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THE LONG TERM PSYCHOLOGICAL EFFECTS FOR SURVIVORS OF
SIBLING INCEST AND THEIR CAPACITIES TO HAVE ADULT
RELATIONSHIPS THAT ARE INTIMATE AND AUTONOMOUS

BY

THOMAS MICHAEL McGRATH

Dissertation Committee

Robert F. Massey, Ph.D., Mentor
Chairperson of the Supervisory Committee:
Department of Psychology and Family Therapy

Mary Casey Nebus, Ph.D., Committee Member
Henry Schreitmueller, Ed.D., Committee Member
Ben Beitin, Ph.D., External Reader
Wesley Matsui, Ph.D., External Reader

A Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree
DOCTOR OF PHILOSOPHY in
SCHOOL OF PROFESSIONAL PSYCHOLOGY & FAMILY THERAPY
Seton Hall University

2008

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SETON HALL UNIVERSITY
COLLEGE OF EDUCATION AND HUMAN SERVICES
OFFICE OF GRADUATE STUDIES

APPROVAL FOR SUCCESSFUL DEFENSE

Doctoral Candidate, **Thomas M. McGrath**, has successfully defended and made the required modifications to the text of the doctoral dissertation for the **Ph.D.** during this **Spring Semester 2008**.

DISSERTATION COMMITTEE
(please sign and date beside your name)

Mentor:
Dr. Robert F. Massey *Robert F. Massey, Ph.D. 3/18/08*

Committee Member:
Dr. Mary Casey Nebus *Mary Casey Nebus Ph.D. 3/13/08*

Committee Member:
Dr. Henry Schreitmüller *Henry Schreitmüller Ph.D. 3/13/08*

External Reader:
Dr. Ben Beitin *Ben Beitin Ph.D. 3/13/08*

External Reader:
Dr. Wesley Matsui *Wesley Matsui Ph.D. 3/13/08*

ABSTRACT

THE LONG TERM PSYCHOLOGICAL EFFECTS FOR SURVIVORS OF SIBLING INCEST AND THEIR CAPACITIES TO HAVE ADULT RELATIONSHIPS THAT ARE INTIMATE AND AUTONOMOUS

Sibling-incest, a form of family violence, was investigated to explore the long-term effects on the adult survivors' psychological well-being and relational functioning. A nationwide sample of 87 clinical participants of whom 43 were sexually abused in childhood by a sibling was obtained. The four main hypotheses of this research were tested by MANOVA, and the major findings were that sibling-incest has a statistically significant impact on the psychological wellbeing and relational functioning of adult survivors of sibling-incest. In addition to the brother-sister type (62.9% of respondents), the other types of sibling-incest reported were brother-brother (20.9%), sister-brother (13.9%) and sister-sister (2.3%). Although women were more frequently the victims, male victims comprised 34.8% of the survivor group. The results suggest that sibling-incest victims share characteristics of victims of parent-child incest: the sexual experience was highly abusive and a betrayal of trust, regardless of the age difference. The sibling incest participants revealed they were expected to keep the incest a secret. A majority of incest participants in this research believed their sibling-perpetrator was a victim of sexual abuse. The average age-difference between perpetrator and victim was 4 ½ years. Just under 50% of these victims of sibling-incest point out they were sexually abused 26 or more times with a majority reporting they were victimized for four or more years. An overwhelming majority of incest participants felt that the age when they experienced the sexual abuse increased the psychological pain for them. The participants indicated that the perpetrator used force in their sexual-abuse experience and felt powerless in the abusive situation. The findings of this study show that victims of sibling-incest are reluctant to reveal their abuse, and, if they disclose, it is with a great deal of shame and guilt. Family-of-origin characteristics include a lack of parental leadership and poor communication. Overall, the sibling-incest participants had a higher level of education than the non-incest participants but made less money than the non-incest group participants. They were younger than the participants in the non-incest group. The number of divorces for participants in the sibling-incest group was more than twice the number of divorces of participants in the non-incest group. The number of participants who never married was two-times higher for sibling-incest participants compared to the non-incest group. Sibling-incest occurs in the context of family dysfunction and has practical consequences for research, prevention and treatment in the marriage and family mental-health community.

Dedication

My parents

Margaret Mary McGrath
February 28, 1923- November 24, 1971

William Francis McGrath
June 27, 1920-January 31, 1972

My brothers and sisters

William A. McGrath

Patriciann M. McGrath

Kathleen J. McGrath Cavanagh

Edward J. McGrath

John M. McGrath

Acknowledgments

A research study of this magnitude and importance involves the contribution of so many good people. The adult survivors of sibling-incest who participated in this study were enormously courageous and have given much in sharing the secret of the family violence they experienced as children. Their contributions can have a vast impact on future efforts to assist all adult survivors on their way to health and wellbeing.

I would like to express my immeasurable gratitude to Robert F. Massey, Ph.D. my mentor on this project and two other committee members, Mary Casey Nebus, Ph.D., and Henry Schreitmueller, Ed.D. The intensity of their involvement in this work has been profound and their contributions have been brilliant. The committee readers, Ben Beitin, Ph.D and Wesley Matsui, Ph.D., have expertly expanded an understanding of the results of this research; I have the utmost gratitude for their contribution. I would like to also express a deep sense of appreciation to Joseph A. Ryan, Ph.D., who has contributed so much to my educational experience over the course of many years.

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TABLE OF CONTENTS

Acknowledgments.....	iii
List of Tables.....	xi
CHAPTER I: INTRODUCTION.....	1
Why This Study is Important and Necessary	1
How Does This Study Add To The Existing Research?	4
What Methodological Or Conceptual Gaps Does this Study Fill?.....	5
CHAPTER II: REVIEW OF THE LITERATURES	6
Introduction and Overview.....	6
Prevalence of Child Sexual Abuse	9
Theories of the Long-Term Effects of Child Sexual Abuse.....	11
Post-Traumatic Stress Model	11
Traumatogenic Model	12
Developmental and Social Model	13
A Review of the Literature on Sibling Incest.....	14
Sibling Incest Variables Identified in Literature Review.....	15
Sibling Incest.....	15
The Perpetrator.....	22
Degree of Violence	26
Age Difference	30
Age at Onset.....	32

Frequency and Duration.....	33
Psychological Variables.....	35
Anxiety and Depression.....	36
Dissociation.....	38
Sexual Problems.....	39
Sleep Disturbance	40
Summary	41
Relational Variables	41
Intimacy	42
Individuation.....	44
Summary and Background for Research Questions.....	45
Incest and Psychological Problems.....	45
Incest and Capacity for Adult Relationships.....	46
Four Types of Sibling-incest.....	46
Degree and Duration	47
Models of Child Sexual Abuse	48
Research Questions	49
Main Hypotheses.....	49
Hypothesis 1: Sibling-incest will affect psychological wellbeing.....	49
Hypothesis 2: Sibling-incest will affect relational functioning.....	49
Hypothesis 3: The type of sibling-incest (homosexual vs. heterosexual) will not affect psychological wellbeing.....	50
Hypothesis 4: The type of sibling-incest (homosexual vs. heterosexual) will not affect relational functioning.....	50
Exploratory Hypotheses	51
Hypothesis 5: The level of violence will mediate the effect of sibling-incest on psychological wellbeing.....	51

Hypothesis 6: The level of violence will mediate the effect of sibling-incest on relational functioning	51
Analyses of Data	56
 CHAPTER III: METHODOLOGY	 57
Participants and Method of Recruitment.....	57
Sexual Abuse Agencies, Counseling Agencies, Professional Organizations.	57
Catholic Charity Counseling Agencies Nationwide.	58
The Sibling Incest Survivor Group	58
The Non-Incest Group	59
Description of Independent Measures.....	59
Letter of Invitation	59
Letter of Informed Consent.....	60
Notice Regarding the Questionnaires.....	62
Demographic and Sibling Incest Questionnaire.....	62
Response Bias Check Questionnaire.....	63
Trauma Symptom Checklist-40	64
Personal Authority in Family System Questionnaire.....	64
Procedures	69
Plan for Analyses of Data.....	70
Main Hypotheses.....	71
Hypothesis 1	71
Hypothesis 2.....	71
Hypothesis 3.....	71

Hypothesis 4.....	72
Exploratory Hypotheses	72
Hypothesis 5.....	72
Hypothesis 6.....	73
Major Limitations.....	74
 CHAPTER IV: RESULTS.....	 75
Demographic Results	76
Demographics	76
Sibling Incest Questionnaire	94
Type of Sibling Incest.....	94
Sibling Incest.....	95
Perpetrator.....	97
Degree of Violence	98
Age Difference.....	100
Age of Onset	100
Response Bias Test.....	102
Hypothesis Testing.....	104
Hypothesis 1.....	104
Hypothesis 2.....	105
Hypothesis 3.....	106
Hypothesis 4.....	108
Exploratory Hypotheses 5 and 6	110
Results of Regression Analyses	112
Multiple Regression 1: Spousal Fusion	112

Multiple Regression 2: Spousal Intimacy	113
Multiple Regression 3: Intergenerational Intimacy	114
Multiple Regression 4: Intergenerational Fusion.....	115
Multiple Regression 5: Dissociation	116
Multiple Regression 6: Anxiety	117
Multiple Regression 7: Depression	118
Multiple Regression 8: Sleep Disturbance.....	119
Multiple Regression 9: Sexual Problems	120
Post-hoc MANOVA.....	121
Three Violence Scores by Incest Group	121
Chi-square Test on Demographics	122
Sex by Group	123
Ethnicity by Group.....	123
Relationship Status by Group	125
Children by Group	126
Religion by Group.....	126
Parents Participants Lived With by Group	128
Social Class by Group.....	128
Fathers' Education by Group	129
Mothers' Education by Group.....	130
Mothers' Occupation by Group	130
Fathers' Occupation by Group.....	131
Siblings in the House by Group	132
Siblings Getting Along by Group	132
Participants' Education by Group	133
Work by Group	134
Sexual Orientation (heterosexual vs. other) by Group.....	134

Independent Samples t-Test: Age and Salary	136
Summary	136
Sibling Incest.....	138
Degree of Violence	138
Age of Onset	139
Hypotheses	139
CHAPTER V: SUMMARY, CONCLUSIONS, RECOMMENDATIONS	143
Demographic Profile of Participants in this Study.....	145
Major Findings of the Research Study	147
Hypothesis 1: Sibling-incest will affect psychological wellbeing.	147
Hypothesis 2: Sibling-incest will affect relational functioning.	148
Hypothesis 3: The type of sibling-incest (homosexual versus heterosexual) will not affect psychological wellbeing.	149
Hypothesis 4: The type of sibling-incest (homosexual versus heterosexual) will not affect relational functioning.	150
Discussion of Descriptive Findings in Relation to the Literature	152
Type of Sibling Incest.....	152
Sibling Incest.....	153
Perpetrator	155
Degree of Violence	156
Age of Onset of Abuse.....	158
Age Difference	159
Frequency and Duration.....	159
Model of Abuse.....	160
Limitations	161

Clinical Implications	164
Recommendations for Future Research	173
Conclusion.....	175
REFERENCES.....	177
APPENDIXES	187
APPENDIX A	188
Reminder To All Volunteers.....	188
Demographic Questionnaire.....	189
Sibling Incest Questionnaire	193
Trauma Symptom Checklist – 40 (TSC-40) / Briere & Runtz (1989).....	203
Personal Attitudes and Traits	206
APPENDIX B	207
IRB Extension of Approval Letter (November 1, 2007).....	208
IRB Extension of Approval Letter (December 13, 2006).....	209
Request for Approval of Research (Approved January 16, 2004).....	210
Approval for Dissertation Proposal (Signed in July 2003).....	211
IRB Approval Letter (January 16, 2004)	212
Letters of Informed Consent – IRB Stamped.....	214
Announcements of Research – IRB Stamped	220

LIST OF TABLES

Table 1: Frequencies and Percentages for Participants' Genders.....	76
Table 2: Frequencies and Percentages for Participants' Age.....	77
Table 3: Means and Standard Deviations for Age.....	78
Table 4: Frequencies and Percentages for Participants' Ethnicities.....	79
Table 5: Frequencies and Percentages for Participants' Relationship Status.....	80
Table 6: Frequencies and Percentages for Participants' Children.....	81
Table 7: Frequencies and Percentages for Participants' Religions.....	82
Table 8: Frequencies and Percentages for Participants' Parents Lived With.....	83
Table 9: Frequencies and Percentages for Participants' Social Class.....	84
Table 10: Frequencies and Percentages for Participants' Fathers' Level of Education..	85
Table 11: Frequencies and Percentages for Participants' Mothers' Levels of Education.	86
Table 12: Frequencies and Percentages for Participants' Mother Occupations.....	87
Table 13: Frequencies and Percentages for Participants' Fathers' Occupations.....	88
Table 14: Frequencies and Percentages for Participants' Siblings in Household.....	88
Table 15: Frequencies and Percentages for Siblings Getting Along.....	89
Table 16: Frequencies and Percentages for Participants' Education.....	90
Table 17: Frequencies and Percentages for Participants' Work.....	91
Table 18: Frequencies and Percentages for Participants' Sexual Orientation.....	92

Table 19: Frequency and Percent for Participants Salary.....	93
Table 20: Means and Standard Deviations for Salary.....	94
Table 21: Type of Sibling Incest.....	95
Table 22: Sibling Incest.....	96
Table 23: Perpetrator.....	98
Table 24: Degree of Violence.....	99
Table 25: Age of Onset	101
Table 26: Frequency.....	101
Table 27: Duration.....	102
Table 28: Response-Bias Measures.....	103
Table 29: ANOVA Psychological Subscores	105
Table 30: ANOVA Four Relational Functioning Subscores.....	106
Table 31: ANOVA Psychological Subscores by Sexual Orientation.....	108
Table 32: ANOVA Relational Functioning Subscores by Sexual Orientation.....	110
Table 33: Multiple Regression predicting Spousal Fusion.....	113
Table 34: Multiple Regression predicting Spousal Intimacy.....	114
Table 35: Multiple Regression predicting Intergenerational Intimacy.....	115
Table 36: Multiple Regression predicting Intergenerational Fusion.....	116
Table 37: Multiple Regression predicting Dissociation.....	117
Table 38: Multiple Regression predicting Anxiety.....	118
Table 39: Multiple Regression predicting Depression.....	119

Table 40: Multiple Regression predicting Sleep Disturbance.....	120
Table 41: Multiple Regression predicting Sexual Problems.....	121
Table 42: ANOVA on Three Violence scores by Incest Group.....	122
Table 43: Chi-square on Sex by Group.....	123
Table 44: Chi-square on Ethnicity.....	124
Table 45: Chi-square on Relationship Status	125
Table 46: Chi-square on Children.....	126
Table 47: Chi-square on Religion.....	127
Table 48: Chi-square on Parents Lived With.....	128
Table 49: Chi-square on Social Class.....	129
Table 50: Chi-square on Fathers' Education.....	129
Table 51: Chi-square on Mothers' Education.....	130
Table 52: Chi-square on Mothers' Occupation.....	131
Table 53: Chi-square on Fathers' Occupation.....	131
Table 54: Chi-square on Siblings in House.....	132
Table 55: Chi-square on Siblings Getting Along.....	133
Table 56: Chi-square on Participants' Education.....	133
Table 57: Chi-square on Participants' Work.....	134
Table 58: Chi-square on Sexual Orientation.....	135
Table 59: Independent Samples t – Tests on Age and Salary.....	136

CHAPTER I: INTRODUCTION

Why This Study is Important and Necessary

During the past thirty years, sexual abuse of children has received much attention from the psychological community. Weinstein and Rosen (1988) suggested that 15% of all sexual assaults in the United States are committed against children. Finkelhor (1995) also estimated that child sexual abuse cases constituted 15% of all sexual assaults committed in the United States. It has come to be widely regarded as a major cause of mental-health problems in adult life. The initial research into child sexual abuse was triggered by the self-disclosures of adults who told of their abuse as children, and these adult survivors attributed their mental health difficulties to their childhood sexual abuse (Fleming & Mullen, 1998). This evolved into the public-health concern that exists today for childhood sexual abuse and the subsequent research that has driven the professional community caring for children.

The research on childhood sexual abuse led to research on childhood incest (Herman, 1981; Rush, 1980). This research on incest has focused on adult-child incest, and in particular, father-daughter incest, which is the form of sexual abuse most often reported to authorities (Fleming & Mullen, 1998). The research on adult-child incest has

almost exclusively concerned female victims of incestuous abuse and has left the abuse of males' largely unexplored (Fleming & Mullen, 1998). The research has produced an increasing interest in the long-term psychological effects of childhood incest on the victims (Finkelhor, 1987). The clinical literature supports the hypothesis that individuals who have had a history of childhood incest are more disturbed and have more complaints than most other individuals in therapy (Fleming & Mullen, 1998). The literature on sexual abuse suggests that an individual at risk may develop depressive symptoms, anxiety symptoms, and post-traumatic stress disorders (Briere & Runtz, 1988; Bryer, Nelson, Miller & Kroll, 1987; Craine, Henson & Colliver, 1988; Lindberg & Distad, 1985; Romans, Martin, Anderson & Herbison, 1995). The influence of child sexual abuse on interpersonal functioning in a survivor's adult life has received less attention and research than other mental-health problems (Tomison, 1996).

The focus on adult-child incest has overshadowed sibling-incest, another form of childhood incest. Society's lack of awareness of sibling-incest and responses to it has practical consequences for research, prevention, and treatment. Complicating the matter, sibling-incest historically has been viewed as a harmless family-based phenomenon (Strong & Reynolds, 1982) and has produced little research or clinical attention. While the Child Abuse Prevention and Treatment Act (CAPTA) passed by Congress in 1974 made the reporting of incidents of child abuse mandatory and has brought child abuse and father-daughter incest into the open, this has not been the case with sibling-incest. It has not come into the open like other forms of incest, as much of it is never revealed by parents who are unlikely to file assault charges against their child who has sexually-

abused a sibling (Wiehe, 1990). This has not only led to the delay in research and treatment of sibling-incest (Caffaro, 1998) but also to the delay of development of clinical theory for treatment of sibling-incest (Finkelhor, 1987). Psychotherapists often are under-prepared to help clients cope with the complexities of their bonds to brothers and sisters, even though sibling-relationships are relationships that last a lifetime. What happens when those sibling bonds go beyond the expected boundaries and become sexual and exploitative in nature?

Sibling-incest has been viewed as harmless because no generational boundaries are violated (Canavan, Higgs & Meyers, 1992). Also, if there is less than a five-year difference in age between the siblings, many authors view the “sex play” as non-problematic (Laviola, 1992). Yet existing research suggests that sibling-incest is the most commonly occurring type of incest (Cole, 1982; Laredo, 1982). Some researchers estimate that incest between a brother-and-sister is approximately five times more prevalent than father-daughter incest in the general population (Bank & Kahn, 1982; Smith & Israel, 1987). Other estimates of the occurrence of sibling-incest range from 6% (Pierce & Pierce, 1985) to 33% of all families (Thomas & Rodgers, 1983).

Research studies containing acknowledgement of the harmful effects of sibling-incest began to appear in the literature in the last decade (Abrahams & Hoey, 1994; Caffaro, 1998). The reported harmful effects differ based on the characteristics of the sibling-incest. The characteristics include the age when the victim experienced incest, duration of the incest, use of force, and pattern of the incest. The more frequently children are traumatized, the more likely they are to suffer symptoms (Caffaro & Caffaro,

1998).

The research on sibling-incest is in its infancy stage and has been exploratory in nature. With evidence accumulating regarding the prevalence and traumatic effects of sibling incest, further research is necessary to advance knowledge about it.

How Does This Study Add To The Existing Research?

The existing research and clinical experience underscore that sibling-incest is a serious mental-health problem, and highlight the compelling need for further study. Although past research has focused mainly on the psychological symptoms of the adult survivor, research must begin to examine the impact sibling-incest has on the survivor's adult relationships as well. The majority of literature on child sexual abuse implies an association between the sexual abuse and the adult survivor's difficulties with intimate relationships (Briere & Runtz, 1988; Jehu 1979). However, gaps in the literature point to a need for further study.

This study on sibling-incest is designed to address two of these gaps in the existing literature by researching both the long-term psychological effects for survivors of sibling-incest, and the ability these survivors have to maintain intimate and autonomous adult relationships.

The population to be studied was adult survivors of sibling incest who are 18 years and older. The population included both males and females who have experienced brother-sister, sister-brother, sister-sister, or brother-brother incest while growing up during their non-adult years in their family, regardless of the age difference between the siblings. For this study, incest is defined as any sexually oriented physical interaction

between the siblings, which must be kept secret.

What Methodological Or Conceptual Gaps Does this Study Fill?

The research on sibling-incest has focused mainly on one type of sibling-incest, brother-sister incest. This study will research all four types of sibling-incest: brother-sister, sister-brother, sister-sister, and brother-brother incest.

The female victims of sibling-incest have been the focus of past research. A review of the literature suggests that the sexual abuse of male children is poorly understood except for the work of Richard Gartner (1999). This is attributable in part to the silence surrounding the sexual victimization of males in society. As a result, male survivors frequently suffer in silence. This study will include males who have experienced sibling-incest, thereby expanding the existing body of research on sibling-incest.

The research on sibling-incest has been mainly exploratory in nature and has not used non-incest groups or comparison groups in its research methodology. This study on the long-term psychological effects for survivors of sibling incest, and their capacities to have intimate and autonomous adult relationships, included the use of a non-incest comparison group.

CHAPTER II: REVIEW OF THE LITERATURES

Introduction and Overview

Sibling-incest is a form of child sexual abuse. Its widespread prevalence has been known for a considerable period of time, but unfortunately, little research has been devoted to it. The purpose of this study was to research sibling-incest and to explore this problem in a manner that will add to the existing literature. This was accomplished by (a) researching the mental-health impact of sibling incest on adult survivors, and (b) researching the impact of sibling incest on the relational functioning of adult survivors. This research involved an attempt to fill a gap in the existing literature that has generally focused on one type of sibling-incest: brother-sister incest. The four types of sibling-incest that were studied include brother-sister, sister-brother, brother-brother, and sister-sister incest. This not only expands the knowledge on sibling-incest to include all types, but also addresses the largely unexplored area of abuse of males by both genders.

Sibling-incest in this paper was defined as any sexually oriented physical interaction between siblings while growing up during their non-adult years in their family, which must be kept secret. In the past, the research on childhood sibling abuse has generally required a five-year difference between the participants (Laviola, 1992). In this study, age difference is not a determining factor in defining sibling sexual contact as

abusive. Incestuous sexual abuse is arguably the most shaming of all types of child abuse (Taylor, 1995). It happens in secret, is kept a secret by the family, and exists in a culture that has not advocated for its victims.

A review of literature indicates that sibling-incest is a risk factor for a wide range of subsequent problems in adulthood. The developmental and social model of Fleming and Mullen (1998) suggests that those with a history of childhood sexual abuse have an increased risk for interpersonal problems in adult life. This model includes a proposal that the interpersonal problems associated with a history of childhood sexual abuse may themselves be the grounds for the development of mental health-problems in adulthood. In light of this, a plausible hypothesis advanced in this study is that the developmental disruption engendered by childhood sibling-incest may diminish a survivor's capacity for entering trusting and intimate relationships. This, in turn, can lead to the second-order effects of mental-health problems that include depression, anxiety, dissociation, sexual problems, and sleep disturbance in adult survivors.

In the United States, incest is illegal in all states, although the laws and penalties vary by state as to the behaviors and degree of relatedness considered incestuous (Weinberg, 1955). The incest laws prohibit marriage between parents and children, siblings, grandparents and grandchildren, and between aunts and uncles and their nieces and nephews (Courtois, 1988; Weinberg, 1955). Although the problem of incestuous relationships has been in existence throughout history, only recently have clinical researchers focused energy on the occurrence and prevalence of this form of child abuse.

In 1974 the Congress of the United States enacted into law the Child Abuse Prevention and Treatment Act (Public Law 93-247). This legislation placed child abuse, in particular child sexual abuse, on the public and health agendas (Herman, 1992) by making the reporting of incidents of child abuse mandatory. This advocacy movement, which resulted from this heightened legal protection of children, placed child sexual abuse firmly on the social agenda. An almost exclusive emphasis on father-daughter sexual abuse, however, left sibling-incest unrecognized as an equally important reality of child sexual abuse.

Most of the research investigations of child-abuse trauma over the last three decades have focused almost exclusively on father-daughter incest, despite recognition that sibling-incest occurs and that it happens frequently (Bank & Kahn, 1982). Even though studies acknowledging the harmful effects of sibling-incest have appeared in the literature in the past decade (Abrahams & Hoey, 1994; Canavan, Meyer, & Higgs, 1992), only a small percentage of child-abuse research during that time specifically addressed the problem of sibling-incest (Caffaro & Caffaro, 1998). It is not clear whether society's lack of concern about sibling incest perpetuates a lack of concern among researchers, or whether a lack of concern among researchers perpetuates society's lack of concern about sibling-incest. What is clear is that the accumulating body of evidence regarding the prevalence and traumatic effects of sibling-incest calls for further research to advance knowledge about this neglected form of family violence (Wiehe, 1990).

Prevalence of Child Sexual Abuse

Of all crimes against children, sexual abuse has arguably captured the greatest share of attention from child advocates, professionals, policymakers, and the general public (Finkelhor, 1995). The data from the National Child Abuse and Neglect Data System (NCANDS, 2005) indicated an increase in child sexual abuse in the 1980s that was followed by an extended period of marked declines in the 1990s. The substantiated cases of child sexual abuse decreased from a national estimated peak of 149,800 cases in 1992, to 103,600 cases in 1998, a decline of 31%.

As child sexual abuse was recognized and became a growing social concern, there was little understanding about the nuances of different types of abuse. Accurate statistics on sibling-incest are not available, partially because of this phenomenon. Also, reported cases of sibling-incest are still far less common than other types of childhood sexual abuse because most parents who discover sibling-incest are unlikely to deliver a son or daughter to the authorities (Caffaro & Caffaro, 1998). In addition, research shows that women who have had sex with a sibling may be less inclined to divulge the incident than women who have been victims of adult-child incest (Canavan, Meyer, & Higgs, 1992). Smith and Israel (1987) noted a “past tendency of professionals to group all incest dynamics together, rather than delineating the more distinct characteristics of the different sexual couplings” (p. 101). Finkelhor (1979) noted that sibling-incest has historically been lumped together with other forms of incest under the category of “nuclear family incest” or “other.”

The statistics on childhood sibling incest have been gathered mainly from studies that survey adults and ask them to recall and report abuse that they may have experienced in childhood. These studies, called adult retrospective accounts of childhood abuse, are subject to underreporting because of societal values, as well as memory biases (Alter-Reid, Gibbs, Lachenmeyer, Sigal, & Massoth, 1986). A number of authors reviewed in this chapter proposed that sibling-incest is the most prevalent of all forms of intrafamilial sexual abuse (Finkelhor, 1979; Cole, 1982; Loreda, 1982; Meiselman, 1978). Bank and Kahn (1982) and Smith and Israel (1987) suggested that sibling-incest is five times as prevalent as incest between a parent and a child. However, these suggestions of a higher prevalence rate for sibling-incest are not based on empirical research.

Using the adult retrospective technique to estimate incidence rates of childhood sexual abuse, Russell (1986) randomly selected 930 women from the San Francisco area, and using trained interviewers and standardized interview formats, found that 38% of these women had experienced at least one unwanted sexual contact with an adult before the age of 18 years. This study also estimated that 2% of the randomly selected sample was victims of sibling-incest.

In another retrospective study, Finkelhor (1979) surveyed 796 male and female undergraduates at several public and private universities and community colleges. His results showed that 15% of female and 10% of males in his sample reported childhood sibling sexual experiences. Although the study established that sexual experiences

between siblings are fairly common, sibling behavior could not easily be categorized as either incest or sex play because many types of sexual activities were studied together.

Theories of the Long-Term Effects of Child Sexual Abuse

Theory development of child sexual abuse has been slow to emerge. The models currently used to explain the development of long-term symptomatology within an adult population of victims of child sexual abuse are the Post-Traumatic Stress Disorder model (Lindbert & Distad, 1985, & Bryer et al., 1987), the model of Traumagenic Dynamics (Browne & Finkelhor, 1986; Finkelhor, 1987), and the Developmental and Social Model (Fleming and Mullen, 1998).

Post-Traumatic Stress Model

The relationship between child sexual abuse and adult psychopathology tended initially to be conceptualized in terms of a chronic form of post-traumatic stress disorder (Lindbert & Distad, 1985; Bryer et al., 1987). This model focused on trauma-induced symptoms, most particularly dissociative disorders such as desensitization, amnesias, fugues, and even dissociated identity disorders. The idea was that stress-induced symptoms engendered in the process of the abuse have reverberated through the years to produce a post-abuse syndrome in adult life. This model involved the attempt to integrate the damage the incest inflicted on the victim's psychological integrity with the need to repress the trauma, which resulted in psychological fragmentation. The latter manifested itself in adult life in mental-health problems, and in problems of interpersonal and sexual adjustment (Carmen & Reiker, 1986). The post-traumatic stress model found its strongest support in the observations of clinicians dealing with individuals with histories of severe

and repeated abuse. The belief that child sexual abuse is not only a potent cause of adult psychopathology but can be understood and treated within a post-traumatic stress disorder framework has spawned a minor industry in sexual-abuse counseling.

The understandable wish to avoid repeating the deplorable error made in domestic-violence treatment of blaming the victim can lead to an insistence on looking no further than the perpetrator for an understanding of why abuse occurs. This impoverishes research aimed at identifying the social and family correlates of child sexual abuse that constitute risk factors for such abuse.

Traumatogenic Model

In the United States, Finkelhor (1987) proposed a less medicalized model for the mediation of the long-term effects of child sexual abuse. His traumatogenic model implied that child sexual abuse produced a range of psychological effects at the time and, secondarily, behavioral changes. This model led to predicting a disparate range of psychological impairments and behavioral disturbances in adult life that contrast with the post-traumatic syndrome model with its specific range of symptoms. Finkelhor's model, though less medical and symptom-bound, paid only scant attention to the developmental perspective. It gave primacy to the psychological ramifications of the abuse with little acknowledgment of the social dimensions. Only in recent years have attempts been made to articulate the long-term effects of child sexual abuse within a developmental perspective (Cole, 1992), and to attend to the interactions between child sexual abuse and the child-victims' overall psychological, social, and interpersonal development.

Developmental and Social Model

In their developmental and social model, Fleming and Mullen (1998) pointed out that the sexual abuse of children takes place during a period of life where normally complex and ordered changes are occurring in a child's physical, psychological, and social being. The normal state of flux leaves the child vulnerable to sustaining damage that may retard or prevent normal developmental processes. The impact of abuse is likely modified by the developmental stage at which it occurs. It will also vary according to how resilient the victim is in terms of his or her psychological and social development. Those with histories of child sexual abuse, particularly of the most physically intrusive types, are at an increased risk of social, interpersonal, and sexual problems in adult life. This association may play a role in mediating at least some of the better-known associations between child sexual abuse and mental-health problems.

Child sexual abuse involves a breach of trust or an exploitation of vulnerability, and frequently both. Sexually abused children face not only an assault on the developing sense of their sexual identities, but a blow to their constructions of the world as a safe environment and their developing sense of others as trustworthy. In those abused by someone with whom they have a close relationship, the impact is likely to be all the more profound. Several studies report that a history of child sexual abuse is associated with insecure and disorganized attachments in adult life (Alexander, 1992; Briere & Runtz, 1988; Jehu, 1989). Increased rates of relationship breakdowns have also been reported in those exposed to child sexual abuse (Beitchman et al., 1991).

The social, interpersonal and sexual problems associated with a history of child sexual abuse may themselves provide fertile ground for the development of mental-health problems, particularly in the area of depressive disorders. The developmental and social model of childhood sexual abuse helps to advance the hypothesis that the developmental disruption engendered by child sexual abuse in the victim's sense of self-esteem, sense of the world as a safe-enough environment, in the capacity for entering trusting intimate relationships, and, finally, in developing sexuality. This leads in adult life to an increased risk of low self-esteem, social insecurity and isolation, difficulties with intimacy, and sexual problems. This constellation of difficulty is a pattern of disadvantage likely to leave the subject prone to depressive and anxiety disorders (Fleming & Mullen, 1998).

A Review of the Literature on Sibling Incest

The following is a review of the existing literature on sibling-incest. This portion of the review will focus upon the variables also addressed in the current study. The variables studied in this review are sibling-incest, the perpetrator, the degree of violence, age, duration and frequency of the incest. The dependent variables are both psychological and relational. The psychological variables include anxiety, depression, dissociation, sexual problems, and sleep disturbance. The relational variables include intimacy and individuation. A major contribution of this research paper was to further an understanding of how sibling-incest affects the adult relationships of survivors.

It must also be noted that many of the following references and quotations from primary sources make no mention of the specific research study upon which their conclusions are based. Wherever possible, the specific study was cited, but, if none is

available, no reference was noted. This difficulty supports the need for further research on this topic utilizing a rigorous methodical design.

