An empirical study of the effects of sexual abuse on psychosocial development and distress
by Kevin E Wyse

A thesis submitted in partial fulfillment of the requirements for the degree Of Master of Education in Mental Health Counseling
Montana State University
© Copyright by Kevin E Wyse (1994)

Abstract:
The purpose of this study was to examine the differences in psychosocial development and reported distress levels between women in counseling who have experienced sexual abuse (N=20) and women in counseling who have not experienced sexual abuse (N=14). Psychosocial development was assessed using the Measures of Psychosocial Development (MPD), which measures resolution of Erik H. Erikson's eight psychosocial stages. Individuals' reported level of distress was measured by the Global Symptoms Index (GSI) on the Symptoms Checklist 90 Revised (SCL-90-R).

The sample consisted of Caucasian women at the Human Development Training and Research Clinic, the Montana State University Counseling and Psychological Services Center and selected clients of private counselors. All of these referral sources resided in the community of Bozeman, Montana. All participants were referred by their primary therapists to complete the assessments and an additional information form.

The data obtained from the MPD and the SCL-90-R was analyzed by comparing the means of each group through the use of t tests. At the p = .05 level, there was a significant difference between the two groups in all of Erikson's eight stages except the Intimacy versus Isolation stage. There was also a significant difference between the two groups on the GSI of the SCL-90-R (p = .05). Specifically, women who have experienced sexual abuse showed lower levels of resolution in seven of Erikson's eight psychosocial stages and higher levels of reported distress, as measured by the SCL-90-R. Descriptive data from the additional information form is reported in the study.

Recommendations resulting from this study include the use of the MPD and Erikson's theory in understanding and treating women in counseling who have experienced sexual abuse. Also, recommendations for further research include the investigation into the relationship between reported levels of distress and levels of psychosocial development.
AN EMPIRICAL STUDY OF THE EFFECTS
OF SEXUAL ABUSE ON PSYCHOSOCIAL
DEVELOPMENT AND DISTRESS

by

Kevin E. Wyse

A thesis submitted in partial fulfillment
of the requirements for the degree
of
Master of Education
in
Mental Health Counseling

MONTANA STATE UNIVERSITY
Bozeman, Montana

August 1994
APPROVAL

of a thesis submitted by

Kevin Edward Wyse

This thesis has been read by each member of the thesis committee and has been found to be satisfactory regarding content, English usage, format, citations, bibliographic style, and consistency, and is ready for submission to the College of Graduate Studies.

Date

Chairperson, Graduate Committee

Approved for the Major Department

Date

Head, Major Department

Approved for the Major Department

Date

Graduate Dean
STATEMENT OF PERMISSION TO USE

In presenting this thesis in partial fulfillment of the requirements for a master's degree at Montana State University, I agree that the Library shall make it available to borrowers under rules of the Library.

If I have indicated my intention to copyright this thesis by including a copyright notice page, copying is allowable only for scholarly purposes, consistent with "fair use" as prescribed in the U.S. Copyright Law. Requests for permission for extended quotation from or reproduction of this thesis in whole or in parts may be granted only by the copyright holder.

Signature
Date
ACKNOWLEDGEMENTS

I would like to thank my family and friends who have supported me throughout this project. I deeply appreciate the support and confidence of my family, Mary and Vernon Vial, and Patrick and Doreen Wyse. To Tonya for your love, patience and technical expertise, you are truly one in a million. To my friends, especially Liz, Eric, Rob and Ginny, thank you for helping me get through the tough times not only in the writing of this thesis, but also in graduate school and life.

I would also like to thank my graduate committee, Dr. Richard Horswill, Dr. Cheryl Blank and Dr. Michael Waldo. They were all instrumental in the completion of this study. A special thanks to Dr. Michael Waldo, my mentor and friend, for his patience, knowledge and persistence. He helped me to realize the importance of this project.

Finally, thank you to all of the brave individuals who had the courage to participate in this study. The sharing of your experiences will not be ignored.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPROVAL</td>
<td>ii</td>
</tr>
<tr>
<td>STATEMENT OF PERMISSION TO USE</td>
<td>iii</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>iv</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>vii</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>viii</td>
</tr>
<tr>
<td>1. INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>Conceptual Framework</td>
<td>3</td>
</tr>
<tr>
<td>Definitions</td>
<td>8</td>
</tr>
<tr>
<td>Sexual Abuse</td>
<td>9</td>
</tr>
<tr>
<td>Human Development</td>
<td>11</td>
</tr>
<tr>
<td>Adjustment</td>
<td>12</td>
</tr>
<tr>
<td>Psychotherapy</td>
<td>12</td>
</tr>
<tr>
<td>2. LITERATURE REVIEW</td>
<td>14</td>
</tr>
<tr>
<td>Incidence of Sexual Abuse</td>
<td>14</td>
</tr>
<tr>
<td>Effects of Sexual Abuse</td>
<td>18</td>
</tr>
<tr>
<td>Developmental Effects of Sexual Abuse</td>
<td>31</td>
</tr>
<tr>
<td>Summary of the Literature Review</td>
<td>41</td>
</tr>
<tr>
<td>3. METHODS AND PROCEDURES</td>
<td>43</td>
</tr>
<tr>
<td>Hypotheses</td>
<td>43</td>
</tr>
<tr>
<td>Design Statement</td>
<td>47</td>
</tr>
<tr>
<td>Sample</td>
<td>49</td>
</tr>
<tr>
<td>Instruments</td>
<td>53</td>
</tr>
<tr>
<td>Measures of Psychosocial Development</td>
<td>53</td>
</tr>
<tr>
<td>Reliability Coefficients for the MPD</td>
<td>55</td>
</tr>
<tr>
<td>Validity Coefficients for the MPD</td>
<td>57</td>
</tr>
<tr>
<td>Symptoms Check-List 90 Revised</td>
<td>59</td>
</tr>
<tr>
<td>Reliability coefficients for the SCL-90-R</td>
<td>62</td>
</tr>
<tr>
<td>Validation Coefficients for the SCL-90-R</td>
<td>63</td>
</tr>
<tr>
<td>Studies Utilizing the SCL-90-R</td>
<td>68</td>
</tr>
<tr>
<td>Procedures</td>
<td>69</td>
</tr>
<tr>
<td>Analysis</td>
<td>73</td>
</tr>
<tr>
<td>Limitations</td>
<td>74</td>
</tr>
<tr>
<td>Correlational Studies</td>
<td>74</td>
</tr>
<tr>
<td>Self-report Assessments</td>
<td>75</td>
</tr>
<tr>
<td>Sample</td>
<td>75</td>
</tr>
<tr>
<td>4. RESULTS</td>
<td>78</td>
</tr>
<tr>
<td>Analysis of Data</td>
<td>80</td>
</tr>
<tr>
<td>Examination of Null Hypotheses</td>
<td>80</td>
</tr>
<tr>
<td>Summary</td>
<td>85</td>
</tr>
</tbody>
</table>
5. CONCLUSIONS AND DISCUSSION ........................ 88
   Introduction ........................................ 88
   Limitations .......................................... 90
   Size and Nature of the Sample .................. 90
   Efficacy of Instruments .......................... 92
   Statistical Analysis ................................ 93
   Observations and Recommendations for Research .... 95

   Clinical Application of the Study ........ 98

   Summary ................................................ 99

REFERENCES CITED ............................................. 100

APPENDICES ................................................ 108

   A. ADDITIONAL INFORMATION ............................ 110
   B. PARTICIPANT CONSENT FORM .......................... 112
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Mean Scores on the Crisis Symptoms Checklist</td>
<td>29</td>
</tr>
<tr>
<td>2. MPD Test-Retest Coefficients</td>
<td>56</td>
</tr>
<tr>
<td>3. MPD Reliability Coefficients</td>
<td>57</td>
</tr>
<tr>
<td>4. Monomethod and Heteromethod Comparison Correlations</td>
<td>60</td>
</tr>
<tr>
<td>5. Alpha Coefficients and Test-Retest Coefficients for the SCL-90-R</td>
<td>63</td>
</tr>
<tr>
<td>6. Correlation for SCL-90 and the MHQ</td>
<td>65</td>
</tr>
<tr>
<td>7. Results of t tests</td>
<td>87</td>
</tr>
</tbody>
</table>
ABSTRACT

The purpose of this study was to examine the differences in psychosocial development and reported distress levels between women in counseling who have experienced sexual abuse (N=20) and women in counseling who have not experienced sexual abuse (N=14). Psychosocial development was assessed using the Measures of Psychosocial Development (MPD), which measures resolution of Erik H. Erikson's eight psychosocial stages. Individuals' reported level of distress was measured by the Global Symptoms Index (GSI) on the Symptoms Checklist 90 Revised (SCL-90-R).

The sample consisted of caucasian women at the Human Development Training and Research Clinic, the Montana State University Counseling and Psychological Services Center and selected clients of private counselors. All of these referral sources resided in the community of Bozeman, Montana. All participants were referred by their primary therapists to complete the assessments and an additional information form.

The data obtained from the MPD and the SCL-90-R was analyzed by comparing the means of each group through the use of t tests. At the p = .05 level, there was a significant difference between the two groups in all of Erikson's eight stages except the Intimacy versus Isolation stage. There was also a significant difference between the two groups on the GSI of the SCL-90-R (p = .05). Specifically, women who have experienced sexual abuse showed lower levels of resolution in seven of Erikson's eight psychosocial stages and higher levels of reported distress, as measured by the SCL-90-R. Descriptive data from the additional information form is reported in the study.

Recommendations resulting from this study include the use of the MPD and Erikson's theory in understanding and treating women in counseling who have experienced sexual abuse. Also, recommendations for further research include the investigation into the relationship between reported levels of distress and levels of psychosocial development.
CHAPTER 1

INTRODUCTION

I hear the cries of pain,
The silence that speaks of grief
And wonder,
Can they ever find relief?

I feel their disbelief and sadness
And see their lovelessness
And wonder
What is the answer to their pain?

To see this human havoc is pain enough.
To be that person must be terribly tough.
To know these brave survivors is to see their strength,
A shimmering diamond shining bright.

Jan Lincecum McLean
(Thorman, 1983)

As society is shedding the sheath of secrecy, it is becoming apparent that sexual abuse is much more prevalent than was ever imagined. Briere and Elliott (1992) reported that one out of every four children in this country experiences some form of child sexual abuse with 15% to 20% of the victims being boys. Reichert (1992) reported that 15 to 20% of females are abused as children, 50% of rape victims are teens, 25 to 66% of pregnant teens were sexually abused, and that 8 to 12 year old children are the most common victims of sexual abuse.

These statistics are particularly alarming given the impact sexual abuse may have on survivors' adjustment and
development. Several authors (Allers, Allers & Benjack, 1992; McFadden, 1987; Yates, 1991) reported the following problems which are associated with sexual abuse of children and adolescents: increased sexual and aggressive conduct; difficulties in meeting age appropriate behavior; an increase in drug and alcohol abuse; and an assortment of DSM-III-R diagnoses. Other authors (Briere, Evans, et al.; Browne & Finkelhor; Feinaur; Runtz & Runtz; cited in Ratican, 1992; Breire & Elliott, 1992; Johnson 1989) reported an array of problems which plague adults who have been sexually abused including increased incidence of depression, low self-esteem, guilt, anger, and anxiety. They also reported difficulties with dissociation, body image and somatic complaints.

There has been extensive speculation on how sexual abuse affects survivors. Thorman (1983) stated that most professionals who deal with sexual abuse survivors agree survivors suffer some type of emotional trauma. McFarlane (1978) believed that the abuse results in the production of a victim mentality which is extremely detrimental to the development of the survivor's personality. Gagliano (1987) reported that many children who have been sexually abused "fail to accomplish the normal developmental tasks of childhood and adolescence" (p. 103). McFadden (1987) also wrote in detail about the effects of sexual abuse on development, stating that "the effect of maltreatment is to arrest or freeze the developmental process" (p. 53). Johnson
(1989), Burgess (1985) and Byers (1990) believed that the effects of sexual abuse are similar to other traumas that impact people's lives. These authors have purported that sexual abuse negatively affects the normal development of children, adolescents and adults.

Though differences in developmental levels between women who have experienced sexual abuse and women who have not experienced sexual abuse have been reported by a number of authors, at the inception of this project, no empirical evidence had been identified which supported this assertion. It was the purpose of this study to assess whether or not there is a significant difference between the psychosocial developmental levels of adult women in counseling who have experienced sexual abuse and adult women in counseling who have not experienced sexual abuse.

Conceptual Framework

This study focused on the effects that sexual abuse has on psychosocial development. A conceptual framework for understanding psychosocial development has been suggested by Erik H. Erikson (Hergenhahn, 1990). Erikson postulated an eight stage developmental model. Hergenhahn (1990) explained that Erikson's theory "can be viewed as a description of how the ego gains or loses strength as a function of developmental experiences" (p. 150). Each developmental stage is characterized by a crisis, which can be defined as an
important turning point. The ego gains strength as the individual encounters a crisis and achieves a positive resolution of that stage. Likewise, the ego loses strength when there is negative resolution of a crisis. Sexual abuse may detract from the ego's ability to successfully resolve a crisis, negatively affecting the course of psychosocial development. For Erikson, each stage must result in the positive resolution of that stage because an unresolved crisis restricts the development of ego strength, which is necessary to deal with life's problems.

Erikson's first stage is Basic Trust versus Basic Mistrust and usually lasts from birth to the end of the first year. If there is positive resolution of this stage individuals will develop feelings of trust in other people and things, and a sense of belief that they can obtain what they desire in life. If there is negative resolution of this stage, individuals will exhibit apprehension and suspiciousness of others, and possibly of themselves. The second stage is Autonomy versus Shame and Doubt which lasts from about the end of the first year to end of the third year. If there is positive resolution in this stage, individuals can begin to decide for themselves if they will participate in something or not participate. Positive resolution is also characterized by an ability to understand cultural ideas of right and wrong. However, if there is negative resolution in the second stage,
individuals may become rigid, dogmatic and caustic (Hergenhahn, 1990).

The third stage described by Erikson is Initiative versus Guilt. It usually extends from the fourth year to the fifth year. If individuals successfully resolve this stage, they will be able to perceive future events, and their roles in these events. They will also develop an ability to try on different roles and decide which parts fit for them and which parts they would rather leave behind. If they are unsuccessful in resolving the third stage, individuals may demonstrate a lack of self-sufficiency and "will tend to live within the limits of others" (p. 155). The fourth stage is called Industry versus Inferiority and usually exists from the age of six to the age of eleven. Positive resolution in this stage is signified by the sense that there is pleasure in a job well done and confidence that they will have a place in society. Negative resolution of this stage can be characterized by individuals feeling as if they will not become useful members of society (Hergenhahn, 1990).

The fifth stage, Identity versus Role Confusion, marks the transition between childhood and adulthood in a period Erikson called the psychological moratorium. Erikson explained that when individuals emerge from this stage with positive resolution, they will have a sense of who they are and an initial consideration for an overall plan for their lives. Furthermore, they will develop a doctrine which will help them
carry out this overall plan. However, without success, individuals will emerge with a negative identity or role confusion (Hergenhahn, 1990).

