES can be very useful when employed with caution" (p. 271). FACES III was criticized in two separate, and very different, reviews (Camara, 1990; Preli & Carlson, 1993). While Camara (1990) was quite complimentary, Preli and Carlson (1993) pointed out that the statistical model upon which FACES III was based (the circumplex model) was incorrect, thus fundamentally nullifying this instrument's usefulness unless and until it
can be re-scaled properly. No critiques were located for the Family-of-Origin Scale or the Personal Authority in Family Systems Questionnaire (Carson et al., 1991).

Greenwald & Leitenberg (1990) used a questionnaire of their own making, based partly on items corresponding to the DSM-III-R and partly on a "scale . . . modeled after the one used by Derogatis (1983) in the Symptom Checklist-90-R" (p. 220). The authors warned the reader that " . . . it should be observed that the reliability and validity of measuring PTSD symptomatology in this way as distinguished from an interview is very questionable" (p. 222). No attempt was made by the authors to assess any reliability or validity for their instrument.

Jackson et al. (1990) chose eleven, mostly well known and proven instruments for their study. The Beck Depression Inventory and the Wahler Physical Symptoms Inventory have been recently criticized by Stehouwer (1985) and Faust and Walker (1989), respectively; both critiques indicated well designed and verified instruments. The other instrument chosen by Jackson et al. (1990) included: Mini-Mult (Kincannon, 1968) (a version of the MMPI); Veronen-Kilpatrick Modified Fear Survey Schedule (1980); Rotter's I-E Scale (1966); Social Adjustment Scale - Self Report Form (Weissman & Bothwell, 1976); and Derogatis Sexual Functioning Inventory (Derogatis & Melisaratos, 1979).

The limitations of the FES (Jackson et al., 1990) were discussed above. The Rosenberg Self-Esteem Scale and the Social Support Scale were exceptions in that they were not appropriate or proven instruments. The Rosenberg Self-Esteem Scale consisted of only 5 items, which is not large enough to determine reliability or
validity with any certainty; and the Social Support Scale was an unproven instrument presented as a thesis. Also, the interview was not shown to be reliable or valid.

Harter et al. (1988) used an untested, unproven questionnaire and interview as well as the FACES-II, discussed above. The other instrument administered was a specially constructed form of the Family Perception Grid (Harter et al., 1988) for which no critique was found. The discussion of the instrument in the text indicated only moderate reliability statistics and no validity tests were discussed at all.

Again, Pribor and Dinwiddie (1992) chose to include an interview about sexual abuse which was not only untested as an instrument, it was not even described in the study. The discussion of the computerized version of Diagnostic Interview Schedule was not present in the study and no critique was located for this form of the instrument.

Wheeler et al. (1992) used the Q-Sort as the only instrument for their study. Scott and Thoner (1986) used the MMPI with Barron’s Ego-strength research scale, and Roland et al. (1989) used only a form of the MMPI. These instruments have been shown to be reasonably reliable and valid through repeated testing and use in the literature.

Statistical Conclusion Validity

Samples. Many threats to the statistical conclusion validity were found throughout the studies. The most prevalent procedural problem encountered was that none of the studies accomplished a random sample, nor did it appear that any of them even made an attempt to do so. Keeping in mind that a random sample is a
prerequisite for any parametric statistical analysis, and that nearly all of the extant studies applied parametric statistics to their data, it was clear that any generalization of the results to populations other than those studied were suspect.

All of the studies used small samples, which in some cases was more problematic than others. Wheeler et al. (1992) compared three groups, one of 6, one of 7 and one (the St. Louis Catchment Area) of a large, but unstated size, none of which were properly identified as a control. Roland et al. (1989) and Harter et al. (1988) used bigger samples, (20/32 and 29 respectively) but compared them to control groups that were much larger (119 and 56 respectively). Carson et al. (1991) and Greenwald and Leitenberg (1990) both used sufficiently sized samples, but chose not to use control groups for comparison. Greenwald and Leitenberg (1990) stated that no control group was used because, "The way PTSD is defined . . . precluded a comparison of the frequency of PTSD symptoms in the abused group v. a control group of women who had not been sexually abused during childhood" (p. 222). The authors eliminated the possibility that other types of trauma could be a source for PTSD symptomatology in subjects who have not experienced incest. The statistical conclusion validity that was lost was, in my estimation, a fatal error. Pribor and Dinwiddie (1992)'s sample size was 52, with a control group of 23, which was not large enough for the $X^2$ goodness of fit comparisons that were performed. The remaining two studies (Scott & Thoner, 1986; Jackson et al., 1990) used small, yet adequate samples with appropriate controls.
Choice of statistic. The most common problem encountered in the choice of statistic was that data obtained from intercorrelated scales (e.g., the MMPI scales) was treated as independent. Scott and Thoner (1986), Roland et al. (1989) and Carson et al. (1991) all applied a univariate analysis of variance as their primary analytic device when the appropriate statistic would have been a multivariate analysis of variance, which adjusts for the lack of independence in the scales. Scott and Thoner (1986) also applied a rank order correlation between scores, which again assumes independence of scales. Wheeler et al. (1992) chose the Spearman Rho to compare the data from Yalom’s Q-Sorts administered to three groups; again, the scales of the Q-Sort are not independent, hence, a test of repeated measures would have been more appropriate.

