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A CROSS NATIONAL VALIDATION OF

CHILD SEXUAL ABUSE PREDICTORS

By

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A Dissertation Submitted to the Faculty of the Graduate School of the University of Louisville In Partial Fulfillment of the Requirements For the Degree of

Doctor of Philosophy

College of Education and Human Development University of Louisville Louisville, Kentucky

December, 2007

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A Dissertation Approved on

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ACKNOWLEDGEMENTS

My major professor, Dr. Nancy Cunningham, has been a source of guidance and inspiration throughout my doctoral training and I offer my special thanks for these and her extended patience. My thanks are also extended to the members of my committee, Dr. George Cunningham, Dr. Patrick Hardesty, Dr. Daya Sandhu and Dr. Denise Gifford. I would like to especially thank Dr. George Cunningham for his most valuable help in reading the dissertation and providing comments on the form and the efficacy of the statistical procedures used. My thanks also go to Dr. Denise Gifford who was also my research assistantship supervisor and my mentor in research. Without her guidance and encouragement, this doctoral candidacy would not have been possible.

I was made to feel quite at home and welcome in Louisville and this was due to a large extent to the kindness and support of Dr. Bernie and Mrs. Irene Strenecky. My fellow students and housemates Dr. Wilma Wright, Dr. Henry Cunningham and Kevin Kester also deserve special thanks for their support and friendship during my years of candidacy for the doctoral degree. Of course my friends, family and children at home played an important supportive role in my study abroad and I will be forever in their debt. Lastly this candidacy could not have been successful without the continued support, patience and encouragement of my husband Dr. Leopold Perriott who assisted me at all levels during my doctoral training.

ABSTRACT

A CROSS NATIONAL VALIDATION OF CHILD SEXUAL ABUSE PREDICTORS

Juanita E. Briceño-Perriott

9 October, 2007

An exploratory cross national study was conducted to determine if factors identified in the existing literature predictive for CSA in developed countries were also valid and predictive CSA factors for females in Belize, a developing country. The conceptual framework adapted from current CSA literature included the choice of CSA definition, the number and specificity of questions used to elicit CSA response and the questionnaire response rate. Variables investigated were adopted from CSA literature and included: the presence of a stepfather in the family, parent figure (mother figure, father figure) alcohol use, parent figure (mother figure, father figure) child care, family violence (mother figure, father figure) and child having a small number of friends and not having anyone to confide in. Additionally, variables of particular interest to developing countries which included varied ethnicity, income level, religious affiliation, education, and family type were also examined.

T-tests and Chi square tests were used to investigate the independence of CSA and the factors hypothesized as CSA correlates. Also a General Linear Model (GLM) analysis was used to determine which of the factors found at the bivariate level to be

iv

significant correlates of CSA were predictors of CSA. The t-tests identified parental family violence and parent figure child care as significant CSA correlates while the chisquare tests results identified presence of a stepfather and father figure alcohol use as CSA correlates. In addition, GLM analysis confirmed the correlates identified at the bivariate level as CSA predictors. All other variables examined were not statistically significant. The findings lend support to the hypothesis that factors predictive of CSA in developed countries are also predictive of CSA in developing countries. Since this is only one study to test this hypothesis other studies with similar methodologies are required to confirm the conclusion. Implications, both theoretical and practical, are proposed and a short discussion on factor interaction is included.

TABLE OF CONTENTS

PAGE

ACKNOWLEDGEMENTS	iii
ABSTRACT	iv
LIST OF TABLES	xii
LIST OF FIGURES	xiii

CHAPTER

I.	INTRODUCTION	1
	Context of the Problem	1
	Background to the Problem	5
	Factors which are predictive of CSA	5
	CSA in Belize	6
	Cultural Beliefs	6
	Incidence of CSA	8
	Summary	10
	Statement of the Problem	10
	Purpose of the Study	11
	Significance of the Study	11
	Definition of Terms	12
	Child Sexual Abuse	12
	Presence of a stepfather	13

	Parental alcohol and/or drug use	13
	Family violence	13
	Parental/Child bonding	14
	Social Isolation	14
	Stepfather	14
	Stepmother	14
	Limitations of Study	14
	Research Question	17
II	LITERATURE REVIEW	18
	Introduction	18
	Definitions of CSA	19
	From early United States studies	20
	From developed countries other than the U.S	21
	From studies in developing countries	23
	Summary of CSA definitions	23
	Methodological Issues Affecting CSA Prevalence	26
	CSA definition	26
	Screen questions	30
	Questionnaire response rate	32
	Summary of methodological issues	35
	CSA Definition in Current Study	36
	Independent Variables	38
	Risk factors	38

Exploratory studies	39
Finkelhor (1979)	39
Finkelhor (1981)	42
Bergner et al. (1994)	43
Madu and Peltzer (2000)	43
Critique of exploratory studies	44
United States studies using national samples	46
Finkelhor et al. (1990)	46
Finkelhor et al. (1997)	47
Volgentanz et al. (1999)	48
Critique of U.S. national studies	49
Studies using sophisticated methodologies	50
Benedict and Zautra (1993)	51
Brown et al. (1998)	52
Fergusson et al. (1996)	53
Fleming et al. (1997)	54
Critique of studies using sophisticated methodologies	56
Study addressing time sequence issue	56
Summary of independent variables' literature	57
Significant Factors Found Across Studies	58
Current Study	60
Thesis	60
Research site	61

	Potential predictor variables	62
	Independent variables	60
	to be investigated	62
	Hypotheses to be investigated	64
III	METHODOLOGY	67
	Introduction	67
	Subjects	67
	Procedure	68
	Instrumentation	69
	Pilot Test Results	72
	Response rate	72
	Social isolation	72
	Reliability	73
	Parent figure child care	73
	Validity	73
	Reliability	74
	Parental figure alcohol and drug use	74
	Reliability	74
	Parental figure family violence	.75
	Validity	75
	Reliability	75
	Analyses	76

RESULTS)
Introduction)
Descriptive Statistics)
Response rate)
Means and standard deviations)
Prevalence 81	1
Respondents' parent figures	3
Analyses used to examine the hypotheses	1
Hypothesis 1 87	7
Hypothesis 2 87	7
Hypothesis 3 88	3
Hypothesis 4 88	3
Hypothesis 5 89)
Hypothesis 6 90)
Hypothesis 7 90)
Hypothesis 8 91	1
Hypothesis 9 91	1
Hypothesis 10	2
Hypothesis 11	1
Hypothesis 12	1
Hypothesis 13	5

IV

Type I Main Effects And Two Way Interaction Model	96
Significant Two-Way Interactions	97
Summary	98
DISCUSSION	100
Summary of Major Findings and Discussion	100
Major findings	101
Implications	102
Research implications	102
Implications for practice	104
Identification of CSA	104
Implications for treatment	105
Implications for prevention	107
Limitations	109
Recommendations	110
Future research	.110
Practice	. 111
Conclusion	112
REFERENCES	114
APPENDIX A: INFORMED CONCENT	123
APPENDIX B: LIFE EXPERIENCES SURVEY	126
CURRICULUM VITAE	146

V

LIST OF TABLES

TABL	E PAGE	
1.	Factors Found to be Significant across Studies Reviewed	59
2.	Hypotheses, Variables and Items on the LES	77
3.	Independent and Dependent Variables	78
4.	Means and Standard Deviations of Independent Variables	80
5.	Percentage of Individuals Identified as Parent Figures	83
6.	Intercorrelations for Predictor Variables Included in the GLM Analysis .	. 85
7.	Means (M) and Standard Deviations (SD) of Parent Child Care and Family Violence for CSA and Non-CSA Respondents	89
8.	Chi Square Tests Results for Income Level, Family of Origin, and Religious Affiliations	92
9.	Reported Percentage of Ethnicity, Income Level and Family of Origin by Sexually Abused and Non-abused Respondents	93
10.	Chi Square Tests Results for Parent Figure and Parental Educational Level	94
11.	ANOVA – Main Effects	96

LIST OF FIGURES

FIGURE

PAGE

1.	CSA Perpetrators	82
2.	Normal P – P Plots for Covariates – Mother Figure Child Care,	
	Father Figure Child Care, Mother Figure Family Violence and	
	Father Figure Family Violence	86

CHAPTER I

INTRODUCTION

Context of the Problem

Risk factors, sequelae, correlates, and prevalence of child sexual abuse (CSA) have been studied over the last twenty years in many developed countries. However, there have been few studies conducted in developing countries. As a result, information about CSA risk factors, sequelae, correlates, and prevalence in developing countries is limited (Lachman, Poblete, Ebigbo, Nyandiya-Bundy, Killliam, & Doek, 2002). This study seeks to contribute to the body of CSA literature by extending the investigation of CSA risk factors from developed to developing countries. Those factors found in CSA literature to be predictive of female CSA in developed countries are investigated in a particular developing country to establish validation for the factors and to elaborate a methodology for national studies in other developing countries.

CSA is defined as any sexual activity or contact with a child by persons who through their power and/or authority force a child into sexual activity (Blume, 1990; Brown, 1991; Finkelhor, 1979; Lew, 1990; Manon & Leitschuch, 2002). CSA may occur between either a child or adolescent and someone significantly older, or between two peers who are children or adolescents (Finkelhor, 1979; Manon & Leitschuch, 2002; Rind, Tromovitch, & Bauserman, 1998; Russell, 1984). To differentiate among child experimental play, adolescent romantic relationships, and CSA, researchers (Finkelhor,

1979; Goldman & Padayachi, 2000; Leitenburg, Greenwald, & Cado, 1992; Russell 1983; Schaff & McCann, 1998) have added the requirement that the peer perpetrator must be at least five years older than the victim.

CSA is divided into two types: familial CSA and non-familial CSA. When CSA occurs in families, it is called incest or familial CSA (Fergusson & Mullen, 1999; Finkelhor 1979; Herman, 2000). Historically, the CSA perpetrator had to be a blood relative for the term incest to be used (Finkelhor, 1986; LaFontaine, 1990; Renvoize, 1982). Currently, incest is defined not in terms of blood ties, but in terms of the emotional bond between the victim and offender. The absence or presence of blood relationships is less important than the kinship roles the abusers play (Akande, 2001; Herman, 2000; Lein, 2001). Biological parents, surrogate parents such as adoptive parents, step-parents, foster parents, common law husbands, paramours of the victims' biological parents, siblings, step-relations, other members of the family and legal guardians are included on the list of potential familial CSA perpetrators (Blume, 1990; Lein, 2001; Lew, 1990; Stevens, 1992). Non-familial CSA occurs when the perpetrators are non-family members (Akande, 2001; Blume, 1990; Finkelhor, 1986; Lein, 2001; Stevens, 1992).

Variations in CSA definitions (Gorey & Leslie, 1997; Roosa, Reyes, Reinholtz & Angelini, 1998; Wyatt & Peters, 1986a; 1986b), number of questions used to elicit CSA history (Bolen & Scannapieco, 1999; Finkelhor, 1994b; Goldman & Padayachi, 2000; Peters, Wyatt & Finkelhor, 1986; Williams, Siegel, & Pomeroy, 2000), and response rate (Bolen & Scannapieco, 1999; Haugaard & Emery, 1989; Goldman & Padayachi, 2000; Gorey & Leslie, 1997) have directly influenced prevalence rates. Nonetheless, research

on CSA indicates that prevalence rate is high across many countries where it has been surveyed (Finkelhor, 1994a; Goldman & Padayachi, 2000; Rind, Tromovitch, & Bauserman, 1998). CSA prevalence rates obtained from United States national surveys based on retrospective studies range from 2% to 16% for males and from 8 % to 30% for females with the mean prevalence of 25% for females and 9% for males (Bolen, 2001). Based on retrospective studies of CSA conducted in Canada, Europe, South Africa, Australia, and New Zealand, McMillan, Fleming, Trocme, Boyle, Wong, Racine, Beerdslee, and Offord (1997) concluded that international prevalence estimates cluster around 20% for females and 7 % for males. These prevalence rates indicate that females are more likely to be abused than males.

Results from Bolen's (2001) meta-analysis provide support for this conclusion. Bolen (2001) cites statistics that indicate that females are at greater risk than males of abuse by filial and non-filial males, and that CSA is primarily heterosexual. Findings from a review of studies that used national probability samples conducted in Western Europe and Australia are consistent with conclusions drawn from North American CSA literature (Finkelhor, 1994b). In the countries sampled, females experienced CSA approximately 1.5 to 3 times more than males, and the offenders were overwhelmingly males (Finkelhor, 1994b). Research conducted since the review has confirmed these conclusions (Bendixen, Muus, & Schei, 1994; Goldman & Padayachi, 2000; McMillan et al., 1997).

Over the last two decades, knowledge regarding CSA prevalence, risk factors, correlates, and sequelae has greatly increased in North America, Western Europe, and Australia (Lachman et al., 2002; Olsson, Ellsberg, Herrera, Zelaya, Peña, Zelaya, &

Persson, 2000). In response to these empirical findings, the developed world has implemented legal and social child protection measures that have resulted in sophisticated child sexual abuse services (Lachman et al., 2002) including education, prevention, therapeutic interventions for victims, offender treatment programs, and legal prosecution of perpetrators (Haugaard, 2000; Tomison, 1995).

CSA has evolved into an important social issue in countries with more highly sophisticated social service infrastructures (Heise, Ellsberg, & Gotemoeller, 1999); however, there have been few systematic studies of CSA conducted in less-developed countries. As a result, information regarding the prevalence, risk factors, correlates, and sequelae of CSA beyond the developed world is still limited, and data from populationbased studies is rare (Barthauer & Leventhal, 1999; Lachman et al., 2002).

The limited systematic data that is available from less-developed countries such as Brazil (Farinnatti, Fonseca, Dondonis, & Brugger, 1990), Costa Rica (Krugman, Mata, & Krugman, 1992), India (Segal & Ashtekar, 1994), Malaysia (Singh, Ying & Nurani, 1996), and Nigaragua (Olsson, Ellsberg, Berglund, Herrera, Zelaya, Pena, Zelaya, & Person, 2000) indicate that CSA is an important issue in less-developed countries. Researchers in these countries have focused on investigating CSA prevalence with little attention being paid to issues of risk factors, correlates or sequelae. Evidently, there is a need to examine these neglected areas of CSA research in developing countries and an investigation of the factors that are predictive of CSA in developing countries is timely and necessary. Since empirical data on factors that are predictive of CSA in developing countries are not available, it is necessary to adopt factors that have been identified in CSA literature in developed countries as the basis for this type of research. Such studies

can provide empirical data on which advocacy, educational, intervention and prevention programs can be based (Barthauer & Leventhal, 1999; Olsson et al., 2000).

Belize, situated in Central America, is one such less-developed country. This study will investigate whether factors predictive for CSA in developed countries are valid and predictive factors for Belizean female children. Studies such as this one can provide valuable information for cross-national comparisons of these factors and guide the development of child protection services in less-developed countries such as Belize. In order to put the study of CSA in Belize in perspective, it is important: (a) to describe those factors identified in empirical literature that are predictive for CSA and (b) to understand the cultural context of CSA in Belize.

Background to the Problem

Factors which are predictive for CSA

Results from multiple CSA studies conducted in developed countries indicate that a number of family and social factors are predictive for female CSA. These include: the presence of a non-biological father in the home (Fergusson & Mullen, 1999; Finkelhor, 1979; Finkelhor et al., 1990; Herman & Hirshman; 1981; Mullen, Martin, Anderson, Romans, Herbison, 1996; Russell, 1983; Smith, 2002); living apart from the mother at some time in childhood (Finkelhor, 1986; Fleming, Mullen, & Bammer, 1997; Herman & Hirshman, 1981); mother disability or illness (Finkelhor, 1979; Finkelhor, 1986; Herman & Hershman, 1981; Mullen et al., 1996; Smith, 2002); social isolation from peers (Finkelhor, 1986; Fleming et al., 1997; Mullen et al., 1996); physical abuse (Fergusson, Lynskey, & Horwood,1996; McCloskey & Bailey, 2000; Mullen et al., 1996; Roberts & Miltenberger, 1999); parental alcohol and drug dependency (Fergusson, Lynskey, & Horwood,1996; Fleming et al., 1997; McCloskey & Bailey, 2000); parental divorce or separation (Fergusson et al. 1996; Roberts, Miltenberger, & Raymond, 1999); and poor relationship with parents (Finkelhor, 1986; Fleming et al., 1997). Other factors that were investigated were not found to be significant across studies but were found significant in individual studies. Examples include ethnicity (Madu & Peltzer, 2000) and income (Finkelhor, 1979).

The current study will investigate factors that were found to be significant across 50% or more of the studies investigating predictive factors for CSA. These include parent figure alcohol and or/drug use, the presence of a stepfather in the family, parent figure child care, family violence and perceived social isolation by the child. These variables will be discussed in depth in Chapter 2.

CSA in Belize

Cultural Beliefs.

CSA occurs in Belize but not much is known about its prevalence, characteristics, risk factors, or sequelae. To date, a detailed systematic study on the correlates or prevalence of CSA has not been undertaken. Information presently available comes from individuals working with CSA victims, police reports, and reports to the National Department of Human Services. CSA statistics compiled by the police and the National Department of Human Services are not routinely compiled for public usage.

F. M. Gillett (personal communication, May 10, 2004), an educator of twenty years who has done volunteer work with maltreated children and women in Belize, suggests that CSA is not widely recognized by the general public as a problem in Belize and is not discussed openly because of the taboo about sexuality and sex that exists in

Belizean society. She further indicates that the general public believes that perpetrators are primarily strangers and that victims are female. The perception by the general public that CSA victims are females is reflected in the laws of Belize where victims of CSA are referred to as females, and only rape is punishable by law (Belize Criminal Code Act, 2001).

Child abuse and neglect gained recognition and attention in the early 1990's when educators, professionals working with children, and government officials initiated discussions and programs to address child abuse and maltreatment in general. The National Organization for Child Abuse and Neglect (NOPCAN), a non-governmental organization, along with the National Department of Human and Social Services of the government of Belize, were established in 1992 to take the lead in the fight against child abuse, and neglect (NOPCAN, 2002).

Since then the government of Belize and NOPCAN have worked to make the Belizean public aware of the different forms of child maltreatment, including CSA. This awareness campaign gained intensity over the first half of 2004 with the launching of a national television media campaign aimed at making the public aware (a) of what acts constitute CSA and (b) that perpetrators can be family members, persons in position of authority, acquaintances and not only strangers as is commonly believed. However, economic constraints have made it difficult to provide comprehensive prevention and intervention programs. Because there is a paucity of empirical evidence, with only few cases being reported and a lingering reluctance by the Belizean public to recognize the problem, the severity of CSA is still underestimated and the correlates and sequelae of CSA have not been studied (F. M. Gillett, personal communication, May 10, 2004).

Incidence of CSA.

In many countries, information about the incidence of CSA is based on the number of cases that are recognized and reported to the appropriate agency such as child protective services or law enforcement (Leventhal, 2000). This holds true for Belize. One such source for the reported occurrence of CSA in Belize is the data compiled by the Police Statistical Unit to keep track of the criminal cases that are reported and brought to trial. Currently, all CSA cases reported to any agency in Belize must be reported to the police. In 1999, the Minister of Human Development, Women and Civil Society signed the child abuse regulations act which made it mandatory for professionals and the public to report child abuse. This act was then approved and passed by the House of Representatives.

CSA statistics are not routinely compiled for public usage. E. Wade (personal communication, May 25, 2004), police senior superintendent and head of the Central Investigative Branch in Belize, was instrumental in obtaining the following information from police records. In 2003, 111 incidences of carnal knowledge (forced contact sexual abuse with penetration), 37 incidents of rape, 4 incidences of incest, and 12 reports of indecent assault (forcibly touching or attempting to touch the child's body with the intention of causing harm, pain or fear) were reported to the police. Of these 164 reported cases, only 38 arrests were made. In the first four months of 2004, reported cases included 38 carnal knowledge, 23 rape, 3 incest, and 5 indecent assault cases. A total of 37 arrests were made as a consequence of these 69 reports.

The first four months of 2003 produced 33 reported CSA cases and no arrests. In comparison, the first four months of 2004 produced 69 reported cases and 37 arrests.

This indicates an increase of over 100% in both CSA reporting and arrests. Available statistics indicate that CSA victims for 2003 and the first four months of 2004 were all female. Further, the majority of reported perpetrators for 2003 and 2004 were identified as strangers to the victims and all reported perpetrators were male.

Although statistics show an increase in the number of cases reported, many cases are difficult to prosecute by law because those involved refuse to testify. Many incidences are also not reported to the police because of the shame and stigma attached to CSA. In 2003 and 2004, newspapers have used reported CSA cases as headliners and therefore confidentiality has become an issue and has probably kept Belizeans from reporting CSA incidences (E. Wade, personal communication, May 25, 2004).

The Belize National Human Services Department began recording CSA statistics in 1995. All twenty-four cases reported that year occurred in the Belize District and victims were all females. The Belize District is the largest political division in the country of Belize and has a population of 75,000 (Abstract of Statistics, Belize, 2001). From 1996 to 2001, 514 cases [1996 (33 cases), 1997 (21 cases), 1998 (29 cases), 1999, (159 cases), 2000 (153 cases), 2001 (119 cases)] were reported in the Belize District, and similarly to 1995, all victims were females and all perpetrators were male. It was not until 2002 that CSA reports were obtained from all districts [280 cases in 2002 and 331 cases in 2003] (Belize National Human Services Department records). A. Pennell (personal communication, May 4, 2004), Director of the Belize National Human Services Department and a social worker, suggests that the increase in cases reported to the National Human Services indicates increased awareness of CSA among the general public in Belize.

Summary

CSA occurs in the country of Belize, but not much is known about its prevalence, characteristics, risk factors, or sequelae. Information comes from individuals working with CSA victims, police reports, and reports to the National Department of Human Services. It is evident that wide discrepancies exist among the incidence reports provided by different agencies in Belize. Statistics on CSA, where available, are based on reported incidences and are obtained with difficulty. Individuals working with CSA victims believe that it is under-reported partly because of the public's perception of lack of safeguards to protect confidentiality in the reporting process, lack of awareness of the issue, as well as the shame and stigma attached to CSA. To date, a detailed systematic study on the prevalence or characteristics of CSA has not been undertaken in Belize. Lachman et al. (2002) suggests that the dearth of research in less developed countries has been the result of three important factors: (a) the lack of resources for conducting research, (b) the lack of trained researchers in the field and (c) lack of awareness of the issue and its consequences. This holds true for Belize.

Statement of the Problem

CSA occurs in Belize, and in recent years, the country has seen a rise in the reported number of cases. Statistics collected by the Belize National Human Services Department indicate an increase in the total number of reported cases for the country between 1996 (33 cases) and 2003 (331 cases). This increase in the number of reported incidences indicates a growing awareness by the general public of the problem in Belize. However the true incidence, characteristics, and sequelae of CSA are unknown as data collected is based on the notification of cases to the National Human Services

Department and to the police and not on systematic population based-studies. Empirical data obtained from systematic studies of CSA is non-existent in Belize.

In general, empirically based CSA data from developing countries is limited (Barthauer & Leventhal, 1999; Lachman et al., 2002; Leventhal, 1998). A populationbased study such as the current study can provide valuable information on the characteristics of CSA in developing countries and therefore, contribute to the body of CSA related research.

Purpose of the Study

The purpose of this exploratory study is to investigate whether factors predictive for CSA in developed countries identified in the existing research literature are valid and predictive CSA factors for females in Belize. These variables include presence of a stepfather in the family, parent figure alcohol and/or drug use, family violence, parent figure child care and social isolation.