Hamachek (1988) listed the behaviors of people with a sense of role confusion or a negative identity:

1. They tend to have an unstable self-concept marked by ups and downs;

2. They tend to set short-term goals, but have trouble establishing long-range plans;

3. They are more susceptible to the shifting whims of peer pressure influences;

4. They tend to have rather low levels of self-acceptance;

5. They are apt to have trouble making decisions, fearing that they will be wrong;

6. They tend to have a somewhat cynical attitude about themselves, others and life generally;

7. They tend to believe that what happens to them is largely out of their hands, a matter of fate or breaks;

8. They are inclined to seek self-acceptance indirectly by being what they believe others want them to be;

9. They are inclined to have trouble being physically and emotionally close to another person without being either too dependent or too separate; and

10. They tend to be cognitively inflexible; their sense of self resides heavily on being right. (p. 359)

Erikson (1968) depicted a person with negative identity and role confusion as feeling as if "life and strength seem to exist only where one is not, while decay and danger threaten wherever one happens to be" (p. 173). Erikson also described
problems with intimacy, fear of success and failure, feelings of ambivalence about who one is, and an inability to commit oneself to an occupation. Many of these symptoms have been associated with survivors of sexual abuse.

At about 20 years of age, the identity process should be near completion and individuals can then move into the sixth stage of Intimacy versus Isolation. This stage usually lasts until the age of 24 and is identified by "young adults with a strong identity eagerly seek intimate relationships with others" (Hergenhahn, 1990, p. 159). Individuals should also have a sense of cultural expectations of caring and productive relationships. Negative resolution is indicated by individuals feeling a sense of detachment and separation from others. Stage seven, Generativity versus Stagnation, is depicted by the desire to pass on to others one's perception of what makes for a satisfying life. This stage usually occurs between the ages of 25 to 64. It is also the time where adults begin to pass on values of the culture to the next generation. If there is negative resolution of this stage, individuals will use their power for their own self-indulgent objectives. Erikson's final stage, Integrity versus Despair, occurs from about the age of 65 until individuals die. According to Erikson (Hergenhahn, 1990), "it is only the person who can look back on a rich, constructive, happy life who does not fear death. Such a person has a feeling of completion and fulfillment" (p. 161). Despair would be
denoted by individuals feeling desperate and hopeless about their lives (Hergenhahn, 1990).

Erikson postulated that this theory is epigenetic, meaning individuals must pass through these stages in order. He also indicated that each of the crisis resolutions is reversible. For example, if individuals were to leave the first stage with the resolution of trust, they may lose it. Likewise, individuals leaving this stage with mistrust, may at some point gain trust (Hergenhahn, 1990).

It is this principle of reversibility which could have important implications for survivors of sexual abuse. Specifically, does sexual abuse affect the psychosocial development principles described by Erikson? If there is a significant difference in the psychosocial development of women who have experienced sexual abuse, which stages are affected and to what degree are they impacted? If abuse does negatively impact psychosocial development, it is possible that a therapeutic intervention designed to reconstruct these developmental stages could allow sexual abuse survivors to move past the abuse or resolve developmental tasks.

Definitions

This section provides conceptual definitions of sexual abuse, human development, adjustment and counseling. Following each conceptual definition an operational
definition, used to measure each variable in this study, will be provided.

Sexual Abuse

Sgori (1982) defined child sexual abuse as:

a sexual act imposed on a child who lacks emotional, maturational and/or cognitive development. The ability to lure a child into a sexual relationship is based upon the all-powerful and dominant position of the adult or older adolescent perpetrator, which is in sharp contrast to the child's age, dependency and subordinate position. Authority and power enable the perpetrator, implicitly or directly, to coerce the child into sexual compliance. (p. 7)

This is a comprehensive definition of child sexual abuse which points out that any of these circumstances, which could be present in an abusive relationship, involve more than the act of sex. Rather, it is the issue of power and dominance which is the foundation of the relationship between the victim and the perpetrator. Sgori also outlined what acts can produce negative effects of child sexual abuse. Behaviors such as the perpetrator being nude in front the victim, the perpetrator disrobing in front of the victim, exposure of the perpetrator's genitals, fondling by perpetrator of victim's genital area, any penetration of the vagina or anus by the perpetrator and even "dry intercourse" where the perpetrator ejaculates by rubbing his penis against the victim's vaginal or anal region can all be considered sexual abuse. Though this may seem obvious to some, it is important to acknowledge that each of these behaviors are important to consider for
this study and in the selection of the participants for this study.

For this study, incest was considered a form of sexual abuse. Poston and Lison (1989) defined sexual abuse using the definition put forth by the National Committee for the Prevention of Child Abuse; "sexual abuse consists of contacts or interactions between a child and an adult when the child is being used for the sexual stimulation of that adult or of another person" (p. 21). They used the same definition for incest, but added that the perpetrator is a blood relative. They made no distinction between perpetrators who are blood relatives or relatives by marriage, for example a stepfather. They believed that either situation can have devastating effects on the victim. They added that the abuse often involves the dimensions of bribery, trickery or the use of force.

The final type of abuse which was denoted as sexual abuse in this study was sexual assault or rape. Katz and Mazur (1979) summarized their definition citing three criteria, "legally forcible rape is defined by three elements: (1) vaginal penetration, (2) use of force, and (3) non-consent of the victim" (p. 15). Sunday and Tobach (1985) added to this definition the concepts that rape is a crime of violence, rape is not committed for sex, but for domination and humiliation of the victim, rapists often use threats and weapons, and that rape is a violation of the victims civil rights. Finally,
Hursch (1977) reported that rape is not an act of affection or love "it is a way of degrading and debasing a woman" (p. 5).

Though these three acts of sexual abuse have components which differ, they have several elements in common. Powerlessness of the victim, violation of the victim by the perpetrator and use of force or coercion are all inherent in each of these acts. Therefore, it was appropriate to include all three types of sexual abuse survivors in this study.

These three types of sexual abuse were operationally defined as the clients reporting, or not reporting, one of these types of sexual abuse. The primary therapist then referred the individual to the study.

**Human Development**

Erik H. Erikson's psychosocial developmental model offers a conceptualization of development. As recounted above, Erikson described age appropriate developmental stages, indicated by resolution of crises and formation of ego.

For this study, psychosocial development of subjects was operationally defined as clients' scores on Gwen A. Hawely's Measures of Psychosocial Development (MPD). This assessment measures the resolution in each of Erikson's eight stages. An in-depth discussion of this assessment is offered in the Methods section of this study.
Adjustment

As reported earlier, sexual abuse survivors present to mental health professionals with varying levels of adjustment problems. To assess how levels of adjustment are related to surviving sexual abuse and resolution of Erikson's stages, it was necessary to assess the level of distress each participant was experiencing.

For this study, participants' level of distress was operationally defined as their scores on the Symptoms Checklist 90 Revised (SCL-90-R). This assessment measures an individual's level of distress over the last seven days on nine symptom indices and three global indices. An in-depth discussion of this assessment is offered in the Methods section of this study.

Psychotherapy

In this section, definitions for individual psychotherapy, family psychotherapy and group psychotherapy are provided. Psychotherapy, in general, is defined by Corsini (1989) as:

A formal process of interaction between two parties, each party usually consisting of one person but with the possibility that there may be two or more people in each party, for the amelioration of distress in one of the two parties relative to any of the following areas of disability or malfunction: cognitive functions (disorders of thinking), affective functions (suffering or emotional discomforts) or behavioral functions (inadequacy of behavior), with the therapist having some theory of personality's origins, development, maintenance and change along with some method of treatment logically
related to the theory and professional and legal approval to act as a therapist. (p. 1)

Individual psychotherapy was defined as one person seeking psychotherapy from a therapist. Family psychotherapy was defined as a group of individuals, who have kinship or previous emotional ties to each other, seeking psychotherapy from a therapist (Corsini, 1989). Group psychotherapy was defined as two or more individuals, who may or may not have previous emotional ties, meeting for the purpose of psychotherapy. These individuals must recognize that they belong to this group and have mutually agreed upon goals of the group (Gladding, 1991).

For the purpose of this study, psychotherapy was operationally defined as the individual participating in one or more of these types of psychotherapy. To be selected for this study, participants must have participated in psychotherapy for three sessions or more.
CHAPTER 2

LITERATURE REVIEW

The literature review explores the prevailing qualitative and quantitative research that pertains to the varied effects of sexual abuse. This chapter begins with an examination of evidence in the literature regarding the incidence of sexual abuse. Next, symptoms which are commonly experienced by survivors of sexual abuse are discussed, including Post-Traumatic Stress Disorder. Finally, the chapter discusses the literature addressing the underlying developmental dynamics of individuals who have experienced sexual abuse. The chapter ends with a summary of the literature and the statement of questions to be addressed in this study.

Incidence of Sexual Abuse

This section examines literature reporting the incidence of sexual abuse.

Byers (1990) characterized sexual abuse as a problem that has been around for many years. However, the extent of the problem is just now being realized by mental health professionals. Gellés and Conte (1990) reported "there has
been a 225% increase in reporting between 1976 and 1987" (p. 1046).

Byers (1990) found that different studies show that 8% to 28% of women have experienced some type of sexual abuse. One study of psychiatric settings cited by Byers indicated that 21% of the women had been sexually abused; a second reported that 19% of inpatient women and 38% of outpatient women were sexually abused. Byers reported that 80% of convicted sexual offenders had been sexually abused. Though Byers cites several renowned authors, she provides no empirical evidence for these figures. However, Craine, Henson, Colliver and Maclean (1988) found in their sample of 105 women that 54 of them had been sexually abused. Because these authors use a definition of sexual abuse which included behaviors other than sexual intercourse, they suggested that their results may display a higher percentage compared to studies where sexual intercourse was the only criteria recognized.

Briere (1992a) in a review of the literature found, "perhaps one third of the women and one sixth of the men in our culture have experienced sexual contact with someone substantially older by their mid-teens" (p.196). Briere and Elliot (1992) reported that one out of every four children in this country experiences some form of child sexual abuse with 15% to 20% of these being boys. Reichert (1992) stated that 15% to 20% of females are abused as children, 50% of rape victims are teens, 25% to 66% of pregnant teens were sexually
abused, and that 8 to 12 year old children are the most common victims of sexual abuse. Though all of these individual authors are experts in the field of the treatment of sexual abuse, they offer no empirical evidence for their figures.

Other studies also supported the contentions of these authors. Wyatt, Guthrie and Notgrass (1992) reported that, in a nonclinical population, 1 in 2.5 to 1 in 4 women experience sexual abuse by the age of eighteen. Wheeler and Walton (1987) reported that 4% to 12% of all women endure a sexual experience with a relative, and one percent of women have been sexually assaulted by their father or stepfather. Braver, Bumberry, Green and Rawson (1992) found that 35.7% of the college counseling center population they studied had been sexually abused. Allers, Allers and Benjack (1992) found in a study of 600 adolescent females, who were participating in inpatient treatment for substance abuse, that 35.2% admitted they had been sexually abused as children or adolescents.

The variations in reported sexual abuse would seem to warrant explanation. One possible reason for variations may be that different populations are researched in different studies. Patients in psychiatric hospitals, clients in outpatient mental health settings and individuals who have had no contact with mental health professionals may have different rates of abuse history. Variations in age, environment or presenting symptoms may also have an effect on the probability that an individual would have reported sexual abuse.
Different definitions of sexual abuse could also be another possibility for the variations.

Self-report measures, which were utilized by some of the above research, are also subject to limitations. Gotlib (1984) reported, because self-reports are a subjective report by an individual who may want help, individuals may tend to report in a negative light. According to Wessman, Prusoff, Thompson, Harding and Myer (1978), self-report measures may set up expectations that the individual should perform well on the assessment. This assumption lends itself to the possibility of an individual either over or under reporting the incidence of sexual abuse.

Another issue which is currently under investigation is the possibility of false memories. Persinger (1992) tested six subjects who had suddenly remembered experiences of child sexual abuse. Persinger (1992) found that individuals who were tested had a history of anxiety, EEG measurements which were epileptic-like and scores which were significantly high on the Hypnotic Induction Profile, implying high levels of suggestibility. Persinger suggested that this study supports the hypothesis that individuals with this profile may be prone to perceiving suggestions of sexual abuse as repressed memories. This may provide an interpretation for their feelings of unexplainable anxiety, providing even further reinforcement. Because of the small number of participants in this study (n = 6), the results of the study should be
questioned. Persinger (1992) also made several inferences which are not clearly explained, bringing into question the significance of the study.

False memories of sexual abuse may be produced to explain feelings of confusion or fear (Loftus, 1993). Sexual abuse may provide a logical answer to life-long struggles, when there actually was no experience of sexual abuse. Loftus also suggested that a therapist's suggestive probing may create false memories for clients who are struggling to understand painful feelings. Lotus offers no empirical evidence to support these suppositions.

Despite limitations of the studies, available data does suggest that sexual abuse of children is a reality in our society, raising questions about its effects on psychological adjustment and development.

Effects of Sexual Abuse

This section of the literature review considers the research on symptomatology and psychopathology associated with the experience of having been sexually abused.

McFadden (1987) reported several behaviors which may be present in children who have been sexually abused. In infants, eating problems, sleep disturbances and behaviors which demonstrate a lack of basic needs being met are manifested. Preschool children often demonstrate an increased need for love but an extreme problem communicating and
trusting adults. They may not feel guilty about the abuse but will often have a poor self-concept. Preschoolers usually do not understand sex or sexual abuse and deal with this confusion by repressing or denying any feelings about the abuse or the perpetrator. At this time too, children who have been sexually abused may begin to act out sexually with other children during times of play and may begin to have problems with enuresis or encopresis.

Gelles and Conte (1990), after reviewing the literature in the 1980's, stated:

Specific differences in the functioning of sexually abused children have been observed in the research, and it is clear that such children display a variety of negative social, emotional, and physical sequelae in comparison with children who are not known to have been abused and those who are identified as having psychosocial problems. (p. 1053)

In a study with 15 children, Fagot, Hagan, Youngblade and Potter (1989) found that sexually abused children were more passive but were not more likely to exhibit behavior problems. They also found that passivity often leads to children interacting less with teachers and peers, leading to an increased incidence of depression and anxiety. The authors of these studies rely on clinical observation and offer no empirical evidence to support their inferences.

McFadden (1987) reported that as children reach school-age the effects of sexual abuse become more obvious. They may demonstrate negative feelings about their bodies and feel unworthy to associate with others unless there is some type of
physical encounter. They often illustrate both extreme difficulties with other children and feelings of shame in many of their peer and child-adult relationships. McFadden offers no empirical evidence to support the inferences in this study.

McFadden (1987) found that school-age children may be sexually over-aroused. In a review of the research, Browne and Finkelhor (1986) cited two researchers who have studied sexual behavior in children who have been sexually abused. Tufts (cited in Browne & Finkelhor, 1992) found that 27% of children four to six years old who were sexually abused scored significantly higher on a sexual behavior scale compared to clinical and general control populations. The behavior scale which was utilized included "having had sexual relations, open masturbation, excessive sexual curiosity and frequent exposure of the genitals" (p.68). Though overt sexual behavior is not an indicator of sexual abuse, this study suggested that it may be a difficulty that some children who have been sexually abused experience. It is important to note that neither Browne and Finkelhor nor McFadden described the instruments or the limitations of these studies.

Friedrich, Urquiza and Beilke (cited in Browne and Finkelhor, 1986) found in a study of sexually abused children that 70% of boys and 44% of girls scored one standard deviation above the mean for a normal population on a scale measuring sexual difficulties. During times of sexual arousal, children may dissociate from their experience, have
feelings of fear or revulsion, or seek further gratification which is uncommon in non-abused children of this age (McFadden, 1987). It is important to note that neither Browne and Finkelhor nor McFadden described the instruments or the limitations of these studies.

