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Canonical variates of postabortion syndrome

 Vaughan, Helen P., Ph.D.
The University of North Carolina at Greensboro, 1990
CANONICAL VARIATES OF POST ABORTION SYNDROME

by

Helen P. Vaughan

A Dissertation Submitted to
the Faculty of the Graduate School at
The University of North Carolina at Greensboro
in Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy

Greensboro
1990

Approved by

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July 5, 1990  
Date of Acceptance by Committee

June 19, 1990  
Date of Final Oral Examination
This study extended post abortion research beyond the treatment of negative post abortion adjustment as a univariate construct to the examination of it as post abortion syndrome comprised of anger, guilt, grief, depression, and stress symptoms. When treated as a multivariate construct in a canonical correlation, negative post abortion adjustment presented two different dimensions. The first dimension of post abortion syndrome included high amounts of anger and guilt, with a significant absence of any grief feelings. The variables antecedent to this pattern of post abortion syndrome were social or externally based: pressure from others to abort, a worse relationship with the partner, dissatisfaction with preabortion counseling and information, medical complications with the abortion, inability to bear children at a later time, and a decision based on fear of harm to the mother's health.

The second dimension of post abortion syndrome showed high guilt and stress, with a significant absence of anger. The antecedent variables which comprised this dimension were psychological or internally based, such as personal difficulty making the decision to abort and the importance of their faith. This dimension was characterized by a lack of pressure from others to abort and improved relationships with their partners after the abortion. Also characterizing this dimension were older age at abortion and abortion later in the pregnancy.
These conclusions were reached through a canonical correlation analysis on a set of 16 antecedent variables and five post abortion syndrome variables. Since questionnaires were distributed nationwide through crisis pregnancy centers the limitations imposed by research based on a convenience sample and retrospective recall apply here. The women who responded had already reported symptoms of post abortion syndrome at the centers.

Along with structured questions, the questionnaire included open-ended questions which were analyzed using qualitative methods. This analysis provided further substance to the two dimensions of the post abortion outcome and also gave insight about the women's interaction with the abortion provider.
ACKNOWLEDGMENTS

I am grateful to my committee members for their advice and help throughout the project: Dr. Rebecca M. Smith, Professor of Child Development and Family Relations for chairing the committee; Dr. Grace Kissling, Associate Professor of Mathematics for statistical consultation; Dr. Nancy White, Associate Professor Emeritus of Child Development and Family Relations and Dr. Sarah Shoffner, Assistant Professor of Child Development and Family Relations for their insightful comments.

In addition I want to thank the Christian Action Council and the Crisis Pregnancy Center Directors who approved of the project and helped collect the data. A special thanks to the volunteers of Greensboro Crisis Pregnancy Center who devoted their energy and prayer toward the project. Carolyn Holobaugh deserves a great amount of appreciation for her typing and editing skills, as well as her tremendous encouragement. I am especially indebted to the women who completed the questionnaires so fully about such an intensely emotional experience.

My most deep appreciation goes to my parents who always believed in me and supported my goals and to my older sister, Beth Whicker, who paved the way by setting an
example of excellence.

I am forever indebted to my husband, Ellis, who in word and actions has supported this project and shared in the care of our infant son, Seth.
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CHAPTER I
INTRODUCTION AND REVIEW OF LITERATURE

Abortion is one of the most commonly performed surgical procedure in the United States today. Each year approximately 1.5 million women have abortions with an estimate of 22 million having been performed since the 1973 Supreme Court ruling which legalized abortion in the United States (Henshaw, Forrest, and Vort, 1987). But, unlike other surgical procedures, abortion has the consuming interest of the nation. Almost daily the media reports on judicial and legislative developments, as well as civil activism related to abortion. The recent Supreme Court case, Webster v. Reproductive Health Services, has aroused even more emotion and opinion regarding the legalization of abortion.

Connected to the debate on the competing rights of the woman and the fetus, is the question of the effect abortion may have on the emotional well-being of the woman. This question of post abortion sequelae was addressed by the Surgeon General of the United States, C. Everett Koop, in January of 1988. In a letter to President Reagan, Dr. Koop stated that the available scientific data "do not support the premise that abortion does or does not cause or contribute to psychological problems" (Andrusko, 1989,
Dr. Koop's assertion that the available research is inadequate for drawing conclusions about the effects of abortion on women was accompanied by a call for more and better research on this topic.

Previous research conducted on the psychological effects of abortion has focused predominantly on whether there are any negative sequelae and, to a lesser extent, under what conditions the sequelae will emerge. Rodman, Sarvis, and Walker (1987) pointed out that one's interpretation of research evidence is influenced by one's ideology and that counterarguments exist even for research which seem conclusive.

The consensus from the post abortion literature is that a small percentage of women suffer from negative post abortion sequelae (Rodman et al., 1987). A counterargument to this conclusion is based on the fact that psychological difficulty from an abortion may take years to surface. With few exceptions, the research on post abortion sequelae has been based on women's responses within a year post abortion. Research based on women's responses years after the event may draw an entirely different conclusion.

Another concern is the fact that even if only a small percentage of women are affected by negative reactions to abortion, the small percentage of the more than 22 million comprises a very large number of affected women.
Purpose

The major purpose of this research was to describe the psychological problems associated with women who seek counseling after an abortion. It was assumed that these psychological problems include stress, guilt, grief, depression, and anger. In order to understand the correlates of these post abortion problems, the following factors were also measured: pressure to abort, ambivalence about decision, satisfaction with preabortion counseling and information, perceived support from family and friends to abort, relationship with partner, effect of abortion on relationship with partner, support from partner for abortion, degree of medical complications, conception and delivery of a child since abortion, degree to which decision based on fetal abnormality, type of abortion, race, socio-economic level, age, and religiosity.

The research question was: Will high scores in certain post abortion psychological problems be characterized by certain variables antecedent to the abortion? A canonical correlation was used to measure the shared variance between the antecedent variables and the consequent variables.

The research was a timely response to the escalated debate about abortion, the Surgeon General's call for more research on how abortion affects women, and the need to understand more about a phenomena affecting thousands of American women.
A Social Psychological Framework

Since abortion has increased tremendously after the Supreme Court ruled abortion to be legal in 1973 under certain restrictions, it is often assumed that the psychological acceptance of it has increased. A social-psychological framework holds that abortion is psychologically stressful even though socially legal. Individual women and significant others respond to an abortion with their own meaning and method of dealing with the experience.

Outcome of abortions, the psychological aspect, has been found to be influenced by both social and psychological antecedents to the abortion. Such psychological outcomes are stress, grief, guilt, anger, and depression. Any one of these may occur alone, but taken together, they become what Rue (1988) called "Post Abortion Syndrome" which is manifested in behaviors of reexperiencing thoughts, avoidance of relationships, and psychophysiological symptoms. Social predictions of post abortion syndrome given by Adler (1979) were younger age, unmarried status, and conservative religious preference. Also associated was being persuaded to have the abortion and lack of social support. Psychological antecedents can be personal make up or beliefs. Psychological outcomes were viewed not only as immediate after effects, but also long term effects. There does not seem to be a one-to-one relationship between
two variables. For these theoretical reasons, the present research was planned to study the relationships between multiple social and psychological antecedents and multiple psychological outcomes of abortion.

