INVESTIGATION OF ATTACHMENT, SHAME AND PSYCHOLOGICAL STRESS
IN OUTPATIENT PSYCHOTHERAPY CLIENTS
DISSERTATION

Presented in Partial Fulfillment of the Requirements for
the Degree Doctor of Philosophy in the Graduate
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By

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* * * * *

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To My Children
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# TABLE OF CONTENTS

DEDICATION ................................................. ii

ACKNOWLEDGEMENTS ................................. iii

VITA ................................................... iv

LIST OF TABLES ....................................... viii

LIST OF FIGURES ..................................... ix

CHAPTER PAGE

I. INTRODUCTION ......................................... 1

  Background ............................................ 1
  Need for the Study .................................. 5
  Problem Statement .................................. 7
  Purpose of the Study ............................... 7
  Research Questions .................................. 8
  Hypothesis .......................................... 8
  Definition of Terms .................................. 9
  Limitations of the Study .......................... 11
  Summary ............................................. 13

II. LITERATURE REVIEW ................................. 14

  Three Models of Attachment, Shame, and Psychological Stress ........ 15
  Shame .............................................. 19
    Psychoanalytic Theory ............................ 19
    Neo-psychoanalytic Theory ....................... 20
    Affect Theory ..................................... 25
    Addiction Theory .................................. 28
  Shame and Guilt ................................... 29
  Shame and Self-esteem ............................. 30
  Psychological Stress ............................... 34
  Attachment .......................................... 36
  Summary ............................................ 42
III. METHODOLOGY ................................................. 45
   Research Setting ............................................. 45
   Sample ......................................................... 46
   Research Design .............................................. 46
   Instruments .................................................... 47
      Parental Bonding Instrument ............................. 47
      Internalized Shame Scale ................................. 50
      Brief Symptom Inventory ................................ 52
      Personal Data Form ...................................... 55
   Data Collection Procedures ................................ 56
   Statistical Analysis ......................................... 58
   Summary ....................................................... 67

IV. RESEARCH FINDINGS .......................................... 68
   Description of the Sample .................................. 70
      Age ........................................................... 70
      Sex .......................................................... 75
      Ethnic/Racial Identification .............................. 75
      Marital Status ............................................. 75
      Highest Level of Education .............................. 76
      Religious Preference ................................... 76
      Income Level .............................................. 77
      Recycle ..................................................... 77
      Parental Substance Abuse ................................ 78
      Birth Order ................................................. 78
      Number of Children ...................................... 78
      Number of Genuine Friends ............................... 73
      Stress Related Changes ................................ 78
      Abuse/Addictions ........................................ 79
      Therapy Variables ....................................... 79
   Findings by Hypothesis ...................................... 82
      Sub-hypothesis 1 (Model A) .............................. 83
      Sub-hypothesis 2 (Model B) .............................. 86
      Sub-hypothesis 3 (Model C) .............................. 89
   Discussion .................................................... 91
   Summary ....................................................... 95

V. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS .......... 98
   Summary ....................................................... 98
      Sub-hypothesis 1 (Model A) .............................. 102
      Sub-hypothesis 2 (Model B) .............................. 102
      Sub-hypothesis 3 (Model C) .............................. 103
      Research Question 1 ..................................... 106
      Research Question 2 ..................................... 106
   Conclusions .................................................. 107
   Recommendations for Future Research .................... 110
APPENDIXES

A. Internalized Shame Scale .................. 114
B. Personal Data Form ....................... 117
C. Human Subjects Approval Form .......... 122
D. Letter to Therapists ...................... 124
E. Instructions to Therapists ................. 126
F. Letter to Client Subjects .................. 128
G. Thank You/Reminder Letter ............... 130
H. Letters of Permission ...................... 132

REFERENCES .................................... 135
LIST OF TABLES

<table>
<thead>
<tr>
<th>TABLE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Structural and measurement equations for models of attachment, shame and psychological stress</td>
<td>66</td>
</tr>
<tr>
<td>2. Self reported sample demographics as measured by the Personal Data Form by frequency and percent</td>
<td>71</td>
</tr>
<tr>
<td>3. Comparison of sample demographic data on sex, age, race, marital status, highest level of education, religious preference and income level with 1990 Bureau of Census and 1990 Ohio Council of Churches statistics for Franklin County by percent</td>
<td>81</td>
</tr>
<tr>
<td>4. Pearson correlation coefficients matrix for model of attachment, shame and psychological stress in outpatient psychotherapy clients</td>
<td>84</td>
</tr>
<tr>
<td>5. Univariate summary statistics for model variables</td>
<td>85</td>
</tr>
</tbody>
</table>
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>FIGURE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Path diagrams of the latent variables in the hypothesized models A, B and C, of attachment, shame, and psychological stress</td>
<td>4</td>
</tr>
<tr>
<td>2. Schematic diagram of latent and measured variables for hypothesized model B of attachment, shame, and psychological stress</td>
<td>17</td>
</tr>
<tr>
<td>3. Structural-equation model A hypothesized for attachment and psychological stress</td>
<td>60</td>
</tr>
<tr>
<td>4. Structural-equation model B hypothesized for attachment, shame and psychological stress</td>
<td>61</td>
</tr>
<tr>
<td>5. Structural-equation model C hypothesized for attachment, shame and psychological stress</td>
<td>62</td>
</tr>
<tr>
<td>6. Parameter estimates for model A of attachment and psychological stress</td>
<td>87</td>
</tr>
<tr>
<td>7. Parameter estimates for model B of attachment, shame and psychological stress</td>
<td>88</td>
</tr>
<tr>
<td>8. Parameter estimates for model C of attachment, shame, and psychological stress</td>
<td>90</td>
</tr>
</tbody>
</table>
CHAPTER I

INTRODUCTION

The secret bores under the skin, gets in the blood, into the bone, and stays there. Long after you have supposedly been cured of malaria, the fever can flare up, the tremors can shake you. So it is with the fevers of shame. You swallow the bitter quinine of knowledge and you learn to feel pity and compassion toward the other. Yet shame lingers and, because of it, anger.

--Scott Russell Sanders

Background

Shame as a variable of personality has increasingly appeared in psychological literature as well as in popular literature particularly through the 12-step recovery movement (Bradshaw, 1988). This interest in shame has resulted in studies designed to quantify and measure shame, as well as determine whether it is a separate variable from self-esteem, or from the affect variable, guilt. Shame has been distinguished from self esteem (Cook, 1993; Lighty, 1990/1991; Novak, 1986/1987; and Ursu, 1984). Tangey (1988) found an empirical difference between an individual's subjective
experiences of shame and guilt, suggesting that shame is also qualitatively different from guilt. Studies suggest that the difference between the experience of guilt and shame, is whether the individual is dissatisfied with what she/he has done (guilt), or with who she/he is (shame) (Lewis, 1987b; Lynd, 1958).

Shame, the sense of the self as bad, becomes a pervasive part of the personality as more incidents occur where this unworthiness is mirrored back from parents, caregivers, or others in the child's environment. Once the child has internalized this sense of shame, future actions tend to be organized around attempts to ward off this painful feeling. Typically, personality defenses are developed to fend off this rejection, and pathological ways of relating to others result (Broucek, 1991).

Many theorists believe there is a developmental logic associated with these pathological ways of relating (Bowlby, 1988; Miller, 1980; Nathanson, 1992). Attachment theory is a developmental theory which suggests the child's ability to form an emotional bond to a caregiver, provides the secure base necessary to explore, learn and develop relationships with others (Bowlby, 1988). Parental care and protection are suggested by Parker (1983a) as influences in the development of optimal attachment, or the development of psychological stress.
The present research was designed to investigate the effects of shame in relation to attachment and symptoms of psychological stress. Three models of attachment, shame and psychological stress were proposed and are presented in Figure 1. Model A proposes psychological stress (Ψ ST) as resulting from attachment (ATT) disturbance. Model B proposes the effect of attachment (ATT) on psychological stress (Ψ ST) as mediated through shame (SHA). Last, Model C simultaneously evaluates the direct effects of attachment (ATT) on psychological stress (Ψ ST), and the effects mediated through shame (SHA).

Figure 1 provides the basic structure of the three models by indicating the path diagrams of the relationships among the variables in the models. Chapter II provides a more detailed description of each model, including the path diagrams for the structural, and the measurement portion of each model. The structural portion of a model indicates the effects of the latent variables on other latent variables, and the measurement portion of a model details the indicators or measures of the latent variables utilized in the model.

To further aid the reader, Chapter III contains a description of the statistical notations employed and the statistical procedure utilized. Structural equation modeling methodology using the LISREL 7 statistical program
Figure 1. Path diagrams of the latent variables in the hypothesized models, A, B and C, of attachment, shame, and psychological stress.

ATT = attachment, SHA = shame, ΨST = psychological stress
was employed to analyze the data. This technique allows for investigating the relationship of "cause-and-effect variables" and their measured indicators (Joreskog and Sorbom, 1989, p. 1). Shame was postulated to have a central role in the relationship between attachment disturbances and adult psychological stress. Structural equation modeling allowed for a comparison of the effects of attachment on psychological stress without consideration of the shame variable, with effects including the shame variable.

**Need for the Study**

Understanding the role of shame and its relationship to psychological stress is necessary. "There is no lack of attention to affects or their importance in the literature, but the primary motivating function of innate affects has not always been emphasized and the function of shame affect has been all but ignored" (Cook, 1990, p.3).

Shame has been shown to correlate with addictions and be a central issue in eating disorders, depression, and other adult psychopathology (Harper & Hoopes, 1990; Kaufman, 1989; Morrison, 1989; Nathanson, 1987b, 1990). An increased understanding of how this feature of personality develops has the potential to illuminate exactly where intervention can be most productive in reducing shame levels. Many people are trapped in the cycle of helplessness, depression, anxiety, anger and despair, which characterizes a shame-
based personality (Kaufman, 1989). The loss of human potential is staggering as are the societal problems resulting when a portion of the population is unable to function successfully. Child abuse, violence, various addictions and emotional difficulties are the anesthesia which a person uses in an attempt to ward off feelings of shame (Miller, 1991).

Research has been conducted on measuring shame, determining ways of differentiating it from guilt and substantiating its negative correlation to self esteem (Cook, 1993; Novak, 1986/1987; Ursu, 1984). It has been suggested that the development of shame in an individual as a pervasive part of his/her personality results from living in a dysfunctional family (Bradshaw, 1988; Fossum & Mason, 1986; Kaufman, 1985). The role/effects of early attachment in developing and maintaining relationships has been studied (Ainsworth, Blehar, Waters, & Wall, 1978; Bowlby, 1982, 1988; Bretherton & Waters, 1985; Main, Kapland, & Cassidy, 1985). Little work however has been conducted linking parental attachment to the development of a shame-based personality, and which implicates shame as a factor in adult psychological stress. Highlighting shame's role in psychological stress is important to stimulate further research on identifying models of parenting minimizing shame development and modes of therapeutic interventions addressing shame. This knowledge potentially could pave the
way for shame reduction, thereby mitigating negative effects on society.

Problem Statement

The focus of the present research on whether shame is a result of attachment disruptions in childhood, and a predictor of psychological symptoms in adults. Examination of three a priori models of attachment, shame and psychological stress were investigated. As previously stated, Model A proposed a path directly from attachment to psychological stress, without shame being used as an intervening variable. Model B proposed a path where shame is the intervening variable between attachment and psychological stress. Model C proposed that both paths be evaluated by use of the same model which measures the effects of both paths simultaneously. The models then were compared to determine which model provides the better explanation for the role shame plays as it relates to attachment and psychological stress in adults.

Purpose of the Study

The major purpose of this study was to investigate the relationship and effect of shame as a psychological construct on people's lives. Empirical evidence clarifying the connection between shame and attachment disruptions and between shame and psychological symptoms in adulthood is
needed. As a result of this knowledge, the importance of developing interventions for addressing harmful effects of shame may be suggested.

**Research Questions**

The present research was designed to investigate the following research questions:

1. Are the constructs attachment, shame, and psychological stress related in definable ways?
2. Can a model be identified which clarifies the relationships among attachment, shame, and psychological stress?

**Hypothesis**

The overall hypothesis can be stated as follows: Shame can be shown to be an intervening variable in the relationship between attachment and psychological stress. Three models were utilized to test this hypothesis and the sub-hypotheses are stated below.

**Sub-hypothesis 1:** Attachment directly affects psychological stress as indicated in Model A (see Figure 1).

**Sub-hypothesis 2:** Attachment directly affects shame, and shame directly affects psychological stress, as indicated in Model B (see Figure 1).
Sub-hypothesis 3: Attachment directly affects psychological stress and/or affects psychological stress through shame as indicated in Model C (see Figure 1).

**Definition of Terms**

Following is a list of terms and definitions used within the context of this research. Each is separately described.

**Attachment Variables:** Attachment variables indicate that an identification with an older individual has been established for the purpose of security (Ainsworth, 1979, 1989; Bowlby, 1977, 1982, 1988). According to attachment theory, a child's ability to develop an emotional attachment bond to a caregiver provides the security necessary for exploring the environment; and additionally forms the basis for development of interpersonal relationships throughout the person's life. The Parental Bonding Instrument (PBI) scores of maternal and paternal care and protection are the indicators of attachment used in this research (Parker, Tupling & Brown, 1979).

**Latent Variable:** The term latent variable will be used to indicate constructs which cannot be directly observed or directly measured. Latent variable is the term used in Structural Equation Modeling to indicate the constructs whose relationships are being investigated. Assessment of these constructs is obtained indirectly through measurement
of an observed behavior. In the present research an instrument score is used as the observed behavior or measured variable. Latent variables will be specified as endogenous (dependent) if they can be specified as a linear combination of other latent variables or as exogenous (independent) if they cannot.

**Outpatient Psychotherapy Clients:** For the purposes of this study, outpatient psychotherapy clients were defined as persons who were in treatment at a therapy practice under the supervision of an Ohio licensed psychologist. The therapy is received on an outpatient basis, as compared to treatment taking place in an in-patient setting like a hospital psychiatric unit.

**Shame:** Shame is the painful emotion arising from unconsciously accepting blame or disgrace as merited. It is an emotion which "may be understood as a complex coassembly of memories, cognitions, and behaviors that are overlaid with meaning" (Cook, 1990, p. 7), and which serves to "function as a reducer of positive affects of interest and enjoyment" (Cook, 1990, p. 7). Shame was measured by the Internalized Shame Scale (ISS) developed by Cook (1990).

**Symptoms of Psychological Stress:** Psychological symptoms are the manifestations of psychological stress. Among these symptoms are somatization, obsessive-compulsion, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation and psychoticism. These
psychological symptoms are the indicators of psychological stress used in this study, and were measured by scores on the Brief Symptom Inventory (BSI), (Derogatis, 1975/1993).

**Limitations of the Study**

There are at least seven limitations to the design and scope of this study. They are:

1. The study was conducted with a sampling of adult participants age, 19 to 67, from private outpatient therapy settings. These practices were selected from a midwest metropolitan area. The results can be generalized only to similar populations.

2. The possible contribution of such variables as age, sex, education and socioeconomic level were not investigated. There could be effects explained by these variables which were not included in the models.

3. This study employed self-report instruments which depend on the individuals' ability to distinguish between truth and fiction in self-assessment, and on memory accuracy in their retrospective measuring of past events. Since many persons experiencing psychological stress have repressed memories of past traumatic events, their perception of childhood may not match actual reality. It must be acknowledged, however, that the memory an individual carries is the only one which is significant.
4. The LISREL model is based on several assumptions. Violation of any one of these assumptions would limit the model's validity. The assumptions include the following: All variables are assumed to be measured as deviations from their means. The latent variables are assumed to be uncorrelated with the errors in measurement. The measurement errors and errors in equations are assumed to be uncorrelated across equations. Finally, all independent latent variables are assumed to be uncorrelated with the errors in equations.

5. Random sampling was not employed to select the 29 psychotherapy practices. The practices were selected by the researcher from different locations in Franklin County. Since these practices were not selected at random, there is a limit to the generalizability of the results.

6. The return of research packets represented 37.8% of the packets distributed and of these 33.6% were usable. There was no procedure to account for nonrespondents, therefore the generalizability is limited to those who responded.