Sibling Incest Variables Identified in Literature Review

Sibling Incest

Bank and Kahn (1982, p. 144) asserted that “legitimate” sex, or sex that is not abusive or coercive, occurs only between two freely consenting adults. They considered sex between siblings as abusive because children are incapable of giving consent. The authors stated that, by definition, incest is abusive. With regard to children who have had a sexual experience with a sibling, the rationale to ascribe an abusive definition was:

1. They have no means of knowing what sex is really about;
2. They have no conception of what their feelings will be about any incestuous childhood experience when they are grown up;
3. It is almost impossible for them to deny the perpetrators, if the relationships are important to them (p. 145).

The authors suggested that the issue of relationships between sibling-incest participants before and after the sexual behavior is crucial in most cases of sexual abuse. It may be that the more satisfying and trusting the relationship prior to the incest, the more severe the aftereffects will be for the participants. Illustrations of this association have been reported in older brother-younger sister relationships, in particular, where the young girl looks up to and feels protected by her older-brother, only to have this illusion destroyed and replaced by the stark reality of the sexual experience. The conclusion of these authors derives from clinical studies spanning 15 years.

Bank and Kahn (1982) proposed that there is a significant degree of anger, pathos, and anxiety in sibling-incest. They provided insight into the phenomenon of the “pseudo identity” or “false self” developed by female siblings who experienced sibling incest. This was described as a protective façade of quiet conformity; a disguise that covers the powerful covert sexualized self felt when they were with their brothers. These researchers assessed from their interviews that sibling-incest which took place in pre-adolescence usually produced crippling effects in adulthood.

A Myth of Non-Abusive Sexual Contact. Forward and Buck (1978), authors of *Betrayal of Innocence*, wrote that casual sibling sexual contact, or sexual play, is very common. They suggested that if children are young and close in age then the experience contains no betrayal of trust and is only normal curiosity. They also suggested that if adults do not traumatize the children about the experience, the experience does not result in long-lasting trauma for the participants. This suggestion, which implies the possibility of non-abusive sexual contact between siblings, contributes to a myth of mutuality regarding sibling-incest, which exists even among professionals who tend to view parent-child incest as abusive.

Probably the most well-known researcher on sibling incest is Finkelhor (1979). In this retrospective study, Finkelhor distributed questionnaires about childhood sexual experiences to 796 male and female undergraduate New England college students. For this landmark study within the field of sexual abuse, Finkelhor chose a sample from a non-clinical population, at a time when most other studies were based on clinical populations or case studies.

Fifteen percent of the female respondents and ten percent of the male respondents in this survey reported childhood sibling sexual experience. The most common activities were reported to be fondling and touching.

Close to a third of the respondents in this study who reported sibling sexual experience reported it as a positive experience. Positive reports appeared to be associated with the sibling-sexual experience having taken place after age nine. These respondents reported a significantly higher level of sexual self-esteem. Females reported more negative feelings about the experience than did males (35% to 22%). Of the respondents who reported a coercive experience, 82% were female victims.

Cole (1982) in her article, entitled *Sibling incest: The myth of benign sibling incest*, claimed that sibling incest between an older-brother and younger-sister is never benign. She uses two case studies to illustrate, but not to empirically demonstrate, this opinion. She clarified that small age differential or reports from both siblings that the experience was positive are disproved by the presence of aftereffects in the population of adult women who experience childhood sibling sexual contact. Cole found that women who experienced sibling-incest shared characteristics of other women who have been victims of parent-child incest: they believed it was their fault, felt extreme guilt, feared they would not be believed, and struggled with issues of intimacy, self-esteem, and trust. Cole (1982) argued from a feminist perspective that females in our culture are trained to be submissive to the demands of male counterparts and that sibling-incest is, therefore, always harmful.

Secrecy and Denial. Most of the respondents in Finklehor's (1979) study reported

that they had not discussed the experience of childhood sibling sexual contact with anyone. Not one respondent who had been involved in a sexual experience with a much older sibling had revealed it to anyone. The author stated that the pain of keeping the secret was then added to the trauma of the experience itself. Finkelhor speculated that the children did not tell anyone of the experience because of fear of not being believed, fear of being blamed, and/or fear of punishment or retaliation.

In a discussion of effects on adult sexuality, Finkelhor (1979) related possible negative outcomes as guilt feelings or perceiving self as sexually deviant. Finkelhor, however, expressed his belief that sibling-sexual relationships “may have very little effect on adult sexuality at all” (p. 181). He cautioned that sibling sex affects family relationships in that it may set up rivalries and secrecy that negatively affect the normal course of family-relationship development. Finkelhor found that the median age for sibling-incest was older than 10 years, with more sexual activity occurring during the latency stage (8 to 11 years) than any other period.

Cole (1990) studied a volunteer sample of 122 adult women from 28 states who had been sexually abused by a brother and 148 women sexually abused by their fathers. The mean age of the onset of the sexual abuse for the sibling incest was 8.2 years compared to 5.2 years for the father-daughter incest. Approximately one third of both groups experienced the sexual abuse for 4 to 10 years and did not disclose the abuse for 20 years or more. The sibling-incest survivors reported feeling more responsible for their abuse as compared to their father-daughter survivor counterparts.

Based on his clinical work and case studies of families with sibling-incest, Loredó

(1982) applied the term “denial of impact” to describe the adult-incest-survivor’s tendency to minimize the effect of the incest in his or her functioning. This denial causes many survivors to remain silent about abuse long after it occurred. He suggested that those who deny the consequences of the sexual experience exhibit signs of conflict and guilt in their adult functioning. He also proposed that sibling-incest might exist because of dysfunctions within the family system.

The Double-Bind Pattern. Wooley and Vigilante (1984) reported that a double-bind pattern often is observed in incestuous families. The double-bind pattern (Bateson, 1960) is the dilemma experienced when two non-compatible expectations or demands are made of a person in a family system, and there is an injunction to not acknowledge the existence of the double-bind. Being raised in a family exhibiting the double-bind produces women who exhibit seemingly contradictory problems: lack of trust, extreme dependency, fear of being alone, fear of becoming intimate, profound feelings of inadequacy, and ambivalence towards the person who abused them. In addition, the victim of sexual abuse in double-bind incestuous families is unable to effectively individuate from the identity of family members.

Wooley and Vigilante (1984) reiterated a similar awareness expressed by Bank and Kahn (1982) that the victim of childhood sexual abuse may present as extremely well-functioning as an adult, but examination of the family system will exhibit family pathology. Wooley and Vigilante (1984) stated that adult women who experienced childhood sexual abuse were forced to make the best of their situations and in the process learned to become manipulative. They also wrote about the grief process that adults in

this population experience in recovery. As part of recovery, they noted that this grief process occurs during movement toward living one's own life instead of living a life for the parents (p. 351).

Factors Related to Family. Smith and Israel (1987) described factors influencing sibling incest behavior in their study of 25 reported cases of sibling incest in Boulder, Colorado. This descriptive study of sibling-incest was of 25 families who had open cases for substantiated reports of sibling incest at the Boulder County Colorado Department of Social Services. The families were randomly assigned to Smith and Israel for treatment that lasted approximately 13 months. Social-history information and diagnostic assessments about the family were gathered during the intake interviews and subsequent therapeutic sessions. The factors reported include a home environment characterized by a sexualized atmosphere, covert sexuality encouraged by provocative play, and nudity. The researchers attributed sexualized behavior among siblings as both imitative and a reaction to the sexual stimulation that was witnessed. In the study, 72% of the mothers or fathers had been sexually abused as children, and the presence of extramarital affairs was found in 76% of the families. There was a distinct contrast between sibling-incest families and information in the literature for father-daughter incest families. For example, sibling-incest families had loose boundaries or undefined parent-child roles. In general, parental leadership was lacking. Many fathers were not present either physically or emotionally. In father-daughter incest families, the boundaries were rigid and restrictive, and the family unit was controlled exclusively by the father. The findings of Smith and Israel (1987) confirmed Bank and Kahn's (1982) suggestion that sibling-incest is more likely to

occur in situations where there is parental neglect or abandonment. Smith and Israel (1987) suggested that a family milieu in which sibling-incest typically occurs is chaotic. The home is one in which poor communication patterns are the norm both within the family and between the family and the outside world. In a family in which external ties are minimal, fears of abandonment by family members may become overwhelming. Also frequently found in homes where sibling-incest occurred was a strongly conservative value system, including a fear of authority and an abuse of power on the part of one or both parents.

Silence About the Abuse. Caffaro and Caffaro (1998) proposed that sibling-incest survivors remain silent about their abuse because of society's ambiguous taboo against sibling sexual behavior. The authors suggested that the victim and the offender are age-mates. Offenders can either make survivors feel guilty or induce them to assume that they were willing participants. This research study included seventy-three adult survivors of sibling incest recruited by advertisements placed in professional newsletters of the California Association of Marriage and Family Therapists. Forty-nine (67%) of the participants were female and twenty-four (33%) were male adult survivors of sibling-incest. The participants were interviewed about the effects of sibling-incest on the individual's current relationship with the offending sibling. They found that many of the adult survivors of sibling incest in their study had little or no contact with the offenders. They also reported that many of the research participants had undergone therapy and that their therapists had not focused on their sibling relationships. This made it easier for them to remain silent about their abuse. Some of the participants expressed a fear that their

therapists would judge them harshly upon hearing their secrets.

Summary. The literature presented in this section indicated that sibling-incest represents abusive sexual behavior. In addition to destroying trust that may have existed in a sibling relationship prior to the incest, this form of family violence has a long-term negative effect on an adult survivors' psychological and relational life. Cole (1990) pointed out that sibling-incest survivors share similar characteristics of survivors of parent-child incest, and that sibling-incest survivors feel more responsible for their abuse as compared to their parent-child survivor counterparts. In addition, sibling-incest survivors have difficulty separating and individuating from their abusive families, and this affects recovery as survivors. Caffaro and Caffaro (1998) noted that, despite the accumulating research substantiating the high incidence of sibling-incest and its harmful effects, society still tends to ignore it as a problem affecting children and families. These authors also stated that therapists tend to ignore the significance of sibling-incest as well.

The Perpetrator

Although this research study will review the four types of sibling-incest that stem from a study of both male and female perpetrators, the research on perpetrators to date has focused almost exclusively on adolescent male perpetrators of sibling incest. In the last decade the descriptive information about adolescent male perpetrators is increasing because of cases of sibling-incest reported to child protective services. This descriptive information is contained in studies within this section, and the information is supported by past literature on perpetrators of sibling incest.

Factors of Family Dysfunction. Research has focused on brothers who have become the male heads of the households, either because the father died or deserted the family, or because they were weak and ineffectual (de Young, 1982). Thus, a perpetrator is frequently the oldest son who becomes the surrogate father in the home, and who uses sex and violence to maintain control. In each of the four cases studied by Courtois (1991), incest was initiated by older brothers upon their younger sisters. The author theorized that the incest was a displacement of rage the brothers felt toward their parents. She suggested that there is an overly close alignment between the mother and son in these cases, and that the brothers felt rejection by their fathers, hypothesizing that sibling-incest is a symptom of family dysfunction.

O'Brien (1991) found that adolescent sibling-incest offenders commit more serious sexual offenses than other groups of adolescent sex offenders. He proposed (from clinical experience) that victims of sibling-incest are likely to be induced gradually by the perpetrator to share equal responsibility, so that they will share in the responsibility, blame, and punishment for the behavior if the secret is disclosed. In his study of 170 adolescent male sex offenders with a mean age of 15.2 years, O'Brien reported that 24% of the victims' mothers had been abused in their own childhood. The purpose of the study was to identify variables that differentiate male adolescent sibling-incest offenders from other types of adolescent sex-offenders. The sample was subdivided into four groups on the basis of the primary sexual offending behavior. The families of sibling-incest offenders were more likely to be physically abusive (61%) than other adolescent sex offenders, and 64% of the sibling sex offenders had poor social skills and few, if any,

male or female friends.

Worling (1995) recommended that sibling offenders experienced significantly more physical punishment in their families, as well as negative, argumentative, and authoritarian family environments. They experienced greater feelings of parental rejection than did non-sibling sex offenders. His study also indicated that sibling sex offenders are more often victims of childhood sexual abuse and that they report hostility and depression. He compared 32 adolescent male sex offenders who assaulted younger siblings to a group of 28 adolescent male non-sibling sex offenders.

Ascherman and Safier (1990) presented a case of brother-sister sibling-incest and reported that the offender was physically abused by his father and that the offender reported sexually victimizing his sister because of the close relationship between his father and sister. The father was also physically abusive with his wife, and had a history of sibling-incest in his own family of origin.

Associated Disorders and Past Physical Abuse. Several studies point to perpetrators having both other psychiatric disorders *and* a history of being abused by parents. In a descriptive study of male-sibling sex-offenders, Adler and Schutz (1995) reported that 58% were diagnosed with conduct disorders, and that a parent physically abused 92% of them. The sample of offenders in this study consisted of 12 males referred for evaluation and treatment to an out-patient psychiatric clinic with a specialty in family violence and were diagnosed after they became offenders.

Becker (1986) interviewed 22 adolescent male sibling sex-offenders who were referred to an outpatient community-based treatment program after being charged by the

legal system with a sexual crime of incest against a family member. Seventy-three percent of the offenders had some type of psychiatric disorder. Twelve displayed a conduct disorder, five had attention-deficit disorders, two had adjustment disorders, two had social phobias, one had dysthymia, and one post-traumatic stress disorder. Thirteen percent reported being physically abused by their fathers, and 23% reported having been sexually abused as children. A psychologist, using a structured clinical interview focused on the offender's family, criminal history, and sexual history, interviewed each offender. In addition, a psychiatrist interviewed each offender using a structured clinical interview for DSM-III diagnoses.

In her book, *The Violence of Men*, Cloe Madanes (1995) described the first sample of eighty-one juvenile sex offenders who entered therapy at the Family Therapy Institute in Montgomery County, Maryland. All eighty-one sex offenders were male, ranging from age seven to twenty. There was one seven-year old and one twenty-year old. Forty-four percent were between the ages of twelve and fifteen, and 44% were between the ages of sixteen and eighteen. The racial composition was 47% white, 30% black, 20% Hispanic, and 3% Asian American.

Almost 50% of the offenders were considered learning disabled, 26% suffered from serious mental-health problems, and 13% had language disorders. Twenty-five percent had histories of disruptive behavior at school or of truancy. Substance abuse was considered to be a problem for 33% of the offenders. Forty percent of the juvenile offenders in the sample had a history of sexual abuse themselves. Older brothers perpetrated the abuse in 19% of the cases, fathers in 19% of the cases, and stepfathers in

8% of the cases. Physical abuse of the juvenile offender was reported in 20% of the sample. In 57% of the cases, the father was the abuser, in 14%, the mother was the abuser, and in 14%, stepmothers were the abusers. Sixteen percent of the offenders had a history of suicide threats, in 39% of the cases there was violence between parental figures, and substance abuse was a problem in 33% of the families.

Types of Offenses. Bank and Kahn in *The Sibling Bond* (1982) defined two general types of sibling-incest. The first is the “power-oriented” type that was sadistic which included exploitation, and coercion. The second type is called “nurturance-oriented” that involved mutual cooperation, trust, and regard for the other. Pierce and Pierce (1990) conducted a survey of 43 juvenile incest offenders who had been reported to the Illinois Department of Child and Family Services during 1986. The clinical findings of their study distinguished between these two different types of sibling-incest among offenders, with one related to “sex play” or mutual exploration, and the other related to power or force. The first type of sibling-incest typically ended when the siblings realized their behavior was not appropriate, but Pierce and Pierce (1990) did not specify how or when this awareness developed. However, if this type of sibling-incest continued into adolescence, the authors suggested that the siblings may have difficulty in future sexual relationships. The second type of sibling-incest described by Pierce and Pierce involved force, and is similar to the “power-oriented” incest described by Bank and Kahn (1982).

Degree of Violence

Researchers have noted several degrees of violence in incest abuse. As an

example, Russell (1986) noted that 71% of forceful incestuous abuse was reported to be extremely traumatic for the victim. Russell's comprehensive survey of adults on the prevalence of intrafamilial sexual abuse used a probability sample of the general population that included both clinical and non-clinical subjects. In the San Francisco-based study, 152 incest victims (16%) were identified out of 930 respondents interviewed, and 19 (2%) experienced incest with an older-brother. Trained interviewers using standardized interview formats and questionnaires questioned the respondents at length. It was rare in the survey to find respondents describing brother-sister incestuous abuse as positive or as having pleasurable feelings about the sexual aspect of the experience. The ambivalent or positive feelings that were reported were overshadowed by more substantial negative reactions. The results of Russell's study demonstrated that sexual abuse may be more traumatic when genital contact such as intercourse is performed and when aggression and force are used to coerce victims into compliance. Russell noted that in 44% of the sibling-incest cases she studied, the brothers' primary strategy for initiating and continuing the sexual experience was physical force. This survey has provided important information about the extent and effect of sibling-incest in the general non-clinical population.

Russell (1986) developed three categories for the sexual acts experienced by her respondents, labeling them very-severe, severe, and least-severe incestuous abuse. These categories were based on whether or not force was used and on the level of sexual violation that occurred. Russell reported that "when we differentiated between extreme trauma" (i.e., genital intercourse, fellatio, cunnilingus, anilingus, anal intercourse) "and

the other degrees of trauma” (i.e. considerable, some, and no trauma) “an almost perfect linear relationship was evident between trauma and severity” (p.144). Fifty-four percent of the sexual acts included in the very-severe category were reported to be extremely traumatic. Also reported as extremely traumatic were 35% of those sexual acts in the severe category and 19% in the least severe category. She also noted “the fact that so few mild cases were reported contradicts the notion that the experiences of these girls are often benign” (p.286).

A number of other researchers have also found that force, coercion, and brutality correlated with the degree of trauma (Courtois, 1988; Laviola, 1989; Worling, 1995). In his student survey, Finkelhor (1979) noted that, of all the factors measured in the study, the use of force by the perpetrator accounted for more of the negative reactions to the abuse than any other variable. In her clinical sample of sibling-incest victims, de Young (1982) discovered an association between force and the rating of the experience as negative. Herman (1986) noted that a higher degree of physical violation, including intercourse, correlated with lasting effects for the incest victims.

Kilpatrick (1989), using a community sample of 501 women to study women’s adult functioning, indicated that 255 (55%) reported a history of sexual abuse during childhood. The analyses indicated coercive sexual behaviors during childhood correlated significantly with poor family relationships, depression, marital dissatisfaction and reduced self-esteem. Finkelhor (1979) indicated that within his college sample of sibling sex participants that coercion, age difference between peers, and sexual experience of greater intensity than exhibitionism resulted in worse sexual self-esteem. And Briere and

Conte (1989) found that physically injurious sexual abuse was related to an amnesiac, dissociative response to the abuse.

Wiehe (1990) proposed that the typical response of sisters who are victims of sibling-incest is quiet compliance; they become victims because they are powerless. Often a victim does not understand what is happening and does not begin to feel shame, guilt, or the victim status until later in adulthood. To cope with the negative feelings of shame or guilt, victims usually will take responsibility for the sexual experience. Wiehe described how perpetrators usually seduce victims to enforce secrecy about the incest. The author suggested that sibling incest occurs in the context of threat. Some victims in Wiehe's study (1990) were threatened with physical harm and even death by their sibling perpetrators if they reported the sexual abuse to their parents. The author also reported from his study that sibling-incest often occurs in connection with physical harm.

Laviola (1989) indicated that the long-term effects of sibling-incest are often associated with the degree of force or coercion that is used by the perpetrator. She noted that the long-term effects for sibling-incest victims can be as severe as those effects of father-daughter incest if the degree of coercion is extreme. The long-term effects for the victim in her study of 17 women who experienced sibling-incest included mistrust of men, chronic negative self-esteem, sexual-response difficulties, and intrusive thoughts about the incest. More than half of the women reported the age difference between themselves and their offenders as five years or less. Even so, the victims perceived themselves as having been coerced into the activity. The magnitude of a child's experience with sibling-incest appears to be directly proportional to the complexity and

the subjective emotional significance of the experience and the violence.

Although Russell (1986) was clear that she was not describing a direct correlation between a history of sibling-sexual-abuse and specific negative effects, she did find that almost half (47%) of sexually abused siblings never married. She reported that sibling-incest victims experienced more re-victimization than the other women in her sample. The data from her study indicated that female victims of sibling-incest who married were more likely to be subjected to physical violence in their marriages than women who were never incestuously abused (50% versus 18%). It also indicated that 58% of the women who experienced sibling sexual abuse had a history of unwanted sexual experiences with authority figures versus 27% of women who were never incestuously abused. She concluded that sibling-incest is the most discounted of familial incest because of the predominant cultural presumption of the myth of mutuality that proposes that the victim equally and mutually participated in the sibling-incest. Russell (1986) also suggested that because of the power differential, which exists between the perpetrator and the victim, the victim is not a willing participant, yet the victim internalizes self-blame and shame for the experience. Consistent with Meiselman (1978) and Finkelhor (1979), Russell found that women who were sexually abused by a brother more often grew up in a large family.

Age Difference

A controversy has existed in the literature about whether sibling-incest is harmless sex play or harmful abuse. The age difference between siblings appears to be at the heart of this debate. On one side of the controversy lie theorists such as Pitman (1987)

who claimed that “brother-sister incest is not unusual before and at puberty, and, if the children are near the same age, it may not be considered much of a problem” (p. 156). The absence of crossing generational boundaries may be one of the reasons the sibling-incest taboo is tenuous and may support conceptions of sibling sexuality as inconsequential and a natural part of growing up (Meiselman, 1978). As the criterion for defining non-problematic “sex play,” a four-to-five year age difference or less between siblings is used (Bank & Kahn, 1982; Courtois, 1988; Russell, 1986). Forward and Buck (1978) suggested that if children are close in age, the experience of sibling-incest contains no betrayal of trust.

On the other side of the debate, Cole (1982), an early pioneer into the area of sibling-incest, proposed that sibling-incest is not benign even for those who report the experience as positive. She proposed that the presence of aftereffects in the population of adult women who experience sibling-incest disproves that notion. Herman et al., (1986) reported a significant relationship between age disparity and trauma. Women who were sexually abused by a brother and wrote of their traumatic experiences noted that the average age difference between perpetrator and victim was three years (SIA, 1987). Russell’s (1986) data also showed that it is likely for a girl to be abused at a younger age than at an older age.

Current research and data increasingly have pointed to the harmfulness of any type of sibling-incest. A growing body of researchers (Canavan, Meyer, & Higgs, 1992; Daie, Eleff, & Witztum, 1989; Finkelhor, 1979) believed that age of the participants cannot define trauma. These same authors claim other factors are more potent in moving

sibling-incest beyond the realm of appropriate sexual exploration. These factors include use of power, enforced secrecy, betrayal of trust, and influence on sexual development of the victim. Herman (1988) indicated, “an experience which feels exploitative, frightening, or unusual and confusing should not be ignored, regardless of the age of the participants or activity involved” (p.136).

The view that siblings with less than a five-year difference in age are simply involved in innocent sex play is becoming less common among professionals in the 1990s, as a greater understanding of sibling incest is developed. Wiehe (1990) stated that children of all ages are abused by siblings from infancy to adulthood. Caffaro and Caffaro (1998) proposed that the victim and offender are age-mates because they are still in the family constellation. This may result in survivor’s guilt that leads victims to assume they were willing participants in the incest. This guilt may explain why survivors of sibling incest remain silent about their abuse for long periods of time compared to other incest victims (Caffaro & Caffaro, 1998).

Age at Onset

One of the variables researchers have considered is the influence of the child’s age at the onset of sibling-incest. The debate has been between those who maintain that prepubescent onset of sexual abuse is less traumatic because the child is not aware of sexuality and cultural taboos surrounding it, and those who think that the younger child is more vulnerable because he or she is so much more impressionable. In her clinical study Meiselman (1978) noted that 37% of the women whose incest experiences commenced prior to puberty were seriously disturbed whereas only 17% of those women victimized

after puberty were evaluated as seriously disturbed. Courtois (1980) reported that victims' long-term relationships with men and their sense of self-worth were both negatively affected if abuse began prior to puberty. Bank and Kahn (1982) reported a more traumatic impact on the victim if abuse started at an earlier age.

On the other hand, Finkelhor (1979) was unable to find a significant association between age at onset and trauma. Russell's (1986) results were also non-significant, although both Finkelhor and Russell reported that prepubescent onset of abuse tended to be associated with more trauma. Russell indicated that 32% of her sample was abused before the age of nine, and 52% were ten to thirteen. She did not account for degree of trauma relative to age at onset of abuse.

Talan (1988) used the Rorschach test to assess severity of effect of the abuse for 100 sexually abused girls. In his study, he found that if abuse began before the girl's ninth birthday, she was more likely to manifest severe depression, disturbed cognition, and damaged self-image. Girls who were abused after their ninth year were more angry and hostile. He concluded that the time of trauma determines the degree of psychological harm, more so than who did the abusing or the type of contact.

Frequency and Duration

Russell's (1986) data indicated that 46% of the incidents of incestuous abuse that occurred only once were described as considerably traumatic while 61% of the experiences that occurred from two to twenty times and 78% of the experiences that occurred more than twenty times were extremely traumatic. Her respondents noted that 73% of the abuse that lasted more than five years was extremely traumatic.

Studies noting data on duration relative to sibling-incest are rare; however, a number of studies have found significant associations between duration of incest and long-term impact of the abuse.

Tsai, Feldman-Summers, and Edgar (1979) established a positive correlation between duration of childhood sexual abuse and negative effect of the abuse among a sample of women seeking counseling. These authors noted that women who experienced childhood sexual abuse may differ significantly in later adult psychological adjustment, and that these differences may be determined by the frequency of the sexual abuse, the length of time it occurs, and the stage of development at the time of the last incident. The authors examined the impact of childhood sexual abuse on adult psychosexual functioning. Three groups of 30 women each participated in the study: a clinical group consisting of women seeking therapy for problems associated with childhood sexual abuse; a non-clinical group consisting of women who experienced childhood sexual abuse who never sought therapy; and a non-incest group of women who never experienced childhood sexual abuse. Participants ranged in age from 18 to 65 years. The MMPI was administered to all the participants in this study. The profiles of sexually abused women in the non-clinical group were within normal limits and did not differ significantly from the profiles of the non-incest group. However 15 of the 30 women in the clinical group had clinically elevated scores on the Psychopathic Deviate and Schizophrenic scales of the MMPI. In addition, the clinical group was significantly higher on the Depression, Paranoia, and Social Introversion Scales.

Herman (1986) reported a correlation between duration of abuse and long-term

impact on the lives of the victims. Caffaro and Caffaro (1998) pointed out that duration of the sibling-incest determines the extent of the trauma to the victim. The more frequently children are traumatized, the more likely they will suffer severe symptoms (p. 40).

Summary

This section contained reviews of the sibling-incest variables that were studied in this research. The descriptive information existing in the literature on *perpetrators* of sibling-incest has been focused on older brothers who sexually abuse younger sisters. The research indicates that these male offenders are themselves victims of physical and sexual abuse, and have psychiatric disorders as well as problems with substance abuse.

The long-term effects of sibling-incest are often associated with the *degree of violence* that is used by the perpetrator. The literature leads to the premise that any type of sibling-incest is harmful and that *age difference of the participants* cannot define trauma. The review involved identifying those factors other than age differences between the perpetrator and the victim that appear to be more relevant. These factors include power, enforced secrecy, and betrayal of trust. Previous research has identified a more traumatic impact on the victim if the *age of onset* of the abuse began prior to puberty. In addition, *duration and frequency* of the sibling incest determines the extent of the trauma for the victim and the more times children are sexually traumatized, more likely they will suffer severe symptoms.

Psychological Variables.

There are serious long-term psychological effects for victims of sibling-incest. Several variables have been a consistent finding of researchers (Canavan et. al., 1992;

Courtois, 1988; Daie et. al., 1989; de Young, 1982; Laviola, 1989; Russell, 1986) and these psychological variables include: anxiety, depression, dissociation, sexual problems, and sleep disturbance. The Trauma Symptom Checklist-40 (TSC-40) was used in this research to examine these five psychological variables. The TSC-40 is composed of six subscales measuring anxiety, depression, dissociation, sexual problems and sleep disturbance.

In *Child Abuse Trauma*, Briere (1992) identified long-term effects of sexual abuse that are prominent in adults who experience childhood sexual abuse. The six broad categories include post-traumatic stress, altered emotionality, disturbed relatedness, avoidance, impaired self-reference, and cognitive distortions.

Laviola (1989) indicated that the long-term effects of sibling-incest can be as severe as the effects of father-daughter incest. The effects of sibling-incest include problems with trust, chronic negative self-esteem and sexual response difficulties.

Anxiety and Depression

Daie, Eleff, and Witztum (1989) presented four clinical cases to illustrate the long-term effects of sibling-incest. Three of the cases involved brother-sister incest, and one case, sister-brother incest. The long-term psychological effects of sibling-incest included depression, generalized anxiety disorder and interpersonal difficulties in forming relationships with the opposite sex.

Sibling relationship theorists Bank and Kahn (1982) indicated that sibling-incest could have profound implications for personality development because it involves such contradictory feelings as guilt, shame, and confusion about the nature of the relationships

between the siblings, as well as the violations of a social custom, and taboo. The authors proposed that there always is a significant degree of anger, pathos, and anxiety in sibling incest (p. 179). The work of these authors was based on a review of their clinical studies spanning 15 years.

Briere and Runtz (1989) studied a non-clinical sample of 278 university women and found approximately 15% had experienced sexual contact with a significantly older person before age 15 years. Those who had a sexual-abuse history showed greater depressive symptoms than those who did not.

Canavan, Higgs, and Meyers (1992) advocated that sibling-incest is a significant interpersonal boundary violation with potentially devastating short and long-term effects. These authors used case examples from their clinical experiences to illustrate that the harmful effects include an inability to trust others, post-traumatic stress disorder, and depression. The incest often sets up a template that includes victimization, powerlessness, secrecy and guilt regarding sexual expression. The authors discussed the significant relevance of the enforced secrecy usually present in sibling sexual experiences. These experiences are not acknowledged or discussed publicly, or even discussed with other siblings. Shame and guilt kept the sibling silent and locked into the assumption of self-blame for the incest.

Kilpatrick (1989) did a retrospective study using a community sample of women's adult functioning in five areas: (a) family relations, (b) depression, (c) marital satisfaction, (d) sexual satisfaction, and (e) self-esteem. There were 501 women ranging in age from 18 to 65, and 255 subjects (55%) reported a history of sexual abuse during

childhood. The questions that were asked regarding the sexual behavior included who initiated the behavior, age discrepancy, short-term reaction, and whether or not the sexual activity was voluntary or forced. The author conducted a regression analysis on the data. The results indicated that any sexual behaviors that were forced or pressured produced depression, marital dissatisfaction, and self-esteem problems in the survivors. One hundred and twenty participants (8%) reported sibling sexual relations with an older brother. The effect on sexual satisfaction was non-significant, but the measure of sexual satisfaction employed was only applicable to women who were currently in a sexual relationship. It is possible that those with sexual dissatisfaction were not in a sexual relationship. The results of this study supported the notion that coercion acts as a factor in determining the longer-term outcome of childhood sexual encounters.

Talan (1988) used the Rorschach test to assess severity of effect of the abuse for 100 sexually abused girls. In his study, he found that, if abuse began before the girl's ninth birthday, she was more likely to manifest severe depression.

Dissociation

Briere and Conte (1989) examined the use of force and bribery in a sample of 468 subjects in therapy with a history of sexual abuse. The participants were divided into two groups on the basis of reported amnesiac response to abuse at some point during their lives. Fifty-nine percent of the participants reported an amnesic episode to the abuse. Thirty-nine factors of the abuse situation were collected, and a discriminant analysis performed. A significant multivariate relationship between the abuse characteristics and a history of a dissociative response regarding the participants' abuse emerged. Those who

suffered dissociative responses were more likely to have been molested at a younger age, by more people, and reported fears of death if they revealed the secret.

In her book *Healing the Incest Wound*, Courtois (1988) offered a model for treatment of incest victims. The author noted that sibling-incest is coercive and that the victim is threatened to keep the incest a secret. This author noted that the psychological sequelae from sibling-incest included dissociation, depersonalization, isolation, and psychosomatic complaints.

Sexual Problems

Meiselman's (1979) pioneering work on incest included an extensive review of the research on incest to that date. The author concluded that brother-sister incest is more frequent than father-daughter incest in the general population because society considers it to be less of a taboo. In a study of 58 clinical cases of incest (male and female), the author assessed the broader category of incestuous families, with sibling-incest included. The sibling-incest subsample constituted 14% of the total number of cases (8 out of 58). She conducted semi-structured interviews with 58 psychotherapists of incest survivors and reviewed the charts of these clients. The same process was conducted with a comparison group of randomly selected charts. She proposed that the most consistent finding regarding sibling-incest is that it takes place with siblings who lack parental supervision. Meiselman reported that even after they became adults, the victimized sisters were never able to trust the brothers who abused them. About 85% of the sisters in her study reported serious orgasmic problems as adults as compared to the estimated 10-12% of women in the United States (citing the statistics of Masters and Johnson, 1970) who

experience problems with orgasms. Meiselman's sample was drawn from a clinically mixed population of males and females in a Los Angeles psychiatric clinic. Meiselman also noted that sibling-incest victims experienced periods of sexual promiscuity and often reported a history of rape.