**Review of the Literature**

Post abortion syndrome as a term is in its infancy. This is reflected in the fact that a review of the literature on post abortion syndrome requires searching under a variety of related terms such as the psycho-social sequelae of abortion, post abortion adjustment, negative responses to abortion, post abortion coping, and the psychosocial effects of abortion.

In addition to the fact that several terms are used to describe post abortion syndrome is the variety of ways in which the term is operationalized. Guilt, depression, stress, anxiety, regret, grief, loss, low self-esteem, anger, unhappiness, crying, hostility, shame, disappointment, and embarrassment have all been examined individually or in some combination as measures of post abortion syndrome. One of the goals of the research was to build upon the past work in this area by creating an operationalized multivariable definition of post abortion syndrome.

The review of literature also revealed that women's reactions to their abortion experiences have been assessed within a short period of time after their abortion ---
ranging from within minutes of the abortion to two years. From his research on women's reaction to abortion, years after the event, David Reardon (1987) concluded that "dissatisfaction and regrets over the abortion grow with time" (p. 7). As with other precipitators of post traumatic stress disorder, the effects of abortion may not be revealed until years after the occurrence of the stressful event (American Psychiatric Association, 1987). This research addressed this deficit in previous studies by assessing women at various lengths of time post abortion and examining the development of post abortion syndrome.

Because of the complexity of post abortion syndrome, it was appropriate to examine it as a multivariable construct. This study brought together, for simultaneous analysis, variables identified in the literature and from the researcher's clinical experience as a crisis pregnancy counselor.

Antecedents to Abortion.

One set of variables was labeled the antecedent variables and includes demographic, medical, decision to abort, and relationship with partner variables. These were correlated to a set labeled the post abortion syndrome variables.

Demographic Variables. Age, marital status, race, socioeconomic level and religion have been considered in post abortion syndrome research and none has consistently
emerged as having significance. Bracken, Hachamovitch, and Grossman (1974); Evans and Gusdon (1973); and Payne, Kravitz, Notman, and Anderson (1976) have found that younger women have a higher risk of emotional problems following an abortion. Moseley, Follingstad, Harley, and Heckel (1981) did not find age as a predictor of post abortion problems. Age is highly correlated with another demographic variable, marital status. Payne et al. (1976) have identified that single women, particularly if they have never had other children, experienced more post abortion difficulties. For this research all the variables were analyzed simultaneously for the purpose of clarifying the significance of age and marital status.

Few of the reviewed studies identified race as a significant correlate of post abortion syndrome. Payne et al. (1976) found that the black race had less post abortion anxiety than others. Also, Shusterman (1979) identified three social variables correlated to race, which in turn have been related to post abortion syndrome. In Shusterman's study, black women viewed their relationships with partners as the least intimate and were the least likely to tell their partner about the pregnancy and abortion. Also, black women received the least amount of support for their decision to abort. Bracken et al. (1974) correlated these three factors with more post abortion difficulty. In view of the fact that the abortion rate is
higher among black and Hispanic minorities (Henshaw & Silverman, 1988) race was an important variable to include in this study.

Religiosity, defined in a variety of ways, is often cited in the post abortion literature. Osofsky and Osofsky (1972 and Payne et al. (1976) examined denominational preferences and found that Catholics experience more guilt with abortion than protestants. Shusterman (1979) found no relationship between religiosity and post abortion syndrome when the religiosity was measured on a continuum of liberalism and conservatism. Ewing, Liptzin, Rouse, Spencer and Werman (1973) examined how the abortion experience affected a woman's religious practices. Five percent of the women in their sample reported becoming "more thoughtful concerning the meaning and significance of religion" and 1% reported being "more liberal in practices and beliefs" (p. 268).

Based on clinical experience this researcher has observed that many women with religious backgrounds have extreme guilt related to their abortion experience. Yet, women currently claiming a strong religious commitment report a relief of post abortion guilt through God's forgiveness, but may report difficulty with a sense of loss or depression related to the abortion. By examining post abortion as a multidimensional construct, the research differentiated what aspects of post abortion syndrome were
related to religiosity.

There is evidence that women of lower socioeconomic levels abort more frequently than women of higher levels (Henshaw & Silverman, 1988), but none of the reviewed articles have examined the direct impact of socioeconomic status. It was included as a variable in this research for heuristic reasons.

Medical Factors. Among the psychosocial correlates of post abortion syndrome are medically related variables. As may be expected, medical problems are negatively correlated to post abortion adjustment (Shusterman, 1979). The study included four medical variables: abortion for fetal abnormality or health threats to the mother, type of abortion, subsequent pregnancy history and degree of pain or complications with the actual procedure.

Consistently established in the literature is the fact that women aborting for medically indicated reasons exhibit more symptoms of post abortion syndrome (Ashton, 1980; Blumberg and Golbus, 1975; Lloyd and Laurence, 1985; and Wallerstein, Kurtz, and Bar-Din, 1972). Specifically, having a late term abortion leads to a greater degree of post abortion emotional problems. This is particularly true if the saline or prostaglandin procedure, which requires labor and delivery of the fetus, is used (Osofsky & Osofsky, 1972).

From the researcher's clinical experience, it is
apparent that women unable to conceive and bear a child subsequent to abortion have an increased sense of loss and regret concerning their abortion. Most of the literature assesses effects within a short period of time post abortion and therefore does not address this question. Greenglass (1977) touched on this issue with her findings of a greater likelihood of post abortion neuroses among women who were planning to have children in the future than among women not planning for children. Because the sample included women whose abortion experience covered a long range of time, the study was able to assess the relationship between desire for children after the abortion and post abortion syndrome.

The study included a variable concerning pain and complications with the actual procedure. Bracken, Klerman, and Bracken (1978) found that more pain during the abortion was associated with more post abortion anxiety. The researcher has observed that women, who due to an incomplete abortion had to return for a repeat procedure, communicate great distress about the abortion even years after the event.

The Decision to Abort. There is much empirical evidence demonstrating that coercion to abort and ambivalence over the decision are related to post abortion syndrome (Horowitz, 1978; Senay, 1970; Shusterman, 1979; and Wallerstein, 1972). Post abortion syndrome is more likely to occur in women who are pressured into abortion or who
Abort without a firm commitment to that decision.

Conversely, relatively little research has been done to determine the relationship between preabortion counseling or information and post abortion syndrome. Wallerstein (1972) did not find a correlation between post abortion adjustment and how the physician prepared the women for the experience. In counseling, however, post abortal women frequently and regretfully comment on their preabortion ignorance of fetal development or knowledge of alternatives.

The perceived support from family and peers concerning one's decision to abort has emerged as an important determinant of post abortion adjustment (Bracken et al., 1974; David, Rasmussen & Holst, 1981; Major, Mueller, & Hildenbrandt, 1985; Senay, 1970). The more support that a woman receives for her decision during the time of crisis, the better her post abortion adjustment.

**Relationship with partner.** The relationship with the partner in conception is often cited as a principal determinant of post abortion adjustment, but the conclusions about what effect the relationship has are not in agreement. Based on research and clinical experience, three variables concerning the relationship with the partner appear to carry the most salience in understanding post abortion syndrome.