Significance of the Study

CSA, its correlates, prevalence, and sequelae have been extensively studied in developed countries. Research on CSA in developing countries, however, has been limited to the determination of prevalence rates. Evidently, much work on CSA correlates and sequelae is needed to allow cross-national comparisons. This exploratory study begins the investigative process by targeting one developing country, Belize, and in this setting, examining those factors found to be predictive for CSA in current literature. The methodology and instrument used in the current study can form a basic template to be replicated in national CSA studies in other developing countries.

It is clear from previous discussion that empirical data on CSA correlates do not generally exist for developing countries. Cross-national comparisons are not possible and it is not known if factors predictive for CSA in developed countries are also predictive in developing countries. It is also not known if factors exist that are predictive for CSA in developing countries but which are not predictive for CSA in developed countries. This exploratory study attempts to shed some light on the universality of correlates across national borders and derives its significance not from the sample size and amount of data collected but from the methodology detailed, and the potential for replication in developing countries which can provide data for further cross-national validation of CSA predictors.

Definition of Terms

Child sexual abuse

Child sexual abuse is defined in the current study as sexual experiences between the respondent as a child (16 years or younger), and an adult (18 years or older). "Sexual experiences" include both contact and non-contact activities by either the adult or the respondent as a child (Finkelhor, 1979; 1981; Fleming et al. 1997; Wyatt, 1985) as described below and measured by a 15 item scale on the Life Experiences Survey (LES).

Contact sexual experiences include: (a) the adult kissing the respondent as a child on the mouth, touching the child's breasts or genitals, fondling the child in a sexual way, oral sex, and anal or vaginal intercourse, and (b) the respondent as a child touching the other person's breasts and/or genitals, and fondling the other person in a sexual way.

Non-contact sexual experiences include: (a) the adult taking nude or semi-nude photographs of the respondent as a child, exposing the child to pornographic magazines

or audio-visual materials (Akande, 2001; Lein, 2001), showing breasts and/or genitals to the child, and (b) the respondent as a child showing her breasts and/or genitals to the other person.

Familial CSA occurs when any of the previously described sexual activities are perpetrated by the child's biological parents, other biological or related by marriage family members, stepparents, step-relations, common-law spouses, mother's boyfriends, adoptive parents, foster parents or legal guardians. Non-familial CSA occurs when nonfamily members perpetrate any of the previously described acts.

Presence of a stepfather

Presence of a stepfather in the home for a minimum extended period of six months before age 16 (Benedict & Zutra, 1993; Finkelhor, 1979; 1981; Fleming et al. 1997) as measured by the LES.

Parent figure alcohol and/or drug use

Respondent's perception of whether parent figures used alcohol and/or marijuana frequently (Fergusson, Lynskey & Horwood, 1996; Finkelhor, 1979; 1981; Fleming et al., 1997) as measured by two items on the LES.

Family violence

Parent figure physical abuse of respondent during childhood and parent figure-toparent figure physical abuse; physical abuse refers to reported frequent hitting, kicking, punching, and whipping as measured by an 11 item scale on the LES. Injuries caused by hitting with open hands, fists or weapons such as belts and sticks are included (Finkelhor, 1979; 1981; Fleming et al., 1997).

Parent Figure Child Care

Extent of respondent's perception of parent figure's physical attention and care towards her up to age 16 (Finkelhor 1979; 1981; Fergusson, Lynskey, & Horwood, 1996; Fleming et al., 1997) as measured by an 11 item scale on the LES.

Social isolation

Reported three friends or less in elementary and high school; no-one to confide in (Finkelhor, 1979; 1981; Fleming et al., 1997); and respondent's perception of parent figure keeping her away from peers (personal communication with professionals who work with CSA victims in Belize) as measured by a three item scale on the LES.

Stepfather

Respondent mother's legal or common-law husband, live-in boyfriend, adoptive father or foster father (Finkelhor, 1979; Fleming et al., 1997; Wyatt, 1985) as measured by an item on the LES.

Stepmother

Respondent father's legal or common-law wife, live-in girlfriend, adoptive mother or foster father (Finkelhor, 1979; Fleming et al., 1997; Wyatt; 1985) as measured by an item on the LES.

Limitations of the Study

The findings of this study should be interpreted with caution for the following reasons:

(a) The sample was limited to women between the ages of 25 and 34 years in an urban area of Belize. Therefore, the sample may not be representative of Belizean women as a whole or of the population of women in general.

- (b) Differences in culture across national borders may emerge as important issues in identifying or confirming factors that are predictive of CSA in female children. Each developing country may contribute its own peculiar cultural identity to any study of CSA and this may have a direct bearing on the results of the study. In Belize, the results of the current study may be affected by the perceived guilt, shame, and stigma attached to CSA. Respondents may also feel that anonymity is not adequately assured and may not respond truthfully to items in the questionnaire. Furthermore, CSA and incest are highly tabooed topics and thus, no assurance can be given that a high degree of candor can be obtained.
- (c) Although English is the official language of Belize, English is in actuality a second language to Belizeans. Respondents may misinterpret some of the items on the questionnaire that may have a direct bearing on the results.
- (d) The University of Louisville Human Studies Internal Review Board has limited the sample size from 400 to 200. McMillan et al. (1997) reported that international female CSA prevalence rate is 20%. This means that of the sample of 200, 40 respondents may admit to CSA. This may be too small a number to find any statistical differences between respondents who report CSA and those who do not.
- (e) The survey method that will be used to collect data has inherent limitations.
 - The use of a self-report questionnaire could provide erroneous data because of the possibility of conscious bias in the respondents.
 Response sets such as social desirability, acquiescence and nay saying

of respondents who want to be thought of positively could distort the data either intentionally or unintentionally. Presumably, social desirability set falsifies answers in the direction the respondent deems socially appropriate (Baldwin, 2000).

- Non-response also poses a serious problem when self-report questionnaires are used because non-respondents may differ from respondents in ways that could affect answers and therefore the results of the study (Baldwin, 2000). Response rates have been found to affect CSA prevalence rates with response rates of 60% or more eliciting more accurate CSA prevalence rates than studies with less than 60% response rates. CSA prevalence rates directly influence analyses of studies on CSA correlates (Gorey & Leslie, 1997; Haugaard & Emery, 1989).
- Obtaining honest answers to questions regarding sensitive topics such as CSA poses a special problem. Respondents need to be assured that their responses will be truly anonymous (Baldwin, 2000). This holds true for Belize where stigma and shame are attached to the CSA victim.
- (f) Empirical evidence suggests that long-term memory is subject to distortions (Briere & Comte, 1993; Loftus, 1993). Evidence from case studies and surveys supports the existence of accurately repressed memories. Evidence also suggests that recovered memories may contain distortions or be entirely false and that incestuous or violent abuse is most likely to be repressed (Briere

& Comte, 1993; Elliott & Briere, 1995; Loftus, Garry & Feldman, 1994). Prospective studies on women's memories of CSA (Loftus, Polonski & Fullilove, 1994; Fish & Scott, 1999; Williams, 1994) also indicate that having no memory of CSA is a common occurrence among community samples of women who were reported to have been sexually abused as children. This has implications for the current study that will obtain data utilizing a questionnaire that asks women to report on CSA. The data collected may not accurately represent the circumstances surrounding CSA because participants' memories may be repressed or distorted. Additionally, the prevalence rate may be underestimated.

Research Question

Is female CSA in Belize more likely to occur in families where there is

- a stepfather present
- parent figure alcohol/drug use
- family violence
- little parent figure child care and/or
- where the child is socially isolated?

CHAPTER II

LITERATURE REVIEW

Introduction

Belize, a developing country in Central America, is identified as the research site of the current study. Analyses of factors which place children at increased risk for child sexual abuse (CSA) have not been attempted for developing countries. This study will initiate such research in order to determine whether factors found to be predictive for CSA in developed countries are also predictive for CSA in developing countries. In this chapter, a definition of CSA consistent with current CSA literature is described for the Belize study, and variables to be investigated and hypotheses to be examined are developed.

Definitions, ideas, and issues addressed in CSA literature are also examined in this literature review. Early definitions of CSA proposed by various authors are compared to identify common themes and differences to provide a template on which to base the current study's CSA definition. Attention is given to three methodological issues which empirical research indicates affect the accurate estimate of CSA prevalence and therefore, the accuracy of the results of the study. These include: (a) CSA definitions, (b) questions used to obtain CSA history from the respondents (screen questions), and (c) response rate.

"Risk factor" analyses conducted by researchers from the United States (US) and other developed countries are summarized and critiqued to identify the independent

variables for the current cross-national study. These studies include early exploratory studies, United States studies using national samples, studies using sophisticated methodologies, and issues relating to the time at which the "risk factor" occurred. Since most of the researchers whose studies are reviewed do not insist that the factor investigated predate the sexual abuse, there is some ambiguity in the use of the term "risk factor". This realization motivates the current author to use the term "predictors" in the current study to refer to factors or variables that statistically differentiate between sexually abused and non-sexually abused respondents and which are associated statistically with an increased risk for CSA. However, to accurately reflect the content of the articles reviewed, the term "risk factors" is used in the current literature review because it is the terminology used by CSA researchers whose works are reviewed. This usage is reserved for the review of literature only. The author reverts to the term "predictors" in the term "predictors" in the study.

Definitions of CSA

Three studies (Finkelhor, 1979; Russell, 1983; Wyatt 1985) provide CSA definitions that have formed the basis of definitions used in subsequent studies. Published reports indicate that Bergner, Delgado, and Graybill (1994), Madu and Peltzer (2000), Ray, Jackson, and Townsley (1991) and Vander Mey and Neff (1984) based their definitions of CSA on Finkelhor (1979). Vogeltanz, Wilsnack, Harris, Wilsnack, Wonderlich, and Krisjanson's (1999) definition was based on Russell (1983) and Fleming, Mullen, and Bammer (1997), Wyatt, Loeb, Solis, Carmona, and Romero (1999), Vogeltanz et al. also (1999) based their definitions on Wyatt (1985).

CSA definitions from early United States studies

Finkelhor (1979) described CSA as any or all sexual activity or contact with a child. He included both contact and non-contact sexual activities in his definition and used age criteria consisting of three categories. These were: (a) a child 12 years and under who has sexual experiences with an adult 18 years or older, (b) a child 12 years and younger who has sexual experiences with a person who is under 18 but at least 5 or more years older than the child, and (c) an adolescent 13 to 16 years who has sexual experiences with a legally defined adult at least 10 or more years older. Incest or familial CSA was defined as any sexual experience in which the perpetrator was a biological parent, extended family member, stepparent, step-relation, or surrogate parent figure such as a common-law spouse, foster parent, or adoptive parent.

Russell's (1983) primary definition of CSA included only contact experiences. Non-familial CSA was defined: (a) for victims less than 14 years old as one or more unwanted sexual experiences with persons unrelated by blood or marriage ranging from touching or attempts at touching of breasts or genitals to rape, and (b) for persons 14 years to 18 years old as completed forcible rape experiences. Since she expected familial CSA to be more traumatic than non-familial CSA, Russell (1983) included noncontact abuse in her definition of familial CSA. Familial CSA was defined as any kind of sexual contact that occurred between blood relatives before the victim turned 18 years old. Persons between the ages of 14 and 17 years were deemed to be victims of familial sexual abuse if the sexual experience occurred with someone at least 5 years older.

Wyatt (1985) included both contact (fondling, intercourse, and oral sex) and noncontact (solicitations to engage in sexual behavior and exhibitionism) sexual activities in

her definition of CSA and stipulated that the abuse had to occur before the victim was 18 years old. Similar to Russell (1983) and Finkelhor's (1979) definitions, the perpetrator had to be at least five years older than the adolescent victim. If the perpetrator was less than five years older, only unwanted sexual experiences that involved some degree of coercion were included. Unlike Russell (1983), Wyatt (1985) included surrogate parents, stepparents and stepsiblings as perpetrators in her familial CSA definition.

Other researchers have used definitions derived from those used by Finkelhor (1979), Russell (1983), and Wyatt (1985). These definitions addressed the issues of what constitutes sexual abuse behavior, familial and non-familial CSA, contact and noncontact CSA, and age criteria that identify victims and perpetrators. For example, Hanson, Lipovsky, and Saunders (1994) included any inappropriate sexual contact with a child below 18 years by another person. Age differences between victim and perpetrator were not specified and the terms "inappropriate" and "sexual contact" were not defined. Familial CSA was defined as any contact sexual activity between a child under 18 years old and a person in a relatively stable caretaking, parental role with the child or in a romantic relationship with the child's mother or primary caretaker.

CSA definitions from studies conducted in developed countries other than the United States

Researchers in developed countries other than the US have modified or extended the definitions of the three United States seminal studies: Finkelhor (1979), Russell (1983) and Wyatt (1985). For example, Fleming, Mullen and Bammer (1997), using Wyatt's (1985) definition as a basis for their Australian study, defined CSA as: (a) any sexual contact experience occurring before the age of 12 and (b) any unwanted sexual
contact experiences at 12 to 16 years with a person 5 or more years older. Similar to Wyatt (1985), Fleming et al. (1997) included surrogate parents, stepparents and stepsiblings as well as biological parents and relatives as perpetrators of familial CSA. Fleming et al. (1997) restricted the scope of Wyatt's (1985) definition by using the age of 16 years instead of 18 years as the upper age limit of childhood and by studying only contact sexual abuse instead of both contact and non-contact sexual abuse.

Furthermore, Fleming at al. (1997) were specific in describing sexual contact as touching or fondling the child's body; attempts by the child to arouse the adult, or touch his/her body in a sexual way; the adult rubbing his/her genitals against the child's body in a sexual way; touching the child's genitals with the mouth or having the child touch the sexual abuser's genitals with his/her mouth; attempts to have vaginal or anal intercourse with the child; and anal or vaginal intercourse.

Two groups of researchers (Fergusson, Lynskey & Horwood, 1996; Mullen, Martin, Anderson, Romans, & Herbinson, 1996) who conducted CSA "risk factors" studies in New Zealand also employed the age of 16 years as the upper age limit of childhood. However, they extended Fleming et al.'s (1997) definition by studying both contact and non-contact sexual experiences. Only unwanted sexual experiences were classified as CSA, and age differences between the perpetrator and victim were not stipulated. Similarly to Finkelhor (1979) and Wyatt (1985), both groups of researchers included surrogate parents, stepparents and stepsiblings as well as biological parents and relatives as perpetrators of familial CSA.

CSA definitions from studies conducted in developing countries

CSA prevalence research conducted in developing countries also employed definitions of CSA that addressed many of the issues found in the definitions of Finkelhor (1979) and Wyatt (1985). Olsson et al. (2000), researchers in the developing country of Nicaragua, considered both contact and non-contact sexual activities and defined CSA as any sexual act towards a child 12 years or younger by an older person or any unwanted sexual act towards a child more than 12 years by an older person. Similarly to Wyatt (1985), Olsson et al. (2000) employed the criterion of unwanted sexual activities involving the child after age 12. However, Olsson et al. (2000) restricted the scope of Wyatt's (1985) definition by employing only sexual acts perpetrated against the child and not including sexual acts performed by the child towards the perpetrator. The upper age limit of childhood was also extended to 18 years instead of 17 years used by Wyatt (1985) and the age limit of an "older person" was not provided.

In a study conducted in Malaysia, Singh, Yiing, and Nurani (1996) used a broader CSA definition than Olsson et al. (2000). CSA was defined as any sexual activity including vaginal rape, sodomy, molestation, or exhibitionism occurring intra-familial or extra-familial to a child less than 18 years of age. Age criteria to identify the perpetrator were not stipulated in the journal article reviewed. Familial perpetrators included stepparents, stepsiblings and biological parents and relatives.

Summary of CSA definitions

A number of common themes occur that appear to have a basis in the early seminal work of three United States researchers: Finkelhor (1979), Wyatt (1985), and Russell (1983). Sexual experiences were categorized as either contact or non-contact.

CSA definitions using only contact sexual experiences were used by Russell (1983) and Fleming et al. (1997). All other researchers whose works were reviewed used a CSA definition based on both contact and non-contact sexual experiences.

There was no consensus on the number and type of activities which constituted sexual experiences. Fergusson, Lynskey and Horwood, (1996) and Mullen et al. (1996), for example, did not specify activities that constitute CSA. In their study, Fleming et al. (1997) used 11 activities to describe contact sexual abuse. These activities included touching or fondling the child's body; attempts to arouse the adult, or touch his/her body in a sexual way; the adult rubbing his/her genitals against the child's body in a sexual way; touching the child's genitals with the mouth or having the child touch the sexual abuser's genitals with her mouth; attempts to have vaginal or anal intercourse with the child; and anal or vaginal intercourse.

Some researchers (Finkelhor, 1979; Fergusson, Lynskey, Horwood, 1996; Fleming et al. 1997; Mullen et al., 1996) consider a child to be a person no older than 16 years of age. Other researchers (Olsson et al., 2000; Russell, 1983; Singh et al., 1996 Wyatt, 1985) use 18 years as the upper limit for defining childhood. Clearly no standard agreement on the definition of a child is universally accepted. Furthermore, the age at which children are classified as adolescents also varied with some researchers using 12 years (Finkelhor, 1979; Fleming et al. 1997; Olsson et al., 2000) and others (Fleming et al., 1997; Russell, 1983) using 14 years as the beginning of the adolescent years. Higher CSA prevalence rates are obtained with the use of higher age cut off criteria. For example, Fleming et al. (1997) calculated CSA prevalence rates using both adolescent

age criteria and found a higher CSA prevalence rate for the 14 year cutoff criterion (41%) than for the 12 year cut off criterion (21%).

Issues of wanted and unwanted sexual experiences also played a part in CSA definitions used by the various investigators. Some investigators, for example; Finkelhor (1979), included both wanted and non-wanted sexual experiences in their definition. Others, for example; Fleming et al. (1997), restricted the definition of CSA to non-wanted sexual contact experiences only. A common recurring theme is that adolescents are considered to be sexually abused only if the sexual experience is unwanted (Fleming et al., 1997; Fergusson, 1996; Mullen et al., 1996; Olsson et al., 2000; Russell, 1983; Wyatt, 1985). Age difference between perpetrator and victim is also felt to be important presumably to eliminate adolescent sexual experimentation (Finkelhor, 1979; Fleming, 1997; Olsson et al., 2000; Russell, 1983; Wyatt, 1985). Adolescent peers are only considered perpetrators if the sexual experience is unwanted (Fleming et al., 1997; Wyatt, 1985).

It is clear that there is no standardized CSA definition. However, the following themes are addressed in the literature reviewed: contact and non-contact sexual experiences, wanted and unwanted sexual experiences, the activities which constitute CSA, age considerations to determine when a person is a child or adolescent, and age considerations to identify the perpetrator.

Information from this review suggests that researchers in developed and developing countries have exercised latitude in choosing a definition of CSA. This, evidently, has directly affected the reported CSA prevalence of the studies with prevalence rates ranging from 19% (Finkelhor, 1979) to 62% (Wyatt, 1985). Researchers

using broader definitions report higher prevalence rates (See the section below for a detailed discussion of this issue).

Methodological Issues Which Affect CSA Prevalence

Any CSA investigation must start with a definition of CSA. It is reasonable to suggest that the methodological issue of the choice of a CSA definition must be addressed and that the choice of a specific definition will have a direct impact on the number of CSA disclosures and the prevalence rate calculated. This conclusion has been supported by studies conducted by Bolen (2001), Bolen and Scannapieco (1999) Finkelhor (1994b), and Gorey and Leslie (1997). These researchers and others (Peters, Wyatt, and Finkelhor, 1986, Wyatt & Peters, 1986 a; 1986b) also propose two other methodological issues which affect CSA prevalence rate calculation: the number of screen questions (questions used to elicit CSA history) and response rate. These three methodological issues are shown in the following sections to affect outcomes and validity of any CSA study. Conceptualization, design and implementation of the current study were guided by the following review of methodological issues.

The issue of definition

Wyatt and Peters (1986a; 1986b) examined four of the representative studies of CSA prevalence to explore how the differences in definitions of CSA contributed to the variation in reported prevalence rates. These included Finkelhor's (1979) retrospective study of CSA among a sample of college students, Finkelhor's (1984) study of parents of school age children in the Boston area, Russell's (1983) retrospective study of women in San Francisco and Wyatt's (1985) retrospective study of White and African –American

women in Los Angeles. Comparisons of these studies demonstrated that differences in CSA definitions influenced prevalence rates.

Wyatt and Peters (1986b) recomputed the CSA prevalence rate for Wyatt's (1985) sample using Finkelhor's (1979; 1984) age demarcations for victim and perpetrator. Three categories of abusive experiences included in Wyatt's (1985) CSA definition were deleted in the re-computation. They found that the overall CSA prevalence rate from Wyatt's (1985) study dropped from 62% to 54%. However, this recalculated prevalence rate was still almost three times more than Finkelhor's (1979) prevalence rate of 19%.

Russell (1983) and Wyatt (1985) did not differ in their definition of non-familial abuse up to age 13 or familial CSA up to age 17. Therefore, imposition of Russell's (1983) criteria did not affect Wyatt's (1985) prevalence rate for these categories (Wyatt & Peters, 1986a). However, Russell's (1983) definition of non-familial CSA between the ages of 13 and 17 was restricted to completed or attempted forcible rape. This resulted in the deletion from Wyatt's (1985) study of incidents occurring to respondents between the ages of 13 and 17 with a non-family member that involved non-contact abuse or less severe types of contact abuse such as fondling. As a result of this deletion, Wyatt's (1985) overall prevalence rate for combined contact and non-contact CSA through to age 17 was reduced from 62% to 53%. Wyatt and Peters (1986b) concluded that when the comparison involved studies that shared similar methodologies and samples (Wyatt 1985; Russell, 1983), adjusting for differences in definition brought about a very close agreement in the prevalence rates. However, when studies dissimilar both in methodology and sample characteristics (Finkelhor, 1979; Wyatt, 1985) were compared,

a large difference in prevalence rates remained even after differences in definition had been eliminated.

Gorey and Leslie (1997) determined that CSA operational definitions influence reported outcomes on estimated CSA prevalence. They analyzed data from 16 random and non-random studies involving North American community samples. These 16 studies measured the prevalence of past experience of child (less than 18 years of age) sexual abuse among adults (18 years or older). Operational definitions varied widely and Gorey and Leslie (1997) categorized the definitions used in the studies into: (a) narrow which included severe sexual abuse as a child, involving force for less than one week, (b) broad which included ever (as a child) experiencing any of eight sexual behaviors with an adult-exhibitionism through fondling to intercourse, and (c) middle. They did not stipulate the behaviors assigned to the middle category and found that the use of broader operational definitions. CSA prevalence rates for females were 8.3% (narrow definition), 17.8% (middle definition) and 36.2% (broad definition). For males, the rates were 6.6% (narrow definition), 7.2% (middle definition), and 11.5% (broad definition).

After combining samples across studies, Gorey and Leslie (1997) found that 22% of women and 9% of men experienced CSA when they were children. However, when they adjusted for operational definitions; that is, excluded the broadest non-contact category, CSA prevalence rates were estimated at 14.5% for females and 7.2% for males. Additionally, a multiple linear regression using each study's total sample (male plus female), estimated CSA prevalence rate as the dependent variable and methodological characteristics (response rate, operational definition, year of data collection, country in

which study was conducted [Canada or United States], sampling method [probability or convenience], sample [population or college], and interview method as independent variables was conducted. Operational definitions and response rates were the only two significant predictors of CSA prevalence rate. Operational definitions accounted for 11% of the variability among CSA prevalence rates.