Courtois (1980), in her volunteer sample of 31 women, who reported any type of sexual contact between related and quasi-related individuals, noted that 77% rated their sexual functioning and sense of self to be severely affected over the long-term. The author proposed that a passage of time is necessary to properly assess the effect of incest. Courtois (1988) suggested that brother-sister sibling-incest is often coercive, with the sister being bribed, compromised or threatened to keep the activity a secret. The author put forward that violence and rape are not uncommon nor are instances of brothers "sharing" their sister(s) with friends, cousins, or other brothers. Laviola (1989) studied the long-term effects for the victims of sibling-incest and reported sexual-response difficulties to be a chronic difficulty for survivors. De Young (1982) identified sexual promiscuity and aversion to sex as long-term effects of older-brother-younger-sister sibling-incest.

Sleep Disturbance

In order to assess possible relationships between sleep disturbance of sexual-abuse victims and aspects of the child-sexual-abuse situation itself, Briere and Runtz (1988) calculated simple correlations between symptomatology and perceived presence of force or threat of force in at least one abuse incident. In a sample of 278 college students, 41 women (14.7%) experienced some type of sexual contact before the age of

fifteen with an individual at least five years older. The results of this study indicated a significant correlation between use of force and acute sleep disorder.

Summary

The literature reviewed in this section leads to the conclusion that there are serious long-term psychological effects for a victim of sibling-incest. The long-term effects of sibling-incest can be as severe as the effects of father-daughter incest. The literature proposed that the psychological variables studied in this research are common long-term problems for victims of sibling-incest. These psychological problems include anxiety, depression, dissociation, sexual problems, and sleep disturbance.

Relational Variables

The two relational variables investigated in this study were intimacy and individuation. The Personal Authority in Family System Questionnaire, Adult version (PAFS), was used in this research to measure these variables.

Abrahams and Hoey (1994) reported from a clinical case study that sexual abuse by a sibling impacts the life of the victim not only in serious psychological ways such as depression, but also that the effects impact the interpersonal lives of survivors. The authors noted that survivors of sibling-incest have difficulty in securing adequate professional help for the effects of the incest because the issue is underreported in the literature and because its clinical profile is under-recognized by therapists in the field.

De Young (1982) in *The Sexual Victimization of Children* reported on data from a sample composed of 80 incest victims and 69 offenders. The descriptive study was taken from the author's court casework. There were five sibling-incest cases in the overall

sample. The author conducted unstructured interviews with the members of her sample, and identified the long-term effects of brother-sister sibling-incest as sexual promiscuity, aversion to sex, and relationship problems. The author placed brother-sister sibling-incest in the context of family dysfunction.

Intimacy

Canavan, Higgs, and Meyer (1995) suggested that the harmful effects of sibling-incest include an adult confusion of sexuality with intimacy and resultant problems in the marital relationships of survivors.

Wiehe (1990) also found intimacy problems resulting from sibling-incest. In his book, *Sibling Abuse*, he reported on the responses from 150 participants who took part in his survey research. The respondents to his advertisements for this research project filled out a 14-page questionnaire that included questions about their earliest memories of abuse by a sibling, their parent's responses to abuse, and how the abuse affected their lives as adults. Eighty-nine percent (134) of the respondents were female; 11% (16) were male. The average age of those responding was 37 years. Twenty-seven percent (41) of the respondents were single. Forty-seven percent (73) were married, and 3% (4) identified themselves as cohabiting. Twenty-one percent (31) were divorced. Seventy-one percent (107) of the respondents provided their names, addresses, and phone numbers at the end of the questionnaire to indicate their willingness to be contacted for a possible follow-up letter or phone call. In the broad area of sibling abuse, the author asked questions about sibling physical abuse, sibling emotional abuse, as well as sibling-incest. Sixty-seven percent (100) of the respondents in this research indicated that they had been

sexually abused by a sibling while they were growing up while 33% (50) had been physically and/or emotionally abused. The majority of those who were abused by a sibling reported that the earliest incident of sexual abuse occurred when they were between five and seven years of age. The author stated that only a few respondents indicated that their sexual abuse by a sibling was a single or one-time event. In most cases the incest continued repeatedly over many years until the victim was old enough to resist the incest verbally. The author noted that low self-esteem is an effect of sibling-incest that all respondents reported. In addition, other reported effects included problems with intimacy in relationships with the opposite sex, difficulty relating to anyone regardless of gender, re-victimization, hypersensitivity, anger, sexual dysfunction, and depression.

Owens (1984) also found intimacy issues. Owens utilized the Rorschach for detecting differences between 34 incest and non-incest outpatient psychotherapy clients. Seventeen participants in the incest group were matched with the non-incest participants. The Rorschach was administered to all participants and was scored by individuals who were unaware of the nature of the study. Interrater reliability of 89% was obtained by assigning coefficients to each response category across the 34 protocols. The Rorschach data were computer-scored and analyzed using t-tests followed by chi-squares. Interpretations of the test data revealed a denial of need for affection and feelings of dependency on others, social isolation, and difficulty with emotional closeness as well as poor self-esteem and angry feelings.

Cole (1982) suggested that women who experience sibling-incest believe it was

their fault, and struggle with issues of intimacy, self-esteem and trust.

Individuation

Caffaro and Caffaro (1998) reported that their interviews with adult sibling-incest survivors indicated that sibling-incest could leave lasting effects on the relationships between survivors and their brothers and sisters. They found gradations of what Bowen (1978) called “emotional cutoff”; many of the adult survivors in their study had little or no contact with their offenders. Efforts to differentiate from one’s family are impaired and resulted in extremely fused or disengaged relationships in adulthood.

Weinberg (1955) investigated 203 cases of incest offenders in and around Chicago, Illinois, and found 37 cases of brother-sister incest, as well as 5 cases of combined father-daughter/brother-sister incest. Weinberg extensively interviewed the individuals as well as members in the family in which incest occurred.

In the study he found that sibling-incest tended to destroy social relationships of siblings. The sisters responded to the sibling-incest either by becoming estranged from their offending brothers or by behaving as if the brothers were eligible sexual or marital partners. Weinberg (1955) proposed that the abused sisters had difficulties with autonomy.

Wooley and Vigilante (1984) explanation of a double-bind pattern often observed in incestuous families was noted in an earlier section of this review. The double-bind pattern is a dilemma experienced when two non-compatible expectations are made of a person and there is an injunction to not acknowledge existence of the double bind. These authors proposed that this double-bind process resulted in the victim of sexual abuse

being unable to effectively separate from his or her family of origin. The work of Wooley and Vigilante supports the work of Bank and Kahn (1982) who indicated that the victim of childhood sexual abuse might present as an extremely well-functioning adult, but examination of the family system will exhibit family dysfunctional problems.

Summary and Background for Research Questions

Incest and Psychological Problems

The literature reviewed leads to the conclusion that sibling-incest is abusive sexual behavior and a risk factor for a wide range of subsequent psychological problems in adulthood. Thus, three hypotheses of this study address how sibling-incest affects the psychological functioning of survivors of sibling-incest.

The literature reviewed in this section indicated that sibling-incest is a trauma that may affect an adult survivor's ability to form adequate intimate relationships. This trauma affects a survivor's ability to experience intimacy in adult relationships. The relational difficulties of adult-sibling-incest survivors also involve issues of autonomy from family of origin.

The need for further research on sibling-incest is compelling for a variety of reasons. Yet, there is presently a limited amount of literature on sibling-incest; until recently it has not been viewed by many as a serious form of family violence (Caffaro & Caffaro, 1998). The literature that does exist has focused mainly on the psychological symptoms of the adult survivors of sibling-incest, and not on the relational context of the survivors. It is important in further research on sibling-incest to study the relational context of sibling-incest, and begin to examine the impact that incest has on the

survivor's adult relationships. The research in this project added to the literature by investigating both the psychological and relational effects of sibling-incest on survivors. The research questions focused on the long-term psychological effects for survivors of sibling-incest as well as their capacities to have adult relationships that are intimate and autonomous.

A significant limitation of the research on sibling-incest has been its exploratory nature, and researchers have not used non-incest groups or comparison groups in their methodologies. This study included the use of a non-incest group, and utilized multivariate analyses on the data collected. The following section summarizes the hypotheses.

Incest and Capacity for Adult Relationships

This study involved researching sibling-incest survivors' capacity to maintain intimate and autonomous adult relationships. Thus, three hypotheses investigated how sibling-incest affects the relational functioning of adult survivors as compared to those who have not experienced sibling-incest.

Four Types of Sibling-incest

The existing literature on sibling-incest has been focused exclusively on one type of sibling-incest, brother-sister incest. Although this type of sibling-incest greatly needs to be understood, it leaves the research community with an understanding of only the female victims of this form of family violence. The sexual abuse of male children is poorly understood, attributable in part to the silence surrounding the sexual victimization of males in society. As a result, male survivors frequently suffer in silence. This study is

designed to investigate all four types of sibling-incest: brother-sister, sister-brother, sister-sister, and brother-brother incest, thereby expanding the research beyond one type and including male victims in the study. Since the existing literature on sibling-incest has not encompassed all types of incest, the research has not been able to show which type of sibling-incest is more traumatic to the victim. Therefore, research data is required to fill this gap in the literature; the third and fourth hypotheses of this project are designed toward that end. The third and fourth hypotheses in this study state there is no difference in the psychological or relational functioning of sibling-incest survivors based on homosexual versus heterosexual contact.

Degree and Duration

The literature suggests that the degree of violence used by the perpetrator will have a significantly negative impact upon the survivor of sibling-incest. The degree of violence includes intensity of type of sexual interaction, coercion and subjective experience of violence as measured in questions 45-50 of the Sibling Incest Questionnaire (see Appendix A). The research shows a more traumatic impact on the victim if the age-of-onset of the abuse began prior to puberty. The sexual abuse may be more traumatic when genital contact such as intercourse is performed and when aggression and force are used to coerce victims into compliance. In addition, duration of the sibling-incest may determine the extent of the trauma for the victim since the literature has shown that the more times children are sexually traumatized, the more likely they will suffer severe symptoms. In hypotheses five and six of this paper this researcher investigated how the level of violence of sibling-incest affected the

psychological wellbeing and relational functioning of survivors of sibling-incest.

Models of Child Sexual Abuse

As noted in the literature review, theory development regarding child sexual abuse has been slow to emerge. The models currently used to explain the development of long-term symptomatology within an adult population of victims of child sexual abuse are the Post-Traumatic Stress Disorder model (Linberg & Distad 1985, Bryer et al., 1987), the Traumagenic Dynamics model (Browne & Finkelhor, 1986; Finkelhor, 1987), and the Developmental and Social model (Fleming & Mullen, 1998). The reviewed literature established that sibling-incest is a trauma that occurs in an interpersonal context, a notion addressed by the developmental and social model. This study proposed that the developmental disruption engendered by childhood sibling-incest may diminish a survivor's capacity for entering trusting and intimate relationships, and lead in adult life to the second-order effects of mental-health problems. The Developmental and Social theory (Fleming & Mullen) support this proposal.

The second, fourth, and sixth hypotheses tested in this project investigated the adult survivors' abilities to have intimate and autonomous relationships to determine if sibling-incest diminishes a survivor's capacity for entering trusting and intimate relationships.

Research Questions

1. Does the psychological wellbeing and relational functioning of survivors of sibling-incest differ from those who have never experienced sibling-incest?
2. Does the type of sibling-incest (homosexual vs. heterosexual) affect the psychological wellbeing or relational functioning of survivors of sibling-incest?
3. Does the level of violence of sibling-incest mediate the psychological wellbeing and relational functioning of survivors of sibling-incest?

Main Hypotheses

Hypothesis 1: Sibling-incest will affect psychological wellbeing.

Sibling-incest will affect psychological wellbeing. Specifically, the survivors of sibling-incest will experience greater levels of anxiety, depression, dissociation, sleep disturbance, and sexual problems than those who have not experienced sibling-incest.

Levels of anxiety, depression, dissociation, sleep disturbance, and sexual problems were operationally defined as the summary score on the Trauma Symptom Checklist-40 (TSC-40). MANOVA was used to test this hypothesis.

Hypothesis 2: Sibling-incest will affect relational functioning.

Sibling-incest will affect relational functioning. Specifically, the survivors of sibling-incest will experience lower levels of intimacy and autonomy in adult relationships than those who have not experienced sibling-incest.

Levels of intimacy and individuation were operationally defined on the scores of

the first four subscales of the Personal Authority in Family System Questionnaire (PAFS): (a) Spousal Fusion/Individuation, (b) Intergenerational Fusion/Individuation, (c) Spousal Intimacy, and (d) Intergenerational Intimacy. MANOVA was used to test this hypothesis.

Hypothesis 3: The type of sibling-incest (homosexual vs. heterosexual) will not affect psychological wellbeing.

The type of sibling-incest (homosexual vs. heterosexual) will not affect psychological wellbeing. Specifically, those who have experienced same sex sibling-incest versus opposite sex sibling-incest will not differ on levels of anxiety, depression, dissociation, sleep disturbance and sexual problems.

Levels of anxiety, depression, dissociation, sleep disturbance and sexual problems were operationally defined as the summary score on the Trauma Symptom Checklist-40 (TSC-40). MANOVA was used to test this hypothesis.

Hypothesis 4: The type of sibling-incest (homosexual vs. heterosexual) will not affect relational functioning.

The type of sibling-incest (homosexual vs. heterosexual) will not affect relational functioning. Specifically, those who have experienced same sex sibling-incest versus opposite sex sibling-incest will not differ on levels of intimacy and autonomy in adult relationships.

Levels of intimacy and autonomy were operationally defined as scores on the first four subscales of the Personal Authority in Family System Questionnaire (PAFS): (a) Spousal Fusion/Individuation, (b) Intergenerational Fusion/Individuation, (c) Spousal

Intimacy, and (d) Intergenerational Intimacy. MANOVA was used to test this hypothesis.

Exploratory Hypotheses

Hypothesis 5: The level of violence will mediate the effect of sibling-incest on psychological wellbeing.

The level of violence will mediate the effect of sibling-incest on psychological wellbeing. Specifically, those who have experienced a greater level of violence in sibling-incest will display higher levels of anxiety, depression, dissociation, sleep disturbance, and sexual problems. It is further predicted that those who experienced sibling-incest and lower levels of violence in relation to sibling-incest will manifest lower levels of anxiety, depression, dissociation, sleep disturbance, and sexual problems.

Levels of anxiety, depression, dissociation, sleep disturbance, and sexual problems were operationally defined as the summary score on the Trauma Symptom Checklist-40 (TSC-40). Levels of violence were operationally defined by responses to questions 45 to 50 on the Sibling Incest Questionnaire (SIQ) and *because this instrument is not validated* this hypothesis is exploratory in nature. Regression analysis was used to test this hypothesis.

Hypothesis 6: The level of violence will mediate the effect of sibling-incest on relational functioning.

The level of violence will mediate the effect of sibling-incest on relational functioning. Specifically, those who have experienced a greater level of violence in sibling-incest will display lower levels of intimacy and autonomy in adult relationships. It is further predicted that those who experienced sibling-incest and lower levels of violence

in relation to sibling-incest will manifest higher levels of intimacy and autonomy in adult relationships. Levels of intimacy and autonomy in adult relationships were operationally defined as scores on the first four subscales of the Personal Authority In Family System Questionnaire (PAFS): (a) Spousal Fusion/Individuation, (b) Intergenerational Fusion/Individuation, (c) Spousal Intimacy, and (d) Intergenerational Intimacy. Level of violence was operationally defined by responses to questions 45 to 50 on the Sibling-Incest Questionnaire (SIQ) and *because this instrument is not validated* this hypothesis is exploratory in nature. Regression analysis was used to test this hypothesis.

Operational Definitions

1. *Sibling-incest* is defined as any sexually oriented physical interaction between siblings, which must be kept secret. Sibling-incest can happen between older brother-younger sister, older sister-younger brother, older brother-younger brother or older sister-younger sister. The definition of *sexually oriented physical interaction* includes the 10 types of sibling-incest experiences listed in question 45 of the Sibling Incest Questionnaire of this study; the incest experiences range from showing of sexual organs to penetration, both vaginal and anal. This list is a combination of types of sexual interaction, some of which are from *Sexually Victimized Children*, Finkelhor (1979), and *A Sourcebook on Child Sexual Abuse*, Finkelhor (1986). The basic list of types of sexual interaction is categorized by coercion and intensity of degree of trauma.

2. *Survivors group* in this study is defined as survivors of sibling-incest who are currently in therapy, or survivors who are in groups directed by a professional therapist. *The non-*

incest group in this study is those participants *who have never* experienced sibling-incest in their family of origin while growing-up as a child, or parent-child incest, or child sexual abuse.

3. *Psychological variables* in this study are identified as anxiety, depression, dissociation, sexual problems and sleep disturbance as measured by the summary score on the TSC-40. The TSC-40 is a research measure that evaluates symptomatology in adults associated with childhood or adult traumatic experiences. It measures aspects of post-traumatic stress and other symptom clusters found in some traumatized individuals. *Anxiety* is characterized by excessive worry or restlessness concerning some future event, which disturbs the mind, and keeps it in a state of painful uneasiness. *Depression* is described as a decrease in functional activity and an increase in emotional feelings of inadequacy. During a period of depression the individual can experience poor appetite, low energy, poor concentration, or difficulty making decisions. *Dissociation* is characterized by an inability to recall important personal information, usually of a traumatic or stressful nature, that is too extensive to be explained by ordinary forgetfulness. *Sexual problems* is characterized by marked interpersonal sexual difficulty and/or impaired sexual desire, impaired sexual arousal and impaired ability for sexual orgasm. *Sleep disturbance* is characterized by a complaint of difficulty initiating or maintaining sleep, with frequent awakenings during the night.

4. *Relational variables* in this study are individuation and intimacy. The scales on the PAFS measure these relational variables, and the scores on the PAFS operationalize the

degree of function/dysfunction. *Individuation* refers to the phenomenon labeled as differentiation of self by Bowen (1978) and is on a continuum with *fusion* at the opposite pole. Individuation is a process in which a person becomes increasingly differentiated from one's family of origin and nuclear family. *Intimacy* is defined as voluntary closeness with distinct boundaries for the self (Lewis et al, 1975; Williamson, 1981, 1982b). Closeness without voluntariness or boundaries is synonymous with fusion and therefore is not in the same domain as intimacy. *Isolation* is viewed as the opposite pole on the continuum with intimacy. Relational intimacy includes both intergenerational intimacy within the family of origin and intimacy with peers.

The items in the first two subscales of the PAFS measure the degree to which a person operates in a fused or individuated manner in relationship with the mate or significant other and in a fused or individuated manner with parents. The items in the third and fourth subscales of the PAFS assess the degree of intimacy and satisfaction with one's mate or significant other, and the degree of intimacy and satisfaction with parents.

5. *Violence*. The literature review in this study indicated that sibling-incest is more traumatic when violence is used by the perpetrator to coerce victims into compliance (Courtois, 1988; Laviola, 1989; Russell, 1986; Worling, 1995). Laviola (1989) noted that the long-term effects for sibling-incest victims could be as severe as those effects of father-daughter incest if the degree of violence is extreme. In this study, there were three measures of violence taken from the Sibling Incest Questionnaire. One measure assessed the intensity of sexual interaction (question 45), the second measure involves four

questions, which assesses force, violence, powerlessness, and threat (questions 46-49) and one question assesses the personal and subjective experience of the level of violence (question 50).

The responses for Question 45 are categorical variables, and they were grouped into eleven categories representing degree of trauma based on theoretical knowledge. The first category, question one, involves playing doctor. The second category, question two, concerns kissing on the mouth. The third category includes questions three and four, which is the showing of sexual organs. The fourth category includes questions five and six that relate to touching sexual organs. The fifth category includes questions seven and eight which involves masturbation. The sixth category includes questions nine and ten concerning oral sex. The seventh category is question 11 which is attempted but unsuccessful genital penetration. The eighth category is question 12 involving genital penetration without ejaculation. The ninth category is question 13 relating to genital penetration with ejaculation. The tenth category is question 14 involving anal penetration without ejaculation, and the eleventh category is question 15 relating to anal penetration with ejaculation.

Responses to questions 46-49 were totaled for a summary score giving a continuous variable to reflect an objective level of violence with an empirical base. The last item, question 50, was a 10-point Likert-scale and a continuous variable reflecting a subjective level of violence for the sibling-incest survivor. These items reflect different, yet related, aspects of the level of violence in the sibling-incest experience. Level of violence was operationally defined by responses to these measures in the Sibling Incest

Questionnaire. The categorical items of question 45, the summary score from questions 46-49, and the subjective score from question 50 are predictors of the level of violence.

Analyses of Data

The first and third hypotheses were evaluated by MANOVA, the second and fourth hypotheses were evaluated by MANOVA and Regression Analyses evaluated the fifth and sixth exploratory hypotheses.

The predictor variables analyzed in Hypotheses 5 and 6 were the 15 violence scores in the Sibling Incest Questionnaire (Q 45 to Q 50, see Appendix A). Regression analysis evaluated the affect the 15 violence scores had upon both the psychological and relational functioning of the survivor.

The Response Bias measures were examined in the preliminary analyses of data and correlated with the other scales in this study. If there was a significant correlation, then the response bias scores were treated as covariates.

In this project, there were three measures of violence, and those measures included question 45 on the Sibling Incest Questionnaire, questions 46-49, and question 50. These questions describe the level of violence the participant in this study experienced as a survivor of sibling-incest. The responses for question 45 are categorical variables and they measure the intensity of the sexual interaction. The responses to questions 46-49 were totaled for a summary score to measure force, violence, powerlessness, and threat. The last item, question 50, was a 10-point Likert scale that measures the personal experience of violence for a survivor of sibling-incest.

CHAPTER III: METHODOLOGY

The methodology of this study is described in this chapter, and is divided into the following sections: (a) participants and method of recruitment, (b) independent and dependent measures, (c) procedure, (d) analysis of data, and (e) major limitations of the study.

Participants and Method of Recruitment

Adult volunteers (18 years and older) were recruited for two groups: (a) a sibling-incest survivor group, and (b) a non-incest group. There was no financial incentive used to recruit these individuals. The sample population included both male and female volunteers. The first group included survivors of sibling-incest who were in therapy at the time of the study, while the volunteers who have never experienced any type of incest or child sexual abuse formed the non-incest group.

The volunteers in this study who have experienced sibling-incest were recruited nationwide from Sexual Abuse Agencies, Counseling Agencies, Professional Organizations and Catholic Charity Counseling Agencies Nationwide. The non-incest sample was gathered from these same counseling agencies nationwide.

Sexual Abuse Agencies, Counseling Agencies, Professional Organizations.

An Internet search generated a list of approximately 1000 Sexual Abuse

Agencies, Counseling Agencies, and Professional Organizations in the United States, providing the names of directors, their addresses, phone numbers, and email addresses. The directors of each treatment center were contacted by phone and letter to notify them that this research project was recruiting volunteers.

Catholic Charity Counseling Agencies Nationwide.

There are 153 Catholic dioceses in the United States; each of these dioceses has its own Catholic Charities, and respective counseling agencies. The Executive Directors of the 153 Catholic Charities nationwide were contacted by letter requesting approval to conduct research and to receive that approval from the immediate directors of the counseling agencies.

The Sibling Incest Survivor Group

The inclusionary criteria for a volunteer in this group was any male or female from any ethnic or cultural background who was 18 years and older, who was a victim of sibling-incest in his or her family while growing up, and who was, at the time of the study, in therapy or a group directed by a professional therapist. There was no upper age limit in this group. They were individuals who were victims of at least one sexually oriented physical interaction by an offending sibling in their families of origin. The participants in this study included survivors from any of the four types of sibling-incest: brother-sister, sister-brother, sister-sister, or brother-brother. In addition those who had history of parent-child incest or childhood sexual abuse were excluded from the study. Individuals of any socio-economic group or educational level were included in this group. However, because the instruments for this research were available only in English,

those who do not read English were excluded.

The Non-Incest Group

The inclusionary criteria for a volunteer in this group was any male or female of any ethnic or cultural background who was 18 years of age or older who have never had a history of any type of incest or child sexual abuse. These non-incest participants may have been in counseling for other issues. There was no upper age limit for membership in this group, but no one under the age of 18 was included. Because the instruments for this research were available only in English, those who do not read English were excluded.

Description of Independent Measures

An announcement for the survivors group in this research project was sent by mail to all respondents from the various methods of recruitment in this study as well as an announcement for the non-incest group. The announcements included all the elements required by the Seton Hall University Institutional Review Board (IRB) for Letters of Solicitation/Invitation. The announcements included an office address, a Seton Hall phone number and a Seton Hall email address for respondents to contact this researcher.

The following is a description of the materials given to each respondent to the recruitment effort.

Letter of Invitation

Individuals who were interested in volunteering for this research project were able to express that willingness by contacting this investigator via their direct service providers. This investigator had already contacted these service providers by letter requesting permission to conduct research at their agency. Once approval had been

granted by the immediate director of the counseling centers, potential participants volunteered either via their service provider, or by direct contact with this investigator at the contact information provided in the recruiting materials. The participants who willingly provided their names and addresses were sent the letter of Invitation, the letter of Informed Consent, the four questionnaires and a stamped return addressed envelope. The list of names and addresses were kept in a secure file cabinet and were destroyed upon completion of this research project. This researcher was the only person who had access to the list of names, which has now been destroyed. The data from all participants remained secured in a separate file cabinet. In order to protect confidentiality and anonymity, potential participants were told to return the surveys without any identifying information on the questionnaires or the return envelope. There was no prior coding of materials sent to participants so that the responses to the questionnaires could be anonymous with no way to link the responses to the identity of the participants.

The letter of Invitation was printed on Seton Hall University departmental letterhead and included all of the elements required by the Seton Hall University Institutional Review Board.

Letter of Informed Consent

All potential participants for the survivors group and for the non-incest group received a separate Letter of Informed Consent on the Department of Psychology and Family Therapy letterhead, which explains the following:

1. this researcher's affiliation with Seton Hall University,
2. an explanation of the purpose of the research,

3. a description of the procedures to be followed in this research,
4. a description of the survey materials used in this project with a sample of questions to be asked,
5. an explanation of the voluntary nature of the participation,
6. an explanation of how anonymity will be preserved,
7. a statement of how the subject's data will be securely stored to maintain confidentiality,
8. a statement describing to what extent records will be kept confidential,
9. a description of reasonable risks for participants,
10. a statement of benefits to the participant,
11. a statement about discontinuing the study if discomfort emerges or immediately seeking help from a participant's mental health provider, and instructions to consider filling out the questionnaires on different days,
12. contact phone numbers of Seton Hall University and the IRB, and Seton Hall email address,
13. a statement that the participant should keep this letter of Informed Consent for his/her records and not sign it and return it to this researcher to maintain the anonymity of the participant,
14. a statement that for anonymity's sake, returning the questionnaires to this researcher is consent to participate in this study, and
15. a statement that this project has been reviewed and approved by the Seton Hall University Institutional Review Board for Human Subjects Research.

This letter of Informed Consent is in appendix B.

Notice Regarding the Questionnaires

A notice was included in the package of questionnaires explaining to the potential participants that if they had more than one sibling abuser, that they must indicate “most significant” next to the incestuous relationship that was most significant. The volunteers were asked to fill-out the questionnaire based on the incestuous relationship that was most significant to them.

If participants did not wish to use the actual first name of siblings or their own name, they were directed to use initials such as B1, B2, B3 and S1, S2, S3, and to refer to themselves in the questionnaire as “Self.”

The notice also requested that the non-incest volunteer fill out the first two questions on the sibling-incest questionnaire, which indicated clearly whether they had siblings, and confirmed that they never experienced incest by a sibling. A copy of this notice is included in Appendix A.

Demographic and Sibling Incest Questionnaire

The Demographic Questionnaire contained 19 questions about the participants’ background information. The Sibling Incest Questionnaire contained 50 questions to gather information about the independent variables. There were 26 questions about the volunteer’s *sibling-incest* experience (question number 1, 2 and 4 to 27), nine questions about the *perpetrator* of the sibling-incest (question number 3, 28, 29, and 38 to 43), four questions about the *age at onset* of sibling-incest (question numbers 30 to 33), three questions on the *duration* of the sibling-incest (question numbers 34 to 36), two questions

on the *age difference* between the perpetrator and the sibling-incest victim (question 37 and 44), and six questions on the *degree of violence* of the sibling-incest (question 45 to 50). This researcher constructed these Demographic Questionnaires, both of which specifically examined the population studied in this research, and gathered information on the independent variables in this study. The instruments were reviewed by an expert, and piloted with a survivor of sibling-incest. The Demographic and Sibling Incest Questionnaire are in Appendix A.

Response Bias Check Questionnaire

Because all data in this study were obtained using self-reports, the possibility existed that a response style may confound the data. In order to ascertain the extent to which acquiescence (question 1 to 15), social desirability (question 16 to 25), or self-monitoring (question 26), may be operating in the responses of a participant, a questionnaire consisting of items from published scales was administered.

Social desirability was assessed with 10-items drawn from the Marlowe-Crowne Social Desirability Scale (Strahan & Oerbasi, 1972). The acquiescence response bias may confound the results. Therefore, the 15-item scale developed by Couch and Keniston (1960) of agreeing response tendency was administered.

In order to assess self-monitoring, the single best item from Snyder's (1974) self-monitoring scale was used. This item has been found to correlate most highly with the remaining items on the scale.

This questionnaire was attached at the end of the Trauma Symptom Checklist-40 (Briere & Runtz, 1989) in appendix A. The heading Personal Attitudes and Traits was

used to provide an inclusive title for the three scales and to minimize demand characteristics (Orne, 1962 & Rosenthal, 1963).

Trauma Symptom Checklist-40

The Trauma Symptom Checklist-40 (TSC-40) was used in this study to test for psychological variables the review of the literature associates with victims of sibling-incest.

The TSC-40 (Briere & Runtz, 1989) is a 40-item self-report instrument consisting of six subscales, all of which were used in this study: Anxiety, Depression, Dissociation, Sexual Abuse Trauma Index, Sexual Problems, and Sleep Disturbance. Each symptom item is rated using a four-point scale ranging from 0 (never) to 3 (often). Studies using the TSC-40 indicate that it is a relatively reliable measure, with subscale alphas typically ranging from .66 to .77, with alphas for the full scale averaging between .89 and .91 (Briere & Runtz, 1989). The TSC-40 has predictive validity with reference to a wide variety of traumatic experiences including childhood sexual abuse. Despite copyright by John Briere, Ph.D., and Marsha Runtz, Ph.D, this instrument is freely available to researchers, and permission is not required from the authors for use or reproduction of this measure provided Briere and Runtz (1989) are cited. The TSC-40 requires approximately 10 to 15 minutes to complete and can be scored in approximately 5 to 10 minutes. A copy of the TSC-40 and the Response Bias items is in Appendix A.

Personal Authority in Family System Questionnaire

The Personal Authority in Family System Questionnaire (PAFS, Bray, 1984) was

used in this study to measure the relational variables the review of the literature associates with victims of sibling-incest. The author of the PAFS (Bray, 1984) has granted permission (personal communication) to reproduce the PAFS and its answer sheet for this proposed project. Bray has requested that the instrument not be included in the appendix of the dissertation. The adult version of this instrument is for adults with and without children, and is designed to measure the relationships of the volunteer in a three-generational family system. It operationalizes concepts of the intergenerational systems theory also discussed by Bowen (1978) and Williamson (1991).

The Personal Authority in the Family System Questionnaire (PAFS) is a self-report instrument developed to provide a self-report measure of intergenerational family relationships as perceived by each member of the family. A person describes current relationships with relevant family members in both the family of origin and nuclear family or dyadic relationship. The key concepts and behaviors underlying PAFS include individuation, fusion, triangulation, intimacy, isolation, personal authority, and intergenerational intimidation.

Individuation refers to the phenomena labeled as differentiation of self by Bowen (1978) and is on a continuum with fusion at the opposite pole. Individuation is a process in which a person becomes increasingly differentiated from one's family of origin and nuclear family. The first four components of the PAFS refer to the definition of individuation. Triangulation is related to fusion in that both indicate a lack of individuation. However, they are not the same process. Fusion refers to a particular type of relationship between two people while triangulation refers to a particular type of

relationship among three people. Fusion is generally experienced as positive, although the effects of being in a fused relationship are not always positive. Triangulation is generally experienced by at least one person in the triad as stressful and as being pulled between the two others.

Intimacy is defined as voluntary closeness with distinct boundaries to the self (Lewis et al., 1975; Williamson, 1981, 1982b). Closeness without voluntariness or boundaries is synonymous with fusion and therefore is not in the same domain as intimacy. Isolation is viewed as the opposite pole on the continuum with intimacy. Intimacy is comprised of four components: trust, love-fondness, self-disclosure, and commitment (Larzelere & Huston, 1980; Peplau, 1982). The fifth component of the PAFS refers to the definition of intimacy.

PAFS is offered as a synthesizing construct in the inherent tension between differentiation and intimacy, as this occurs in the biological family and is then recreated in other significant personal relationships. PAFS is on a continuum with personal authority at one pole and intergenerational intimidation at the other. PAFS implies the behavioral patterns characteristic of an integrated and differentiated self (Bowen, 1978, Karpel, 1976) exercising increased control over individual destiny in life, and choosing personal health and wellbeing in a systemic sense. This can be observed behaviorally through the resolution of idiosyncratic intra-psychic conflicts, as well as through the resolution of relational intimacy issues. Relational intimacy includes both intergenerational intimacy within the family of origin and intimacy with peers, with particular reference to the spouse. Intergenerational intimacy means knowing the

individual person and the private meanings of the inner life experiences of each parent. Finally, it includes reconnection and belongingness to the family of origin while simultaneously acting from a differentiated position within the family of origin.