The first of these variables is the degree of closeness in the relationship at the time of the abortion. Freeman (1977), Moseley et al. (1981), Payne et al. (1976; and
Shusterman (1979), all conclude that women in close supportive relationships with their partner had a positive resolution to their abortion. But, this conclusion has been challenged by the work of Bracken et al. (1978) who found no relationship between closeness of relationship and post abortion adjustment and especially by the work of Robbins (1984) whose sample demonstrated greater regret and more negative emotional reactions among women with closer relationships to their partner. This research was particularly helpful in making sense out of these previous findings because of its treatment of post abortion as a multifaceted construct. For example, the conclusions may demonstrate that a close relationship with the partner is highly correlated with the grief aspects of post abortion syndrome, whereas anger aspects may be more associated with a weaker partner relationship.

A second variable that was included concerned the perceived effect of the abortion experience on the relationship with the partner. Ashton (1980), Ewing et al. (1973), and Shusterman (1976) concluded that for most women there is no change in the relationship with the partner, yet some women report both improved and worsened relationships associated with the abortion. Similar conclusions were drawn from a sample of men regarding their post abortion relationships with their partners (Rothstein, 1977). The use of multivariate analysis for this research
detected not only the relation of post abortion syndrome and change in relationship with partner, but picked up combined effects. For example, Ashton's (1980) research connected relationships that worsened after the abortion with elements of coercion with the abortion experience.

The third variable related to the partner was the degree to which the partner supported the woman in her decision to abort. Better post abortion adjustment has been found to relate to partner support for the decision to abort (Bracken et al., 1974; Freeman, 1977; Moseley et al., 1981 and Shusterman, 1979). It also has emerged as a nonsignificant factor (Payne et al., 1976).

All of the preceding variables categorized into a demographic group, medical group, decision to abort group, and relationship with partner group, comprised the set of antecedent variables. Those variables were simultaneously considered for how they correlate to another set of variables which comprised post abortion syndrome.

**Post Abortion Syndrome Variables.**

Post abortion syndrome refers to the collection of psychological and emotional symptoms experienced by women in relation to their abortion (Rue, 1987). Based on clinical experience and a review of the literature, this researcher identified five key elements of post abortion syndrome: stress, grief, guilt, anger, and depression. This research examined how these five elements are affected by the set of
antecedent variables.

**Stress.** The term "stress" was used to represent the collections of related terms (anxiety, worrying, nervousness, preoccupation) which have appeared in the post abortion literature. Although several researchers have identified stress in their samples of post abortal women, they have not connected the stress to a specific aspect of the abortion experience (Adler, 1975; Bracken et al., 1978; Ewing et al., 1973; Freeman, Rickels, Huggins, Garcia's, and Polin, 1980; Shusterman, 1979; and Wallerstein, 1972). Most of the research focused on the percentage of women who experienced stress. Wallerstein (1972) not only examined how frequently stress was reported as a symptom, but also on its salience as a symptom.

Foremost in distinguishing this group was the continual conscious preoccupation with various aspects of the pregnancy and abortion experience and the seeming inability to consign it to memory. The symptoms described were continually active, and neither conscious thought content, preoccupation, nor felt symptoms were in a state of decline of self-limitation. p. 830.

An important contribution of the research was an understanding of the significance of stress as an element of post abortion syndrome. The aspects of an abortion experience (from the set of predictor variables) which had influence on a woman's post abortal stress were identified.

**Grief.** Grief over the pregnancy loss is another aspect of post abortion syndrome which was addressed in the research. Freeman (1978) found that of the women who had
difficulty with their abortion experiences, the largest percent reported feelings of loss of a child as the hardest part of their abortion. Women who identified the fetus as a baby with a specific sex and other recognizable attributes also reported more conflict over their abortion (Wallerstein, 1972). The presence of post abortion grief appears to be equally strong among women who abort for health reasons or fetal abnormality (Blumberg and Golbus, 1975; Lloyd and Laurence, 1985). Work by Horowitz (1978) implies that coercion to abort may be related to increased post abortion grief.

**Depression.** Depression is often cited as a principal component of post abortion syndrome. Higher levels of depression have been related to predictor variables such as having an abortion for health reasons (Blumberg and Golbus, 1975; Lloyd and Laurence, 1985; Wallerstein, 1972), poor relationships with their partners (Moseley et al., 1981), women who wanted the pregnancy (Freeman et al., 1980; Major et al., 1985), women who describe the fetus as a child (Freeman, 1977), and women who had a previous abortion (Kumar and Robson, 1978).

There is a tendency for people to use "depression" as a blanket term for negative emotional reactions. The inclusion of other negative emotional reactions such as grief and guilt was helped in assessing the actual incidence of depression and differentiating it from some of the other
symptoms of post abortion syndrome.

**Guilt.** A measure of post abortion guilt was also included in this research. Although guilt is frequently associated with abortion, (Ashton, 1980; Moseley, 1981; Osofsky & Osofsky, 1972; and Wallerstein, 1972), not much else is known about it. Wallerstein (1972) did determine that the focus of guilt for some women was on "killing the baby" and for other women the guilt was focused on keeping the abortion a secret from loved ones.

**Anger.** Anger frequently appeared in the post abortion literature as part of a measure of post abortion adjustment (Freeman, 1978; Moseley et al., Osofsky & Osofsky, 1972; and Shusterman, 1979). Moseley et al. (1981) specifically connected negative feelings toward the partner with increased post abortal anger. Otherwise, the research literature provides little insight as to which variables contribute to increased post abortion anger.

Although most of the variables used in the study have been cited in the literature, they have previously been examined only for their presence or absence among women experiencing post abortion problems, not as they related to the specific areas of post abortion syndrome (depression, grief, stress, anger or guilt). From these findings women who are young, single, Catholic, and who were coerced to abort, ambivalent about their decision to abort, experienced more pain during the abortion, had late term abortions, and
based their decision on fetal abnormality or health problems are more likely to experience more post abortion problems.

**Research Questions**

The research question were these: How strong is the relationship between the antecedent variables and the post abortion syndrome variables? That is, how much of post abortion difficulty can be explained by the variables in the antecedent set? Also, which variables carry the most salience in explaining the relationship which exists between the antecedent variables and the post abortion syndrome variables?
CHAPTER II
METHODS

This research was a descriptive ex post facto study of variables contributing to post abortion syndrome: stress, guilt, grief, depression, and anger. Variables antecedent to post abortion syndrome were demographic factors, medical factors, factors related to the decision to abort, and factors related to the relationship with the partner.