In Greenwald and Leitenberg (1990) the application of ANOVAs to significant findings in the MANOVAs was done correctly; however, the decision not to break the data down into sub-categories due to this lack of significance in the univariate findings regarding the relationship of the perpetrator and type of sexual activity was incorrect (p. 225). Since there was a significance shown in the MANOVA, the proper procedure would have been to make such a break down in order to find the source of significance. Greenwald and Leitenberg (1990) also applied a frequency correlation, which would have been appropriate if the sample size were large enough that none of the observed frequency cells equalled zero, however, since this required assumption for this test was violated, the power of the results decreased.
Although Roland et al. (1989) and Scott and Thoner (1986) erred in their choice of univariate analysis of variance, they both chose other appropriate statistics for their respective data sets. Roland et al. (1989) chose the Tukey-B to adjust for unequal means, and Scott and Thoner (1986) correctly and properly applied both the Duncan procedure and the Point Biserial tests.

Both Harter et al. (1988) and Jackson et al. (1990) chose and correctly conducted appropriate statistics for their studies, including MANOVA, ANOVA, Pillai’s Trace, Path Analysis and Multiple Regression. In Harter et al. (1988), it was not possible to determine if the MANOVA was an appropriate test since they did not present either a test for sphericity or for homogeneity of variance between the control and sample groups. However, since it was not clear if the omission of these tests was the choice of the authors or the journal, the test may have been appropriate.

Another question concerning whether it was the journal’s or the author’s choice to include or omit information arose in the Jackson et al. (1990) study. There was a limited amount of information regarding the specific finding of the study and the MANOVA results were not systematically presented.

In Roland (1989) the statistical results were poorly presented. Specifically no F values were shown and the data was unclear as presented in the tables. Carson et al. (1991) presented an insufficient analysis of the data. Most of the correlations that were reported were moderate at best, and since the statistical procedure used (ANOVA) did not adjust for the interdependence of the scales which were correlated, the possibility that the "significant" correlations were due to chance is very high.
Adherence to hypothesis. Most of the studies that presented clear hypotheses at the outset (Harter et al., 1988; Roland et al., 1989; Greenwald & Leitenberg, 1990; Jackson et al., 1990) also adhered closely to those original hypotheses in the discussions. A notable exception was found in Scott and Thoner (1986). Rather than sticking to the stated hypotheses (which were essentially supported, according to the text) the discussion went on to speculate freely that similar scores on the shared scales for anorexics and incest victim "more specifically suggest how common ego functioning could have resulted from two distinct developmental routes" (p. 844). Nothing in the hypotheses indicated an interest in the development of the psychological problems, only that they existed and would be similar to one another. They spent a disproportionate amount of the discussion relating these speculations and supporting them with specific score comparisons from the study, rather than presenting how the actual outcome of the study related to past research and could lead to further research with regard to the course of development of the traits discovered.

Carson et al. (1991) was one of the studies criticized earlier for its vague hypothesis. Since the hypothesis was lacking in specifics, the possibilities for discussion were wide open. Virtually any dynamic of incestuous families could be related to the various indicators of psychological adjustment. There was extensive discussion of those associations, which, as discussed above, may have been due to chance.

Pribor and Dinwiddie (1992) held closely to the original hypothesis for the stated results, but went beyond the stated expectations of higher prevalence of most of
the psychiatric disorders. They also discussed the significantly higher number of diagnoses present in the sample population.

Wheeler et al. (1992)'s discussion could be described as exploratory. Many statement of speculation were used (e.g., "If it is true that . . ." and " . . . data suggest the possibility that . . ." p. 93). The discussion did not attempt to support the original hypothesis, but speculated on possible reasons for the results and lack thereof. The questions posed in the hypothesis, and the discussion were qualitative. The attempt to quantify the comparisons made was beyond the scope of the study.