Based on her clinical experience, MacFarlane (1978) reported that sexual abuse instills within its victims a reference of self which leaves them feeling they are victims, not only in the context of the abuse, but also in the greater context of their lives. She suggests that this may be the most long lasting effect of sexual abuse and leads to a life of self-deprecation and poor self-concept.

Burgess (1985) stated that sexual abuse denotes an ego-shattering experience for adolescents. In adolescence, any type of anxiety may cause individuals who have been sexually abused to damage their health through self-mutilation or the development of sleeping or eating disorders. Adolescents may also disassociate from body sensations during times of stress to protect themselves from a perceived threat. Chronic feelings of worthlessness or failure may result in the individual presenting with clinical depression, including suicidal ideation (McFadden, 1987). Burgess and McFadden based their findings on clinical experience.

Adolescents who are currently being sexually abused, or have been abused in the past, may have trouble looking past the present and into the future. Their behavior is often
promiscuous, leaving them open to future abuse, sexually transmitted diseases and pregnancy in their teenage years (McFadden, 1987). Byers (1990) supported this observation by reporting that adolescent survivors of sexual abuse often use sex as a tool to control or manipulate others. McFadden and Byers offered no empirical evidence to support their inferences.

Tufts (cited in Browne and Finkelhor, 1986) found that 45% to 50% of a sexually abused adolescent sample scored high, when compared to a norm sample on an aggression and antisocial behavior measure. DeFrancis (cited in Browne & Finkelhor, 1986) reported that 64% of his sexually abused adolescent sample expressed extreme guilt. Again, this is not to suggest that guilt, aggression or antisocial behavior are unique to survivors of sexual abuse, only that these may be difficulties experienced by sexually abused adolescents. Browne and Finkelhor (1986) acknowledged that there are few studies which assess the constructs of aggression, antisocial behavior and guilt, making it difficult to obtain a more accurate measure of these constructs.

Adults, too, may suffer from the effects of sexual abuse which occurred when they were children and adolescents. Ratican (1992) reported on the effects that childhood sexual abuse may have had on adults. Potential effects can be summarized as follows:
1. a higher incidence of depression, including suicidal ideation, eating disorders and sleeping disorders;

2. low self-esteem, including lack of self-confidence, feelings of hopelessness or shame, self-abusive behavior, impulsive behavior and procrastination;

3. inappropriate guilt, including feelings of over-responsibility for others and events beyond one's control or perfectionism;

4. increased levels of anger, often exhibited by irritability, explosiveness, fits of rage for no apparent reason and overly passive or aggressive behavior;

5. higher frequency of anxiety related problems, including panic attacks, insomnia or phobias;

6. somatization diagnoses including pelvic pain, genital or urinary problems, gastrointestinal problems or difficulty swallowing;

7. relationship problems, including being sexually, emotionally or physically abused or abusive, being overly passive or hostile, a poor sense of personal boundaries or an extreme fear of intimacy;

8. difficulties in sexuality, including sexualizing most relationships, being inappropriately seductive, sexual compulsiveness or promiscuousness, lack of sexual desire, flashbacks of abuse during sex or fear of being touched;

9. negative body image, including obesity, obsessed with body appearance, poor or perfectionistic grooming or self-mutilation;

10. denial of abuse, including amnesia of parts of childhood, down-playing of effects of abuse or discounting the pain experienced by other survivors; and

11. increased levels of dissociation, including omissions of periods of time, feeling cut-off from body, learning problems, hearing voices or multiple personalities. (p. 37)
Ratican's conclusions stem from clinical observations and other researchers, not through empirical evidence.

Browne and Finkelhor (1986) reported in their review of sexual abuse literature that depression is the most frequent symptom reported by survivors of sexual abuse. They cited several authors (Bagley & Ramsay; Briere & Runtz; Peters; Sedney & Brooks) who, through empirical research, found significant differences between abused and non-abused populations. In a study of 153 women in a clinical population, Briere (cited in Browne & Finkelhor, 1986) found that 51% of the sexually abused population was suicidal. This compares to 34% of the non-abused population. Browne and Finkelhor suggested that this is a significant difference.

Briere, (cited in Browne and Finkelhor, 1986) describing a clinical sample, reported that 54% of abuse survivors reported anxiety attacks, as compared to only 28% of non-abused persons reporting such attacks. Fifty-four percent of sexual abuse survivors, compared to 23% of non-abused persons, reported intrusive nightmares. Seventy-two percent of sexual abuse survivors, compared to 55% of non-abused persons, had sleeping difficulties. Briere also found that social isolation was a problem for 64% of the sexually abused population, while only 49% of a non-abused clinical population experienced social isolation. Other studies (Bagley & Ramsay; Courtois; Herman; Sedney & Brooks) mentioned by Browne and Finkelhor (1986) all found similar results.
Browne and Finkelhor (1986) summarized the observations of other authors who compared sexual abuse survivors to non-abused individuals. These authors found that the survivors showed significantly poorer self-concepts, self-esteem, interpersonal relationships, sexual adjustment difficulties and higher levels of prostitution, drug abuse, and alcohol addiction. All of these studies were conducted on a variety of individuals with a number of different instruments. Browne and Finkelhor did not mention the limitations of these studies.

Some authors have suggested that women who have been sexually abused are at risk of re-victimization because they do not understand the effect the first experience of abuse had on them (Wyatt, Gutherie & Notgrass, 1992). De Young (1984) explains:

These children, in other words, actually sought out and engaged in the very activity that caused anxiety in the first place. In their effort to master the anxiety [created by the initial trauma of sexual abuse], they became "participant victims," initiating and maintaining sexual relationships with exploitative adults, in which each encounter reduced their level of anxiety and strengthened their existing defenses against the residual anxiety. (p. 336)

DeYoung suggested that children often develop a counterphobic response to the trauma of sexual abuse. DeYoung based her conclusions on her clinical observations.

Russell (1986; cited in Browne & Finkelhor, 1986) found in a population of 930 women, 33% to 68% of the women who had been sexually abused were sexually assaulted at a later date.
This compared to 17% of the non-abused population. Russell also found that between 38% to 48% of sexually abused women married physically abusive husbands. This compared to 17% of women who had not been sexually abused. Forty percent to 62% were later abused by their husbands, compared to 21% of women who had not been abused. Browne and Finkelhor (1986) offered no explanation for the variation of the figures for the abused population. They reported that there was a variety of sexual abuse which women in the sample experienced. They also reported that several authors (Briere; Fromuth; and Miller et al.) reported similar findings.

Gagliano (1987) found that survivors of sexual abuse often experience fear of the dark, fear of strangers, have increased levels of substance abuse, and poor attendance at school or work. Fallon and Coffman (1991) reported increased levels of substance abuse, promiscuity and prostitution, suicide attempts, feelings of poor self-esteem and an array of other symptoms similar to those cited above. Sexual abuse survivors also have been reported to exhibit extreme problems in social adjustment, perceive themselves as different from people close to them, and are less connected to their families of origin. Children who experience abuse that involves a parent or intercourse, show higher levels than other survivors in the areas of social maladjustment and perceived isolation (Harter, Alexander & Neimeyer, 1988).
Wheeler and Walton (1987) reported that sexual abuse survivors who took the Minnesota Multiphasic Personality Inventory were most likely to demonstrate elevation on the Psychopathic Deviance scale, the Schizophrenia scale and the Depression scale. They also reported that results from the Leary Interpersonal Checklist, the Gambrill-Richey Assertion Inventory, the Parental Attributes Questionnaire and the Rorschach Projective Test suggest that survivors of sexual abuse are unassertive, have poor self-esteem, have problems developing intimate relationships and problems expressing anger. Braver, Bumberry, Green and Rawson (1992), in a study of a university counseling center population, found clients reporting sexual abuse experienced more psychological problems than non-abused clients according to scores on the Personal Information Questionnaire, the Brief Symptom Inventory, the Beck Depression Inventory and the Millon Clinical Multiaxial Inventory.

Knight (1990), in observations of sexual abuse groups, reported that survivors often struggle with feeling isolated, dirty, guilty, unable to protect themselves and distrustful of others, and that they experience flashbacks, nightmares and hopelessness. In a study of 98 female psychiatric inpatients, who were predominantly white and middle class, 36% reported a history of child sexual abuse. Seventy-seven percent of this population scored significantly higher than the median on the Dissociative Experiences Scale. Allers, Allers and Benjack
(1992) have investigated the high incidents of chronic depression and dementia in older adults (over 65) and have found a correlation between these symptoms and child sexual abuse.

Briere (1988) compared the mean scores on the Crisis Symptoms Checklist of 195 abused and non-abused female clients, and found significant differences in the results. The results of this study are listed in Table 1. Though the p values vary for the different variables, Briere stated, "the results of the current investigation, as do those of other recent studies, offer strong support for the notion that sexual abuse in childhood produces long-term psychological problems" (p. 331).

The trauma of sexual abuse has also been compared to other forms of trauma (Sprei & Goodwin, 1983). Byers (1990) described the effects of trauma as chronic traumatic neuroses. She explains, "the sexual abuse experienced as a child is a trauma and the aftereffects are similar to those of survivors of other traumas" (p. 26). Kilgore (1988), in an article describing the symptoms of child sexual abuse, presented his argument "many researchers espouse the adaptive-survival concept for symptom formation, diagnostically labeled post-traumatic stress disorder" (p. 228). In his book, Trauma in the Lives of Children, Johnson (1989) also placed reactions to child sexual abuse into the DSM-III-R diagnostic category of Post-Traumatic Stress Disorder (PTSD). Behaviors such as
hypervigilance, nightmares, flashbacks, dissociation and sleep disturbances are all symptoms of PTSD that are exhibited by the sexual abuse survivor (Briere & Elliott, 1992).

Craine, Henson, Colliver and MacLean (1988) stated that many of the sexually abused psychiatric patients which they observed demonstrated symptoms congruent with PTSD.

Table 1. Mean Scores on the Crisis Symptoms Checklist.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Abused (n=133)</th>
<th>Non-abused (n=61)</th>
<th>p &lt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dissociation</td>
<td>.53</td>
<td>.29</td>
<td>.0001</td>
</tr>
<tr>
<td>Sleep Problems</td>
<td>.76</td>
<td>.60</td>
<td>.0007</td>
</tr>
<tr>
<td>Sex Problems</td>
<td>.65</td>
<td>.40</td>
<td>.0001</td>
</tr>
<tr>
<td>Anger</td>
<td>.49</td>
<td>.32</td>
<td>.0008</td>
</tr>
<tr>
<td>Alcoholism</td>
<td>.28</td>
<td>.03</td>
<td>.0001</td>
</tr>
<tr>
<td>Drug Addiction</td>
<td>.32</td>
<td>.08</td>
<td>.0002</td>
</tr>
<tr>
<td>Sexual Assault</td>
<td>.43</td>
<td>.13</td>
<td>.0001</td>
</tr>
<tr>
<td>Self-Mut</td>
<td>.08</td>
<td>.00</td>
<td>.0197</td>
</tr>
<tr>
<td>Suic. Ideation</td>
<td>1.11</td>
<td>.42</td>
<td>.0001</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>.330</td>
</tr>
</tbody>
</table>

Nevertheless, many of these patients had not been given this diagnosis. In 1980, the American Psychiatric Association reported that the cluster of symptoms which may be experienced by sexual abuse survivors is comparable to the symptoms associated with PTSD (Fallon and Coffman, 1991). Patten, Gatz, Jones and Thomas (1989) reported that all of the symptoms which are present in PTSD are present in many
survivors of sexual abuse. These authors suggested that sexual abuse creates disruptions and symptoms in peoples lives which are similar to those seen in veterans of war or victims of natural disasters.

As mentioned earlier in the consideration of the incidence of sexual abuse, it is necessary to recognize differences in populations, difficulties in self-report assessments, and the potential that reports of abuse are based on false memories.

Gelles and Conte (1990) also reported that while there is evidence of cognitive, emotional and social difficulties in children who have been sexually abused, there are no retrospective studies which measure these elements before the abuse. The inability to measure pre-abuse psychological levels is something that is not mentioned in the majority of the literature. If an individual is experiencing pre-abuse difficulties, research and documentation of the effects of sexual abuse may be inappropriately skewed, adding to the assumption that sexual abuse was the cause of the symptoms reported by survivors. It is also possible that if there were pre-abuse psychological conditions present, they may have contributed to subject's vulnerability to abuse.
Developmental Effects of Sexual Abuse

This section of the literature review considers research which explores the effect sexual abuse may have on survivors psychological development.

As children move through the formative years of their lives, they usually begin to accomplish developmental tasks such as changing their relationship with parents, cultivating a sense of who they are in relation to others, learning respect for authority and acquiring necessary socialization skills. Children who have been sexually abused may have trouble with assertiveness and self-sufficiency, respecting persons who are authority figures, and managing their anger. This often leaves children isolated and unable to encounter the experiences necessary to accomplish developmental tasks (Gagliano, 1987). Though Gagliano suggested sexual abuse prevents children from achieving developmental milestones, he provides no systematically gathered, empirical evidence.

Burgess (1985) explained that "the major task for the adolescent is gaining a sense of identity" (p. 12). He suggested that sexual assault or abuse is an ego shattering experience for both the female and male adolescent. Byers (1990) used Erikson's model of development to explain the reactions that adolescents have due to sexual abuse. The author reported that sexually abused adolescents are struggling with many developmental tasks including the development of a sexual identity. As survivors of sexual
abuse, they often learn to use sex as a tool for protection. They may also identify sex as something which is disgusting and to be avoided. Both of these attitudes may have detrimental effects on identity formation as the child moves from adolescence to adulthood and becomes aware of the wrongness of the sexual abuse.

Survivors of sexual abuse usually seek help for symptoms such as depression, poor self-esteem or substance abuse. These symptoms may be viewed as difficulties in achieving developmental milestones. Interpersonal relationships are also affected by developmental deficits. Survivors often mature with relationship imbalances and will tend to recreate these relationships throughout their lives (Byers, 1990). Though Byers offered ample anecdotal evidence to support her suppositions, she offered no systematically gathered empirical evidence.

McFadden (1987) reported on the importance of creating a safe environment for children who have been sexually abused. McFadden suggested that sexual abuse arrests the normal development of children's personalities and it is necessary to create a safe environment within the counseling relationship to move their development forward. McFadden suggested that arrested development is due to years of abuse and it is necessary to consider the differences between the developmental stage and the chronological age of a sexual abuse survivor. Developmental stages are sequential and
cannot be skipped. Therefore, survivors may need to re-experience earlier stages in order to move past the effects of the abuse. Though these contentions seem to have face validity from clinical observations, Mcfadden offered no systematically gathered empirical evidence.

Brown and Finkelhor (1986) reported one of the long-term effects of sexual abuse may be difficulties in psychological development. Gagliano (1987) reported that many children who experience sexual abuse "fail to accomplish the normal developmental tasks of childhood and adolescence" (p. 103). She continued to explain that experiencing an adult sexual relationship is more than the child's psyche can manage. Briere (1992a) reported that when an investigator conducts research with survivors of sexual abuse, it is important to consider developmental issues when explaining variability in results. Though these authors seem to have gathered data from their clinical observations, they offer no empirical evidence.