The study used a combined qualitative and quantitative methods approach. A questionnaire was used to collect all the data. Closed-ended questions with Likert-type responses were used to collect interval level quantitative data. Open-ended questions were used to collect the qualitative data. Connidis (1983) endorsed this combined methods approach because it permits the discovery of new questions or variables, allows elaboration of answers, obtains direction for interpreting the quantitative findings and promotes a better understanding of divergent findings. Because the post abortion experience is embedded in a complex social and emotional context, the combined methods approach is particularly well suited for abortion research.
Subjects

The population from which the sample came consisted of women who had one or more abortions and who, by self-report, suffered some of the symptoms of post abortion syndrome. The sample was a purposive sample acquired primarily through a national network of crisis pregnancy counseling centers. Crisis pregnancy centers provide pregnancy counseling, pregnancy support services, and post abortion counseling. The participants for this study came to the centers to receive one or more of the services mentioned. They were asked to participate in the study if they described problems identified by the counselor as post abortion syndrome. The counselors used the post abortion diagnostic sheet (see Appendix A) as the reference for asking women to participate in the study. This "diagnosis" of post abortion syndrome was left to the discretion of the counselor. Because of their provision of services to females of all ages, the nationwide crisis pregnancy counseling centers were in a unique position to provide the identified sample, as well as provide regional and demographic variety.

Three hundred crisis pregnancy centers were each sent two consent forms (see Appendix B) and two questionnaires (see Appendix C) to distribute. Sixty-nine centers agreed to participate in the study with the largest percent of returned questionnaires coming from California (17%) and
North Carolina (12%). Responses were received from 234 women. Two women sent narratives about their abortion and did not complete the questionnaire. They were not included in the analysis making a total of 232 subjects included in the study. Using the principle of ten subjects per variable, 210 subjects were needed to perform a canonical correlation analysis.

Table 1 shows the demographic characteristics of the 232 women who participated in the study. When compared to the demographic characteristics of U. S. abortion patients collected from abortion clinic statistics in 1987 (Henshaw and Silverman, 1988) the subjects in this study were similar in marital status and age at the time of the abortion. The white race was over represented in this study as compared to Henshaw and Silverman's sample (68.6% white). Also this study had an overrepresentation of the "protestant" (76.9%) and "other" (16.6%) religious classifications as compared to Henshaw and Silverman's sample of 41.9% in the "protestant" and 2.9% in the "other" category.

According to Hollingshead's 4-Factor Index of socio-economic status, the subjects in this study included the range of different statuses from unskilled laborers and menial service workers (18) to major business and professional workers (66). The mean ($\bar{x} = 42$) socio economic status was represented by minor professional and technical workers and medium business personnel. The Henshaw and
Table 1

Demographic Characteristics of Women

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<tr>
<th>Age</th>
<th>At time of abortion</th>
<th>At time of study</th>
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<tr>
<td>Mean years</td>
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<td>32</td>
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<td>Range</td>
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<td>19 - 62</td>
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<td>6.68</td>
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<td>N = 230</td>
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Marital status

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<th>At time of abortion</th>
<th>At time of study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>77.9%</td>
<td>19.8%</td>
</tr>
<tr>
<td>Separated</td>
<td>5.3%</td>
<td>2.6%</td>
</tr>
<tr>
<td>Married</td>
<td>11.5%</td>
<td>71.1%</td>
</tr>
<tr>
<td>Divorced</td>
<td>5.3%</td>
<td>6.0%</td>
</tr>
<tr>
<td>Widowed</td>
<td>0.0%</td>
<td>0.4%</td>
</tr>
<tr>
<td>N = 226</td>
<td></td>
<td>N = 232</td>
</tr>
</tbody>
</table>

Race

<table>
<thead>
<tr>
<th>Race</th>
<th>At time of abortion</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>92.6%</td>
</tr>
<tr>
<td>Black</td>
<td>3.5%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>2.6%</td>
</tr>
<tr>
<td>Native American</td>
<td>0.4%</td>
</tr>
<tr>
<td>N = 230</td>
<td></td>
</tr>
</tbody>
</table>

Education completed

<table>
<thead>
<tr>
<th>Education completed</th>
<th>At time of abortion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Junior High</td>
<td>0.9%</td>
</tr>
<tr>
<td>Partial High School</td>
<td>3.0%</td>
</tr>
<tr>
<td>High School Graduate</td>
<td>25.2%</td>
</tr>
<tr>
<td>Partial College</td>
<td>39.6%</td>
</tr>
<tr>
<td>College Graduate</td>
<td>22.2%</td>
</tr>
<tr>
<td>Graduate/Professional Training</td>
<td>9.1%</td>
</tr>
<tr>
<td>N = 230</td>
<td></td>
</tr>
</tbody>
</table>

Religious Preference

<table>
<thead>
<tr>
<th>Religious Preference</th>
<th>At time of abortion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protestant</td>
<td>76.9%</td>
</tr>
<tr>
<td>Catholic</td>
<td>4.4%</td>
</tr>
<tr>
<td>Jewish</td>
<td>0.4%</td>
</tr>
<tr>
<td>Other</td>
<td>16.6%</td>
</tr>
<tr>
<td>Other</td>
<td>1.7%</td>
</tr>
<tr>
<td>N = 229</td>
<td></td>
</tr>
</tbody>
</table>
Silverman study did not report a socioeconomic status score on their sample.

The mean age of participants in the study was 32 years old and the mean age at which they aborted was 21 years old. The time between their abortion and their participation in this study ranged from one month to 39 years with a mean of 11 years (see Table 2). Hence, a wide range of years since abortion was represented in the study.

The questionnaire also included a request for information about previous pregnancies and the pregnancy which was aborted (see Table 2). Eighty-one percent of the women had a pregnancy other than the aborted one and more than two-thirds have had children since the abortion. In all there have been 339 births, 296 abortions, 67 miscarriages or stillbirths, and three adoptions in this sample. Nine of the women (3.9%) conceived their aborted pregnancy by rape or incest. Fifteen women (6.6%) had an illegal abortion.

The time of the abortions ranged from 3 weeks to 30 weeks gestation (see Table 2). Ninety-five percent of the abortions were performed in the 12th week or earlier. This corresponds to the type of abortion procedures. Eighty-two percent of the women said they had the procedures (D & C or suction), which are normally used for first trimester abortions, and 12% reported the procedures (saline, D & E, and prostaglandin) more common in second and third trimester
Table 2

Abortion-Related Information

<table>
<thead>
<tr>
<th>Type of abortion</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Suction</td>
<td>65.4%</td>
</tr>
<tr>
<td>D &amp; C</td>
<td>16.2</td>
</tr>
<tr>
<td>D &amp; E</td>
<td>5.7%</td>
</tr>
<tr>
<td>Saline</td>
<td>5.3%</td>
</tr>
<tr>
<td>Prostaglandin</td>
<td>.9%</td>
</tr>
<tr>
<td><strong>N = 228</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weeks pregnant at time of abortion</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean number of weeks</td>
<td>10</td>
</tr>
<tr>
<td>Range</td>
<td>3 - 30</td>
</tr>
<tr>
<td>S. D.</td>
<td>4.13</td>
</tr>
<tr>
<td><strong>N = 222</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Length of time since abortion</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean number of years</td>
<td>11</td>
</tr>
<tr>
<td>Range</td>
<td>0-39</td>
</tr>
<tr>
<td>S. D.</td>
<td>6</td>
</tr>
<tr>
<td><strong>N = 230</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pregnancy resulting from rape or incest</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>3.9%</td>
</tr>
<tr>
<td>No</td>
<td>96.1%</td>
</tr>
<tr>
<td><strong>N = 230</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Post abortion childbearing</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Had a child(ren)</td>
<td>67.5%</td>
</tr>
<tr>
<td>None</td>
<td>9.6%</td>
</tr>
<tr>
<td>Not tried</td>
<td>22.8%</td>
</tr>
<tr>
<td><strong>N = 228</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pregnancy history at time of survey</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Births</td>
<td>339</td>
</tr>
<tr>
<td>Abortions</td>
<td>296</td>
</tr>
<tr>
<td>Miscarriages/Stillbirths</td>
<td>67</td>
</tr>
<tr>
<td>Adoptions</td>
<td>3</td>
</tr>
<tr>
<td><strong>N = 230</strong></td>
<td></td>
</tr>
</tbody>
</table>
abortions.