**Summary of Data**

Table 1, entitled Potential Threats to Validity, is a graphic representation of the potential threats to validity which were found in the eight studies reviewed (exclusive of instrumentation and definition of terms). Those threats that were identified were classified in the table as either a clear threat (indicating that a specific error was found in the procedure, \((X)\)) or a possible threat (indicating that threat to validity was not discussed in the study, but may have effected the outcome \((P)\)).
<table>
<thead>
<tr>
<th>Name of Study</th>
<th>Hypotheses (E)</th>
<th>Representative Samples (E)</th>
<th>Sample/Tx (E)</th>
<th>Tx/Tx Setting (E)</th>
<th>Different Tx (C)</th>
<th>Eval. Apprehension (C)</th>
<th>Sample Size/Control (S)</th>
<th>Choice of Statistic (S)</th>
<th>Adherence to Hypothesis (E)</th>
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<td>Wheeler et al. (1992)</td>
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(E) = external validity; (C) = construct validity; (S) = statistical conclusion validity
X = Clear threat to validity; P = Possible threat to validity
In most of the studies, one or two threats to validity were sufficient to question any results proffered. As shown in Table 1, both Scott and Thoner (1986) and Roland et al. (1989) chose inappropriate statistics. Greenwald and Leitenberg (1990) chose not to use a control sample and the subject sample used was most probably not representative of a nonclinical/nonstudent population, as desired.

Harter et al. (1988) employed unproven and inappropriately scaled instruments in addition to the other threats identified in Table 1. Jackson et al. (1990) hurt themselves by trying to get too much information at one time. Ten instruments with multiple scales reduced the power of the results.

In the case of Pribor and Dinwiddie (1992), it was not one threat to validity, but the combination of several that nullified the results. Even though they presented a procedurally correct study, the hypothesis was unclear, the instruments chosen were questionable and the discussion wandered outside the parameters of the hypothesis. Carson et al. (1991) (as shown on Table 1) also managed to violate nearly every validity threat investigated, invalidating the stated results. Wheeler et al. (1992), as discussed earlier, misrepresented itself as an empirical study by making an attempt to quantify results that cannot be considered quantifiable. The study was qualitative, at best.

The most damaging threats discovered in this review were inadequate hypotheses and inappropriate statistics. The most common threats involved the sampling methods. Nearly all of the studies (Harter et al., 1988 excepted) exhibited
possible interactions between the sample and treatments applied; five of the eight studies did not use samples which were representative of the intended population; sample size was clearly too small in three studies; and three studies used no control sample.
CHAPTER IV

CONCLUSION/DISCUSSION

The original hypothesis was supported in that each of the threats to validity expected were shown to exist in at least one (and indeed several) of the studies reviewed, with the exception of the threats to internal validity, which did not apply to these studies. Because only eight studies were included in this review, we must be careful not to attempt to generalize to all research in the area of incest, but rather, regard these findings as admonitions of potential problems for future research.

It was difficult to make overall comparisons between the cases in this study. While all were examining possible correlations between incest and psychological distress, they each used different definitions of the primary term, incest, and chose different tools with which to measure the psychological distress. There was no sense of communality across cases.

Inadequate hypotheses, not including a control sample and choosing inappropriate statistics were indications of weak preparation of the researchers in the areas of experimental design and mathematics. Threats to validity which were not even acknowledged as possible limitations of the studies show a lack of concern for detail. A modicum of care in developing and carrying out procedures could minimize the effects of these threats. Research as a whole will improve in these areas only when psychology and related programs recognize these weaknesses and implement a
more stringent requirement for their graduates. That journal articles have been published with these weaknesses is a problem best addressed at the publication level. Requirements for submissions may need to become more rigorous.

The sampling problems which were rampant in these studies are not so easily rectified. Random sampling is a problem for all researchers who want their results to be generalizable to a larger population than that being studied. When dealing with a incest population defined by its reticence to disclose the existence (much less the details) of the problem, sampling becomes an ordeal. How do we study those who are not able or willing to talk about incest? We could limit the research to those already in treatment, with the understanding that results would only be applicable to those who have already discovered that there might be another way to live. Or, we could attempt (as Greenwald & Leitenberg (1990) did, however unsuccessfully) to study nonclinical/nonstudent populations. Perhaps approaching the business world (from the mailroom to the boardroom) for sampling purposes would present a better cross-section, demographically, than Greenwald and Leitenberg’s (1990) nurses. Granted, it will be difficult to obtain permission to work with individuals in a business setting. However, if we continue to limit the population we work with to the convenient clinical or student subjects, we are destined to exclude a potentially large portion of the incest victim population.

Other suggestions specific to dealing with the survivors of incest population would include a non-threatening initial request for participation, rather than the sexual
history interviews currently being used for screening possible participants, and implementing instruments that are proven reliable and valid, and sensitive to the increased evaluation apprehension of the incested population.
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Journal for Specialists in Group Work, 17(2), 89-95.

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The final copies have been examined by the director of the thesis committee and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the thesis is now given final approval by the committee with reference to content and form.

The thesis is, therefore, accepted in partial fulfillment of the requirements for the degree of Master of Arts, Community Counseling.

6/26/95
Date

Jack Kavanaugh
Director's Signature