Briere (1992b) in his book, which is one of four in the Interpersonal Violence Series, states:

Abuse-focused therapy suggests that the client is not mentally ill or suffering from a defect, but rather is an individual whose life has been shaped, in part, by ongoing adaptation to a toxic environment. Thus the goal of therapy is less the survivors recovery than his or her continued growth and development. (p. 82)

Briere would seem to have suggested that sexual abuse does negatively affect development. He goes on to mention that sexual abuse trauma often causes normal development to diverge
from the norm. Nevertheless, he offered no systematically gathered empirical evidence which would substantiate this inference.

Mcfarlane (1978) reported that it is hard to determine the effects of sexual abuse. She explained that there are many factors which may determine the reaction to the abuse by the child. They include:

Age and developmental status, the relationship of the abuser to the child, the amount of force or violence used by the abuser, the degree of shame or guilt evoked in the child for her participation, and, perhaps most importantly, the reaction of the child's parents and those professionals who become involved in the case (p. 61).

Though Mcfarlane believed these factors influence the degree of severity in response to sexual abuse, she suggested that sexual abuse leads to the formation of a "victim mentality" (p. 55), as survivors' personalities develop. The victim mentality often transcends any efforts to help survivors eliminate a negative self-image. King (1983) reported that sexual abuse often leads to an abusive sexual self-identity which affects development. King added that lack of self-identity may lead to further victimization. Though this evidence would seem logical, these authors offered no empirical evidence which would purport this to be true.

Cole and Putman (1992) examined the effects of sexual abuse from a Self Psychology perspective. Self Psychology postulates that the development of the internal sense of self and the external social self begins in infancy and continues
through childhood, adolescence and adulthood. As individuals mature throughout their lives, they encounter developmental transitions which usually result in a redefinition of their internal and social selves. Through this process, individuals develop the ability to regulate their behavior and affect in a manner which seems congruent with the social situation. Cole and Putman observed the behaviors of sexual abuse survivors and concluded that sexual abuse severely impacts this process.

For example, Cole and Putman (1992) suggested that while abused toddlers and preschoolers may not have a sense of social taboos against incest, there seems to be a lack of development of the self as separate from others. The trauma of the penetration of a child's body by a caretaker's finger or penis results in developmental difficulties in trust or a sense of not being able to control threatening events. In later childhood, ages seven to nine, the more common experiences of development would allow the child to increase social exploration and gain competence in the world beyond the home. However, the sexually abused child often is isolated and, coming to realize the implications of abuse, is filled with guilt and shame. At this stage of development, sexual abuse seems to interrupt the "integration of positive and negative aspects of self and realistic self-appraisal" (p.178). Unable to integrate the experience of the abuse, the
child often reverts to either denial or dissociation in order to deal with the overwhelming events.

Cole and Putman (1992) suggested the lack of completion of developmental tasks continues as the child moves into adolescence. A sexualized relationship with a parent or someone who is much older becomes even more socially inappropriate. This leads to confusion and disorder during the critical development of the sexual self. Adolescents are also trying to consolidate many different aspects of the internal and social self. Sexual abuse, again, creates unusual experiences that are difficult to integrate. Cole and Putman (1992) suggested that as the adolescent moves into adulthood, social expectations create situations and expectations which become even more disrupting to the disorganized self. Problems in intimacy, decision making, communication, sexuality and regulations of personal boundaries become apparent. Though comparison of behaviors which are apparent in sexual abuse survivors and developmental deficits defined by Self Psychology seem to correlate; Cole and Putman offered no empirical data to substantiate these inferences. They offered no instruments which would allow for systematic measurement of Self Psychology developmental delays of sexual abuse survivors.

Alexander (1992a), in an introductory article for a special issue about adult survivors of sexual abuse in the *Journal of Consulting and Clinical Psychology* stated "sexual
abuse occurs within the context of normal developmental changes in a child and therefore is bound to interact with other events and developmental processes" (p. 165). Alexander (1992b) studied the effects of sexual abuse, specifically incest, according to the principles of Attachment Developmental Theory. Attachment Developmental Theory postulates that infants and children have a biological attachment to their primary caregiver. This attachment at first may be for protection but later it serves the purpose of developing expectations of the individuals' and others' roles in relationships. This can lead to either the development of trust and worthiness or mistrust and unworthiness.

Alexander (1992b) observed that victims of incest often are rejected by one or both of their primary caregivers except in incidence of sexual contact. This leads to interpersonal difficulties, a negative self-image and problems in control of affect, leading to periods of depression and anxiety. Again, Alexander relied on clinical observations of behavior rather than systematically gathered, empirical evidence. However, Socarides (1983) reported that children who suffer rejection and sexual abuse from parents often develop the defense mechanism of splitting the personality into different parts. This would suggest that the lack of attachment through rejection or sexual abuse results in severe disturbances of human development. Symptoms which demonstrate the lack of attachment seem to fit with symptoms seen in survivors of
sexual abuse. However, these authors offered no empirical evidence which substantiates this supposition, nor did they offer any instruments which would allow for the investigation of developmental levels of attachment of sexual abuse survivors.

As mentioned earlier, symptoms associated with the diagnosis of PTSD have been linked to both survivors of trauma and sexual abuse (Briere & Elliott, 1992; Byers, 1990; Fallon & Coffman, 1991; Johnson, 1989; Kilgore, 1988; Patten, Gatz, Jones & Thomas, 1989; Sprei & Goodwin, 1983). Everly (1993), in his work with survivors of trauma, utilized Abraham Maslow's theory of human development to explain PTSD symptoms. Maslow developed a hierarchy of needs which are necessary for a person to reach full psychological potential. This hierarchy begins with needs such as food and water. After these most basic needs are met, individuals can then begin to address other needs such as safety, a sense of belonging and being loved by others. With these needs met, individuals may then turn to satisfying the needs of self-esteem and finally, self-actualization (Hergenhahn, 1991). However, these needs may not be met when traumatic experiences are encountered.

Everly (1993) reported that trauma violates individuals' ability to keep themselves safe. This results in the development of individuals returning to the stage of safety and remaining there until the need for safety is met. This may result in hypervigilance or intrusive thoughts; two
symptoms which are often seen in clients with PTSD and in survivors of sexual abuse. Like others, Everly (1993) offered no systematic method or assessment by which Maslow's developmental theory can be empirically established.

Hall, Kassees and Hoffman (1986) seem to have supported this contention when they compared victims of sexual abuse to other victims of serious trauma. They suggested that sexual abuse trauma "results in an arrest of socioemotional development" (p. 86). They continued to explain that when the abuse stops, children often do not return from their sexual adult role to a typical developmental level. Therefore, it is important to consider developmental remediation as an integral part of therapy. Braver, Bumberry, Green and Rawson (1992) reported that arrests in development often result in difficulties trusting and becoming intimate with others. Poston and Lison (1989) reported that trust is the foundation for the development of a healthy personality. They cited Erik Erikson's Basic Trust as the principle component needed for children to gain self-acceptance and feel accepted by others. They reported that sexual abuse betrays the sense of trust at a most fundamental level, leaving the child unable to develop a healthy sense of self. Furthermore, Hall, Kassees and Hoffman (1986) suggested that if basic trust is not acquired in childhood, it is difficult to attain in adulthood. Though a trauma, such as sexual abuse, would seem to disrupt trust of
the world and of others, these authors offered no empirical evidence to support their conclusions.

Johnson (1989), who compared the symptoms of sexual abuse to PTSD, viewed Erickson's model of human development as an important concept when understanding the effects of sexual abuse. He described Erikson's theory as it pertains to sexual abuse:

Development, then, is a process of transformation through stages characterized by specific demands, opportunities, and vulnerabilities. As Erikson suggests, adverse conditions may affect development in stage specific ways. This disruption affects not only the stage during which the event occurred but also resolution of tasks in subsequent stages. (p. 56)

He concluded by stating the importance of exploring developmental deficits in children who have experienced sexual abuse.

Murdy (1986), in his work with survivors, reported that each stage of Erikson's theory is often unresolved for sexual abuse survivors. For the child who is being sexually abused, trust is often replaced with secrecy, deceit or reversal of roles; autonomy is often replaced with powerlessness; initiative is often replaced with a feelings of inadequacy as the child tries to fulfill adult responsibilities; industry is often replaced with trying to meet the needs of others, especially sexual needs; identity is often replaced with a sense of oneself as a victim; intimacy is often replaced with only feeling close to another when one is being sexual. These
authors suggested, through observational evidence, that developmental stages in Erikson's theory are affected by sexual abuse. However, they did not offer any systematically gathered empirical evidence which would support this supposition.

Though the literature cited above clearly suggests that sexual abuse affects the psychological development of survivors, at the inception of the current study there is no empirical evidence which measures the degree or breadth of developmental delays in sexual abuse survivors. There is also no literature which describes the use of an instrument to measure developmental levels in sexual abuse survivors, regardless of the theoretical framework.

Summary of the Literature Review

The literature cited above indicates that reports of sexual abuse are increasing and that sexual abuse is a violation which many women and men experience in our society. The effects of sexual abuse are explored in the literature. The effects cited are wide ranging and in many cases, severe and life long. Many authors cited a variety of DSM-III-R diagnoses which have been observed in survivors of sexual abuse. There is also speculation in the literature that there is a connection between sexual abuse and arrests in psychological development. Several authors have tried to explain observed symptoms in sexual abuse survivors by using
a variety of psychological developmental theories. However, there is no empirical evidence which documents psychological developmental levels among survivors of sexual abuse. The purpose of this study was to explore the question, do women in counseling who have experienced sexual abuse show a significant difference in their psychosocial development in comparison to women who are not known to have experienced sexual abuse?
CHAPTER 3

METHODS AND PROCEDURES

In this chapter, the methods and procedures for the study will be outlined. The chapter begins with a statement of the hypothesis which was tested (stated in both the null and alternative hypothesis format) then proceeds to a discussion of the design of the study, the sample, a description of the assessments, and procedures for data collection and analysis.

Hypotheses

The null hypotheses stated:

\( H_0_1: \) A t test analysis will reveal no significant difference between subjects' experience of sexual abuse and their level of development on the Trust versus Mistrust scale (R1), as measured by the Measures of Psychosocial Development (MPD).

\( H_0_2: \) A t test analysis will reveal no significant difference between subjects' experience of sexual abuse and their level of development on the Autonomy versus Shame and Doubt scale (R2), as measured by the Measures of Psychosocial Development (MPD).
Ho3: A t test analysis will reveal no significant difference between subjects' experience of sexual abuse and their level of development on the Initiative versus Guilt scale (R3), as measured by the Measures of Psychosocial Development (MPD).

Ho4: A t test analysis will reveal no significant difference between subjects' experience of sexual abuse and their level of development on the Industry versus Inferiority scale (R4), as measured by the Measures of Psychosocial Development (MPD).

Ho5: A t test analysis will reveal no significant difference between subjects' experience of sexual abuse and their level of development on the Identity versus Role Confusion scale (R5), as measured by the Measures of Psychosocial Development (MPD).

Ho6: A t test analysis will reveal no significant difference between subjects' experience of sexual abuse and their level of development on the Intimacy versus Isolation scale (R6), as measured by the Measures of Psychosocial Development (MPD).

Ho7: A t test analysis will reveal no significant difference between subjects' experience of sexual abuse and their level of development on the Identity versus Role Confusion scale (R5), as measured by the Measures of Psychosocial Development (MPD).
abuse and their level of development on the Generativity versus Stagnation scale (R7), as measured by the Measures of Psychosocial Development (MPD).

Ho8: A t test analysis will reveal no significant difference between subjects' experience of sexual abuse and their level of development on the Integrity versus Despair scale (R8), as measured by the Measures of Psychosocial Development (MPD).

Ho9: A t test analysis will reveal no significant difference between subjects' experience of sexual abuse and their reported level of distress on the Global Symptoms Index (GSI), as measured by the Symptoms Checklist 90 Revised (SCL-90-R).

The alternative hypotheses stated:

H1: A t test analysis will reveal a significant difference between subjects' experience of sexual abuse and their level of development on the Trust versus Mistrust scale (R1), as measured by the Measures of Psychosocial Development (MPD).

H2: A t test analysis will reveal a significant difference between subjects' experience of sexual
abuse and their level of development on the Autonomy versus Shame and Doubt scale (R2), as measured by the Measures of Psychosocial Development (MPD).

H3: A t test analysis will reveal a significant difference between subjects' experience of sexual abuse and their level of development on the Initiative versus Guilt scale (R3), as measured by the Measures of Psychosocial Development (MPD).

H4: A t test analysis will reveal a significant difference between subjects' experience of sexual abuse and their level of development on the Industry versus Inferiority scale (R4), as measured by the Measures of Psychosocial Development (MPD).

H5: A t test analysis will reveal a significant difference between subjects' experience of sexual abuse and their level of development on the Identity versus Role Confusion scale (R5), as measured by the Measures of Psychosocial Development (MPD).

H6: A t test analysis will reveal a significant difference between subjects' experience of sexual abuse and their level of development on the Intimacy
versus Isolation scale (R6), as measured by the Measures of Psychosocial Development (MPD).

H₇: A t test analysis will reveal a significant difference between subjects' experience of sexual abuse and their level of development on the Generativity versus Stagnation scale (R7), as measured by the Measures of Psychosocial Development (MPD).

H₈: A t test analysis will reveal a significant difference between subjects' experience of sexual abuse and their level of development on the Integrity versus Despair scale (R8), as measured by the Measures of Psychosocial Development (MPD).

H₉: A t test analysis will reveal a significant difference between subjects' experience of sexual abuse and their reported level of distress on the Global Symptoms Index (GSI), as measured by the Symptoms Checklist 90 Revised (SCL-90-R).

**Design Statement**

In this section the type of research design which was employed in this study is discussed.
A correlational research design was employed in this study. Gay (1992) characterizes a correlational study as a research method which utilizes quantitative data to demonstrate the degree of the relationship between two or more variables. The strength of this relationship can be depicted by a t test comparing the level of development and level of reported distress between women who have experienced sexual abuse and women who have not experienced sexual abuse.

Gay (1992) reported "the t test is used to determine whether two means are significantly different at a selected probability level" (p. 436). The means of each of the two groups, women who have experienced sexual abuse and women who have not experienced sexual abuse, were compared in each of the MPD's stages and the GSI of the SCL-90-R. The t test determines if the difference between the two means happened by chance. This is accomplished through establishing a probability level. If the probability level calculated by the t test is less than or equal to the probability level which was established by the investigator, the difference between the two means is significant. If the two means are determined to be significant, it can be assumed that they did not occur by chance. This would indicate that different levels of development and distress on one variable are associated with experience (or no experience) of sexual abuse. The probability level for this study was established at \( p = .05 \),
meaning there is only a five percent chance that the differences between the two groups happened by chance.

**Sample**

This section discusses sample selection and the limitations of generalizing to other populations.

Women for this study were selected from clients at the Human Development Training and Research Clinic, the Montana State University Counseling and Psychological Services and selected counselors in the community of Bozeman, Montana.

The Human Development Training and Research Clinic serves a population which consists of residents of Bozeman, Montana and the greater Gallatin County, Montana, area. This population is mostly caucasian but includes several minorities, in particular Native Americans. The population of the clinic could generally be described as lower to middle socioeconomic class. The clinic also serves Montana State University staff as a part of the Employees' Assistance Program. The staff at the clinic are graduate students who are obtaining their masters degrees in Mental Health Counseling, Marriage and Family Therapy or School Counseling.