**Instruments**

The data were collected by a self-administered questionnaire (see Appendix C). The questionnaire included instruments developed by other researchers as well as open-ended and forced-response questions which were developed from the researcher's clinical experience. As recommended by the methodological evaluation in Shostak and McLouth's (1984) research on abortion, the questionnaire began with questions relevant to the topic of the study and ended with the potentially more threatening request for personal background data.

**Post Abortion Syndrome Variables**

Post abortion syndrome (see Appendix A) is the collection of symptoms resulting from abortion trauma with a duration of one month or more. The checklist features symptoms of reexperiencing the abortion, symptoms of avoidance regarding abortion-related stimuli, and a general grouping of associated features such as hypervigilance, guilt, and suicidal ideation. These symptoms were grouped into five areas of post abortion difficulty - guilt, grief, depression, stress, and anger. Several validated instruments for these five emotional states were incorporated in the questionnaire to measure aspects of post abortion syndrome.
**Stress.** Stress was measured using the Impact of Event Scale (see Q-26 of Appendix C) developed by Horowitz, Wilner, and Alvarex (1979). This is an 11 item, 4 point scale of current stress related to a specific event. Respondent checked the frequency of occurrence of behaviors indicating stress. A high score indicated a high degree of stress. The range of scores could be from 11 to 44.

The developers of the scale did a reliability check using a beginning class of 25 physical therapy students (median age = late twenties) who had recently begun dissection of a cadaver. Comparing two administration of the scale they found the split-half reliability of the total scale was 0.86 and the test-retest reliability was 0.87. Also, two tests of validity were performed by the developers of the scale. One test demonstrated that the scale differentiated clinically defined stressed people from medical students. The other test demonstrated that the scale was sensitive to improvement among therapy patients.

**Guilt.** Guilt was measured by asking respondents to place a mark on a line to indicate the amount of guilt they experienced in relation to their abortion. This guilt continuum ranged from no guilt to extreme guilt. The researcher measured their mark and assigned a numerical score (0 to 10) with a higher number meaning more guilt.

**Grief.** The Texas Inventory of Grief, developed by Faschingbauer, Devaul, and Zisook (1977), is a 7 item, 5
point scale which measured the extent of unresolved grief (see Q-28 in Appendix C). A high score indicated a great amount of unresolved grief with scores ranging from 7 to 35. The developers of the scale administered it to 57 patients in a psychiatric outpatient clinic who had lost first degree relatives. (mean age = 37 years). A split-half reliability coefficient of this instrument was computed at 0.81. A test for construct validity indicated a significantly higher grief score on recent deaths as compared to deaths less recent in occurrence. This validity check was premised on the expectancy that grief will decrease with time.

Depression. An adaptation of the CES-D, a self-report depression symptom scale developed by the Center for Epidemiologic Studies (Weissman, Sholomskas, Pottenger, 1977), was used to measure post abortion depression (see Q-30 in Appendix C). It is a 16 item, 4 point scale. The scores may range from 16 to 64. In order to assess whether a present depressive state is connected with the abortion experience, the instructions on the CES-D will be adapted so that respondents will check only the symptoms that they perceive are related to their abortion experience. This alteration may mean that the reliability and validity attached to the CES-D will not hold true to this adaptation. Weissman, et al. (1977), demonstrated that the CES-D differentiated psychiatric patients from community normals
and acutely depressed patients from other psychiatric patients. It also correlated highly with other depression scales.

Anger. Anger was assessed by summing the responses to questions from a 12 item, 5 point scale developed by the researcher (see Q-31 of Appendix C). A higher score indicated a greater degree of anger with a possible range of 12 to 60.

Antecedent Variables

The antecedent variables were made up of personal decision factors, medical factors, and demographic factors. The personal and medical questions had Likert type responses. The personal decision factors included support from family and friends (Q-3), pressure to abort (Q-4), difficulty in deciding to abort (Q-5), satisfaction with preabortion counseling (Q-6), and relationship with partner (Q-8, 9, 10, 11). Medical factors included medical complications (Q-13) subsequent conceiving and bearing a child (Q-14), effect on childbearing thoughts (Q-15), fear of abnormality (Q-16), and fear of own health (Q-17). Demographic factors included age, race, education, and religiosity (Q-36, 38, 39, 40).

Pilot Study

A brief explanation of the study and a preliminary questionnaire used to collect data were given to twelve women who were participating in the post abortion support
group of Greensboro Crisis Pregnancy Center. The women were asked to answer the questionnaire, to record how much time they spent answering, and to offer suggestions and make corrections on the questionnaire. Four women who facilitate the post abortion support groups were also requested to offer their suggestions concerning the questionnaire and letter to the subjects.

The pilot study respondents pointed out errors in wording and typographical mistakes. They also pointed out that more than one method could be used to pay for an abortion, therefore a multiple response reply was necessary. A few concerns about the excessive length of the questionnaire were shared, but no change was made to shorten it.

The suggestions and corrections offered by the pilot study participants were incorporated to make the final questionnaire. Although the completed questionnaires were perused for trends in missing data and skewness, no formal analysis was performed using the pilot study data.

Procedure for Data Collection

After the Christian Action Council approved the research, a packet including the letter to Crisis Pregnancy Center directors explaining the project and giving instructions, the approval for centers to participate, the symptom list for post abortion syndrome (see Appendix A), two subject's consent forms, two explanatory letters to the
subjects (see Appendix B), two questionnaires (see Appendix C), and two return envelopes were sent to 300 Crisis Pregnancy Centers across the United States.

The personnel at participating crisis pregnancy centers distributed the questionnaires to all clients reporting symptoms of post abortion syndrome. The questionnaires were completed at the centers and returned to the center director who forwarded them to the researcher. Sixty-two of the 300 centers agreed to participate in the project. Several directors called saying they received the mailing too late to participate by the deadline. The low response rate was probably due to this delay in their receiving the bulk mailing.

Procedure for Data Analysis

Data Reduction

The qualitative data required a separate analysis for each of the eight open ended questions (Q12, 15, 17, 19, 24, 28, 31, 34). Initially, all questionnaires were sorted into a response or a no response group for each question being analyzed. Each statement under each question was given a label which characterized what the subject had said. These statements were collapsed into a smaller set of variables. Selected quotations were used to enhance the conclusions of the canonical correlation. These grouped qualitative responses were also coded and entered into the computer for further quantitative analysis.
The quantitative data came from responses on the questionnaire which had a preassigned number. All the borrowed scales, (Q-27 for the Impact of Events Scale, Q-29 for the Texas Inventory of Grief, and Q-32 for the CES-D depression scale) were scored according to their author's directions and used as the scaled score. The guilt continuum was measured with a ruler by the researcher and recorded as one number. Each millimeter was a unit for scoring. Hollingshead reference for employment status served as the basis for assigning numbers to the occupational status of the subject and her husband (if applicable). The four factor formula was used to compute the overall socioeconomic level of the subject's household. The numerical representations for the open-ended questions were entered after the full qualitative analysis was completed.