7. Structural Equation Modeling is a powerful research tool and has many strengths. However, caution should be exercised in the determination of causality from correlational data.
Summary

Chapter I has stated the research problem and provided background on recent interest in shame and attachment as related to emotional well-being. Three a priori models of attachment, shame and psychological stress have also been presented. The purpose and significance of the study are stated, followed by research questions and the hypotheses. Last, terms unique to the study are defined, and research limitations are indicated. Chapter II presents additional descriptions of tested models, along with a review of literature on shame, attachment and psychological stress. Chapter III describes methodology used in research, including its design, sampling methods, instrumentation, procedures and statistical analysis. Chapter IV contains a report of how the models fit the statistical data. Chapter V provides a research summary detailing conclusions based on the findings and recommendations for future research.
CHAPTER II
LITERATURE REVIEW

Chapter II begins with a section describing three models (Model A, Model B and Model C) of attachment, shame, and psychological stress. Following the model description, a literature review which parallels the three latent model variables is presented. Shame literature is reviewed followed by the literature on psychological stress and attachment.

The section on shame includes a discussion of theoretical approaches to shame, research on shame, and guilt; along with research on shame and self esteem. Following the discussion of shame is a section on shame and psychological stress, outlining the research relating shame to psychological disorders. Since there is an implication that shame and psychological disorders are related to the development of self, the subsequent section reviews attachment research. The section on attachment discusses the development of attachment theory and the relationship of attachment theory to shame and psychological stress. A summary of this literature review and research makes up the
final section, and includes ways the three major variables relate to psychotherapy clients.

Three Models of Attachment, Shame and Psychological Stress

Three models of attachment, shame and psychological stress were proposed and are presented in Chapter I, Figure 1. Model A proposes psychological stress (Ψ ST) as resulting from attachment (ATT) disturbance. Model B proposes the effect of attachment (ATT) on psychological stress (Ψ ST) as mediated through shame (SHA). Last, Model C simultaneously evaluates the direct effects of attachment (ATT) on psychological stress (Ψ ST), and the effects mediated through shame (SHA).

The basic structure of the models explored in the present research deals with the latent variables attachment, shame and psychological stress, mapping out the hypothesized relationship among them. The overall hypothesis is that attachment influences the development of shame identities which then can lead to psychological stress.

In covariant structural modeling, latent variables are defined as constructs which cannot be precisely measured. As a result, indicators of those variables are used to approximate construct measurement. In the present research, attachment was measured by care and protection scores of the Parental Bonding Instrument (PBI) for each parent, since
those variables were consistently found significant in the child/parent relationship bond (Parker, Tupling & Brown, 1979).

Shame was measured by the shame score on Cook's 1990 version of the Internalized Shame Scale (ISS). In covariant structural modeling, when there is a single indicator of a latent variable, it is considered to be a perfect model indicator of that latent variable; and the error term for this indicator in the model is set at zero and the effect is set at one.

Nine indicators, as measured by the Brief Symptom Indicator (BSI) (Derogatis, 1975/1993), were used to measure psychological stress. They are somatization, obsessive-compulsion, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation and psychoticism.

Basic symbols employed in the models, the notation used to designate variables and error terms are defined below (see Figure 2). Employing Model B as an example, Figure 2 is a schematic representation of the notation utilized to indicate latent and measured variables and their relationships. The schematic representation of the notation utilized in Model C is the same as in Model B. Model A is similar except the shame variable is removed.

Ovals are used to indicate both the exogenous latent variable, Attachment (ATT); and the endogenous latent
MODEL B

Figure 2. Schematic diagram of latent and measured variables for hypothesized model B of attachment, shame and psychological stress.

ATT = attachment, SHA = shame, ΨST = psychological stress, ξ and η = latent variables, X and Y = measured variables, MC = mother care, FC = father care, MP = mother protection, FP = father protection, ISS = shame score, SOM = somatization, OBC = obsessive compulsion, IPS = interpersonal sensitivity, DEP = depression, ANX = anxiety, HOS = hostility, PAX = phobic anxiety, PID = paranoid ideation, PSY = psychoticism.
variables, Shame (SHA) and Psychological Stress (Ψ ST). The latent variables with arrows indicate their effects on each other, and the error terms associated with the endogenous latent variables, form the structural model.

Rectangles represent measured variables and, arrows from the latent variables and their corresponding measurement error terms, form the measurement model. Arrows indicate the hypothesized direction of effect for each variable in the model.

The exogenous (independent) latent variables are indicated by $\xi$, the endogenous (dependent) latent variables are indicated by $\eta$ and the error terms of the endogenous latent variables by $\zeta$. Indicators of exogenous variables are shown by $x$ with error terms, $\delta$, and indicators of endogenous variables by $y$ with error terms, $\epsilon$. Chapter III provides additional detail concerning the notation of the error terms, and notation for paths of the effects of the latent variables on each other completing the model notation.

The remainder of Chapter II focuses on the review of the literature for the latent variables: shame, psychological stress, and attachment. The focus is on examining these variables as related to psychotherapy clients. Additional consideration is given on how the variables relate.
**Shame**

This section includes contributions of various schools of thought regarding shame. Theories considered are psychoanalytic, neo-psychoanalytic, affect theory and addiction theory. These four schools of thought provided a framework for considering the origin, function and role of shame in symptom formation.

**Psychoanalytic Theory**

Psychoanalytic contributions began with Freud (1905/1953) who "had no consistent theory of shame" (Broucek, 1991, p.12). Shame received little attention compared to guilt or anxiety. Freud had an attitude of disrespect for shame and "viewed it as one of the major forces promoting repression and resistance to the analytic process, thus opposing insight into the sexual dynamics underlying the various neuroses" (Broucek, 1991, p. 12). Fenichel (1945) agreed with Freud regarding the link between shame and the scopophilic drive. Shame was seen as a reaction formation against exhibitionistic drives. This idea was questioned by Spiegel (1966): "The usual derivation of shame from the repression of exhibitionistic drives does not coincide with the observation that shame can appear before such repression has taken place" (p.86). In addition Miller (1985) responds to the theorists who view shame as a reaction formation against exhibitionism: "Although they identify the commonplace situation in which shame experience
interrupts morally forbidden exhibitionism, they mistake that function for the defining core of the shame experience. One can prop open a window with a book but that does not mean a book is essentially a window prop" (p. 11).

**Neo-psychoanalytic Theory**

Erickson (1963) linked shame to the struggles of the anal phase of development which involves self control and outcome. He outlined eight stages of development where the struggle for autonomy was the struggle to master shame and doubt, and was the second stage following the struggle between trust and mistrust. The child's ability to resolve subsequent crises will be affected by excessive shame at this stage. Lobel & Winch (1987) supported the idea that the degree of resolution at each stage influences all later stages. A person burdened with shame and doubt will be less apt to take initiative. Kauffman (1989) viewed the negative poles of each of Erickson's crises as an elaboration of shame, given new or wider meaning. In other words, Kaufman viewed the mastering of each crisis as a reworking of shame.

Piers (Piers & Singer, 1953) conceptualized shame as a tension between the ego and the ego-ideal resulting from a discrepancy between the two when the ego fails to live up to the ego-ideal, which is defined by Piers as "the repository for narcissistic omnipotence, positive parental identifications, identifications formed later from societal values, and awareness of ego potentialities" (p. 11). Guilt
associated with transgressing a boundary set by the super ego was thus linked to bad behavior. The unconscious threat implied in guilt was castration, and in shame abandonment. Morrison (1989) agreed that shame was reflective of tension between the ego and ego-ideal, but used the terms self and ideal-self as were used by the self-psychologists.

Horney (1950) suggested neurosis is set in the struggle to attain the unrealistic expectations of the ideal-self. This ideal image is rigid and unrealistic, and attempting to live up to this image, low self esteem, self-contempt and striving to be perfect serve as the cognates of shame.

Levin (1967) introduced secondary shame, and shame-about-shame. He pointed out that persons who hide shame from others and from themselves, so as not to be vulnerable to the shame affect, are often admired for their strength. Lewis (1987b) adds that shame makes human beings want to hide, avert their gaze and hang their head, because it is too painful; thus the focus becomes a desire for the experience to end quickly. There is no desire to contemplate or discuss shame, since that would lead to the risk of re-experiencing it. Witnessing another person's shame is difficult to experience without twinges of self shame. There is a shame-of-being-ashamed.

Kohut (1971) and Wurmser (1981) both linked shame to drive theory. Kohut suggested the self was bipolar, with one pole consisting of the grandiose-self and the other the
idealized self-object. The grandiose self requires adequate mirroring on the part of the significant caregiving and nurturing figure in the child's early development in order for development to proceed optimally. If one of the significant caregiving others lends him/herself to serve as an idealized self-object, the child has a second chance. The self-object is experienced by the child as both other, and as part of the self. If the self-object is critical and scornful of the child, the child learns to become scornful of self in fulfilling the drive to have a nurturing other. The interpretation of scorn and rejection from the other results from "badness" of the self, and results in shame. Wurmser (1981) in the tradition of psychoanalytic theory derives shame from conflicts involving the partial drives of voyeurism and exhibitionism, feeling shame guarded the boundaries of privacy and intimacy, and that guilt limited the expansion of power.

Helen Block Lewis (1971, 1987b) began to appreciate the position of centrality of shame in psychological stress as a result of her observation of undischarged shame which blocked progress in therapy, stressing the twofold nature of the super-ego and its part in shame and guilt. Shame of failure occurs when the positive identification (ego ideal), is stirred. Guilt from transgression results when the negative or castrating figure is stirred, guilt being seen as able to evoke shame through failure to live up to an ego-
ideal. Both states are internalized aggression against self; one being prone to activate the ego ideal leading to shame, and the other activating the negative superego, and thus producing guilt. Lewis stated that shame and guilt are equally developed expressions of super-ego functioning, thus assigning shame an equal position with guilt.

"In spite of her assertion that internalized ego-ideals were a major source of shame, Lewis (1971) hypothesized that shame-prone persons would be more dependent on external influences than would guilt-prone individuals" (Mcfarland, 1992, p. 39). She designed a double blind study using the Gottschalk & Gleser (1969) method to analyze transcripts of 179 therapy sessions for shame-versus-guilt content in the subject's verbal expression. Results supported Lewis' hypothesis that field dependence is correlated with shame and field independence is correlated with guilt. Citing studies by Witkin (1954, 1965) connecting field dependence with depression, Lewis suggests a link between depression and shame. Clinical experience confirmed the connection between shame and depression, as well as dependency. Further support was given by Hoblitzelle (1982/1987) and Harder and Lewis (1987), who found a correlation between shame and depression through the use of objective measures.

Lewis concurred with the guilt/shame cycle suggested by Piers (Piers & Singer, 1953), which was that shame can follow guilt when the self feels worthless for having
violated a moral sanction. Guilt does not reflect on the worth of the self but rather on an act which is able to be repaired. Greater stress is associated with shame, because the self is involved; and it is difficult to repair a defective self.

Shame was also seen by Lewis (1971, 1987a, 1987b) as a signal that affectional bonds were at one point broken; shame thus increasing awareness of separateness, or lack of self-boundaries. Moreover, if the self is rejected by the beloved, the person, in an effort to maintain the bond, rejects self as well. Lewis (1988) drew on attachment theory (Bowlby, 1973a), and neurophysiological investigations of the separation-distress system emphasizing a relationship between shame and distress/panic. "Shame is the empathetic or vicarious experience of the other's rejection of the self. Shame is the state in which one accepts the loss of the other as if it were a loss in the self" (Lewis, 1988, p. 103).

Lynd (1958) wrote of shame as having several components to its nature. First is the unexpected quality of exposure of self or others involved in experiencing shame. Second is a quality of incongruity, of violating a previous self image, of being inappropriate or of not fitting the expected behavior in a particular situation. Shame is a threat to trust; often destroying it and resulting in doubts concerning one's adequacy or value in the world. Lynd also
suggests one source for this mistrust would be the child's trust in an abusive or indifferent parent, this can lead to withdrawal, impeding the process of identification necessary for identity formation. She also views shame as involving the core sense of identity, pointing out the difficulty of communicating shame.

**Affect Theory**

The affect theorist, Tomkins (1963) developed a theory of nine discreet affects which are seen as having "subcortical programs" controlling facial muscles. The positive affects are interest-excitement and enjoyment-joy. The six negative affects are fear, anger, distress, shame, dismell and disgust. Surprise was seen as a resetting affect. Shame, according to Tomkins (1963, 1987), was activated by the incomplete reduction of interest-excitement or excitement-joy. Broucek (1991), believes there are several contradictions in the work of Tomkins, but acknowledges the importance of Tomkin's contribution, stating that shame results from a break in interpersonal communication, "along with the idea that in the shame response the self remains positively committed to the other or to that part of the self that has created an impediment to communication" (Broucek, 1991, p. 22).

Schneider (1977) related the core of the shame experience to the sense of exposure and visibility. "We experience shame when we feel we are placed out of the
context within which we wish to be interpreted" (Schneider, 1977, p. 35).

Many writers have linked shame to psychological distress. Fisher (1985) viewed shame as central to borderline disorder. Broucek (1982) felt shame was the core affect in narcissistic disorders. Morrison (1983) examined shame's relation to narcissism and self-esteem. Nathanson (1987a) used research data from infant observation, psychoanalytic theory and Tomkins' (1987) affect theory, to outline a developmental timetable for shame. Tomkins views shame as the result of developmentally-learned relationships, and as relating to self esteem and sexuality. He also relates shame directly to psychological stress in the theory of manic depressive illness involving neurophysiological loss of regulation of the affects of interest-excitement and shame.

Kaufman (1985, 1989) also draws on Tomkin's (1963) theory of shame proventing that shame is a result of the incomplete reduction of interest or excitement. Kaufman stresses an interpersonal activator resulting from the breaking of an emotional bond referred to by Kaufman (1989), as an interpersonal bridge, which is based on shared-positive affect, communicative understanding, mutual valuing and respect. Breaking the bond results in the activation of shame. Shame is described by Kaufman (1989) as follows:
Shame is the affect of inferiority. No other affect is more central to the development of identity. None is closer to the experienced self, nor more disturbing. Shame is felt as an inner torment. . . . Shame is a wound made from the inside, dividing us from both ourselves and others. (p.1).

Stipek (1983) believes that shame is a result of failure to meet standards learned from parents and society, pointing out that the negative self-evaluations associated with shame, cannot occur before certain cognitive developments transpire at around the age of two; however she agrees that physiological expressions of shame may be innate.

Scheff (1988) proposes a "deference-emotion system" where the origins of shame are found in social contexts in which failure to perform results in non-deference from others. Shame in this system is a form of social control. To avoid this experience, rigid conforming behaviors are used to control and repress shame. Asch's (1956) study on conformity is interpreted by Scheff as an attempt to avoid the shame of being "different", by overlooking an obvious perceptual error which was endorsed by the majority of subjects. Acceptance by peers, and not being seen as different, was viewed to be more significant than reporting an obvious error.


**Addiction Theory**

Blatt, Rounsaville, Wyre, & Wilber (1984), using the Gottschalk-Gleser Shame Anxiety Scale with opium addicts, gave empirical evidence supporting internalized shame as being an antecedent of alcoholism and drug dependency. Fossum & Mason (1986) describe the intergenerational system common in families as being a situation where addiction and co-addiction regulate interactions among members. Rules of the shame-bound family impose constraints preventing development of personhood. Shame is therefore defined as:

"... an inner sense of being completely diminished or insufficient as a person. It is the self judging the self. ... A pervasive sense of shame is the ongoing premise that one is fundamentally bad, inadequate, defective, unworthy, or not fully valid as a human being" (p. 5).

Addiction and co-addiction are attempts to deal with the pain caused by the shame of feeling unlovable.

Others supporting the ideas of shame as a generational phenomenon, are Bradshaw (1988), Harper & Hoopes (1990) and Patton (1991/1992). In 86 father-adolescent dyads, Patton (1991/1992) found a positive correlation between parental rejection and high levels of shame, and between high levels of shame and high levels of chemical dependency. His data also suggested parental rejection, shame and chemical
dependency reported by a father, were frequently reported by an adolescent within the family's next generation.

Kurtz (1981) relates shame to the fundamental inability to accept one's own human limitations, viewing shame as involving feelings of inadequacy or the failure to achieve perfection or absolute power and control. Persons with shame identities construct a set of false images of self thereby protecting themselves from painful self-awareness of their limitations. This denial of limitation results in alienation from self and from others.