The Montana State University Counseling and Psychological Services Center serves the campus population at Montana State University. Though the majority of students at the University are from the State of Montana, the University also serves students from other states throughout the United States. The
population is mostly caucasian but the center does serve a variety of individuals from a variety of cultures, including students from foreign countries. Clients at the center come from a variety of socio-economic classes. The staff of this center is comprised of clinical and counseling psychologists, a psychiatrist, a social worker, pre-doctoral interns and masters level practicum students.

Counselors in the community of Bozeman, Montana, serve clients similar to the population served by the Human Development Training and Research Clinic. However, clients served by counselors in the community would generally come from a higher socioeconomic level.

This study involved women between the ages of 18 and 60 years. All participants were involved in individual, family or group counseling. Participants were referred by their primary therapist to the study after the client reported the presence or absence of abuse. Participants who had experienced sexual abuse remembered the sexual abuse or had other evidence that it occurred (i.e. report by parent to participant or authorities). They also were willing to disclose in writing their age, their level of education, the age at which they were abused, the duration of the abuse, the amount of time they have spent in therapy and the concerns addressed in therapy.

Participants who had not experienced sexual abuse agreed to disclose their age, level of education and duration of
therapy. Both groups signed a subject consent form for participation in human research (see Appendix B). The sample size of 20 participants who had experienced sexual abuse and 14 participants who had not experienced sexual abuse were utilized. Of the 14 women who had not experienced sexual abuse, six were referred from the Human Development Training and Research Clinic, four were referred from the Montana State University Counseling and Psychological Services Center and four were referred from counselors in the community of Bozeman, Montana. Of the women who had experienced sexual abuse, 11 were referred from the Human Development Training and Research Clinic, seven were referred from the Montana State University Counseling and Psychological Services Center and two were referred from counselors in the community of Bozeman, Montana.

Demographic information concerning the participants was as follows: of the 34 women who participated, 14 (41.2%) had experienced no sexual abuse and 20 (58.8%) had experienced sexual abuse. Of the participants who experienced sexual abuse 15 (75%) were abused before the age of 12, 12 (60%) had experienced sexual abuse by a blood relative or step-parent, 3 (15%) were abused as children by someone other than a relative, 7 (35%) experienced some combination of incest and non-incest child sexual abuse and 5 (25%) were sexually assaulted after the age of 12. The mean age of the group which had not experienced sexual abuse was 34 years old
(standard deviation of 8.081) and the mean age of the group which had experienced sexual abuse was 35.8 years old (standard deviation of 6.521).

The concerns addressed in therapy for the women who experienced sexual abuse included sexual abuse, self-esteem, depression, sexuality issues, feelings of worthlessness, substance abuse issues, dissociation, unexplainable fears, an inability to trust others, over-weight issues, PTSD, and interpersonal problems. The concerns addressed in therapy by women who had not experienced sexual abuse included stress, self-esteem, depression, loneliness, communication skills, feelings of worthlessness, substance abuse, self-growth and interpersonal problems.

Level of education for the group which had experienced sexual abuse was 1 (5%) less than high school diploma, 3 (15%) with a high school diploma, 11 (55%) currently in college and 5 (25%) with college degrees. For the group which had not experienced sexual abuse the level of education was 7 (50%) currently in college and 3 (21%) with a college degree and 4 (29%) with more than a college degree.

Limitations of the results for generalizing to other populations include: the limited number of participants; the lack of ethnic diversity of the sample; and the specific geographic setting.
Instruments

This section reviews the two specific instruments which were used to measure the variables. It also includes the validity and reliability measures, norms and prior use of each of the assessments and the method by which the data were collected and compiled.

Measures of Psychosocial Development

The first instrument discussed is the Measures of Psychosocial Development which was developed by Gwen A. Hawley in 1980, then revised in 1984 and 1988. The Measures of Psychosocial Development (MPD) measures positive, negative and overall resolution of psychosocial developmental according to Erik Erikson’s theory. It is a 112 item, self-report instrument which asks individuals to respond to each item according to a five-level, Likert scale, as follows: (A) Not at all like me, (B) Not much like me, (C) Somewhat like me, (D) Like me, and (E) Very much like me. Each individual rates each item according to this scale. Items are arranged in seven sections in the test booklet.

As the MPD was developed, the first criteria was to write items which adhere as closely as possible to Erikson’s theory. For example, the instrument provides a score for an individual’s level of Trust, a score for an individual’s level of Mistrust and a score of the level of resolution between
Trust and Mistrust. The level of resolution is conveyed as either positive conflict resolution, a higher level of Trust than Mistrust, or negative conflict resolution, a higher level of Mistrust than Trust. The instrument addresses each of the separate attitudes which result in conflict resolution, not in opposition to each other, but rather as dualities which individuals struggle with concurrently throughout life (Hawley, 1988). For example, at any time in a person's life it is possible to have both Trust and Mistrust playing a role in situations which a person encounters. The MPD measures which of these constructs dominates in a majority of situations, considering the age of the individual at the time of the assessment.

Hawley (1988) also hypothesized that it would be confusing and complicating, rendering the assessment unusable for gathering data, to write items which would follow Erikson's epigenetic principle. Therefore, each item was written to represent attitudes that relate only to a specific stage construct. Again using the stage of Trust versus Mistrust as an example, the MPD measures the level of Trust in items 1, 17, 33, 49, 65, 81 and 97. It measures the level of Mistrust in items 9, 25, 41, 57, 73, 89 and 105. To follow Erikson's epigenetic principle, the items which measure Trust would have to be included in the items which measure Autonomy, the items which measure Trust and Autonomy would have to be included in the items which measure Initiative, and the items which
measures Trust, Autonomy and Initiative would have to be included in the items which measure Industry. This would have to continue until each item which measured a previous stage was included in that stage. The same principle would hold true for all negative levels of resolution.

The MPD is designed for administration to caucasian individuals and is not recommended for use with non-caucasian individuals unless local norms have been established. Any individual taking the MPD must be able to read at a sixth grade level. The normative population consisted of 2,480 individuals, ages 13 to 86, 62% women and 38% men. T scores ranging on any of the MPD scales from 40 to 59 are considered normal. Scores between 30 to 39 are considered low and scores 60 to 69 are considered high. Scores above 70 and below 30 only occurred 4% of the time in the norm population. Separate age profiles exist for the age classifications 13 to 17, 18 to 24, 25 to 49 and over 50 years. Separate age profiles exist for males and females (Hawley, 1988).

Reliability Coefficients for the MPD

Hawley (1988) reported the test-retest reliability coefficient of overall conflict resolution from .91 to .75 (Table 2). Test-Retest reliability suggests that scores for a person will remain relatively stable over time intervals, one indication that the measure is assessing real rather than error variance. The time intervals for the MPD ranged from 2 to 13 weeks. Hawley (1988) reported that the test-retest
reliability coefficients at this level are adequate for a personality assessment.

Table 2. MPD Test-Retest Coefficients.

<table>
<thead>
<tr>
<th>Scale</th>
<th>Test-Retest (N=108)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust vs Mistrust</td>
<td>.78</td>
</tr>
<tr>
<td>Autonomy vs Shame and Doubt</td>
<td>.81</td>
</tr>
<tr>
<td>Initiative vs Guilt</td>
<td>.86</td>
</tr>
<tr>
<td>Industry vs Inferiority</td>
<td>.83</td>
</tr>
<tr>
<td>Identity vs Identity Confusion</td>
<td>.91</td>
</tr>
<tr>
<td>Intimacy vs Isolation</td>
<td>.75</td>
</tr>
<tr>
<td>Generativity vs Stagnation</td>
<td>.82</td>
</tr>
<tr>
<td>Ego Identity vs Despair</td>
<td>.85</td>
</tr>
<tr>
<td>Total Resolution</td>
<td>.87</td>
</tr>
</tbody>
</table>

(p. 15)

Hawley (1988) also utilized the reliability measure of internal consistency. Internal consistency can be explained as measuring the correlation between individual items which are presumed to measure a specific construct. High correlations suggest less influence of error variance on the total score. For example, internal consistency for the construct of Trust measures the intercorrelations between items 1, 17, 33, 49, 65, 81 and 97. This intercorrelation is expressed as an alpha coefficient. Alpha coefficients for the positive and negative scales on the MPD are expressed in Table 2. The author reported alpha coefficients of this magnitude as acceptable for a personality assessment. She continued by reporting "these data provide support for the conceptual base underlying the item selection procedure for the MPD" (p. 15).
Validity Coefficients for the MPD

To evaluate the level of construct validity for the MPD, Hawley (1988) utilized two other self-report assessments of Erikson's theory, the Inventory of Psychological Development (IPD) and the Self-Description Questionnaire (SDQ). Data from the comparison of these assessments was analyzed using a multitrait-multimethod design. A multitrait-multimethod design provides for a systematic examination of convergent, construct and discriminant validity. The information from the

Table 3. MPD Reliability Coefficients

<table>
<thead>
<tr>
<th>Scale</th>
<th>Alpha (N= 372)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Scale</td>
<td></td>
</tr>
<tr>
<td>Trust</td>
<td>.65</td>
</tr>
<tr>
<td>Autonomy</td>
<td>.78</td>
</tr>
<tr>
<td>Initiative</td>
<td>.77</td>
</tr>
<tr>
<td>Industry</td>
<td>.84</td>
</tr>
<tr>
<td>Identity</td>
<td>.73</td>
</tr>
<tr>
<td>Intimacy</td>
<td>.76</td>
</tr>
<tr>
<td>Generativity</td>
<td>.79</td>
</tr>
<tr>
<td>Ego-Integrity</td>
<td>.74</td>
</tr>
<tr>
<td>Negative Scale</td>
<td></td>
</tr>
<tr>
<td>Mistrust</td>
<td>.72</td>
</tr>
<tr>
<td>Shame and Doubt</td>
<td>.72</td>
</tr>
<tr>
<td>Guilt</td>
<td>.69</td>
</tr>
<tr>
<td>Inferiority</td>
<td>.70</td>
</tr>
<tr>
<td>Identity Confusion</td>
<td>.83</td>
</tr>
<tr>
<td>Isolation</td>
<td>.70</td>
</tr>
<tr>
<td>Stagnation</td>
<td>.74</td>
</tr>
<tr>
<td>Despair</td>
<td>.81</td>
</tr>
</tbody>
</table>

(p. 15)

A multitrait-multimethod design is examined through the use of monotrait-monomethod comparisons, heterotrait-monomethod
comparisons, monotrait-heteromethod comparisons and heterotrait-heteromethod comparisons. The correlations of the monomethod comparisons (MC) and heteromethod comparisons (HC) for the positive and negative scales are listed in Table 3. Using these methods, Hawley (1988) reported strong evidence for construct, convergent and discriminant validities for the positive and negative scales. Because the overall resolution scales are the differences between the positive and negative scales, it is presumed that these same validities hold true for the overall resolution scales.

In the Eleventh Edition of the Mental Measurements Yearbook, Carmer (1992) reported adequate internal consistency coefficients ranging from .64 to .84. Carmer reported that the MPD is an effective tool to assess personality dynamics and functioning, except perhaps with minority populations for whom norms do not exist. He continues by asserting the MPD is useful for research on human development, primarily research on Erikson's theory on human development. Finally, he reported that it is a useful clinical tool and research instrument. Gabel (1992), in his review of the MPD, reported that support from the literature and expert judgment is provided for sufficient content validity figures. He stated that the author provides several instrument development decisions which increase the support for content validity. Finally, he reported that the MPD sufficiently assesses effective variables associated with developmental theory.
Symptoms Check-List 90 Revised

The second assessment discussed is the Symptoms Check-List 90 Revised. It was developed by Leonard R. Derogatis in 1977 and then revised in 1983. The Symptoms Check-List 90 Revised (SCL-90-R) is a self-report instrument which measures an individual's level of stress through a 90 item inventory. Each item is rated on a five point Likert scale ranging from Not at all (0), A little bit (1), Moderately (2), Quite a bit (3), and Extremely (4). It was specifically designed to measure an individual's distress over the seven days prior to administration of the assessment, including the day of administration.

The SCL-90-R is a "measure of current, point in time, psychological symptom status; it is not a measure of personality" (Derogatis, 1983, p. 5). It achieves this process by scoring and interpreting the 90 items in terms of nine symptom categories and three global dimensions of distress. The first is the construct of Somatization which is the distress arising from perceived physical health problems. The second, Obsessive-Compulsive, reports the level of distress due to unremitting and unwanted thoughts. The third, Interpersonal Sensitivity, reports the level of distress arising from feelings of personal inadequacy and inferiority, especially in interpersonal relationships. The forth,
### Table 4. Monomethod and Heteromethod Comparison Correlations

<table>
<thead>
<tr>
<th>Scales</th>
<th>MC</th>
<th>HC for MPD &amp; IPD</th>
<th>HC for PD &amp; SDQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust</td>
<td>.75</td>
<td>.59</td>
<td>.44</td>
</tr>
<tr>
<td>Autonomy</td>
<td>.79</td>
<td>.59</td>
<td>.47</td>
</tr>
<tr>
<td>Initiative</td>
<td>.85</td>
<td>.78</td>
<td>.53</td>
</tr>
<tr>
<td>Industry</td>
<td>.84</td>
<td>.76</td>
<td>.65</td>
</tr>
<tr>
<td>Identity</td>
<td>.82</td>
<td>.69</td>
<td>.53</td>
</tr>
<tr>
<td>Intimacy</td>
<td>.82</td>
<td>.65</td>
<td>.64</td>
</tr>
<tr>
<td>Generativity</td>
<td>.78</td>
<td>.56</td>
<td>.62</td>
</tr>
<tr>
<td>Ego-Identity</td>
<td>.78</td>
<td>.68</td>
<td>.50</td>
</tr>
<tr>
<td>Mistrust</td>
<td>.77</td>
<td>.64</td>
<td>.42</td>
</tr>
<tr>
<td>Guilt</td>
<td>.78</td>
<td>.56</td>
<td>.46</td>
</tr>
<tr>
<td>Inferiority</td>
<td>.67</td>
<td>.62</td>
<td>.56</td>
</tr>
<tr>
<td>Identity Confusion</td>
<td>.89</td>
<td>.46</td>
<td>.57</td>
</tr>
<tr>
<td>Isolation</td>
<td>.72</td>
<td>.50</td>
<td>.58</td>
</tr>
<tr>
<td>Stagnation</td>
<td>.76</td>
<td>.78</td>
<td>.29</td>
</tr>
<tr>
<td>Despair</td>
<td>.82</td>
<td>.72</td>
<td>.48</td>
</tr>
</tbody>
</table>

Depression, reports symptoms which are congruent with clinical depression, including dysphoric mood, withdrawal, lack of motivation, loss of energy, hopelessness and suicidal ideation. The fifth, Anxiety, reports the level of distress due to feelings of nervousness, tension or apprehension. The sixth, Hostility, reports the level of distress due to feelings of aggression, irritability, rage and resentment. The seventh, Phobic Anxiety, reports the level of distress due to a specific fear of person, place, object or situation which
is out of proportion to the circumstance. The eighth, Paranoid Ideation, reports the level of distress due to delusional cognitive processes which may manifest in hostility, suspiciousness, grandiosity, centrality, etc. The final symptom category, Psychoticism, reports the level of distress correlated with a reclusive lifestyle, hallucinations and thought broadcasting (Derogatis, 1983).