Data Analysis.

Because of the complex relationships among variables antecedent to the post abortion syndrome and the belief that there is value in examining the component parts of post abortion syndrome, the researcher selected a multivariate technique for the quantitative data analysis. Canonical correlation provides for the unique contribution of each antecedent variable to be discerned while also providing the same for each post abortion syndrome variable. Because of the descriptive purpose of the research, correlation
provided the necessary summary of the two sets of variables.

Very little research about post abortion syndrome has utilized a multivariate technique and therefore has not been able to separate out the unique contribution of variables. The variable of age is a good case in point. Age is highly correlated with marital status, education level, and presence of other children. Therefore, the unique contribution of each of these variables can be assessed while the correlated variables are held constant.

The data were checked for skewness and multicollinearity. No corrections were needed. The significance of the canonical correlations was tested utilizing Bartlett's correction factor for Wilks' lambda and the resulting chi-square test. By treating post abortion syndrome as a multivariable construct, the canonical correlation could assess the amount of variance shared by the antecedent and outcome variables in each canonical variate.
CHAPTER III
RESULTS AND DISCUSSION

Two hundred and thirty-two women surveyed about their abortion experiences showed that certain demographic variables and relationship variables at the time of the abortion were related to post abortion syndrome. A canonical correlation between these antecedent variables and post abortion syndrome was computed to find which sets of variables were most highly related. An analysis of five open-ended questions gave qualitative support for the two significant canonical variates.

Canonical Variates of Post Abortion Syndrome

The post abortion syndrome variables were anger, guilt, stress, depression, and grief. The women had the highest scores in guilt ($\bar{x} = 8.60$, $sd = 2.11$). Anger ($\bar{x} = 2.75$, $sd = .95$), stress ($\bar{x} = 2.01$, $sd = .93$), and grief ($\bar{x} = 2.79$, $sd = .77$) were all midrange scores with the depression index showing the lowest scores ($\bar{x} = 1.85$, $sd = .78$). Table 3 summarizes the post abortion syndrome scores.

A canonical correlation procedure was used to find the ability of certain variables to predict post abortion syndrome. Canonical correlation is basically a multiple regression technique in which there are the usual multiple predictor variables, but also multiple outcome variables.
Table 3

Mean Scores of Post Abortion Syndrome Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Possible Range</th>
<th>Mean*</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anger</td>
<td>1-5</td>
<td>2.75</td>
<td>.95</td>
</tr>
<tr>
<td>Guilt</td>
<td>1-10</td>
<td>8.60</td>
<td>2.11</td>
</tr>
<tr>
<td>Stress</td>
<td>1-4</td>
<td>2.01</td>
<td>.93</td>
</tr>
<tr>
<td>Depression</td>
<td>1-4</td>
<td>1.85</td>
<td>.78</td>
</tr>
<tr>
<td>Grief</td>
<td>1-5</td>
<td>2.79</td>
<td>.77</td>
</tr>
</tbody>
</table>

*A higher score indicates more presence of the symptom.
In the computation each set of variables becomes a composite. The correlation between these two composites is the canonical correlation, \( R \). The square of this canonical correlation is the estimate of the variance shared by the two composites.

The two sets of variables in this study were the antecedent, or predictor set, and the post abortion syndrome set. The predictor set included 16 variables: seven relationships variables; four medical variables; and five demographic variables (see Table 4). The post abortion syndrome set included five variables: anger, guilt, stress, depression, and grief.

After finding that the antecedent variables and the post abortion variables were significantly correlated \( (F=1.65 [60,506], p=.05) \) the procedure further identified an array of variables in the antecedent set which predicted the array of variables in post abortion syndrome. Five different sets of arrays, called canonical variates, emerged from the analysis, two of which were significantly correlated at the .05 level. The correlation between the first pair of canonical variates was .63 which explained 40% of the variance that the two sets of variables have in common. The correlation between the second pair of canonical variates was .50, explaining 25% of the variance in common. The third variate explained 20%, the fourth variate explained 10%, and the fifth variate explained 8% of
Table 4

Canonical Variates for Antecedents of Post Abortion Syndrome

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>First Canonical Variate</th>
<th>Second Canonical Variate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Antecedent set</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others support abortion</td>
<td>-.01</td>
<td>.02</td>
</tr>
<tr>
<td>Others press to abort</td>
<td>.25</td>
<td>-.41</td>
</tr>
<tr>
<td>Difficulty deciding</td>
<td>.16</td>
<td>.59</td>
</tr>
<tr>
<td>Poor preabortion counseling</td>
<td>.38</td>
<td>.06</td>
</tr>
<tr>
<td>Closeness to partner</td>
<td>-.01</td>
<td>.24</td>
</tr>
<tr>
<td>Partner supports abortion</td>
<td>.04</td>
<td>-.24</td>
</tr>
<tr>
<td>Worse relationship</td>
<td>.35</td>
<td>-.31</td>
</tr>
<tr>
<td>Subsequent childbearing</td>
<td>-.27</td>
<td>-.16</td>
</tr>
<tr>
<td>Medical complications</td>
<td>.27</td>
<td>.00</td>
</tr>
<tr>
<td>Fetal abnormality</td>
<td>-.05</td>
<td>-.25</td>
</tr>
<tr>
<td>Threat to woman's health</td>
<td>.25</td>
<td>-.04</td>
</tr>
<tr>
<td>Weeks pregnant at abortion</td>
<td>-.13</td>
<td>.28</td>
</tr>
<tr>
<td>Age at abortion</td>
<td>-.01</td>
<td>.45</td>
</tr>
<tr>
<td>Race (W = 1, other = 2)</td>
<td>-.11</td>
<td>-.02</td>
</tr>
<tr>
<td>Socio-economic level</td>
<td>-.01</td>
<td>-.21</td>
</tr>
<tr>
<td>Importance of faith</td>
<td>.12</td>
<td>.54</td>
</tr>
<tr>
<td><strong>Post abortion syndrome set</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anger</td>
<td>.59</td>
<td>-.88</td>
</tr>
<tr>
<td>Guilt</td>
<td>.69</td>
<td>.73</td>
</tr>
<tr>
<td>Stress</td>
<td>.20</td>
<td>.50</td>
</tr>
<tr>
<td>Depression</td>
<td>.04</td>
<td>-.22</td>
</tr>
<tr>
<td>Grief</td>
<td>-.25</td>
<td>-.02</td>
</tr>
<tr>
<td><strong>Canonical correlation (R)</strong></td>
<td>.63</td>
<td>.50</td>
</tr>
<tr>
<td><strong>Redundancy</strong></td>
<td>.11</td>
<td>.05</td>
</tr>
<tr>
<td><strong>Percent of variance (R-sq)</strong></td>
<td>.40</td>
<td>.25</td>
</tr>
</tbody>
</table>

F = 1.65 (60,506), p < .05
variance. Table 4 shows the correlations between the variables in the canonical variates. The major distinguishing factor between the two variates was how anger related to guilt, stress, and grief. One dimension of post abortion syndrome had high anger linked to guilt and inversely related to grief. The other dimension had low anger linked with higher guilt and stress. A different set of antecedent variables was correlated with these two dimensions, one social or external and one psychological or internal. In order for a variable to be considered relevant, its standardized canonical coefficient had to have a cutoff of .25.