In summary, addictions and compulsions are ways of managing or denying loneliness, hurt, anger, fear or helplessness. Shame then attributes badness to the self for inability to transcend one's own human responses. These responses are experienced as bad, weak or wrong as a result of negative evaluation from parents. When individuals must deny their human affects, needs and the range of their responses to the world, shame thereby results.

Shame and Guilt

Goldberg (1988) compared conscious shame with unconscious guilt as equally potent sources of psychopathology. Guilt was seen as a result of threatening internalized figures from the past; shame as resulting from a "disturbed sense of self" (p. 116). Sandler, Holder & Meers (1963) related guilt as a failure to meet the demands
of introjects, while shame was related as a failure to meet
the expectations of the ideal-self either in one's own eyes
or the eyes of another.

Miller (1989) writes that shame is "aroused when
personal authority is minimal and guilt when it is used
sadistically" (p. 238), thereby distinguishing shame from
humiliation. Shame is a result of specific negative
reflections of self as weak or unimpressive; while
humiliation results when the self is rendered powerless.
Coleman (1985) suggests a human's deepest fear as being that
of powerlessness or vulnerability.

Shame and Self-esteem

Crandall (1973) in writing of self-esteem stated that
"Despite the popularity of self-esteem, no standard
theoretical or operational definition exists" (p. 45).
Patton (1991/1992) points out that the same thing can be
said almost 25 years later, due to varied conceptualizations
of self-esteem. Frey & Carlock (1989) offer the following
definition:

Self-esteem is an evaluative term. It refers to
negative, positive, neutral, and/or ambiguous judgments
that one places on the self-concept. Self-esteem is an
evaluation of the emotional, intellectual and
behavioral aspects of self-concept. Self-esteem is not
self-love, but the evaluation it places on self-concept. (p. 7)

Lewis (1987b) wrote "Shame may be understood as the affective-cognitive state that accompanies low self-esteem" (p. 105). Kauffman (1989) stated that the dynamics of shame and self esteem were invariably the same, stating that issues of "self-concept, self-image, body-image, self-worth, self-doubt, even masculinity and femininity, dissolve into issues of shame" (p.260).

Ursu (1984) suggested shame was unique and differed from low self esteem. In her view shame had more power to explain and predict psychological phenomena. Shame had more predictive power in predicting a social psychological phenomenon in Asch's (1956) study where majority opinion was supported even when it was clearly incorrect. Ursu suggests that the power of shame is enhanced by its interpersonal and intrapersonal characteristic. Since shame, unlike low self esteem is an affect it can be implicated in emotional disorders. Low self esteem has more to do with desirability whereas shame focuses on intensity of affect (Ursu, 1984).

Chang (1989) demonstrated that not only are shame and self-esteem almost perfectly and negatively correlated, but are also parallel in their correlation with outside variables. The shame scale which Chang developed and used is theoretically equivalent to the Internalized Shame Scale.
(ISS), (Cook, 1990), and correlates at the .99 level. Chang's scale correlated -.95 with Rosenberg's Self Esteem Scale (Rosenberg, 1965); and -.94 with the Cheek & Buss (1981) Self-Esteem Scale.

Cook (1991) reports correlations which indicate some convergent validity between shame and self concept but leaves considerable variance unaccounted for. Correlations with the ISS (Cook, 1993), and self-esteem and self-concept measures significant at <.001 ranging from -.52 with the Coopersmith Self-Esteem Scale, to .79 with the ineffectiveness scale on the Eating Disorder Inventory.

Patton (1991/1992) suggests one way to understand the association between shame and self esteem is to consider them as a continuous variable, with high self esteem at one end and high shame at the other. In the middle, shame and low self esteem are overlapping concepts. One of the ways he suggests that these concepts may differ is in the focus of self evaluation. How persons think in considering their own self worth is the focus of self esteem measures, and how persons feel in regard to themselves is the focus when measuring shame. In other words, language of cognition and self evaluation seems to pervade self esteem measures, while the language of affect appears to pervade measures of shame.

In summary, shame has been conceptualized in various ways, but the common theme is the relation of shame to the core sense of the self as being "bad". Psychoanalytic
theory relates shame to the frustration of sexual drive, while the neo-psychoanalysts explore the discrepancy of the ego and ego-ideal; or as Horney (1950) discusses, the tyranny of the idealized self struggling to overcome realistic limitations. Shame results when the needs of the self to be expressed and accepted are frustrated. Affect theorists view shame as a biologically based emotion which is elaborated through experience and cognitive development. Although the affect theorists tend to view shame as a learned emotion, they would consider it a part of identity formation, a powerful force in a human’s life.

Addiction theorists consider shame an important affect addicts must learn to manage. The intergenerational effects of shame are emphasized (Bradshaw, 1988), in an effort to understand these painful feelings of personal inadequacy.

Guilt and low self esteem have been correlated with shame. Guilt has been associated with behavior, while shame is associated with the self (Miller, 1985). Avoiding the experience of shame or experiencing one's own perceived defect is hypothesized as a major contributor to psychological stress. The next section contains a review of literature suggesting a relationship between shame and symptoms of psychological stress.
Psychological Stress

Shame is felt to be a defect of the self; a failure to "measure up" to the values of the ego-ideal; a defect in one's identity representation, resulting from fear of abandonment or rejection. Major effects of shame result from a desire to avoid the overwhelming feeling of shame. Narcissistic disorders result in desires to insulate one's self from painful feelings resulting from acknowledging someone else's reality regarding the self. Borderline disorder, on the other hand, blocks the experience of self, interpreting every interaction in terms of the other person's view of self. Viewing self as worthless and deserving of punishment/death when feelings present which are dissimilar to the idealized other, maintains the borderline's illusion of closeness but keeps him/her bankrupt in terms of genuine intimacy.

The idea that psychopathology is fundamentally rooted in relationships, not in individuals (Sameroff & Emde, 1989), gives a basis for assuming the emotional distress in adults results from early patterned relationships developed, and the inherent affect (Vinsant, 1992). Tomkins defines affect as the "primary innate biological motivating mechanism" providing a model for cognition, decision and action (1987, p. 137). Humans naturally explore, trying to effect positive and negative affects. Kauffman (1989) suggests that mental scenes result from this exploration
serving as prototypes for subsequent interaction. These scenes usually are from childhood, and are based on interactions with parents on whom the child is dependent upon for survival. This sets up a bind for the child of sustaining the relationship at all costs even when his/her needs, impulses or reality must be denied. The other alternative open to the child is to completely avoid the relationship.

Broucek (1991), points to an increasing awareness of the importance of shame as a pathogenic force in the development and maintenance of various clinical disorders. Shame and the defense against it have been suggested as playing a central role in a variety of disorders including depression; manic-depressive illness; schizophrenia; eating disorders; personality disorders; social phobias (Bursten, 1973; Lewis, 1987a, 1987b; Morrison, 1989; Waite-O'Brien, 1991 and Wurmser, 1981), addictions (Bradshaw, 1988, Possum & Mason, 1986; Harper & Hoopes, 1990; Patton, 1991/1992) and sexual perversions (Carnes, 1985; Stoller, 1987). Shame is also intertwined with many affect states as rage, envy, despair, hopelessness, contempt (Morrison, 1989; Wurmser, 1981), vanity, conceit, ambition, pride and recklessness (Broucek, 1982; Nathanson, 1987a).

Since shame, a matter of self, is born in relationship; and since shame has been identified as being associated with many disorders, it is logical to investigate
the early relationship where shame originally developed. Additionally, since shame is implicated as playing a crucial role in complex affective states, and since stable attachments mediate powerful psychological arousal (Coe, Glass, & Winer, 1983; Field, 1985; Reite, Short & Seiler, 1987), it is logical to examine the contribution of attachment to the development of shame and psychological stress.

**Attachment**

Bowlby (1965, 1973a, 1977, 1979, 1980, 1982, 1988), has shown an interest in inherited psychobiological response patterns, sharing this interest with Freud, Klein and Jung. His focus, however, is on patterns involved in forming and sustaining attachment bonds, as opposed to fantasy events, sexual impulses or drives. Bowlby believes that vulnerability results from real events, not fantasy (Gilbert, 1992). "The central factors of Bowlby's theory--disturbances in the development, maintenance and/or termination of attachment bonds--are seen to underlie a variety of psychopathological disturbances" (Gilbert, 1992, p. 288). Gilbert (1989) believes the basic bio-social goal frustrated is care eliciting, with basic biosocial needs being nurturance and safety.

Bowlby (1988) discusses the importance of relationships with primary caregivers in developing early "working models"
of relationship upon which subsequent relationships can be patterned. Parenting consists of providing a secure base from which the child can explore the world, and "to which he can return knowing for sure that he will be welcomed when he gets there, nourished physically and emotionally, comforted if distressed, reassured if frightened" (Bowlby, 1988, p. 11).

Distortions in attachment relationships are the roots of significant conflict between what is needed and what is available. Safarn & Segal (1990) believe that memories of poor parenting may be stored at an affective level. Bowlby (1980) suggests that in the older child conflict can exist as a result of what the parent tells the child about himself/herself as a parent, and how the child actually experiences the parent.

On threat of not being loved or even of being abandoned, a child is led to understand that he is not supposed to notice his parents' adverse treatment of him or, if he does, that he should regard it as being no more than the justifiable reaction of a wronged parent to his (the child's) bad behavior. (Bowlby, 1980, p. 71)

The above relationship pattern leads to shame developing in the child, and affects future ability to form close attachments. Lewis (1971, 1987b) and Nathanson (1987a) agree that shame acts to modulate attachment by
determining the interpersonal effect resulting when one member of a dyad assumes a self-image, responding in a way unjustified by the bounds of the relationship previously agreed on.

Care receiving has equally strong effects on the development of beliefs and attitudes about self. The working models or schema regarding acceptability, lovability, self-esteem, personal competency, power and the availability of support from others, are learned in interactions with others (Gilbert, 1992).

The basic assumptions of attachment theory are summarized by Gilbert (1992). Attachment theory assumes that attachment is instinctive and goal-directed; and that attachment objects provide the secure base from which exploration is possible because this source of encouragement, reassurance, and stimulation is available. Attachment behavior is present throughout all phases of life, and is a source of varied emotional experiences which is not viewed as pathological response or regressive behavior. The intrapsychic processes such as affects, cognitions and behaviors mediating attachment behavior, may only be activated under conditions where the need for nurturance and protective impulses are threatened. There are many manifestations of affect related to making and breaking affectional bonds. Security is experienced when attachment is stable and uninterrupted, whereas anger and/or
anxiety are experienced when attachment bonds are threatened. Depression occurs when there is a severing of bonds and joy when the bonds are re-established.

Bowlby (1977) credits the parent-child relationship with determining subsequent vulnerability, believing it is the capacity to secure and maintain attachment bonds which are crucial to mental health stating:

The key point of my thesis is that there is a strong causal relationship between an individual's experiences with his parents and his later capacity to make affectional bonds, and that certain common variations in that capacity, manifesting themselves in marital problems and trouble with children as well as in neurotic symptoms and personality disorders, can be attributed to certain common variations in the ways that parents perform their roles. (1977, p. 206)

Ainsworth & Whittig (1969) quantified Bowlby's thesis that the emotional development of children was influenced by their interactions with their mother using the "Strange Situation" (Ainsworth, Whittig, 1969). The quality of attachment of the child was found to predict the quality of maternal support and behavioral aspects of the toddler, including enthusiasm, persistence and compliance (Matas, Arent, & Stroufe, 1978). Mothers' reports of nurturance received in their own childhoods predicted the quality of their infant's attachments (Morris, 1980, 1983), suggesting
the generational nature of attachment patterns. Main (Main & Goldwyn, 1984) further explained how relationship patterns are represented and carried forward; substantiating the intergenerational aspect of attachment behavior. Using the Strange Situation, Ainsworth (Ainsworth, M. D. S., Blehar, M., Waters, E., & Wall, S., 1978) specified categories of attachment based on the behavior a child showed when separated from mother and then reunited. The categories were secure, avoidant and anxious/ambivalent. In a longitudinal study, Main, Kaplan, and Cassidy (1985) examined security of attachment five years after Ainsworth (1978) study, finding a link (R = .62) between infant security of attachment and "the security implicit in the mother's internal working model of herself in overall relationship to 'attachment experiences, feelings, and ideation' determined in the Adult Attachment Interview" (Main, Kaplan, & Cassidy, 1985, p. 99). That is, they stated:

To summarize, where parent's own experiences and feelings are not integrated, restrictions of varying types are placed on attention and the flow of information with respect to attachment. These restrictions appear in speech in the form of incoherences and in behavior as insensitivities (p. 100).
Bowlby (1988) describes secure attachment as confident emotional attachment where the other is experienced as psychologically available. Persons who self-report as securely attached, also report relationships characterized by higher levels of satisfaction (Levy & Davis, 1988), interdependence and commitment (Simpson, 1990). Anxious/ambivalent attachment is associated with clinging, neediness and an over-involved and idealized focus on the other person (Feeney & Noller, 1990, 1991; Hazan & Shaver, 1987, 1990). The attachment figure's availability is experienced as inconsistent in those who are anxiously/ambivalently attached, as opposed to being experienced as indications of rejection in those avoidantly-attached (Kobak & Hazan, 1991). A major characteristic of avoidant-attachment is distance (Feeney & Noller, 1990). Other characteristics of avoidantly-attached persons are tendencies to dismiss the importance of close relationships and to avoid acknowledging distress (Kobak & Scree, 1988) along with defensiveness and sensitivity to rejection (Hazen & Shaver, 1987).

Pistole (1989a, 1989b, 1993) found significant differences among attachment styles determined by amount of self-disclosure, comfort with self-disclosure and trust of the partner. These findings were based on a study of 33 males and 65 female undergraduate students. No sex differences were found, which is consistent with previous
research (Hazen & Shaver, 1987), and no ethnic differences were found in the Mexican-American and Caucasian samples. Similar proportions of attachment styles have also been reported with other cross-nationality studies conducted with adults; such as an Australian sample (Feeney & Noller, 1991) and an Israeli sample (Mikulincer, Florian & Tomacz, 1990).

Summary

The constructs of shame, psychological stress and attachment were examined with a focus on psychotherapy clients. Severino, McNutt, & Feder (1987) view shame as the reaction to loss of the idealized-self. They found that the ability to tolerate shame in therapy is correlated with increased autonomy, self esteem, and willingness to delve into the history of these inferiority feelings. This is consistent with the findings of Lewis (1971) concerning field dependence, and with her observations of lack of progress in therapy associated with feelings of shame.

In situations of guilt, amends can be made leading to psychological absolution and subsequent relief. With shame this type of relief is difficult. Lewis (1990) points out that shame, in the case of moral transgression, lingers long after appropriate amends have been made; and the transgression is presumably rectified unless thoughts and feelings carried by shame are acknowledged.
Bowlby (1980) attributes psychological disorders to distorted processes of mourning (Gut, 1989; Pedder, 1982). Bowlby believes loss of self esteem results in sadness, which unacknowledged, leads to depression. The lack of adequate caregiving sensitizes the individual to respond to subsequent loss (especially of attachment bonds) in a pathological way, especially through a change in self evaluation, and/or difficulty in forming adaptive attachments. The vulnerability lies in the cognitive-affective models of self and others, in other words, in working models of attachment. The attachment process therefore is vital in being able to cope with sadness and loss to avoid states of depression or other maladaptive responses.

In summary, attachment is the process of developing a model for relationship building permitting self to be valued, and to experience the safety needed for exploration and development. Since the development of this relationship involves a learning not only about the other but about the self, an attachment relationship serves as a base from which a core self can develop. A strong core self enables a person to experience shame feelings without being defined by them.

When a model for secure attachment is not achieved, a shame identity is more likely, accompanied by symptoms of psychological stress. The models in the current research
were designed to add empirical evidence to shame as developing out of the relationship with attachment figures and to shame’s role as resulting in psychological stress.

Chapter II has presented the notation for the three models and reviewed literature of the latent variables—shame, psychological stress and attachment. Chapter III presents methodology utilized for implementing the research. Chapter IV presents the findings and Chapter V summarizes the research and provides conclusions as well as recommendations for future research.
CHAPTER III

METHODOLOGY

This chapter includes a description of the methods used in data collection and statistical analysis. The first three sections contain a description of the research setting, sample and research design. Following these sections is an explanation of instruments utilized in the study, and a description of data collection procedures and statistical analysis.