The three global dimensions of distress are the Global Severity Index, the Positive Symptom Distress Index and the Positive Symptom Total. The Positive Symptom Total (PST) measures the number of positive items endorsed by an individual. The Positive Symptom Distress Index (PSDI) measures the response style of an individual and communicates whether or not a person is over-reporting or under-reporting their symptoms. The Global Severity Index (GSI) is the best overall indicator of the current level of distress. Derogatis (1983) reported that the GSI should be used when a single measure is indicated.

The normative sample was comprised of 1,002 heterogeneous psychiatric outpatients, 974 non-patient normals, 310 psychiatric inpatients and 806 adolescent non-patients. The mean raw score of the GSI for the psychiatric outpatient sample, the sample which is most similar to the sample in this study, was 1.26 with a standard deviation of .68.
Reliability coefficients for the SCL-90-R

Derogatis (1983) defined the two types of reliability which were used with the SCL-90-R. Internal consistency for the nine symptom dimensions were calculated using the alpha coefficient (α), which is a variation of the Kuder-Richardson 20 formula. Table 4 lists specific correlations.

Test-retest reliability was also measured in a method that is unique to the SCL-90-R. The difference in this measure lies in the time period which was used between the two administrations of the assessment. Ninety-four psychiatric outpatients were administered this assessment upon their initial visit to a mental health facility. One week later, the SCL-90-R was again administered to these individuals, before their next session. This gave the test-retest the unique feature of measuring symptoms within a week time span. Given the wavering nature of mood, the reliability coefficients for the SCL-90-R nine symptom dimensions, listed in Table 4, are seen as appropriate (Derogatis, 1983).

Derogatis (1983) reported that these correlations suggested adequate reliability for the SCL-90-R nine symptom dimensions. Because the GSI is a composite of these nine symptom dimensions, this study will assume reliability of the GSI.
Table 5. Alpha Coefficients and Test-Retest Coefficients for the SCL-90-R.

<table>
<thead>
<tr>
<th>Symptom Dimension</th>
<th>α</th>
<th>Test-Retest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Somatization</td>
<td>.86</td>
<td>.86</td>
</tr>
<tr>
<td>Obsessive-Compulsive</td>
<td>.86</td>
<td>.85</td>
</tr>
<tr>
<td>Interpersonal</td>
<td>.86</td>
<td>.83</td>
</tr>
<tr>
<td>Depression</td>
<td>.90</td>
<td>.82</td>
</tr>
<tr>
<td>Anxiety</td>
<td>.85</td>
<td>.80</td>
</tr>
<tr>
<td>Hostility</td>
<td>.84</td>
<td>.78</td>
</tr>
<tr>
<td>Phobic Anxiety</td>
<td>.82</td>
<td>.90</td>
</tr>
<tr>
<td>Paranoid Ideation</td>
<td>.80</td>
<td>.86</td>
</tr>
<tr>
<td>Psychoticism</td>
<td>.77</td>
<td>.84</td>
</tr>
</tbody>
</table>

Validation Coefficients for the SCL-90-R

Derogatis (1983) stated that validation is not a static process but an ongoing process in which validation is accomplished over many trials. Derogatis, Rickles and Rock (1976) began the validation process of the SCL-90, the SCL-90-R's predecessor, by examining convergent validity. The report compared the nine symptom scales of the SCL-90 to the clinical scales of the Minnesota Multiphasic Personality Inventory (MMPI). The Wiggins content scales and Tryon cluster, of the MMPI, scales were also used in the study in comparison tests with the SCL-90 nine symptom dimension. The Wiggins content scales and Tryon cluster scales were developed from items showing high correlations within the MMPI. The study reported coefficients which range from .75 to .40. The authors reported:
Results of the study reflected a high degree of convergence for the nine primary symptom dimensions of the SCL-90. Each dimension correlated highest with one of the MMPI scales considered to measure a corresponding symptom construct. Secondary correlations also formed a pattern highly consistent with current conceptualizations of out-patient psychopathology. (p. 288)

Because the GSI is a composite of these nine symptom dimensions, the current study assumed convergent validity of the GSI.

Another study (Bolelouchy and Horvath; cited in Derogatis, 1983) investigated the concurrent validity in the nine symptom dimensions of the SCL-90-R and the Middlesex Hospital Questionnaire (MHQ). The Middlesex Hospital Questionnaire is a self-report instrument which measures inpatient and outpatient psychological symptoms. This study cited correlation coefficients for the nine symptom dimensions and the GSI on the SCL-90-R (Table 5). Though there are no corresponding constructs for Interpersonal Sensitivity, Hostility or Psychoticism and the correlation for Phobic Anxiety is relatively low, the other symptom dimensions showed adequate correlation to the MHQ. There is a significant correlation between the GSI and the MHQ Global indices.

Weissman, Prusoff, Thompson, Harding and Myers (1978) utilized the GSI on the SCL-90-R to measure concurrent validity with Social Adjustment Scale Self-Report (SAS-SR). The SAS-SR is an instrument which measures social adjustment in the areas of work, social and leisure activities, and
relationships with family members. The authors studied four different populations. The results of the study showed correlations of .59 for a community population with no known psychiatric difficulties, .66 with acute depressive patients, .76 with alcoholic patients and .84 with Schizophrenic patients. These correlations showed significance at p < .001.

Derogatis and Cleary (1977) used the factor analysis techniques, Varimax and Procrustes Loadings, for the nine symptom dimensions on the SCL-90 to examine construct validity. Correlations for the items on the Somatization scale ranged from .64 to .42 on the Procrustes Loadings and .67 to .40 on the Varimax Loadings. Correlations for the items on the Obsessive-Compulsive scale ranged from .62 to .44 on the Procrustes Loadings and .68 to .43 on the Varimax Loadings.

Table 6. Correlation for SCL-90 and the MHQ.

<table>
<thead>
<tr>
<th>SCL-90-R</th>
<th>MHQ</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>Somatization</td>
<td>Somatic Symptoms</td>
<td>.52</td>
</tr>
<tr>
<td>Obsessive-Compulsive</td>
<td>Obsessive-Compulsive</td>
<td>.48</td>
</tr>
<tr>
<td>Intper. Sensitivity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depression</td>
<td>Depression</td>
<td>.73</td>
</tr>
<tr>
<td>Anxiety</td>
<td>Free-Floating Anxiety</td>
<td>.74</td>
</tr>
<tr>
<td>Hostility</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phobic Anxiety</td>
<td>Phobic Anxiety</td>
<td>.36</td>
</tr>
<tr>
<td>Paranoid Ideation</td>
<td>Paranoia</td>
<td>.63</td>
</tr>
<tr>
<td>Psychoticism</td>
<td>MHQ Global</td>
<td>.92</td>
</tr>
<tr>
<td>GSI</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(p. 19)
Loadings. Correlations for the items on the Interpersonal Sensitivity Scale ranged from .69 to .30 on the Procrustes Loadings and .66 to .30 on the Varimax Loadings. Correlations for items on the Depression scale ranged from .70 to .35 on the Procrustes Loadings and .77 to .44 on the Varimax Loadings. Correlations for items on the Anxiety scale ranged from .63 to .36 on the Procrustes Loadings and .57 to .31 on the Varimax Loadings. Correlations for the items on the Hostility scale ranged from .75 to .41 on the Procrustes Loadings and .76 to .41 on the Varimax Loadings. Correlations for the items on the Phobic Anxiety Scale ranged from .70 to .35 on the Procrustes Loadings and .75 to .54 on the Varimax Loadings. Correlations for the items on the Paranoid Ideation scale ranged from .58 to .30 on the Procrustes Loadings and .60 to .40 on the Varimax Loadings. Correlations for the items on the Psychoticism scale ranged from .57 to .31 on the Procrustes Loadings and .64 to .48 on the Varimax Loadings. Derogatis and Cleary (1977) reported that these correlations are important steps in the process of construct validation for the SCL-90. They also reported that these correlations suggest adequate construct validity. Because the GSI is a composite of the nine symptom dimensions, this study assumed construct validity for the GSI.

Kass, Charles, Klien and Cohen (1983) caution mental health professionals against relying too heavily on the SCL-90-R in the diagnosis of patients. They compared the SCL-90-R
GSI to therapists' global analogue ratings and found a Pearson Product Moment of .17. They concluded that when assessing validity measures for the SCL-90-R it is important to consider the setting and the purpose for which it is used. Nevertheless, the authors acknowledge the lack of inter-rater reliability for the analogue global scores and the inexperience of the trainee-clinician raters which could have affected the validity of their study.

Pauker (1985), in his review of the SCL-90-R in the Ninth Edition of the *Mental Measurements Yearbook*, reported satisfactory results in internal consistency and test-retest reliability. He continued that the few validity studies which have been conducted with the SCL-90-R indicate convergent, concurrent, discriminate and construct validity levels which are comparable to those of other self-report assessments. He summarizes that available validity data supports the use of the SCL-90-R for research studies, especially when the three global dimensions are the primary scores used for consideration. Payne (1985), in his review, reported that there is no evidence that the SCL-90-R can be used for psychiatric diagnosis. He also reported that Gotlib's findings asserted that the SCL-90-R is nothing beyond a measure of psychiatric disturbance or complaining. However, in his examination of many self-report measures, including the SCL-90-R, Gotlib (1984) reported that while it is difficult for these measures to discriminate between the different
symptom dimensions "a factor analysis indicated that these scales measure a unitary factor of general distress" (p.27). Payne (1985) went on to indicate that the SCL-90-R is a reliable instrument which can be useful in research studies, which was the purpose of the SCL-90-R in the current study.

**Studies Utilizing the SCL-90-R**

Derogatis (1983) cited many studies which have utilized the SCL-90-R. These studies include: documentation of the effects of psychotropic medications; measurement of distress levels of drug addicted and alcoholic patients; as a screening tool and outcome measure in medical settings; and as a tool which discriminates between treatment modalities for stress-related illnesses and emotional difficulties. Though this is not a complete list of the types of studies which have utilized the SCL-90-R, it demonstrates the diverse applications of the instrument.

The SCL-90-R has also been used in studies with the survivors of sexual abuse and sexual assault. Bryer, Nelson, Miller and Krol (1987) compared sexually abused populations to a non-abused population in a psychiatric inpatient hospital. They reported a mean GSI percentile score for the non-abused population of 42.70 and a mean GSI for the abused population of 48.43. The authors reported that the results of their investigation showed a significant difference in levels of distress between psychiatric inpatients who have been abused and those who have not been abused.
Kilpatrick, Veronen and Resick (1979) studied survivors of sexual assault using the SCL-90-R as a measure of distress. The study reported analysis of variance F values which were significantly elevated compared to the non-assaulted population. The GSI showed F values of 7.85 immediately after the assault which was significant at $p < .05$, an F value of 10.65 three months after the assault which was significant at $p < .001$ and an F value of 7.18 six months after the attack which was significant at $p < .001$. This study not only illustrated the prolonged effects of sexual assault, but also demonstrated the usefulness of the SCL-90-R as a research and clinical assessment.

**Procedures**

This section describes the procedure for data collection. The investigator presented, to the therapists, the manner in which the study should be presented to each of the clients. There were slight variations at each location.

At the Human Development and Training and Research Clinic, counselors were asked to read this script to their clients:

**PLEASE READ THIS TO YOUR CLIENT**

One of the missions of the Human Development Clinic is conducting research which helps counselors to understand the process of psychotherapy. You have the opportunity to participate in one such study, investigating developmental levels of women who have experienced sexual abuse. Women who have experienced sexual abuse and women who have not, will both be needed for this study. Participation would involve your completion of two psychological questionnaires and providing demographic and limited personal
information. Participation would require approximately 45 minutes of your time and is completely confidential. If you are interested, I will give you the consent form for participation. If you have any questions, concerns or would like more information call Kevin Wyse at 994-4531.

DO NOT READ THIS TO YOUR CLIENT

If your client agrees to participate in this study, please have them read and sign the consent form and then refer them to me (Kevin Wyse) to take the assessments by giving me their first name and telephone number. I will call them to arrange a convenient time to administer both assessments and give them the additional information sheet. Also, put the signed consent form in my mail box and I will place it in a folder in the locked file cabinet. They will not have to reveal to me whether they were abused or not nor will I ask them any other questions.

After being referred to the investigator by the primary therapists, the participant was asked to complete the two assessments, the MPD and the SCL-90-R, and the additional information form. The participant was also given a copy of the consent form, for her personal records, at this time. The assessments were administered by the investigator to the participant.

At the Montana State Counseling and Psychological Services Center, the therapists were asked to read this script to their clients:

PLEASE READ THIS TO YOUR CLIENT

Staff members at CPS often conduct research to better understand the process of psychotherapy. You have the opportunity to participate in one such study; investigating the impact of sexual abuse on women. Women who have experienced sexual abuse and women who have not, will both be needed for this study. Participation would involve your completion of two psychological questionnaires (neither of which have
anything to do with sexual abuse) and providing demographic and limited personal information. All of this information is completely confidential and anonymous. Participation would require approximately 45 minutes of your time. I will give you the consent form for participation and you can read it at your own convenience. If you decide to participate you can take this form to Sara or Lynn at the front desk and they will give you the rest of the materials. They will have no knowledge of whether or not you were abused. Declining to participate has no bearing on the services you receive at CPS, this is completely voluntary. If you have any questions, concerns or would like more information call Kevin Wyse at 994-4531.

The secretaries gave the participant the assessment package, containing the MPD, the SCL-90-R, the additional information form and a copy of the consent form, and directed her to a quiet area of the facility to complete the assessment package. When the participant was finished with the assessment package she sealed the contents in a manila envelope, which she received with the assessment package. When finished the participant returned the assessment package to the secretaries.

At the private clinics, therapists were asked to read this script:

PLEASE READ THIS TO YOUR CLIENT

Counselors at Montana State University often conduct research to better understand the process of psychotherapy. You have the opportunity to participate in one such study; investigating the impact of sexual abuse on women. Women who have experienced sexual abuse and women who have not, will both be needed for this study. Participation would involve your completion of two psychological questionnaires (neither of which have anything to do with sexual abuse) and providing demographic and limited personal information. All of this information is completely confidential and anonymous.
Participation would require approximately 45 minutes of your time. I will give you the consent form for participation and you can read it at your own convenience. If you decide to participate you can take this form to the secretary at the front desk and she will give you the rest of the materials. She will have no knowledge of whether or not you were abused. Declining to participate has no bearing on the services you receive, this is completely voluntary. If you have any questions, concerns or would like more information call Kevin Wyse at 994-4531.

The secretaries gave the participant the assessment package, containing the MPD, the SCL-90-R, the additional information form and a copy of the consent form, and directed her to a quiet area of the facility to complete the assessment package. When the participant was finished with the assessment package she sealed the contents in a manila envelope, which she received with the assessment package, and returned the assessment package to the secretaries.

The completed assessments were given to the investigator, who scored each assessment. The results were given to the participant's primary therapist only if the participant indicated her permission for the therapist to receive the scores. Therapists, who received the scores and believed this information could be helpful to the participant, provided the assessment results to the participant in a therapeutic manner. The investigator was available for professional consultation on the presentation of the scores.
Analysis

The primary purpose of this study was to determine if clients who had experienced sexual abuse show lower levels of psychosocial development than do clients who had not experienced sexual abuse. Level of current distress may also be related to clients' experience of sexual abuse and was assessed in the study. To determine the relation between sexual abuse, psychosocial development and reported level of distress, a t test was performed on each of the eight stages of the MPD and the GSI of the SCL-90-R.