In another study, Roosa, Reyes, Reinholtz and Angelini (1998) also illustrated the difference that CSA definitions can make to reported rates of sexual abuse. Two thousand and three women, 18 to 22 years, from both urban and rural areas in Arizona participated in the study. A modified version of Koss and Oro's Sexual Experiences Survey was used to collect data on contact CSA experiences. Modifications to the questionnaire included the addition of items developed by Berger and Fine which assessed non-contact and contact abuse and specifically expanded the definition of contact molestation.

Two scales of the severity of CSA were created from the measures of molestation and sexual abuse: a five-level measure which included reported contact molestation, coercion, attempted rape, rape and no abuse, and a six-level measure which included the additional category of reported non-contact molestation. Roosa et al. (1998) reported that when the six-level measure was used 59% of the women were identified as CSA victims compared to 39% for the five-level measure. When women who were victimized by peers (boyfriends and friends) were not considered as part of the CSA definition, the rates for the five-level and six-level measures were 18% and 34% respectively. Roosa et al. (1998) concluded that using broader definitions of CSA and no age demarcations between perpetrators and victims result in higher reported CSA prevalence rates.

The issue of screen questions (questions in a survey or interview used to elicit CSA history)

Screen questions are items on a questionnaire or questions in a structured interview describing specific sexual activities used by researchers to detect CSA. These screen questions operationalize the definition of CSA and hence the number and specificity of the questions are directly linked to the CSA prevalence rate obtained in the study. In this section, attention is also given to the number of screen questions needed to obtain full CSA disclosure.

Peters, Wyatt, and Finkelhor (1986) reviewed 14 retrospective community prevalence studies conducted between 1979 and 1985 in which data was collected using surveys that used between one and fourteen screen questions. They found that the prevalence rates for studies using one screen question ranged from 6% to 22%. Prevalence rates for studies using two to four screen questions ranged from 11% to 35% and prevalence rates for studies using eight or more screen questions ranged from 54% to 62%. Peters et al. (1986) found that as the number of screen questions used increased, the reported prevalence rates also increased. Thus, Peters et al. (1986) concluded that the number of screen questions used in a study was an important predictor of prevalence rate.

Indeed, in a multivariate analysis of community, state and national random prevalence studies conducted in the US, Bolen and Scannapieco (1999) found that the number of screen questions was the strongest predictor of prevalence. Variables for the meta-analysis were the stated prevalence of CSA for each study (dependent variable) and the methodological characteristics of the studies: screen questions, number of respondents, and the year the study was done (independent variables). Bolen and

Scannapieco (1999) implemented a stepwise regression analysis and because of the small number of independent variables, set the probability of F to .10 for entry and .15 for removal. The first variable to enter the equation was the number of screen questions, followed by the number of respondents, and the last variable was the year the study was done. These variables accounted for 58% of the variance in CSA prevalence with number of screen questions and number of respondents accounting for the greatest proportion of the variance. Bolen and Scannapieco (1999) concluded that more screen questions, a smaller sample size, and a more recent study are related to a higher reported prevalence of child sexual abuse.

Williams, Siegel and Pomeroy (2000) attempted to determine how many screen questions are necessary to obtain full CSA disclosure. They found that 14 screen questions were needed to elicit all disclosure of contact CSA incidents in a sample of women with an identified case of CSA prior to age 13. They asked a series of 19 screen questions to 136 women who, before the age of 13, had a documented case of CSA to determine the capability of the screen questions to elicit the respondents' CSA history. The women ranged in age from 18 to 35 and their CSA experiences had been documented 17 years earlier. The initial four questions were general questions that asked whether the respondent was ever sexually assaulted and the other 15 were behavior specific questions that asked about specific sexual acts, focused on the relationship of the perpetrator to the victim, asked about sexual contact in the context of age differentials, asked about unwanted sex and about sexual experiences that evoked fear or involved violence or assault.

Williams, Siegel and Pomeroy (2000) identified 67% of the women who disclosed index CSA (documented CSA experience that occurred 17 years earlier) in response to the initial four gate questions (broad screen questions, for example, "Were you ever sexually assaulted by someone you knew?"). Williams, Siegel and Pomeroy (2000) reported that if they had only used the four gate questions and none of the behavior specific questions, 33% of the women would have been falsely identified as non-victims. After eight questions, 90% of the disclosing women reported an initial incident of CSA. Fourteen questions were needed to elicit all disclosures that were forthcoming in the interviews. However, even after fourteen questions, 12 % of the women never disclosed any CSA incident. These researchers warn that a general question and even one or two behavior specific questions will probably result in false assumptions about the actual victimization status of victims and researchers may reach erroneous conclusions about the outcome of interest. They argue that behaviorally specific questions may trigger memories and facilitate recollections that might not be retrieved by general questions.

The issue of response rate

Some researchers have investigated the effect of response rate on CSA prevalence. Authors, for example, Haugaard and Emery (1989) and Gorey and Leslie (1997) argue a significant effect of response rate on CSA prevalence. Other authors, for example, Bolen and Scannapieco (1999) disagree.

In their study, Haugaard and Emery (1989) examined the effect of response rate on CSA prevalence. Their research consisted of two phases. In the first phase, they obtained response and CSA prevalence rates for three classes of undergraduate students. Response rates were 25%, 42% and 74% with reported CSA prevalence rates of 9%, 9% and 6.4% respectively. These three classes were subsequently re-examined using a follow-up questionnaire. CSA prevalence rates of 6.6% for the first class, 8% for the second class, and 7.5% for the third class obtained from the second phase of the study were deemed by Haugaard and Emery (1989) to be correct estimates of CSA prevalence for the three classes.

Assuming that the information obtained from the second phase reflected the true CSA rates of the classes, Haugaard and Emery (1989) inferred an inverse response rate CSA prevalence association. Low response rates yielded high CSA prevalence rates. These authors concluded than these findings supported the thesis that adults who experienced CSA were more likely to respond to CSA surveys than their non-abused counterparts.

In another study, Gorey and Leslie (1997) compared 16 random and non-random studies of CSA prevalence to examine the effect of response rate on disclosed abuse rates. Response rates among the 16 reviewed studies varied widely from 25% to 98%. They categorized studies as to whether or not they had a good response rate (defined as obtaining returns of 60 % or over). Thirteen of the samples met the criterion of good surveys (response rate of 60% or over). They found that female CSA prevalence (27.8%) among poor response surveys (response rates less than 60%) was two thirds greater than that estimated among good response surveys, ones with response rates of 60% or greater (16.8%). These researchers also reported an inverse association among the male samples in the study (studies with response rates below 60% having higher CSA prevalence rates than studies with 60% and over). However, they did not report the actual rates.

men. When the analysis was restricted to samples with 60% or greater response rate, results were lower (17% for women and 6% for men). Multiple linear regression results indicated response rate was a significant predictor of CSA prevalence rate and accounted for 39% of the variability among CSA prevalence rate in the 16 studies.

Gorey and Leslie (1997) concluded that the study's finding of an inverse response rate-CSA association (the greater a study's response rate, the lower its prevalence estimate) is consistent with Haugaard and Emery's (1989) findings that observed an inverse response rate CSA prevalence association across three separate response rates (25%, 42%, and 74%). They further argue that their study replicated Haugaard and Emery's (1989) findings across all 16 of the surveys analyzed. Gorey and Leslie (1997) argue that both their study and Haugaard and Emery's study indicate that adults who are sexually abused as children are more likely to respond to such surveys and that response rate is an important predictor of CSA prevalence.

However, another recent study of all random community, state and national studies conducted in the United States (Bolen and Scannapieco, 1999) did not find any relationship between response rate and CSA prevalence (this study is described under the screen questions section). Bolen (2001) contends that Gorey and Leslie (1997) failed to control for the number of screen questions, and that the failure to include this variable confounded the results of the study as the number of screen questions has been found to be one of the most important predictors of prevalence (Bolen & Scannapieco, 1999; Finkelhor, 1994b; Wyatt and Peters, 1986a). Bolen (2001) suggests that Gorey and Leslie (1997) did not clearly define response rate, and the inclusion of nonrandom and random studies of limited populations (college students and clinicians), weakened

inferences drawn from their findings. She also argues that since the effect size of Gorey and Leslie's (1997) study is small (.228), and that Bolen and Scannapieco's (1999) conclusions are strengthened by their inclusion of all random studies, the effect of response rate upon CSA prevalence rate is not significant.

Summary of methodological issues

Many authors (Bolen, 2001; Bolen & Scannapieco, 1999; Peters et al., 1986; Williams et al. 2000) argue the importance of CSA definitions, screen questions and response rates on CSA prevalence rates. On the issue of CSA definitions, the reviewed literature indicates that researchers who use broader definitions, such as the inclusion of both contact and non-contact incidences, both wanted and unwanted events, and no age discrepancies between the perpetrator and victim, report higher prevalence rates than researchers who use narrower definitions. Response rates were not found by all authors to be predictive of CSA prevalence. Empirical research has not provided conclusive evidence whether response rate influences CSA prevalence rate. However, it appears that studies with response rates of 60% or more elicit more accurate CSA prevalence rates than studies with less than 60% response rates. A methodological issue on which CSA experts agree is that multiple behaviorally specific screen questions (more than 4 questions that ask about specific sexually abusive behaviors) are necessary for capturing more accurate estimates of CSA disclosure. These three methodological issues (CSA definition, screen questions and response rates) were all factored into the conceptualization, design and implementation of the current study (See Chapters 3 and 4).

CSA Definition in Current Study

In the current study, the CSA definition primarily based on Finkelhor (1979) adopts many of the criteria found in CSA definitions from the research literature. These criteria include ideas from both earlier and more recent studies. Earlier studies considered definitions of sexual experiences, inclusion of contact and non-contact sexual activities, definition of child according to age, and age limit of perpetrator. More recent studies extended the definition to include the acts of taking nude or semi-nude photographs of the respondent, and exposing the respondent to pornographic magazines or audio-visual materials.

Upper age limits of childhood used in CSA definitions range between 16 and 18 years old. In the current study, 16 years old was chosen as the upper age limit of childhood for a number of reasons. Research (Fergusson, Lynskey & Horwood, 1996; Fleming et al., 1997, Mullen et al., 1996) conducted in developed countries other than the United States used 16 years old as the upper age limit of childhood. Other researchers (Finkelhor, 1979; Fleming et al., 1997; Goldman & Padayachi, 2000; Lietenburg, Greenwald, & Cado, 1992; Russell, 1983; Schaff & McCann, 1998; Wyatt, 1985) argue that adolescents may be involved in romantic relationships with peers and hence the issue of sexual consent must be taken into consideration in CSA definitions. In Belize, the country in which the current study will be conducted, the legal age of sexual consent is 16 years (Belize Criminal Code Act, Chapter 101, Section 2:47, 2001). Accordingly, in the current study, 16 years is chosen as the upper age limit of childhood to address issues of adolescent romantic relationships, conform to cross-national studies, and comply with Belizean Law.

Analysis of CSA studies indicates that CSA definitions that describe specific sexually abusive behaviors provide for more accurate CSA prevalence rates and therefore, provide more accurate information for analysis of variables ((Peters, Wyatt & Finkelhor 1986; Finkelhor, 1994b; Williams, Siegel & Pomeroy, 2000; Bolen & Scannapieco, 1999). Therefore, the definition used in this study includes specific sexual behaviors.

Child sexual abuse is defined in the current study as sexual experiences between the respondent as a child (16 years or younger), and an adult (18 years or older). "Sexual experiences" include both contact and non-contact activities by either the adult or the respondent as a child as outlined below.

Contact sexual experiences include: (a) the adult kissing the respondent as a child on the mouth, touching the child's breasts or genitals, fondling the child in a sexual way, oral sex, and anal or vaginal intercourse, and (b) the respondent as a child touching the other person's breasts and/or genitals, and fondling the other person in a sexual way.

Non-contact sexual experiences include: (a) the adult taking nude or semi-nude photographs of the respondent as a child, exposing the child to pornographic magazines or audio-visual materials, showing breasts and/or genitals to the child, and (b) the respondent as a child showing her breasts and/or genitals to the other person.

Familial CSA occurs when any of the previously described sexual activities are perpetrated by the child's biological parents, other biological or related by marriage family members, stepparents, step-relations, common-law spouses, mother's boyfriends, adoptive parents, foster parents or legal guardians. Non-familial CSA occurs when nonfamily members perpetrate any of the previously described acts.

Independent Variables

In the following sections, attention is paid to the independent variables found to be predictive of CSA across current CSA literature. This discussion will lay the framework for the independent variables investigated in the current study. Studies reviewed are grouped into four categories: exploratory studies, United States studies using national samples, studies utilizing sophisticated methodologies, and a study addressing the issue of time sequence. Each study within the group is described and a critique of each group is provided. At the end of the critiques, the variables to be used in the current study are proposed and their use justified.

Risk factors

Before examining the studies, it is necessary to clarify the use of the term "risk factors" used throughout the CSA literature. Mental health and prevention literature refer to "risk factor" as a characteristic of a person or environment which precedes the onset of a problem or mental illness (Hawkins, Catalano, & Miller, 1992; Reiss & Price, 1996) and associate the "risk factor" with an increased probability of occurrence of the problem (Hawkins, Catalano, & Miller, 1992). Of crucial importance in the previous definition is the time at which the risk factor is observed; the risk factor must precede the onset of the problem. In CSA literature, however, researchers generally did not take into consideration the time sequence between the abuse and the presence of the factors. CSA researchers refer to "risk factors" as variables (factors) that statistically differentiate between those subjects reporting CSA and those not reporting CSA using: (a) Chi square tests and t-tests; and (b) regression techniques for prediction purposes. Evidently, CSA

was the dependent variable and the risk factor variables examined were the independent variables.

In the following literature review, "risk factor (s)" is defined as in CSA literature and, therefore, refers to variables (factors) that statistically differentiate between those subjects reporting CSA and those not reporting CSA. Accordingly, the main criterion for a variable to be considered a risk factor was for the variable to be statistically correlated with the CSA and not whether the occurrence of the variable (factor) preceded the abuse. Current social science researchers use the term "correlates" instead of "risk factors" to indicate variables that statistically differentiate target populations. However, the researchers whose works are reviewed in the following sections used the term "risk factors" instead of "correlates", and this necessitates the use of the term "risk factor" in the remainder of the review. It should be noted that the author reverts to the term "predictors" in the remainder of the study.

Exploratory studies

The first attempt at an empirical study of CSA "risk factors" was conducted by Finkelhor (1979). His study provided the basis for much of the subsequent research in CSA. In this section (Exploratory Studies), Finkelhor's (1979) study is examined along with those exploratory studies which replicate his research.

Finkelhor's (1979) college students study.

Finkelhor (1979) conducted a non-probability CSA exploratory study in which the sample of 530 females and 266 males were students from six New England colleges and universities and mostly members of middle class intact families. This study was designed to determine prevalence and variables (risk factors) that significantly differentiated adults

who reported CSA from those who did not report such experiences. Questionnaires administered to students in sociology, psychology, and human sexuality classes contained questions about childhood sexual experiences with adults and children, childhood incestuous sexual experiences and coercive sexual experiences.

Questions consisting of multiple choice items, short answers and numerical ratings provided data on the respondents' sources of sex information, attitudes, and practices about sex, discipline in the respondent's family of origin, current sexual behavior, family background, parental characteristics, the nature of family relationships, family composition, and various social and demographic features including parental occupation, income, education, religion, ethnicity, presence or absence of the natural father in the home, presence of a step-parent, degree of personal isolation of the respondent, violence and alcohol abuse in the home, and the quality of parental marital relationship. Violence was defined as conflict with other persons leading to physical blows such as hitting very hard, kicking, punching, stabbing, or throwing the other person to the floor. Alcohol abuse was defined as drinking heavily frequently.

Both contact and non-contact sexual activities were included in Finkelhor's (1979) CSA definition. "Sexual behavior" was defined broadly from playing doctor to sexual intercourse. Age criteria consisting of three categories were used: (a) a child 12 years and under who had sexual experiences with an adult 18 years or older, (b) a child 12 years and younger who had sexual experiences with a person who is under 18 but at least 5 or more years older, and (c) an adolescent 13 to 16 years who had sexual experiences with a legally defined adult at least 10 or more years older.

Information on CSA experiences was obtained by providing respondents with a list of sexual activities to choose from: (a) an invitation or request to do something sexual, (b) kissing and hugging in a sexual way, (c) other person showing his/her sexual organs to the respondent, (d) respondent showing sexual organs to other person, (e) other person fondling respondent in a sexual way, (f) respondent fondling other person in a sexual way, (g) other person touching respondent's sex organs, (h) respondent touching other person's sex organs, (i) intercourse, but without penetration, (j) intercourse. A response rate of 92% yielded 19% CSA prevalence rate for female respondents and 9% CSA prevalence rate for male respondents. Of those sexually abused, 28% of females, and 23% of males reported familial CSA. Data were analyzed only for female respondents as there were too few males who reported CSA experiences.

Finkelhor (1979) used Chi square tests at p = .05 to identify statistically significant factors. However, he did not provide the Chi square test statistics. Instead, statistically significant factors were identified and reported as a percentage of total CSA responses. For example 58 % of the respondents who reported CSA also reported living without a biological mother.

Chi square tests demonstrated statistical associations with CSA at p = .05 for the following factors: (a) mother often ill (35%), family income less than \$10,000 per year (33%), three friends or less (42%), growing up in a farm (44%), lived without a natural father (29%), and having parents who were less than happy (25%); and (b) living without a biological mother (58%), had a stepfather (42%) and mother not completed high school (38%) at p = .001 (Finkelhor, 1979).

Finkelhor's (1981) study.

Finkelhor (1981) re-examined his 1979 data employing his 1979 statistical methodology and concluded that the factors most strongly associated with reported female child sexual abuse involved the characteristics of the parents. Indeed, stepfathers and mothers' boyfriends victimized half of the women who reported having been sexually abused as children. In addition to the factors reported in the 1979 studies, the following factors were found to be associated with female CSA using Chi square tests at p = .05: fathers with little physical affection toward child (31%), fathers with conservative values (38%), child had a stepmother (35%), child not close to mother (34%), mother with little affection toward child (32%), mother who was sexually punitive (35%), and mother who spanked child at age 12 (24%).

Using a step-wise multiple regression analysis, Finkelhor (1981) determined that eight of these factors were predictive of CSA: (a) presence of a step-father, (b) separation from mother during some period of childhood, (c) maternal education less than high school completion, (d) lack of emotional closeness to mother, (e) sexually repressive mother, (f) absence of physical affection from father, (g) family income less than \$10,000 a year, and (h) fewer than three friends during childhood. An index for identifying children at risk for CSA: "The Risk Factors Checklist" was constructed using these eight predictors. Finkelhor (1981) reported that among children with none of the factors present, CSA was virtually absent. Among children with five factors, two-thirds were victimized and that these risk factors were cumulative such that each additional factor increased the child's vulnerability.

Bergner et al.'s (1994) college students study.

Bergner et al. (1994) replicated Finkelhor's (1979) study to cross-validate Finkelhor's (1981). Risk Factors Checklist index; that is to determine both the individual and collective predictive power of the eight risk factors on the index list. Only one factor, family income under \$10,000 [χ^2 (1, 88) = 4.67, *p* = .05] proved significant. Three other factors: mother not finishing high school [χ^2 (1, 77) = 3.22, *p* = .10]; mother sexually punitive [χ^2 (1, 70) = 2.96, *p* = .10]; and living without a mother at some period in childhood [χ^2 (1, 66) = 3.13, *p* = .10] showed results in the expected direction. One factor, three or more friends in childhood (26%) compared to less than three friends in childhood (14%) showed a trend contrary to expectation [χ^2 (1, 40) = 3.19, *p* = .10]. Twenty six percent of respondents who reported CSA abuse also reported having three or more friends in childhood.

Madu and Peltzer's (2000) South African study.

In a more recent study, Madu and Peltzer (2000), similarly to Bergner et al. (1994), used Finkelhor's (1979) questionnaire to cross-validate Finkelhor's (1981) Risk Factors Checklist index. This study was conducted in the Northern Province in South Africa. However, they only found four factors significantly associated with CSA: ethnicity not Northern Soto which included white, colored and other $[\chi^2 (1, 50) = 9.530, p$ = .05]; mother employed and not as a laborer $[\chi^2 (1, 87) = 4.620, p = .05]$; stepparent present during childhood $[\chi^2 (1, 43) = 4.069, p = .05]$; and violence in the home $[\chi^2 (1, 73) = 4.527, p = .05]$.

Critique of exploratory studies.

Two of the four "risk factors" in Madu and Peltzer's (2000) South African study presence of a stepfather, and mother employed (which implies separation of child from mother at some time) - appear on Finkelhor's Risk Factors Checklist. Parents in the Northern Province (South Africa) often leave their homes for long periods of time for employment purposes (Madu & Peltzer, 2000), and this implies that the child is separated from the parents for an extended period of time. Ethnicity and violence in the home, investigated but not determined to be risk factors by Finkelhor (1979; 1981), were significant in Madu and Peltzer's (2000) study. Cross-national differences between Finkelhor's (1979; 1981) and Madu and Peltzer's (2000) samples may have contributed to the different results reported in these two studies. Eighty one percent of the participants in the South African study (Madu & Peltzer, 2000) were Blacks. Furthermore, the apartheid system is inherently violent and pervades all of the South African society especially people of color. These two factors may have contributed to violence and ethnicity being identified as significant risk factors by Madu and Peltzer (2000).

Both Bergner et al. (1994) and Madu and Peltzer (2000) employed Finkelhor's (1979; 1981) criteria to determine which respondents were sexually abused as children. All three groups of researchers utilized a non-random, retrospective, cross-sectional survey methodology and reported a high questionnaire response rate (greater than 90%). Bergner at al. (1994) cross-validated one of the risk factors from Finkelhor's (1981) Risk Factors Checklist: family income under \$10,000. This along with the three factors (mother not finishing high school, mother sexually punitive, and living without a mother

at some period in childhood) that were determined to be predictive in the expected direction lends partial support to the validity of Finkelhor's Risk Factors Checklist (1981). Bergner et al.'s (1994) sample of 411 Illinois State University female students were recruited via advertisement on campus and were compensated for their participation in the study. These students came from working, middle-class and/or rural families. In contrast, Finkelhor's (1979; 1981) sample was drawn from elite universities and urban commuting oriented junior colleges. Bergner et al.'s (1994) sample may have been biased towards low-income families and the result obtained (income < \$10,000, significant variable) may be a reflection of this bias.

Unlike Finkelhor (1981), Bergner et al. (1994) did not find a significant association between the number of risk factors and increased risk for CSA. Twenty two percent of subjects with none of the factors on Finkelhor's Risk Factor Index were sexually abused and this was close to the overall prevalence rate of 24%. Furthermore, the abuse rates for presence of various numbers of factors on Finkelhor's Index were: one risk factor (24%), two risk factors (32.7%), and three risk factors (23.5%). Madu and Peltzer (2000), however, found that as participants reported the presence of increasing numbers of the four significant risk factors identified in their study, the likelihood that they were sexually abused increased in a linear manner: subjects with only one risk factor had 58.4% probability of CSA, those with two factors had 69.8% probability of CSA, those with three risk factors had 89.5% probability of CSA, and those with four risk factors had 100% probability of CSA.

United States studies using national samples

Studies previously discussed used non-probability samples making generalizations beyond the target population inappropriate. This limitation was addressed in three studies (Finkelhor et al., 1990; Finkelhor et al., 1997; Vogeltanz et al., 1999). These researchers used national random samples and different methodologies to obtain data: (a) Vogeltanz et al. (1999) utilized face to face structured interviews, and (b) the other two groups of researchers employed structured telephone interviews. Variables examined by Finkelhor (1979) were investigated in these national studies.

Finkelhor et al.'s (1990) study.