Research Setting

Current research was conducted at 23 private outpatient psychotherapy practices, each under the supervision of an Ohio licensed psychologist. All practices were from the geographical area of Franklin County, including the City of Columbus, Ohio and surrounding suburbs. Columbus is a midwestern city with a population of 650,000 people. The city is located in the metropolitan area of Franklin County which had a population of 961,437 as reported in the 1990 census. Columbus is Ohio's capitol with a diverse mix of business, government, scientific, educational and cultural centers.
Sample

Subjects in this study were 336 adult outpatient psychotherapy clients between the ages of 19 and 67. Subjects were clients who were willing to complete the packet and were in treatment at private psychotherapy practices in Franklin County including the Columbus metropolitan area.

Research Design

Structural-equation modeling of covariance matrices (Jöreskog & Sorbom, 1989), was employed to test three a priori models of attachment, shame and psychological stress for the purpose of determining which model provided the best explanation for the data. These procedures included construction of a structural model [as described and illustrated in Chapter I (Figure 1)] of the theoretical relationships postulated between latent variables. Measures were selected as indicators of the latent variables, and together with their effects on the latent variables and error terms are referred to as the measurement model. Structural-equation modeling is attractive because it permits the integration of the factor analysis or measurement model and the regression coefficient or path analysis, structural model. Together the structural and the measurement model are referred to as the structural-equation model (Romney & Bynner, 1992). The statistical program,
LISREL (Jorskog and Sorbon, 1989), was employed to test the fit of models to the data from the population sample.

**Instruments**

The instruments employed in this research as indicators of latent variables in the measurement portion of the structural-equation model, included the Parental Bonding Instrument (PBI), the Internalized Shame Scale (ISS) (Appendix A) and the Brief Symptom Index (BSI). Demographic data were obtained by use of the Personal Data Form (PDF) (Appendix B). A description of each instrument is provided.

**Parental Bonding Instrument**

The Parental Bonding Instrument (PBI) (Parker, Tupling, and Brown, 1979) was developed based on Bowlby's (1977) idea which theorized disturbed patterns of parental bonding can have a significant impact on the psychosocial development of a child which can then lead to a higher risk of psychopathology. A 25-item, 4-point Likert scale is used to rate maternal and paternal attitudes and behaviors from "very like her/him" to "very unlike her/him", based on the respondent's memory of his/her first 16 years. Each of the 25 items is answered for the mother, and then for the father or primary caretaking persons.

Two dimensions of parenting identified by Parker (1979b), as contributors to parental bonding and measured by the PBI, are caring and protection. The items on care
"define a parental style that may range from one of affection, emotional warmth, empathy, and reciprocity to one of coldness, indifference, and neglect" (Parker, 1983a, p. 112). Protection items "suggest a dimension ranging from parental control, overprotection, intrusion and infantilization, to parental allowance of independence and the development of autonomy" (Parker, 1983a, p. 112).

Examples of items measuring care are "spoke to me in a friendly voice" and "seemed emotionally cold to me". Protection items include "let me go out as often as I wanted" and "did not want me to grow up" (Parker, 1983a, p. 288-189).

Parker developed a conceptual model of parental bonding based on the care and protection scores utilizing combinations of high and low scores which reflect four styles of parenting. A high-care, low-protection score was defined as "optimal bonding"; high-care, high-protection as "affectionate constraint"; low-care, high-protection as "affectionless control"; and low-care, low-protection as "neglectful parenting" (Parker, 1983a; Parker, Tupling & Brown, 1979).

Using a clinical population Parker (1981), demonstrated test-retest reliability correlation coefficients ranging from .87 to .92. During the development of the original instrument (Parker, Tupling & Brown, 1979), test-retest reliability for a non-clinical population yielded a Pearson
correlation coefficient for the care score of .76 (p < .001), and for the protection score of .63 (p < .001). On a measure of split-half reliability, the Pearson correlation coefficients were .88 (p < .001) for the care score and .73 (p < .001) for the protection score.

The PBI care and protection scores of subjects have been found to correlate significantly with scores by family observers, and by raters supporting the validity of the PBI as a measure of actual as well as perceived parental characteristics (Parker, 1979a, 1981, 1983a). Joint interviews were held with 65 of the original sample; and each of the two raters assigned a care and a protection score for each parent. The inter-rater reliability coefficient on the care scores were .85, and on the protection scores, .69. Concurrent validity was determined by comparing the raters' score during the interview with the scores. On the care dimension, the raters' Pearson correlations were .77 and .78, and on the protection dimension, .48 and .51 (Parker, 1979a). Results of the PBI were shown to be resistant to the effects of current mood state (Parker, 1981). Studies supported the PBI as a useful measure for assessing disturbed bonding as a risk factor for depression, anxiety and hypochondriasis (Parker, 1983b).

The Parental Bonding Instrument is used with permission from Gordon Parker, Professor of Psychiatry, The University
of New South Wales. The address is Box 1, Kensington, New South Wales, Australia, 2033.

**Internalized Shame Scale**

The Internalized Shame Scale (ISS) (Cook 1990) is a self-administered, 30-item scale designed to measure the extent to which individuals have internalized a shame identity. The 30 statements are rated on a five point scale from "never" to "almost always" and is scored 0-4, respectively. The shame score is determined by adding the numerical scores on the 24 negatively worded items. The remaining six items, items numbered 4, 9, 14, 18, 21 and 28; (see Appendix A), are positively worded self esteem items, and are included to minimize the response set. Therefore, these six items are not included in the data analysis of the present research.

Reliability studies were conducted by Cook (1993), using a non-clinical college student sample of 645 subjects, to establish the alpha reliability of the ISS. Alpha scores were .95 for shame and .90 for self esteem. A second sample, including 370 subjects diagnosed as alcohol dependent, as depressed, along with other psychiatric and eating disorders, producing an alpha of .96 for the shame scale (Cook, 1993). Test-retest reliability coefficients over a nine week period were .84 for the shame scale, and .71 for the self esteem scale, based on 44 graduate students (Cook, 1993).
Since shame is in the domain of the self it would be predicted there would be overlap in measurement of self concept and self esteem measures, and measures such as anger, depression and self derogation (Cook, 1993). The correlations between the ISS and various measures of self esteem show convergent validity with self esteem, but also leave variance unaccounted for. Correlation with the Tennessee Self Concept Scale (TSCS) is -.66 with N=116, the Coopersmith -.52 with N=92, the Janis Field Feelings of Inadequacy Scale (JFFIS) -.77 with N=186, and on the Rosenberg Self Esteem Scale (RSES) -.74 with N=85. The shame scale score also correlates .75 with the Multi-score Depression Inventory (MDI) based on a sample of 193 and .79; with the ineffectiveness scale on the Eating Disorders Inventory (EDI), N=113 (Cook, 1993).

In a study of 193 college students, construct validity between the ISS shame score and the total score on the MDI was .75 and -.59, with the self-esteem subscale (Cook, 1993). Two studies were conducted with clinical samples. One study of 108 male psychiatric patients at a VA hospital utilized the Beck Depression Inventory (BDI), the ISS and the RSES. The BDI correlated .66 with shame for the total group, and the RSES -.61 with shame for the total group. In the second study of 25 male and 53 female outpatient clients at a psychiatric clinic, the ISS correlated .79 with the BDI.
The clinical samples in the above studies were combined to determine the relationship of the ISS and severity of depression based on the BDI scores (Cook, 1993). The mean ISS score for each level of depression was as follows: None = 29.10, Mild depression = 41.65, Moderate depression = 61.12, and Severe depression = 68.95. This study shows that shame levels tend to vary with levels of depression.

The shame scale total was also correlated with anxiety, as measured by the State Trait Anxiety Inventory (STAI). Shame correlated .79 with State anxiety, and .68 with Trait anxiety using a sample of 44 college students and adults. With an adolescent inpatient chemically dependent sample the correlation was .83 with State anxiety and .91 with Trait anxiety (Cook, 1993).

The Internalized Shame Scale is included in Appendix A. It is available from Channel Press, Rt. 7, Box 270A, Menomonie, WI 54751.

**Brief Symptom Inventory**

The Brief Symptom Inventory (BSI) is a 53-item self-report symptom inventory designed by Derogatis (1975/1993, 1992) to measure symptoms of psychological distress. The BSI is the brief form of the Symptom Check List (SCL-90-R) also developed by Derogatis to assess psychological symptom status. Examples of symptoms included in the items are pains in the heart or chest, poor appetite, feelings of
being easily annoyed, hot or cold spells, getting into frequent arguments and feelings of fear.

As in the SCL-90-R, the BSI has three global indices representing summary measures of psychological disorder. "The General Severity Index (GSI), combines information on numbers of symptoms and intensity of distress, while the Positive Symptom Total (PST), reflects only numbers of symptoms: the Positive Symptom Distress Index (PSDI) is a pure intensity measure adjusted for numbers of symptoms" (Derogatis, 1975, p.1). The three global measures have been shown to correlate, but have also shown distinct aspects of psychopathology (Derogatis, Yevzeroff & Wittelsberger, 1975). It has been suggested that "the GSI is the single best indicator of current distress levels, and should be utilized in most instances where a single summary measure is required" (Derogatis & Melisaratos, 1983, p. 597).

The BSI reflects the nature of psychopathology with nine primary symptom dimensions: Somatization (SOM), Obsessive-Compulsive (OBC), Interpersonal Sensitivity (IPS), Depression (DEP), Anxiety (ANX), Hostility (HOS), Phobic Anxiety (PAX), Paranoid Ideation (PID) and Psychoticism (PSY). These measures were employed in the present study to give the most complete picture of psychological distress.

Reliability estimates for the BSI were established by examining internal consistency and test-retest coefficients. Using a sample of 1,002 out-patients Chronbach's Alpha
coefficients for all nine dimensions ranged from a low of .71 on the psychoticism dimension to a high of .85 for depression (Derogatis & Melisaratos, 1983). Test-retest stability coefficients were derived using a population of sixty non-patient subjects with testing conducted at a two week interval. The test-retest reliability coefficients for the nine symptom categories generated from BSI data on a sample of non-patient subjects tested at a two week interval are as follows: somatization (SOM) = .68, obsessive compulsive (OBC) = .85, interpersonal sensitivity (IPS) = .85, depression (DEP) = .84, anxiety (ANX) = .79, hostility (HOS) = .81, phobic anxiety (PAX) = .91, paranoid ideation (PID) = .79 and psychoticism (PSY) = .78. For the GSI the reliability coefficient was .90 which indicates it is reliable over time (Derogatis & Melisaratos, 1983).

Validity was based on a study which involved a sample of 209 symptomatic volunteers which demonstrated convergent validity with the SCL-90-R and the Minnesota Multiphasic Personality Inventory (MMPI) (Derogatis & Melisaratos, 1983). Since the 53 items of the BSI are contained in the SCL-90-R the data were re-analyzed using the BSI items and the MMPI (Dahloom, 1969), the Wiggins Content Scales of the MMPI (Wiggins, 1966), and the Tyron Cluster Scores (Tryon, 1966). Correlation coefficients ranged from .32 on psychoticism to .55 on interpersonal sensitivity. Correlation coefficients remained similar to the SCL-90-R
with the exception that on four of the symptom dimension scales there was a .10 reduction and on two others a reduction of .15.

Derogatis & Melisaratos (1983) reports that Kremer & Atkinson (1981), using chronic pain patients demonstrated high convergent validity for the BSI and a number of other scales designed to predict affective status. The predictive value of the BSI in a counseling center population was also found to be high by Peterson, Hogue, Kafer, Matthews, Pfeifle, & Van Heuse (1981).

The Brief Symptom Inventory is available from National Computer Systems, Inc. The address is Box 1416, Minneapolis, MN 55440.

**Personal Data Form**

The Personal Data Form (PDF) was created by the present researcher to provide demographic data (age, sex, marital status, education level, religious affiliation, income level, occupation, length of time in therapy and major issues which have been the focus of therapy). Items 10 to 21 are based on the Family of Origin Questions in the 1986 Version of the Internalized Shame Scale (Cook, 1987a). These items are designed to assess each parent's substance abuse, whether either parent died, parent's marital status and whether foster care was needed during the first 18 years of the subject's life. Three Likert-scale type items were also included to indicate the degree to which a subject felt
happy, secure and loved in the family. The next set of items inquired about birth order, number of children and friends, changes experienced in the last year, and types of abuse or addictions the respondent experienced. The PDF followed the cover letter, and preceded the other instruments in the mailed packet. It is included in Appendix B.

**Data Collection Procedures**

The first step was to gain the approval of the Human Subjects Review Committee at The Ohio State University (see Appendix C). Following this approval, 29 licensed psychologists in Franklin County were contacted by telephone, informed of the study, and asked if they would participate by having their current psychotherapy clients and those treated under their direct supervision respond to the four instruments in the instrument packet. Of the psychologists contacted 26 agreed to participate and including 22 persons supervised by those psychologists made a total of 48 therapists who participated in the study. The outpatient psychotherapy practices were selected on the basis of the psychologist supervising the practice being known to the researcher. Since there was no direct follow-up procedure for non-respondents in order to guarantee anonymity to those who did respond, the cooperation of the therapists was maximized by eliciting the
largest response possible. The Columbus and Vicinity Yellow Pages (1993-94) lists 232 private practice psychologists in this central Ohio area.

Forty-eight therapists were invited to give research packets to each different client with whom they had a session during a two week period. Forty-three therapists, (26 psychologists and 22 therapists supervised by participating psychologists) from areas of Franklin county including the city of Columbus agreed to participate. Geographical representation was attempted and accomplished with the exception of the southern portion of Franklin County.

If the therapist was willing to invite subject participation, a cover letter (see Appendix D), an instruction to therapists sheet (see Appendix E) and an appropriate number of packets was delivered to him/her by the researcher. Therapists were told if they participated they would be provided a research finding summary.

Clients were asked to participate in the study by their therapist, and were told that participation was voluntary. A population numbering approximately 1,000 were asked by therapists to complete the research packet. Packets containing a cover letter detailing the study (see Appendix F); the PDF; the PBI; the ISS; and the BSI were given by therapists to subjects willing to participate. The sequence of these four instruments was randomly ordered as suggested
by Gay (1976), to control for instrument effects. The instructions to subjects were to complete the questionnaires in the order presented, and return them in the addressed, stamped envelope to the researcher. Subjects were also asked to return partially completed forms, if they should at any point decide not to complete in the study. Of the 1,000 packets sent, 378 (37.8%) were returned; 17 (1.7%) were returned blank, and an additional 25 (2.5%), were unusable due to one or more of the instruments not being completed. Copies of research packet materials are provided in Appendices A, B and F.

The researcher provided a thank you/reminder letter (see Appendix G), which was given to subjects by their therapists one week after receiving the initial packet. This follow-up procedure was designed to protect each client's identity.

**Statistical Analysis**

The present research was designed to compare three models of relationships among attachment, shame and psychological stress. Shame was hypothesized to be the transmitter of effects of the attachment disruption on psychological stress experienced in adults. Since most theories and models in the social and behavioral sciences are based on latent variables which cannot be directly observed, it was postulated they could be inferred by
measures or indicators on which they have an effect. The models in the present research are Model A (Figure 3), which indicates a hypothesized relationship between attachment and psychological stress; Model B (Figure 4), which includes shame as a mediating variable between attachment and psychological stress; and Model C (Figure 5), which considers the relationships simultaneously. The indicators of attachment were maternal and paternal care and protection measured by the PBI (Parker, Tupling & Brown, 1979). The indicator of shame was the internalized shame scale score of the ISS (Cook, 1993). Psychological stress was indicated by measures of somatization, obsessive-compulsion, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation and psychoticism on the BSI (Derogatis, 1975/1993). These indicators, along with the latent variables and error terms of each, were considered in analyzing how well the models fit the data.

The LISREL 7 (Joreskog and Sorbom, 1989) statistical analysis program was used in the analysis of the data. The LISREL model is composed of a measurement model and a structural model. Jorskog and Sorbon (1989), state:

The measurement model specifies how the latent variables or hypothetical constructs are measured in terms of the observed variables, and it describes the measurement properties (validities and reliabilities)
MODEL A

Figure 3. Structural-equation model A hypothesized for attachment and psychological stress.