First Canonical Variate: External Antecedent Factors

Substantively, the first canonical variate indicated a dimension of post abortion syndrome which included high anger (.59) and guilt (.69), but low grief (-.25). The loading for the antecedent factors came primarily from more dissatisfaction with pre-abortion counseling and information (.38), worse relationship with partners after their abortion (.35), inability to conceive and bear a child since the abortion (-.27), greater medical complications associated with the abortion (.27), greater pressure from others to abort (.25), and an abortion decision more likely based on the fear of harm to health (.25).

In this first canonical variate, the variables which contributed most to this pattern of high post abortion
anger, guilt, and lower grief were similar in that they represent dissatisfaction with events or people external to one's control. In Adler's (1978) social-psychological perspective, this first variate would show a dimension of post abortion syndrome influenced by social variates. All the variables represented an outcome perceived as negative and reflect a position of "recipient" rather than "agent" of the circumstances.

The qualitative phase of the analysis confirmed this assessment. For example, in reference to the physician's pre-abortion counseling, one woman said, "Being 17, I naturally felt that he was the expert when he told me my baby wasn't a baby, but a mass of tissue." In reference to her relationship to her partner, this "recipient" role is reflected in her comment, "...he said he would leave me if I had the baby. He also made the appointment. I wouldn't have done it myself."

**Second Canonical Variate: Internal Antecedent Factors**

Another value in canonical correlation is that it allows one to look at another array of antecedent and post abortion variables which is called the second pair of canonical variates. This allows the researcher to distinguish two different dimensions of the psychological profile by the peculiarities of the related variables. Essentially, the first variate was made up of characteristics influenced by social variables, but the
second was characterized by psychological variables.

In the second canonical variate, low anger, but high guilt and stress composed the post abortion syndrome set (see Table 4). The antecedent variables were, in order of magnitude, difficulty making decision to abort (.59), importance of faith in personal life (.54), older age at time of abortion (.45), perceived absence of pressure from other people to abort (-.41), and the degree to which the relationship with the partner improved (-.31), the higher scores indicating the relationship became worse.

The second canonical variate profiled a dimension of post abortion syndrome characterized by an absence of anger (-.88), more guilt (.73), and more stress (.50). Unlike the first variate, the second was characterized by internally based or psychological variables such as ambivalence, making the decision to abort, and the importance of her faith. These three outcome variables and the seven antecedent variables had 25% common variance, not as high as the 40% common variance for the external factors, but still noteworthy.

Although two variables, age and number of weeks pregnant when aborted, in the second variate were not considered to be intrapsychic variables, their interpretation is actually well suited in this dimension of post abortion guilt and stress. The older woman who chooses abortion may be predisposed to a guilt reaction because of
what her age means. Usually, the older a woman, the more resources she has for parenting --- maturity, education, wisdom, financial stability. More socially acceptable (or personally acceptable) reasons to abort are more characteristic of a younger person --- have not yet finished school, no money to have a child, no maturity to raise a child. For a younger person, the unanticipated pregnancy could be interpreted as an unfortunate mistake of youth and immaturity. The older woman can view the unanticipated pregnancy as something she should have prevented and believe she has increased responsibility in the outcome of the pregnancy. Hence, her socialization era also could have contributed to increased guilt over the pregnancy as well as the decision to abort it.

One main reason that women abort later in pregnancy is due to difficulty in making the decision. The women who abort later in the pregnancy may experience more post abortion guilt and stress because they were not initially committed to their abortion decision. A second reason that they may have experienced more guilt and stress is because they had more time to experience the pregnancy psychologically, and possibly even physically experience fetal movement. A third reason for more guilt may be that two of the late term abortion techniques, saline and prostaglandin, result in the delivery of a dead fetus. The potential for such an experience to contribute to guilt and stress is intuitively evident.
There was not a consensus in the literature concerning how the quality of the relationship with the partner influenced post abortion satisfaction. The presence of the variable "degree to which relationship with partner improved" in the second canonical variate, gave support to the work of Robbins (1984) whose sample demonstrated a worse post abortion adjustment among women whose partner relationships strengthened. One way to interpret this finding is to focus on the woman's perception that "maybe the relationship could have sustained a child bearing experience" leading to guilt and stress over having made the abortion decision.

**Discussion of Qualitative Analysis and Canonical Variates**

A combined quantitative and qualitative approach to research can provide a richer picture of the phenomena being studied (Connidis, 1985). Such is the case with this study on post abortion syndrome. Each section of the questionnaire used to collect data (see Appendix C) had at least one open-ended question in which subjects wrote out their individual answers. There were five major categories of responses to these questions: outcome of relationship with partner, childbearing and medical concerns, abortion decision, anger and suicide, and interaction with abortion provider. With each of these five sections, the qualitative analysis is discussed to show how it enhances the canonical
variates and relates to the literature.

**Relationship with Partner.**

The questionnaire section entitled, "Your relationship with the father of the baby (partner)" included the question, "What eventually happened with your relationship with your partner?" to which 225 women responded. Ten distinct categories emerged from the qualitative analysis of their responses (see Table 5). The categories were differentiated by the relationships status and/or duration. More than half (57.9%) remained single, but only 5.9% continued the relationship. There were 23.2% who were still married, although 19.6 had married after the abortion. More than 11% were married at the time of the abortion, but about 8% of them separated or divorced.

There was one category of respondents in which there was not a normal dating relationship to end (5%). Nine respondents indicated their pregnancy resulted from rape or incest. One woman detailed that it was a date rape. Also included in this category were women who conceived from a one night stand.

*Single and relationship continued.* Some women (5.9%) remained in a relationship with the partner of their abortion but were never married to him. Not surprisingly, the women in this group had their abortion more recently. Some women in this group reported an improved relationship since the abortion as reflected in the following quotation:
I feel my relationship improved because it was a very hard time in my life and my partner would be there anytime day or night to hug me and make me feel like I wasn't all alone or a killer.

Other women in this group simply wrote that the relationship has continued on the same level.

Still others wrote of strains in the present relationship. One woman wrote, "He chose to ignore my decision and would not discuss it due to his Catholic beliefs. We continued in the relationship (three years now) but this issue is a very angering one for both of us."

Single and relationship ended. The largest number of single women were those whose relationship ended (see Table 5). The closure of these relationships took many different routes. Several respondents simply wrote, "the relationship ended," "we separated," "ended shortly afterwards," "eventually we didn't date anymore." These responses did not provide any insight into the reason for the dissolution or whether the dissolution was painful.