Finkelhor et al. (1990) analyzed data of the first CSA national telephone survey of adults on CSA risk factors collected in 1985 by the Los Angeles Times Poll, a survey research organization. In this survey, telephone numbers were randomly generated by computer to ensure that both listed and unlisted telephone numbers were included and the sample of 1,145 men and 1,481 women 18 years and older conformed to census demographics. Potential risk factors included some of the variables examined by Finkelhor (1979; 1981): age, education, race, religion, ethic background, region of residence, childhood family structure, whether family life was happy, whether they had many friends, and whether they received adequate sex education. Twenty seven percent of the female respondents and 16% of male respondents reported CSA.

Chi square tests indicated significant associations with female CSA at p = .05 for the following variables: an unhappy family life (60%), inadequate sex education (32%), Pacific region (40%), and lived without a natural parent at sometime during childhood (39%) at p = .001. Finkelhor et al. (1990) did not provide Chi square test statistics but

similar to his 1979 and 1981 studies identified and reported statistically significant factors as a percentage of reported total CSA.

Results of a discriminant function analysis test (r = .24) reconfirmed the statistical significance of these four variables. The variable, lived without a natural parent at some time during childhood, was measured by one question asking for predominant family type: both natural parents, mother alone, father alone, non-natural parents, natural mother/stepfather, natural father/stepmother. Female respondents who reported CSA were at higher risk for CSA under all types of family structure except that of living with both natural parents [$\chi^2 = 24.91$, p = .0001].

Finkelhor et al.'s (1997) study.

In a later study, Finkelhor et al. (1997) investigated CSA prevalence and risk factors using a random national telephone survey of 1,000 parents with sample size methodology identical to Finkelhor et al. (1990). A logistic regression analysis identified three significant predictors for a child sexually abused within the last year of the interview: the respondent having been a CSA victim (Adjusted OR 10.2, p = .001); having a family income of less than \$30,000 a year (Adjusted OR 3.6, p = .01); and the child being a teenager (Adjusted OR 3.0, p = .05). Significant predictors for a child ever having been sexually abused were: the respondent being sexually abused in childhood (Adjusted OR 2.9, p = .001); not having both biological parents living in the household (Adjusted OR 1.8, p = .05); respondent alcohol abuse (Adjusted OR 4.2, p = .05) and the respondent admitting to leaving the child at home without adequate supervision (Adjusted OR 2.7, p = .01).

Vogeltanz et al.'s (1999) study.

Utilizing a national probability sample of women, age 18 years or older, Vogeltanz, et al. (1999) also examined CSA prevalence and the following potential risk factor variables: parental education (highest education obtained by either parent), religion, strictness about sexual issues, loving versus rejecting attitudes toward daughters, mother's and father's drinking status (drinker vs. non-drinker), and whether the daughter had or had not lived with both biological parents until age 16. Logistic regression analyses with backward elimination of childhood parental and demographic characteristics identified five significant CSA predictors: father's drinking, mother's drinking, perception of father and mother as rejecting rather than loving and not living with both biological parents by age 16.

Vogeltanz et al. (1999) further examined the interactions among the three dichotomous variables: mother drinking, father drinking, and biological parent status. These variables were evaluated along with the main effects of the five significant variables. A logistic regression analysis, which used the χ^2 contrast statistic, investigated all possible two way interactions of the three dichotomous variables. Results determined that living in a family with both biological parents in which the father drank [χ^2 (1) =15.59, *p* = .0001]; living in a family with both biological parents in which both parents drank [χ^2 (1) =15.59, *p* = .0001]; and living in a non-intact family (one biological and one non-biological parent) in which the father (biological or non-biological) drank [χ^2 (1) =15.59, *p* = .0001] increased CSA risk. These interactions suggest that father's (biological or non-biological) alcohol abuse is an important CSA predictor. Percentages of variance for these variables were not stipulated.

Critique of United States national studies.

Response rate was one of the methodological issues discussed in previous sections. Researchers (Gorey & Leslie, 1997; Haugaard & Emery, 1989) indicated that response rates of 60% or more tended to yield more accurate CSA prevalence rates. In the US national studies reviewed, high response rates obtained by Finkelhor et al. (1990), 76%; and Vogeltanz et al. (1999), 90% would, therefore, be one important factor contributing to the validity of the studies' results. Vogeltanz et al.'s (1999) higher response rate could be attributed to the methodology employed: face-to-face interview format and the matching of interviewers and respondents on ethnicity. Although Finkelhor et al.'s (1997) response rate was below 60%, the number of parents interviewed (1,000) was large enough to provide acceptable results.

Parents who are interviewed in order to elicit children's CSA history (Finkelhor et al., 1997) could be suspect in that all parents would not know if their children were sexually abused. Furthermore, even if all parents knew, it is very likely that many parents would be hesitant to admit to familial CSA especially if the parent is the perpetrator. Low prevalence rates as reported (1.9% within the last year of the interview; 5.9 % ever) may be a reflection of the under-reporting of CSA. CSA operational definitions employed by Finkelhor et al. (1990) allowed the respondent great latitude in interpretation of sexual abuse; for example, "When you were a child (under age 18), can you remember having any experience you would now consider sexual abuse—like someone trying or succeeding in having any kind of sexual intercourse with you, or anything like that?" (p. 20). Similarly, questions employed by Finkelhor et al. (1997) did not clearly make operational the researchers' CSA definition. For example, "touched in a

sexual way" and "forced to have sex" were not defined. Therefore, respondents could have included experiences that the researchers did not consider CSA or excluded experiences that the researchers considered CSA.

Vogeltanz et al. (1999) explicitly stated the two criteria (Russell, 1983; Wyatt, 1985) used to identify respondents who were sexually abused. Wyatt's criteria included:

- (a) Any intra-familial sexual activity before age 18, that was unwanted or that involved a family member 5 or more years older than the respondent; and
- (b) any extra-familial sexual activity that occurred before age 18 and was unwanted, or that occurred before age 13 and involved another person 5 or more years older than the respondent.

Russell's criteria included:

(a) any intra-familial sexual activity before age 18 that was unwanted or involved

a family member 5 or more years older than the respondent; and

(b) any unwanted extra-familial activity that occurred before age 14, or any unwanted sexual intercourse occurring at ages 14-17 (p. 582).

In the journal articles reviewed, the authors of the three national studies did not provide definitions for independent variables examined in these three studies.

Studies utilizing sophisticated methodologies

As previously discussed, one of the main weaknesses of CSA "risk factor" research is that the "risk factor" variables are inadequately operationalized. This limitation is addressed in four studies (Benedict & Zautra, 1993; Brown et al., 1998; Fergusson, Lynskey, & Horwood, 1996; Fleming et al., 1997). These researchers also expanded on the potential pool of risk factor variables and utilized more sophisticated methodologies and statistical procedures. Benedict and Zautra (1993) used a quasiexperimental design; Brown et al. (1998) and Fergusson, Lynskey & Horwood, (1996) utilized a longitudinal design, and Fleming et al. (1997) used a Likert Scale methodology.

Benedict and Zautra's (1993) college students study.

Benedict and Zautra (1993) compared 76 undergraduate college students who reported a history of CSA and their siblings to 76 age and gender matched non-abused undergraduate college controls and their siblings. CSA and control groups were of similar ethnic make up, mainly Caucasians. Subjects completed the Family Environment Scale (FES) that consisted of 10 variables each measured on a nine-point scale: cohesion, expressiveness, conflict, independence, achievement, intellectual-cultural achievement, active-recreational orientation, moral-religious emphasis, organization, and control. Scores were calculated summing each respondent's ratings on each of the ten variables. Reliability values for the respondents ranged from .61 (Independence) and .82 (Cohesion).

To elicit CSA history, obtain demographic data, family history and to measure purported CSA "risk factor" variables (parental absence, alcohol abuse, family type, physical abuse etc.) not measured by the FES, Benedict and Zautra (1993) also administered Finkelhor's (1979) questionnaire to the respondents. Paired sample t-tests found the following variables significant: (a) parental illness (having an emotionally or physically ill parent), (M = 26.37, SD = 7.0), t = 1.00, p = .001; (b) parental absence (mother employed outside of home and not living with one natural parent), (M = 4.9, SD= 0.87), t = 2.28, p = .001; and (c) the stepparent family composition (M = 3.67, SD =

0.66), t = -0.69, p = .001. Items were scored so that the lower values indicated higher CSA incidence.

A multivariate logistic-regression analysis was also conducted on the variables measured by the Finkelhor questionnaire. Results indicated parental absence ($\chi^2 = 14.27$, p = .001) as the most powerful CSA predictor and found the level of perceived family conflict ($\chi^2 = 3.35$, p = .001) significantly associated with CSA.

Three aspects of the family environment significantly differentiated CSA respondents from controls in a MANOVA analysis of Benedict and Zautra's (1993) data. CSA respondents and their siblings viewed their families as being less cohesive, more likely to have had a stepparent, and to have come from families with parental illness. These factors were not found to be significant in a logistic regression analysis. The discrepancy between these findings and the results of the logistic regression analysis could be explained by the significant inter-correlations existing between many of the family environment subscales. Subscales that failed to remain significant in the logistic regression model were significantly correlated with parental absence (see previous paragraphs). Benedict and Zautra (1993) argued that correlations between parental absence as a CSA risk factor.

Brown et al.'s (1998) New York State study.

Brown et al. (1998) implemented a longitudinal study to determine risk factors for child maltreatment (physical abuse, sexual abuse and neglect). Surveys administered on four occasions to a representative sample of 644 families in two New York counties assessed demographic variables, family relationships, parental behavior, and child and

parent characteristics. Official New York State records and retrospective self-reports of children who had reached 18 years provided child abuse and neglect data.

Variables examined in this study which were not investigated in studies previously reviewed by this author included: maternal age at birth of child, welfare dependency, maladaptive parental personality traits (hostility, self-esteem), parental conflict, unwanted pregnancy, childhood anxiety and withdrawal, handicapped status of child, low birth weight, low verbal intelligence, perinatal problems, serious illness, and difficult temperament. Logistic regression analyses established that different patterns of risk factors predicted the occurrence of child physical abuse, sexual abuse, and neglect. Maternal youth (Odds Ratio = 2.26), parental death (Odds Ratio = 2.62), harsh punishment (Odds Ratio = 3.22), maternal sociopathy defined as mother's drug and alcohol problems (Odds Ratio = 6.27), presence of a stepfather (Odds Ratio = 3.32), unwanted pregnancy (Odds Ratio = 3.10), child female gender (Odds Ratio = 2.44) and handicapped child (Odds Ratio = 11.79) significantly (p = .05) predicted CSA.

Fergusson, Lynskey, and Horwood's (1996) New Zealand study.

Using a cohort of 1, 265 New Zealand children and their parents, Fergusson, Lynskey, and Horwood, (1996) also conducted a longitudinal study investigating factors that place children at risk for CSA. Demographic, family history, marital conflict, parent-child relationships, and parental adjustment data were collected annually for the first 16 years of the child's life. Parental bonding was measured using the paternal care and protection scales of the Parental Bonding Instrument (PBI). The PBI generates two dimensions of the respondents' perception of their childhood relationship with their parents: (a) care and (b) the degree of control or overprotection. The PBI was

administered to the subjects at age 16, and the reliabilities of the resulting scales ranged from .85 to .95. Parents were asked to report on alcohol use and problems and also on illicit drug use. Any parent reporting use of cannabis or other illicit drugs by the sample member's 11th birthday was categorized as having used illicit drugs. At 18 years of age, the youths were administered a CSA retrospective questionnaire.

Using the χ^2 test, Fergusson, Lynskey and Horwood (1996) found the following variables significant for CSA: gender of child with the female child being at greater risk (p = .001); experiencing at least one change of parents before age 15 (p = .005); having a stepparent before age 15 (p = .001); parental marital conflict (p = .005); poor parental bonding (p = .001); paternal overprotection (p = .05); parental alcohol abuse (p = .005); parental illicit drug use (p = .005) and parental criminality (p = .05). Fergusson, Lynskey and Horwood (1996) provided only the level of significance for these variables. Chi square test statistics were not provided for this analysis.

Fleming et al.'s (1997) Australian study.

In Fleming et al.'s (1997) Australian study, a random community sample of 6,000 women was mailed a questionnaire (response rate 65%) to identify risk factors (variables that differentiated women who reported CSA from those who did not). Likert Scales included 1 "very happy" to 5 "very unhappy" for self-reported happiness prior to age 12 years and between the ages of 13 and 16 years; 1 "many good friends" to 4 "no good friends" to determine numbers of friends in primary and high school; 1 "very satisfied to 5 "very dissatisfied" to measure overall satisfaction with social life as a teenager; 1 "good" to 4 "always sick" to measure physical health. Other variables included: family structure, conflict, violence between parents measured as extreme conflict between

parents; parent's perceived physical and mental health status, parent's perceived alcoholic status, whether or not the subject had someone to confide in, presence or absence of caring male and female adults, and physical abuse. The care and protection scales of the PBI were used to measure the respondents' perception of their relationship with the adults in their lives. Physical abuse was measured by the women reporting how often they were physically hit or beaten, who hit them, whether or not they were ever hurt physically, and if so, the worst outcome.

Chi square tests were used to determine which variables differentiated between CSA respondents and non-abused respondents. Variables significantly associated with CSA were: physical abuse [χ^2 (1, 304) = 115.37, p = .000]; having a mother who was mentally ill [χ^2 (1, 62) = 37.46, p = .000]; the presence of a stepfather [χ^2 (1, 43) = 11.02, p = .004]; presence of a stepmother [χ^2 (1, 3) = 3.88, p = .05]; extreme conflict between parents [χ^2 (1, 142) = 37.46, p = .000]; alcoholic mother [χ^2 (1, 110) = 17.80, p = .000]; and alcoholic father [χ^2 (1, 304) = 115.37, p = .000]. Sexually abused women rated their mothers as significantly less caring (M = 27.5), t (202) = 4.92, p = .000; and more over protective and controlling (M =14.6), t (698) = 2.13, p = .000) than non-abused women. Sexually abused women also rated their fathers as less caring (M = 25.6), t (192) = 6.74, p = .000; and more controlling (M = 15.2), t (192) = 3.79, p = .000.

Strong correlations were found between the variables measuring peer relationships: not doing well socially in primary school and in high school (r = .66), having few friends in primary school (r = .49), having few friends in high school (r = .41), and rated satisfaction with social life as a teenager (r = .39). These variables that significantly differentiated women who reported CSA from those who did not were

combined into a single variable labeled social isolation. Factors significant at the $p \le .05$ in the χ^2 tests along with the variable social isolation were analyzed by multiple logistic regression tests. Physical abuse of the respondent as a child (Adjusted OR = 11.5, p = .000); social isolation (Adjusted OR = 1.6, p = .01); no one to confide in as a child (Adjusted OR = 2.2, p = .01) and mother's health (Adjusted OR = 0.1, p = .04) emerged as significant CSA predictors.

Multiple logistic regression analyses for CSA before age 12 years and after 12 years demonstrated that physical abuse of the respondent was a significant predictor for both age groups. Experiencing the death of a mother and social isolation were also significant predictors before age 12, while CSA predictors after age 12 were a mentally ill mother and physical abuse of the respondent.

Critique of studies utilizing sophisticated methodologies.

These four studies (Benedict & Zautra, 1993; Brown et al., 1998; Fergusson, Lynskey & Horwood, 1996; Fleming et al. 1997) adequately operationalized risk factor variables, utilized improved methodology and statistical analyses. They moved beyond examining traditional risk factor variables considered in previous studies. Although the samples used were probability samples, the target populations were limited in scope and the studies were essentially retrospective.

Study addressing the issue of time sequence

One group of researchers (Mullen et al., 1996) addressed an outstanding limitation of previous studies by ensuring that the factors examined predated CSA, that is, examining factors known to predate CSA experiences or could reasonable be assumed to predate CSA experiences. This study was conducted mainly to examine associations between CSA and its long-term sequelae. In order to examine the sequelae, risk factors were first identified. Questionnaires to determine CSA incidence, mailed to a random selection of New Zealand women, constituted the first stage of a two-stage sampling plan. In the second stage, women who reported CSA were interviewed along with a non-CSA control group selected randomly from the original sample.

Variables were clearly defined and clear descriptions of how the variables were measured were provided. For example, physical abuse was defined as reported hitting of a severity to produce injury a minimum of three times a year including those that required hospitalization. Injuries caused by hitting with open hands, fists or weapons such as belts or sticks. Alcohol abuse was defined as ingesting more than 14 standard drinks (140 grams) per week and measured by the World Health Organization (WHO) alcohol questionnaire.

Factors that predated and were significantly linked to CSA were: living in families where the parents separated during childhood, blended families and single parent families ($\chi^2 = 16.80$, p = .001); violence between parents ($\chi^2 = 15.7$, p = .001); parental alcohol and drug abuse ($\chi^2 = 18.50$, p = .001); shyness as a child ($\chi^2 = 14.380$, p = .001); and not having a special friend or confidant prior to 11 years ($\chi^2 = 22.4$, p = .000). *Summary of literature on independent variables*

Many researchers (Benedict & Zautra, 1993; Bergner, et al., 1994; Brown, et al., 1998; Fergusson, Linskey, & Horwood, 1996; Finkelhor, 1981; Finkelhor et al., 1990; Finkelhor et al., 1997; Fleming et al., 1997; Madu & Peltzer, 2000; Mullen et al., 1996; Vogeltanz et al., 1999) have used Finkelhor's (1979) risk factor variables as a basis for their own studies. In these studies, conducted in Australia, New Zealand, South Africa
and the United States, "risk factors" referred to variables (factors) that statistically differentiated between those subjects reporting CSA and those not reporting CSA using: (a) Chi square tests, (b) t-tests; and (b) regression techniques. These researchers did not take into consideration the time sequence between the abuse and the presence of the variables; that is, the risk factor variable did not necessarily have to precede the onset of the abuse.

Finkelhor's (1979; 1981) studies along with those closely allied, for example, Bergner et al. (1994) suffer many limitations that could be expected because of the exploratory and novel nature of the research. Subsequent research addressed many of the limitations of earlier work. In particular the following concerns were addressed: adequately operationalizing variables, using national samples instead of specific populations, using multivariate analyses and analyzing interactions along with bivariate analyses, using random probability samples instead of non-probability samples, trying to control for extraneous variables as in conducting a quasi-experimental study and conducting longitudinal studies instead of cross-sectional studies. All of the studies with the exception of Mullen et al. (1996) neglected to consider the time sequence between the abuse and the presence of factors; that is no assurance was given that risk factors considered preceded or could reasonably be expected to precede the observed abuse.

Significant Factors Found Across Studies

Although each of the 12 studies reviewed (8 United States and 4 non-US) investigated a different collection of factors, a number of these factors were found to be significant across studies (Table 1). Of these factors, several were significant across 50% or more of the studies investigating them. These were the presence of a stepfather in the

family, parental alcohol and/or drug use, parents expressing little physical attention and care toward the child, and child having a small number of friends and not having anyone to confide in. One factor physical abuse (38%) was not significant across 50% of the studies investigating it. However, it was significant across all non-US studies in which physical abuse was examined (Table 1).

Table 1

Factor	Total # Studies Investigating Factor	Total # Studies With Factor Significant (%)	# Non-US Studies With Factor Significant (% Non-US Investigating Factor)
Presence of a stepfather	12	09 (75%)	04 (100%)
Parental Alcohol and/or drug use	08	06 (75%)	03 (100%)
Physical abuse	08	03 (38%)	03 (100%)
Parents expressing little physical affection and care toward child	08	06 (75%)	03 (100%)
Small number of friends, no-one to confide in	07	04 (57%)	03 (75%)

Factors Found to be Significant Across Studies Reviewed

Since the current study will be a non-US study, special attention must be given to the four non-US studies reviewed (one in Australia, two in New Zealand, one in South Africa). The variable presence of a stepfather was investigated and found significant in all four studies (Table 1). Furthermore, the variables parental alcohol and/or drug use, physical abuse and parents expressing little physical attention and care to the child were found to be significant in those non-US studies in which they were investigated (Table 1). Small number of friends and no one to confide in were significant in three of four non-US studies in which they were investigated (Table 1).

Current Study

Thesis

It is clear from the preceding literature review that over the last two and a half decades CSA has been recognized as an important issue in developed countries. It is also clear that few systematic studies of CSA have been conducted in developing countries. These few studies in developing countries were in fact conducted within the last decade (Barthauer & Leventhal, 1999) in Brazil (Farinnatti, Fonseca, Dondonis, & Brugger, 1990), Costa Rica (Krugman, Mata, & Krugman, 1992), India (Segal & Ashtekar, 1994), Malaysia (Singh et al., 1996), and Nigaragua (Olsson et al., 2000). Issues of identification and analyses of factors which place children at risk for CSA were not addressed in any of these studies. Rather, only CSA prevalence and sequelae were of interest to the researchers.

Because CSA is a most important issue in developing countries, there is an urgent need to address issues that have not been studied. In particular, it is necessary to identify and investigate CSA factors which place children at risk for CSA in developing countries to establish commonalities and differences in CSA profiles between developed and developing countries. The current exploratory study will adopt and investigate a number of the variables that have been studied. All of these variables were found to be significant across both US and non-US studies. This provides some evidence that factors that appear

to place children at risk for CSA seem to be the same across developed countries. It is reasonable to suggest that these may have the same effect in developing countries. The current study will seek to explore this thesis.

Research site

Since the current study is a non-US study and because the reader may not be familiar with the research site, a description of the country in which the current study will be conducted follows. Belize, a developing country in Central America, will be the location where the current study will be conducted. This country, with English as the official language, is divided into six administrative regions called districts: Corozal, Orange Walk, Belize, Cayo, Dangriga, and Punta Gorda. Belize has a population of approximately 250,000 people, with persons between the ages of 5 and 17 years constituting 34 % of the total. Roman Catholics comprise 50% of the population and the remaining religions (Pentecostal, Anglican, Adventist, Mennonite, Baptist, Methodist, and Nazarene) 41%. Nine percent of the population has no religious affiliation. Education is mandatory to age 14 years but access to high school and tertiary level education is limited. There is a diverse ethnic composition with Mestizos constituting 49% of the population, Creole 25%, Mayas 10% and remaining ethnic groups (Garifuna, Mennonite, East Indian, Caucasian, Chinese, African) 16%. Single parents head a substantive number of homes, and there is an extensive extended family system. Poverty rate is approximately 33% and current unemployment rate stands at 12.2%. Gross Domestic Product (GDP) per capita is estimated at 6, 296 Belizean dollars (3,149 United States dollars) and the major sector of production is agricultural (Abstract of Statistics, Belize, 2001).

Potential predictor variables

Potential predictor variables adopted from the CSA literature for investigation in this current study are those variables found to be statistically significant across 50% or more of the total number of studies that investigated them (Table 1). These variables include: the presence of a stepfather in the family (75%), parental alcohol and/or drug use (75%), parents/caretakers expressing little physical attention and care toward the child (75%), and child having a small number of friends and not having anyone to confide in (57%). One variable physical abuse (38%) was not significant across 50% or more of the total number of studies investigating them (Table 1). However, it was statistically significant across all non-US studies investigating it (Table 1). Because this current study is a cross-national study, this variable will also be examined as a potential predictor. The variables presence of a stepfather, physical abuse and parents expressing little affection and care toward child were also significant across all non-US studies that investigated them (Table 1).

Variables of particular interest to developing countries which include varied ethnicity, income level, religious affiliation, education, and family type were also examined to determine whether they were significant CSA predictors in developing countries. These variables have been studied but not found to be significant across studies conducted in developed countries.