$\text{ATT (}\xi) =$ attachment, $\Psi ST (\eta)$ = psychological stress, $\text{MC (X}_1) =$ mother care, $\text{FC (X}_2) =$ father care, $\text{MP (X}_3) =$ mother protection, $\text{FP (X}_4) =$ father protection, $\text{SOM (Y}_1) =$ somatization, $\text{OBC (Y}_2) =$ obsessive compulsion, $\text{IPS (Y}_3) =$ interpersonal sensitivity, $\text{DEP (Y}_4) =$ depression, $\text{ANX (Y}_5) =$ anxiety, $\text{HOS (Y}_6) =$ hostility, $\text{PAK (Y}_7) =$ phobic anxiety, $\text{PID (Y}_8) =$ paranoid ideation, $\text{PSY (Y}_9) =$ psychoticism, $\gamma =$ path between independent and dependent latent variable, $\lambda =$ paths between measured variables and latent variables, $\delta =$ error for independent measured variables, $\varepsilon =$ error for dependent measured variables, $\zeta =$ error for dependent latent variable.
MODEL B

Figure 4. Structural-equation model B hypothesized for attachment, shame and psychological stress.

ATT ($\xi$) = attachment, SHA ($\eta_1$) = shame, PST ($\eta_2$) = psychological stress, MC ($X_1$) = mother care, FC ($X_2$) = father care, MP ($X_3$) = mother protection, PP ($X_4$) = father protection, ISS ($Y_1$) = shame score, SOM ($Y_2$) = somatization, OBC ($Y_3$) = obsessive compulsion, IPS ($Y_4$) = interpersonal sensitivity, DEP ($Y_5$) = depression, ANX ($Y_6$) = anxiety, HOS ($Y_7$) = hostility, PAX ($Y_8$) = phobic anxiety, PID ($Y_9$) = paranoid ideation, PSY ($Y_{10}$) = psychoticism, $\gamma$ = path between independent and dependent latent variables, $\beta$ = path between dependent latent variables, $\lambda$ = paths between measured variables and latent variables, $\delta$ = error for independent measured variables, $\epsilon$ = error for dependent measured variables, $\zeta$ = error for dependent latent variables.
MODEL C

Figure 5. Structural-equation model C hypothesized for attachment, shame and psychological stress.

ATT ($\zeta_1$) = attachment, SHA ($\eta_1$) = shame, $\psi$ST ($\eta_2$) = psychological stress, MC ($X_1$) = mother care, FC ($X_2$) = father care, MP ($X_3$) = mother protection, FF ($X_4$) = father protection, ISS ($Y_1$) = shame score, SOM ($Y_2$) = somatization, OBC ($Y_3$) = obsessive compulsion, IPS ($Y_4$) = interpersonal sensitivity, DEP ($Y_5$) = depression, ANX ($Y_6$) = anxiety, HOS ($Y_7$) = hostility, PAX ($Y_8$) = phobic anxiety, PID ($Y_9$) = paranoid ideation, PSY ($Y_{10}$) = psychoticism, $\gamma$ = path between independent and dependent latent variables, $\beta$ = path between dependent latent variables, $\lambda$ = paths between measured variables and latent variables, $\delta$ = error for independent measured variables, $\varepsilon$ = error for dependent measured variables, $\zeta$ = error for dependent latent variables.
of the observed variables. The structural equation model specifies the causal relationships among the latent variables, and additionally, describes the causal effects and amount of unexplained variance.

(p.2)

The measurement model and the structural equation model are based on matrix algebra. Matrices specify the relationships among the latent variables, measured variables and error terms. These matrices are then used to construct the structural and measurement equations.

The structural model is expressed algebraically as follows:

\[ \eta = \beta \eta + \Gamma \xi + \zeta, \]

where \( \eta \) = an \((r \times 1)\) column vector of endogenous (dependent) latent variables,

\( \xi \) = an \((s \times 1)\) column vector of exogenous (independent) latent variables,

\( \zeta \) = an \((r \times 1)\) column vector of errors in equations,

\( \beta \) = an \((r \times r)\) matrix of coefficients relating the endogenous latent variables to one another,

\( \Gamma \) = an \((r \times s)\) matrix of coefficients relating the exogenous and endogenous latent variables.
The structural model, then, "specifies the causal relationships among the latent variables and describes the causal effects and the amount of unexplained variance" (Jorskog and Sorbon, 1989, p. 2). The relationships of exogenous latent variables on endogenous latent variables are represented in the models by $\gamma$. The relationships of endogenous latent variables on other endogenous latent variables are represented in the models by $\beta$. The errors in equations are residuals that can be random error or the result of influences not accounted for in the model. Errors of endogenous latent variables are represented by $\zeta$.

The measurement model consists of two algebraic equations. One equation is for the independent measured variables or $x$ variables which are indicators for the exogenous latent variables. The second is an algebraic equation for the dependent measured variables or $y$ variables which are indicators for the endogenous latent variables. Error terms are represented by $\delta$ for the $x$ variables and by $\epsilon$ for the $y$ variables.

\[ [2] \quad x = \Lambda x \xi + \delta \]
\[ [3] \quad y = \Lambda y \eta + \epsilon \]

where $x$ = a $(q \times 1)$ column vector of independent measured variables,
\[ \Lambda x = a (q \times s) \text{ matrix of loadings of the } x's \text{ on the } \eta's, \]
$\delta = a \ (q \times 1) \ column \ vector \ of \ errors \ in
\ measurement \ affecting \ x \ variables,$

$y = a \ (p \times 1) \ column \ vector \ of \ dependent \ measured
\ variables,$

$\Lambda y = a \ (p \times r) \ matrix \ of \ loadings \ of \ the \ y's \ of
\ the \ \xi's,$

$\epsilon = a \ (q \times 1) \ column \ vector \ of \ errors \ measurement
\ affecting \ the \ y \ variables, \ and \ vectors \ \xi \ and
\ \eta \ as \ defined \ previously.$

The structural and measurement equations for the models of
attachment, shame and psychological stress are presented in
Table 1.

Four additional matrices are defined to complete
specification of the LISREL model and several assumptions
are made. The four matrices are as follows:

$\Phi = E( \xi \ xi' ) \ is \ a \ (s \times s) \ matrix \ of \ variances
\ and \ covariances \ among \ the \ exogenous \ latent
\ variables,$

$\Psi = E( \zeta \ zeta' ) \ is \ a \ (r \times r) \ matrix \ of \ variances
\ and \ covariances \ among \ the \ errors \ in
\ equations,$

$\delta = E( \delta \ \delta' ) \ is \ a \ (q \times q) \ matrix \ of \ variances
\ and \ covariances \ among \ the \ errors \ of
\ measurement \ in \ the \ x's, \ and
### Table 1

**Structural and Measurement Equations for Models of Attachment, Shame and Psychological Stress**

**Equation**

**Structural**

1. \( \text{SHA} = \gamma_{11} (\text{ATT}) + \zeta_1 \)
2. \( \Psi_{ST} = \beta_{21} (\text{SHA}) + \gamma_{21} (\text{ATT}) + \zeta_2 \)

**Measurement**

1. \( x_1 = \lambda_{x1} (\text{MC}) + \delta_{x1} \)
2. \( x_2 = \lambda_{x2} (\text{FC}) + \delta_{x2} \)
3. \( x_3 = \lambda_{x3} (\text{MP}) + \delta_{x3} \)
4. \( x_4 = \lambda_{x4} (\text{FP}) + \delta_{x4} \)
5. \( y_1 = \lambda_{y1} (\text{ISS}) + \epsilon_{y1} \)
6. \( y_2 = \lambda_{y2} (\text{SCM}) + \epsilon_{y2} \)
7. \( y_3 = \lambda_{y3} (\text{OBC}) + \epsilon_{y3} \)
8. \( y_4 = \lambda_{y4} (\text{ISN}) + \epsilon_{y4} \)
9. \( y_5 = \lambda_{y5} (\text{DEP}) + \epsilon_{y5} \)
10. \( y_6 = \lambda_{y6} (\text{ANX}) + \epsilon_{y6} \)
11. \( y_7 = \lambda_{y7} (\text{HOS}) + \epsilon_{y7} \)
12. \( y_8 = \lambda_{y8} (\text{PAX}) + \epsilon_{y8} \)
13. \( y_9 = \lambda_{y9} (\text{PID}) + \epsilon_{y9} \)
14. \( y_{10} = \lambda_{y10} (\text{PSY}) + \epsilon_{y10} \)

\( \text{ATT} = \) attachment, \( \text{SHA} = \) shame, \( \Psi_{ST} = \) psychological stress, \( \text{MC} = \) mother care, \( \text{FC} = \) father care, \( \text{MP} = \) mother protection, \( \text{FC} = \) father protection, \( \text{ISS} = \) shame, \( \text{SCM} = \) somatization, \( \text{OBC} = \) obsessive-compulsive, \( \text{ISN} = \) interpersonal sensitivity, \( \text{DEP} = \) depression, \( \text{ANX} = \) anxiety, \( \text{HOS} = \) hostility, \( \text{PAX} = \) phobic anxiety, \( \text{PID} = \) paranoid ideation, \( \text{PSY} = \) psychoticism.
\[ \Theta \epsilon = \mathbf{E}(\epsilon \epsilon') \] is a \((p \times p)\) matrix of variances and covariances among the errors of measurement in the \(y\)'s.

The LISREL model is based on four assumptions. First, all variables in the model are assumed to be measured as deviations from their means. Second, the latent variables are assumed to be uncorrelated with the errors in measurement. Third, the measurement errors and errors in equations are assumed to be uncorrelated across equations. Finally, all independent latent variables are assumed to be uncorrelated with the errors in equations.

The models were evaluated for goodness of fit by examining chi-squares (Joreskog and Sorbom, 1989), the goodness of fit index (GFI) (Tanaka and Huba, 1985), and the root mean square of approximation (RMSEA) (Browne & Mels, 1992).

**Summary**

Chapter III presents the research methodology. A description of the research sample is presented followed by a description of the research setting and the design of the study. The instruments used are described as well as the procedures used in data collection. Finally, the statistical procedures are explained and related to the models tested.
CHAPTER IV
RESEARCH FINDINGS

The purpose of this study was to determine the structure of the relationships among attachment, shame and psychological stress. Three a priori causal models of attachment, shame and psychological stress were tested to determine whether shame is a mediating variable between attachment and psychological stress.

In the models, maternal and paternal care and protection, measured on the Parental Bonding Instrument (PBI), were the indicators of the exogenous latent variable, attachment, postulated to predict shame. The Internalized Shame Score (ISS) shame score was used as a perfect indicator of the endogenous latent variable, shame, postulated to predict the second endogenous latent variable - psychological stress. Indicators of psychological stress were somatization, obsessive compulsion, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation and psychoticism scores on the Brief Symptom Inventory (BSI).

In order to clarify the roles of attachment and shame in predicting psychological stress three a priori models
were compared. Model A included the effect attachment has on psychological stress. Model B included shame as an intervening variable between attachment and psychological stress. Model C examined both relationships in the same model which allowed the paths to compete in order to determine whether shame mediated the effect of attachment on psychological stress.

This chapter is divided into four sections, with the first section providing descriptive data on the sample. The second section contains a presentation of the results by the overall research hypothesis and the three sub-hypotheses. In addition the results of goodness-of-fit measures of the models are reported. The last two sections include a discussion of the findings followed by a summary of the findings.

Results are based on 336 outpatient psychotherapy clients in the Columbus Metropolitan Area. Of the 1,000 packets passed out to clients by their therapists, 378 (37.8%) were returned. Of these 17 (1.7%) were returned blank, and 25 (2.5%) with missing data critical to the structural equation model. The remaining 336 (33.6%) packets were used in the analysis. The findings reported were generated by the computer program LISREL VI developed by Joreskog and Sorbom (1984). The primary purpose for selecting this program was its ability to assess the fit between a proposed causal model and data from a population.
Description of the Sample

Descriptive information were collected from the sample using the Personal Data Form (PDF). Data were analyzed based on 336 respondents consisting of 243 (72.3%) females, and 93 (27.7%) males. A profile of the sample is presented giving sex, age, ethnic/racial identification, marital status, highest level of education, religious preference, income level and participation in recycling. Included in the demographic profile are items relating to the respondent's birth family, parents' addiction, death of a parent prior to 18 years of age, stress experienced in the last year, abuse experienced, addictions and frequency of therapy sessions. The demographic responses are summarized in Table 2 by frequency and percent.

Age

The mean age of the sample was 40 years. The range of ages represented in the actual sample was 19 to 67. Persons 30-39 years old comprised 37.8% of the sample, and an additional 36.0% were 40-49 years old. The decades 19-29 and 50-59 were equally represented, with 11.9% and 11.6%, of the total sample. According to the 1990 statistics released by the U. S. Department of Commerce Bureau of the Census (Bureau of Census, 1990a), there were 649,183 persons ages 19-70 in Franklin County. Of this, 32.9% were ages 19-29; 32.9% were ages 30-39; 26.6% were ages 40-49; 11.9% were ages 50-59; and 10.5% were ages 60-69 (see PDF item 1).
### TABLE 2

Self Reported Sample Demographics as Measured by the Personal Data Form by Frequency and Percent

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<th>Variable</th>
<th>f</th>
<th>%</th>
<th>cum. %</th>
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<td></td>
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<tr>
<td>Male</td>
<td>93</td>
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<td>27.7</td>
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<tr>
<td>Female</td>
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<tr>
<td><strong>Age</strong></td>
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<td>19 - 29</td>
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<td>11.9</td>
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<td>30 - 39</td>
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<td>1.8</td>
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Religious Preference

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Income Level

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Do you recycle?

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Paternal Substance Abuse

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<td>Very untrue</td>
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Maternal Substance Abuse

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<td>Very untrue</td>
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Birth Order

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<td>Eldest Child</td>
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<td>A Middle Child</td>
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Number of Children

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<tr>
<td>Two or Three</td>
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<td>Four or more</td>
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<td>Number of Genuine Friends</td>
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<td>------</td>
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<td>Four or more</td>
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<td>Death of Significant Person in Past Year</td>
<td>Yes</td>
<td>83</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>253</td>
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<tr>
<td>Loss of Significant Relationship in Past Year</td>
<td>Yes</td>
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</tr>
<tr>
<td></td>
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<td>Change in Economic Situation in Past Year</td>
<td>Yes</td>
<td>183</td>
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<tr>
<td></td>
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<td>Change in Number in Household in Past Year</td>
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<td>Serious Illness in Past Year</td>
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<td>Sexual Abuse</td>
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Addiction Problem with:

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<td>83.9</td>
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<td>16.1</td>
<td>100.0</td>
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Prescription Drugs

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<td>315</td>
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Illegal Drugs

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<th>Yes</th>
<th>No</th>
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<tr>
<td>Yes</td>
<td>15</td>
<td>321</td>
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Food

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<td>208</td>
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Sex

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Therapy Frequency

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<th>Every other week</th>
<th>Other</th>
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<td>17</td>
<td>101</td>
<td>66</td>
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<td>45.2</td>
<td>5.1</td>
<td>30.1</td>
<td>19.6</td>
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<tr>
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<td>50.3</td>
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Length of Time in Therapy

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<thead>
<tr>
<th>One month or less</th>
<th>Two to three months</th>
<th>Three months to one year</th>
<th>Between one and two years</th>
<th>Between two and three years</th>
<th>Over three years</th>
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<tbody>
<tr>
<td>17</td>
<td>29</td>
<td>82</td>
<td>69</td>
<td>49</td>
<td>90</td>
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<td>5.1</td>
<td>8.6</td>
<td>24.4</td>
<td>20.5</td>
<td>14.6</td>
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N = 336
Sex

As previously stated data were analyzed based on 336 respondents consisting of 243 (72.3%) females, and 93 (27.7%) males. The Bureau of the Census in 1990 (Bureau of Census, 1990a) reports Franklin County as having 497,795 (51.8%) females and 463,642 (48.2%) males (see PDF item 2).

Ethnic/Racial Identification

Caucasians comprised 94.6% of the sample. Other racial groups represented were African Americans (1.8%); Native Americans (1.5%); Hispanic Americans (.6%); and Asian Americans (1.2%). According to the 1990 statistics released by the U. S. Department of Commerce Economics and Statistics Administration Bureau of the Census (Bureau of Census, 1990a), the racial representation of Franklin County was 81.5% Caucasian; 15.9% African American; 0.2% Native American; 1% Hispanic American; and 2% Asian American (see PDF item 3).

Marital Status

Married persons represented 46.4% of the sample including those who had remarried following death of a spouse, or a divorce. An additional 8.6% cohabitating would increase this group of persons living with a partner to 55%. Single persons accounted for 22.6% of the sample, or 45% when widowed, divorced and separated singles were also included. For comparison, the 1990 Census (Bureau of
Census, 1990a) in Franklin County reported 39.4% married; 24.8% single; 1.7% separated; 4.8% widowed; and 8% divorced for persons ages 15 and over (see PDF item 4).