It is important to note that PAFS is not viewed as a personality construct, but rather as a set of interpersonal skills, interactional behavior patterns, and a way of being that can be observed in family interactions and other significant interpersonal relationships.

The PAFS contains 132 items grouped into the following eight non-overlapping scales:

1. *Spousal Fusion/Individuation*: The items in this scale measure the degree to which a person operates in a fused or individuated manner in relationship with the mate or significant other.
2. *Intergenerational Fusion/Individuation*: The items in this scale measure the degree to which a person operates in a fused or individuated manner with parents.
3. *Spousal Intimacy*: Items assess the degree of intimacy and satisfaction with one's mate or significant other.
4. *Intergenerational Intimacy*: Items assess the degree of intimacy and satisfaction with parents.
5. *Nuclear Family Triangulation*: The items in this scale measure triangulation between spouses and their children. These items are completed only by people who have children.

6. *Intergenerational Triangulation*: These items measure triangulation between a person and his/her parents.
7. *Intergenerational Intimidation*: Items assess the degree of personal intimidation experienced by an individual in relation to his/her parents.
8. *Personal Authority*: This scale measures the interactional aspects of Personal Authority as defined by Williamson (1982b). Items reflect topics of conversation, which require an intimate interaction with a parent, while maintaining an individuated stance.

The first four subscales of the PAFS were used for this study: (a) Spousal Fusion/Individuation, (b) Intergenerational Fusion/Individuation, (c) Spousal Intimacy, and (d) Intergenerational Intimacy. All items are rated on 5-point Likert scale.

The reliability of the PAFS was assessed in two different studies by Bray et al. (1984). The alpha coefficients (Cronbach, 1951) were calculated for each scale at Time 1 and Time 2. At Time 1 the coefficients ranged from .82 to .95 with a mean of .90. At time 2 the coefficients ranged from .80 to .95 with a mean of .89. The reliability estimates were generally consistent across time periods, and overall, the scales demonstrated excellent to good reliability (Seibel, 1986).

The validity for the PAFS was assessed in two different studies by Bray et al. (1984), and the findings confirm the underlying factor structure of the PAFS questionnaire, and support content and construct validity of the scales (Bray et al., 1984). The PAFS is a reliable instrument with both content and construct validity.

Procedures

In order to generate a sample population for this study an Internet search generated a list of approximately 1000 Sexual Abuse Agencies, Counseling Agencies, Professional Organizations, as well as Catholic Charity Counseling Agencies in the United States. A letter requesting permission to conduct research was sent to agency directors announcing this research project. The Executive Director of each counseling agency nationwide was sent a letter requesting approval to conduct research following IRB approval. Once approval was granted by the immediate directors of the counseling agencies, an announcement about this research project was sent to the associated counseling agency.

The non-incest group for this study was recruited from the agencies that were solicited nationally. These were individuals who never had a history of sibling-incest, parent-child incest or a history of child sexual abuse. The requirement for a non-incest group volunteer was that he or she be at least 18 years of age and had no history of incest or childhood sexual abuse.

All volunteers who expressed a willingness to be participants in this research were mailed the following: a Letter of Invitation, a Letter of Informed Consent, the Demographic and Sibling Incest History Questionnaire, the Trauma Symptom Checklist-40, the Personal Authority in Family System Questionnaire, and the Response Bias Inventory. Instructions to assist the volunteer in filling out the questionnaires were attached. It was estimated that the four measures would take approximately 70 minutes to complete.

In order to protect confidentiality and anonymity, the names and addresses provided by potential participants were kept in a secure file until the research was completed. At that time all names and addresses of volunteers were destroyed. There was no coding system used on the questionnaires or the return envelopes, and participants were instructed to return materials with no identifying information so that this researcher could not match returns with requests.

Plan for Analyses of Data

The literature reviewed in chapter two of this study led to the conclusion that sibling-incest is a risk factor for a wide range of subsequent psychological and relational problems in adulthood. In light of this, the primary hypotheses of this paper are that sibling-incest results in greater long-term psychological problems for the survivors, and that they have greater problems with intimacy and autonomy in their adult relationships, as compared to adults who were not abused by a sibling. The theory advanced in this paper is that developmental disruptions engendered by childhood sibling-incest may diminish a survivor's capacity for entering trusting and intimate adult relationships, and lead in adult life to second-order mental health problems.

The first two sets of hypotheses were evaluated using Multiple Analyses of Variance and one set evaluated by Regression Analyses. The first and third hypotheses were evaluated by MANOVA, the second and fourth hypotheses were evaluated by MANOVA and Regression Analyses evaluated the fifth and sixth exploratory hypotheses.

Main Hypotheses

Hypothesis 1

Sibling-incest will affect psychological wellbeing. Specifically, survivors of sibling-incest will experience greater levels of anxiety, depression, dissociation, sleep disturbance, and sexual problems than those who have not experienced sibling-incest.

Levels of anxiety, depression, dissociation, sexual problems, and sleep disturbance were operationally defined as the summary score on the Trauma Symptom Checklist-40 (TSC-40). MANOVA was used to test this hypothesis.

Hypothesis 2

Sibling-incest will affect relational functioning. Specifically, survivors of sibling-incest will experience lower levels of intimacy and autonomy in adult relationships than those who have not experienced sibling-incest.

Levels of intimacy and autonomy were operationally defined as scores on the first four subscales of the Personal Authority in Family System Questionnaire (PAFS): (a) Spousal Fusion/Individuation, (b) Intergenerational Fusion/Individuation, (c) Spousal Intimacy, and (d) Intergenerational Intimacy. MANOVA was used to test this hypothesis.

Hypothesis 3

The type of sibling-incest (homosexual vs. heterosexual) will not affect psychological wellbeing. Specifically, those who have experienced homosexual sibling-incest versus heterosexual sibling-incest will not differ on levels of anxiety, depression, dissociation, sleep disturbance and sexual problems.

Levels of anxiety, depression, dissociation, sleep disturbance, and sexual

problems was operationally defined as summary score on the Trauma Symptom Checklist-40 (TSC-40). MANOVA was used to test this hypothesis.

Hypothesis 4

The type of sibling-incest (homosexual vs. heterosexual) will not affect relational functioning. Specifically, those who have experienced homosexual sibling-incest versus heterosexual sibling-incest will not differ on levels of intimacy and autonomy in adult relationships.

Levels of intimacy and autonomy were operationally defined as scores on the first four subscales of the Personal Authority in Family System Questionnaire (PAFS): (a) Spousal Fusion/Individuation, (b) Intergenerational Fusion/Individuation, (c) Spousal Intimacy, and (d) Intergenerational Intimacy. MANOVA was used to test this hypothesis.

Exploratory Hypotheses

Hypothesis 5

The level of violence will mediate the effect of sibling-incest on psychological wellbeing. Specifically, those who have experienced a greater level of violence in sibling-incest will display higher levels of anxiety, depression, dissociation, sleep disturbance and sexual problems. It is further predicted that those who experienced sibling-incest and lower levels of violence in relation to sibling-incest will manifest lower levels of anxiety, depression, dissociation, sleep disturbance and sexual problems.

Levels of anxiety, depression, dissociation, sleep disturbance, and sexual problems were operationally defined as the summary score on the Trauma Symptom Checklist-40 (TSC-40). Levels of violence were operationally defined by responses to

questions 45 to 50 on the Sibling Incest Questionnaire (SIQ) and because this instrument is not validated this hypothesis is exploratory in nature. Regression Analysis was used to test this hypothesis.

Hypothesis 6

The level of violence will mediate the effect of sibling-incest on relational functioning. Specifically, those who have experienced a greater level of violence in sibling-incest will display lower levels of intimacy and autonomy in adult relationships. It is further predicted that those who experienced sibling-incest and lower levels of violence in relation to sibling-incest will manifest higher levels of intimacy and autonomy in adult relationships.

Levels of intimacy and individuation in adult relationships were operationally defined as scores on the first four subscales of the Personal Authority in Family Questionnaire (PAFS): (a) Spousal Fusion/Individuation, (b) Intergenerational Fusion/Individuation, (c) Spousal Intimacy, and (d) Intergenerational Intimacy. Levels of violence were operationally defined by responses to questions 45 to 50 on the Sibling Incest Questionnaire (SIQ) and because this instrument was not validated, this hypothesis was exploratory in nature. Regression Analysis was used to test this hypothesis.

The Response Bias measures was looked at in the preliminary analyses of data and correlated with the other scales in this study. With a significant correlation it was expected that the response bias scores would be treated as a covariate.

The level of violence of the sibling-incest was expected to affect both psychological and relational functioning of the survivor. In this project, there were three

measures of violence, and those measures included question 45 of the Sibling-Incest Questionnaire, questions 46-49, and question 50. These questions describe the level of violence the participant in this study experienced as a survivor of sibling-incest. The responses for question 45 are categorical and measure the intensity of the sexual interaction. The responses to questions 46-49 were totaled for a summary score giving a continuous variable that measures force, violence, powerlessness and threat. The last item, question 50 is a 10-point Likert scale that is a continuous variable will measure the subjective experience of violence for the survivor of sibling-incest. These items reflect different, yet related levels of violence in the incest experience and these three measurements were evaluated by multiple Regression Analyses.

Major Limitations

The sample involved in this study was not a random sample; therefore, the results cannot be generalized. Also, because of the distress that may be experienced by the nature of the information requested, response validity was of concern. Another limitation of this study is that the sibling history questionnaire, which is a semi-demographic inventory, was not validated, although demographic questionnaires generally are not. Since these surveys are retrospective in nature, memory and false memory bias are limitations in this study.

CHAPTER IV: RESULTS

The results of this research study on “The Long-term Psychological Effects for Survivors of Sibling Incest and Their Capacities to Have Adult Relationships That are Intimate and Autonomous,” are presented in Chapter 4 of this dissertation. The format of these results will include descriptive statistics on the demographic characteristics of the sibling-incest group and the non-incest group and on the Sibling Incest Questionnaire including the percentages of the four types of sibling-incest studied in this project. Included in this chapter are the results of the Response Bias Test, and the statistical analyses of the hypotheses. The results include multiple regressions conducted with the fifteen violence variables from the Sibling Incest Questionnaire in relation to the psychological and relational variables of this project. This chapter also includes a post hoc test to determine if the violence scores significantly differed by type of sibling-incest, and a post hoc test of the demographic variables to determine if there are any significant differences between the sibling-incest group and the non-incest group. The significance of all these data will be discussed in chapter 5.

In order to analyze the research questions, data were collected from a nationwide sample population of 87 volunteers who are currently in therapy. The participants for the sibling-incest group (N=43) and the non-incest group (N=44) were from sexual-abuse

agencies, counseling agencies, professional organizations, and Catholic Charity counseling agencies nationwide.

Demographic Results

Demographics

Eighty-seven participants are included in the total sample. There were 43 (49.4%) participants in the sibling-incest group and 44 (50.6%) participants in the non-incest group. The sample includes 31 (35.6%) male participants and 56 (64.4%) female participants. All participants in the sibling-incest and non-incest groups reported having been in counseling in the past and report being in counseling currently. The frequencies and percentages for gender overall and for the sibling-incest and non-incest groups are presented in Table 1. Overall, the majority (64.4%) of participants are female.

Table 1

Frequencies and Percentages for Participants' Genders

	Total		Sibling Incest		Non-Incest	
	<i>N</i>	%	<i>n</i>	%	<i>n</i>	%
Male	31	35.6	15	34.9	16	36.4
Female	56	64.4	28	65.1	28	63.6
Total	87	100.0	43	100.0	44	100.0

The frequency and percentage for participants' ages are shown in Table 2. The means and standard deviations for participants' ages are presented in Table 3. The age of the non-incest group is higher than the age of the sibling-incest group.

Table 2
Frequencies and Percentages for Participants' Age

Age	Total		Sibling Incest		Non-Incest	
	<i>N</i>	%	<i>N</i>	%	<i>n</i>	%
27	1	1.1	1	2.3	0	0.0
30	3	3.4	2	4.7	1	2.3
31	1	1.1	0	0.0	1	2.3
32	1	1.1	1	2.3	0	0.0
34	2	2.3	1	2.3	1	2.3
36	1	1.1	1	2.3	0	0.0
38	2	2.3	2	4.7	0	0.0
39	1	1.1	0	0.0	1	2.3
40	2	2.3	2	4.7	0	0.0
41	2	2.3	2	4.7	0	0.0
42	5	5.7	5	11.6	0	0.0
43	1	1.1	0	0.0	1	2.3
44	3	3.4	2	4.7	1	2.3
45	3	3.4	2	4.7	1	2.3
48	4	4.6	4	9.3	0	0.0
49	3	3.4	1	2.3	2	4.5
50	2	2.3	2	4.7	0	0.0
51	4	4.6	2	4.7	2	4.5
52	3	3.4	1	2.3	2	4.5
53	4	4.6	1	2.3	3	6.8
54	4	4.6	3	7.0	1	2.3
55	6	6.9	3	7.0	3	6.8
56	4	4.6	0	0.0	4	9.1
57	1	1.1	0	0.0	1	2.3
58	6	6.9	2	4.7	4	9.1
59	2	2.3	1	2.3	1	2.3
60	2	2.3	0	0.0	2	4.5
61	4	4.6	1	2.3	3	6.8
62	1	1.1	0	0.0	1	2.3
63	4	4.6	0	0.0	4	9.1
65	3	3.4	1	2.3	2	4.5
8	1	1.1	0	0.0	1	2.3
72	1	1.1	0	0.0	1	2.3
Total	87	100%	43	100%	44	100%

Table 3
Means and Standard Deviations for Age

	Total		Sibling Incest		Non-Incest	
	M	SD	M	SD	M	SD
Age	50.55	9.90	46.30	8.89	54.70	9.12

The frequencies and percentages for ethnicity overall, and for the sibling-incest, and non-incest groups are presented in Table 4. Overall, the largest proportion of participants is White/American. For the sibling-incest group, the majority of participants are White/American (60.5%) and the second highest ethnicity is Latin American (9.3%). For the non-incest group, the largest proportion of participants is White/American (34.1%) and the second highest ethnicity is Irish/American (15.9%).

Table 4

Frequencies and Percentages for Participants' Ethnicities

	Total		Sibling Incest		Non-Incest	
	<i>N</i>	%	<i>n</i>	%	<i>N</i>	%
White/American	41	47.1	26	60.5	15	34.1
Italian/Irish	3	3.4	1	2.3	2	4.5
German/American	6	6.9	3	7.0	3	6.8
Irish/American	10	11.5	3	7.0	7	15.9
Latin American	5	5.7	4	9.3	1	2.3
Polish American	2	2.3	0	0.0	2	4.5
German/Irish	3	3.4	0	0.0	3	6.8
Asian	1	1.1	0	0.0	1	2.3
Franco/American	1	1.1	0	0.0	1	2.3
Italian/American	7	8.0	2	4.7	5	11.4
Italian/Irish/French/American	1	1.1	0	0.0	1	2.3
Irish/Dutch	1	1.1	0	0.0	1	2.3
African American	2	2.3	2	4.7	0	0.0
Irish/Polish	1	1.1	1	2.3	0	0.0
Irish/French	1	1.1	1	2.3	0	0.0
Italian	2	2.3	0	0.0	2	4.5
Total	87	100.0	43	100.0	44	100.0

Frequencies and percentages on relationship status overall and for the sibling-incest and non-incest groups are presented in Table 5. Overall, the largest proportion of participants is married (47.1%). For the sibling-incest group, the largest proportion of participants is divorced (30.2%). For the non-incest group, the majority of participants are married (65.9%).

Table 5

Frequencies and Percentages for Participants' Relationship Status

	Total		Sibling Incest		Non-Incest	
	<i>N</i>	%	<i>n</i>	%	<i>N</i>	%
Married	41	47.1	12	27.9	29	65.9
Separated	6	6.9	4	9.3	2	4.5
Divorced	19	21.8	13	30.2	6	13.6
Widowed	1	1.1	0	0.0	1	2.3
Single (never married)	15	17.2	10	23.3	5	11.4
Committed relationship, not living together	2	2.3	2	4.7	0	0.0
Committed Relationship, living together	3	3.4	2	4.7	1	2.3
Total	87	100.0	43	100.0	44	100.0

The frequencies and percentages of participants having children overall and for the sibling-incest, and non-sibling groups are presented in Table 6. Overall, the largest proportion of participants has children (69.0%). The sibling-incest group has a slightly lower percentage (62.8%) of participants with children than did the non-incest group (75%).

Table 6

Frequencies and Percentages for Participants' Children

	Total		Sibling Incest		Non-Incest	
	<i>N</i>	%	<i>N</i>	%	<i>n</i>	%
Yes	60	69.0	27	62.8	33	75.0
No	27	31.0	16	37.2	11	25.0
Total	87	100.0	43	100.0	44	100.0

The frequencies and percentages for religion overall and for the sibling-incest and non-incest groups are presented in Table 7. Overall, the largest proportion of participants is Roman Catholic (63%). The sibling-incest group has a lower percentage of Roman Catholic (48.8%) participants than the non-incest group (77.3).

Table 7

Frequencies and Percentages for Participants' Religions

	Total		Sibling Incest		Non-Incest	
	<i>N</i>	%	<i>n</i>	%	<i>N</i>	%
Roman Catholic	55	63.2	21	48.8	34	77.3
Baptist	1	1.1	1	2.3	0	0.0
Orthodox Christian	1	1.1	1	2.3	0	0.0
Christian	3	3.4	3	7.0	0	0.0
Quaker	1	1.1	1	2.3	0	0.0
None	9	10.3	5	11.6	4	9.1
Greek Orthodox	1	1.1	1	2.3	0	0.0
Protestant	5	5.7	4	9.3	1	2.3
Presbyterian	3	3.4	0	0.0	3	6.8
Jewish	5	5.7	3	7.0	2	4.5
Muslim	1	1.1	1	2.3	0	0.0
Episcopalian	1	1.1	1	2.3	0	0.0
Missing	1	1.1	1	2.3	0	0.0
Total	87	100.0	43	100.0	44	100.0

The frequencies and percentages of parents lived with overall and for the sibling-incest and non-incest groups are presented in Table 8. Overall, the largest proportion of participants lived with both biological parents (89.7%). For the sibling-incest group, the majority of participants lived with both biological parents (88.4%). For the non-incest group, the majority of participants lived with both biological parents (90.9%).

Table 8

Frequencies and Percentages for Participants' Parents Lived With

	Total		Sibling Incest		Non-Incest	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Both Biological Parents	78	89.7	38	88.4	40	90.9
Parent and Stepparent	2	2.3	2	4.7	0	0.0
Single Parent	6	6.9	3	7.0	3	6.8
Adoptive Parents	1	1.1	0	0.0	1	2.3
Total	87	100.0	43	100.0	44	100.0

The frequencies and percentages for social class in which the participants grew up overall and for the sibling-incest and non-incest groups are presented in Table 9. Overall, the largest proportion of participants was from working-class homes (44.8%) and the second largest proportion of participants was from middle-class homes (36.8%). For the sibling-incest group, the largest proportion of participants was from working-class homes (44.8%), and the second largest proportion (34.9%) was from middle-class homes. In the non-incest group, the largest proportion of participants was from working class homes (45.5%), and the second largest proportion (38.6%) was from middle-class homes.

Table 9

Frequencies and Percentages for Participants' Social Class

	Total		Sibling Incest		Non-Incest	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Poverty Level	6	6.9	4	9.3	2	4.5
Working Class	39	44.8	19	44.2	20	45.5
Middle Class	32	36.8	15	34.9	17	38.6
Upper Middle Class	9	10.3	4	9.3	5	11.4
Upper Class	1	1.1	1	2.3	0	0.0
Total	87	100.0	43	100.0	44	100.0

The frequencies and percentages of the fathers' levels of education overall and for the sibling-incest and non-incest groups are presented in Table 10. Overall, the largest proportion of participants had fathers with a high-school education (39.1%) and the second largest proportion of participants had fathers with less than a high-school education (20.7%). For the sibling-incest group, the largest proportion of participants had fathers with a high-school education (39.5%), and the second largest proportion (16.3%) had fathers with less than a high-school education. For the non-incest group, the largest proportion of participants had fathers with a high-school education (38.6%) and the second largest proportion (25.0%) had fathers with less than a high-school education.

Table 10

Frequencies and Percentages for Participants' Fathers' Level of Education

	Total		Sibling Incest		Non-Incest	
	<i>N</i>	%	<i>n</i>	%	<i>n</i>	%
Less than HS	18	20.7	7	16.3	11	25.0
GED	7	8.0	2	4.7	5	11.4
High School	34	39.1	17	39.5	17	38.6
Associate's Degree	5	5.7	4	9.3	1	2.3
Bachelor's Degree	7	8.0	3	7.0	4	9.1
Master's Degree	7	8.0	5	11.6	2	4.5
Beyond Master's Degree	7	8.0	3	7.0	4	9.1
N/A, Unknown, BLANK	2	2.3	2	4.7	0	0.0
Total	87	100.0	43	100.0	44	100.0

The frequencies and percentages for mothers' level of education overall and for the sibling-incest group and non-incest groups are presented in Table 11. Overall, the largest proportion of mothers of participants had a high-school education (52.9%) and the second largest proportion (17.2%) had mothers with less than a high-school education. For the sibling-incest group, the largest proportion of participants had a mother with a high-school education (48.8%), and the second largest group had mothers with a bachelor-degree education (20.9%). For the non-incest group, the largest proportion of participants had mothers with a high-school education (56.8%), and the second largest group had mothers with less than a high-school education (25.0%).

Table 11

Frequencies and Percentages for Participants' Mothers' Level of Education

	Total		Sibling Incest		Non-Incest	
	<i>N</i>	%	<i>n</i>	%	<i>n</i>	%
Less than HS	15	17.2	4	9.3	11	25.0
GED	3	3.4	2	4.7	1	2.3
High School	46	52.9	21	48.8	25	56.8
Associate's Degree	5	5.7	4	9.3	1	2.3
Bachelor's Degree	11	12.6	9	20.9	2	4.5
Master's Degree	6	6.9	2	4.7	4	9.1
Beyond Master's Degree	1	1.1	1	2.3	0	0.0
Total	87	100.0	43	100.0	44	100.0

The frequencies and percentages for the occupations of mothers' overall and for the sibling-incest and non-incest groups are presented in Table 12. Overall, the majority of participants' mothers were homemakers (50.6%), the second largest proportion (18.4%) was skilled worker and the third largest proportion (16.1%) was administrative worker. For the sibling-incest group, the largest proportion of participants' mothers was homemaker (41.9%), and the second largest proportion was a skilled worker mother (25.6%). For the non-incest group, the largest proportion of participants' mothers was a homemaker (59.1%), and the second largest proportion of mothers was administrative workers (15.9%).

Table 12

Frequencies and Percentages for Participants' Mothers' Occupation

	Total		Sibling Incest		Non-Incest	
	<i>N</i>	%	<i>n</i>	%	<i>N</i>	%
Executive	1	1.1	1	2.3	0	0.0
Manager	2	2.3	1	2.3	1	2.3
Administrative	14	16.1	7	16.3	7	15.9
Skilled Worker	16	18.4	11	25.6	5	11.4
Unskilled Worker	9	10.3	4	9.3	5	11.4
Homemaker	44	50.6	18	41.9	26	59.1
Student	1	1.1	1	2.3	0	0.0
Total	87	100.0	43	100.0	44	100.0

The frequencies and percentages on the participant's father's occupation overall, for the sibling-incest and non-incest groups are presented in Table 13. Overall, the largest proportion of participants' fathers was skilled workers (46.0%), and the second largest proportion (20.7%) was manager. In the sibling-incest group, the largest proportion of participants' fathers was skilled workers (46.5%). For the non-incest group, the largest proportion of participants' fathers was skilled workers (45.5%).

Table 13

Frequencies and Percentages for Participants' Fathers' Occupation

	Total		Sibling Incest		Non-Incest	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Executive	12	13.8	5	11.6	7	15.9
Manager	18	20.7	9	20.9	9	20.5
Administrative	6	6.9	4	9.3	2	4.5
Skilled Worker	40	46.0	20	46.5	20	45.5
Unskilled Worker	11	12.6	5	11.6	6	13.6
Total	87	100.0	43	100.0	44	100.0

The frequencies and percentages of siblings in the household of participants overall and for the sibling-incest and non-incest groups are presented in Table 14.

Overall, the majority of participants had siblings in the household (94.3%). For the sibling-incest group, all of the participants had siblings in household (100%). For the non-incest group, the majority of participants had siblings in household (88.6%).

Table 14

Frequencies and Percentages for Participants' Siblings in Household

	Total		Sibling Incest		Non-Incest	
	<i>N</i>	%	<i>n</i>	%	<i>n</i>	%
Yes	82	94.3	43	100.0	39	88.6
No	5	5.7	0	0.0	5	11.4
Total	87	100.0	43	100.0	44	100.0

The frequencies and percentages of participants getting along with their siblings overall and for the sibling-incest and non-incest groups are presented in Table 15. Overall, the majority of participants had siblings with whom they usually got along (52.9%). For the sibling-incest group, the largest proportion of participants had siblings with whom they sometimes got along (41.9%), and the second largest proportion (39.5%) had siblings with whom they usually got along. For the non-incest group, the majority of participants had siblings with whom they usually got along (65.9%) and, by contrast with the incest group, had siblings with whom they sometimes got along (4.5%).

Table 15

Frequencies and Percentages for Siblings Getting Along

	Total		Sibling Incest		Non-Incest	
	<i>N</i>	%	<i>n</i>	%	<i>N</i>	%
Never	1	1.1	0	0.0	1	2.3
Rarely	6	6.9	5	11.6	1	2.3
Sometimes	20	23.0	18	41.9	2	4.5
Usually	46	52.9	17	39.5	29	65.9
Always	10	11.5	3	7.0	7	15.9
N/A or left Blank	4	4.6	0	0.0	4	9.1
Total	87	100.0	43	100.0	44	100.0

The frequencies and percentages of participants' education levels overall and for the sibling-incest and non-incest groups are presented in Table 16. Overall, the largest

proportion of participants had a Bachelor's Degree (27.6%). For the sibling-incest group the largest proportion of participants had a Bachelor's Degree (30.2%), the second largest proportion (27.9%) had a Master's Degree, and the third largest proportion (16.3%) had a high-school education. For the non-incest group, the largest proportion of participants had a high-school education (34.1%), and the second largest proportion (25.0%) had a Bachelor's Degree.

Table 16

Frequencies and Percentages for Participants' Education

	Total		Sibling Incest		Non-Incest	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Less than HS	5	5.7	3	7.0	2	4.5
GED	3	3.4	2	4.7	1	2.3
High School	22	25.3	7	16.3	15	34.1
Associate's Degree	5	5.7	3	7.0	2	4.5
Bachelor's Degree	24	27.6	13	30.2	11	25.0
Master's Degree	20	23.0	12	27.9	8	18.2
Beyond Masters	8	9.2	3	7.0	5	11.4
Total	87	100.0	43	100.0	44	100.0

The frequencies and percentages for participants' occupation overall and for the sibling-incest and non-incest groups are presented in Table 17. Overall, the largest proportion of participants worked as administrative personnel (39.1%). For the sibling-incest group the largest proportion of participants worked as administrative personnel (44.2%), and the second largest proportion worked as managers (18.6%). For the non-

incest group, the largest proportion of participants' worked as administrative personnel (34.1%) and the second largest proportion worked as managers (31.8%).

Table 17

Frequencies and Percentages for Participants' Work

	Total		Sibling Incest		Non-Incest	
	<i>N</i>	%	<i>n</i>	%	<i>n</i>	%
Executive	14	16.1	6	14.0	8	18.2
Manager	22	25.3	8	18.6	14	31.8
Administrative Personnel	34	39.1	19	44.2	15	34.1
Skilled Worker	10	11.5	6	14.0	4	9.1
Unskilled	4	4.6	2	4.7	2	4.5
Homemaker	2	2.3	1	2.3	1	2.3
Student	1	1.1	1	2.3	0	0.0
Total	87	100.0	43	100.0	44	100.0

The frequencies and percentages of the participants' sexual orientation overall and for the sibling-incest and non-incest groups are presented in Table 18. Overall, the majority of participants were heterosexual (86.2%). For the sibling-incest group the majority of participants were heterosexual (79.1%), the second highest proportion of participants was bisexual (11.6%), and the third highest proportion was gay male (4.7%) or female lesbian (4.7%). For the non-incest group, the majority of participants are heterosexual (93.2%), the second highest proportion of participants was gay male (4.5%), and the third highest proportion (2.3%) was female lesbian.

Table 18

Frequencies and Percentages for Participants' Sexual Orientation

	Total		Sibling Incest		Non-Incest	
	<i>N</i>	%	<i>n</i>	%	<i>N</i>	%
Heterosexual	75	86.2	34	79.1	41	93.2
Gay Male	4	4.6	2	4.7	2	4.5
Female Lesbian	3	3.4	2	4.7	1	2.3
Bisexual	5	5.7	5	11.6	0	0.0
Total	87	100.0	43	100.0	44	100.0

The frequency and percentage for participant's salaries are shown in Table 19.

The means and standard deviations for participant's salaries are presented in Table 20.

The salary for the non-incest group was higher than the sibling-incest group. An

Independent Samples t-test was conducted to investigate statistical significant differences between groups and the results are included later in this chapter in Table 59.

Table 19
Frequency and Percent for Participants Salary

Salary	Total		Sibling Incest		Non-Incest	
	<i>N</i>	%	<i>n</i>	%	<i>N</i>	%
0	19	22.1	9	20.9	10	23.3
15,000	1	1.2	0	0.0	1	2.3
20,000	2	2.3	1	2.3	1	2.3
21,000	1	1.2	0	0.0	1	2.3
22,000	1	1.2	1	2.3	0	0.0
25,000	1	1.2	0	0.0	1	2.3
30,000	4	4.7	3	7.0	1	2.3
32,000	1	1.2	0	0.0	1	2.3
33,000	1	1.2	0	0.0	1	2.3
34,000	2	2.3	2	4.7	0	0.0
35,000	2	2.3	1	2.3	1	2.3
36,500	1	1.2	1	2.3	0	0.0
38,000	2	2.3	0	0.0	2	4.7
39,000	1	1.2	1	2.3	0	0.0
40,000	3	3.5	2	4.7	1	2.3
42,000	2	2.3	2	4.7	0	0.0
45,000	7	8.1	5	11.6	2	4.7
50,000	2	2.3	1	2.3	1	2.3
54,000	1	1.2	0	0.0	1	2.3
55,000	4	4.7	2	4.7	2	4.7
60,000	4	4.7	1	2.3	3	7.0
68,000	1	1.2	1	2.3	0	0.0
70,000	5	5.8	3	7.0	2	4.7
75,000	5	5.8	3	7.0	2	4.7
80,000	1	1.2	0	0.0	1	2.3
84,000	1	1.2	1	2.3	0	0.0
90,000	1	1.2	1	2.3	0	0.0
94,000	1	1.2	0	0.0	1	2.3
98,000	1	1.2	0	0.0	1	2.3
100,000	1	1.2	1	2.3	0	0.0
103,000	1	1.2	0	0.0	1	2.3
110,000	2	2.3	0	0.0	2	4.7
114,000	1	1.2	0	0.0	1	2.3
120,000	1	1.2	0	0.0	1	2.3
125,000	1	1.2	0	0.0	1	2.3
133,000	1	1.2	1	2.3	0	0.0

Table 20

Means and Standard Deviations for Salary

	Total		Sibling Incest		Non-Incest	
	M	SD	M	SD	M	SD
Salary	\$45,168.6	\$34,813.2	\$42,546.5	\$30,930.9	\$47,790.7	\$38,496.4

Sibling Incest Questionnaire

The Sibling Incest Questionnaire was comprised of fifty questions. The Questionnaire was developed based upon a review of the existing literature on sibling-incest outlined in chapter 2 of this dissertation. The literature reviewed pointed to the following variables: *Type of Sibling-incest, Sibling-incest, Perpetrator, Degree of Violence, Age Difference, Age of Onset, Frequency and Duration of Sibling-incest.*

The Sibling Incest Questionnaire, therefore, contained categories for these variables to gather information from the sibling-incest survivors who participated in this study. The descriptive information that participants provided about their sibling-incest experiences is reported below.

Type of Sibling Incest

The Type of Sibling Incest information section is composed of questions 1 to 3. The results are presented in Table 21. The largest percentage of type of sibling-incest is Brother-Sister (62.9%), the second largest type of sibling-incest is Brother-Brother (20.9%), the third type reported is Sister-Brother (13.9%) and Sister-Sister type of

sibling-incest is the lowest percentage with one case reported (2.3%). Of the two genders who are survivors of sibling-incest in this study, female survivors comprise the larger percentage (65.2%) and male survivors are the lower percentage (34.8%). Thus the majority of responses to the questions in the Sibling Incest Questionnaire were from female survivors.