Both the MPD and the SCL-90-R contain many scales which could be therapeutically useful but were not used in this study. The scale for the MPD which was utilized in this study was the overall resolution scale. This scale provides a quantitative summary of an individual's psychosocial functioning according to Erikson's theory (Hawley, 1988), and therefore, is appropriate for this study. From the SCL-90-R the Global Severity Index was utilized. It provides an overall, current level of distress which an individual is experiencing (Derogatis, 1983).
Limitations

This section will discuss possible limitations concerning correlational studies, self-reports and the sample chosen for this study.

Correlational Studies

Gay (1992) stated "the purpose of a correlational study may be to establish a relationship (or lack of it)" (p. 14). He also reported that a correlational study never confirms a cause-effect relationship between two variables, only that there may be a relationship between the two variables. The current study examined the relationship between sexual abuse and psychosocial development, and sexual abuse and reported level of distress. This is not to imply that sexual abuse caused developmental delays or higher levels of reported distress, only that there may be a relationship between these variables.

It is important to remember there are other possible factors which could be related to developmental deficits and high levels of reported distress. The results of this study may have been caused by the environmental factors before the sexual abuse, factors which were inherent within the individual before the sexual abuse, or by environmental factors after the sexual abuse (Gelles & Conte, 1990).
Self-report Assessments

Self-report assessments, such as the MPD or SCL-90-R, may affect the conclusions reached in this study. Gotlib (1984) reported, because self-reports are a subjective report by an individual who may want help, individuals may tend to report in a negative light. Wessman, Prusoff, Thompson, Harding and Myer (1978) also reported that self-report measures may set up expectations that the individual should perform well on the assessment. This assumption lends itself to the possibility of an individual either over or under-reporting the incidence of sexual abuse.

This same assumption also needs to be considered in the case of memories of childhood sexual abuse. Persinger (1992) and Loftus (1993) both suggested that there may be many factors involved in false memories of childhood sexual abuse. The possibility of participants reporting sexual abuse when they have not been abused should be a consideration in the conclusions of this study.

Sample

Gay (1992) reported that the sample chosen for a quantitative study should be generalizable to a specific target population. Gay (1992) postulated that the most appropriate manner in which to accomplish generalizability is through probability sampling, where each member of the target population has the same probability of being chosen for the sample.
A limitation of this study was that the sample which was selected is a convenient sample. Gay (1992) reported that a convenient sample is a non-probability type of sampling, making it difficult to generalize to a specific target population. The only population which this study is generalizable to are the populations of the MSU Counseling and Psychological Services Center, the Human Development Training and Research Clinic and the clients from the private counselors selected for the study in the community of Bozeman, Montana.

It is also necessary to consider the effects that the duration and type of therapy may have had on the developmental levels of the participants. In the conception of this study, the therapeutic use of the MPD showed developmental delays in survivors of sexual abuse, regardless of the amount or type of therapy which was received. Because there seemed to be no empirical evidence which reported on the developmental levels of sexual abuse survivors, the investigator believed that it was necessary to assess survivors at different levels of therapy.

The final consideration which is necessary to address is the number of participants chosen for this study. Gay (1992) reported that 30 participants for a correlation study is sufficient. However, he also suggested that larger sample sizes can increase the significance of the results. The use of 20 participants who have experienced sexual abuse and 14
participants who have not experienced sexual abuse brings into question the results of this study.
CHAPTER 4

RESULTS

This chapter begins with a review of the purpose of the study, a restatement of the null hypotheses, and the methods that were utilized. This will be followed by a report on the data collected and the analysis of that data.

The purpose of this study was to examine the relationships which exist between women's experience of sexual abuse and their psychosocial development. The current literature indicates that women who have experienced sexual abuse present with a variety of psychological difficulties. Many authors believe that one of the factors underlying these difficulties is an arrest in their psychosocial development due to the sexual abuse (Alexander, 1992; Brown & Finkelhor, 1986; Briere, 1992a; Burgess, 1985; Byers, 1990; Cole & Putman, 1992; Everly, 1993; Gagliano, 1987; Green & Rawson, 1992; Hall, Kassees & Hoffman, 1986; Johnson, 1989; King, 1983; McFadden, 1987; Mcfarlane, 1978; Murdy, 1986; Poston & Lison, 1989; Socarides, 1983). This study is unique because it is the first study which empirically examines the relationship between having experienced sexual abuse and level of development according to Erikson's Psychosocial Developmental Theory.
The two instruments used were the Measures of Psychosocial Development and the Symptoms Checklist 90 Revised. Reliability and validity coefficients for each of the assessments are reported in Chapter 3. Participants were also asked to complete an additional information sheet which is listed in Appendix A.

The sample was chosen from three populations; the Human Development Training and Research Clinic (HDC), the Montana State University Counseling and Psychological Services Center (CPS), and private counselors (PC) from the community of Bozeman, Montana. Therapists at each of these facilities referred participants to complete the assessments and additional information sheet. Specific procedures for this referral process are reported in Chapter 3.

Participants were referred from all three settings. Of the 14 women who had not experienced sexual abuse, six were referred from the Human Development Training and Research Clinic, four were referred from the Montana State University Counseling and Psychological Services Center and four were referred from counselors in the community of Bozeman, Montana. Of the women who had experienced sexual abuse, 11 were referred from the Human Development Training and Research Clinic, seven were referred from the Montana State University Counseling and Psychological Services Center and two were referred from counselors in the community of Bozeman, Montana.
This chapter reports the analysis of the data used to determine if statistically significant differences existed between women who have experienced sexual abuse and women who have not experienced sexual abuse on measures of their psychosocial development and current psychological distress. Through the use of t tests the means of each of the developmental stages and distress levels for the participants who have experienced sexual abuse and participants who have not experienced sexual abuse were compared to determine if the two groups were significantly different on these variables.

**Analysis of Data**

**Examination of Null Hypotheses**

This section will discuss the analysis of the data according to the null hypotheses. This will be followed by a summary of the results.

The first null hypothesis (Ho₁) stated:

A t test analysis revealed no significant difference between subjects' experience of sexual abuse and their level of development on the Trust versus Mistrust scale (R₁), as measured by the Measures of Psychosocial Development (MPD).

An analysis of the t test showed that there was a significant difference between the means of the two groups on the Trust versus Mistrust scale (R₁). Therefore, the null was not retained. The mean for the group which had experienced sexual abuse was 1.10 (standard deviation of 9.142) and the mean for the group which had not experienced sexual abuse was 10.93
The second null hypothesis (Ho₂) stated:

A t test analysis will reveal no significant difference between subjects' experience of sexual abuse and their level of development on the Autonomy versus Shame and Doubt scale (R2), as measured by the Measures of Psychosocial Development (MPD).

An analysis of the t test showed that there was a significant difference between the means of the two groups on the Autonomy versus Shame and Doubt scale (R2). Therefore, the null was not retained. The mean for the group which had experienced sexual abuse was -3.8 (standard deviation of 10.07) and the mean for the group which had not experienced sexual abuse was 8 (standard deviation of 9.348). The T was equal to -3.462 and the p was equal to .0015 (see Table 7).

The third null hypothesis (Ho₃) stated:

A t test analysis will reveal no significant difference between subjects' experience of sexual abuse and their level of development on the Initiative versus Guilt scale (R3), as measured by the Measures of Psychosocial Development (MPD).

An analysis of the t test showed that there was a significant difference between the means of the two groups on the Initiative versus Guilt scale (R3). Therefore, the null was not retained. The mean for the group which had experienced sexual abuse was -3.65 (standard deviation of 8.481) and the mean for the group which had not experienced sexual abuse was...
7 (standard deviation of 6.288). The T was equal to -3.987 and the p was equal to .0000 (see Table 7).

The forth null hypothesis (Ho4) stated:

A t test analysis will reveal no significant difference between subjects' experience of sexual abuse and their level of development on the Industry versus Inferiority scale (R4), as measured by the Measures of Psychosocial Development (MPD).

An analysis of the t test showed that there was a significant difference between the means of the two groups on the Industry versus Inferiority scale (R4). Therefore, the null was not retained. The mean for the group which had experienced sexual abuse was 4.75 (standard deviation of 9.273) and the mean for the group which had not experienced sexual abuse was 15.14 (standard deviation of 9.348). The T was equal to -3.265 and the p was equal to .0026 (see Table 7).

The fifth hypothesis (Ho5) stated:

A t test analysis will reveal no significant difference between subjects' experience of sexual abuse and their level of development on the Identity versus Role Confusion scale (R5), as measured by the Measures of Psychosocial Development (MPD).

An analysis of the t test showed that there was not a significant difference between the means of the two groups on the Identity versus Role Confusion scale (R5). Therefore, the null was not retained. The mean for the group which had experienced sexual abuse was -5.70 (standard deviation of 11.97) and the mean for the group which had not experienced sexual abuse was 4.857 (standard deviation of 9.348). The T
was equal to -2.315 and the $p$ was equal to .0272 (see Table 7).

The sixth null hypothesis ($H_{0_6}$) stated:

A $t$ test analysis will reveal no significant difference between subjects' experience of sexual abuse and their level of development on the Intimacy versus Isolation scale ($R_6$), as measured by the Measures of Psychosocial Development (MPD).

An analysis of the $t$ test showed that there was not a significant difference between the means of the two groups on the Intimacy versus Isolation scale ($R_6$). Therefore, the null was retained. The mean for the group which had experienced sexual abuse was 2.350 (standard deviation of 6.604) and the mean for the group which had not experienced sexual abuse was 8.017 (standard deviation of 10.77). The $T$ was equal to -1.922 and the $p$ was equal to .0636 (see Table 7).

The seventh null hypothesis ($H_{0_7}$) stated:

A $t$ test analysis will reveal no significant difference between subjects' experience of sexual abuse and their level of development on the Generativity versus Stagnation scale ($R_7$), as measured by the Measures of Psychosocial Development (MPD).

An analysis of the $t$ test showed that there was a significant difference between the means of the two groups on the Generativity versus Stagnation scale ($R_7$). Therefore, the null was not retained. The mean for the group which had experienced sexual abuse was 4.80 (standard deviation of 9.111) and the mean for the group which had not experienced sexual abuse was 12.29 (standard deviation of 8.297). The $T$
was equal to -2.444 and the p was equal to .0202 (see Table 7).

The eighth null hypothesis (Ho8) stated:

A t test analysis will reveal no significant difference between subjects' experience of sexual abuse and their level of development on the Integrity versus Despair scale (R8), as measured by the Measures of Psychosocial Development (MPD).

An analysis of the t test showed that there was a significant difference between the means of the two groups on the Integrity versus Despair scale (R8). Therefore, the null was not retained. The mean for the group which had experienced sexual abuse was 1.90 (standard deviation of 9.619) and the mean for the group which had not experienced sexual abuse was 12.36 (standard deviation of 11.90). The T was equal to -2.830 and the p was equal to .0080 (see Table 7).

The ninth null hypothesis (Ho9) stated:

A t test analysis will reveal no significant difference between subjects' experience of sexual abuse and their reported level of distress on the Global Symptoms Index (GSI), as measured by the Symptoms Checklist 90 Revised (SCL-90-R).

An analysis of the t test showed that there was a significant difference between the means of the two groups on the GSI scale (R8). Therefore, the null was not retained. The mean for the group which had experienced sexual abuse was 1.204 (standard deviation of .6814) and the mean for the group which had not experienced sexual abuse was .5171 (standard deviation of .3916). The T was equal to 3.393 and the p was equal to .0019 (see Table 7).
Summary

The means for each of the developmental stages as shown by the Measures of Psychosocial Development (MPD) and the distress levels shown by the Global Symptoms Index on the Symptoms Checklist 90 Revised (SCL-90-R), were compared and contrasted using a t test (see Table 7 for results). Gay (1992) reported "the t test is used to determine whether two means are significantly different at a selected probability level" (p. 436). The probability level for this study was \( p = .05 \).

The means were tested for the two groups, the group which had experienced sexual abuse and the group which had not experienced sexual abuse in the stages of Trust versus Mistrust (R1), Autonomy versus Shame and Doubt (R2), Initiative versus Guilt (R3), Industry versus Inferiority (R4), Identity versus Role Confusion (R5), Intimacy versus Isolation (R6), Generativity versus Stagnation (R7) and Integrity versus Despair (R8). The means of the groups were also compared on the GSI of the SCL-90-R. All of these comparisons were tested at the \( p = .05 \) level (see Table 7).

It would be expected at the \( p = .05 \) level, one in 20 of the independent variables would show significance by chance alone. In this study, however, eight of the nine variables showed significance (see Table 7). These findings suggest a significant difference between the means of all groups tested,
with the exception of Intimacy versus Isolation (R6), at the p = .05 level.

The null hypotheses $H_0_1$, $H_0_2$, $H_0_3$, $H_0_4$, $H_0_5$, $H_0_7$, $H_0_8$ and $H_0_9$ were rejected. The null hypothesis $H_0_6$ was retained. For the sample of clients at the Human Development Training and Research Clinic, the Montana State University Counseling and Psychological Center and selected clients from private counselors in the community of Bozeman, Montana, there was a significant difference between women who have experienced sexual abuse and women who have not experienced sexual abuse in the developmental stages, measured by the Measures of Psychosocial Development, of Trust versus Mistrust, Autonomy versus Shame and Doubt, Initiative versus Guilt, Industry versus Inferiority, Identity versus Role Confusion, Generativity versus Stagnation and Integrity versus Despair, and there is a significant difference in their reported level of distress, measured by the Global Symptoms Index on the Symptoms Checklist 90 Revised.

For the sample of clients at the Human Development Training and Research Clinic, the Montana State University Counseling and Psychological Center and selected clients from private counselors in the community of Bozeman, Montana there was no significant difference between women who have experienced sexual abuse and women who have not experienced sexual abuse in the developmental stage, measured by the
Measures of Psychosocial Development, of Intimacy versus Isolation.

Investigation through the use of t tests, indicated there was a significant difference in all of Erikson's stages, as measured by the MPD, except for the stage of Intimacy versus Isolation (see Table 7). In addition, a significant difference in individual's reported level of distress, as measured by the GSI on the SCL-90-R, was demonstrated between the two groups.

Table 7. Results of t tests.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Abused Mean, (S.D.) n = 20</th>
<th>Non-Abused Mean, (S.D.) n = 14</th>
<th>T</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>R1</td>
<td>1.10, (9.142)</td>
<td>10.93, (9.95)</td>
<td>-2.976</td>
<td>.0055</td>
</tr>
<tr>
<td>R2</td>
<td>-3.8, (10.07)</td>
<td>8, (9.348)</td>
<td>-3.462</td>
<td>.0015</td>
</tr>
<tr>
<td>R3</td>
<td>-3.65, (8.481)</td>
<td>7, (6.288)</td>
<td>-3.987</td>
<td>.0000</td>
</tr>
<tr>
<td>R5</td>
<td>-5.70, (11.97)</td>
<td>4.857, (14.56)</td>
<td>-2.315</td>
<td>.0272</td>
</tr>
<tr>
<td>R6</td>
<td>2.350, (6.604)</td>
<td>8.071, (10.77)</td>
<td>-1.922</td>
<td>.0636</td>
</tr>
<tr>
<td>R7</td>
<td>4.80, (9.111)</td>
<td>12.29, (8.297)</td>
<td>-2.444</td>
<td>.0202</td>
</tr>
<tr>
<td>R8</td>
<td>1.90, (9.619)</td>
<td>12.36, (11.90)</td>
<td>-2.830</td>
<td>.0080</td>
</tr>
<tr>
<td>GSI</td>
<td>1.204, (.6814)</td>
<td>.5171, (.3916)</td>
<td>3.393</td>
<td>.0019</td>
</tr>
</tbody>
</table>

(*) Indicates significance at p = .05
CHAPTER 5

CONCLUSIONS AND DISCUSSION

This study investigated the relationship between women's experience of sexual abuse, psychosocial development and their reported level of distress. Conclusions and discussion of the data will be presented in this chapter. The limitations of this study, recommendations for the use of the study and recommendations for future research will also be discussed. The chapter will close with a summary of the study.