**Highest Level of Education**

Ninety-eight percent (98.2%) reported having at least a high school diploma. Those holding a Bachelor's degree or higher, accounted for 63.0%. These figures are higher than those reported in the Bureau of the Census-Selected Social Characteristics (Bureau of Census, 1990b): 1990 Franklin County of 81.0% high school graduates and 26.6% bachelor's degree or higher (see PDF item 5).

**Religious Preference**

Protestants accounted for 48.2% of the sample, with Catholics representing 23.5% and Jewish people 1.5%. Nineteen percent (19.1%) of the sample reported no religious affiliation, and 7.7% indicated religious practices other than those specified. According to the Ohio Council of Churches Report of Church Membership by Denomination (Ohio Council of Churches, 1990) for Franklin County the percentages were Protestants 26.9%; Catholics 11.9%; Jews 1.1%; and others 1.3%. These data are based on the population of Franklin County, and reflect the 41.9% holding membership in religious denominations (see PDF item 6).
**Income Level**

Fifty one percent of the sample reported they had income of $20,000 to $50,000 yearly. An additional 13.4% fell within the $10,000 to $19,000 range; 17.6% in the $50,000 to $74,999 range; and 4.8% indicated they had income of $75,000 to $99,999. Those with income levels below $10,000 represented 8.6% of the sample, and those whose income was $100,000 or above was 4.2%. In comparison, the Bureau of the Census-Selected Social Characteristics (Bureau of Census, 1990b): 1990 Franklin County figures based on a sample of 379,240 households in Franklin County indicated that 13.8% had incomes of less than $10,000, and 3.6% had income of more than $100,000. The data from Franklin County also revealed 61.8% with income in the $10,000 to $49,999 range, compared with 64.9% of the sample; and 15.0% in the $50,000 to $75,000 range, compared with 17.6% of the sample (see PDF item 9).

**Recycle**

Over two-thirds (68.8%), of the sample reported recycling; while 31.2% indicated they do not recycle. The definition of recycling was not specified in the Personal Data Form thus the results are based on the interpretation of the individual respondents. This item was included as a measure of social-consciousness (see PDF item 7).
Parental Substance Abuse

Forty-one percent (41.4%) indicated substance abuse by their father during the years 1-18 years old (see PDF items 14-15). Substance abuse by their mother during the same period was indicated by 19.3% of the sample.

Birth Order

First-born children comprised 44.9% of the sample; of the 151 first-born children, 26 (7.7%) of the sample were an only child. Middle children represented 28.9%; and youngest children 26.2% of the sample (see PDF item 22).

Number of Children

A majority (55.1%), of the sample indicated they had children. Thirty-five percent (35.1%) reported they had two or three children; 5.7% indicated they had four or more children; and 14.3% reported they had one child (see PDF item 23).

Number of Genuine Friends

Nearly 87 percent (86.9%) self-reported having at least one individual with whom they could reveal their true self. Seventy two percent (72.3%) indicated having two or more persons as genuine friends (see PDF item 24).

Stress Related Changes

Several items addressed changes which the respondents had experienced in the past year. The first item, death of
a significant person in the last year, was experienced by
24.7% of the sample. Loss of a significant relationship was
experienced by 39.3%. Change in economic situations was
reported by 54.5%; and change in number of persons living in
the household was reported by 29.5%. Serious illness was
experienced by 20.8% (see PDF items 25-29).

Abuse/Addictions

Emotional abuse was reported by 79.5% of the sample.
Physical abuse and sexual abuse was indicated by 39.3%, and
37.5% respectively. Addiction to various substances and to
sexual activity was self-reported as follows: Alcohol
16.1%; prescription drugs 6.3%; illegal drugs 4.5%; food
38.1%; and sex 11.3% (see PDF items 30-31). The Franklin
County Alcohol, Drug Addiction and Mental Health Board
reported diagnosis of Substance Abuse Disorder in 16% of the
persons treated during January through October 1993, with an
additional 0.3% diagnosed with Sexual Disorder.

Therapy Variables

Weekly therapy sessions were reported by 45.2%. A more
frequent schedule was indicated by 5.1%. Thirty percent
(30.1%) self-reported a schedule of every other week and
19.6% reported another frequency schedule, for example
monthly. Reports from 26.8% indicate they had been in
therapy for over three years. Those who self-reported being
in therapy 2-3 years represented 14.6% of the sample; and
those in therapy 1-2 years, 20.5%. Persons who indicated being in therapy less than one year represented 38.1% of the sample; with 13.7% reporting having been in therapy less than three months (see PDF items 32-33).

Several of the demographic variables--age, sex, race, marital status, level of education, religious preference and income level were compared with data from the Bureau of the Census Statistics for Franklin County (Bureau of Census, 1990a), including the Selected Social Characteristics (Bureau of Census, 1990b) based on a sample of Franklin County residents, and religious data from The Ohio Council of Churches (1990). A summary of the comparisons by percent is presented in Table 3.

Age of the sample clustered in the 30-50 years range, whereas the Franklin County data was more evenly distributed. The therapy sample was made up of 27.7% males and 72.3% females, while the Franklin County data was more evenly split 49.2% males and 51.8% females. Marital Status was similar with the sample reporting 22.6% single, 46.4% married, 6.3% separated, 1.8% widowed and 14.3% divorced, and the Franklin County sample reporting 24.8% single, 39.4% married, 1.7% separated, 4.8% widowed and 8% divorced.

Both the sample and Franklin County data reflected high percentages with a high school diploma--89.2% and 81.0% respectively. In the sample 63.1% indicated having a bachelor's degree in comparison to 26.6% of the Franklin
<table>
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<th>Sample</th>
<th>Franklin County</th>
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</tr>
<tr>
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<td>27.7</td>
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<td>Female</td>
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<td>51.8</td>
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<td></td>
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<tr>
<td>19 - 29</td>
<td>11.9</td>
<td>32.9</td>
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<td>30 - 39</td>
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<tr>
<td>Black/African American</td>
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<td>White/Caucasian American</td>
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<td>81.5</td>
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<td>62.1</td>
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<td>above 100,000</td>
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N = 336 (Sample), N = 961,437 (1990 Census Statistics)
*Based on Selected Social Characteristics 1990 Census Data
**From 1990 Ohio Council of Churches-Churches/Church Membership Table
County sample. Religious preference showed the largest discrepancy in those reporting no religious affiliation--19.1% of the sample and 58.1% of the Franklin County data.

Level of income reported was very similar for the two groups with the sample differing from the county data only in the 0-9,999 dollar range. In the sample 8.6% reported income in this range compared to 13.8% in Franklin County.

Findings by Hypothesis

The two research questions proposed in this study were whether the constructs of attachment, shame and psychological stress are related in definable ways, and whether a model can be identified which clarifies the relationships. The overall hypothesis was shame can be shown to be an intervening variable between attachment and psychological stress. This hypothesis was tested by examining three a priori models (Model A, Model B, and Model C) designed to identify relationships among the variables in the sample. Findings are presented below by the three sub-hypotheses. A discussion of the measurement model and information on goodness-of-fit of the models to the data follows. All values reported are completely standardized solutions generated by the LISREL 7 statistical program for analyzing covariant structural models. The Pearson Correlation Coefficient Matrix of the measured
variables considered in the models is presented in Table 4. The univariate summary statistics are presented in Table 5.

The relationships among attachment, shame and psychological stress are represented by the latent variables in the structural model of the LISREL 7 analysis. As discussed in Chapter III, the structural model "specifies the causal relationships among the latent variables and describes the causal effects and the amount of unexplained variance" (Jorskog and Sorbom, 1989, p. 2). The errors in equations are either residuals that are random error, or are the result of influences not accounted for in the model.

Sub-hypothesis 1 (Model A)

Attachment directly affects psychological stress as indicated in Model A (see Figure 3, Chapter III, p. 60). Findings were as follows.

The effect of attachment on psychological stress is -.364 indicating a negative relationship between attachment and psychological stress. The t-value, i.e. the parameter estimate divided by the standard error for this parameter, is -4.018 indicating that the parameter value is statistically significant. T-values greater than the absolute value of 2 are generally considered to be statistically significant (Jorskog and Sorbom, 1989; Byrne, 1989).

Based on the relationship hypothesized in Model A, attachment has a direct and negative effect on psychological
TABLE 4

**Pearson Correlation Coefficients Matrix for Model of Attachment, Shame and Psychological Stress in Outpatient Psychotherapy Clients**

<table>
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<tr>
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<th>MC</th>
<th>FC</th>
<th>MP</th>
<th>FP</th>
<th>SHA</th>
<th>SOM</th>
<th>OBC</th>
<th>IPS</th>
<th>DEP</th>
<th>ANX</th>
<th>HOS</th>
<th>PAX</th>
<th>PID</th>
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<td>.193</td>
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<td>.654</td>
<td>.601</td>
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N=336  \(p < .001\)  \(*p < .01\)  \(**p < .05\)  \(***p\) not significant at < .05
### TABLE 5

**Univariate Summary Statistics for Model Variables**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD.</th>
<th>Skewness</th>
<th>Kurtosis</th>
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<th>Max. f</th>
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</table>

\[ N = 336 \]
stress. This relationship is shown in Figure 6. The error term for psychological stress is .868 indicating the amount of variance in psychological stress not accounted for by attachment.

Sub-hypothesis 2 (Model B)

Attachment directly affects shame and shame directly affects psychological stress as indicated in Model B (see Figure 4, Chapter III, p. 61). Findings were as follows.

The effect of attachment on shame is -.411 indicating a negative relationship between attachment and shame. The t-value, -4.484, indicates the parameter value is statistically significant.

Based on the relationship hypothesized in Model B, attachment has a direct and negative effect on shame. This relationship is revealed in Figure 7. The error term value .813, for the latent variable shame, indicates the amount of variance in shame not accounted for by attachment.

The effect of shame on psychological stress is .881, indicating a positive relationship between shame and psychological stress. The t-value 12.281, indicates that the parameter value is statistically significant.

Based on the relationship hypothesized in Model B, shame has a direct and negative effect on psychological stress. This relationship is shown in Figure 7. The error term, .343, indicates the amount of variance in psychological stress not accounted for by shame.
MODEL A

Figure 6. Parameter estimates for model A of attachment and psychological stress.

All parameter estimates are statistically significant.

ATT = attachment, $\psi$ST = psychological stress, MC = mother care, FC = father care, MP = mother protection, FP = father protection, SOM = somatization, OBC = obsessive compulsion, IPS = interpersonal sensitivity, DEP = depression, ANX = anxiety, HOS = hostility, PAX = phobic anxiety, PID = paranoid ideation, PSY = psychoticism.
MODEL B

Figure 7. Parameter estimates for model B of attachment, shame and psychological stress.

All parameter estimates are statistically significant.

ATT = attachment, SHA = shame, ψST = psychological stress, MC = mother care, FC = father care, MP = mother protection, FP = father protection, ISS = shame score, SOM = somatization, OBC = obsessive compulsion, IPS = interpersonal sensitivity, DEP = depression, ANX = anxiety, HOS = hostility, PAX = phobic anxiety, PID = paranoid ideation, PSY = psychoticism
Sub-hypothesis 3 (Model C)

Attachment directly affects psychological stress and/or affects psychological stress through shame as indicated in Model C (see Figure 5, Chapter III, p. 62). Findings were as follows.

The effect of attachment on psychological stress is -.029, indicating a small negative direct effect of attachment on psychological stress. The t-value, -.572, indicates this path in the model is not statistically significant. The effect of attachment on psychological stress with shame as an intervening variable produces an effect of -.411, for attachment on shame with a t-value of -4.512; and an effect of .799, for shame on psychological stress with a t-value of 11.652, which clearly indicates significance. There is error variance of .831 for shame, and .342 for psychological stress; indicating the amount of variance in these endogenous latent variables not explained by the other latent variables in the model. The relationship of attachment and psychological stress including and excluding shame is illustrated in Figure 8.

In summary, when shame is added to the model, the direct effect of attachment on psychological stress becomes statistically significant. This path, $\gamma_{21}$, may be eliminated from the model without affecting fit.
MODEL C

Figure 8. Parameter estimates for model C of attachment, shame and psychological stress.

* Parameter estimate of this path is not statistically significant. Parameter estimates of all other paths indicate statistical significance.

ATT = attachment, SHA = shame, YST = psychological stress, MC = mother care, FC = father care, MP = mother protection, FP = father protection, ISS = shame score, SOM = somatization, OBC = obsessive compulsion, IPS = interpersonal sensitivity, DEP = depression, ANX = anxiety, HOS = hostility, PAX = phobic anxiety, PID = paranoid ideation, PSY = psychosis.
Discussion

Since the parameter estimates are standardized, the variance accounted for by the paths in Model B (see Figure 4, Chapter III), can be compared to the variances accounted for by the path in Model A (see Figure 3, Chapter III), and the paths in Model C (see Figure 5, Chapter III). The path in Model A from attachment to psychological stress, accounts for a smaller amount of variance than the variance accounted for in Model B, where the path is, through shame. The error term for the endogenous variable, psychological stress, provides additional evidence for the selection of Model B. The error term for psychological stress is .868, with a t-value of 6.186 for Model A; and .343 with a t-value of 6.025 in Model B. Therefore, Model B provides a more complete explanation of psychological stress when shame is included as an intervening variable than does Model A which does not include shame. This relationship is illustrated in Figures 6 and 7.

Results based on Model C indicate the direct path from attachment to psychological stress is not statistically significant, therefore it does not add anything to the model. When that path is eliminated, the result is a more parsimonious and explanatory model, Model B.

Examination of Model A, Model B and Model C clarifies the relationship of attachment, shame and psychological stress in the sample. In Model A, attachment predicts
psychological stress; but when shame is added in Model B, more of the variance in psychological stress is accounted for in the model. Finally, by examining Model C, where the path from attachment to psychological stress is estimated directly - as well as through shame - the degree to which attachment can directly predict psychological stress is not statistically significant. In comparison, the path from attachment to psychological stress through shame is statistically significant. This would indicate that the effects of attachment on psychological stress are mediated by shame.

The structural part of the model, or the relationships among latent variables, has been discussed above, but the measurement model, or measures/indicators of the latent variables, indicates statistical significance as well. All t-values of parameter estimates of the measured variables for attachment and for psychological stress were statistically significant. Since these indicators of the latent variables are significant, they are to some degree, identifying attachment or psychological stress, respectively. The nine indicators of psychological stress reveal a stronger relationship with psychological stress than the indicators of attachment showed to attachment.

An overall goodness-of-fit of the model to the data is useful following the evaluation of parameter estimates. The LISREL 7 program provides goodness-of-fit indicators between
the proposed model and the data obtained from the sample. The chi-square is the first measure of fit, and is provided along with the degrees of freedom. Dividing the chi-square value by the degrees of freedom yields a ratio index. "There is no consensus on what represents a 'good' fit, with recommendations ranging from ratios of 3, 2 or less (Carmines and McIver, 1981) to as high as 5" (Bollen, 1989, p. 278). As presented in Table 4, all values are between 3.6 and 3.7, indicating moderate fit.

**TABLE 6**

**Summary Statistics and Goodness-of-Fit Indices for Models A, B, and C**

<table>
<thead>
<tr>
<th>Model</th>
<th>df</th>
<th>X²</th>
<th>X²/df</th>
<th>GFI</th>
<th>AGFI</th>
<th>RMSEA</th>
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<tr>
<td>A</td>
<td>64</td>
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<td>B</td>
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<td>3.641</td>
<td>0.890</td>
<td>0.848</td>
<td>0.089</td>
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<td>C</td>
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<td>276.36</td>
<td>3.685</td>
<td>0.890</td>
<td>0.846</td>
<td>0.090</td>
</tr>
</tbody>
</table>

df = degrees of freedom, X = chi-square, GFI = Goodness-of-Fit Index, AGFI = Adjusted Goodness-of-Fit Index, RMSEA = Root Mean Square Error of Approximation

A second measure of fit is the Goodness-of-Fit Index (GFI). The GFI is defined as the "relative amount of variances and covariances jointly accounted for by the model" (Jorskog & Sorbom, 1984, p. I.41). The GFI indices for Models A, B and C were .900, .890 and .890 respectively.
The recommended value of .9 which is considered to be the cut-off for good fit (Fassinger, 1987).