Independent variables investigated in current study

Variables found across studies conducted in developed countries were reformulated and provided the following list of potential CSA predictor variables:

- Presence of a stepfather: Presence of a stepfather in the home for a minimum of six months before the age of 16 (Benedict & Zutra, 1993; Finkelhor, 1979; Fleming et al., 1997).
- Parent figure alcohol and/or drug use: Respondent's perception of whether parent figures drank heavily and frequently and used marijuana often (Fergusson, Lynskey, & Horwood, 1996; Finkelhor, 1979; 1981; Fleming et al., 1997).
- 4. Family violence: Parent figure physical abuse of respondent during childhood and parent figure -to-parent figure physical abuse; physical abuse refers to reported frequent hitting, kicking, punching, and whipping. Injuries caused by hitting with open hands, fists or weapons such as belts and sticks are included (Finkelhor, 1979; 1981; Fleming et al., 1997).
- Parent figure child care: Extent of respondent's perception of parent figure's physical attention and care towards her up to age 16 (Finkelhor 1979; 1981; Fergusson, Lynskey, & Horwood, 1996; Fleming et al., 1997).
- 6. Social isolation: Reported three friends or less in elementary and high school; noone to confide in (Finkelhor, 1979; 1981; Fleming et al., 1997).
- Ethnicity: Major ethnic groups: Mestizo, Creole, Garifuna, Maya, Mennonite,
 East Indian, Caucasian, Asian, and African (Abstracts of Statistics, Belize, 2001).
- Family of origin: Composition of family or families in which respondent lived up to age 16; for example, single parent family, nuclear family, extended family, stepparent family, adopted family or foster family (Abstract of Statistics, Belize, 2001).

- 9. Income Level: less than 400; 400—999; 1,000—1,999; 2,000—2,499; 2,500 plus Belize dollars household's monthly income (Abstract of Statistics, Belize, 2001).
- Religion: Religious affiliation (Roman Catholic, Anglican, Methodist, Mennonite, Adventist, and Baptist); non-affiliation (Abstract of Statistics, Belize, 2001).
- Parent figure education: Formal educational level completed: primary, high school, junior college, teacher's college, or university (Abstract of Statistics, Belize, 2001).

Hypotheses to be investigated in the current study

- 1. Presence of a Stepfather
 - H_o: There is no difference in the rate of female CSA for respondents with a stepfather or those without a stepfather.
 - H₁: There is a difference in the rate of female CSA for respondents with a stepfather.
- 2. Parent Figure Alcohol and/or Drug Use
 - H_o: There is no difference in the rate of female CSA for respondents whose parent figures use alcohol or drugs and those whose parent figures do not use alcohol or drugs.
 - H₁: There is a difference in the rate of female CSA for respondents whose parent figures use alcohol or drugs.
- 3. Family Violence
 - H_o: There is no difference in the rate of female CSA for respondents from non-violent families of origin and those from violent families of origin.

- H₁: There is a difference in the rate of female CSA for respondents from violent families of origin.
- 4. Parent Figure Child Care
 - H_o: There is no difference in the rate of female CSA for respondents with caring parent figures or those with less-caring parent figures.
 - H₁: There is a difference in the rate of female CSA for respondents with less-caring parent figures.
- 5. Social Isolation
 - H_o: There is no difference in the rate of female CSA for socially isolated respondents and non-socially isolated respondents.
 - H₁: There is a difference in the rate of female CSA for socially isolated respondents.
- 6. Ethnicity
 - H_o: There is no difference in the rate of female CSA for respondents from different ethnicities.
 - H₁: There is a difference in the rate of female CSA for respondents from different ethnicities.
- 7. Income Level
 - H_o: There is no difference in the rate of female CSA for respondents from families of origin with different income levels.
 - H₁: There is a difference in the rate of female CSA for respondents from low income level families of origin.

- 8. Family Type
 - H_o: There is no difference in the rate of CSA for respondents from different family of origin types.
 - H₁: There is a difference in the rate of CSA for respondents from different family of origin types.
- 9. Religion
 - H_o: There is no difference in rate of female CSA for respondents from families with religious affiliations and those from families with no religious affiliations.
 - H₁: There is a difference in the rate of female CSA for respondents from families with religious affiliations.
- 10. Parent Figure Education
 - H_o: There is no difference in the rate of female CSA for respondents with parent figures with different educational levels.
 - H₁: There is a difference in the rate of CSA for respondents with parents with different levels of education.
- H_o: There is a no difference in the rate of female CSA for respondents from violent families of origin with a stepfather and less-caring parent figures who use alcohol.
 - H₁: There is a difference in the rate of female CSA for respondents from violent families of origin with a stepfather and less-caring parent figures who use alcohol.

CHAPTER III

METHODOLOGY

Introduction

The 12 studies reviewed (8 conducted in the United States and 4 in other developed countries) in Chapter 2 investigated variables used to predict female child sexual abuse (CSA). A number of these variables were found to be significant across studies. Potential predictor variables adopted from the CSA literature for investigation in this current study are those found to be statistically significant across 50% or more of the total number of studies that investigated them. These variables include: presence of a stepparent, family violence, parent figure alcohol and/or drug use, parent figure child care and social isolation. Findings from these studies (United States and international studies) provide some evidence that CSA predictor variables appear to be common across developed countries. Similar studies have not been undertaken in developing countries. The current cross-sectional study starts to explore whether those predictor variables identified in the existing literature for developed countries are also predictive and valid for female CSA in developing countries. In particular, this study seeks to explore this thesis in Belize, Central America.

Subjects

Women between the ages of 25 and 34 years who live in Orange Walk Town, an urban area in Belize, Central America constituted the study's population. Subjects

between the ages of twenty five to thirty four years were selected because this is one of the groupings used in the country's national census, and demographic information on this group is readily available from the Belize Population Census (2000).

Three factors necessary to determine the optimal sample size (N) in a research design are significance level (α) desired, effect size, and the power of the test probability (Cohen, 1992; Sedlack, Zeller, & Doheny, 2002). Current literature indicates that the most widely accepted method of determining sample size is to perform a power analysis prior to conducting the study (Cohen, 1992). A power of .80 is the standard specified for behavioral research designs that would lead to statistically significant results (Sedlack, Zeller & Doheny, 2002). Cohen (1992) provides a table for determining sample size based on the desired effect size and on the chosen alpha level. For α = .05, and medium effect size of .25; a sample size of N = 124 is needed to obtain a power of 0.80 (Cohen, 1992). These were the guidelines used in the current study and accordingly, 200 women were randomly selected from the total number of women between the ages of 25 and 34 years in the Orange Walk area and were administered the survey questionnaire.

Procedure

Databases providing names and addresses of women in the targeted population are not available in Belize. However, information about the total number of males and females in different age ranges, percentages and number totals that each of these age ranges comprise in the general population, religion, education, and socioeconomic status (SES) can be obtained from the Belize Population Census (2000). Therefore, the total number of women in the targeted population can be estimated. Additionally, a geographical map of the area, available at the Orange Walk Lands Department Office, provided a listing of all the streets in the research site from which a random sample of streets was obtained.

A random sample of 200 women between the ages of 25 and 34 was obtained in the following manner. Street names were arranged in alphabetical order, numbered sequentially, and a sample of streets was randomly chosen using a random numbers table. Once a street was randomly selected, the researcher visited each household on the street and delivered a survey questionnaire package if a woman in the 25 to 34 years age-range was a member of the household. Since the targeted sample number of 200 women was not reached by the time the households on the streets selected had been visited, another random selection of streets was made. This procedure continued until the targeted sample number (200) was reached. Thus a random cluster sample was utilized with the streets being the clusters and the household being the sample unit (Cochran, 1977; Creswell, 1994).

The initial design required that trained couriers deliver the survey questionnaires to the respondents. However, the University of Louisville Human Studies Committee determined that the researcher and not trained couriers had to deliver and collect the completed survey questionnaires because of the sensitivity of the data being collected, and to safeguard respondents' confidentiality and anonymity.

Instrumentation

Data was collected using The Life Experiences Survey (LES), a self-report questionnaire (Appendix B). Items on the LES assessed CSA predictor variables and whether the respondent was sexually abused in childhood by an adult (an individual 18 years or older). The questionnaire is divided into two sections. Seven questions in

Section A assessed demographic data including current age (Question 1), ethnicity (Question 2), religion (Question 3), family of origin (Question 5), family of origin's socioeconomic status (Question 6), adults who lived in the respondent's home while she was growing up (Question 7) and one predictor variable: social isolation (Question 4).

In Section B, the respondent provided information about adults who were members of her household when she was growing up (to age 16). Information obtained includes: relationship to respondent (Question 8), educational level (Question 11), and whether the adult was living in the home when the respondent was sexually abused (Question 16). The respondent also reported whether she was sexually abused when she was a child (Question 14) and identified CSA perpetrators (Question 15) and CSA experiences (Question 17 a-o).

Other questions in Section B assessed CSA predictor variables identified in the empirical CSA literature reviewed in Chapter 2. These predictor variables include: parent figure child care (Question 12), presence of a stepparent (Questions 5 &16), parent figure alcohol and/or drug use (Question 13 a, b), and family violence (Question 13 c, d, e, f, g, h, i, j, k, l, & m). Respondents were requested to report on two adult males and two adult females that played a primary role in her life and who lived in the same household. Therefore, some respondents answered Section B up to four times depending on the number of adults who lived in the household when they were growing up. Scales comprised of Likert Type items measured four of the predictor variables: social isolation (Question 4 a, b, c), parent figure child care (Question 12 a-k), parent figure alcohol and/or drug use (Question 13 a, b), and family violence (Question 13 c-m).

A cover letter that informed the respondent of the purpose, procedures, potential risks, benefits, compensation, confidentiality, and voluntary participation of the study as well as reference for counseling services was attached to the survey questionnaire (Appendix A).

The LES was primarily adapted from Finkelhor's Risk Factors Survey Questionnaire (1979) but was updated using current CSA literature on CSA predictor variables. Finkelhor's Risk Factor Survey Questionnaire has been one of the instruments used in the last decade (Bergner, Delgado & Grayhill, 1994; Finkelhor et al., 1990; Madu & Peltzer, 2000; Sariola & Uutela, 1996) to measure CSA predictor variables. Question 12, the parent figure child care scale, was adapted from Parker, Tupling and Brown's (1979) Parental Bonding Instrument (PBI) Care Scale. Parker et al.'s (1979) PBI Care Scale has excellent internal consistency with a split-half reliability coefficient of .88. The scale also has good stability, with three-week test-retest correlations of .76, as well as good concurrent validity, correlating significantly with independent rater judgments of parental caring (Corcoran & Fischer, 2000). Permission to use and adapt the PBI Care Scale and Risk Factors Survey Questionnaire was obtained from the authors of the instruments.

Other adjustments made to the questionnaire addressed issues of the cultural context in Belize and the reading level of the respondents. Two psychologists, experts in CSA and instrument development, verified that the survey questionnaire met standards of clarity and that data obtained would likely elucidate the research question.

Additionally, a pilot study using 50 University of Belize female students enrolled in first year Psychology courses as the sample population was conducted. Results of the pilot test were used to establish whether the items on the questionnaire appeared to measure the identified independent variables (face validity) and to improve questionnaire items, format and scales. Principal component analyses and reliability analyses using the alpha coefficient were conducted for the scales.

Pilot Test Results

Response Rate

Of the fifty questionnaires distributed, forty (80%) were completed and returned to the researcher. Researchers have determined that studies with 60% or higher response rate yield valid results. Therefore with an 80% response rate, the analysis of the pilot study data was expected to yield valid information on the independent variables examined.

Social Isolation

Social isolation was made operational using three items based on Finkelhor's (1979) questionnaire and Fleming, Mullen, and Bammer's (1997) social isolation scale. These items were "How many persons did you have to confide in when you were growing up (to age 16)? How many friends did you have when you were in primary school?, and How many friends did you have when you were in high school?. Response choices were None, 1, 2, 3, and Many. Responses for each item were coded 0, 1, 2, 3, or 4. The total Social Isolation score were determined by summing across these three items. Scores ranged from 0 to 12, with 12 indicating that the respondent was the least socially isolated.

Reliability.

The internal consistency of the variable social isolation was 48% indicating that this variable had low reliability. Therefore, in the present study, the variable social isolation was no longer used as an independent variable. Instead each of the items that were initially used to create the social isolation scale was used as a separate independent variable.

Parent Figure Child Care

Parent figure child care was measured using 11 items (Question 12, a-k, Part B, LES). Response choices were Never, Rarely, Sometimes, Often, and Very Often. Responses for each item were coded 1, 2, 3, 4, and 5. The total care score was determined by summing across the 11 items. Scores ranged from 11 to 55. Since this scale was measured on a continuum, the higher scores indicated that the parent figures were more caring to the respondents. Additionally parent figure child care was measured by two scales: father figure child care scale and mother figure child care scale. As stated above, the parent figure child care scale was adapted from Parker, Tupling and Brown's (1979) Parental Bonding Instrument (PBI) Care Scale. Parker et al.'s (1979) PBI Care Scale has excellent internal consistency with a split-half reliability coefficient of .88. The scale also has good stability, with three-week test-retest correlations of .76, as well as good concurrent validity, correlating significantly with independent rater judgments of parental caring.

Validity.

As expected results of the principal component analyses performed on both the mother figure child care and father figure child care scales indicated that all 11 items for

both scales loaded as one component. The observed loadings for father figure child care ranged from .803 to .955. This then supports the one-factor pattern of father figure child care as an independent variable. The same results were obtained for the mother figure child care scale with the observed loadings ranging from .834 to .949.

Reliability.

Both scales have excellent internal consistency with $\alpha = .97$ for both the father figure and mother figure child care scales.

Parent Figure Alcohol and Drug Use

Based on the literature reviewed, Finkelhor's (1979) Risk Factors Survey and Belize's (research site) socio-cultural environment, two items were used to measure parental substance use. These items were "How often did the adult that you selected in Question 8 smoke marijuana", and "drank alcohol". Response choices were Never, Rarely, Sometimes, Often, and Very Often. Reponses for each item were coded 1, 2, 3, or 4. The total Substance Use score was determined by summing across these two items. Scores ranged from 2 to 10, with 10 indicating that the adult was a frequent user. Parent figure alcohol and drug use was measured using two scales: father figure alcohol and drug use and mother figure alcohol and drug use. A factor analysis was not conducted on this scale because it consisted of only two items.

Reliability.

The internal consistency of the variable father figure alcohol and drug use was $\alpha =$.33 and mother figure alcohol and drug use was $\alpha =$.40, indicated very low reliability. Further examination of both these items indicated that respondents were more likely to respond to the alcohol use question than the marijuana question. One explanation may be

that marijuana use is illegal and, thus, respondents may have found it difficult to respond. As a result, in the present study, the variable examined was alcohol use rather than alcohol and drug use.

Parent Figure Family Violence

Based on the literature reviewed, Finkelhor's (1979) Risk Factors Survey and Belize's (research site) socio-cultural environment, 11 items Question 13, c-m, Part B, LES) were used to measure parent figure family violence. Response choices were Never, Rarely, Sometimes, Often, and Very Often. Reponses for each item were coded 1, 2, 3, 4 or 5. The total parent figure family violence score was determined by summing across these two items. Scores ranged from 11 to 55, with the higher scores indicating that the adult was more violent.

Validity.

Results of a principal component analysis performed on the eleven items extracted two factors with observed loadings from .803 to .882. One factor extracted included the eight items that measured parent figure to child violence and the other the three items that measured parent figure to parent figure violence. Again family violence was measured using two scales: mother figure family violence and father figure family violence

Reliability.

The internal consistency for both father figure family violence ($\alpha = .80$) and mother figure family violence ($\alpha = .89$) was high indicating that both these variables are reliable. Although two factors loaded for 11 items in this study, the items were used to measure one independent variable (parental family violence) because of the following

reasons. The literature reviewed did not separate parent figure to parent figure violence and parent to child violence and the internal consistency of the 11 items was high.

Analyses

Researchers, for example Gorey and Leslie (1997) established that a 60% response is good enough to provide accurate analyses of CSA variables (for a thorough discussion of this issue see Chapter 2). The response rate of this cross-sectional survey was determined from the completed and non-completed questionnaires and data was summarized in tabular form.

Hypotheses were first tested at the bivariate level to determine whether the independent variables (presence of a stepfather, parent figure alcohol use, family violence, parent figure child care, number of confidants, number of friends in primary and high school) differentiated between women who reported being sexually abused as children and those who did not. Hypotheses 1, 2, 5, 6, and 7 were tested using Chi square tests of independence and Hypotheses 3 and 4 were tested using independent t-tests.

The hypotheses that were found to be statistically significant (Table 3) at the bivariate level were tested using the General Linear Model (GLM), a statistical procedure of the Statistical Package for the Social Sciences (SPSS) software (Table 1). GLM is appropriate for analyses of data that is not normally distributed. Thus, for example, the independent variables *family violence* and *ethnicity* have two and six responses respectively and so these variables cannot be normally distributed. Hypotheses were tested to determine: (a) whether the independent variables (Table 2, 3) differentiated between women who reported being sexually abused as children and those who did not and (b) which of the independent variables were predictive of CSA.

	General Linear Model Analyses						
Hypothesis	Variables	Item*					
1,2,3,4, 5, 6, 7	Dependent Variable: CSA	Question 14 (Did anyone 18 or older touch you in a way that made you feel uncomfortable or involve you in activities that you now consider sexual abuse?)					
	Independent Variables: 1. Presence of a stepparent	Questions 5, 16 (Adult living in home, biological, stepparent)					
	2. Parent figure alcohol use	Question 13 a (Adult drank alcohol)					
	3. Family violence	Question 13, c-m (Adult punched me, kicked me)					
	4. Parent figure child care	Question 12 a-k (Adult was affectionate to me, frequently smiled at me)					
	5. Number of confidants	Question 4 a (# of confidants)					
	6. Number of friends in primary school	Question 4 b (# of friends in primary school)					
	7. Number of friends in high school	Question 4 c (# of friends in high school)					

Table 2Hypotheses, Variables and Items on the LES

* Details of all items used in the analyses can be obtained from the LES (Appendix B).

Separate GLM analyses were used for each hypothesis (Table 3) and the focus of each hypothesis was entered last in the GLM equations. GLM Model 1, an SPSS statistical procedure was used in the stepwise analyses. This procedure automatically treated each variable as the last variable and provided the effect for the last variable after it had removed the effects of the other preceding variables.

Table 3Independent and Dependent Variables

Hypothesis	Data Type	Independent Variable	Dependent Variable
1	Fixed	Presence of a Stepparent	CSA
2	Co-variate	Parent Figure Child Care Scale	CSA
3	Co-variate	Parental Figure Family Violence Scal	le CSA
4	Co-variate	Parental Figure Alcohol Use Scale	CSA

Similarly, Chi square tests were used to determine: (a) whether socioeconomic status, ethnicity, family of origin type, religion, and parental educational level (independent variables) differentiated between women who reported CSA and those who did not (dependent variable). Since none of these variables were found to significantly differentiate between respondents who reported CSA and those who did not, these variables were not tested as predictors.

Descriptive statistics were used to: (a) indicate overall reported CSA prevalence, (b) provide information about the degree to which the women who experienced CSA were sexually abused by more than one perpetrator, and (c) provide demographic information on the respondents.

CHAPTER IV RESULTS Introduction

Analyses performed on the data encompass the following techniques: (a) descriptive statistics to summarize important characteristics of the respondents and the respondents' parents and (b) t-tests, Chi square tests, relative risk estimate calculations and a general linear model (GLM) analysis to evaluate the research hypotheses.

The variables addressed in the hypotheses include presence of a stepfather (Hypothesis 1), parent figure alcohol use (Hypothesis 2), family violence (Hypothesis 3), parent figure child care (Hypothesis 4), number of confidants (Hypothesis 5), number of friends in primary and high school (Hypotheses 6, 7), ethnicity (Hypothesis 8), income level (Hypothesis 9), family of origin (Hypothesis 10), religious affiliation (Hypothesis 11), and parent figure educational level (Hypothesis 12). These hypotheses are detailed in the analysis section of this chapter.

Descriptive Statistics

Response rate

Two hundred questionnaires were distributed to women in Orange Walk Town, Belize. Of these, 190 (95%) were completed and returned to the co-principal investigator. Since 19 of the questionnaires were completed by women over the age of 34, only 171 of the collected questionnaires were used in the analyses. Using this reduced number of questionnaires, the adjusted response rate of this study is 85.5%. Researchers (Bolen & Scannapieco, 1999; Gorey & Leslie 1997; Haugaard & Emery 1989) have found that studies with response rates of 60% or more elicit more accurate CSA prevalence rates than studies with less than 60% response rates and therefore provide valid information on variables studied. With an 85.5% response rate, results of this study are expected to be valid.

Means and standard deviations

Means and standard deviations for alcohol use, parent figure child care scale, family violence scale, number of confidants, friends in primary and high school are reported in Table 4.

Table 4

Variable		п	М	SD
Parent Figure Alcohol Use	Mother Figure	154	1.88	1.11
	Father Figure	122	3.03	1.39
Parenl Figure Child Care	Mother Figure	154	44.19	10.54
	Father Figure	122	37.34	12.19
Family Violence	Mother Figure	154	15.24	5.24
	Father Figure	122	16.64	6.94
Confidants		171	1.83	1.34
Friends in Primary School		171	3.03	1.31
Friends in High		1.51	2.1.6	.
School		171	3.16	2.18

Means and Standard Deviations of Independent Variables

Prevalence

In this study, one question differentiated between CSA and non-CSA respondents (Life Experiences Questionnaire, Part B, Question 14). However, responses to this question were cross-referenced with a CSA Scale (reliability coefficient of .96) consisting of 15 items (Life Experiences Questionnaire, Part B, Question 17). This was done to ensure a consistent report of CSA within the survey. Cross-referencing between the responses to Question 14 and CSA scale proved to be consistent (all respondents who reported CSA checked items on the CSA scale) and thus provided support for a consistent report of CSA within the survey.

The average age of all the respondents was found to be 29.5 years with a standard deviation (*SD*) of 3.49 years. Thirty five (20.4%) of the respondents reported CSA experiences. Of this number, eighty two percent reported intra-familial CSA and 95% indicated that the perpetrators were known to them. Stepfathers (24%) were the most commonly reported perpetrators (Figure 1). Nine percent of the women reported two perpetrators and 3% reported multiple perpetrators.

Figure 1

CSA Perpetrators



Respondents' parent figures

In this study, the term 'parent figure' refers to the female and male who raised and lived in the same household as the respondent for more than 5 years (Life Experiences Survey, Part B, Questions 8 & 10). Respondents were requested to report on one adult male and one adult female who raised them and lived in the same household. Therefore, some respondents reported on one adult male and one adult female while others reported on only one adult. Of the 171 respondents, 49 (28.7%) reported being raised only by a female parent figure, 17 (10%) reported being raised only by a male parent figure and 105 (61.3%) reported being raised by both a male and female parent figure. Table 5 further provides the percentages of individuals identified as parent figures.

Table 5

	Frequency	Percentage
Female Parent Figure	(<i>n</i> =154)	100%
Mother	123	79.4%
Aunt	10	7.1%
Grandmother	16	10.3%
Stepmother	4	2.6%
Legal Guardians	1	0.6%
Male Parent Figure	(<i>n</i> =122)	100%
Father	90	73.8%
Uncle	4	3.3%
Grandfather	8	6.5%
Stepfather	20	16.4%

Percentage of Individuals Identified as Parent Figures

Of the 35 respondents who were abused seventeen (48.6%) indicated that when the CSA experiences occurred they were living in homes with their biological mother and stepfather while 10 (28.6%) reported living with their biological mother and biological father. Four (11.4%) reported living with their aunts and uncles, two (5.7%) reported living in extended families with grandmother as head of the household and two (5.7%) reported living in single parent figure homes.