Table 21

Type of Sibling Incest

Question	<i>N</i>	%
Brother-sister	27	62.9
Brother-brother	9	20.9
Sister-brother	6	13.9
Sister-Sister	1	2.3

Sibling Incest

The Sibling Incest section is composed of questions 4 to 27. In Table 22 are the range, means and standard deviations, frequencies, and percentages of the participants' responses. Questions 5, 11, 17, and 24 of the table were rated the highest, and questions 6, 18, 22, and 27 of the table the lowest. Most survivors did not disclose the incest to their parents.

Table 22

Sibling Incest

	Question	Min	Max	M	SD
Q4	Did you believe that the sibling-incest was abusive at the time it occurred?	1.00	5.00	3.07	1.65
Q5	Do you now believe as an adult that the sibling-incest was abusive?	1.00	5.00	4.63	0.87
Q6	Did you believe at the time the sibling-incest occurred that it was a mutually agreed upon experience?	1.00	5.00	2.21	1.37
Q10	Were you concerned that your parents would have blamed you if you told them about the incest?	1.00	5.00	3.49	1.45
Q11	Did you believe that you were expected to keep the sibling-incest a secret?	1.00	5.00	4.79	0.71
Q13	Do you struggle to present yourself as a well-functioning adult, even though internally you feel otherwise?	1.00	5.00	3.91	1.06
Q14	Looking back, do you think that parental leadership was lacking in your childhood home environment?	2.00	5.00	4.00	1.02
Q15	Do you think that there was poor communication in your childhood home environment?	1.00	5.00	4.42	0.88
Q16	Do you think that society views sibling-incest as a serious form of family sexual violence?	1.00	5.00	3.10	1.32
Q17	Have you ever been in counseling where the sibling-incest was addressed?	1.00	5.00	4.02	1.14
Q18	Have you had an experience with a counselor who you felt would judge you too harshly if you told him/her about the sibling-incest?	1.00	3.00	1.72	0.88
Q19	Have you often thought that the relationship between your parents was an abusive relationship?	1.00	5.00	3.35	1.45
Q20	Was your father or stepfather a heavy drinker?	1.00	5.00	2.93	1.45
Q21	Was your mother or stepmother a heavy drinker?	1.00	5.00	2.12	1.16
Q22	Was your father or stepfather overly religious?	1.00	5.00	1.77	1.23
Q23	Was your mother or stepmother overly religious?	1.00	5.00	2.74	1.58
Q24	Was your father emotionally distant from your family?	1.00	5.00	3.98	1.08
Q25	Was your mother emotionally distant from your family?	1.00	5.00	3.26	1.20
Q27	As an adult, do you spend time with the sibling who perpetrated the sibling-incest?	1.00	5.00	2.21	1.10

	Question	Yes	No	N/A
Q7	Did you disclose to your parent(s) as a child that you were the victim of sibling-incest by one of your siblings?	12 (27.9%)	31 (72%)	
Q8	If you disclosed, did your parents believe you?	7 (16.3%)	8 (18.6%)	28 (65.1%)
Q9	If you disclosed and your parents believed you, did they effectively seek to protect you?	3 (7.0%)	9 (20.9%)	31 (72.1%)
Q12	Did you disclose to your parent(s) as an adult that you were a victim of sibling-incest during childhood by one of your siblings?	19 (44.2%)	24 (55.8%)	
Q26	Do you think that the sibling-incest affected your sexual orientation?	12 (27.9%)	31 (72.1%)	

Note. $N=43$.

Perpetrator

The Perpetrator section is comprised of Questions 28, 29, and 38 to 43. Below are the means and standard deviations of the participants' responses. In Question 41 survivors were asked if the perpetrator was also a victim of sexual abuse: 25 (58.1%) endorsed Yes and 18 (41.9%) endorsed No.

Table 23

Perpetrator

Question	Min	Max	M	SD
Q28 As an adult, do you worry that your sibling still wishes to have sex with you?	1.00	5.00	1.63	1.11
Q29 As an adult, does the sibling-incest continue?	1.00	1.00	1.00	0.00
Q38 Did your sibling make you believe you shared responsibility for the incest?	1.00	5.00	3.60	1.19
Q39 Do you believe that the sibling perpetrator of the incest was an object of excessive physical punishment by your parent(s)?	1.00	5.00	2.53	1.42
Q40 Do you believe that the sibling perpetrator of the incest was an object of emotional abuse by your parents?	1.00	5.00	2.95	1.36
Q42 How old was the perpetrator of your sibling-incest experience when he or she stopped the sexual abuse?	11.00	24.00	16.74	2.71
Q43 Do you feel that there was a betrayal of trust between you and your sibling as a result of the incest, regardless of the age difference?	1.00	5.00	4.74	0.62

Degree of Violence

Degree of violence is operationalized as SIQ questions 45 to 50. In Table 24 are the frequencies and percentages for Q45 and the means and standard deviations for questions 46 to 50. In question 45, the most frequent responses were categories 1 to 7, with over 50% response rates. This question contained a list of the degrees of trauma based on the theoretical knowledge of a survivor's sibling-incest experience.

Table 24

Degree of Violence

Q45	The list below includes a number of coercive sibling-incest experiences; please circle all the experience(s) you had.	Yes (%)	No (%)
1	Your sibling showed his/her sex organs to you.	36 (83.7)	7 (16.3)
2	You were asked to show your sex organ to your sibling.	34 (79.1)	9 (20.9)
3	Your sibling touched your sex organs	42 (97.7)	1(2.3)
4	You were asked to touch your siblings sex organs.	35 (81.4)	8 (18.6)
5	Your sibling performed oral sex on you.	25 (58.1)	18 (41.9)
6	You were asked to perform oral sex on your sibling.	22 (51.2)	21 (48.8)
7	There was attempted vaginal penetration.	24 (55.8)	19 (44.2)
8	There was attempted anal penetration.	6 (13.9)	37 (86.0)
9	There was vaginal intercourse.	14 (32.6)	29 (67.4)
10	There was anal intercourse.	7 (16.3)	36 (83.7)

Questions 46, 48 received high ratings on a continuous variable that reflects an objective level of violence for the participant. Question 50 is a 10-point Likert scale that is a continuous variable reflecting a subjective level of violence for the survivor of sibling-incest. There were high ratings on this scale by participants.

		Min	Max	M	SD
Q46	Do you feel that your sibling forced you to have a sexual experience with him/her?	1.00	5.00	4.18	1.23
Q47	Was your sibling physically violent with you so you would submit to his/her sexual wishes?	1.00	5.00	2.08	1.42
Q48	Did you feel powerless with the situation of being abused by your sibling	1.00	5.00	4.58	0.92
Q49	Did your offending sibling threaten you with harm if you disclosed the incest?	1.00	5.00	2.08	1.46
Q50	How much violence did you experience by your offending sibling in the incest experience	1.00	10.00	4.55	3.71

Age Difference

The responses to Question 44 about age difference indicated that age difference between the perpetrator and victim made the experience of sibling-incest traumatic for the participants. Thirty (69.8%) endorsed Yes to the question and 13 (30%) endorsed No.

Age of Onset

In Question 30 the participant indicated how old he or she was when abuse began. The average age was 8.07 years (SD=2.37) with a range from 4 to 14 years of age. In question 37 the participant reported how old the perpetrator was when the abuse occurred. The average age was 12.91 years (SD=2.76) with a range from 7 to 21 years of age. These questions taken together indicate that perpetrator was approximately five years older than the victim when abuse began.

Table 25

Age of Onset Questions 31-33

Question	Yes		No	
	<i>n</i>	%	<i>n</i>	%
Q31 Have you felt that the age when you first experienced sibling-incest increased the psychological pain for you?	37	86.0	6	14.0
Q32 Did you ever feel depressed as a child prior to age 9 years?	31	72.1	12	27.9
Q33 Did you ever feel you were a very angry child after age 9?	19	44.2	24	55.8

Frequency and Duration

The frequency and duration of the abuse was examined by questions 34 to 36. In Question 34 the participant reported the age when the incest ended, which averaged 12.47 years of age (SD=2.37), with a range from 9 to 18 years of age. Question 35 indicated the number of times the abuse occurred; just under 50% of the victims were victimized 26 or more times.

Table 26

Frequency: Question 35: How many times did you experience sibling-incest?

Response	N	Percentage
1.00 One Time	3	7.0
2.00 Two to five times	4	9.3
3.00 Six to ten times	5	11.6
4.00 Eleven to fifteen	6	14.0
5.00 Sixteen to twenty-five times	6	14.0
6.00 Twenty-six times and more	19	44.2
Total	43	100.0

In Question 36 the participant stated the number of years he or she was victimized; over 50% were victimized four or more years.

Table 27

Duration Question 36: How long did the sibling-incest last?

Response	N	Percentage
1.00 Less than 1 year	3	7.0
2.00 1 to 2 years	4	9.3
3.00 2 to 3 years	7	16.3
4.00 3 to 4 years	6	14.0
5.00 4 to 5 years	10	23.3
6.00 More than 5 years	13	30.2

Note. N=43.

Response Bias Test

In order to ascertain the extent to which Social Monitoring, Acquiescence, and Social Desirability may be operating in the responses of a participant, a questionnaire consisting of items from published scales was administered.

The analyses of data for the response-bias measures and the psychological and relational variables in this study was conducted. The results are presented in Table 28. Dissociation, sleep disturbance, spousal fusion, intergenerational intimacy, and intergenerational fusion were significantly correlated with acquiescence. The criteria for the Response Bias measures being used as covariates under significant correlation conditions were met for the remaining scales.

Table 28

Response Bias Measures

Variable		Monitoring r	Acquiescence r	Social Desirability r
Dissociation	Pearson			
	Correlation	-.001	.235	.144
	Sig. (2-tailed)	.996	.029*	.182
	N	87	86	87
Anxiety	Pearson			
	Correlation	-.078	.117	-.115
	Sig. (2-tailed)	.470	.284	.290
	N	87	86	87
Depression	Pearson			
	Correlation	-.109	.172	-.051
	Sig. (2-tailed)	.316	.114	.636
	N	87	86	87
Sleep Disturbance	Pearson			
	Correlation	.027	.299	.076
	Sig. (2-tailed)	.807	.005**	.484
	N	87	86	87
Sexual Problems	Pearson			
	Correlation	-.023	.198	-.141
	Sig. (2-tailed)	.831	.070	.196
	N	86	85	86
Spousal Fusion	Pearson			
	Correlation	-.200	-.286	-.023
	Sig. (2-tailed)	.064	.008**	.833
	N	87	86	87
Spousal Intimacy	Pearson			
	Correlation	-.016	-.138	-.001
	Sig. (2-tailed)	.885	.206	.992
	N	87	86	87
Intergenerational Intimacy	Pearson			
	Correlation	.040	-.255	.044
	Sig. (2-tailed)	.713	.018*	.688
	N	87	86	87
Intergenerational Fusion	Pearson			
	Correlation	-.026	-.248	-.238
	Sig. (2-tailed)	.809	.021*	.026
	N	87	86	87

Note. df=1, 84. *p <.05 **p <.01

Hypothesis Testing

Hypothesis 1

Sibling-incest will affect psychological wellbeing. Specifically survivors of sibling-incest will experience greater levels of anxiety, depression, dissociation, sleep disturbance, and sexual problems than those who have not experienced sibling-incest. Levels of anxiety, depression, dissociation, sleep disturbance, and sexual problems will be operationally defined as the summary score on the Trauma Symptom Checklist-40 (TSC-40). MANOVA was used to test this hypothesis.

To examine Hypothesis 1, that sibling-incest will affect the five psychological wellbeing subscores (Anxiety, Depression, Dissociation, Sleep disturbance, and Sexual problems), a MANOVA on Psychological Wellbeing Scores (TSC-40 Summary Subscores) by groups was conducted as well as ANOVA's. The assumptions of MANOVA and ANOVA—homogeneity of covariance's (Box's M) and variances (Levene's test)—were not met. However, homogeneity of covariance is not often met in practice, and the ANOVA is a robust test (Steven, 1996). Further, the group sizes are approximately the same, so equality of variances can be assumed. The MANOVA was statistically significant, $F(5, 80) = 11.20, p < .001$ (Eta=.412, power=1.00). The ANOVA (Table 29) below show that those in the incest group had statistically greater scores on each of the five subscores compared to those who were in the non-incest group. The hypothesis, that differences exist by group, is supported.

Table 29

ANOVA on Five Psychological Subscales by Group

Dependent Variables					Incest Group		Non-Incest Group	
	F	Sig.	Eta	Power	M	SD	M	SD
Dissociation	30.848	.001	.269	1.000	1.03	.54	.44	.44
Anxiety	31.584	.001	.273	1.000	1.12	.63	.47	.43
Depression	47.292	.001	.360	1.000	1.41	.60	.66	.41
Sleep disturbance	21.784	.001	.206	.996	1.65	.80	.92	.68
Sexual problems	29.682	.001	.261	1.000	1.15	.67	.50	.41
Dissociation	(.239)							
Anxiety	(.296)							
Depression	(.266)							
Sleep disturbance	(.547)							
Sexual problems	(.307)							

Note. $df=1, 84$ Numbers in parentheses represent Mean Square Error (MSE).

Hypothesis 2

Sibling-incest will affect relational functioning. Specifically, survivors of sibling-incest will experience lower levels of intimacy and autonomy in adult relationships than those who have not experienced sibling-incest.

To examine Hypothesis 2, that sibling-incest will affect relational functioning, a MANOVA on the four relational functioning scales (Spousal Fusion, Spousal Intimacy, Intergenerational Intimacy, Intergenerational Fusion) by groups was conducted as well as ANOVA (Table 30). The assumptions of MANOVA and ANOVA were met (except on

spousal intimacy by group, $F=6.15, p < .02$). The MANOVA was statistically significant, $F(4, 82) = 15.37, p < .001$ (Eta=.429, power=1.00). The ANOVA table below show that those in the incest group had statistically lower scores on Spousal Intimacy, Intergenerational Intimacy and Intergenerational Fusion, but not on Spousal Fusion. Thus the hypothesis, that differences exist by group, is partially supported. Spousal Fusion was tending towards significance ($p < .068$).

Table 30

ANOVA on Four Relational Functioning Subscales by Group

Dependent Variables					Incest Group		Non-Incest Group	
	F	Sig.	Eta	Power	M	SD	M	SD
Spousal Fusion	3.428	.068	.039	.449	75.02	9.39	78.43	7.72
Spousal Intimacy	9.889	.002	.104	.875	36.23	12.29	43.89	10.35
Intergen Intimacy	41.948	.001	.330	1.000	72.91	19.73	98.43	16.95
InterFusion	41.883	.001	.330	1.000	22.86	5.89	30.32	4.82
Spousal Fusion	(73.715)							
Spousal Intimacy	(128.825)							
Intergen Intimacy	(337.770)							
InterFusion	(28.879)							

Note. $df=1, 85$. Numbers in parentheses represent Mean Square Error (MSE).

Hypothesis 3

The type of sibling-incest (homosexual vs. heterosexual) will not affect psychological wellbeing. Specifically, those who have experienced homosexual sibling-incest versus heterosexual sibling-incest will not differ on levels of anxiety, depression,

dissociation, sleep disturbance and sexual problems. Levels of anxiety, depression, dissociation, sleep disturbance, and sexual problems were operationally defined as summary scores on the Trauma Symptom Checklist-40 (TSC-40). MANOVA was used to test this hypothesis.

To examine Hypothesis 3, that type of sibling-incest (homosexual vs. heterosexual) would not affect the five psychological wellbeing subscores, a MANOVA on psychological wellbeing scores by sexual orientation (heterosexual vs. homosexual) was conducted as well as ANOVA (Table 31). The assumptions of MANOVA and ANOVA were met. The MANOVA was *not* statistically significant, $F(5, 80) = 1.65, p = .156$ (Eta=.094, power=.547). While overall statistical significance did not emerge, exploratory post-hoc ANOVA's were undertaken to examine whether specific psychological wellbeing variables might be significantly related to type of sibling-incest. The results below show a difference only on anxiety by sexual orientation. Those with homosexual incest had greater anxiety scores than those with heterosexual incest. Thus, the hypothesis that differences do not exist by group sexual orientation was supported. However, post-hoc exploratory analyses indicated that levels of anxiety may differ between the groups.

Table 31

ANOVA on Psychological Subscales by Orientation (Heterosexual vs. Homosexual)

Dependent Variables					Heterosexual		Homosexual	
	F	Sig.	Eta	Power	M	SD	M	SD
Dissociation	1.845	.178	.021	.269	0.71	.58	0.88	.53
Anxiety	6.083	.016	.068	.684	0.73	.61	1.18	.65
Depression	1.552	.216	.018	.234	1.00	.63	1.24	.66
Sleep disturbance	.699	.405	.008	.131	1.25	.83	1.50	.75
Sexual problems	.602	.440	.007	.120	0.81	.65	0.97	.59
Dissociation	(.319)							
Anxiety	(.379)							
Depression	(.408)							
Sleep disturbance	(.683)							
Sexual problems	(.413)							

Note. $df=1, 84$. Numbers in parentheses represent Mean Square Error (MSE).

Hypothesis 4

The type of sibling-incest (homosexual vs. heterosexual) will not affect relational functioning. Specifically, those who have experienced homosexual sibling-incest versus heterosexual sibling-incest will not differ on levels of intimacy and autonomy in adult relationships. Levels of intimacy and autonomy were defined as scores on the first four subscales of the Personal Authority in Family System Questionnaire (PAFS):

1. Spousal Fusion/Individuation,
2. Intergenerational Fusion/Individuation,
3. Spousal Intimacy, and
4. Intergenerational Intimacy.

To examine hypothesis 4, that type of sibling-incest (homosexual vs. heterosexual) would *not* affect the relational functioning subscores, a MANOVA on relational scores by sexual orientation (heterosexual vs. homosexual) was conducted as well as ANOVA (Table 32). The assumptions of MANOVA and ANOVA were met. The MANOVA was *not* statistically significant, $F(4, 82) = 2.44, p = .053$ (Eta=.106, power=.676). While overall statistical significance did not emerge, an exploratory post-hoc ANOVA was undertaken to examine whether specific relational variables might be significantly related to type of sibling-incest. The ANOVA results below show a difference only on Spousal Intimacy and Intergenerational Fusion by Sexual orientation. Those with homosexual incest had lower Spousal Intimacy and Intergenerational Fusion scores than those with heterosexual incest. Thus, the hypothesis that differences do not exist by group sexual orientation was supported. However, post-hoc exploratory analyses indicated that Spousal Intimacy and Intergeneration Fusion may differ between the groups.

Table 32

ANOVA on Four Relational Functioning Subscales by Sexual Orientation (Heterosexual vs. Homosexual)

Dependent Variables					Heterosexual		Homosexual	
	F	Sig.	Eta	Power	M	SD	M	SD
Spousal Fusion	0.283	.596	.003	.082	76.95	8.41	75.50	10.70
Spousal Intimacy	4.095	.046	.046	.516	41.12	11.95	33.75	9.98
Intergenerational Intimacy	1.720	.193	.020	.254	87.07	21.45	78.00	26.92
InterFusion	8.149	.005	.087	.806	27.40	6.08	21.83	7.44
Spousal Fusion	(76.433)							
Spousal Intimacy	(137.202)							
Intergenerational Intimacy	(494.455)							
InterFusion	(39.337)							

Note. $df=1, 85$. Numbers in parentheses represent Mean Square Error (MSE).

Exploratory Hypotheses 5 and 6

In Chapter 3 of this study, two Exploratory Hypotheses were set-up to investigate whether the level of violence would mediate the effect of sibling-incest on psychological wellbeing and relational functioning.

Hypothesis 5

The level of violence will mediate the effect of sibling-incest on psychological wellbeing. Specifically, those who have experienced a greater level of violence in sibling-incest will display higher levels of anxiety, depression, dissociation, sleep disturbance and sexual problems. It is further predicted that those who experienced sibling-incest and

lower levels of violence in relation to sibling-incest will manifest lower levels of anxiety, depression, dissociation, sleep disturbance and sexual problems

Levels of anxiety, depression, dissociation, sleep disturbance, and sexual problems were operationally defined as the summary score on the Trauma Symptom Checklist-40 (TSC-40). Levels of violence were operationally defined by responses to questions 45 to 50 on the Sibling Incest Questionnaire (SIQ) and because this instrument is not validated this hypothesis is exploratory in nature. Regression analysis was used to test this hypothesis.

Hypothesis 6

The level of violence will mediate the effect of sibling-incest on relational functioning. Specifically, those who have experienced a greater level of violence in sibling-incest will display lower levels of intimacy and autonomy in adult relationships. It is further predicted that those who experienced sibling-incest and lower levels of violence in relation to sibling-incest will manifest higher levels of intimacy and autonomy in adult relationships.

Levels of intimacy and individuation in adult relationships were operationally defined as scores on the first four subscales of the Personal Authority in Family Questionnaire (PAFS): (a) Spousal Fusion/Individuation, (b) Intergenerational Fusion/Individuation, (c) Spousal Intimacy, and (d) Intergenerational Intimacy. Levels of violence were operationally defined by responses to questions 45 to 50 on the Sibling Incest Questionnaire (SIQ) and *because this instrument is not validated this hypothesis is exploratory in nature*. Regression analysis was used to test this hypothesis.

Results of Regression Analyses

A series of 9 multiple regressions on the 15 violence variables in the Sibling Incest Questionnaire (Questions 45 to 50, see Appendix A) was conducted to examine if violence would affect the psychological and relational functioning of adult survivors of sibling-incest. When all the 15 predicting variables were analyzed together with the outcome variables, none of the multiple regressions overall was statistically significant. Thus, Exploratory Hypotheses 5 and 6 were not supported. There were, however, individual questions that did show statistical significance. In multiple regression 2, question 50 statistically predicted spousal intimacy. In multiple regression 4, question 45.6 statistically predicted intergenerational fusion. In multiple regression 5, question 50 statistically predicted dissociation. In multiple regression 7, question 45.5, question 45.10 and question 49 statistically predicted depression. In multiple regression 8, question 45.10, question 49, and Q50 statistically predicted sleep disturbance. The results are reported below.

Multiple Regression 1: Spousal Fusion

A multiple regression was conducted with 15 violence variables predicting Spousal Fusion. The model accounted for 35.5% of the variability in Spousal Fusion, and the model was not significant. None of the 15 variables statistically predicted Spousal Fusion. The results are presented in Table 33.

Table 33

Multiple Regression with 15 Violence Variables predicting Spousal Fusion

Predictor	B	SE	Beta	T	Sig.
Q45.1	2.615	9.696	.104	.270	.789
Q45.2	4.572	9.640	.200	.474	.639
Q45.3	-13.041	11.653	-.212	-1.119	.273
Q45.4	-5.689	4.736	-.239	-1.201	.240
Q45.5	-1.825	4.293	-.097	-.425	.674
Q45.6	2.874	3.954	.155	.727	.474
Q45.7	-.141	3.699	-.008	-.038	.970
Q45.8	4.205	6.629	.157	.634	.531
Q45.9	-5.601	3.844	-.283	-1.457	.157
Q45.10	-4.548	7.047	-.181	-.645	.524
Q46	-.425	1.607	-.057	-.264	.793
Q47	-3.161	1.960	-.464	-1.613	.118
Q48	1.373	2.287	.133	.600	.553
Q49	2.582	2.211	.395	1.168	.253
Q50	-.610	.838	-.244	-.728	.473

Note. $R^2=35.5$, $F(15, 27) = .992$, $p=.490$.

Multiple Regression 2: Spousal Intimacy

A multiple regression was conducted with the 15 violence variables predicting Spousal Intimacy. The model accounted for 50.9% of the variability in Spousal Intimacy, and all of the predictor variables together were not significant. However, Q50 statistically predicted Spousal Intimacy. When Q50 scores increased, Spousal Intimacy decreased ($p < .002$). In question 45, (category 5) score tended toward significance ($p < .055$), and question 45 (category 2) score tended toward significance ($p < .07$). The results are presented in Table 34.

Table 34
Multiple Regression with 15 Violence Variables predicting Spousal Intimacy

Predictor	B	SE	Beta	T	Sig.
Q45.1	-21.299	11.073	-.647	-1.924	.065
Q45.2	20.732	11.009	.695	1.883	.070
Q45.3	-11.570	13.307	-.144	-.869	.392
Q45.4	-2.862	5.408	-.092	-.529	.601
Q45.5	9.818	4.903	.399	2.003	.055
Q45.6	-6.992	4.515	-.288	-1.549	.133
Q45.7	-3.517	4.224	-.144	-.833	.412
Q45.8	-4.147	7.570	-.118	-.548	.588
Q45.9	1.935	4.390	.075	.441	.663
Q45.10	-1.127	8.047	-.034	-.140	.890
Q46	2.792	1.835	.287	1.521	.140
Q47	3.729	2.238	.418	1.666	.107
Q48	-1.324	2.612	-.098	-.507	.616
Q49	1.090	2.525	.127	.432	.669
Q50	-3.258	.957	-.997	-3.405	.002**

Note. $R^2=50.9$, $F(15, 27) = 1.868$, $p=.076$.

** $p < .01$

Multiple Regression 3: Intergenerational Intimacy

A multiple regression was conducted with the 15 violence variables predicting Intergenerational Intimacy. The model accounted for 36.4% of the variability in Intergenerational Intimacy, and the model was not significant. None of the 15 variables statistically predicted Intergenerational Intimacy. The results are presented in Table 35.

Table 35

Multiple Regression with 15 Violence Variables predicting Intergenerational Intimacy

Predictor	B	SE	Beta	T	Sig.
Q45.1	-13.261	20.244	-.251	-.655	.518
Q45.2	21.918	20.127	.457	1.089	.286
Q45.3	-19.940	24.329	-.154	-.820	.420
Q45.4	-4.715	9.888	-.094	-.477	.637
Q45.5	7.349	8.963	.186	.820	.419
Q45.6	-11.573	8.254	-.297	-1.402	.172
Q45.7	-8.202	7.723	-.209	-1.062	.298
Q45.8	-.645	13.841	-.011	-.047	.963
Q45.9	-1.233	8.027	-.030	-.154	.879
Q45.10	8.682	14.712	.164	.590	.560
Q46	-3.919	3.355	-.251	-1.168	.253
Q47	-1.631	4.092	-.114	-.399	.693
Q48	-2.065	4.776	-.095	-.432	.669
Q49	-1.234	4.617	-.090	-.267	.791
Q50	-.690	1.749	-.131	-.394	.696

Note. $R^2=36.4$, $F(15, 27) = 1.031$, $p=.457$.

Multiple Regression 4: Intergenerational Fusion

A multiple regression was conducted with the 15 violence variables predicting Intergenerational Fusion. The model accounted for 37.2% of the variability in Intergenerational Fusion, and the model was not significant. However, Q45.6 statistically predicted Intergenerational Fusion. The results are presented in Table 36.

Table 36

Multiple Regression with 15 Violence Variables predicting Intergenerational Fusion

Predictor	B	SE	Beta	T	Sig.
Q45.1	-4.396	6.003	-.279	-.732	.470
Q45.2	2.092	5.968	.146	.351	.729
Q45.3	-10.778	7.214	-.279	-1.494	.147
Q45.4	1.872	2.932	.125	.638	.529
Q45.5	1.729	2.658	.146	.650	.521
Q45.6	-5.552	2.448	-.477	-2.268	.032*
Q45.7	-.754	2.290	-.064	-.329	.745
Q45.8	6.673	4.104	.397	1.626	.116
Q45.9	.521	2.380	.042	.219	.828
Q45.10	-.074	4.363	-.005	-.017	.987
Q46	-.098	.995	-.021	-.099	.922
Q47	-.422	1.213	-.099	-.348	.730
Q48	1.021	1.416	.157	.721	.477
Q49	-.750	1.369	-.183	-.548	.588
Q50	-.073	.519	-.046	-.140	.890

Note. $R^2=37.2$, $F(15, 27) = 1.068$, $p=.426$.

Multiple Regression 5: Dissociation

A multiple regression was conducted with the 15 violence variables predicting Dissociation. The model accounted for 30.7% of the variability in Dissociation, and the model was not significant. However, Q50 statistically predicted Dissociation ($p < .024$), and Q 49 tended toward significance ($p < .06$). The results are presented in Table 37.

Table 37

Multiple Regression with 15 Violence Variables predicting Dissociation

Predictor	B	SE	Beta	T	Sig.
Q45.1	.033	.574	.023	.057	.955
Q45.2	.277	.571	.213	.486	.631
Q45.3	.352	.690	.100	.511	.614
Q45.4	.129	.280	.095	.459	.650
Q45.5	-.065	.254	-.060	-.254	.801
Q45.6	-.081	.234	-.077	-.347	.731
Q45.7	-.096	.219	-.090	-.440	.664
Q45.8	-.167	.393	-.109	-.426	.674
Q45.9	-.069	.228	-.061	-.303	.764
Q45.10	-.274	.417	-.191	-.657	.517
Q46	.145	.095	.341	1.520	.140
Q47	.038	.116	.097	.325	.748
Q48	-.081	.135	-.137	-.599	.554
Q49	.257	.131	.689	1.966	.060
Q50	-.119	.050	-.833	-2.393	.024*

Note. $R^2=30.7$, $F(15, 27) = .796$, $p=.672$.

* $p < .05$

Multiple Regression 6: Anxiety

A multiple regression was conducted with the 15 violence variables predicting Anxiety. The model accounted for 33.5% of the variability in Anxiety and the model was not significant. None of the 15 variables statistically predicted Anxiety. However, Q 45 (category 5) tended toward significance ($p < .076$), Q 45 (category 10) tended toward significance ($p < .052$), and Q 50 tended toward significance ($p < .075$). The results are presented in Table 38.

Table 38

Multiple Regression with 15 Violence Variables predicting Anxiety

Predictor	B	SE	Beta	T	Sig.
Q45.1	.524	.664	.309	.789	.437
Q45.2	-.318	.660	-.207	-.482	.634
Q45.3	.950	.798	.229	1.191	.244
Q45.4	.297	.324	.185	.916	.368
Q45.5	-.543	.294	-.428	-1.847	.076
Q45.6	.219	.271	.175	.810	.425
Q45.7	.238	.253	.189	.941	.355
Q45.8	.579	.454	.321	1.276	.213
Q45.9	-.291	.263	-.218	-1.105	.279
Q45.10	-.983	.483	-.580	-2.037	.052
Q46	.084	.110	.167	.759	.454
Q47	.079	.134	.172	.590	.560
Q48	.001	.157	.001	.004	.997
Q49	.233	.151	.529	1.540	.135
Q50	-.106	.057	-.632	-1.855	.075

Note. $R^2=33.5$, $F(15, 27) = .905$, $p=.568$.

Multiple Regression 7: Depression

A multiple regression was conducted with the 15 violence variables predicting Depression. The model accounted for 48.9% of the variability in Depression and the model was not significant. However, Q45.5, Q45.10, and Q49 statistically predicted Depression, and Q 45 (category 8) tended toward significance ($p < .052$). The results are presented in Table 39.

Table 39

Multiple Regression with 15 Violence Variables predicting Depression

Predictor	B	SE	Beta	T	Sig.
Q45.1	.548	.555	.339	.987	.332
Q45.2	-.357	.552	-.244	-.648	.523
Q45.3	.429	.667	.109	.644	.525
Q45.4	.206	.271	.134	.758	.455
Q45.5	-.545	.246	-.451	-2.216	.035*
Q45.6	.182	.226	.152	.803	.429
Q45.7	.117	.212	.097	.552	.585
Q45.8	.772	.380	.448	2.033	.052
Q45.9	-.145	.220	-.114	-.660	.515
Q45.10	-1.390	.403	-.860	-3.444	.002**
Q46	.071	.092	.149	.772	.447
Q47	.049	.112	.113	.441	.663
Q48	-.148	.131	-.223	-1.130	.268
Q49	.270	.127	.642	2.134	.042*
Q50	-.083	.048	-.516	-1.727	.096

Note. $R^2=48.9$, $F(15, 27) = 1.719$, $p=.107$.

* $p < .05$

** $p < .01$

Multiple Regression 8: Sleep Disturbance

A multiple regression was conducted with the 15 violence variables predicting Sleep Disturbance. The model accounted for 47.4% of the variability in Sleep Disturbance, and the model was not significant. However, Q45.10, Q49, and Q50 statistically predicted Sleep Disturbance, and Q 48, tended toward significance ($p < .089$). The results are presented in Table 40.

Table 40

Multiple Regression with 15 Violence Variables predicting Sleep Disturbance

Predictor	B	SE	Beta	T	Sig.
Q45.1	.612	.746	.286	.821	.419
Q45.2	-.207	.741	-.106	-.279	.782
Q45.3	.734	.896	.140	.820	.420
Q45.4	.198	.364	.097	.542	.592
Q45.5	-.452	.330	-.282	-1.368	.183
Q45.6	.269	.304	.170	.886	.383
Q45.7	.035	.284	.022	.123	.903
Q45.8	.230	.510	.101	.452	.655
Q45.9	-.391	.296	-.232	-1.321	.198
Q45.10	-1.415	.542	-.661	-2.611	.015**
Q46	.063	.124	.100	.512	.613
Q47	.085	.151	.146	.563	.578
Q48	-.310	.176	-.352	-1.762	.089
Q49	.435	.170	.781	2.559	.016**
Q50	-.152	.064	-.714	-2.358	.026*

Note. $R^2=47.4$, $F(15, 27) = 1.623$, $p=.133$.