Since the GFI indices were .900 and .890, the models can be said to be approximately equivalent in fit, and are likewise at the lower limit of a good fit. A Goodness-of-Fit Index closer to 1.0 would permit greater confidence in the specified models.

The Adjusted Goodness-of-Fit Index (AGFI) for Models, A, B and C are .858, .848 and .846. These values are above the .8 recommended for acceptance (Anderson & Gerbing, 1984).

The third fit measure, the Root Mean Square Error of Approximation (RMSEA) was also utilized. This fit measure was employed because it balances model parsimony against goodness-of-fit. The FITMOD statistical program developed by Browne (1991) was used to calculate the RMSEA. Browne & Cudeck (1992) suggest a RMSEA of about .05 or less, indicates a close fit of the model in relation to the degrees of freedom; while a value of .08 or less indicates a reasonable RMSEA.

The RMSEA for the models considered are .089 and .090, indicating the models are close to the reasonable fit range. Browne & Cudeck (1992) have also suggested they would not want to use a model with a RMSEA greater than .1. The models proposed are under this limit.
Although the general goodness-of-fit measures are moderate, the model parameter estimates and estimates of error suggest that Model B is most strongly supported by the data. In hypothesized Model B, the effect of attachment on psychological stress is mediated through shame and the effect of shame on psychological stress is statistically significant. In conclusion Model B is the model which best explains the relationship of attachment, shame and psychological stress.

**Summary**

Chapter IV has presented descriptive data on the sample as well as results of the research for the overall hypothesis and the three sub-hypothesis. The sample consisted of 336 (33.6%) usable responses. To summarize the characteristics of the sample, 72% reported they were female, 74% self-reported an age between 30 and 50 years with a mean age of 40 years, 94% reported being Caucasian, 55% indicated they lived with a partner or spouse, 51% reported an income of 20,000-49,999, 48% indicated they were Protestant and 63% self-reported attaining at least a bachelor’s degree.

Parental substance abuse was reported as absent in 59% of fathers and 80% of mothers. First born children represented 45% of the sample with 55% indicating having one or more children themselves. Most of the sample, 87%, self-
reported having at least one genuine friend with whom they were comfortable sharing their true self.

The most frequent change experienced by respondents in the last year was economic change, reported by 55% of those who responded. The most frequently indicated abuse was emotional abuse, reported by 80% of the sample, and the most frequently reported addiction was to food, self-reported by 38% of the respondents. Sixty-two percent (62%) of respondents indicated their length of time in therapy as being over one year and 45% reported a weekly schedule of sessions.

A summary of the major research findings indicates a relationship among attachment, shame and psychological stress. Attachment is statistically significant in its effect on shame and on psychological stress when shame is not considered. When shame is included, however, the effects of attachment on psychological stress are mediated through shame. Shame was found to be statistically significant in the development of psychological stress and attachment was found to be statistically significant in the development of shame.

The results suggest the following answers to the questions researched. The first research question asks whether the constructs attachment, shame and psychological stress are related in definable ways. This research suggests that attachment has a negative and direct effect on
shame, shame has a direct and positive effect on psychological stress and the effect of attachment on psychological stress is mediated by shame.

The second research question asks whether a model can be identified which would clarify the relationships between attachment, shame and psychological stress. A model has been identified. The analysis of the data suggests Model B is the most complete yet parsimonious model of the three models hypothesized. The relationships between attachment and shame and between shame and psychological stress in Model B are statistically significant and the error terms indicate a substantial amount of the variance in the endogenous latent variables is accounted for by Model B.
CHAPTER V
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

This chapter contains a summary of the study, the methodology employed, and the research findings. A discussion of conclusions based on the findings is presented, followed by suggestions for future research.

It is believed that when an attachment bond is not formed in the early years, a range of psychological difficulties arise over the course of development (Belsky & Nezworski, 1988; Bowlby, 1973b, 1988; Bretherton, 1985, 1990; Guidano, 1987; Kobak & Sceery, 1988; Sroufe, 1983, 1988; Weiss, 1982; Zemore & Rinholm, 1898).

Conceptualizations of self and other developed out of the relationships with primary caregivers, tend to persist as a blueprint for relationship throughout development (Main, Kaplan, & Cassidy, 1985). These conceptualizations for relating are viewed as self-perpetuating, since they are thought to represent a cognitive system predisposing a person to interpret experience in ways which fit his/her conceptualizations (Lyddon, Bradford, & Nelson, 1993).
Several theoretical approaches to the development of shame were presented. An individual with a shame identity views the self as bad, defective or unacceptable with no way to make reparation (Miller, 1980). This view of self as something to be despised is usually developed out of a necessity to preserve the parents or other caretaking figures as adequate, capable or good (Miller, 1980, 1990). A blueprint for relationships and for the view of self develop through relationships with attachment figures (Bowlby, 1973a, 1988, Kaufman, 1974, 1989).

In the present research, three a priori models that view attachment as leading to psychological stress were proposed. The first, Model A, proposed a causal relationship between attachment and psychological stress. The second, Model B, proposed the relationship between attachment and psychological stress as mediated by shame. Finally, Model C, contained both the direct path from attachment to psychological stress, and the path through shame. Both paths were considered in the same model to determine if the direct relationship from attachment to psychological stress was stronger, or whether the path through shame was more explanatory.

In the models, attachment was measured by the Parental Bonding Instrument (PBI), (Parker, Tupling, & Brown, 1979). Psychological stress was measured by the Brief Symptom Indicator (BSI), (Derogatis & Melisaratos, 1983). Shame was
measured by the Internalized Shame Scale (ISS), (Cook, 1990). Models were tested with data collected from adult outpatient psychotherapy clients. Approximately 1,000 clients were asked by their 48 therapists from 23 practices to complete a packet of materials containing the instruments and a demographic form. Three hundred thirty-six (33.6%) usable returns were utilized in the analysis.

The LISREL 7 statistical program was utilized to analyze the data. Figure 2 (see Chapter II, p. 17) illustrates the notation for latent and measured variables, and the pathways in the models, using Model B as an example. Latent variables are represented by ovals and designated by \( \xi \), if independent, and \( \eta \), if dependent. Indicators are represented by rectangles and labeled \( x \) if measuring an independent variable, and \( y \) if measuring a dependent variable. Pathways are labeled: \( \gamma \) for paths between the independent latent variable and dependent variables; \( \beta \) for the path between dependent latent variables; and \( \lambda \) for paths between the measurement variables and the latent variables. Error terms are indicated by \( \zeta \), for dependent latent variables, \( \delta \), for measures of independent latent variables and \( \epsilon \), for measures of dependent latent variables. Attachment (ATT) was the exogenous latent variable (\( \xi \)), shame (SHA) and psychological stress (\( \Psi \ ST \)) were the endogenous latent variables (\( \eta \)).
To summarize the characteristics of the sample, 72% indicated they were female, 73% reported an age between 30 and 50 years with a mean age of 40 years, 94% reported being Caucasian, 55% indicated living with a partner or spouse, 51% reported an income of 20,000-49,999, 48% indicated they were Protestant and 63% reported attaining at least a bachelor's degree.

Parental substance abuse was reported as absent in 59% of fathers and 81% of mothers. First born children represented 45% of the sample with 55% reporting having one or more children themselves. Most of the sample, 87%, indicated having at least one genuine friend with whom they were comfortable sharing their true self.

The most frequent change experienced by respondents in the last year was economic change, reported by 55% of those who responded. The most frequently reported abuse was emotional abuse, reported by 80% of the sample, and the most frequently indicated addiction was to food, reported by 38% of the respondents. Sixty-two percent (62%) of respondents reported their length of time in therapy as being over one year and 45% indicated a weekly schedule of sessions.

The overall research hypothesis, shame can be shown to be an intervening variable in the relationship between attachment and psychological stress, and the three sub-hypotheses are discussed below. The research questions are also answered.
Sub-hypothesis 1 (Model A)

Attachment directly affects psychological stress as indicated in Model A (see Figure 3, Chapter III, p. 60). Findings were as follows.

The effect of attachment on psychological stress is -.364 indicating a negative relationship between attachment and psychological stress. The t-value, i.e. the parameter estimate divided by the standard error for this parameter, is -4.018 indicating that the parameter value is statistically significant. T-values > |2| are generally considered to be statistically significant (Byrne, 1989; Jorskog and Sorbom, 1989).

Based on the relationship hypothesized in Model A, attachment has a direct and negative effect on psychological stress. This relationship is shown in Figure 6, Chapter IV, p. 87. The error term for psychological stress is .868 indicating the amount of variance in psychological stress not accounted for by attachment.

Sub-hypothesis 2 (Model B)

Attachment directly affects shame and shame directly affects psychological stress as indicated in Model B (see Figure 4, Chapter III, p. 61). Findings were as follows.

The effect of attachment on shame is -.411 indicating a negative relationship between attachment and shame. The t-value, -4.484, indicates the parameter value is statistically significant.
Based on the relationship hypothesized in Model B, attachment has a direct and negative effect on shame. This relationship is revealed in Figure 7, Chapter IV p. 88. The error term value .831, for the latent variable shame, indicates the amount of variance in shame not accounted for by attachment.

The effect of shame on psychological stress is .881, indicating a positive relationship between shame and psychological stress. The t-value 12.281, indicates that the parameter value is statistically significant.

Based on the relationship hypothesized in Model B, shame has a direct and negative effect on psychological stress. This relationship is also shown in Figure 7, Chapter IV, p. 88. The error term, .343, indicates the amount of variance in psychological stress not accounted for by shame.

**Sub-hypothesis 3 (Model C)**

Attachment directly affects psychological stress and affects psychological stress with shame as a mediating variable [as indicated in Model C (see Figure 5, Chapter III, p. 62)].

The effect of attachment on psychological stress is -.029, indicating a small negative direct effect of attachment on psychological stress. The t-value, -.572, indicates this path in the model is not statistically significant. The effect of attachment on psychological
stress with shame as an intervening variable produces an effect of -.411, for attachment on shame of with a t-value of -4.512; and an effect of .799, for shame on psychological stress with a t-value of 11.652, which clearly indicates statistical significance. There is error variance of .831 for shame, and .342 for psychological stress; indicating the amount of variance in these endogenous latent variables not explained by the other latent variables in the model. The relationship of attachment and psychological stress including and not including shame is illustrated in Figure 8, Chapter IV, p. 90.

In summary, when shame is added to the model, the direct effect of attachment on psychological stress becomes statistically nonsignificant. This path, $\gamma_{21}$, may be eliminated from the model without affecting fit.

Since the parameter estimates are standardized, the variance accounted for by the paths in Model B, can be compared to the variances accounted for by the path in Model A, and the paths in Model C. The path in Model A from attachment to psychological stress, accounts for a smaller amount of variance than the variance accounted for in Model B, where the path is, through shame.

The error term for the endogenous variable, psychological stress, provides additional evidence for the selection of Model B. The error term for psychological stress is .868, with a t-value of 6.186 for Model A; and
.343 with a t-value of 6.025 in Model B. Therefore, Model B provides a more complete explanation of psychological stress when shame is included as an intervening variable than does Model A which does not include shame. This relationship is shown in Chapter IV (Figures 6 and 7).

The results for Model C indicate the direct path from attachment to psychological stress is not statistically significant, therefore it does not add anything to the model. When that path is eliminated, the result is a more parsimonious and explanatory model, Model B.

To summarize the results of the analysis of model parameters suggest that the relationship between attachment, shame and psychological stress as represented in Model B offered the best explanation. A statistically significant relationship was shown between attachment and psychological stress, with shame as a mediating variable.

In Model C the path from attachment to psychological stress was estimated simultaneously with the path through shame. The direct path excluding shame was not statistically significant. Error, including variance of psychological stress not explained by the model and random error, was reduced substantially from Model A to Model B, indicating Model B was more complete in offering explanation of the relationships. The comparison of Models A and B, together with the comparison of Models B and C, indicate
that the effects of attachment on psychological stress are mediated through shame.

When fit measures were explored, the general fit for the three models was similar. The model fit would be described as moderate.

**Research Question 1**

Are the constructs of attachment, shame and psychological stress related in definable ways? Yes.

Attachment as defined and measured in this study predicts shame and psychological stress with shame as a mediating variable. Shame also predicts psychological stress. Although attachment predicts psychological stress in a model which does not include shame, the error terms in the model including shame indicate much less of the variance is unaccounted for by the model when shame is added.

**Research Question 2**

Can a model be identified which clarifies the relationships among attachment, shame and psychological stress? Yes.

Model B has been identified as a model which best clarifies the relationships among attachment, shame and psychological stress. The model contains the latent variables---attachment, shame and psychological stress, the measures of these latent variables, and the error terms to account for variance not explained by the model as well as
random error. Model B clarifies the role of shame as a mediating variable between attachment as perceived from memory of childhood and symptoms of psychological stress experienced by adult therapy clients.

Conclusions

Based on the findings reported in Chapter IV, several conclusions were reached. The first is that both Models B and C support the idea that shame is predicted by attachment. A second conclusion based on the findings supports psychological stress as being predicted by shame. Third, it can be concluded that shame mediates the effects of attachment on psychological stress.

Psychological stress is predicted by shame directly, and by attachment through shame. Less of the variance in psychological stress is unaccounted for in Model B, .343 as opposed to .831 in Model A, so it can be assumed that shame is mediating psychological stress. The possibility does exist that another variable, not included in the model but highly correlated with shame could, in fact, be responsible for the variance. However, nothing in the model independent of shame effects psychological stress.

Based on the results shame has been shown to be significant in the development of psychological stress as suggested by Bowlby (1988), Bradshaw (1988) Broucek (1991), Cook (1990), Kaufman (1985, 1989), Lewis (1971, 1980, 1987b,
1988), Lewis (1992), Miller (1980, 1984, 1990), and Nathanson (1987b, 1987c, 1989). One significant implication for therapy is to recognize the central role of shame in psychological stress and to deal with this aspect of the self directly as a way of reducing psychological stress experienced by psychotherapy clients.

Cook (1993) suggests that there is a tendency to develop coping styles to rid the self of the negative emotions of which shame is one. A person who has developed a healthy coping style is able to pay attention to the presence of shame and other negative affects as signals that something needs attending to or amelioration. He states

However, when the ratio of negative to positive affect in a person's life is more dense on the negative side, many less functional or dysfunctional ways may be found to defend against the constantly recurring negative states. Shame may be only one of these negative emotions, but because of its auxiliary nature, and because it is the emotion that is so pervasive in interpersonal relationships and the development of the sense of self, it is the emotion that lies at the heart of much of our psychic pain. (1993, p. 45)

The centrality of shame as underlying the development of symptoms of psychological stress is one of the conclusions of the present research.
Relationships with one's caregivers has been recognized as having an impact on future relationships with others and in the development of self (Bradshaw, 1988; Bowlby, 1973a, 1973b, 1977, 1982, 1988; Lewis, 1992; Miller, 1980; Parker, 1981, 1983a, 1983b; Ricks, 1985; Rohner, 1986; Stettbacher, 1991). It has been suggested that shame also develops as a result of these interactions with caregivers (Bradshaw, 1988; Cook, 1987b, 1991; Fossum & Mason, 1986; and Harper & Hoopes, 1990; and Miller 1980, 1990, 1991). "Hidden beneath the range of symptoms, behaviors, emotional distress and cognitive dysfunction for many, if not most, therapy clients is internalized shame, most typically a product of childhood experiences (Cook, 1993, P. 45). The present research affirms the connection between treatment received in childhood and the development of shame. This finding indicates the importance of advocating for child rearing practices which will minimize the development of shame as a part of the child's identity.

The children of today are the adults of tomorrow. Miller (1991), has presented a strong argument for pathological patterns of relating being passed from generation to generation. The consequence of this legacy is the repression of the wounds received from one's own parents by inflicting similar psychic wounds on one's children or on society in general as in the case of Hitler.
The importance of the connection of attachment and shame is also significant when considered with recent literature relating attachment to the ability to develop cognitively (Barrett and Trevett, 1991). Psychological stress is often present when an individual experiences cognitive difficulties and the role of shame in the interaction needs clarification.

In summary, the present research clarifies shame's role as a mediator of pain suffered in childhood as a result of inadequate attachment formations and symptoms of psychological stress in adults. Model B suggests that shame is related to attachment and that shame leads to psychological stress in adult psychotherapy clients.