Analyses Used to Examine the Hypotheses

Hypotheses 3 and 4 were investigated using independent t-tests. The independent variables family violence and parent figure child care were treated as continuous variables and measured using scales which produced a score for each of the variables with higher scores indicating greater degree of care or more violence. The independent t-test is robust to lack of normality of the data and heteroscasticity can be accommodated by the statistical procedure. Results from these tests were, therefore, expected to yield valid conclusions. All other variables (those corresponding to Hypotheses 1, 2, and 5 through 12) were categorical and were examined for independence from CSA using Chi square tests. Relative risk estimates were calculated in support of the Chi square tests.

Furthermore, a General Linear Model (GLM) analyses was performed on the independent variables to determine which could significantly differentiate between respondents who reported CSA and those who did not. Inter-correlations for the predictor variables included in the GLM are shown in Table 6.

Table 6

Va	ariable	1	2	3	4	5	6	7	-
1	Stepfather	_	11	03	.08	.15	.11	.16	-
2.	Mother Figure Alcohol Use		_	.52*	.43*	.37*	35*	27*	
3	Father Figure Alcohol Use			_	.32*	.35*	16*	33*	
4	Mother Figure Family Violence				_	.59*	36*	33*	
5	Father Figure Family Violence					_	176*	41*	
6	Mother Figure Child Care						_	.45*	
7	Father Figure Child Care							_	

Intercorrelations for Predictor Variables Included in the GLM Analysis

* *p* < .05.

GLM accommodates both continuous data (covariates) and categorical data (factors) and was designed specifically to utilize variables which are non-normal (Stevens, 1996; Henderson, 1998). Normal P-P plots can be used to determine whether the distribution of a variable is approximately normal. Thus Normal P-P plots were conducted on the covariates Mother Figure Child Care, Father Figure Child Care, Mother Figure Family Violence, and Father Figure Family Violence. Results indicate that they do not meet normality assumptions (Figure 2). Additionally, the data included the independent categorical variables (Stepfather in the Home, Alcohol Use, Ethnicity, Religious Affiliation etc.). GLM was designed to address these types of variables and

hence is a procedure well suited to test for CSA predictors.

Figure 2

Normal P-P Plots for Covariates-Mother Figure Child Care, Father Figure Child Care, Mother Figure Family Violence and Father Figure Family Violence



Hypothesis 1

There is a difference in the rate of female CSA for respondents with a stepfather.

Chi square test results $[\chi^2 (1, 171) = 11.18, p = .001]$ indicate that CSA and presence of a stepfather in the home are correlated. However, the result of this test does not indicate the direction of the relationship of the independent variable to CSA. Therefore, a relative risk estimate value for this variable was calculated. The relative risk estimate for presence of a stepfather in the home indicates that CSA is more than 2.7 (relative risk estimate) times likely to be reported by respondents who had a stepfather living in the home than those who did not.

Hypothesis 2

There is a difference in the rate of female CSA for respondents whose parent figures use alcohol.

This hypothesis was measured using two variables (mother figure alcohol use and father figure alcohol use) each variable having five categories (never, rarely, sometimes, often, very often). Chi square tests results for mother figure alcohol use [χ^2 (4, 154) = 3.29, p = 5.11] and father figure alcohol use [χ^2 (4, 122) = 15.98, p = .003] demonstrated that only father figure alcohol use significantly differentiated CSA respondents from non-CSA respondents. The test result did not indicate the direction of the relationship of the independent variable, father figure alcohol use, to CSA. Therefore, risk estimate values were calculated for each of the five father figure alcohol use categories. These risk estimate values were: never (.17), rarely (.27), sometimes (.66), often (2.2) and very often (2.7) and suggest that as reported father figure alcohol use increased, so did the

probability for the occurrence of CSA. Hypothesis 2 is, therefore, only partially supported.

Hypothesis 3

There is a difference in the rate of female CSA for respondents from violent families of origin.

Mother figure family violence [t(152) = 1.916, p = .05] and father figure family violence [t(120) = 3.119, p = .004] were determined to significantly differentiate between CSA and non-CSA respondents and this tends to lend support to Hypothesis 3 that the rate of CSA in violent and non-violent families of origins are different.

Hypothesis 4

There is a difference in the rate of female CSA for respondents with less-caring parent figures.

Mother figure child care [t(152) = -2.509, p = .016] and father figure child care [t(120) = -3.055, p = .003] were also found to significantly differentiate between CSA and non-CSA respondents. These results support Hypothesis 4.

Means of the independent variables mother figure family violence and father figure family violence were higher for the CSA respondent group than for the non-CSA group (Table 7). Means for the independent variables mother figure child care and father figure child care were lower for the CSA respondent group than for the non-CSA respondent group (Table 7). This suggests that respondents whose parent figures were more violent or who had less caring parent figures reported CSA at a significantly higher rate than those who had less violent or more caring parent figures.

Table 7

	CSA Resp	ondents	Non CSA	Non CSA Respondents			
	М	SD	М	SD	t-test	р	
Parent Figure Child Care							
Father Figure	30.75	12.23	38.96	11.69	3.05	.00	
Mother Figure	39.19	13.04	45.45	9.46	2.50	.02	
Family Violence							
Father Figure	21.33	8.69	15.49	5.96	3.11	.00	
Mother Figure	16.84	5.96	14.84	4.99	1.92	.05	

Means (M) and Standard Deviations (SD) of Parent Figure Child Care and Family Violence for CSA and Non-CSA Respondents

Father figure n=122; Mother figure n=154

Hypotheses 5

There is a difference in the rate female CSA for respondents who had less than three confidants while growing up.

Analyses of the Pilot Study data demonstrated that the internal consistency of the variable social isolation was 48% indicating that this variable had low reliability. Therefore, in the present study, the variable social isolation was no longer used as an independent variable. Instead each of the variables that were initially used to measure social isolation scale was restated as a separate hypothesis (Hypotheses 5, 6 & 7). One of these variables was less than three confidants while growing up. This variable measured by a Likert Type Item with 5 choices (none, 1, 2, 3, and many) was recoded with none, 1, 2 = less than three confidants and 3 and many = 3+ confidants. The Chi square test performed on this categorical variable $[\chi^2 (1, 171) = 1.36, p = 2.43]$ shows

that having less than three friends does not differentiate CSA respondents from non CSA respondents. Even when the Chi square test was performed on all 5 categories [χ^2 (4, 171) = 5.05, *p* = .282], number of confidants did not differentiate CSA respondents from non-CSA respondents.

Hypotheses 6

There is a difference in rate of female CSA for respondents who had less than three friends in primary school.

This variable was measured and recoded similarly to the variable in Hypothesis 6. Results of the Chi square test $[\chi^2 (1, 171) = .542, p = .326]$ indicate that there was no difference in the rate of female CSA for respondents who had less than three friends in primary school or who had more that three friends. Even when all 5 categories were tested $[\chi^2 (4, 171) = 6.98, p = .137]$, number of friends in primary school was not correlated to CSA. Thus, the data does not provide evidence to support Hypothesis 6. *Hypotheses 7*

There is a difference in the rate of female CSA for respondents who had less than three friends in high school.

This variable was measured and recoded similarly to the variables in Hypothesis 6 and 7. Results of the Chi square test $[\chi^2 (1, 171) = .336, p = .246]$ indicate that there was no difference in the rate of female CSA for respondents who had less than three friends in high school or who had more that three friends. This does not provide support for Hypothesis 7. Even when all 5 categories were tested $[\chi^2 (4, 171) = 6.70, p = .244]$, number of friends in high school was not correlated to CSA.

Hypotheses 8

There is a difference in the rate of female CSA for respondents from different ethnicities.

Data was collected on 5 ethnic groups: Creole (*n* 42), Mestizo (*n* 107), Garifuna (*n* 13), Maya (*n* 3) and Other (*n* 6). This data was recoded using only the Creole and Mestizo groups as these were the two largest groups represented in the sample and are indeed representative of the two major ethnic groups in Belize with Mestizos comprising 49% and Creoles comprising 25% of the country's population (Abstract of Statistics, 2000). Additionally, the number of respondents in the other three groups was small. The Chi square test [χ^2 (1, 149) = .491, *p* = .483] performed on the two categories of ethnicity indicate that there was no difference in the rate of female CSA for respondents from different ethnicities. Therefore support was not provided for Hypothesis 8. However risk estimate values for the Creole group and Mestizo group show results in the expected direction in that respondents in the Creole group (risk estimate value of 1.24) had a higher probability of CSA occurrence than respondents in the Mestizo group (risk estimate value of .912).

Hypothesis 9

There is a difference in the rate of female CSA respondents from low income level families of origin.

Chi square test results (Table 8 below) indicate that income level was not statistically significant and therefore, evidence for Hypothesis 9 is not provided. The percentages reported in Table 9 indicate that CSA occurs across all income levels.

Table 8.

Independent variable	Hypothesis Tested	df	n	Pearson χ^2 Value	p-value
Income Level	9	2	171	0.519	.77
Family of Origin	10	2	171	0.007	.99
Religion	11	1	171	0.007	.93

Chi Square Tests Results for Income Level, Family of Origin and Religious Affiliation

Hypothesis 10

There is a difference in the rate of female CSA for respondents from different family of origin types.

Chi square test results (Table 8) show that there was no statistically significant difference between family of origin type and CSA. Table 9 shows that the respondents were primarily Mestizo, were raised in middle income homes and in two parent families and indicates that CSA was reported across all families of origin.

Table 9

	Respondents			
	Abused	Non-Abused	Total	
Ethnicity	(<i>n</i> =35)	(<i>n</i> =136)	(<i>n</i> =171).	
Mestizo	57.1%	64.0%	62.6%	
Creole	28.6%	23.5%	24.6%	
Garifuna	8.6%	7.4%	7.6%	
Maya	2.9%	1.5%	1.8%	
Other	2.9%	3.7%	3.5%	
Income Level				
(2\$BZ = 1\$US)	(<i>n</i> =35)	(<i>n</i> =136)	(<i>n</i> =171) _	
High (>BZ\$2000)	8.6%	14.7%	13.5%	
Middle (BZ\$400 BZ\$1999)	42.9%	48.5%	47.4%	
Low (<bz\$400)< td=""><td>11.4%</td><td>11.0%</td><td>11.1%</td></bz\$400)<>	11.4%	11.0%	11.1%	
Don't Know	37.1%	25.7%	28.1%	
Family of Origin	(<i>n</i> =35)	(<i>n</i> =136)	(<i>n</i> =171)	
Two Parent	74.3%	74.3%	74.3%	
Single Parent	11.4%	11.0%	11.1%	
Extended	14.3%	14.7%	14.6%	

Reported Percentage of Ethnicity, Income Level, and Family of Origin by Sexually Abused and Non-abused Respondents
Hypothesis 11

There is a difference in the rate of female CSA for respondents from families with religious affiliations.

Results of the Chi square test $[\chi^2 (1, 171) = .007, p = .93]$ performed on the variable religious affiliation determined that religious affiliation was not statistically significant indicating no support for a relationship between female CSA and religious affiliation (Table 8).

Hypothesis 12

There is a difference in the rate of female CSA for respondents with parent figures with different educational levels.

Results of Chi square tests (Table 10) were not significant indicating no support for a relationship between female CSA and educational level of parent figures.

Table 10.

Independent variable	Hypothesis Tested	df	п	Pearson χ^2 Value	p-value
Mother Figure Educational Level	12	4	154	4.236	.38
Father Figure Educational Level	12	4	122	2.873	.58

Chi Square Tests Results for Parent Figure Educational Level

Hypothesis 13

There is a difference in the rate of female CSA for respondents from violent families of origin with a stepfather and non-caring parents who use alcohol.

A General Linear Model (Type I Main Effects) was conducted entering the variables that significantly differentiated CSA respondents from non-CSA respondents. These variables included presence of a stepfather, father figure alcohol use, father figure child care, father figure family violence, mother figure child care, and mother figure family violence. Although mother figure alcohol use was not significant at the bivariate level, because it was a measure of parent figure alcohol use, this variable was also entered in the equation. In this GLM Type I Main Effects Model, the categorical variable stepfather was entered as the fixed factor and all the other continuous independent variables listed above were entered as co-variates (See Table 3, Chapter 3).

The variables, mother figure family violence and father figure child care were no longer significant when the effects of the other variables were considered. Mother figure alcohol use was also not significant. Only four variables - presence of a stepfather, mother figure child care, father figure alcohol use and father figure family violence were significant (Table 11). As seen in Table 10 moderate effect sizes (Cohen 1993; Stevens, 2000) were found for these variables. Power ranged from moderate to high indicating that the probability of committing Type II errors is small. Moderate effect sizes and moderate to high power lend credence to the findings of this study. Additionally, the variables accounted for .20 of the variance in the dependent variable (CSA) with presence of a stepfather accounting for most of the variance (Table 11).

Table 11. ANOVA – Main Effects

	Type I Sum of			Partial Eta	
IVs	Squares	df	F	Squared	Power
Stepfather	1.09	1	8.13**	.077	.806
Mother Figure Child Care	0.83	1	6.21*	.060	.694
Father Figure Alcohol Use	0.60	1	4.49*	.044	.556
Father Figure Family Violence	0.59	1	4.43*	.044	.549
Mother Figure Family Violence	2.52	1	0.19	.002	.071
Father Figure Child Care	2.64	1	0.00	.000	.050
Mother Figure Alcohol Use	0.12	1	0.88	.009	.153
Error	12.94		97	0.13	
Total	20.00		105		

Type I Main Effects and Two-Way Interaction Model

Since the main effects model accounted for only 20% of the variance of CSA, the GLM procedure was repeated using the variables presence of a stepfather, father figure alcohol use, mother figure alcohol use, father figure child care, father figure family violence, mother figure child care, and mother figure family violence as main effects along with all two-way interactions of these variables.

Four main effects were found to be significant at $\alpha = .05$. As expected, these were the four independent variables found to be significant in the main effects model (Table 10). Four two-way interactions were also found to be significant at alpha = .05. These were stepfather and father figure alcohol use [F (1, 76) = 5.122, *p* = .026], stepfather and mother figure alcohol use [F (1, 76) = 3.143, p =.041], mother figure child care and mother figure family violence [F (1, 76) = 6.951, p =.01], and father figure family violence and mother figure family violence [F (1, 76) =12.148, p = .001]. These four main effects and four two-way interactions accounted for R^2 = .512 in the dependent variable (CSA).

Significant Two-Way Interactions

Mother figure alcohol use and mother figure family violence were not significant variables in the main effects model but were found to be significant in the interaction model. These results indicate that these two variables are important CSA predictors. The interactions suggest that family violence and parent figure alcohol are important CSA predictors for females in Belize. The interactions also reiterate support for the predictors identified in the main effects model (presence of a stepfather in the home, father figure family violence and father figure alcohol use). As stated above the main effects model accounted for only 20% of the variance in CSA. The main effects and interactions model accounted for 51% of the variance in CSA suggesting that the interactions are very important CSA predictors for female CSA in Belize.

As stated above, mother figure alcohol use was not a main effect. Hence the statistical significant interaction of stepfather and mother figure alcohol use implies that the effect of stepfather on CSA depends on the level of alcohol use of the mother figure. Mother figure family violence was also not a significant main effect. Thus, the father figure family violence and mother figure family violence interaction indicates that the effect of father figure family violence on CSA depends on the level of violence of the mother figure. Similarly the mother figure child care and mother figure family violence

interaction suggests that the effect of mother figure child care on CSA depends on the level of violence of the mother figure. These interactions indicate complexity among the variables and are recommended for future research.

Summary

In summary, six correlates of CSA were identified using χ^2 tests and Independent t-tests. These correlates included a stepfather living in the home, father figure alcohol use, mother figure family violence, father figure family violence, mother figure child care, and father figure child care. Results indicated that respondents whose father figure uses alcohol, mother figure was less caring to the child, father figure was less caring to the child, father figure was less caring to the child, father figure was more violent, whose mother figure was violent or who had a stepfather were more likely to report CSA. Relative risk estimates obtained indicated that respondents who had a stepfather were more likely to report CSA. This variable did not measure whether the stepfather lived in the home at the time CSA occurred. However, when the latter was measured, 48% of CSA respondents indicated that their stepfathers were living in the home at the time of CSA occurrence and 24% of the perpetrators were stepfathers.

A GLM Type I Main Effects Model identified four CSA predictors which included presence of a stepfather in the home, mother figure child care, father figure alcohol use and father figure family violence. Presence of a stepfather accounted for most of the variability in the dependent variable CSA. However, all four predictors accounted for only 20% of the variability in the data. Therefore, a second GLM Type I Model of main effects and two-way interactions was performed. Two variables that were not significant in the main effects model were significant in the interaction model. These

were (a) mother figure alcohol use and (b) mother figure family violence. The four significant interactions were (a) presence of a stepfather and mother figure alcohol use, (b) presence of a stepfather and father figure alcohol use, (c) mother figure child care and father figure family violence, and (d) father figure family violence and mother figure family violence. These significant interactions provide additional support for the importance of the main effects predictors. Thus this analysis indicated that respondents with stepfathers who used alcohol, or less caring and violent mothers (as measured by items 13 c-13 k, Part B, Life Experiences Survey) were more likely to report CSA. These main effects and two way interactions accounted for 51% of the variance in CSA. With moderate to large effects (.06 to .14) and moderate to large power (.74 to .93), much confidence can be placed on the findings of this study. The presence of interactions involving variables that were not significant as main effect predictors suggests complex relationships between the predictor variables that require further research. Findings from this study support Hypothesis 13 (There is a difference in the rate of female CSA for respondents from violent families of origin with a stepfather and less-caring parent figures who use alcohol).

CHAPTER V

DISCUSSION

Summary of Major Findings and Discussion

Factors which are valid for CSA and can be used to predict female CSA were identified in the research literature. In the present exploratory cross-national study, a list of thirteen variables to be investigated was generated from the CSA literature: the presence of a stepfather in the home, parent figure (mother figure, father figure) alcohol use, parent figure (mother figure, father figure) child care, family violence (mother figure, father figure), and child having a small number of friends (in primary and secondary school) and having nobody in whom to confide, ethnicity, income level, religious affiliation, parent figure education, and family of origin. These factors predictive for CSA in developed countries were investigated to determine whether they are valid and predictive CSA factors for females in Belize, a developing country. In order to have confidence in the validity of the current study, the research literature was used to guide the generation of a definition of CSA. Other guidelines adopted from CSA literature to enhance the validity of the current study included the number and specificity of questions used to elicit CSA history, and the construction and delivery of the questionnaire to obtain an adequate questionnaire response rate.

Major findings

The demographic variables of ethnicity, income level, religious affiliation, parent figure education, and family of origin were not correlated with CSA. These findings support conclusions drawn by CSA researchers in developed countries (Kenny & McEachern, 2000; Fergusson, Lynskey, & Horwood, 1996; Finkelhor, 1994a; Madu & Peltzer, 2000; Putnam, 2003) that CSA is not related to socio-economic factors. One may conclude that female CSA occurs across all socio-economic strata in Belize as it does in developed countries. Since these demographic variables were not correlated to CSA, they were not explored as predictors in subsequent analyses.

According to the research literature respondents who were expected to report CSA at a significantly higher rate were those

- (i) who had stepfathers (Hypothesis1),
- (ii) whose parent figures used alcohol (Hypothesis 2),
- (iii) who grew up in violent families of origin (Hypothesis 3),
- (iv) who had less-caring parent figures (Hypothesis 4), and
- (v) who were socially isolated (Hypotheses 5, 6,7)

Social isolation as measured by the number of friends in primary or high school or having no one to confide in was not correlated to CSA. The variables presence of a stepfather in the home, father figure alcohol use, parent figure (mother figure, father figure) child care, family violence (mother figure, father figure) were all found to be correlated with female CSA. These findings lend support to Hypotheses 1, 3 and 4, and since mother figure alcohol use was not correlated to CSA, partial support for Hypothesis 2 is inferred. Further analyses confirmed the presence of a stepfather, father figure alcohol use, mother figure child care, and father figure family violence (Hypotheses 1, 2 and 3) as predictors of female CSA. Two-way interactions (stepfather in the home with mother figure alcohol use, mother figure child care with mother figure family violence, and father figure family violence with mother figure family violence) also highlighted mother figure alcohol use and mother figure family violence as predictors of female CSA. These findings have both theoretical and practical implications as discussed below.

Implications

Research Implications

Research has shown that CSA occurs in developed countries (Bolen, 2001; Finkelhor, 1994a; 1994b; Fleming, Mullen & Bammer, 1997) as well as in developing countries (Olsson et al., 2000, Singh, Ying & Nurani, 1996). Since CSA is a universal phenomenon occurring across national boundaries, it is of great interest to investigate whether the same factors predictive of CSA in developed countries will prove to be valid and predictive of CSA in developing countries. If this is the case then, just as CSA is universal across countries, predictors are also universal across national borders and much of the research conducted for developed countries will be directly applicable to developing countries. Potential benefits would be substantial given the large numbers of developing countries and the lack of CSA research in these countries.

As stated above, four of the factors examined – parent figure alcohol use, family violence, parent figure child care and having a stepfather in the home (Finkelhor, 1979; 1994a; 1994b; Fergusson, Lynskey, & Horwood, 1996; Fleming, Mullen & Bammer, 1997; Putnam, 2003) were identified as CSA predictors for female CSA in the developing

country of Belize. These findings provide support for the universality of CSA predictors identified in CSA literature. However, this is to be taken with caution as this is only one study conducted in one developing country.

Although support is provided for the cross national validation of CSA predictors, the importance of each CSA predictor may be dependent on the country in which the study is conducted. In Belize, the mother figure is the primary caregiver and nurturer in the home. She provides care and protection for the child and is the parent with whom the child communicates (C. Ross, Social Anthropologist, personal communication, August 6, 2007). Evidently, if the mother figure is not physically or emotionally available, the child may be living devoid of care and affection and may seek attention elsewhere and be more vulnerable to CSA. Indeed, a consistent finding in CSA literature (Faust, Runyon, & Kenny, 1995; Paveza, 1987; Madu, 2003; Madu & Peltzer, 2000; Whealin, Davies, Shaffer, Jackson, & Love, 2002) indicates that CSA victims have mothers who are absent in some fashion, either physically or emotionally.

This study's findings indicate that in Belize, CSA rates were higher for respondents with less-caring mother figures, mother figures who used alcohol and mother figures who were violent. These are all traits of mother figures who have poor relationships with their daughters and who are emotionally absent. This link to female CSA is in agreement with findings from current research in developed countries. CSA researchers suggest that CSA is less likely to occur if the child has at least one caring parent or adult in the home (Fergusson, Lynskey, & Horwood, 1996; Fleming et al., 1997; Volgeltanz et al., 1999). Therefore, as expected for respondents with caring mother figures, CSA rate was lower than for respondents with less-caring mother figures.

Further, CSA researchers (Bolen, 2000; Brown et al., 1998, Fleming et al., 1997; Kellog & Menard, 2003) have found that violence in the home is significantly associated with high CSA rates. In the current study, CSA rates increased when either parent figure was violent.

It is important to note that the CSA predictors identified in this study portray an environment characterized by violence, father figure alcohol use, and a less-caring mother figure which suggests that the child may be living in an environment devoid of care, safety, and affection. The presence of violence in the home and lack of affection are known to isolate families and perpetuate secrecy and isolation and make the child more vulnerable to CSA (Fleming et al., 1997). Additionally, these children may receive poor supervision and have a need for affection and attention which makes them more vulnerable to CSA perpetrators (Finkelhor et. al., 1990).