* $p<.05$

** $p<.01$

Multiple Regression 9: Sexual Problems

A multiple regression was conducted with the 15 violence variables predicting Sexual Problems. The model accounted for 20.3% of the variability in Sexual Problems and the model was not significant. None of the 15 variables statistically predicted Sexual Problems. The results are presented in Table 41.

Table 41

Multiple Regression with 15 Violence Variables predicting Sexual Problems

Predictor	B	SE	Beta	T	Sig.
Q45.1	-.300	.768	-.168	-.391	.699
Q45.2	.456	.764	.280	.596	.556
Q45.3	-.107	.923	-.024	-.116	.908
Q45.4	.137	.375	.081	.366	.717
Q45.5	.054	.340	.040	.158	.876
Q45.6	-.107	.313	-.081	-.342	.735
Q45.7	.090	.293	.067	.306	.762
Q45.8	.483	.525	.253	.919	.366
Q45.9	.234	.305	.166	.768	.449
Q45.10	-.682	.558	-.381	-1.221	.233
Q46	-.036	.127	-.067	-.280	.782
Q47	.072	.155	.147	.461	.649
Q48	-.023	.181	-.031	-.124	.902
Q49	.104	.175	.223	.594	.557
Q50	-.083	.066	-.464	-1.243	.225

Note. $R^2=20.3$, $F(15, 27) = .458$, $p=.942$.

Post-hoc MANOVA

Three Violence Scores by Incest Group

A MANOVA was conducted to examine if there were differences on the three Violence scores: Violence 1 (Sibling Incest Questionnaire 45.1 to Question 45.10), Violence 2 (Sibling Incest Questionnaire 46 to Question 49), and Violence 3 (Sibling Incest Questionnaire 50) by Incest group (Brother/Sister Incest vs. Other Incest). The assumptions of MANOVA and ANOVA--homogeneity of covariance's (Box's M) and variances (Levene's test)--were met favorably by the incest groups. The MANOVA was not statistically significant, $F(3, 39) = 1.67$, $p = .114$ ($\eta^2 = .11$, power = .40). Three

ANOVA's are presented in Table 42 and suggest that no significant mean difference exists on Violence scores by Incest group.

Table 42

ANOVA on Three Violence scores by Incest Group (Brother/Sister vs. Other)

Dependent Variables					Brother/Sister		Other	
	F	Sig.	Eta	Power	M	SD	M	SD
Violence 1	.690 (4.10)	.411	.017	.128	5.48	2.04	6.00	2.00
Violence 2	.981 (52.15)	.328	.023	.162	18.60	6.56	16.39	8.06
Violence 3	.407 (14.34)	.527	.010	.096	5.08	3.66	4.33	3.96

Note. Values in parentheses represent Mean Square Errors.

Chi-square Test on Demographics

To investigate whether there was a significant difference in the demographics of this study between the sibling-incest survivor group and the non-incest group a chi-square statistical test was conducted.

Sex by Group

The result of the Chi-square test on Sex by group in Table 43 reveals that there was no significant difference in gender between the sibling-incest group and the non-incest group.

Table 43

Cross Tabulations on Sex by Group (Incest vs. Non-Incest)

Group	Incest	Non-Incest
Male	15	16
Female	28	28

Note. $\chi^2(1) = .021, p = .89.$

Ethnicity by Group

The result of the Chi-square test on Ethnicity by group in Table 44 shows that there was no significant difference in ethnicity between the sibling-incest group and the non-incest group.

Table 44
Cross Tabulations on Ethnicity by Group (Incest vs. Non-Incest)

Group	Incest	Non-Incest
White/American	26	15
Italian/Irish	1	2
German/American	3	3
Irish/American	3	7
Latin American	4	1
Polish American	0	2
German/Irish	0	3
Asian	0	1
Franco/American	0	1
Italian/American	2	5
Italian/Irish/French/American	0	1
Irish/Dutch	0	1
African American	2	0
Irish/Polish	1	0
Irish/French	1	0
Italian	0	2

Note. $\chi^2 (15) = 22.96, p = .085.$

Relationship Status by Group

The result of the Chi-square test on Relationship Status by group in Table 45 reveals a significant difference between the sibling-incest group and the non-incest group. There was a pattern regarding relationships in the sibling-incest group in that participants tend to be divorced or single. There was a pattern regarding relationships in the non-incest group in that the participants tend to be married.

Table 45

Cross Tabulations on Relationship Status by Group (Incest vs. Non-Incest)

Group	Incest	Non-Incest
Married	12	29
Separated	4	2
Divorced	13	6
Widowed	0	1
Single (never Married)	10	5
Committed relationship, not living together	2	0
Committed Relationship, Living Together	2	1

Note. $\chi^2(6) = 15.29, p = .018.$

Children by Group

The result of the Chi-square test on Children by group in Table 46 shows no significant difference between the sibling-incest group and the non-incest group.

Table 46

Cross Tabulations on Children by Group (Incest vs. Non-Incest)

Group	Incest	Non-Incest
Yes	27	33
No	16	11

Note. $\chi^2(1) = 1.52, p = .218.$

Religion by Group

The result of the Chi-square test on Religion by group in Table 47 reveals no significant difference between the sibling-incest group and the non-incest group.

Table 47

Cross Tabulations on Religion by Group (Incest vs. Non-Incest)

Group	Incest	Non-Incest
Roman Catholic	21	34
Baptist	1	0
Orthodox Christian	1	0
Christian	3	0
Quaker	1	0
None	5	4
Greek Orthodox	1	0
Protestant	4	1
Presbyterian	0	3
Jewish	3	2
Muslim	1	0
Episcopalian	1	0
N/A	1	0

Note. $\chi^2(13) = 19.06, p = .121.$

Parents Participants Lived With by Group

The result of the Chi-square test regarding the caretaker the participants lived with by group in Table 48 show no significant difference between the sibling-incest group and the non-incest group.

Table 48

Cross Tabulations on Parents Lived With by Group (Incest vs .Non-Incest)

Group	Incest	Non-Incest
Both Biological Parents	38	40
Parent and Stepparent	2	0
Single Parent	3	3
Adoptive Parents	0	1

Note. $\chi^2 (3) = 3.04, p = .385.$

Social Class by Group

The result of the Chi-square test on social class by group in Table 49 reveals no significant difference between the sibling-incest group and the non-incest group.

Table 49

Cross Tabulations on Social Class by Group (Incest vs. Non- Incest)

Group	Incest	Non-Incest
Poverty Level	4	2
Working Class	19	20
Middle Class	15	17
Upper Middle Class	4	5
Upper Class	1	0

Note. $\chi^2(4) = 1.92, p = .751.$

Fathers' Education by Group

The result of the Chi-square test on fathers' education by group in Table 50 shows no significant difference between the sibling-incest group and the non-incest group.

Table 50

Cross Tabulations on Fathers' Education by Group (Incest vs. Non-Incest)

Group	Incest	Non-Incest
Less than HS	7	11
GED	2	5
High School	17	17
Associate's Degree	4	1
Bachelor's Degree	3	4
Master's Degree	5	2
Beyond Master's Degree	3	4
N/A, Unknown, BLANK	2	0

Note. $\chi^2(7) = 7.54, p = .375.$

Mothers' Education by Group

The result of the Chi-square test on mothers' education by group in Table 51 reveals no significant difference between the sibling-incest group and the non-incest group.

Table 51

Cross Tabulations on Mothers' Education by Group (Incest vs. Non-Incest)

Group	Incest	Non-Incest
Less than HS	4	11
GED	2	1
High School	21	25
Associate's Degree	4	1
Bachelor's Degree	9	2
Master's Degree	2	4
Beyond Master's Degree	1	0

Note. $\chi^2(6) = 11.86, p = .065.$

Mothers' Occupation by Group

The result of the Chi-square test on mothers' occupations by group in Table 52 shows no significant difference between the sibling-incest group and the non-incest group.

Table 52

Cross Tabulations on Mothers' Occupation by Group (Incest vs. Non-Incest)

Group	Incest	Non-Incest
Executive	1	0
Manager	1	1
Administrative	7	7
Skilled Worker	11	5
Unskilled Worker	4	5
Homemaker	18	26
Student	1	0

Note. $\chi^2(6) = 5.81, p = .445.$

Fathers' Occupation by Group

The result of the Chi-square test on fathers' occupations by group in Table 53 shows no significant difference between sibling-incest group and the non-incest group.

Table 53

Cross Tabulations on Fathers' Occupation by Group (Incest vs. Non-Incest)

Group	Incest	Non-Incest
Executive	5	7
Manager	9	9
Administrative	4	2
Skilled Worker	20	20
Unskilled Worker	5	6

Note. $\chi^2(4) = 1.08, p = .898.$

Siblings in the House by Group

The Chi-square test on siblings in the house by group in Table 54 reveals significant results. Five participants in the non-incest group did not have siblings in their childhood households while growing up.

Table 54

Cross Tabulations on Siblings in House by Group (Incest vs. Non-Incest)

Group	Incest	Non-Incest
Yes	43	39
No	0	5

Note. $\chi^2(1) = 5.18, p = .023$.

Siblings Getting Along by Group

The result of the Chi-square test on siblings getting along by group in Table 55 shows a statistically significant difference between the sibling-incest group and the non-incest group. The results indicate that there is a significant difference between the groups on participants' getting along with their siblings. A significantly higher number of participants in the non-incest group usually got along with their siblings compared to a lower number of participants in the incest group.

Table 55

Cross Tabulations on Siblings Getting Along by Group (Incest vs. Non-Incest)

Group	Incest	Non-Incest
Never	0	1
Rarely	5	1
Sometimes	18	2
Usually	17	29
Always	3	7
N/A or left Blank	0	4

Note. $\chi^2(5) = 25.19, p < .001.$

Participants' Education by Group

The result of the Chi-square test on participants' education by group in Table 56 reveals no significant difference between the sibling-incest group and the non-incest group.

Table 56

Cross Tabulations on Participants' Education by Group (Incest vs. Non-Incest)

Group	Incest	Non-Incest
Less than HS	3	2
GED	2	1
High School	7	15
Associate's Degree	3	2
Bachelor's Degree	13	11
Master's Degree	12	8
Beyond Masters	3	5

Note. $\chi^2(6) = 5.10, p = .531.$

Work by Group

The result of the Chi-square test on participants' work categories by group in Table 57 shows no significant difference between the sibling-incest group and the non-incest group.

Table 57

Cross Tabulations on Participants' Work by Group (Incest vs. Non-Incest)

Group	Incest	Non-Incest
Executive	6	8
Manager	8	14
Administrative Personnel	19	15
Skilled Worker	6	4
Unskilled	2	2
Homemaker	1	1
Student	1	0

Note. $\chi^2(6) = 3.78, p = .706.$

Sexual Orientation (heterosexual vs. other) by Group

There were two ways of dividing sexual orientation by group. The result of the Chi-square test on sexual orientation to examine the relationship between heterosexual orientation and other (gay male, lesbian female and bisexual) by group in Table 58 (a) yielded a tendency toward statistical significance ($p < .06$).

Table 58

(a) Cross Tabulations between Sexual Orientation (heterosexual vs. other) by Group (Incest vs .Non-Incest)

Group	Incest	Non-Incest
Heterosexual	34	41
Other	9	3

Note. $\chi^2(1) = 3.64, p = .06$

The result of the Chi-square test on sexual orientation by group (heterosexual, gay male, female lesbian and bisexual), in Table 58 (b) yielded no statistically significant difference between the sibling-incest survivor group and the non-incest group.

(b) Cross Tabulations on Sexual Orientation by Group (Survivor vs .Non-Incest)

Group	Survivor	Non-Incest
Heterosexual	34	41
Gay Male	2	2
Female Lesbian	2	1
Bisexual	5	0

Note. $\chi^2(3) = 5.98, p = .113.$

Independent Samples t-Test: Age and Salary

To investigate statistical differences between the sibling-incest group and the non-incest group on age, an Independent Samples t-Test was conducted, and results in Table 59 show statistical significance in that the non-incest group participants were older than the incest group participants. An Independent Samples t-Test was also conducted to investigate significant differences between the sibling-incest group and the non-incest group on salary, and the results in Table 59 show that there was no statistically significant difference between groups.

Table 59

Independent Samples t – Tests on Age and Salary by Group (Incest vs. Non-Incest)

Group	<i>t</i>	<i>Df</i>	Sig.	Incest		Non-Incest	
				<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Age	-4.351	85	.001	46.30	8.89	54.70	9.12
Salary	-.696	84	.488	\$42,546.51	\$30,930.95	\$47,790.70	\$38,496.48

Summary

The title of this dissertation is “The Long-term Psychological Effects for Survivors of Sibling Incest and Their Capacities to Have Adult Relationships That are Intimate and Autonomous.” The following section is a summary of the major points that were detailed in this chapter. The significance of these data will be explained in Chapter 5.

There were 87 participants who volunteered to be included in this research project. There were 43 (49.4%) of the participants in the sibling-incest group and 44 (50.6%) participants in the non-incest group. The sample included 31 (35.6%) male participants and 56 (64.4%) female participants. All participants in the sibling-incest and non-incest groups reported having been in counseling in the past and indicated that they were in counseling currently.

Overall, the largest proportion of participants was white Americans (47.1%). In the sibling-incest group the largest proportion of participants were divorced (30.2%), and in the non-incest group the majority of participants was married (65.9%). There was a higher percentage of participants in the sibling-incest group (23.3%) who never married than in the non-incest group (11.4%). The sibling-incest group had a slightly lower percentage of participants with children (62.8%) than did the non-incest group (75.0%). The largest proportion of participants was Roman Catholic (63.2%). The majority of participants had siblings in the household (94.3%). The largest proportion of participants in the sibling-incest group had a bachelor's degree (30.2%), and the largest proportion of participants in the non-incest group had a high-school education (34.1%). The majority of participants in the sibling-incest and non-incest groups reported a heterosexual orientation (86.2%). The participants in the non-incest group were significantly older than the sibling-incest group.

The Sibling Incest Questionnaire comprised fifty questions. It is categorized in the results section into the following headings: *Type of Sibling Incest, Sibling Incest, Perpetrator, Degree of Violence, Age Difference, Age of Onset, Frequency and Duration.*

The largest percentage of *Type of Sibling Incest* was Brother-Sister (62.9 %), the second largest type was Brother-Brother (20.9%), the third largest type reported was Sister-Brother (13.9%) and Sister-Sister type was the lowest (2.3%).

Sibling Incest

The *Sibling-incest* data from the survivors in the sibling-incest group indicated that most of the participants believe that the incest was abusive and that they were expected to keep the incest secret. The majority of survivors thought there was poor communication in their childhood home environments. The data showed that most survivors did not disclose the incest to their parents as children, but that a majority of them did disclose the incest to their parents as adults.

The data provided by the survivors about the perpetrators indicate that a majority of them (58%) believed that the perpetrator was also a victim of sexual abuse. A high number of survivors in this research specified that the sibling-incest was a betrayal of trust regardless of the age difference between self and the perpetrator.

Degree of Violence

The *Degree of Violence* in this study was operationalized in questions 45 to 50 of the Sibling Incest Questionnaire. For question 45 the most frequent responses were categories 1 to 7 with over 50% positive response rates to those questions. A high number of participants gave high ratings to question 46, which indicated that a participant felt that a perpetrator forced him/her to have a sexual experience. A high number of participants also give a high rating to question 48, affirming that the survivor believed that he or she felt powerless with the situation of sexual abuse by a sibling. On a scale of 1 to 10 in

Question 50 of the Sibling Incest Questionnaire the survivor rated how much violence the individual subjectively believed he or she experienced from the offending sibling in the incest experience. A majority of participants rated the sibling-incest experience as moderately violent.

Age of Onset

The *Age of Onset* questions in the Sibling Incest Questionnaire indicated that the average age when sibling-incest occurred for the participants in the sibling-incest group was 8.07 years (SD=2.37) with a range from 4 to 14 years of age. The questions (31 to 33) taken together indicated that the perpetrator was approximately five years older than the victim when the sibling-incest began.

The average age when the sibling-incest ended for the victim was 12.47 years of age with a range from 9 to 18 years of age. Just under 50% of the victims were victimized 26 or more times, and over 50% were victimized for four or more years.

Hypotheses

There were four main hypotheses examined in this study.

Hypothesis 1: Sibling-incest would affect psychological wellbeing. Specifically, survivors of sibling-incest would experience greater levels of anxiety, depression, dissociation, sleep disturbance and sexual problems than those who have not experienced sibling-incest. The MANOVA was statistically significant. ANOVA revealed that those in the sibling-incest group had statistically significant greater scores on each of the five subscales compared to those in the non-incest group. Thus hypothesis 1, that differences exist by group, was supported.

Hypothesis 2: Sibling-incest would affect relational function. Specifically, survivors of sibling-incest would experience lower levels of intimacy and autonomy in adult relationships than those who have not experienced sibling-incest.

In order to examine Hypothesis 2, a MANOVA on the four relational function scales (Spousal Fusion, Spousal Intimacy, Intergenerational Intimacy, and Intergenerational Fusion) by groups was conducted. The MANOVA was statistically significant. ANOVA's were also conducted and showed that those in the sibling-incest group had statistically lower scores in Spousal Intimacy, Intergenerational Intimacy, and Intergenerational Fusion, but not on Spousal Fusion. Thus the hypothesis, that differences exist by group, is partially supported. Spousal Fusion tended toward statistical significance ($p < .068$).

Hypothesis 3: The type of sibling-incest (homosexual vs. heterosexual) would not affect psychological wellbeing. Specifically, those who had experienced homosexual sibling-incest versus heterosexual sibling-incest would not differ on levels of anxiety, depression, dissociation, sleep disturbance and sexual problems. MANOVA was used to test this hypothesis and was not statistically significant.

To examine whether any psychological wellbeing variables might prove significant, an exploratory post-hoc ANOVA was also conducted and showed a difference in the Anxiety subscale by sexual orientation. Those who had experienced homosexual incest had greater anxiety scores than those with heterosexual incest. Thus, the hypothesis that differences did not exist by group sexual orientation was supported.

However, post-hoc exploratory analyses indicated that levels of anxiety might differ between groups.

Hypothesis 4: The type of sibling-incest (homosexual vs. heterosexual) would not affect relational functioning. Specifically, those who have experienced homosexual sibling-incest versus heterosexual sibling-incest would not differ on levels of intimacy and autonomy in adult relationships.

A MANOVA on relational scores by sexual orientation (homosexual vs. heterosexual) was conducted and was not statistically significant. To examine whether any variables might prove significant, an exploratory post-hoc ANOVA showed differences on Spousal Intimacy and Intergenerational Fusion by sexual orientation. Those with homosexual incest had lower Spousal Intimacy and Intergenerational Fusion scores than those with heterosexual incest. Thus, the hypothesis that differences did not exist by group sexual orientation was supported. However, post-hoc exploratory analyses indicated that Spousal Intimacy and Intergenerational Fusion might differ between the groups.

The exploratory hypotheses 5 and 6 were investigated by a series of 9 multiple regressions on the 15 violence variables in the Sibling Incest Questionnaire (Questions 45 to 50). When all of the 15 predicting variables were analyzed together with the outcome variables, none of the multiple regressions was statistically significant. There were, however, individual questions that showed statistical significance and in chapter 5 of this study these will be stated to explore their implications.

A MANOVA was conducted to examine if the violence scores in this study (Sibling Incest Questionnaire 45 to 50) differed by Sibling Incest groups, and the MANOVA was not statistically significant.

In order to investigate whether there were any significant differences in the demographics of this study between the sibling-incest survivor group and the non-incest group, Chi-square statistical tests were conducted. The results of the Chi-square test indicated significant statistical differences in relationship status by groups, in siblings in house by groups, and in siblings getting along by groups. An Independent Samples t-Test was conducted to assess statistically significant differences between the sibling-incest group and the non-incest group on age and salary. The results showed that the non-incest group was significantly older than the sibling-incest group and that there was no significant statistical difference between groups on salary.

CHAPTER V: SUMMARY, CONCLUSIONS, RECOMMENDATIONS

This study was focused on sibling-incest, a topic that has not been sufficiently addressed in prior studies. Research studies on the harmful effects of sibling-incest began to emerge in the latter part of the last century. As a result, the research on sibling-incest is in its infancy and is exploratory in nature. The available literature indicated strongly that this problem requires further serious study.

The current study on sibling-incest was designed to address this form of childhood sexual abuse, and to address gaps in the existing literature. Previous research focused mainly on the psychological effects of sibling-incest for survivors. This project included a study of the psychological effects for survivors of sibling-incest and an expansion of the research to the relational area by investigating a survivor's ability to maintain intimate and autonomous adult relationships. The existing research on sibling-incest had been concentrated on one type of sibling-incest, older brother-younger sister incest. This study concerned all four types of sibling-incest: brother-sister, sister-brother, sister-sister, and brother-brother.

The sexual abuse of children has come to be widely regarded as a major cause of mental health problems in adult life (Fleming & Mullen, 1998). The initial research on childhood sexual abuse was triggered by the self-disclosures of adults who reported abuse

as children; this evolved into the public health concern that exists today for childhood sexual abuse. The research on childhood sexual abuse led to research on childhood incest and in particular father-daughter incest, which is the form of sexual abuse most often reported to authorities. That body of research has produced interest in the long-term psychological effects of childhood incest on the victims, and the literature on sexual-abuse suggests that an individual at-risk may develop depressive symptoms, anxiety symptoms, and post-traumatic stress disorder (Briere & Runtz, 1988; Bryer et. al., 1987; Craine et al., 1988; Lindberg & Distad, 1985; Romans et al., 1995). The influence of child sexual abuse on interpersonal functioning in a survivor's adult life has received less attention than the more pronounced mental health problems (Tomison, 1996).

The focus on adult-child incest has overshadowed sibling-incest. Society's awareness of sibling-incest and response to the problem has lagged behind other child abuse issues and concerns. This, of course, has practical consequences for research, prevention, and treatment. Sibling-incest was historically viewed as a harmless phenomenon (Forward & Buck, 1978; Strong & Reynolds, 1982) because no generational boundaries were violated (Canavan, Hess, & Meyers, 1992). This view also led to a delay in research on sibling-incest (Caffaro & Caffaro, 1998).

The existing research on sibling-incest has not involved control groups or comparison groups in the research methodologies. In the current study, both sibling-incest group and non-sibling-incest group participants completed surveys.

Sibling-incest in this study was defined as: (a) sexually oriented physical interaction between siblings while growing up, which (b) must be kept secret during their

non-adult years in their family. In past research, childhood sibling-incest has generally required a five-year age difference between the participants (Laviola, 1992). In this study, age difference was not a limiting factor in defining sibling-incest.

Demographic Profile of Participants in this Study

There were 87 participants in this research study, 43 in the sibling-incest group and 44 in the non-incest group. The sample included 56 female (64.4%) and 31 male participants (35.6%). The non-incest group participants were older (54.7 years) than the sibling-incest group of participants (46.3 years). The average salary of the non-incest group was higher (\$47,790.70) than the average salary of the sibling-incest group (\$42,546.51). A high percentage of participants in the sibling-incest group had a bachelor's degree (27.6%), and a high percentage of participants in the non-incest group had a high-school education (34.1%). These data show that the incest participants were younger, had a higher level of education but earned a lower income than the non-incest group. Although no statistical difference was found, the majority of participants were white Americans; the incest group participants were not as ethnically diverse as were their counterparts. In religious affiliation, the largest percentage of participants was Roman Catholic (63%) perhaps because many of the participants were solicited from Catholic agencies. Although not statistically different, the religious affiliations of the incest group participants were more diverse. For the sibling-incest group, the majority lived with both biological parents (88.4%) in childhood as did the majority of non-incest participants (90.9%). Overall, the majority of participants had siblings in their childhood home (94.3%), but the incest group participants did not get along as well with their

siblings compared to participants in the non-incest group. The largest proportion of participants was from working-class homes (44.8%), the plurality of participants' fathers (39.1%) had a high-school education, and the majority of participants' mothers had a high-school education (52.9%). However, the level of education for the parents of the incest group participants was slightly higher than that of the non-incest group participants. The plurality of participants' fathers' occupation (46%) was skilled workers, and the majority (50.6%) of mothers of participants was homemakers. The plurality of participants worked as administrative personnel (39.1%), and a lower percentage of the participants in the incest group worked as managers or executives despite their higher level of education. The majority of participants' sexual orientation was heterosexual (86.2%).

A Chi-square test investigated whether there were any statistically significant differences in the demographics of this research study between the sibling-incest group and the non-incest group. The results indicated *statistically significant differences in the relationship status between groups*. The number of participants in the non-incest group who were married was more than double the number of participants in the incest group who were married. A larger proportion of participants in the sibling-incest group were divorced compared to non-incest group participants. The number of divorced participants in the incest group was double the number of divorced participants in the non-incest group. Furthermore, the number of participants in the incest group who were single and never married was double the number of participants in the non-incest group who were single and never married.

The results of the test to determine statistically significant differences between demographic groups indicated statistically significant differences in siblings in the house by group. All of the participants in the sibling-incest group had siblings in their childhood home while 11.4% (5) of participants in the non-incest group had no siblings in their childhood homes.

The statistical investigation to examine differences between demographic groups indicated statistically significant differences in siblings getting along with one another by groups. A higher percentage of participants in the non-incest group (65.9%) usually got along with their siblings compared to a lower percentage (39.5%) of participants in the incest group who usually got along with their siblings. The percentage of participants in the non-incest group who always got along with their siblings was more than double the percentage of participants in the incest group who always got along with their siblings. The results indicate the incest group participants did not get along with their siblings as well as the participants in the non-incest group.

Major Findings of the Research Study

There were four hypotheses examined in this study. The major findings were that sibling-incest has a profound and statistically significant impact on the psychological wellbeing and relational functioning of adult survivors of sibling-incest.

Hypothesis 1: Sibling-incest will affect psychological wellbeing.

It was expected that survivors of sibling-incest would experience greater levels of anxiety, depression, dissociation, sleep disturbance, and sexual problems than those who have not experienced sibling-incest. The psychological variables were operationally

defined as the summary scores on the Trauma Symptom Checklist-40, and MANOVA was used to test this hypothesis. The MANOVA was statistically significant. The ANOVA showed that those in the survivor group had statistically higher scores on each of the five subscores compared to those in the non-incest group. The hypothesis that differences exist by group was supported.

The existing literature that lends support to Hypothesis 1 includes studies by Fleming and Mullen (1998) which advances the theory that the social, interpersonal, and sexual problems associated with a history of child sexual abuse may provide fertile ground for the development of mental-health problems, particularly in the area of depressive disorders. That there are serious long-term psychological effects for victims of sibling-incest has been a consistent finding of research (Canavan et al., 1992; Courtois, 1988; Daie et al., 1989; de Young, 1982; Laviola, 1989; Russell, 1986). Briere and Runtz (1989) suggested that those with a sexual-abuse history showed greater depressive symptoms than those who did not. Wiehe (1990) reported, from his survey research of sibling-incest survivors, that adult survivors of this form of sexual abuse experience psychological problems with depression, anxiety, sexual dysfunction and difficulty with interpersonal relationships.

Hypothesis 2: Sibling-incest will affect relational functioning.

It was expected that survivors of sibling-incest would experience lower levels of intimacy and autonomy in adult relationships than those who had not experienced sibling-incest. Levels of intimacy and autonomy were operationally defined as scores on the first four subscales of the Personal Authority in Family System Questionnaire (PAFS).

MANOVA was used to test this hypothesis. The MANOVA was statistically significant. The ANOVA showed that those in the survivor group had statistically lower scores on Spousal Intimacy, Intergenerational Intimacy, and Intergenerational Fusion, but not on Spousal Fusion. Thus the hypothesis, that differences exist by group, was partially supported. Spousal Fusion tended towards significance.

The findings of hypothesis 2 are consistent with the findings of Alexander (1993), Briere and Runtz (1988), and Jehu (1989) implying an association between child sexual-abuse and the adult survivor's difficulties with intimate adult relationships. Increased rates of adult relationship breakdown have also been reported in studies of adults exposed to child-sexual abuse (Beitchman, 1991; Fleming & Mullen, 1988). Almost half (47%) of the victims of brother-sister sibling-incest in Russell's (1986) study had never married. Abraham and Hoey (1995) noted that sibling-incest impacts the life of the victim not only in serious psychological ways such as depression, but also in the interpersonal lives of survivors. As suggested by Wiehe (1990), adult survivors of sibling-incest experience problems with intimacy in adult relationships. In addition, adult survivors of sibling-incest have difficulty differentiating from their families-of-origin, resulting in fused or disengaged relationships in adulthood (Caffaro & Caffaro, 1998).

Hypothesis 3: The type of sibling-incest (homosexual versus heterosexual) will not affect psychological wellbeing.

Specifically, those who have experienced homosexual sibling-incest versus heterosexual sibling-incest will not differ on levels of anxiety, depression, dissociation, sleep disturbance and sexual problems. These psychological variables were operationally

defined as summary scores on the Trauma Symptom Checklist-40. MANOVA was used to test this hypothesis. The MANOVA was not statistically significant. While overall statistical significance did not emerge, exploratory post-hoc ANOVA examined whether specific psychological wellbeing variables might be significantly related to type of sibling-incest. Those with homosexual incest had greater anxiety scores than those with heterosexual incest. Thus, the hypothesis that differences do not exist by group sexual orientation was supported. However, post-hoc exploratory analyses indicated that levels of anxiety may differ between groups. The results of ANOVAs must be considered with caution because of the possibility for Type-I error.

Hypothesis 4: The type of sibling-incest (homosexual versus heterosexual) will not affect relational functioning.

Specifically those who have experienced homosexual sibling-incest versus heterosexual sibling-incest will not differ on intimacy and autonomy in adult relationships. These relational variables were operationally defined as scores on the first four subscales of the Personal Authority in Family System Questionnaire. MANOVA was used to test this hypothesis. The MANOVA was not statistically significant. While overall statistical significance did not emerge, an exploratory post-hoc ANOVA was conducted to examine whether specific relational variables might be significantly related to type of sibling-incest. The ANOVA results showed a difference only on Spousal Intimacy and Intergenerational Fusion by sexual orientation type of incest. Those with homosexual incest had lower Spousal Intimacy and Intergenerational Fusion scores than those with heterosexual incest. Thus, the hypothesis that differences do not exist by group

sexual orientation was supported. However, post-hoc exploratory analyses indicated that Spousal Intimacy and Intergenerational Fusion may differ between the groups. The results of ANOVAs must be considered with caution because of the possibility for Type-I error.

Thus, hypotheses three and four that type of sibling-incest (homosexual versus heterosexual) will not affect psychological wellbeing or relational functioning were supported. The literature on this aspect of sibling-incest is non-existent.

In the proposal for the analyses of data in this study, it was proposed that the level of violence in the sibling-incest experience would affect both the psychological and relational functioning of the survivor. The three measurements of violence (Q: 45, Q's: 46 to 49 and Q: 50, see Appendix A) were analyzed by multiple regression analyses. When all the 15 predicting variables were analyzed with the outcome variables, none of the nine multiple regressions were statistically significant. Thus, Exploratory Hypotheses 5 and 6 were not supported.

There were, however, individual questions that did show significance. In multiple regression 2, question 50 statistically predicted spousal intimacy. In multiple regression 4, question 46.6 statistically predicted intergenerational fusion. In multiple regression 5, question 50 statistically predicted dissociation. In multiple regression 7, question 45.5, question 45.10, question 49, and question 50 statistically predicted sleep disturbance. The small sample size did not possess sufficient power to determine overall significance in the multiple regressions testing Hypotheses 5 and 6.

This study tested the following research questions:

1. Does the psychological wellbeing and relational functioning of survivors of sibling-incest differ from those who have never experienced sibling-incest?
2. Does the type of sibling-incest (homosexual verses heterosexual) affect the psychological wellbeing or relational functioning of survivors of sibling-incest?
3. Does the level of violence of sibling-incest mediate the psychological wellbeing and relational functioning of survivors of sibling-incest?

Discussion of Descriptive Findings in Relation to the Literature

The literature review of this study focused on the following types of sibling-incest variables: type of sibling-incest, sibling-incest, the perpetrator, degree of violence, age difference, age of onset, frequency, and duration of the incest. The Sibling Incest Questionnaire was constructed according to these variables, and only the adult survivors of sibling-incest in this study completed this survey. The non-incest group never experienced sibling-incest and did not fill-out the Sibling Incest Questionnaire.

Type of Sibling Incest

The largest percentage of type of sibling-incest reported in this study was brother-sister (62.9%), the second largest was brother-brother (20.9%), followed by sister-brother (13.9%), and sister-sister (2.3%). These findings on four types of sibling-incest are important because any comparative literature on four types of sibling-incest is non-existent. A purpose of this study was to fill in a gap in the literature regarding the four types of sibling-incest. In this study women comprised the majority of survivors (65.2%).

The findings on gender-type were similar to the results of Caffaro and Caffaro (1998) on survivors of sibling-incest in which 67% of participants were female.

Sibling Incest

The participants in this study overall viewed their sibling-incest experience as abusive. That they believed their incest experiences were abusive is supported by the literature. Bank and Kahn (1982) considered sex between siblings as abusive because children are incapable of giving consent. This finding is similar to that of Russell (1987), Cole (1990), Wiehe (1990), and Caffaro and Caffaro (1998). This study did not support the assertions by Forward and Buck (1978) that sibling sexual contact is non-abusive and perhaps even positive.