**Recommendations for Future Research**

Based on the results, limitations and conclusions of the present research at least seven recommendations for future research are evident. Each recommendation is separately stated below.

1. Further research is needed to determine whether shame is the major predictor of psychological stress as suggested by Model B, or whether a construct not considered in the model, but correlated with shame is a more powerful predictor. Since the model indicates the predictor may be correlated with shame, a preliminary study could determine
the role of other constructs correlated with shame which may also lead to psychological stress.

2. The present study should be replicated employing other means of measuring attachment such as the Inventory of Parent and Peer Attachment (Armsden & Greenberg, 1987). Subjects could also be classified into attachment style groups based on selection of one of three attachment style paragraphs as suggested by Hazen and Shaver (1987).

3. Sampling techniques, including random sampling of all outpatient psychotherapy clients in Franklin County or using an inpatient population where selected demographic data from nonrespondents may be available, would extend the possibility of generalizing the results. The research setting for such a study could be chosen by considering treatment focus such as addictive disorders treatment centers or clinics specializing in the treatment of depression.

4. A longitudinal study tracking a cohort group through their development from birth through their adult years would enable researchers to collect data from direct observation and from self report. Analysis of data and model comparison over time would permit a more indepth analysis of the relationships of attachment and internalized shame in development of psychological stress throughout the life span. A longitudinal study would eliminate the limitations of retrospective data and allow etiology to be
discovered while in the present research it is only suggested.

5. Replicating the present study with more narrowly defined populations to determine whether the model holds with more specific populations would add to the clarity of the role of shame in specific diagnostic categories. For example eating disorder clients or clients experiencing emotional abuse could be compared to clients receiving career counseling. Alternative models could also be compared using restricted age groups to determine whether a difference exists in the role shame plays as a person ages. Since the majority of the sample in the present research were ages 30-50 years old, comparisons could be made with a younger and older population.

6. Research should be designed to relate attachment and cognitive development and to determine whether shame mediates that relationship as well. For example, shame may be fostered in the student/teacher relationship as in the parent/child relationship. The power differences may set the stage for shaming to occur thus limiting an opportunity for enhancing cognitive development. Research is needed in this area to further understand the debilitating levels of shame experienced by many members of our society as a result of institutions such as the educational system.

7. A more in-depth analysis of friendships and marital relationships could suggest similarities with the current
attachment relationships. Those relationships could be compared to reported relationships with caregivers from childhood, and the strength of their prediction of shame and psychological stress could be analyzed.
APPENDIX A

INTERNALIZED SHAME SCALE
ISS

DIRECTIONS: Below is a list of statements describing feelings or experiences that you may have from time to time or that are familiar to you because you have had these feelings and experiences for a long time. Most of these statements describe feelings and experiences that are generally painful or negative in some way. Some people will seldom or never have had many of these feelings. Everyone has had some of these feelings at some time, but if you find that these statements describe the way you feel a good deal of the time it can be painful just reading them. Try to be as honest as you can in responding.

Read each statement carefully and circle the number to the left of the item that indicates the frequency with which you find yourself feeling or experiencing what is described in the statement. Use the scale below. **DO NOT OMIT ANY ITEM.**

<table>
<thead>
<tr>
<th>SCALE</th>
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<tr>
<td>1</td>
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<td>2</td>
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<tr>
<td>3</td>
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<td>4</td>
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<td>5</td>
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</tbody>
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NEVER  SELLDOM  SOMETIMES  FREQUENTLY  ALMOST ALWAYS

**SCALE**

1 2 3 4 5 1. I feel like I am never quite good enough.
1 2 3 4 5 2. I feel somehow left out.
1 2 3 4 5 3. I think that people look down on me.
1 2 3 4 5 4. All in all, I am inclined to feel that I am a success.
1 2 3 4 5 5. I scold myself and put myself down.
1 2 3 4 5 6. I feel insecure about other's opinions of me.
1 2 3 4 5 7. Compared to other people, I feel like I somehow never measure up.
1 2 3 4 5 8. I see myself as being very small and insignificant.
1 2 3 4 5 9. I feel I have much to be proud of.
1 2 3 4 5 10. I feel intensely inadequate and full of self doubt.
1 2 3 4 5 11. I feel as if I am somehow defective as a person, like there is something basically wrong with me.
1 2 3 4 5 12. When I compare myself to others I am just not as important.
1 2 3 4 5 13. I have an overpowering dread that my faults will be revealed in front of others.
1 2 3 4 5 14. I feel I have a number of good qualities.
1 2 3 4 5 15. I see myself striving for perfection only to continually fall short.
1 2 3 4 5 16. I think others are able to see my defects.
1 2 3 4 5 17. I could beat myself over the head with a club when I make a mistake.
1 2 3 4 5 18. On the whole, I am satisfied with myself.
1 2 3 4 5 19. I would like to shrink away when I make a mistake.
1 2 3 4 5 20. I replay painful events over and over in my mind until I am overwhelmed.
1 2 3 4 5 21. I feel I am a person of worth at least on an equal plane with others.
1 2 3 4 5 22. At times I feel like I will break into a thousand pieces.
1 2 3 4 5 23. I feel as if I have lost control over my body functions and my feelings.
1 2 3 4 5 24. Sometimes I feel no bigger than a pea.
1 2 3 4 5 25. At times I feel so exposed that I wish the earth would open up and swallow me.
1 2 3 4 5 26. I have this painful gap within me that I have not been able to fill.
1 2 3 4 5 27. I feel empty and unfulfilled.
1 2 3 4 5 28. I take a positive attitude toward myself.
1 2 3 4 5 29. My loneliness is more like emptiness.
1 2 3 4 5 30. I feel like there is something missing.

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APPENDIX B

PERSONAL DATA FORM
PERSONAL DATA FORM

DIRECTIONS: Circle the numbered option or fill in the blank.

1. Chronological Age: ________
2. Sex: 1 = Male  2 = Female
3. Ethnic or Racial Identification:
   1 = Black/African American  4 = Hispanic American
   2 = Native American        5 = Asian American
   3 = White/Caucasian        6 = Other ________
4. Marital Status:
   1 = Single  2 = Married  3 = Separated
   4 = Widowed, single  6 = Divorced, single
   5 = Widowed, remarried  7 = Divorced/remarried
   8 = Same Sex Cohabitating (with relationship)
   9 = Opposite Sex Cohabitating (with relationship)
5. Highest Level of Education:
   1 = Some High School  5 = Bachelor's degree
   2 = High School diploma  6 = Master's degree
   3 = Some College, no degree  7 = Doctoral degree
   4 = Associate's degree
6. Religious Preference:
   1 = Jewish  4 = No affiliation
   2 = Catholic  5 = Other ________
   3 = Protestant
7. Do you recycle? 1 = Yes  2 = No
8. Occupation:__________________
9. **Level of Income:**

<table>
<thead>
<tr>
<th></th>
<th>0 - 9,999</th>
<th>75,000 - 99,999</th>
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<tbody>
<tr>
<td></td>
<td>10,000 - 19,999</td>
<td>100,000 - 149,999</td>
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<td>20,000 - 49,999</td>
<td>150,000 - 250,000</td>
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<tr>
<td></td>
<td>50,000 - 74,999</td>
<td>above 250,000</td>
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</table>

**Family:**

On the scales below, indicate how happy, secure and loved vs. unhappy, insecure and unloved you felt growing up in your family. Circle the number that comes closest to the way you felt.

10. **Happy** 1 2 3 4 5 6 7 **Unhappy/Miserable**

11. **Secure** 1 2 3 4 5 6 7 **Insecure/Anxious**

12. **Loved** 1 2 3 4 5 6 7 **Unloved/Rejected**

13. How happy was your parents marriage?

|       | 1 2 3 4 5 6 7 **Unhappy** |

Check to the best of your knowledge:

14. During the years before I was 18, my **father** had or may have had a substance abuse problem.

1=Very true 2=Mostly true 3=Mostly untrue 4=Very untrue

15. During the years before I was 18, my **mother** had or may have had a substance abuse problem.

1=Very true 2=Mostly true 3=Mostly untrue 4=Very untrue

16. My **father** died before I was 18 years old.

1 = Yes 2 = No

17. My **mother** died before I was 18 years old.

1 = Yes 2 = No

18. My parents divorced or separated before I was 18 years old.

1 = Yes 2 = No

19. If Yes: _____Age when parents divorced or separated
20. Before I was 18 years old I spent two months or more in a foster or group home.
   1 = Yes    2 = No

21. If Yes: _____ Age when in the foster/group home

22. In your family were you:
   1 = An only child    3 = The oldest child
   2 = The youngest child    4 = A middle child

23. Do you have children?
   1 = No children    3 = Two or three children
   2 = One child    4 = Four or more children

24. How many friends do you have with whom you can be your true self?
   1 = None    3 = Two or three
   2 = One    4 = Four or more

25. Has someone important to you died during the last year?
   1 = Yes    2 = No

26. Have you experienced the loss of a significant relationship in the last year?
   1 = Yes    2 = No

27. Has your economic situation changed either up or down in the last year?
   1 = Yes    2 = No

28. Has the number of people living in your household changed during the last year?
   1 = Yes    2 = No

29. Have you had any serious illnesses during the last year?
   1 = Yes    2 = No

30. Have you experienced any of the following?
    Physical abuse    1 = Yes    2 = No
    Emotional abuse    1 = Yes    2 = No
    Sexual abuse    1 = Yes    2 = No
31. Do you have a problem with addiction to any of the following?
Alcohol. . . . . . . . . . . . 1 = Yes 2 = No
Prescription drugs: . . . . . . 1 = Yes 2 = No
Illegal drugs. . . . . . . . . 1 = Yes 2 = No
Food. . . . . . . . . . . . . 1 = Yes 2 = No
Sex . . . . . . . . . . . . . . 1 = Yes 2 = No

Therapy Questions:

32. How often do you see your therapist?
1 = Weekly 3 = Every other week
2 = More than once per week 4 = Other ________

33. Length of time in therapy:
1 = One month or less 4 = Between one and two years
2 = Two to three months 5 = Between two and three years
3 = Three months to one year 6 = Over three years

34. List the major issues in your therapy:

1.________________________________________
2.________________________________________
3.________________________________________
4.________________________________________
APPENDIX C

HUMAN SUBJECTS APPROVAL FORM
BEHAVIORAL AND SOCIAL SCIENCES  
HUMAN SUBJECTS REVIEW COMMITTEE  
THE OHIO STATE UNIVERSITY

Research Involving Human Subjects

ACTION OF THE REVIEW COMMITTEE

With regard to the employment of human subjects in the proposed research protocol:

93B0118  INVESTIGATION OF THE ETIOLOGY AND EFFECT OF SHAME IN OUTPATIENT PSYCHOTHERAPY CLIENTS, James V. Wight, Azania Akashi, Educational Services and Research

THE BEHAVIORAL AND SOCIAL SCIENCES REVIEW COMMITTEE HAS TAKEN THE FOLLOWING ACTION:

____ APPROVED  __ DISAPPROVED

___ APPROVED WITH CONDITIONS*  ___ WAIVER OF WRITTEN CONSENT GRANTED

* Conditions stated by the Committee have been met by the Investigator and, therefore, the protocol is APPROVED.

It is the responsibility of the principal investigator to retain a copy of each signed consent form for at least four (4) years beyond the termination of the subject’s participation in the proposed activity. Should the principal investigator leave the University, signed consent forms are to be transferred to the Human Subjects Review Committee for the required retention period. This application has been approved for the period of one year. You are reminded that you must promptly report any problems to the Review Committee, and that no procedural changes may be made without prior review and approval. You are also reminded that the identity of the research participants must be kept confidential.

Date: ___ April 19, 1993___  
Signed: [Signature] (Chairperson)

HS-025B (Rev. 8/90)
APPENDIX D

LETTER TO THERAPISTS
April 23, 1993

Dear Therapist:

I am a doctoral candidate in the counselor education program at The Ohio State University under the supervision of Professor James V. Wigtil, principal investigator. For my dissertation I am investigating the role of internalized shame as a result of parent-child relationship as related to adult psychological stress. This research may promote further research of shame's role in emotional distress, as well as clarify the importance of dealing with shame in counseling and therapy.

For my research I need the help of a group of psychotherapists who will distribute four short instruments to clients in outpatient therapy. The questionnaires measure parent-child relationship, shame, symptoms of distress and personal data. Completing these materials takes 30-45 minutes. Participation is voluntary. I have requested the return of packets in any event.

If you are willing to ask your clients to participate, I will provide you with packets of questionnaires to be given to each client. I will contact you within two weeks with a reminder/thank you letter to give participants. This research has been approved by the Human Subjects Review Committee, The Ohio State University.

Upon completion of the research I will provide you with a synopsis. If you have questions and wish to contact me, I am at 846-1421. Thank you for your assistance. Your help is greatly appreciated.

Sincerely,

Azaria Akashi, M. A.

James V. Wigtil
Professor and Acting
Department Chair
APPENDIX E

INSTRUCTIONS TO THERAPISTS
Instructions to Therapists

Below is a statement of information to be given to the client prior to volunteering as a participant in the research study:

"A colleague of mine, Azaria Akashi, is a doctoral candidate in the counselor education program at The Ohio State University doing research under the supervision of Professor James V. Wigtil. The research could help clarify the role of shame in parent-child relationships and in emotional distress. With this clarification new ways of examining shame in counseling and therapy may be considered.

In order to complete Azaria's research, clients are needed to fill out four questionnaires that measure parent-child relationship, shame, symptoms of distress and personal data. Participation is voluntary. Confidentiality is assured.

If you participate in the study I will give you the questionnaires and a letter of explanation. You will complete the questionnaires and mail them to Azaria in the self-addressed stamped envelope. Her phone number is included if you wish to ask her questions directly. I will give you a thank you/reminder letter from her in approximately one week. Since participation is voluntary you may take the information now and return it to her without completing the questionnaires. Thank you for your participation in this research."
APPENDIX F

LETTER TO CLIENT SUBJECTS
April 23, 1993

Dear Client:

I am a doctoral candidate in the counselor education program at The Ohio State University under the supervision of Professor James V. Wigtil, principal investigator. For my dissertation I am studying internalized shame as a result of parent-child relationship and as related to adult distress. This research may indicate need for further research on shame's role in emotional distress, as well as clarify the importance of dealing with shame in counseling and therapy.

For the purpose of my research I need therapy clients to complete three short instruments that measure parent-child relationship, shame, and symptoms of distress and personal data. Completing the total packet takes 30-45 minutes.

Participation is voluntary and information provided by you will be confidential. Completion will serve as your consent to be a part of the research. This research has been approved by the Human Subjects Review Committee, The Ohio State University.

Please complete the forms in the order presented and mail them in the self-addressed stamped envelope provided. If you choose not to participate, please place the instruments in the stamped envelope and mail it. Your therapist will have no knowledge of whether you complete the packet or not but will give you a thank you/reminder letter in one week in any case.

Thank you for your consideration and participation.

Sincerely,

Azaria Akashi, M. A.

James V. Wigtil
Professor and Advisor
Dear Participant,

Thank you for your participation in the research study investigating the role of internalized shame as a result of parent-child relationship and as related to adult emotional distress. Your assistance is greatly appreciated. If you have not mailed your questionnaires to me, I would appreciate your doing so at your earliest convenience.

Thank you for your consideration and participation.

Sincerely,

Azaria Akashi, M. A.

James V. Wigtil
Professor and Advisor
APPENDIX H

LETTERS OF PERMISSION
January 23, 1993

Azaria Akashi
6885 Alloway St. W.
Worthington, OH 43085

Dear Azaria:

This letter is to give you permission to use the ISS in your dissertation research. You may reproduce as many copies of the ISS as you need for your research. Please include a copy in your appendix and send me a copy of your dissertation when you are finished.

Sincerely,

[Signature]

David R. Cook, Ed.D.
Department of Counseling and Psychological Services
231 VR
October 20, 1992

Ms. Azaria Akashi,
6885 Alloway Street West
WORTINGTON OHIO 43085 USA

Dear Ms. Akashi,

Thank you for your enquiry about the PBI. You certainly have my permission to use it. In terms of items, scoring and initial reliability and validity studies, you should consult my book (Parker, G., 1983, Parental Overprotection: A Risk Factor in Psychosocial Development, Grune & Stratton, New York). I hope your research goes well.

Sincerely,

Gordon Parker
Professor of Psychiatry
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