Introduction

Two concepts concerning women who have experienced sexual abuse and women who have not experienced sexual abuse were examined. The first concept is that differences could exist between the two groups in Erikson's psychosocial stages, as measured by the Measures of Psychosocial Development. The second concept is that there could be a difference between the two groups in reported distress level, measured by the Symptoms Checklist 90 Revised. There was a significant difference, as shown by the t tests of the means of the two groups, in the developmental stages of R1 (Trust versus Mistrust), R2 (Autonomy versus Shame and Doubt), R3
(Initiative versus Guilt), R4 (Industry versus Inferiority), R5 (Identity versus Role Confusion), R7 (Generativity versus Stagnation), and R8 (Integrity versus Despair). There was no significance demonstrated between the two groups in the stage R6 (Intimacy versus Isolation). There was a significant difference between the two groups in the reported level of distress, as indicated by the GSI on the SCL-90-R.

The results of this study support the conclusion that women who have experienced sexual abuse may exhibit different developmental levels than women who have not experienced sexual abuse. This seems to suggest that the effects of sexual abuse are far reaching and that psychosocial development should be a focus of therapy. However, before psychosocial development becomes a focus of therapy a thorough evaluation of developmental levels should be completed.

The results of this study call for further investigation between the symptoms reported by women who have experienced sexual abuse and their developmental levels. This approach can change the focus of therapy from curing a mental disease, such as depression, to examining issues of development such as trusting oneself or others, feeling competent to seek a job or having a sense of who one is in the world.

The lack of significant difference of the Intimacy versus Isolation scale is puzzling. It may be that women who have been sexually abused define themselves more through intimacy than they do through any other scale. It is also possible
that intimacy is rewarded, by the perpetrator, in women who experience sexual abuse. Therefore, women who experience sexual abuse identify most strongly with this stage. Because the majority of women in this study were abused before the age of 12, there may be a connection between higher intimacy scores and time of abuse. Further studies need to be conducted on this issue.

The significant difference on the GSI scale are understandable in that women who have experienced sexual abuse might be expected to show lower levels of adjustment than women who have not experienced sexual abuse. Another possibility is that women who report abuse also tend to report more problems in other areas of their lives. This tendency to report problems may explain both the low development reported on the MPD and the lower adjustment reported on the GSI of the SCL-90-R.

**Limitations**

The limitations of this study will be discussed in this section. The limitations include size and nature of the sample, discrimination of the Measures of Psychosocial Development and the Symptoms Checklist 90 Revised, and the statistical analysis which was used.

**Size and Nature of the Sample**

Each of the participants in this study were asked by their therapists to participate in the study, this constitutes a
volunteer sample. Gay (1992) reported that volunteer samples are non-probability types of samples. Non-probability sampling makes it impossible to "specify the probability, or chance, that each member of a population has of being selected for the sample" (p. 138). There is also no means of determining what separated women who were asked to participate, but chose not to, from those who did participate. The sample was also chosen on the basis of who was available to take the assessments. Gay (1992) refers to this type of sampling as convenience sampling, which is another type of non-probability sampling. Both of these sampling biases, bring into question the validity of the results.

Sample size is also an important consideration when considering the efficacy of the results. Gay (1992) suggests that it is necessary to use 30 subjects for correlational studies, with more than 30 subjects being preferable. Though the original intent of this study was to use 30 subjects per group, time and financial considerations limited the researcher's ability to fulfill this requirement. Because the sample consisted of twenty women who experienced sexual abuse and 14 women who had not experienced sexual abuse, the results of the study should be questioned.

Another limiting factor for consideration is the amount and type of therapy which each participant had experienced prior to participating in this study. Because of the sensitive nature of sexual abuse, the investigator chose to
seek referrals from mental health professionals. This helped to insure that participants were sexually abused, according to the study's definition, and that they would be able to process any issues which may have surfaced by participating in the study. The focus of the study was also to examine the differences between the two groups in a clinical population.

The disadvantage of this decision is that the psychosocial development or distress levels of some of the participants may have changed, due to the amount or type of therapy. Both groups were comprised of individuals in different types of therapy and individuals who had different amounts of therapy. This should be considered a limitation of the study.

Another disadvantage of this referral system is the lack of information on clients therapists did not refer. Therapists were asked not to refer clients who would be harmed by the study or did not admit they were sexually abused, when there was evidence to the contrary. The psychosocial development of this group may have been significantly different than the clients who did participate. This should be considered in the results of the study.

**Efficacy of Instruments**

As explained in Chapter 3, the MPD does not follow the epigenetic principle of Erikson's human development theory (Hawley, 1988). Many of the participants' scores varied from one stage to another stage. For example, a participant may have scored a negative 15 on the Trust versus Mistrust scale.
but scored a positive two on the Intimacy versus Isolation scale. Hawley (1988) offers no explanation for this phenomenon other than to explain that in the development of the assessment the epigenetic principle was not followed. This should be considered when generalizing these results.

Another limitation of the MPD is the exclusion of a scale which measures an individual's response style. For example, individuals may respond very differently to similar situations. Many assessments have scales which determine if a participant is over-reporting or under-reporting his or her experience, when compared to the average reporting style of the norm population for the assessment. The lack of documentation of participant's reporting style should be considered when generalizing the results of this study.

The SCL-90-R also has a limitation which is important for consideration. Derogatis (1983) developed the SCL-90-R to measure the distress that an individual has experienced during the previous seven days, including the day of administration. In this study it should be understood that the assessments were given over several months and, because of environmental factors, a participant's distress level could have been different if taken during a different seven day period.

**Statistical Analysis**

Gay (1992), and Ferguson and Takane (1989) both reported the purpose of the t test and a correlational study is to show the relationship between two variables. Though the t test may
show a strong association between the two variables, it does not suggest that one of the variables causes the other variable (Gay, 1992). For example, in this study the t test suggests that women who have experienced sexual abuse have significantly different levels of psychosocial development than women who have not experienced sexual abuse, or that having been abused is associated with lower levels of development and adjustment. However, the results of this study do not suggest that sexual abuse caused the differences in psychosocial development. The concept of correlation versus causation should be considered in generalizing the results of the study.

Gay (1992) reported that many authors suggest having at least 30 participants in each group. Kerlinger and Pedazur (1973) reported that the use of small samples can create either an overestimation or underestimation of the results. The use of larger sample sizes reduces statistical bias that may result from the use of a t test. In the current study there were 14 participants who had not experienced sexual abuse and 20 participants who had experienced sexual abuse. The number of participants in each of the groups does not meet the recommendations of Gay (1992). Small sample size could have influenced the results of the study and should be considered in generalizing the results.
Observations and Recommendations for Research

The following section will discuss the observations of the investigator and recommendations for research.

Because this study examined the effects of sexual abuse on a clinical population of women, an important piece in this study was the referral of participants by their primary therapist. One implication of this study is the report of all 45 therapists contacted that the majority of their female clients had experienced some type of sexual abuse. This subjective observation is congruent with the current literature on the prevalence of sexual abuse, which was reported in Chapter 2.

It is also significant to note that all of the therapists contacted held some reservations about referring certain clients. The therapists were not certain whether or not many of their clients had been sexually abused. This would seem to signify the importance of this type of referral system to reduce the possibility that women who experienced sexual abuse were not categorized as non-abused.

Another occurrence observed by the investigator was that women who had experienced sexual abuse were much more likely to participate than women who had not experienced sexual abuse. Though the investigator is hesitant to draw any conclusions from this observation, it seems important to note this observation in formulating conclusions from the study.
Most importantly, the study seems to support the current literature that women who have experienced sexual abuse may experience different levels of psychosocial development when compared to women who have not experienced sexual abuse (Alexander, 1992; Brown & Finkelhor, 1986; Briere, 1992a; Burgess, 1985; Byers, 1990; Cole & Putman, 1992; Everly, 1993; Gagliano, 1987; Green & Rawson, 1992; Hall, Kassees & Hoffman, 1986; Johnson, 1989; King, 1983; McFadden, 1987; Mcfarlane, 1978; Murdy, 1986; Poston & Lison, 1989; Socarides, 1983). However, the study also suggests that therapists and researchers refrain from making blanket statements about sexual abuse and its relationship to development. The t tests showed significant differences between the two groups in several of the developmental stages, though there was no significant difference between the two groups in the Intimacy versus Isolation stage. This may call for further investigation into the dynamics of each individual and how sexual abuse has or has not influenced their development.

Though this study has limiting factors, it does provide the foundation for future research. More clinical subjects need to be tested using the MPD and the SCL-90-R to reduce the bias intrinsic in a small sample size. Testing subjects during intake or before counseling is initiated, is necessary to determine both the effect of therapy and the developmental levels of subjects before counseling begins. A study utilizing populations other than a clinical population is also
necessary to determine the differences between a clinical and a non-clinical population. Also, a study exploring the developmental effects on men who have experienced sexual abuse is necessary based on the results of this study.

This study suggests that additional research is necessary in other developmental areas. Erikson's psychosocial developmental theory is one of many developmental theories. Empirical examination of the effects of sexual abuse using other developmental theories is necessary to either support or contend the current literature.

Another area for consideration is the relationship between psychosocial development and reported level of distress. The study suggests that there is a significant difference in reported distress levels between women who have experienced sexual abuse and women who have not experienced sexual abuse. This supports the results of Bryer, Nelson, Miller and Krol (1987) and Kilpatrick, Veronen and Resick (1979). What is not addressed in this study is the question, are the differences in developmental levels associated with a participant's experience of sexual abuse or is it associated with perceiving the world as distressful? A study addressing the relationship between psychosocial development and individual's reported level of distress would be helpful in clarifying the actual effects of sexual abuse on psychosocial development.
Clinical Application of the Study

This section will address the clinical or therapeutic implications of the study.

In a clinical or therapeutic setting, the study suggests that developmental issues should not be ignored in the therapeutic process. The study suggests that clients who have experienced sexual abuse may benefit from an exploration of developmental issues and that psychosocial developmental levels could lend an understanding of a client's experience of her world. Assessing an individual's psychosocial development, using the MPD, may help the therapist in providing a treatment plan which may properly identify areas of development which can aid in the healing process.

Consideration should be given to the relationship between issues addressed in therapy and the individual's developmental levels. For example, the finding in this study of no significant difference between the groups in the Intimacy versus Isolation stage, could provide important directions in therapy. Exploration into the relationship of intimacy and sexual abuse, or intimacy as a sense of identity, may provide the client with an understanding of her needs. Having identified her needs, a client may be able to explore different behaviors which meet those needs in a manner that is less painful.
If a therapist is providing treatment to a woman who has experienced sexual abuse, the client may experience life circumstances as more stressful than clients who have not experienced sexual abuse. Though this study provides no clear explanation of the relationship between increased distress and development, it does suggest that women who have experienced sexual abuse do perceive life events as more distressful. Therapists may be able to help their clients to cope with the increased distress and explore the connection to both the sexual abuse and the developmental levels.

Summary

The research presented within this paper brings into question blanket statements regarding the effects of sexual abuse on a clinical population of women. Separate comparisons of Erikson's developmental stages did show a significant difference between the sample of women who had experienced sexual abuse and the sample of women who had not experienced sexual abuse and there was a significant difference in the reported level of distress between the two groups. However, there was no significant difference in the stage of Intimacy versus Isolation. More research is needed to investigate the developmental effects on women who have experienced sexual abuse in order to better understand the effects of their experience and to assist them in the healing process.
REFERENCES CITED
References Cited


APPENDICES
APPENDIX A

ADDITIONAL INFORMATION FORM
ADDITIONAL INFORMATION

1. AGE ________
2. LEVEL OF EDUCATION ________________________________
3. AMOUNT OF TIME IN THERAPY _______________________
4. MAJOR CONCERNS OR ISSUES Addressed IN THERAPY
   __________________________________________________________________
   __________________________________________________________________
5. NAME OF THERAPIST ________________________________

If you have been sexually abused please fill out items 6, 7 & 8.

6. AGE(S) AT WHICH YOU WERE ABUSED __________________
7. DURATION OF ABUSE(S) ______________________________
8. YOUR RELATIONSHIP TO THE PERPETRATOR _____________
APPENDIX B

PARTICIPANTS CONSENT FORM
PARTICIPANT CONSENT FORM
FOR
PARTICIPATION IN HUMAN RESEARCH
MONTANA STATE UNIVERSITY

ASSESSING DEVELOPMENT AND STRESS IN ADULT FEMALE CLIENTS

You are being asked to participate in a study which will assess the levels of psychosocial development among women who have and have not been sexually abused. Information gained could help survivors of sexual abuse by examining different developmental issues which may have been affected by the sexual abuse.

You have been asked to participate in this study because your primary therapist thought you may be interested in contributing to research in this area. If you agree to participate, you will be asked to complete two paper/pencil assessments which will evaluate your level of psychosocial development and your level of distress. These assessments together take about 30 to 45 minutes to complete. With your permission, your primary therapist will be given the results of these assessments.

You will also be asked to disclose in writing your age, your level of education, the amount of time that you have spent in therapy and the concerns you have addressed in therapy. If you have been sexually abused you will also be asked to disclose the age at which you were abused, the duration of the abuse and your relationship to the perpetrator. However, you will not be asked your name or any other identifying information. No one, outside of your primary therapist, will know your identity or whether you have been abused.

Because this study is limited to voluntary completion of a paper and pencil assessment and receipt of the interpretation, there is minimal risk of adverse affects to you. If you were to experience adverse affects, the investigator of this project would strongly encourage you to discuss these effects with your primary therapist. If your therapist feels that the results of this assessment could be beneficial this study could assist you in examining your level of psychosocial development. However, if your primary therapist does not feel the results can assist in your therapy, this study is of no benefit to you.

You are free to decline participation. Refusal will not in anyway jeopardize services from this agency. There will be no cost to you should you decide to participate. I encourage you to ask your primary therapist any questions about this study or ask them how it is possible to contact me. I will give them a phone number where I can be contacted and would
appreciate any comments or suggestions you may have regarding this study. Your name will not be on the assessment and all information will be kept confidential according to professional standards.

In the event your participation in this research directly results in injury to you, psychological treatment consisting of counseling or psychotherapy at the Human Development Training and Research Clinic or the Montana State Counseling and Psychological Services will be available. However, there will be no compensation for such treatment. Further information about this treatment may be obtained by calling Kevin Wyse at 994-4113.

"AUTHORIZATION: I have read the above and understand the discomforts, inconvenience and risk of this study. I,_____________________________________________________, agree to participate in this research. I understand that I may later refuse to participate, and that I may withdraw from the study at any time. I have received a copy of this consent form for my own records. I also agree __ disagree __ (please check one) to release this information to my primary therapist.

Signed ______________________________________________________

Witness ______________________________________________________

Investigator __________________________________________________

Date ____________________________"