The participants in this study reported they did not believe that the sibling-incest was a mutually agreed upon experience similar to the findings of Bank and Kahn (1982). The participants in this study did not disclose the incest to their parent(s) as children, and they were concerned that their parent(s) would have blamed them if they had disclosed the incest. Cole (1982) observed that women who experienced sibling-incest shared characteristics of women who were victims of parent-child incest: they feared they would not be believed. In his retrospective study of college students about their childhood sexual experiences Finkelhor (1979) found that most of the respondents reported that they had not discussed the experiences of childhood sibling-incest with anyone. He stated that the pain of keeping the incest secret then added to the trauma of the experience itself. The author speculated that the children did not tell anyone of the experiences because of fears of not being believed and fears of being blamed. Overall the participants in this present

study believed they were expected to keep the sibling-incest a secret. Many told their parents later in adulthood. This is a different finding compared to Caffaro and Caffaro's (1998) results that silence about the sibling-incest continued into adulthood.

Participants in this study reported their belief that parental leadership was lacking in their childhood home environments; they indicated there was poor communication in their home as well. Smith and Israel (1987), in their descriptive study of 25 cases of sibling-incest, reported that sibling-incest families had loose boundaries or undefined parent-child roles since parental leadership was lacking. These authors reported that a sibling-incest home is frequently one in which poor communication patterns are the norm.

The participants in this study reported fathers were usually emotionally distant from their families, similar to the findings of Smith and Israel (1987) in which fathers of sibling-incest victims were either physically or emotionally distant from their families.

In this research project the survivors of sibling-incest believed that society views sibling-incest as a serious form of family violence. This is not supported by Caffaro and Caffaro (1998) who noted that, despite the accumulating research substantiating the high incidence of sibling-incest and its harmful effects, society tends to ignore it as a problem. Also, the participants in this project indicated that they rarely experienced therapists who tend to ignore the significance of sibling-incest. Caffaro and Caffaro (1998) noted that therapists tended to ignore the problem of sibling-incest. These differences between the findings of this research project and that of Caffaro and Caffaro (1998) could perhaps be

explained by the nine year difference in these studies and a change in adult survivors' beliefs that society and therapists view sibling-incest as a serious form of family violence.

Perpetrator

In this study, perpetrators were generally about five years older than the survivors at the onset of the sexual abuse. The average age of the perpetrator when the sibling-incest began was about 12 ½ years, and the average age that the perpetrator stopped the sexual abuse was 16 ¾ years. The survivors in this study reported that the perpetrators made them believe there was shared responsibility for the sibling-incest. This supported the findings of O'Brien (1991) regarding adolescent sibling-incest offenders. O'Brien proposed that victims of sibling-incest were gradually induced by the perpetrator to share equal responsibility for the sexual behavior so that the victim would share in the blame and punishment for the behavior if the secret were disclosed.

The participants in this study also believed that the perpetrators were an object of physical punishment by their parents. This corroborated the study of Worling (1995) who noted that adolescent male sibling-incest perpetrators experienced significantly more physical punishment from their parents than non-sibling sex offenders. Adler and Schutz (1995) also reported that 92% of male-sibling-incest offenders were physically abused by a parent.

The majority of participants (58.1%) indicated in this research study that they believed their sibling-perpetrators were victims of sexual abuse. In Becker's (1986) study of adolescent-male-sibling sex-offenders, 23% reported having been sexually abused as children.

The literature reviewed found an almost exclusive focus on male perpetrators of sibling-incest. In this research all four-types of sibling-incest were studied. The finding that 16.2% of the perpetrators were female perpetrators of both male and female victims was not found in other research studies. These results must be included in future research studies on perpetrators of sibling-incest.

Degree of Violence

Participants in this study rated the sibling-incest experiences as having high degrees of violence. The degrees of violence in this study were operationalized as Sibling Incest Questionnaire questions 45 to 50 (see Appendix A). Question 45 contained a list of ten categories of degree of trauma based on the theoretical knowledge of a survivor's sibling-incest experience. In question 45 the most frequent positive responses were categories 1 to 7 with over 50% positive response rates (categories 1 to 7 ranged from showing sexual organs to attempted vaginal penetration). In category eight, 13.9% of perpetrators attempted anal penetration with the survivor. In category nine, 32.6% of survivors experienced vaginal intercourse with the perpetrator. In category ten, 16.3% of survivors' experienced anal intercourse with the perpetrator. In Finkelhor's (1979) landmark non-clinical survey research study with college students on childhood sexual experiences, the most common sibling-incest activities were reported to be fondling and touching of sexual organs. In this present research study the most common sibling-incest activities went beyond fondling and touching to include oral sex and attempted vaginal penetration. The results of Russell's (1986) study demonstrate that sexual abuse may be more traumatic for the victim when genital contact such as intercourse is performed.

Sibling Incest Questionnaire item 46 to 49 involved ratings on a continuous variable that reflected an objective level of violence for the survivor. In question 46 the participants reported that they felt that the perpetrators forced sexual experiences. Russell (1986) noted that in 44% of the sibling-incest cases she studied, the brothers' primary strategy for initiating and continuing the sexual experience was physical force. A number of researchers have found that the use of force correlated with the degree of trauma (Courtois, 1988; Laviola, 1989; Worling, 1995). Pierce and Pierce (1990) proposed that sibling-incest involving force is power-oriented incest.

In item 47 participants indicated that the perpetrator rarely was physically violent; however, responses to item 48 suggested that the victims felt powerless. Wiehe (1990) proposed that the typical response of sisters who were victims of sibling-incest was quiet compliance because they felt powerless in the sexual experience.

In the current study, the participants rarely experienced threats of harm from the perpetrator if he/she disclosed the incest (item 49), but Wiehe (1990) suggested that sibling-incest occurs in the context of threat of physical harm. One reason for this result from participants in the current study might be a denial of the threat of harm on their parts.

Question 50 was a 10-point Likert-type scale reflecting subjective levels of violence for the participants in this study. The participants gave moderate ratings on this scale, indicating that they felt the sibling-incest was a moderately violent experience for them. Laviola (1989) noted the magnitude of a child's experience with sibling-incest

appears to be proportional to the subjective emotional significance of the experiences for the victims.

A series of 9 multiple regressions on the 15 violence variables in the Sibling Incest Questionnaire (Questions 45 to 50) were used to examine if the level of violence in the sibling-incest experience would affect the psychological and relational functioning of the survivor. However, none of the multiple regressions were statistically significant.

The subjective measures of trauma from the 15 violence variables in the Sibling Incest Questionnaire strongly indicate the participants believed the abuse was highly violent; however, the objective measures of violence tested in the Multiple Regression indicated otherwise. This discrepancy might be explained by the small sample size which did not possess sufficient power to show a statistically significant effect.

Age of Onset of Abuse

The average age when the sibling-incest began for the survivors in this study was 8.07 years with a range from 4 to 14 years of age. Cole (1990) studied a volunteer sample of 122 adult women from 28 states who experienced sibling-incest and found the mean age of the onset of the sexual abuse was 8.2 years. Meiselman (1978) noted that 37% of women whose incest experience commenced prior to puberty were seriously disturbed as adults. Courtois (1979) reported that the victim's long-term relationships with men and their experiences of self-worth were both negatively affected if abuse began prior to puberty. Finkelhor (1979) and Russell (1986) were unable to find a significant association between age of onset of abuse and emotional trauma in adulthood. The

participants reported that the average age of the perpetrator when the sibling-incest began was 12.91 years with a range from 7 to 21 years of age.

Age Difference

A large majority of participants (86.0%) felt that the age when they experienced sibling-incest increased the psychological pain for them. Overall, 72.1% of the survivors reported feeling depressed as a child prior to age 9, and 44.2% of the survivors in this study reported being very angry as children after age 9. A majority of participants (69.8%) believed that the age difference of sibling-incest was traumatic for them. The responses from participants on age demonstrate that the perpetrators were approximately five years older than the victims. Regardless of age difference survivors viewed sibling-incest as a betrayal of trust. This is similar to the findings of other researchers (Canavan, Meyer & Higgs, 1992; Daie, Eleff & Witztum, 1989) who noted that, regardless of the age difference, sibling-incest is a trauma for survivors and a betrayal of trust. Bank and Kahn (1982) pointed out that the more trusting the sibling relationship was prior to the incest, the more severe the aftereffects would be for the participants. Herman (1988) noted that a sexual experience that feels exploitative, frightening, or unusual regardless of age of the participants should not be ignored. The preponderance of evidence suggests that, regardless of age difference, victims of sibling-incest feel the abuse was a betrayal of trust.

Frequency and Duration

Just under 50% of sibling-incest victims in this study indicated they were sexually abused 26 or more times. Russell's (1986) data indicated that 46% of the incidents of

incestuous abuse that occurred only once were described as considerably traumatic while 61% of the experiences that occurred from two to twelve times, and 78% of the experiences that occurred more than twenty times were extremely traumatic. The more frequently children are traumatized, the more likely they will suffer severe symptoms. Overall 53.5% of participants were victimized for four or more years. Cole (1990) found that sibling-incest lasted from 4 to 10 years. Russell noted that 73% of the abuse that lasted more than five years was extremely traumatic. Herman (1986) reported a correlation between duration of sexual abuse and the long-term impact on the lives of the victims. That the duration of the sibling-incest determines the extent of the trauma to the victims was suggested by Caffaro and Caffaro (1998). The frequency and duration of sibling-sexual abuse for participants in this current study was extremely high, and the results indicate a statistically significant traumatic impact on their psychological and relational adult life.

Model of Abuse

The conceptual framework for this study was the Developmental and Social model of abuse proposed by Fleming and Mullen (1998). The model by Fleming and Mullen pointed out that the sexual abuse of children takes place during a period of life when normally complex and ordered changes are occurring in a child's physical, psychological, and social being. The normal state of flux leaves the child vulnerable to sustaining damage that may prevent normal developmental processes. The impact of abuse is likely modified by the developmental stage at which it occurs. Those with histories of child sexual abuse, particularly of the most physically intrusive types, are at

an increased risk of social, interpersonal, and psychological problems in adult life. This association may play a role in mediating at least some of the better-known associations between child sexual abuse and mental-health problems.

The findings of this study support this model, in that those participants with a history of sibling-incest appear to have an increased risk for interpersonal problems, which may be the grounds for the development of mental-health problems in adulthood. The hypothesis advanced in this study is that the developmental disruptions engendered by childhood sibling-incest may diminish a survivor's capacity for entering trusting and intimate relationships in adulthood. In her study, Russell (1986) reported that 47% of sibling-incest victims never married. In this current study, 23.3% of sibling-incest participants never married compared to 11.4% of non-incest participants who never married. In addition the results from the major findings of this research study support the proposition that sibling-incest has a significant impact on the psychological wellbeing and relational functioning of adult survivors compared to non-incest participants. However, this conceptual model of abuse proposed by Fleming and Mullen (1998) was not able to be statistically tested by Structural Equation Modeling because the clinical sample was too small.

Limitations

The causal comparative research design of this study has a number of limitations. The sample was not a random sample, and therefore, the results may not be generalized to the greater population. In addition, because of the distress that may have been experienced by the participants as a result of the nature of the information requested,

response validity may be influencing the results. This adult retrospective study of sibling-incest is subject to memory and false memory bias.

Another major limitation of this study is that the Sibling Incest Questionnaire is a semi-demographic inventory and has not been validated and tested for reliability. Since there seemed to have been no existing reliable and valid questionnaire on sibling-incest, the questionnaire was developed by this researcher based on the variables in the literature, which comprised the sibling-incest experience of survivors tested in other research studies. The violence measures from the Sibling Incest Questionnaire (Questions 45 to 50, see Appendix A) may have been confusing to participants and thus not measure correctly the violence involved in the participants' sibling-incest experiences. The questions in general may not have provided the opportunity for the participants to report the intensity of their sibling-incest experiences. The sample was not large enough to provide power and effect size to measure if violence differed by the groups of type of sibling-incest. The model of abuse proposed in this study was not statistically examined because of the small sample size.

Due to the sensitive nature of this study, the methodology was understandably restricted because of ethical considerations; therefore, it was not possible to solicit as many participants as perhaps would have been willing to participate in this study. What is known about the non-incest group is that they were participants who were in therapy and who never experienced sibling-incest. They may have been abused in some other way. The participants who were from Catholic-related agencies may have a religious affiliation, which also impacted their responses. The inventories were mailed to the

therapists of the participants, and there is no sure way to know if the therapist filled it out with the participants in the process of therapy or if the participants filled out the questionnaires themselves. The fact that the surveys were collected over time may have had an impact upon the responses in some way, thus affecting internal validity.

The sample of participants in this study was gathered with a great deal of difficulty even though it was a nationwide search for volunteers. The participants were difficult to find mainly because there were so few treatment facilities or therapists actively counseling adult survivors of sibling-incest. It is also noteworthy to mention that, when those facilities and therapists were discovered, the response was overwhelmingly positive that there was interest in the research community for this clinical problem. Comments attached to the survey results of participants and their therapists indicated an appreciation that this research on sibling-incest was being conducted.

The 8-year age difference between the sibling-incest group and the non-incest group is a generalizability issue and not a major liability to the results of this study. The chi-square tests on significant differences between demographic groups show statistically significant differences only on relationship status, number of siblings in the house, and how the participants in both groups got along with their siblings. The relationship differences in the incest-group indicate that there were more divorces for the sibling-incest group compared to the non-incest group, in which participants tended to be married. There were five participants in the non-incest group who did not have siblings in their childhood households while growing up, and a higher number of participants in the non-incest group usually got along with their siblings compared to a lower number of

participants in the incest group. All the other chi-square tests on demographic differences between groups revealed no statistically significant results: on gender, salary, ethnicity, religion, parents social class, parents education, the social class of participants, the education of participants, the occupation of parents, the occupation of participants, or the sexual orientation of participants.

Clinical Implications

Over the course of the past thirty-five years, issues such as childhood-sexual-abuse have dominated the clinical casework of many therapists. The data from the National Child Abuse and Neglect Data System (NCANDS, 2005) substantiated that case reports of childhood sexual abuse increased in the 1980s followed by an extensive period of decline in the 1990s. The sexual abuse cases decreased from a national peak of 149,800 cases in 1992 to 103,600 cases in 1998, a decline of 31%. Sexual-abuse of siblings is a form of the problem, but it has not received enough attention from the research community. Therefore, accurate statistics on its prevalence are unknown. Researchers have speculated on a widespread prevalence of sibling-incest; however, few data have been presented to support their claims. The information will emerge only with further research on this form of family violence. In this research, a small sample of sibling-incest survivors indicated that sibling-incest abuse significantly affected their psychological wellbeing and relational functioning. The participants in this study were in therapy, but it is unknown what type of therapy they were receiving from their mental-health providers. Future researchers must gather information on the type of clinical interventions survivors of sibling-incest receive from their therapists. The research is only

just reflecting the existence of this clinical problem; it has not yet involved developing clinical methods of intervention.

This research study provides a sorely needed focus on the neglected issue of sibling-incest. However, it has not led to developing potential treatment strategies for this family based problem, in particular, intervention strategies for adult survivors of sibling-incest. Marriage and family therapists are best suited to conduct this research on clinical interventions since the problem seems to originate in the context of a family, and perpetuated in the interpersonal life of adult survivors. A treatment methodology must encompass both the psychological problems of adult survivors and at the same time treatment interventions for the survivors' interpersonal difficulties.

Although the research on intervention strategies is lacking and greatly needed in order to reliably assist the mental health community in treating this clinical problem, there are a number of intervention strategies that can be suggested based upon the results of this present study.

During the intake and assessment processes with families and individuals, at the very least, clinicians can explore past childhood sexual abuse histories, and in particular, sibling-incest abuse. In addition, the routine use of the genogram is essential with this clinical population of sibling-incest survivors since it provides an opportunity to explore past and present sibling relationships with clients.

Also, there are statistically significant results in hypothesis 1 of this study that reveal survivors of sibling-incest, who are presently in therapy, experience high levels of anxiety, depression, dissociation, sleep disturbance, and sexual problems. The results of

hypothesis 2 indicate sibling-incest survivors experience low levels of intimacy and autonomy in their adult relationships. These are key indicators of the mental health profile for the sibling-incest survivors who participated in this study, and although they cannot be generalized to a larger population, this clinical profile of sibling-incest survivors cannot escape the attention of the mental health community. If clients present with this psychological and interpersonal profile, it is suggested that clinicians explore a possible history of sibling-incest sexual abuse. Further, based on the Social Developmental model proposed in this study, it is suggested that the interpersonal problems associated with a history of child sexual abuse may provide fertile ground for the development of mental-health problems, particularly in the area of depressive disorders. The client who presents with disorganized attachments in their adult interpersonal life may be a client with a history of childhood sexual abuse, and in particular, a history of childhood sibling-incest abuse.

The finding of this study and similar results from the literature review, reveal that victims of sibling-incest are reluctant to disclose their sexual abuse, and if they disclose, it is with a great deal of shame and guilt. The shame and sense of mutual responsibility that sibling-incest survivors experience (Cole, 1990; Russell, 1987; Wiehe, 1990) is carried into adulthood. This presents a challenge for clinicians. The data in this study indicate that 12 out of 43 sibling-incest participants disclosed the incest to their parents and only 7 of them noted that their parents believed them. Of the 7, only 3 indicated upon disclosure they believed their parents effectively protected them. If this experience is carried over into adult life, there is the likelihood that survivors of sibling-incest would

expect authority figures to repeat the childhood experience he or she had with their parents upon disclosure. It is suggested that clinicians provide a safe-enough environment for any client who a therapist suspects is a victim of childhood sibling-incest. The safe-enough environment would perhaps provide the setting for potential victims of sibling-incest to eventually disclose to their therapist past childhood sexual abuse experiences with the certainty they will be understood and believed. Typical participants in this study pointed out their counseling experiences were those in which sibling-incest was addressed by their therapists, and that they did not feel harshly judged by their mental health providers. The data did not indicate any further information about the context of the survivors' clinical experience, but speculation can lead to a sense that these participants felt safe enough in their clinical setting to disclose their sibling-incest experience, and safe enough to participate in this research study on sibling-incest.

The participants in this study revealed that their fathers were emotionally distant in their childhood home environment. This finding is supported by Smith and Israel (1987) and points to the family disorganization of sibling-incest families. The generational boundaries in sibling-incest families are diffuse and contribute to the interpersonal boundary violation of sibling-incest. The use of the genogram can assist clinicians assess information about the childhood family-of-origin context of clients. If this information reveals the type of family disorganization typical of sibling-incest families described by Smith and Israel, it may be an indicator for clinicians to explore the issue of sibling-incest with clients. If a therapist is treating an adolescent sibling-incest family as opposed to an adult survivor who seeks individual therapy, it is essential to

involve the distant father in the treatment process. This will be discussed later in this clinical implications section when the family therapy model of Madanes (1995) is discussed.

The literature reviewed in this study suggests that the long-term effect of sibling-incest can be as severe as the effects of father-daughter incest. The long-term effects include the psychological and interpersonal difficulties that the major results of this study discovered. It is essential for mental health providers to note that these signs of childhood sexual abuse are indicators that require clinical exploration regardless of the presenting problem for which clients seek mental health treatment. If there is a history of sibling-incest in clients seeking professional mental health services, that history of sexual abuse will thematically play out in the presenting problems which clients bring to their providers.

Although not a methodology examined by research, Wiehe (1990) suggested five distinct stages of therapy with adult survivors of sibling-incest:

1. Acknowledging the reality of the abuse.
2. Overcoming secondary (psychological) responses to the abuse.
3. Forgiving oneself (ending self-blame and punishment).
4. Adopting positive coping behaviors.
5. Relinquishing victim identity.

These stages do not occur in an orderly fashion with one following the other, but in a cyclical manner with repetitions or the survivors reworking aspects of an earlier stage later in therapy. The painful emotions associated with sibling-sexual-abuse never completely go away and this calls for patience by clinicians in order to help adult victims of sibling-incest continually process the experience of abuse to become survivors instead of victims.

In addition, for clinicians working with adolescent families where there is a sibling-incest offender, Madanes (1995) proposed a treatment model to assist therapists in their work with sibling-incest offenders, sibling-incest victims, and parents. This method of treatment for the sibling-incest family includes all family members especially the distant father who is asked to take responsibility for his role in the family violence that occurred in his absence. This methodology requires the parents to accept responsibility, and express repentance and sorrow for not having protected the victim from the perpetrator of the sibling-incest. The work of Madanes supports the structural concept of boundary maintenance and provides a structural focus on family interactions while striving for growth and self-regulation that fosters functionality and family strengths. Further treatment models for these adolescent families of sibling-incest present a challenge to researchers and clinicians.

The work of Trepper and Barrett (1986) as well as Scheinberg and Frankael (2001) are included in this section on clinical implications even though their treatment methodologies are not specifically targeted for clinical work with adult survivors of sibling-incest. These authors profoundly contribute to the research literature on childhood

incest and their treatment models clearly describe the necessity of a family orientated approach to treatment of incest which the work of Madanes (1995) advances.

Trepper, T. S. & Barrett, M. (1986). *Treating Incest: A Multiple Systems Perspective*. Haworth Press: New York. The pioneering work of Trepper and Barrett's (1986) book is the central theme that effective treatment of incest requires a systemic approach because incestuous activity is the product of a problematic family, rather than the cause. A framework for the clinical assessment of intrafamily sexual abuse is presented to allow clinicians to evaluate the multiple dimensions involved in incestuous behavior. The authors suggested that a family be formally assessed using individual and family clinical interviews, objective and projective assessment devices, and ongoing clinical observation. This systems-oriented treatment approach operates on the premise that intrafamily sexual abuse is attributed to and maintained by a variety of interconnecting systems, family, individual, and social. This conceptual framework is derived from the work of structural and strategic schools of family therapy. Using a framework and techniques from this structural/strategic orientation, the multiple systems approach of these authors works to change the structure of the family, reduce the dysfunctional patterns that have contributed to the abuse, and improve communication patterns. The treatment model involves three stages. Stage 1 is designed to create a context for change which involves coordinating services with protective services, caseworker and court system. In this stage the program helps families begin to build an environment which allows enough flexibility so that eventually the members can function with no threat of abusive behavior. During this stage, the therapist works intensely to

coordinate services among the various agencies involved, begins a series of therapeutic intervention, and works actively on the denial of some or all family members. Stage 1 of the program is completed when the therapist has accomplished the following: established a mechanism for ongoing network communication among the various agencies involved; joined with each family member; completed the assessment; established a therapeutic contract; and developed structural maps for the family illustrating how incest occurs when family members cross generational boundaries resulting in the parent and child functioning as if they were peers. This work involves emphasis on the responsibility the parents have for the safety and care of their children. This stage includes the apology session, which is an opportunity for the family members to express their current emotional state with respect to the sadness, remorse, and anger over the incest and a time for the parents to give the children the clear message that the problem is both parents' responsibilities. It is also a time for them to express their hope about their future family functioning. Stage 2 is designed to break and challenge dysfunctional behavioral patterns that led to the sexual abuse and expand functional alternatives, in family, individual, and group sessions. These dysfunctional psychological patterns are established and maintained through many sources, such as family of origin, society, personality, and peer group. The clinical work addresses these varying contexts and helps family members change within these contextual restraints. Stage 3, the final stage of this program, consolidates the changes that have taken place in family, individual and group work to seal the changes and explore potential problem areas in future functioning. In this stage the families take on more responsibility for problem-solving, conflict-resolution, and

decision making. The communication in the sessions by this time should be clear, direct, and more constructive. Interventions are designed for supporting the family's independence from therapy. The entire therapy process lasts between 12 and 18 months.

Sheinberg and Fraenkel (2001) in *The Relational Trauma of Incest: A Family-Based Approach to Treatment* presented a relational approach to the treatment of children who experience incest. The central aspect of the experience of intrafamily child sexual abuse that this treatment approach addresses is the trauma caused to family relationships by the sexual abuse; that it is a relational trauma that impacts all family members. The relational approach to treatment is intended to strengthen the safe, protective relationships between the sexually abused child and family members and to re-empower these individuals and relationships so that the family can be a safe environment. The authors' emphasis on strengthening safe supportive relationships is in contrast to individual treatment of the child, where the focus is upon eliminating psychological and behavioral symptoms. A central assumption of the relational approach is that unless a clinician works with the family to enhance the child's protective relationships, it may be difficult for the victim to recover from individual symptoms of the sexual abuse and to sustain improvement. The authors argued that intrafamily child sexual abuse is fundamentally a relational problem and move away from the research literature's DSM diagnosis-driven focus on the psychopathology of the victimized child. According to these authors, this focus on symptoms neglects the impact sexual abuse has on the child's most significant interpersonal relationships. The concept of incest as relational trauma points not only to the importance of a relational treatment approach for these authors but also to new

directions for research. These authors have produced a clinical model to treat child incest victims and their “torn-apart mothers,” but also a model for the offenders who must come to terms with their sexual abuse of the child victim. This model helps clinicians to view childhood sexual abuse as a family drama, which affects both the reality and the perception of family relationships. The entire family bears the burden of incest, and according to this model the rebuilding of family relationships is the best path for healing and recovery. The integration of social constructionism, feminist, and systemic ideas provides clinicians with an approach to treatment in these highly intense and emotionally charged cases of childhood incest.

Recommendations for Future Research

There is a compelling need for further research on sibling-incest, which should include more participants in all types of sibling-incest and larger sample sizes, particularly those groups in which women were the perpetrators and those in which males were victims. Also to be considered would be various ethnicities as the present research in the non-incest group is largely European-American. The methodology of this future research must become more expansive than that which already exists. The use of the Internet to gather a large enough sample of participants for future research needs to be considered, and in as safe, confidential, and ethical a fashion as possible. The method of gathering a sample by advertising this research project in agencies was slow, and tedious, and possibly did not reach the larger population of possible participants’ willing to respond to research on sibling-incest. The use of a comparative group of non-clinical sibling-incest participants is essential in order to measure: (a) how effective clinical

treatment is for survivors of sibling-incest, (b) significant differences between groups difference and any degree of trauma between groups, (c) the significant difference of duration of abuse between groups, (d) gender issues between groups, and (e) the impact of violence by type of gender between groups.

It is essential for future researchers to develop reliable and valid tests and surveys in order to gather valid and reliable information on the childhood-sexual-abuse experiences of adult survivors of sibling-incest. Protocols to measure degrees of trauma involved in the sexual abuse experiences are needed. Here a number of prior studies on adult survivors of sibling-incest have been reviewed, and an attempt was made to fill in the gaps of prior studies by including the use of a non-incest control group. Other than the fact that the participants in this group never experienced sibling-incest, there were no other clinical data on the type(s) of problem(s) the participants in this non-incest group were experiencing, and for which they sought professional clinical help. In the future, research on sibling-incest with a non-incest control group should include gathering data on the type of mental-health problem for which this group is under treatment in order that further statistical analyses can be conducted on correlations between sibling-incest abuse and other mental-health problems.

Future researchers must also study: (a) the effects different types of sibling-incest have on survivors of sexual abuse, (b) female perpetrators of sibling-incest, (c) the type of family in which sibling-incest occurs, (d) professional treatment interventions for survivors of sibling-incest, (e) effects of sibling-incest on male survivors,

(f) revictimization of sibling-incest survivors and their history of interpersonal violence, and (g) statistical analysis of models of sexual abuse by Structural Equation Modeling which requires a large enough sample.

Conclusion

This study began as a research project aimed at investigating the problem of sibling-incest in order to raise awareness of the possible significance this form of childhood-sexual abuse might have on an adult survivor's psychological wellbeing and adult relational functioning. The research on this type of family violence is scarce in comparison to studies on other forms of sexual abuse. The results of this current project as well as the existing literature strongly indicated that this problem requires further serious study.

The major findings of this research were that sibling-incest has a profound and statistically significant impact on the psychological health and relational functioning of adult survivors of sibling-incest.

Sibling-incest is a serious form of child-abuse. The results from this study are supported by the findings of others (Caffaro & Caffaro, 1998; Canavan et al., 1992; Cole, 1990; Fleming & Mullen, 1998; Laviola, 1992; O'Brien, 1991; Wiehe, 1990, 1996; Worling, 1995) in that sibling-incest is a severe form of sexual abuse that requires further research and treatment methodologies from the mental-health community.

This form of family violence is similar to parent-child incest even though perpetrators of sibling-incest do not cross generational boundaries. However, the participants in this current study indicated that the subjective violence experienced by the

perpetrator of the incest was traumatic, and the results implied a significant impact upon the psychological and relational lives of these adult survivors of sibling-incest.

The sibling-incest survivors reported feeling more responsible for the abuse as compared to their father-daughter survivor counterparts (Cole, 1990). This contributes to the secrecy and denial that surrounds this form of sexual-abuse, and compounds the trauma for the victims of sibling-abuse (Finkelhor, 1979). This might suggest why this form of sexual abuse goes unreported to therapists and authorities, and then escapes the attention of researchers in the mental-health community.

The notes and letters of response from participants and their therapists in this study indicated a profound sense of gratitude that this form of sexual abuse has been noticed by the research community in the field of marriage and family therapy. This research community shares an equal sense of gratitude for the courage that the participants in this study possessed to become willing volunteers in a project that confirms the serious nature of sibling-sexual-abuse.

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APPENDIXES

APPENDIX A

Reminder To All Volunteers

I am asking the volunteers who are sibling incest survivors to fill out all of the enclosed questionnaires. If you do not wish to use the actual first name of siblings or your own name in filling out questions 1 and 3 of the Sibling Incest Questionnaire, you can use initials such as B1, B2, B3, and S1, S2, S3, and refer to yourself as a B or an S and write "self" next to your initial.

If you have had an incestuous relationship with more than one sibling, indicate in question 3 of that questionnaire, which experience was most significant to you by writing *most significant on the line next to the sibling's initial (an example is listed below)*.

I am asking the non-incest group volunteers to fill out all of the enclosed questionnaires, and on the sibling incest questionnaire only answer the first 2 questions.

Example:

1. B1 (most significant)
2. B2
3. B3
4. S1
5. B4 Self
6. S2
7. S3

Note: Please do not put your name, address or identifying information on the questionnaires.

Demographic Questionnaire

Note: Do not put identifying information on the questionnaire to maintain anonymity and confidentiality.

1. Your sex: (circle one number)
 1. Male
 2. Female

2. Your age: _____

3. Your ethnic background: _____

4. Your relationship status: (circle one number)
 1. Married
 2. Separated
 3. Divorced
 4. Widowed
 5. Single (never married)
 6. Engaged
 7. Committed relationship, not living together
 8. Committed relationship, living together

5. Do you have children?
 1. Yes
 2. No

6. Your religion: _____

7. During most of your childhood with whom did you live? (circle one number)

1. Both biological parents
2. Parent & Step-parent
1. Single parent
2. Adoptive parents
3. Relative
4. Other (specify) _____

8. How would you describe the home in which you grew up? (circle one number)

1. Poverty level
2. Working class
3. Middle class
4. Upper middle class
5. Upper class

9. What was the highest level of education attained by your parents?

Father

Mother

10. Which of the following most closely represents your mother's occupation when you were growing up? (circle one number)

1. Executive
2. Manager
3. Administrative personnel
4. Skilled worker
5. Unskilled worker
6. Homemaker
7. Student

11. Which of the following most closely represents your father's occupation when you were growing up? (circle one number)

1. Executive
2. Manager
3. Administrative personnel
4. Skilled worker
5. Unskilled worker
6. Homemaker
7. Student

12. Did you have siblings living with you when you were growing up?

1. Yes
2. No

13. Did you get along with your siblings when you were growing up? (circle one number)

1. Never
2. Rarely
3. Sometimes
4. Usually
5. Always

14. What is the highest education you have received? (circle one number)

1. Less than H.S.
2. GED
3. High School diploma
4. Associate's degree
5. Bachelor's degree
6. Master's degree
7. Beyond Master's degree

15. Which of the following is closest to the work that you usually do? (circle one number)

1. Executive
2. Manager
3. Administrator
4. Skilled manual worker
5. Unskilled worker
6. Homemaker
7. Student

16. What is your gross annual salary? (If you are not employed, write in \$0)

17. What is your sexual orientation? (circle one number)

1. Heterosexual
2. Gay Male
3. Female Lesbian
4. Bisexual
5. Transexual

18. Have you ever been in counseling or therapy?

1. Yes
2. No

19. Are you presently in counseling or therapy?

1. Yes
2. No

Sibling Incest Questionnaire

Note: Do not put identifying information on questionnaire to maintain anonymity and confidentiality. *Please circle one number answer for each question.*

1. List your siblings (initials), including yourself, who grew up in your family starting from oldest to youngest. Also, next to the sibling, please circle gender as well as whether each is a biological, adoptive or step sibling.

	<u>Name/Initial</u>	<u>Age</u>	<u>Gender</u>
1.	_____	_____	Male / Female/Biological / Adoptive / Step
2.	_____	_____	Male / Female/ Biological / Adoptive / Step
3.	_____	_____	Male / Female/ Biological / Adoptive / Step
4.	_____	_____	Male / Female/ Biological / Adoptive / Step
5.	_____	_____	Male / Female/ Biological / Adoptive / Step
6.	_____	_____	Male / Female/ Biological / Adoptive / Step
7.	_____	_____	Male / Female/ Biological / Adoptive / Step
8.	_____	_____	Male / Female/ Biological / Adoptive / Step

2. Were you the victim of any sexually oriented physical interaction by a sibling while growing up in your family as a child?