Implications for Practice

Identification of CSA.

Although this is an exploratory study, the findings have important implications for practitioners in Belize and other developing countries. Findings suggest that in Belize, female children who grow up in a home with (a) stepfathers who use alcohol, (b) either a violent mother figure or father figure, (c) parent figures who use alcohol, (d) less-caring mother figures, and (e) stepfathers are more likely to experience CSA. These findings indicate that having a stepfather increases the likelihood of CSA. Furthermore these findings suggest that CSA does not occur as an isolated event and overlaps with the occurrence of family violence and alcohol use as happens in developed countries (Dong, Anda, Dube, Giles, Felitti, 2003). Therefore, when the child lives in a less-caring home

environment (emotional neglect by the mother), the parent figures use alcohol and are violent, or a stepfather is present, it is important for the Belizean practitioner to check for CSA. Likewise, when the child presents with CSA, the practitioner should check for the identified variables lack of parent figure affection, parent figure alcohol use and family violence.

Implications for Treatment.

It is important that CSA victims receive effective treatment since they are at risk of sexual re-victimization (Russell 1986; Fergusson, Horwood & Lynskey, 1997; Messman-Moore, & Long, 2000; Tarakeshwar, Hansen, Kochman, Fox & Sikkema, 2006), may develop a variety of problematic behaviors and psychiatric disorders (Putnam, 2003; Saywitz, Mannarino, Berliner, & Cohen, 2000) or may themselves become perpetrators (Putnam, 2003). Since the CSA predictors identified in the current study are the same as those identified in studies conducted in developed countries, Belizean practitioners may with some confidence be able to apply empirically-supported counseling methods used in developed countries to treat CSA clients.

Recent studies have found that CSA-focused Cognitive Behavioral Therapy (CBT) provided to the child together with similar treatment to a non-offending parent is effective treatment for CSA symptoms and sequelae. However, treatment must be individualized on the basis of clinical presentation of the child, the developmental level of the child, and whether the child is symptomatic or asymptomatic (Putnam, 2003; Ryan, Nitsun, Gilbert, & Mason, 2005; Saywitz, et al., 2000); therefore, clinicians in Belize must think strategically when treating CSA. Screening, assessment, and treatment planning are essential. Some techniques that are used with children presenting with CSA

symptoms include desensitization, relaxation training, coping skills training, and correction of distortions. Techniques that can be used with children who present with no symptoms include psycho-education which is aimed at prevention of further victimization, positive self-image and parental education. Parents can be taught how to identify signs of difficulty that can occur at later developmental stages (Putnam, 2003; Saywitz et al., 2000). This may increase the probability of children being brought to the counselor for reevaluation if symptoms develop at a later time. Based on these findings, it is recommended that Belizean practitioners receive training in CBT and the application of CBT to CSA-related problems.

Researchers (Browne & Finkkelhor, 1986; Putnam, 2003) have shown that not all sexually abused children develop symptoms or psychopathology, that these children are more resilient compared to those who develop symptoms, and that resiliency is predictive of a positive prospective in addressing CSA symptoms and sequelae (Lam & Grossman, 1997; Putnam, 2003; Tarakeshwar et al.2006). Therefore, therapists can strengthen components of resiliency in CSA victims to facilitate healing by facilitating the development of protective factors in the individual and the individual's environment. Important CSA protective factors include family support, acceptance, affection and sense of belonging (Putnam, 2003; Tarakeshwar et al. 2006). Belizean practitioners, therefore, in treating CSA should identify personal, family and social protective factors that are available for the child and work with parents and/or non-offending parent to develop resiliency in the child. In Belize, many children live in or have access to extended family members. Identifying one of these individuals and working with this family member to develop a close relationship with the child may help ameliorate the effects of CSA (Lam

& Grossman, 1997; Putnam, 2003; Tarakeshwar et al. 2006). Belizean practitioners should also understand that even individuals who are asymptomatic need treatment.

Implications for Prevention.

Knowledge regarding CSA predictors and correlates is essential for prevention and early intervention. These factors are important in creating CSA prevention programs aimed at children, families and the Belizean community. The Government of Belize (GOB) can fund and implement psycho-educational programs aimed at primary school children, parents, teachers, and practitioners that address issues of family violence, alcohol use and CSA. These programs need to be developmentally appropriate and may allow children to disclose which can lead to early intervention.

Evaluation of such primary prevention programs in developed countries have shown that the most effective programs are multi-systematic and target not only children but also significant members of their social networks such as parents, teachers, other family members and other community members (MacIntyre & Carr, 2000). Additionally, research (Roberts, Miltenberger, & Raymond, 1999) suggests that a behavioral skills training (BST) approach to prevention results in the greatest improvement in sexual abuse knowledge, safety related concepts, safety and prevention skills. These BST techniques include instruction, modeling, rehearsal and feedback (McIntyre & Carr, 2000; Roberts, Miltenberger & Raymond, 1999).

GOB along with the National Organization for the Prevention of Child Sexual Abuse and Prevention (NOPCAN) can, therefore, implement school and community programs aimed at educating children, parents, teachers, and community leaders. The benefits of including parents and significant others in the child's social network include

equipping them to educate the children so that prevention concepts and skills can be reinforced throughout childhood, increasing their ability to recognize behavioral signs of abuse in the children, enabling them to develop appropriate ways to communicate with the child if a sexual abuse situation occurs, and to increase child protection and procedure knowledge. Further, educating parents and others may supply the information needed to discontinue or prevent CSA situations and stop CSA perpetrated by the parent or significant other (Roberts, Miltenberger & Raymond, 1999; McIntyre and Carr, 2000). In Belize, these prevention programs may also help stop or allow the child to disclose information on parent figure alcohol use and family violence occurring in the home.

The content of the prevention program should focus on teaching the child to recognize offender behaviors, discriminate between appropriate and inappropriate behavior, recognize warning signs, tell immediately following their recognition of indicators of sexual abuse, identify escape routes and adults in whom the child can confide, understand that he/she is not to blame if abuse occurs, be assertive with bullies, and develop safety skills (Roberts, Miltenberger & Raymond, 1999; McIntyre and Carr, 2000). Further, based on the findings of this study, the Belizean curriculum should also focus on CSA contributing factors, which include violence in the home and parent figure alcohol use. Materials and instruction methodology used should be developmentally appropriate. Child protection knowledge and procedures should be incorporated so that parents know how to respond. Since the number of trained personnel in Belize is limited, parents and teachers can be trained to implement the curriculum.

Limitations

Several limitations of this study were considered in Chapter 1. Four important ones will be reiterated. First, this study is retrospective in nature requiring adult females to recall past life experiences. Individual's self reports may represent only perceptions and are thus subject to distortions (Ray & Jackson, 1997). Therefore, the data collected may not accurately represent the circumstances surrounding CSA. Secondly, the University of Louisville Human Studies Internal Review Board reduced the sample size from 400 to 200 because of the sensitivity of the data being collected and to safeguard respondents' confidentiality and anonymity. This study's prevalence rate reflects McMillan et al.'s (1997) reported international prevalence CSA rate of 20%. The number of respondents reporting CSA was small and thus the statistical differences between respondents who reported CSA and who did not should be viewed with caution. A sample size of 400 would have allowed the analyses to separate more subtle effects and also allowed for more valid results.

An important limitation of this study is that the variables examined are not connected to the perpetrator. The different parent figure characteristics/ behaviors that are examined are not linked to the perpetrator; for example, it is not determined whether the sexually abusive father or stepfather uses alcohol and is violent or less-caring to the respondent. It should be noted that this study was not designed to directly link the perpetrator to the behaviors examined but was designed to identify who the perpetrators were and what parent figure behaviors are correlated to CSA, that is, which parent figure behaviors contribute to CSA prevalence. Finally, the sample was limited to women between the ages of 25 and 34 years in an urban area of Belize. Therefore, the sample

may not be representative of Belizean women as a whole or of the population of women in other developing countries.

Recommendations

Future Research

The present study investigated whether factors identified in CSA research literature in developed countries are valid predictors of female CSA in Belize lending support to the thesis that the same factors apply universally across developed and developing countries. This study was conducted in one urban area in Belize and it is therefore necessary that it be replicated in rural and other urban areas to determine whether the factors found to be significant in the present study are valid for the entire country of Belize. It is also necessary in future research to extend the age ranges of respondents from 24 to 34 years to other age ranges and to include both females and males in future samples. The current study was quantitative in design and implementation but future studies should also include qualitative examination of the factors found to be significant. Additionally, since the theory being explored is that CSA predictors are universal, the study should also be replicated in other developing countries using the current study's methodology to further substantiate that parental figure alcohol use, family violence, parent figure child care, and having a stepfather in the home are valid predictors for developing countries.

It is of great importance to note that one of the methodological issues in CSA research is that of CSA definition. As mentioned in the literature review, researchers have used wide latitude in defining the construct of child sexual abuse. Until a consensus definition exists, the different definitions will need to be considered when interpreting

research findings. Therefore, when this study is replicated in other developing countries, the same definition of CSA should be used. This study's CSA definition is conceptualized on Finkelhor's (1979) CSA definition which has been accepted and used by a number of researchers.

The findings of this study characterize the CSA victim as being devoid of care, safety and affection. Belize has a vibrant extended family system. Research is necessary to investigate whether this system provides a valid CSA protective factor. Further, this study does not link the perpetrator to the behaviors examined. Future research can therefore examine the direct link between the perpetrator and his/her behaviors/characteristics that are correlated with CSA. Future research can also investigate the complexity among the variables suggested by the four significant interactions.

Practice

In the country of Belize, there are two psychologists, two psychiatrists, seven professional counselors and six professionals with masters in social work (S. Smith, Psychologist, personal communication, August 23, 2007). The National University of Belize granted 15 graduates a combination of Associate Degrees in Social Work and Bachelor Degrees in Social Work. Thus, there is a need for trained counseling professionals. Therefore, the Government of Belize and the national university's academic division should ensure that a graduate degree in Counseling Psychology or Counseling be offered at the national university.

Further, a consistent finding in CSA literature is that CBT is the most effective treatment of CSA effects and sequelae (Putnam, 2003; Ryan, Nitsun, Gilbert, & Mason,

2005; Saywitz, et al., 2000). The curriculum should, therefore, include training in CBT and CSA prevention methodology.

Conclusion

Findings from this study provide an initial look at whether factors that have been identified in CSA research literature in developed countries are valid predictors and correlates of female CSA in Belize and thus potentially universal across developed and developing countries. The results revealed that respondents who had stepfathers, whose parent figures used alcohol, grew up in violent families of origin and had less caring parent figures reported CSA at significantly higher rates than respondents who did not have stepfathers, had parent figures who did not use alcohol, who grew up in non-violent families, and who had more caring parents. Additionally, results demonstrated that the interaction of these factors, were also predictive of CSA and require further study.

The present findings also showed a 20.4% prevalence rate which is similar to those reported in international studies. In the current study, participants who experienced CSA came from a wide range of ethnic and economic classes and families of origin although some trends were noticed. For example, the profile of the CSA victim was that of a Mestizo female child, raised in middle-income homes, in two parent families with parents who had only an elementary education and belonged to a religion. However, when one evaluates the demographics, the profile was simply a reflection of the demographics of the research site, Orange Walk Town.

This study replicates findings from research conducted in developed countries. Definitions of CSA, questionnaire design and CSA predictors were adopted from CSA literature and modified for this study which has provided evidence that female CSA

occurs across all socio-economic strata in Belize as it does in developed countries and that CSA predictors identified in developed countries are valid predictors for female CSA in the developing country of Belize.

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APPENDIX A

INFORMED CONSENT

A Cross National Validation of Child Sexual Abuse Predictors.

January 9, 2006

Dear Respondent:

You are being invited to participate in a research study sponsored by the Department of Educational and Counseling Psychology at the University of Louisville conducted by Dr. Nancy J. Cunningham and Jean Briceño-Perriott from Belize who is a doctoral candidate in Counseling Psychology at the University of Louisville.

Very little research has been done in Belize on women's issues and family life. Inside this envelope is a survey. It has to do with your family life when you were growing up. Some of the questions are very personal. Because they are personal, researchers have been reluctant to investigate them. However, if we are to help answer questions about important social issues such as sex education, HIV, teenage pregnancy, child abuse, etc., and begin to understand and document aspects of Belizean culture that contribute to women's health and well-being, we need to know about these personal issues.

The study seeks to find out whether factors that have been connected with child sexual abuse in other countries are characteristic of child sexual abuse in Belize. These factors include violence and drug abuse. The survey includes questions about adult members in your family when you were a child and asks for information on violence and drug abuse that occurred in your family when you were a child. Your participation would consist of filling out the attached survey, which will take about 45 minutes to complete. It is being

given to about 200 women in Orange Walk Town. You are free to decline to answer any question that makes you feel uncomfortable.

The Co-Principal Investigator will stop by your home and invite you to participate in the research study. You will be asked to complete the survey in private and keep in your possession until the researcher returns to collect the envelope.

It is not clear that you will benefit directly from this study, but it is hoped that your participation will help others in the future. Foreseeable risks to you might be discomfort in answering certain questions, and as in any research there can be risks.

In the event that you feel emotionally upset as a direct result of participation in this research, referral for counseling services will be provided to you. You are responsible for payment for these services. The investigators will not provide payment for such things as lost wages, inconvenience, or discomfort. If you are distressed by anything as a direct result of your participation in this study, please contact Jean Briceño-Perriott immediately at 001-501-225-9074.

Your participation in this research is voluntary. If you decide to fill out the survey, you may refuse to answer certain questions or stop answering the questions at any point that you feel uncomfortable.

Because of the sensitivity of the survey, we want you to know of the steps that we have taken to safeguard your privacy. The survey is anonymous. We do not want you to put your name on the survey or envelope, and we have carefully avoided asking any questions that may identify you directly. After completing the survey, you will seal it in the envelope and give it to the researcher. The sealed envelope will be opened only by the researchers.

Additionally, the data will be kept under lock and key, but absolute confidentiality cannot be guaranteed. Although absolute confidentiality cannot be guaranteed, confidentiality will be protected to the extent permitted by law. The sponsor, the Institutional Review Board (IRB), the Human Subjects Protection Office (HSPPO), Louisville, Kentucky, USA or other appropriate agencies may inspect your records. Should the data collected in this research study be published, your identity will not be revealed.

If you have any questions about your rights as a research subject, you may call the Human Subjects Protection Program Office (HSPPO) at 001-502- 852-5188. You will be given the opportunity to discuss any questions about your rights as a research participant, in confidence, with a member of the Institutional Review Board (IRB). The IRB is an independent committee composed of members of the University community, staff of institutions, as well as lay members of the community not connected to these institutions. The IRB has reviewed this study.

By returning the completed survey, you are indicating your willingness to participate freely in this research study. You are further indicating that all your present questions have been answered in language you understand and that you understand that all future questions will be answered in a similar manner. Should you have any questions, you may call the Co-Principal Investigator Jean Briceño-Perriott at 011-501-225-9074.

Thank you for considering our invitation to participate in this study.

Sincerely,

Nancy J. Cunningham, Ph. D. Professor of Educational and Counseling Psychology College of Education and Human Development 001-502- 852-0626 or nancy.cunningham@louisville.edu J. Briceño-Perriott Doctoral Candidate Educational and Counseling Psychology College of Education and Human Development 011-501- 225-9074 or jperriott@ub.edu.bz

APPENDIX B

LIFE EXPERIENCES SURVEY

PART A

1.	How old are you at this time?				Years			
2.	What is your ethnic background?							
	a. Creole	b. Mes	tizo			c. Garif	una	
	d. Maya	e. Men	onite			f. Other	. <u> </u>	
3.	When you were growing up (to ago Menonite, Adventist, Baptist or any	e 16), did v other rel	your fa	amily belo	ng to the	e Catholic, A	Anglican, Methodist,	
	Yes No							
4.	Please answer the following question	ons. Circ	le your	answer.				
	a. How many persons did you have to confide in when you were growing up (to age 16)?	None	1	2	3	Many		
	b. How many friends did you have when you were in primary school?	None	1	2	3	Many		
	c. How many friends did you have when you were in high school?	None	1	2	3	Many	Does not apply to me.	
5.	What type of family did you grow item that you check, tell how old y old).	y up in? I you were	Please c by givin	heck all the heck	hat apply rval of y	in the "Ye ears (for exa	es"column. For each ample: 5 to 10 years	
	Two-Parent Family							
	I grew up with			Yes		Age		
	a. both my biological parents							
	b. mom and her common law husba	and						

Continued on following page

Single-Parent Family

I grew up with	Yes	Age
 f. mom as head of household g. dad as head of household h. mom's boyfriend around most of the time i. dad's girlfriend around most of the time j. a continuous number of mom's boyfriends 		
k. a continuous number of dad's girlfriends		
Extended Family		
I grew up with	Yes	Age
I grew up with I. an aunt as head of household	Yes	Age
I grew up with I. an aunt as head of household m. an uncle as head of household	Yes	Age
I grew up with I. an aunt as head of household m. an uncle as head of household n. a grandmother as head of household	Yes	Age
I grew up with I. an aunt as head of household m. an uncle as head of household n. a grandmother as head of household o. a grandfather as head of household	Yes	Age
I grew up with I. an aunt as head of household m. an uncle as head of household n. a grandmother as head of household o. a grandfather as head of household p. a friend of one or both of my biological	Yes	Age
I grew up with I. an aunt as head of household m. an uncle as head of household n. a grandmother as head of household o. a grandfather as head of household p. a friend of one or both of my biological parents as head of household	Yes	Age
I grew up with I. an aunt as head of household m. an uncle as head of household n. a grandmother as head of household o. a grandfather as head of household p. a friend of one or both of my biological parents as head of household q. another type of family not mentioned above	Yes	Age

6. When you were growing up, what was your household's monthly income? Check your best estimate.

a . Less than \$4	400		
b. \$400	to	\$999	
c. \$1,000	to	\$1,999	
d. \$2,000	to	\$2,499	
e. \$2,500 and	over		
f. Do not know	v		

Continued on following page

7. Who were the adults who raised you, took care of you and lived in your home when you were growing up? **Do not write the names of the adult**s only put a check mark beside all that apply.

Adult Males	
a. Father	 b. Stepfather
c. Uncle	 d. Grandfather
e. Cousin	 f. Brother
g. Mom's boyfriend	 h. Mom's common law husband
i. Stepbrother	 j. A legal guardian
k. Other (please describe)	
Adult Females	
a. Mother	 b. Stepmother
c. Aunt	 d. Grandmother
e. Cousin	 f. Sister
g. Dad's girlfriend	 h. Dad's common law wife
i. Stepsister	 j. A legal guardian
k. Other (please describe)	

CONTINUE ON TO PART B OF THE SURVEY

PART B

PART B of the survey asks you questions about the adults who raised you, took care of you and who were members of your household when you were growing up (to age 16).

Looking back at the adults you checked in Question 7, list the female and male adults who raised you, took care of you and lived in your household when you were growing up. Do not write their names; only indicate how these adults were related to you, for example, father, mother, stepfather, stepmother, grandmother etc. Your list should contain from one to four persons. If there were more than four adults who raised you and lived in your household while you were growing up, please list the two female adults and two male adults that played the biggest roles in your family life.

Adult 1.	
Adult 2.	
Adult 3.	
Adult 4.	

Four copies of Part B are included. Fill out Part B for EACH of the adults that you listed above (up to four). For example, you can answer the questions thinking about your father, mother, grandmother, uncle, guardian, etc.- whatever adults who raised you and lived in your household before you were 16 years old and whom you checked in Question 7. Please remember that the questions refer to the time when you were a child.
Adult 1

8.	Who is the adult you will be answering the questions about in this section? The adult you choose							
	should be one of the adults you selected in Question 7 and listed on Page 4.							
	a. Mother	b. Fatl	ner					
	c. Aunt	d. Uno	ele					
	e. Sister	f. Brot	ther					
	g. Dad's girlfriend	h. Dao	l's commo	n law wife				
	i. Grandmother	j. Gra	ndfather					
	k. Mom's boyfriend	l. Mor	n's commo	on law husbai	nd			
	m. Stepmother	n. Stej	ofather					
	o. Other (please describe)							
0			* 7					
9.	Was this adult biologically related to you?		Yes	_No				
10.	How old were you when this adult live adulthood)	d with y	ou? (for e	example: 8 y	vears or 7	-10 or baby	to	
11.	How far did this adult reach in school?							
	a. Did not go b. Prir	nary		c.	Secondar	у		
	d. Sixth Form e. Uni	versity		f.	Other			
12.	Following is a list of attitudes and behaviou the adult that you selected in Question 8 .	rs of adu	t caretaker	s. Circle the	number th	at best describe	es	
	1=Never 2=Rarely 3=Someti	mes 4=	Often 5	=Very Often				
		Never	Rarely	Sometimes	Often V	ery Often		
	a. Spoke to me in a warm and friendly voice	1	2	3	4	5		
	b. Helped me as much as needed	1	2	3	4	5		
	c. Was emotionally close to me	1	2	3	4	5		
	d. Appeared to understand my problems and worries	1	2	3	4	5		
	e. Was affectionate to me	1	2	3	4	5		
	f. Enjoyed talking things over with me	1	2	3	4	5		

g. Frequently smiled at me	1	2	3	4	5
h. Seemed to understand what I needed or wanted	1	2	3	4	5
i. Made me feel I was wanted	1	2	3	4	5
j. Could make me feel better when I was upset	1	2	3	4	5
k. Talked much to me	1	2	3	4	5

13.

How often did the adult that you selected in **Question 8** do the following? Please circle your answer.

	Never	Rarely	Sometimes	Often	Very Often
a. Smoked marijuana	1	2	3	4	5
b. Drank alcohol (beer, rum, etc.)	1	2	3	4	5
c. Whipped me (Lashed me)	1	2	3	4	5
d. Punched me	1	2	3	4	5
e. Kicked me	1	2	3	4	5
f. Hit me	1	2	3	4	5
g. Hit his/her partner	1	2	3	4	5
h. Kicked his/her partner	1	2	3	4	5
i. Punched his/her partner	1	2	3	4	5
j. Whipped other children in the family	1	2	3	4	5
k. Punched other children in the family	1	2	3	4	5
I. Kicked other children in the family	1	2	3	4	5
m. Hit other children in the family	1	2	3	4	5

1=Never 2=Rarely 3=Sometimes 4= Often 5=Very Often

14. When the adult you listed in **Question 8** was living in your home, did **anyone 18 years or older** touch you in a way that made you feel uncomfortable or involve you in activities that you now consider sexual abuse?

Yes____ No____

15. List the person or persons (s) whom you referred to in Question 14. Do not write the names; only place a check mark beside all that apply. Question 14 asked about child sexual abuse experience(s).