1. Yes
2. No

3. List your siblings (initials), circle the number of the sibling(s) who sexually abused you, and next to the incestuous relationship that was most significant to you, write "most significant."

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____

4. Did you believe that the sibling incest was abusive at the time it occurred?

1. Never
2. Rarely
3. Sometimes
4. Usually
5. Always

5. Do you now believe as an adult that the sibling incest was abusive?

1. Never
2. Rarely
3. Sometimes
4. Usually
5. Always

6. Did you believe at the time the sibling incest occurred that it was a mutually agreed upon experience?

1. Never
2. Rarely
3. Sometimes
4. Usually
5. Always

7. Did you disclose to your parent(s) as a child that you were the victim of sibling incest by one of your siblings?

1. Yes
2. No

8. If you disclosed, did your parents believe you?

1. Yes
2. No

9. If you disclosed and your parents believed you, did they effectively seek to protect you?

1. Yes
2. No

10. Were you concerned that your parents would have blamed you if you told them about the incest?

1. Never
2. Rarely
3. Sometimes
4. Usually
5. Always

11. Did you believe that you were expected to keep the sibling incest a secret?

1. Never
2. Rarely
3. Sometimes
4. Usually
5. Always

12. Did you disclose to your parent(s) as an adult that you were a victim of sibling incest during childhood by one of your siblings?

1. Yes
2. No

13. Do you struggle to present yourself as a well-functioning adult, even though internally you feel otherwise?

1. Never
2. Rarely
3. Sometimes
4. Usually
5. Always

14. Looking back, do you think that parental leadership was lacking in your childhood home environment?

1. Never
2. Rarely
3. Sometimes
4. Usually
5. Always

15. Do you think that there was poor communication in your childhood home environment?

1. Never
2. Rarely
3. Sometimes
4. Usually
5. Always

16. Do you think that society views sibling incest as a serious form of family sexual violence?

1. Never
2. Rarely
3. Sometimes
4. Usually
5. Always

17. Have you ever been in counseling where the sibling incest was addressed?

1. Never
2. Rarely
3. Sometimes
4. Usually
5. Always

18. Have you had an experience with a counselor who you felt would judge you too harshly if you told him/her about the sibling incest?

1. Never
2. Rarely
3. Sometimes
4. Usually
5. Always

19. Have you often thought that the relationship between your parents was an abusive relationship?

1. Never
2. Rarely
3. Sometimes
4. Usually
5. Always

20. Was your father or stepfather a heavy drinker?

1. Never
2. Rarely
3. Sometimes
4. Usually
5. Always

21. Was your mother or stepmother a heavy drinker?

1. Never
2. Rarely
3. Sometimes
4. Usually
5. Always

22. Was your father or stepfather overly religious?

1. Never
2. Rarely
3. Sometimes
4. Usually
5. Always

23. Was your mother or stepmother overly religious?

1. Never
2. Rarely
3. Sometimes
4. Usually
5. Always

24. Was your father emotionally distant from your family?

1. Never
2. Rarely
3. Sometimes
4. Usually
5. Always

25. Was your mother emotionally distant from your family?

1. Never
2. Rarely
3. Sometimes
4. Usually
5. Always

26. Do you think that the sibling incest affected your sexual orientation?

1. Yes
2. No

27. As an adult, do you spend time with the sibling who perpetrated the sibling incest?

1. Never
2. Rarely
3. Sometimes
4. Usually
5. Always

28. As an adult, do you worry that your sibling still wishes to have sex with you?

1. Never
2. Rarely
3. Sometimes
4. Usually
5. Always

29. As an adult, does the sibling incest continue?

1. Never
2. Rarely
3. Sometimes
4. Usually
5. Always

30. How old were you when the sibling incest began? _____

31. Have you felt that the age when you first experienced sibling incest increased the psychological pain for you?

1. Yes
2. No

32. Did you ever feel depressed as a child prior to age 9 years?

1. Yes
2. No

33. Did you ever feel you were a very angry child after age 9?

1. Yes
2. No

34. How old were you when the sibling incest ended? _____

35. How many times did you experience sibling incest by an offending sibling?

1. One time
2. Two to five times
3. Six to ten times
4. Eleven to 15 times
5. Sixteen to twenty-five times
6. Twenty-six times and more

36. How long did the sibling incest last?

1. Less than 1 year
2. 1 to 2 years
3. 2 to 3 years
4. 3 to 4 years
5. 4 to 5 years
6. More than 5 years

37. How old was your sibling when he or she sexually abused you? _____

38. Did your sibling make you believe you shared responsibility for the incest?

1. Never
2. Rarely
3. Sometimes
4. Usually
5. Always

39. Do you believe that the sibling perpetrator of the incest was an object of excessive physical punishment by your parent(s)?

1. Never
2. Rarely
3. Sometimes
4. Usually
5. Always

40. Do you believe that the sibling perpetrator of the incest was an object of emotional abuse by your parents?

1. Never
2. Rarely
3. Sometimes
4. Usually
5. Always

41. Do you believe that the sibling perpetrator of the incest was also a victim of sexual abuse?

1. Yes
2. No

42. How old was the perpetrator of your sibling incest experience when he or she stopped the sexual abuse? _____

43. Do you feel that there was a betrayal of trust between you and your sibling as a result of the incest, regardless of the age difference?

1. Never
2. Rarely
3. Sometimes
4. Usually
5. Always

44. Do you feel that the age difference between you and your offending sibling made the experience traumatic for you?

1. Yes
2. No

45. The list below includes a number of coercive sibling incest experiences; please circle all the experience(s) you had.

1. Your sibling showed his/her sex organs to you.
2. You were asked to show your sex organ to your sibling.
3. Your sibling touched your sex organs.
4. You were asked to touch your sibling's sex organ.
5. Your sibling performed oral sex on you.
6. You were asked to perform oral sex on your sibling.
7. There was attempted vaginal penetration.
8. There was attempted anal penetration.
9. There was vaginal intercourse.
10. There was anal intercourse.

46. Do you feel that your sibling forced you to have a sexual experience with him/her?

1. Never
2. Rarely
3. Sometimes
4. Usually
5. Always

47. Was your sibling physically violent with you so you would submit to his/her sexual wishes?

1. Never
2. Rarely
3. Sometimes
4. Usually
5. Always

48. Did you feel powerless with the situation of being abused by your sibling?

1. Never
2. Rarely
3. Sometimes
4. Usually
5. Always

49. Did your offending sibling threaten you with harm if you disclosed the incest?

1. Never
2. Rarely
3. Sometimes
4. Usually
5. Always

50. How much violence did you experience by your offending sibling in the incest experience?

No Violence at all Extremely Violent

1 2 3 4 5 6 7 8 9 10

Trauma Symptom Checklist – 40 (TSC-40) / Briere & Runtz (1989)

(TSC-40)

Note: Do not put identifying information on questionnaire to maintain anonymity and confidentiality.

How often have you experienced each of the following in the last two months?
Please circle the correct answer.

		Never	Often	
1. Headaches	0	1	2	3
2. Insomnia (trouble getting to sleep)	0	1	2	3
3. Weight loss (without dieting)	0	1	2	3
4. Stomach problems	0	1	2	3
5. Sexual problems	0	1	2	3
6. Feeling isolated from others	0	1	2	3
7. "Flashbacks" (Sudden, vivid, distracting memories)	0	1	2	3
8. Restless sleep	0	1	2	3
9. Low sex drive	0	1	2	3
10. Anxiety attacks	0	1	2	3
11. Sexual overactivity	0	1	2	3
12. Loneliness	0	1	2	3

13. Nightmares	0	1	2	3
14. "Spacing out" (going away in you mind)	0	1	2	3
15. Sadness	0	1	2	3
16. Dizziness	0	1	2	3
17. Not feeling satisfied with your sex life	0	1	2	3
18. Trouble controlling your temper	0	1	2	3
19. Waking up early in the morning and can't get back to sleep	0	1	2	3
20. Uncontrollable crying	0	1	2	3
21. Fear of men	0	1	2	3
22. Not feeling rested in the morning	0	1	2	3
23. Having sex that you didn't enjoy	0	1	2	3
24. Trouble getting along with others	0	1	2	3
25. Memory problems	0	1	2	3
26. Desire to physically hurt yourself	0	1	2	3
27. Fear of women	0	1	2	3
28. Waking up in the middle of the night	0	1	2	3
29. Bad thoughts or feelings during sex	0	1	2	3
30. Passing out	0	1	2	3

31. Feeling that things are “unreal”	0	1	2	3
32. Unnecessary or over-frequent washing	0	1	2	3
33. Feelings of inferiority	0	1	2	3
34. Feeling tense all the time	0	1	2	3
35. Being confused about your sexual feelings	0	1	2	3
36. Desire to physically hurt others	0	1	2	3
37. Feelings of guilt	0	1	2	3
38. Feelings that you are not always in your body	0	1	2	3
39. Having trouble breathing	0	1	2	3
40. Sexual feelings when you shouldn't	0	1	2	3

Personal Attitudes and Traits

Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide, and using the scale below, place the number that corresponds to how the statement pertains to you personally.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Strongly Disagree	Disagree	Slightly Disagree	No answer	Slightly Agree	Agree	Strongly Agree

1. Novelty has a great appeal to me. _____
2. I crave excitement. _____
3. It's a wonderful feeling to sit surrounded by your possessions. _____
4. There are few things more satisfying than really to splurge on something-books, cloths, furniture, etc. _____
5. Only the desire to achieve great things will bring a man's mind into great activity. _____
6. _____
Nothing is worse than an offensive odor. _____
7. In most conversations, I tend to bounce from topic to topic. _____
8. I really envy the person who can walk up to anybody and tell him off to his face. -
9. I could really shock people if I said all the dirty things I think. _____
10. There are few more miserable experiences than going to bed night after night knowing you are so upset that worry will not let you sleep. _____
11. I tend to make decisions on the spur of the moment. _____
12. Little things upset me. _____
13. Drop reminders of yourself wherever you go and your life's trail will be remembered. _____
14. I like nothing better than having breakfast in bed. _____
15. The people around me easily influence my mood. _____
16. I like to gossip at times. _____
17. There have been occasions when I took advantage of someone. _____
18. I'm always willing to admit it when I make a mistake. _____
19. I always try to practice what I preach. _____
20. I sometimes try to get even rather than forgive and forget. _____
21. At times I have really insisted on having things my own way. _____
22. There have been occasions when I felt like smashing things. _____
23. I never resent being asked to return a favor. _____
24. I have never been irked when people expressed ideas very different from my own. _____
25. I have never deliberately said something that hurt someone's feelings. _____
26. I would probably make a good actor/actress. _____

APPENDIX B

IRB Extension of Approval Letter (November 1, 2007)



November 1, 2007

Thomas McGrath
93 Springtown Road
Washington, NJ 07882

Dear Father McGrath,

The Seton Hall University Institutional Review Board has reviewed your Continuing Review application for your research proposal entitled "The Long Term Psychological Effects for Survivors of Sibling Incest and Their Capacities to Have Adult Relationships which are Intimate and Autonomous".

You are hereby granted another 12-month approval from, effective December 13, 2007.

If any changes are desired in this protocol, they must be submitted to the IRB for approval before implementation.

Thank you for your cooperation.

Sincerely,



Mary F. Ruzicka, Ph.D.
Professor
Director, Institutional Review Board

cc: Dr. Robert Massey

IRB Extension of Approval Letter (December 13, 2006)



December 13, 2006

Thomas McGrath
93 Springtown Road
Washington, NJ 07882

Dear Father McGrath,

The Seton Hall University Institutional Review Board has reviewed your Continuing Review application for your research proposal entitled "The Long Term Psychological Effects for Survivors of Sibling Incest, and Their Capacities to Have Adult Relationships Which are Intimate and Autonomous".

You are hereby granted another 12-month approval from the date of this notice. If any changes are desired in this protocol, they must be submitted to the IRB for approval before implementation.

Enclosed are your newly stamped letters of solicitation and recruitment flyers. Make copies only of these stamped documents.

Thank you for your cooperation.

Sincerely,

A handwritten signature in cursive script that reads "Mary F. Ruzicka, Ph.D.".

Mary F. Ruzicka, Ph.D.
Professor
Director, Institutional Review Board

cc Dr. Robert Massey

Office of Institutional Review Board
Presidents Hall
Tel: 973.313.6314 • Fax: 973.275.2361
400 South Orange Avenue • South Orange, New Jersey 07079-2641

Request for Approval of Research (Approved January 16, 2004)

Related Activities Involving Human Subjects

**REQUEST FOR APPROVAL OF RESEARCH, DEMONSTRATION OR
RELATED ACTIVITIES INVOLVING HUMAN SUBJECTS**

All material must be typed.

PROJECT TITLE: The long-term psychological effects for survivors of sibling incest,

and their capacities to have adult relationships which are intimate and

autonomous.

CERTIFICATION STATEMENT:

In making this application, I (we) certify that I (we) have read and understand the University's policies and procedures governing research, development, and related activities involving human subjects. I (we) shall comply with the letter and spirit of those policies. I (we) further acknowledge my (our) obligation to (1) obtain written approval of significant deviations from the originally-approved protocol BEFORE making those deviations, and (2) report immediately all adverse effects of the study on the subjects to the Director of the Institutional Review Board, Seton Hall University, South Orange, NJ 07079.

Thomas McGrath 7/31/03
RESEARCHER(S) OR PROJECT DIRECTOR(S) Thomas M. McGrath DATE

**Please print or type out names of all researchers below signature.
Use separate sheet of paper, if necessary.**

My signature indicates that I have reviewed the attached materials and consider them to meet IRB standards.

Robert Massey 7/31/03
RESEARCHER'S ADVISOR OR DEPARTMENTAL SUPERVISOR Robert Massey, Ph.D. DATE

Please print or type out name below signature

The request for approval submitted by the above researcher(s) was considered by the IRB for Research Involving Human Subjects Research at the in January 2004 meeting.

The application was approved not approved by the Committee. Special conditions were were not set by the IRB. (Any special conditions are described on the reverse side.)

[Signature] 01/16/2004
DIRECTOR, DATE

APPROVED
JAN 16 2004
IRB
SETON HALL UNIVERSITY

Seton Hall University
06/2003

Approval for Dissertation Proposal (Signed in July 2003)

Approved by IRB on January 16, 2004

**SETON HALL UNIVERSITY
COLLEGE OF EDUCATION AND HUMAN SERVICES
OFFICE OF GRADUATE STUDIES**

APPROVAL FOR DISSERTATION PROPOSAL

Candidate, Thomas M. McGrath, has successfully completed all requisite requirements. This candidate's proposal has been reviewed and the candidate may proceed to collect data according to the approved proposal for dissertation, under the direction of the mentor and the candidate's dissertation committee.

If there are substantive differences between what has been approved in the proposal and the actual study, the final dissertation should indicate, on a separate page in the Appendix, the approval of the committee for those changes.

Title of Proposed Dissertation: "The Long Term Psychological Effect for Survivors of Sibling Incest, and their Capacities to have Adult Relationships which are Intimate and Autonomous."

Dissertation Committee:

Mentor (sign/date): Robert A. Massey, Ph.D. 7/29/03 Dr. Robert Massey Ph.D.

Committee Member (sign/date): Henry Schreitmueller Ed.D. 7/22/03 Dr. Henry Schreitmueller Ed.D.

Committee Member (sign/date): Mary Casey Nebus Ph.D. 7/22/03 Dr. Mary Casey Nebus Ph.D.

Approved by Seton Hall University Institutional Review Board on January 16, 2004

Department Chairperson (sign/date): _____

IRB Approval Letter (January 16, 2004)



January 16, 2004

Thomas McGrath
93 Springtown Road
Washington, NJ 07882

Dear Father McGrath:

The Seton Hall University Institutional Review Board has reviewed the information you have submitted addressing the concerns for your proposal entitled "The Long-term Psychological Effects for Survivors of Sibling Incest, and Their Capacities to Have Adult Relationships, Which Are Intimate and Autonomous". Your research protocol is hereby approved as amended. *(but see special conditions on back on next page)*

Enclosed for your records are the signed Request for Approval form and the stamped original Consent Form. Make copies only of this stamped Consent Form.

The Institutional Review Board approval of your research is valid for a one-year period from the date of this letter. During this time, any changes to the research protocol must be reviewed and approved by the IRB prior to their implementation.

According to federal regulations, continuing review of already approved research is mandated to take place at least 12 months after this initial approval. You will receive communication from the IRB Office for this several months before the anniversary date of your initial approval.

Thank you for your cooperation.

Sincerely,

Giordana Mazzoni, Ph.D.
Associate Professor
Director, Institutional Review Board

Cc.: Robert Massey, Ph.D.

Office of Institutional Review Board
Presidents Hall
Tel: 973.275.2974 • Fax: 973.275.2978
400 South Orange Avenue • South Orange, New Jersey 07079-2641

Approved with stipulations (by the IRB Board)

- 1) For the Control Group, please bold statement "NEVER" experienced abuse;
- 2) Insert the word "should" in the section in which you tell the Control Group to see a therapist. It should read "Should you begin to experience.... (last paragraph on the second page).

Letters of Informed Consent – IRB Stamped



**Letter of Informed Consent
For Experimental Group**

Dear Potential Participant,

I am a *doctoral student in the Department of Professional Psychology and Family Therapy at Seton Hall University* and I am conducting scientific research to fulfill the dissertation requirement of the university.

This sensitive research will protect the confidentiality of each participant and the responses given will be anonymous. I am seeking volunteers who have experienced sibling incest in childhood and are currently in therapy. I would like to thank participants for their potential participation in this research study.

The *purpose* of this research is to study the long-term psychological effects of sibling incest, and the capacities of adult survivors to have adult relationships, which are intimate and autonomous.

Sibling incest is defined as any coercive sexual physical interaction occurring between siblings during their non-adult years in which secrecy is either required by the offender or maintained by the victim. The sexual interactions include the following: exposure, touching and fondling of sexual organs, oral-genital contact, attempted intercourse and intercourse (including vaginal and anal penetration). Sibling incest can happen between older-brother, younger sister, older-sister, younger brother, older-brother, younger-brother, and older-sister, younger-sister.

Any individual, who willingly decides to be a participant in this highly *confidential and anonymous research*, will be mailed *four survey instruments*, which will take approximately 70 minutes to complete on paper. Participants are asked to return the completed surveys to this researcher by postal mail. *There are no interviews involved in this research.*

Seton Hall University
Institutional Review Board

DEC 13 2006

Approval Date

Expiration Date

DEC 13 2007

College of Education and Human Services
Department of Professional Psychology and Family Therapy
Tel: 973.761.9451
400 South Orange Avenue • South Orange, New Jersey 07079-2685

First, the *Trauma Symptom Checklist-40* questionnaire is focused on experiences in adults associated with childhood or adult traumatic experiences. A sample of questions in this instrument includes the following: How often have you experienced each of the following in the last two months (1) headache (2) insomnia (3) weight loss (4) stomach problems. Second, the *Personal Authority in Family System Questionnaire* measures intimacy and autonomy in personal relationships. A sample of questions from this instrument includes the following: (1) my significant other and I like to get together for conversation and recreation, (2) usually I am able to disagree with my significant other without losing my temper, (3) my parents frequently try to change some aspect of my personality. Third, the *Demographic and Sibling Incest Questionnaire* provides information on a participant's experiences with sibling incest, and a sample of questions includes the following: (1) were you incested by a brother or sister while growing up in your family as a child, (2) did you believe that the sibling incest was abusive at the time it occurred, (3) did you disclose to your parent(s) as a child that you were incested by one of your siblings, (4) if you disclosed and your parents believed you, did they effectively seek to protect you? Fourth, *The Personal Attitude and Traits Questionnaire*, measures attitudes and beliefs, and a sample of questions includes: (1) novelty has a great appeal to me. (2) I crave excitement, (3) it is a wonderful feeling to sit surrounding by your possessions.

The nature of this research study involves *voluntary participation*. *Not participating or discontinuing participation at any time will involve no penalty or loss of services*. Any participant *who is interested in volunteering for this research project* can contact this investigator at 476 17th Avenue, Paterson, NJ 07504 or by a Seton Hall email address mcgrattn@shu.edu. I will be *pleased to answer any questions* and if an individual expresses a willingness to participate, I will mail the four self-report surveys to the participant via postal service. An *alternative way to express willingness to participate* and receive the four self-report surveys is by requesting them from the participant's service provider. If a participant has read the announcement about this research, it is because these service providers have granted permission for me to recruit volunteers from among the people they serve. These persons will be able to contact me to request the self-report surveys; I will send those items to the requesting person and they can give them to the participant to complete. *These persons will not disclose any identifying information about participants to ensure their anonymity and maintain confidentiality*. If the participant decides to complete the questionnaires the participant is asked to return them to me without any identifying information on the return address envelope.

I assure all participants that *confidentiality will be maintained and anonymity preserved*. If the participant provides their name and address to this researcher to receive the package of questionnaires, the name and address will be kept in a locked cabinet and destroyed upon completion of this project, and I will be the only person who will have access to the list of names and addresses. The data from all participants will be kept in a separate locked cabinet. The questionnaires will be mailed to participants without any identifying information in order to maintain anonymity.

In order to further protect confidentiality and anonymity I am asking that all participants return the completed questionnaires without any identifying information on the questionnaires or on

Seton Hall University
Institutional Review Board

DEC 13 2006

Expiration Date

DEC 13 2007

distress while recalling family of origin information in the questionnaires, the participant should seek therapeutic assistance immediately.

The benefit of this project is that it may contribute to a better understanding of sibling incest.

If participants have any questions about this research, participants may contact me at 476 17th Avenue, Paterson, NJ or by email at mcgrattin@shu.edu. My mentor is Robert Massey, Ph.D. and he can be contacted at the Department of Psychology and Family Therapy at Seton Hall University (973) 761-9591. The IRB office may be reached at (973) 313-6314.

The participant has read the material above and any questions asked have been answered to the participant's satisfaction. The participant agrees to participate in this activity, realizing that he/she may withdraw without prejudice at any time.

For the sake of anonymity and confidentiality, returning the surveys to me implies consent to participate in this research. Please do not include any identifying information on the surveys or on the envelope mailed back to me.

This is *your copy of the Informed Consent*, however, to maintain anonymity I am not asking participants to return it to me with a signature. As stated above, returning the surveys to me implies consent to participate in this research.

Thomas M. McGrath

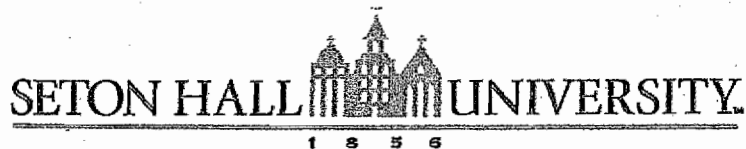
Seton Hall University
Institutional Review Board

DEC 13 2006

Approval Date

Expiration Date

DEC 13 2007



**Letter of Informed Consent
For Control Group**

Dear Potential Participant,

I am a *doctoral student in the Department of Professional Psychology and Family Therapy at Seton Hall University* and I am conducting scientific research to fulfill the dissertation requirement of the university.

This sensitive research will protect the confidentiality of each participant and the responses given will be anonymous. I am seeking volunteers for a control group who have **NEVER** experienced incest or sexual abuse during childhood. I would like to thank you for your potential participation in this research study.

The *purpose* of this research is to study the long-term psychological effects of sibling incest, and the capacities of adult survivors to have adult relationships, which are intimate and autonomous.

Sibling incest is defined as any coercive sexual physical interaction occurring between siblings during their non-adult years in which secrecy is either required by the offender or maintained by the victim. The sexual interactions include the following: exposure, touching and fondling of sexual organs, oral-genital contact, attempted intercourse, intercourse (including vaginal and anal penetration). Sibling incest can happen between older-brother, younger-sister, older-sister, younger-brother, older-brother, younger-brother, and older-sister, younger-sister.

Any individual, who willingly decides to be a participant in this highly *confidential and anonymous research*, will be mailed *four survey instruments*, which will take approximately 70 minutes to complete on paper. Participants are asked to return the completed surveys to this researcher by postal mail. *There are no interviews involved in this research.*

First, the *Trauma Symptom Checklist-40* questionnaire is focused on experiences in adults associated with childhood or adult traumatic experiences. A sample of questions in this instrument includes the following: How often have you experienced each of the following in the last two months (1) headaches (2) insomnia (3) weight loss (4) stomach problems. Second, the *Personal Authority in Family System Questionnaire* measures intimacy and autonomy in personal relationships. A sample of questions from this instrument includes the following: (1) my significant other and I like to get together for conversation and recreation, (2) usually I am able to disagree with my significant other without losing my temper, (3) my parents frequently

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Expiration Date

DEC 13 2006

DEC 13 2007

Approval Date _____

try to change some aspect of my personality. Third, the *Demographic and Sibling Incest Questionnaire* provides information on a participant's vital statistic and a sample of questions includes the following: (1) your sex (male or female), (2) your age, (3) your religion, (4) did you have siblings living with you when you were growing up; the *Sibling Incest Questionnaire* is provided for you to answer question 2 where you indicate whether or not you experienced sibling incest while growing up in your family as a child. Fourth, the *Personal Attitude and Traits Questionnaire*, measures attitudes and beliefs, and a sample of questions include: (1) novelty has a great appeal to me. (2) I crave excitement, (3) it is a wonderful feeling to sit surrounding by your possessions.

The nature of this research study involves *voluntary participation. Not participating or discontinuing participation at any time will involve no penalty or loss of services.* Any participant who is interested in volunteering for this research project can contact this investigator at 476 17th Avenue, Paterson, NJ 07504, or by a Seton Hall email address mcgrattm@shu.edu. I will be pleased to answer any questions and if an individual expresses a willingness to participate, I will mail the four self-report surveys to the participant via postal service. An alternative way to express willingness to participate and receive the four self-report surveys is by requesting them from service providers. If participants have read the announcement about this research, it is because these service providers have granted permission for me to recruit volunteers from among the people they serve. These persons will be able to contact me to request the self-report surveys; I will send those items to the requesting person and they can give them to participants to complete. *These persons will not disclose any identifying information about the participants to ensure anonymity and maintain confidentiality.* If participants decide to complete the questionnaires they are asked to return them to me without any identifying information on the return address envelope.

I assure all participants that *confidentiality will be maintained and anonymity preserved.* If participants provide their name and address to this researcher to receive the package of questionnaires, the name and address will be kept in a locked cabinet and destroyed upon completion of this project, and I will be the only person who will have access to the list of names and addresses. The data from all participants will be kept in a separate locked cabinet. The questionnaires will be mailed to participants without any identifying information in order to maintain anonymity.

In order to further protect confidentiality and anonymity I am asking that all participants return the completed questionnaires without any identifying information on the questionnaires or on the return envelopes. This will guarantee that there will be no way to link the request for the questionnaires with the completed returns from any of the participants in this study.

The limitation of participating in this sensitive research is that participants may come to the realization that they had a sibling incest experience. Should the participant begin to experience this realization, the participant should contact their therapist immediately to seek therapeutic assistance. If, with the advice and guidance of a therapist, the participant decides to complete the sibling incest questionnaire, the participant will no longer be considered a member of the control group, but a member of the experimental group. Also, if the participant experiences

Seton Hall University
Institutional Review Board

Expiration Date

DEC 13 2006

DEC 13 2007

the return envelopes. This will guarantee that there will be no way to link the request for the questionnaires with the completed returns from any of the participants in this study.

The limitation of participating in this sensitive research might be the emergence of uncomfortable memories, thoughts, or feelings as the participant fills out the self-report surveys. As each participant fills out the questionnaires the participant should: (1) seek counseling immediately to help with any distress or any dynamic that may emerge as a result, (2) discontinue the study. Also, the participant might consider filling out the questionnaires on different days.

The benefit of this project is that it may contribute to a better understanding of sibling incest.

If participants have any questions about this research, they may contact me at 476 17th Avenue, Paterson, NJ or by email at mcgratm@shu.edu. My mentor is Robert Massey, Ph.D. and he can be contacted at the Department of Psychology and Family Therapy at Seton Hall University (973) 761-9591. The IRB office may be reached at (973) 313-6314.

The participant has read the material above and any questions asked have been answered to the participant's satisfaction. The participant agrees to participate in this activity, realizing that he/she may withdraw without prejudice at any time.

For the sake of anonymity and confidentiality, returning the surveys to me implies consent to participate in this research. Please do not include any identifying information on the surveys or on the envelope mailed back to me.

This is your copy of the *Informed Consent*, however, to maintain anonymity I am not asking the participant to return it to me with a signature. As stated above, returning the surveys to me implies consent to participate in this research.

Thomas M. McGrath

Seton Hall University
Institutional Review Board

DEC 13 2006

Approval Date

Expiration Date

DEC 13 2007

Research Volunteers Needed

I am looking for ***adult survivors of sibling incest***, who are currently in therapy, to participate in a dissertation research project that will focus on ***the long-term psychological effects on survivors of sibling incest and their capacities to have adult relationships, which are intimate and autonomous.***

This research is highly confidential, is currently in progress, and participation in it is open to male and female survivors of sibling incest who have NEVER experienced parent-child incest or adult-child sexual abuse. This study will explore all types of sibling incest (brother-brother; sister-sister; brother-sister; sister-brother).

I am a doctoral student in the Department of Professional Psychology and Family Therapy at Seton Hall University.

The purpose of this research is to study the long-term psychological effects of sibling incest, and the capacities of adult survivors to have adult relationships which are intimate and autonomous.

Any individual, who willingly decides to be a participant in this highly confidential research, will be mailed four survey instruments which will take approximately 70 minutes to complete on paper and will return the completed surveys to this researcher by postal mail. There are no interviews involved in this research. The *Trauma Symptom Checklist-40* questionnaire evaluates experiences in adults associated with childhood or adult traumatic experiences. The *Personal Authority in Family System Questionnaire* measures intimacy and autonomy in personal relationships. The *Demographic and Sibling Incest Questionnaire* provides information on a participant's experience with sibling incest and the *Personal Attitude and Traits Questionnaire*, which measures attitudes and beliefs.

The nature of this research study involves ***voluntary participation and refusal to participate or discontinue participation at any time will involve no penalty or loss of services. Individuals who are interested in volunteering for this research*** project can express that willingness by contacting me via mail at: 476 17th Avenue, Paterson, NJ 07504; or via your direct service provider / therapist.

Those participants in this study who willingly and freely provide their names and addresses to this researcher, will be mailed a letter of Informed Consent, the surveys, as well as a stamped return envelope in order to return the surveys via postal service. ***This researcher will maintain this identifying information in a confidential manner and anonymity will be preserved.*** This researcher is the only person who will have access to the list of names, addresses and data of participants and will secure this confidential information in a locked cabinet and destroy this list following the conclusion of this research.

Those who participate in this research are asked to return the surveys without any identifying information on the questionnaires or return envelope to maintain ***confidentiality and anonymity.*** As a result, there will be no way to link the responses to the identity of the participant.

If participants have any questions about this research, participants may contact me at 476 17th Avenue, Paterson, NJ or by email at mccrattm@shu.edu. My mentor is Robert Massey, Ph.D. and he can be contacted at the Department of Psychology and Family Therapy at Seton Hall University (973) 761-9911. The IRB office may be reached at (973) 313-6314.

Approval Date

DEC 13 2006

Institutional Review Board

Thomas McGrath
476 17th Avenue, Paterson, NJ 07504

Expiration Date

DEC 13 2007

Volunteers Needed

For a Research Control Group

If you are 18 years or older and have NEVER experienced any type of incest or sexual abuse during childhood, please consider volunteering for this important research project. This research is highly confidential and is currently in progress.

I am a doctoral student in the Department of Professional Psychology and Family Therapy at Seton Hall University.

The purpose of this research is to study the long-term psychological effects of sibling incest, and the capacities of adult survivors to have adult relationships which are intimate and autonomous.

Any individual, who willingly decides to be a participant in this highly confidential research, will be mailed four survey instruments which will take approximately 70 minutes to complete on paper and will return the completed surveys to this researcher by postal mail. There are no interviews involved in this research. The Trauma Symptom Checklist-40 questionnaire evaluates experiences in adults associated with childhood or adult traumatic experiences. The Personal Authority in Family System Questionnaire measures intimacy and autonomy in personal relationships. The Demographic and Sibling Incest Questionnaire provides information on a participant's experience with incest and the Personal Attitude and Traits Questionnaire, which measures attitudes and beliefs.

The nature of this research study involves *voluntary participation and refusal to participate or discontinue participation at any time will involve no penalty or loss of services. Individuals who are interested in volunteering for this research project can express that willingness by contacting me via mail at: 476 17th Avenue, Paterson, NJ 07504; or via your direct service provider / therapist.*

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If participants have any questions about this research, participants may contact me at 476 17th Avenue, Paterson, NJ or by email at mccratim@shu.edu. My mentor is Robert Massey, Ph.D. and he can be contacted at the Department of Psychology and Family Therapy at Seton Hall University (973) 761-1911. The IRB office may be reached at (973) 313-6314.

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