Adult Males

a. Father	 b. Stepfather	-
c. Uncle	 d. Grandfather	_
e. Cousin	 f. Brother	_
g. Mom's boyfriend	 h. Mom's common law husband	_
i. Stepbrother	 j. A legal guardian	_
k. Stranger	 I. Family friend	
m. Teacher	 n. Priest/Minister	
o. Other (please describe)		
p. Does not apply to me		

Adult Females

a. Mother	 b. Stepmother
c. Aunt	 d. Grandmother
e. Cousin	 f. Sister
g. Dad's girlfriend	 h. Dad's common law wife
i. Stepsister	 j. A legal guardian
k. Stranger	 l. Family friend
m. Teacher	 n. Priest/Minister
o. Other (please describe)	
p. Does not apply to me	

16. When the child sexual abuse experience (s) you referred to in **Question 14** happened, which of the following adults were living in your home? Check all that apply.

a. Mother	 b. Stepmother
c. Father	 d. Stepfather
e. Dad's girlfriend	 f. Dad's common law wife
g. Mom's boyfriend	 h. Mom's common-law husband
i. Other (please describe)	
j. Does not apply to me	

17. How often did the person or persons listed in Question 15 do the following? Please circle your answer.

1=Never	2=Rarely	3=Sometimes	4= Often	5=Very Often
---------	----------	-------------	----------	--------------

0.

n. Had anal sexual intercourse

listed above

Made me do other sexual things not

		Never	Rarely	Sometimes	Often	Very Often
a.	Looked at dirty magazines and movies	1	2	3	4	5
	with me around					
b.	Made me look at dirty magazines	1	2	3	4	5
	and movies					
c.	Took photographs of me in my	1	2	3	4	5
	underwear or naked					
d.	Kissed me on the mouth	1	2	3	4	5
e.	Made me show my sexual organs to him/her	1	2	3	4	5
f.	Showed his/her sexual organs to me	1	2	3	4	5
g.	Touched my breasts intentionally	1	2	3	4	5
h.	Touched my sexual organs intentionally	1	2	3	4	5
i.	Made me touch his/her sexual organs	1	2	3	4	5
j.	Made me kiss his/her sexual organs	1	2	3	4	5
k.	Stroked and caressed my body	1	2	3	4	5
	intentionally in a sexual way					
l.	Made me stroke and caress his/her	1	2	3	4	5
	body intentionally					
m.	Had vaginal sexual intercourse	1	2	3	4	5

Thank you for completing this survey about issues that are sensitive to you.

1

1

2

2

3

3

4

4

5

5

If there is another person (Adult 2) that you listed on Page 4, please fill out the next section of the survey.

If there is nobody else on the list, you are finished with the survey.

PLACE THE SURVEY IN THE ENVELOPE AND GIVE IT TO THE INTERVIEWER.

Adult 2

18.	8. Who is the adult you will be answering the questions about in this section? The adult you che					dult you choose		
	should be one of the adults you selected in Question 7 and listed on Page 4.							
	a. Mother	b. Fatl	ner		_			
	c. Aunt	d. Unc	ele		_			
	e. Sister	f. Brot	her		_			
	g. Dad's girlfriend	h. Dac	l's commo	on law wife	_			
	i. Grandmother	j. Grai	ndfather		_			
	k. Mom's boyfriend	l. Mor	n's comm	on law husbar	nd			
	m. Stepmother	n. Step	ofather					
	o. Other (please describe)							
10								
19.	Was this adult biologically related to you?		Yes	No				
20.	How old were you when this adult lived adulthood)	l with y	ou? (for e	example: 8 y	ears or	7-10 or baby to		
21.	How far did this adult reach in school?							
	a. Did not go b. Prim	nary		c.	Secondar	у		
	d. Sixth Form e. Univ	versity		f.	Other			
22.	Following is a list of attitudes and behaviour the adult that you selected in Question 18 .	s of adul	t caretake	rs. Circle the r	number th	at best describes		
	1=Never 2=Rarely 3=Sometin	nes 4=	Often :	5=Very Often				
		Never	Rarely	Sometimes	Often V	Very Often		
	a. Spoke to me in a warm and friendly voice	1	2	3	4	5		
	b. Helped me as much as needed	1	2	3	4	5		
	c. Was emotionally close to me	1	2	3	4	5		
	d. Appeared to understand my problems and worries	1	2	3	4	5		
	e. Was affectionate to me	1	2	3	4	5		
	f. Enjoyed talking things over with me	1	2	3	4	5		

g. Frequently smiled at me	1	2	3	4	5
h. Seemed to understand what I needed or wanted	1	2	3	4	5
i. Made me feel I was wanted	1	2	3	4	5
j. Could make me feel better when I was upset	1	2	3	4	5
k. Talked much to me	1	2	3	4	5

Never Rarely Sometimes Often Very Often

23. How often did the adult that you selected in **Question 18** do the following? Please circle your answer.

1=Never 2=Rarely 3=Sometimes 4= Often 5=Very Often

	Never	Rarely	Sometimes	Often	Very Often
a. Smoked marijuana	1	2	3	4	5
b. Drank alcohol (beer, rum, etc.)	1	2	3	4	5
c. Whipped me (Lashed me)	1	2	3	4	5
d. Punched me	1	2	3	4	5
e. Kicked me	1	2	3	4	5
f. Hit me	1	2	3	4	5
g. Hit his/her partner	1	2	3	4	5
h. Kicked his/her partner	1	2	3	4	5
i. Punched his/her partner	1	2	3	4	5
j. Whipped other children in the family	1	2	3	4	5
k. Punched other children in the family	1	2	3	4	5
l. Kicked other children in the family	1	2	3	4	5
m. Hit other children in the family	1	2	3	4	5

24. When the adult you listed in **Question 18** was living in your home, did **anyone 18 years or older** touch you in a way that made you feel uncomfortable or involve you in activities that you now consider sexual abuse?

Yes____ No____

25. List the person or persons (s) whom you referred to in Question 24. Do not write the names; only place a check mark beside all that apply. Question 24 asked about child sexual abuse experience(s).

Adult Males

a. Father	 b. Stepfather	
c. Uncle	 d. Grandfather	
e. Cousin	 f. Brother	
g. Mom's boyfriend	 h. Mom's common law husband	
i. Stepbrother	 j. A legal guardian	
k. Stranger	 I. Family friend	
m. Teacher	 n. Priest/Minister	
o. Other (please describe)		_
p. Does not apply to me		

Adult Females

a. Mother		b. Stepmother	
c. Aunt		d. Grandmother	
e. Cousin		f. Sister	
g. Dad's girlfriend		h. Dad's common law wife	
i. Stepsister		j. A legal guardian	
k. Stranger		l. Family friend	
m. Teacher		n. Priest/Minister	
o. Other (please describe)		
p. Does not apply to me			

26. When the child sexual abuse experience (s) you referred to in **Question 24** happened, which of the following adults were living in your home? Check all that apply.

a. Mother	 b. Stepmother	-
c. Father	 d. Stepfather	-
e. Dad's girlfriend	 f. Dad's common law wife	-
g. Mom's boyfriend	 h. Mom's common law husband	-
i. Other (please describe)	 	
j. Does not apply to me		

	1=Never 2=Rarely	3=Sometime	es 4=	Often	5=Very Oft	en	
			Never	Rarely	Sometimes	Often	Very Often
a.	Looked at dirty magazines and n	novies	1	2	3	4	5
	with me around						
b.	Made me look at dirty magazine	S	1	2	3	4	5
	and movies						
c.	Took photographs of me in my		1	2	3	4	5
	underwear or naked						
d.	Kissed me on the mouth		1	2	3	4	5
e.	Made me show my sexual organ	s to him/her	1	2	3	4	5
f.	Showed his/her sexual organs to	me	1	2	3	4	5
g.	Touched my breasts intentionally	у	1	2	3	4	5
h.	Touched my sexual organs inten	tionally	1	2	3	4	5
i.	Made me touch his/her sexual or	gans	1	2	3	4	5
j.	Made me kiss his/her sexual org	ans	1	2	3	4	5
k.	Stroked and caressed my body		1	2	3	4	5
	intentionally in a sexual way						
l.	Made me stroke and caress his/h	er	1	2	3	4	5
	body intentionally						
m.	Had vaginal sexual intercourse		1	2	3	4	5
n.	Had anal sexual intercourse		1	2	3	4	5
0.	Made me do other sexual things	not	1	2	3	4	5
	listed above						

27. How often did the person or persons listed in **Question 25** do the following? Please circle your answer.

Thank you for completing this survey about issues that are sensitive to you.

If there is another person (Adult 3) that you listed on Page 4, please fill out the next section of the survey.

If there is nobody else on the list, you are finished with the survey.

PLACE THE SURVEY IN THE ENVELOPE AND GIVE IT TO THE INTERVIEWER.

Adult 3

28.	Who is the adult you will be answering the questions about in this section? The adult you choose							
	should be one of the adults you selected in Question 7 and listed on Page 4 .							
	a. Mother	b. Father						
	c. Aunt		_					
	e. Sister	f. Brot	ther			_		
	g. Dad's girlfriend	h. Dac	l's commo	n law wife		_		
	i. Grandmother	j. Grai	ndfather			_		
	k. Mom's boyfriend	l. Mor	n's commo	on law husbar	nd	_		
	m. Stepmother	n. Stej	ofather					
	o. Other (please describe)							
• •								
29.	Was this adult biologically related to you?		Yes	_No				
30.	How old were you when this adult lived adulthood)	d with y	ou? (for e	example: 8 y	ears or 7-	-10 or baby to		
31.	How far did this adult reach in school?							
	a. Did not go b. Prin	nary		c.	Secondary	/		
	d. Sixth Form e. Univ	versity		f.	Other			
32.	Following is a list of attitudes and behaviou the adult that you selected in Question 28 .	rs of adul	t caretaker	s. Circle the r	number tha	at best describes		
	1=Never 2=Rarely 3=Sometime	mes 4=	Often 5	=Very Often				
		Never	Rarely	Sometimes	Often V	ery Often		
	a. Spoke to me in a warm and friendly voice	1	2	3	4	5		
	b. Helped me as much as needed	1	2	3	4	5		
	c. Was emotionally close to me	1	2	3	4	5		
	d. Appeared to understand my problems and worries	1	2	3	4	5		
	e. Was affectionate to me	1	2	3	4	5		
	f. Enjoyed talking things over with me	1	2	3	4	5		

g. Frequently smiled at me	1	2	3	4	5
h. Seemed to understand what I needed or wanted	1	2	3	4	5
i. Made me feel I was wanted	1	2	3	4	5
j. Could make me feel better when I was upset	1	2	3	4	5
k. Talked much to me	1	2	3	4	5

Never Rarely Sometimes Often Very Often

33. How often did the adult that you selected in Question 28 do the following? Please circle your answer.

1=Never 2=Rarely 3=Sometimes 4= Often 5=Very Often

	Never	Rarely	Sometimes	Often	Very Often
a. Smoked marijuana	1	2	3	4	5
b. Drank alcohol (beer, rum, etc.)	1	2	3	4	5
c. Whipped me (Lashed me)	1	2	3	4	5
d. Punched me	1	2	3	4	5
e. Kicked me	1	2	3	4	5
f. Hit me	1	2	3	4	5
g. Hit his/her partner	1	2	3	4	5
h. Kicked his/her partner	1	2	3	4	5
i. Punched his/her partner	1	2	3	4	5
j. Whipped other children in the family	1	2	3	4	5
k. Punched other children in the family	1	2	3	4	5
l. Kicked other children in the family	1	2	3	4	5
m. Hit other children in the family	1	2	3	4	5

34. When the adult you listed in **Question 28** was living in your home, did **anyone 18 years or older** touch you in a way that made you feel uncomfortable or involve you in activities that you now consider sexual abuse?

Yes ____ No ____

35. List the person or persons (s) whom you referred to in Question 34. Do not write the names; only place a check mark beside all that apply. Question 34 asked about child sexual abuse experience(s).

Adult Males

a. Father	 b. Stepfather	
c. Uncle	 d. Grandfather	
e. Cousin	 f. Brother	
g. Mom's boyfriend	 h. Mom's common law husband	
i. Stepbrother	 j. A legal guardian	
k. Stranger	 I. Family friend	
m. Teacher	 n. Priest/Minister	
o. Other (please describe)		_
p. Does not apply to me		

Adult Females

a. Mother	 b. Stepmother
c. Aunt	 d. Grandmother
e. Cousin	 f. Sister
g. Dad's girlfriend	 h. Dad's common law wife
i. Stepsister	 j. A legal guardian
k. Stranger	 I. Family friend
m. Teacher	 n. Priest/Minister
o. Other (please describe)	
p. Does not apply to me	

36. When the child sexual abuse experience (s) you referred to in **Question 34** happened, which of the following adults were living in your home? Check all that apply.

a. Mother	 b. Stepmother	
c. Father	 d. Stepfather	
e. Dad's girlfriend	 f. Dad's common law wife	
g. Mom's boyfriend	 h. Mom's common-law husband	
i. Other (please describe)	 	
j. Does not apply to me		

	1=Never 2=Rarely	3=Sometime	es 4=	Often	5=Very Oft	en	
			Never	Rarely	Sometimes	Often	Very Often
a.	Looked at dirty magazines and n	novies	1	2	3	4	5
	with me around						
b.	Made me look at dirty magazine	S	1	2	3	4	5
	and movies						
c.	Took photographs of me in my		1	2	3	4	5
	underwear or naked						
d.	Kissed me on the mouth		1	2	3	4	5
e.	Made me show my sexual organ	s to him/her	1	2	3	4	5
f.	Showed his/her sexual organs to	me	1	2	3	4	5
g.	Touched my breasts intentionally	у	1	2	3	4	5
h.	Touched my sexual organs inten	tionally	1	2	3	4	5
i.	Made me touch his/her sexual or	gans	1	2	3	4	5
j.	Made me kiss his/her sexual org	ans	1	2	3	4	5
k.	Stroked and caressed my body		1	2	3	4	5
	intentionally in a sexual way						
l.	Made me stroke and caress his/h	er	1	2	3	4	5
	body intentionally						
m.	Had vaginal sexual intercourse		1	2	3	4	5
n.	Had anal sexual intercourse		1	2	3	4	5
0.	Made me do other sexual things	not	1	2	3	4	5
	listed above						

37. How often did the person or persons listed in **Question 35** do the following? Please circle your answer.

Thank you for completing this survey about issues that are sensitive to you.

If there is another person (Adult 4) that you listed on Page 4, please fill out the next section of the survey.

If there is nobody else on the list, you are finished with the survey.

PLACE THE SURVEY IN THE ENVELOPE AND GIVE IT TO THE INTERVIEWER.

Adult 4

38.	. Who is the adult you will be answering the questions about in this section? The adult you choose						
	should be one of the adults you selected in Question 7 and listed on Page 4.						
	a. Mother	b. Fatl	ner		-		
	c. Aunt	d. Unc	ele		_		
	e. Sister	f. Brot	her		-		
	g. Dad's girlfriend	h. Dad	l's commo	on law wife	-		
	i. Grandmother	j. Grar	ndfather		-		
	k. Mom's boyfriend	l. Mon	n's comm	on law husbai	nd		
	m. Stepmother	n. Step	ofather		_		
	o. Other (please describe)					_	
39.	Was this adult biologically related to you?		Yes	No			
40.	How old were you when this adult lived adulthood)	d with y	ou? (for	example: 8 y	vears or	7-10 or baby to	
41.	How far did this adult reach in school?						
	a. Did not go b. Prir	nary		c.	Second	ary	
	d. Sixth Form e. Unit	versity		f.	Other		
42.	Following is a list of attitudes and behaviou the adult that you selected in Question 38 .	rs of adul	t caretake	rs. Circle the	number	that best describes	
	1=Never 2=Rarely 3=Someti	mes 4=	Often	5=Very Often			
		Never	Rarely	Sometimes	Often	Very Often	
	a. Spoke to me in a warm and friendly voice	1	2	3	4	5	
	b. Helped me as much as needed	1	2	3	4	5	
	c. Was emotionally close to me	1	2	3	4	5	
	d. Appeared to understand my problems and worries	1	2	3	4	5	
	e. Was affectionate to me	1	2	3	4	5	
	f. Enjoyed talking things over with me	1	2	3	4	5	

	Never	Rarely	Sometimes	Often Very Of	ten
g. Frequently smiled at me	1	2	3	4	5
h. Seemed to understand what I needed or wanted	1	2	3	4	5
i. Made me feel I was wanted	1	2	3	4	5
j. Could make me feel better when I was upset	1	2	3	4	5
k. Talked much to me	1	2	3	4	5

43.

How often did the adult that you selected in Question 38 do the following? Please circle your answer.

	Never	Rarely	Sometimes	Often	Very Often
moked marijuana	1	2	3	4	5
rank alcohol (beer rum etc.)	1	2	3	4	5

1=Never 2=Rarely 3=Sometimes 4= Often 5=Very Often

a. Smoked marijuana	1	2	3	4	5
b. Drank alcohol (beer, rum, etc.)	1	2	3	4	5
c. Whipped me (Lashed me)	1	2	3	4	5
d. Punched me	1	2	3	4	5
e. Kicked me	1	2	3	4	5
f. Hit me	1	2	3	4	5
g. Hit his/her partner	1	2	3	4	5
h. Kicked his/her partner	1	2	3	4	5
i. Punched his/her partner	1	2	3	4	5
j. Whipped other children in the family	1	2	3	4	5
k. Punched other children in the family	1	2	3	4	5
l. Kicked other children in the family	1	2	3	4	5
m. Hit other children in the family	1	2	3	4	5

44. When the adult listed in Question 38 was living in your home, did anyone 18 years or older touch you in a way that made you feel uncomfortable or involve you in activities that you now consider sexual abuse?

Y	es	No
-	•0	110

45. List the person or persons (s) whom you referred to in **Question 44**. **Do not write the names;** only place a check mark beside all that apply. **Question 44 asked about child sexual abuse experience(s).**

Adult Males

a. Father	 b. Stepfather	
c. Uncle	 d. Grandfather	
e. Cousin	 f. Brother	
g. Mom's boyfriend	 h. Mom's common law husband	
i. Stepbrother	 j. A legal guardian	
k. Stranger	 I. Family friend	
m. Teacher	 n. Priest/Minister	
o. Other (please describe)		-
p. Does not apply to me		

Adult Females

a. Mother	 b. Stepmother	
c. Aunt	 d. Grandmother	
e. Cousin	 f. Sister	
g. Dad's girlfriend	 h. Dad's common law wife	
i. Stepsister	 j. A legal guardian	
k. Stranger	 I. Family friend	
m. Teacher	 n. Priest/Minister	
o. Other (please describe)		-
p. Does not apply to me		

46. When the child sexual abuse experience (s) you referred to in **Question 44** happened, which of the following adults were living in your home? Check all that apply.

a. Mother	 b. Stepmother
c. Father	 d. Stepfather
e. Dad's girlfriend	 f. Dad's common law wife
g. Mom's boyfriend	 h. Mom's common law husband
i. Other (please describe)	
j. Does not apply to me	

	1=Never 2=Rarely 3=Sometim	es 4	= Often	5=Very Oft	en	
		Neve	er Rarely	Sometimes	Often	Very Often
a.	Looked at dirty magazines and movies	1	2	3	4	5
	with me around					
b.	Made me look at dirty magazines	1	2	3	4	5
	and movies					
c.	Took photographs of me in my	1	2	3	4	5
	underwear or naked					
d.	Kissed me on the mouth	1	2	3	4	5
e.	Made me show my sexual organs to him/her	: 1	2	3	4	5
f.	Showed his/her sexual organs to me	1	2	3	4	5
g.	Touched my breasts intentionally	1	2	3	4	5
h.	Touched my sexual organs intentionally	1	2	3	4	5
i.	Made me touch his/her sexual organs	1	2	3	4	5
j.	Made me kiss his/her sexual organs	1	2	3	4	5
k.	Stroked and caressed my body	1	2	3	4	5
	intentionally in a sexual way					
l.	Made me stroke and caress his/her	1	2	3	4	5
	body intentionally					
m.	Had vaginal sexual intercourse	1	2	3	4	5
n.	Had anal sexual intercourse	1	2	3	4	5
0.	Made me do other sexual things not	1	2	3	4	5
	listed above					

47. How often did the person or persons listed in **Question 45** do the following? Please circle your answer.

Thank you for completing this survey about issues that are sensitive to you.

PLACE THE SURVEY IN THE ENVELOPE AND GIVE IT TO THE INTERVIEWER.

CURRICULUM VITAE

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University:	University of Louisville, Educational and Counseling Psychology-December, 2007 graduate with a Ph. D. in Counseling Psychology.		
	Ohio University, Athens, Ohio, United States of America. 1993 graduate with a Master's Degree in Counselor Education in Community and Agency Counseling and School Counseling.		
	University of Calgary, Alberta, Canada. 1978 graduate with a baccalaureate degree in Education, Secondary Route, Social Studies with emphasis on Geography.		
COLLEGE:	Saint John's College - Sixth Form. 1972 graduate with an Associates Degree in Arts.		
SECONDARY:	Pallotti High School- 1970 graduate.		
PRIMARY:	La Inmaculada Primary School, Orange Walk Town.		
EXPERIENCE:	January 2007 to present-Dean of Student Affairs, University of Belize, Belize, Central America		

August 2005-December 2006-Chair, Faculty of Management & Social Sciences, University of Belize, Belize, Central America

January 2005-July 2005-Lecturer, University of Belize, Belize, Central America, Faculty of Management & Social Sciences

January 2003-December 2004-Predoctoral internship-Jewish Family and Vocational Services, Louisville, KY

August 2001-May 2002-Practicum-Holy Family Elementary School, Louisville, KY, Family Builders Program, Catholic Archdiocese, Louisville

January 2001-April 2001- Practicum-Child Evaluation Center, Louisville, KY

August 1996-2000- Director of Student Enrolment and Paralegal Studies Coordinator, University College of Belize (UCB)

August 1994-1996- University College of Belize. Lecturer of Psychology, Sociology, Research Methods and Spanish. University Counselor.

January-MAY 1992. Internship at Athens Middle School and Health Recovery Services.

Individual counseling in the chemical dependency area as well as preventative work. Member of Athens Regional Teen Institute working in the preventative area with high school students.

January-April 1991. Practicum at Athens Middle School, Athens, Ohio, USA. Individual and group counseling.

1987-1989 Belize Teachers'College. Teacher of Spanish to second year students.

1982-1989 Pallotti High School. Teacher of English Language, English Literature, Geography, Social Studies and Spanish.Sports and drama meet coordinator. Individual and group counseling. Education and prevention classes: drugs/alcoholism, AIDS, etc.

1978-1982 St. Hilda's College. Teacher of Spanish and Geography.

1972-1974 Pallotti High School. Teacher of Spanish, English Language and Geography.

Representative at Geography seminars in Barbados and Jamaica.

AWARDS: Graduate Research Assistantship to VP Student Affairs, University of Louisville, Fullbright Scholarship to Ohio University, Canadian International Development Association Scholarship to the University of Calgary, Alberta, Canada. Belizean Government Scholarships to Pallotti High School and St. John's College.

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G.C.E. A levels in Spanish and English Literature.

PROFESSIONAL **ASSOCIATIONS:** American Psychological Association, Student Affiliate APA International Division Chi

RESEARCH:

Professional and Honor Society Gifford, D. D., Briceño-Perriott, J. & Mianzo, F. (2006).

Locus of control: Academic achievement and retention in a sample of university first-year students. Journal of College Admission, 191, 18-25.

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A survey of bullying behavior: At risk and protective factors in Louisville's parochial elementary schools. Report presented at the Family Builders Seminar, Louisville, August 2001. Survey done as team research with Nicole Thompson and Dr. N. Cunningham (principal investigator)

A survey of bullying behavior: At risk and protective factors in Louisville's public middle schools. Poster presentation at the University of Louisville, University of Cincinnati and University of Kentucky Annual Graduate Research Conference in Louisville, April, 2000. Team presentation with Nicole Thompson, and Katina Shine.

A survey of sexual abuse in Belize City female children. Report presented at the Belize Interdisciplinary Conference, March 1997. This research was done in collaboration with Dr. Leopold Perriott.

An evaluation of the Belize Council for the Visually Impaired (BCVI) services to the elderly. Research done for the BCVI organization, 1996.

Gender equity and its implications in everyday life. Paper presented at Belize's National Women Symposium in March, 1995.

The state of technology in Belize. Paper presented in Spanish at the Caribbean Conference for Technology. October, 1994.

Adolescent alcohol use and misuse: Variables and prevention. November, 1992.