The largest grouping of single subjects (17.9%) whose relationships ended were those whose responses indicated that factors related to the abortion contributed to the relationship's end. Responses like the following indicated that guilt over the abortion was a factor in the relationship's demise:

I tried desperately to make the relationship work - I felt out of guilt that I had to make things work out to make up for what I did. The relationship crumbled - he didn't care.
### Table 5

**Outcome of Relationship with Partner**

<table>
<thead>
<tr>
<th>Response</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No relationship existed</strong></td>
<td>5.0%</td>
</tr>
<tr>
<td><strong>Single</strong></td>
<td></td>
</tr>
<tr>
<td>Relationship continued</td>
<td>6.0%</td>
</tr>
<tr>
<td>Relationship ended, no mention of difficulty</td>
<td>20.1%</td>
</tr>
<tr>
<td>Difficult end due to abortion</td>
<td>18.0%</td>
</tr>
<tr>
<td>Difficult end not due to abortion</td>
<td>8.8%</td>
</tr>
<tr>
<td>Relationship ended before abortion</td>
<td>5.0%</td>
</tr>
<tr>
<td></td>
<td>57.9%</td>
</tr>
<tr>
<td><strong>Married</strong></td>
<td></td>
</tr>
<tr>
<td>After the abortion, still married</td>
<td>19.8%</td>
</tr>
<tr>
<td>After the abortion, now separated or divorced</td>
<td>5.5%</td>
</tr>
<tr>
<td>At time of abortion, still married</td>
<td>3.7%</td>
</tr>
<tr>
<td>At time of abortion, now separated or divorced</td>
<td>8.1%</td>
</tr>
<tr>
<td></td>
<td>37.1%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100.0%</td>
</tr>
</tbody>
</table>

N=225
Some comments indicated that abortion served as an impetus to define the relationship. These quotations showed how the relationship changed. As one woman said about their breaking up, "I believe many times an abortion forces the reality of the actual validity of the relationship." An even more definite way the abortion defined the relationship was described as, "There really was no relationship on his end of it - eventually I wised up to the fact I had been used."

Some of the comments indicated a connection between the abortion and a distancing or communication break in the relationship, as indicated by one who wrote: "Continued dating for two years following the abortion, though never talked about the abortion experience. We distanced tremendously over time, but stayed together out of fear or maybe feelings of obligation." Other comments showed that the father's pain contributed to the distancing in the relationship: "We both grew further apart from each other because he was disappointed that I didn't keep the baby."

In writing about what happened to the relationship with their partners, some of the subjects whose relationships ended pointed to their partner's inability to share in the responsibility as a reason for ending. The viewpoint is reflected in this woman's statement, "At the age of 19 he was more interested in himself and his sexuality and not concerned about the consequences of his actions."
Some separations were not related to abortion. This subgroup of women (8.5%) had difficulty in the relationship, but their comments do not necessarily connect the difficulty to the abortion. One example is when the relationship ended because the partner was seeing another woman. One woman shared, "I went back to the house after the abortion - he was already with another girl and ignored me - I never saw him after it."

Some comments definitely pointed to a difficult end to the relationship, but are not as specific as the one above. They indicated that, "The relationship died - a slow, painful death." One woman described her relationship as "violent" and she still fears him and even has "nightmares about his anger toward me." One father even "tried to commit suicide." Another woman told of staying together, "after two abortions. It was very hard as sexual intimacy makes a bond hard to break."

One group of women (20.1%) reported that their relationships with their partners ended but did not provide additional information concerning the relationship's end. Sometimes they, "gradually broke off the relationship" with a continuing good and caring feeling."

Then there were others whose relationship ended before abortion. Some of the women (5%) in the survey reported that their relationships broke up before the abortion. One woman did not know who the father was, and another woman
said, "We broke up before I had the abortion. He tried to say it wasn't his. But, after I had it he wanted me back."

**Married and relationship ended.** Although the largest group were single women whose relationships ended, there were many women (37.1%) who were married to their partners. The largest subgroup were single when they aborted the pregnancy, but later married their partner.

One subgroup in the sample was women who were married at the time of the abortion. Some remained married (3.7%) and others were divorced or separated at the time of the survey (8.1%). One married woman who aborted wrote, "Now things are much better. The experience was over two years ago. We (when I became very depressed over the experience) received counseling at our church and together received marriage counseling for several months. This strengthened our relationship slowly." Others had the experience of feeling "a barrier come up between us, a sense of distrust began to surface."

The responses of some women who aborted when married then later divorced seemed to indicate that the relationship was troubled. One woman wrote, "We were married at the time and we divorced the following year - probably would have anyway."

In the group of women (19.7%) who said they married after the abortion, most simply stated, "We got married." Others elaborated and shared some insight into their
decisions and circumstances. One woman described how her husband, "still supports abortion and feels it was the best decision. 'Wondering' why I would not put it behind me, he did not understand my shame and guilt." One woman described the situation as it changed, sharing insight into her own as well as her husband's feelings:

The relationship worsened a bit because something was ruined in it. But because of our new-found relationship with Jesus Christ shortly after the abortion, we were able to work through the guilt and forgiveness necessary. Otherwise we would have broken up. We are married today with two more children.

Some of the women (5.4%) reported that they married their partner after the abortion but later divorced. One respondent said, "upon discovering I was pregnant, neither of us wanted an abortion, but were doubtful about marriage also, after extreme pressure from my family to abort, we did separate and divorce."

Discussion of relationship to partner and canonical variates. The women's generous responses to this open-ended question, coupled with the canonical correlation analysis, provide important insight as to the connection between post abortion adjustment and the outcome of the relationship with the partner in conception. There was not a consensus among previous studies as to how the abortion experience affected the dyadic relationship. Robbins (1984) associated greater regret and more negative reactions to the abortion among women whose relationships strengthened after the abortion, while Ashton (1980), Ewing et al. (1973) and Shusterman
(1976) concluded relationships generally do not change after the abortion. Payne et al. (1976) reported better post abortion adjustment among women whose relationships were positive and stable after the abortion.

Approaching post abortion syndrome as a multivariate construct makes evident the complex relationship between the abortion experience and the dyad. For example, in the canonical correlation analysis both the degree to which the relationship improved and the degree to which the relationship worsened emerged as significantly correlated to post abortion syndrome. The key to understanding this finding is in the multivariate structure of post abortion syndrome. The worsened relationship correlated with higher levels of post abortion anger and guilt. The responses of the open-ended questions reflect this finding. One respondent having a high anger and guilt score wrote, "I attribute the resentment, bitterness, and unresolved feelings of my abortion to much of the demise of that marriage."

The improved relationship correlated with higher levels of post abortion guilt and stress with a significantly lower level of anger. Again, the women's comments verify this finding such as the woman who said her relationship improved because, "he would be there anytime day or night to hug me and make me feel like I wasn't all alone and a killer." The comment does not indicate anger, but reflects guilt ("I
wasn't ...a killer") and pervasive stress ("anytime day or night").

Both the qualitative and quantitative analyses led to the conclusion that the outcome of the relationship with the partner is correlated to different aspects of post abortion syndrome.

Another observation from this study concerning post abortion adjustment and the relationship to the partner is the role that abortion can play in defining a relationship. The pregnancy and abortion decision served as a catalyst in exposing or creating a perspective of the relationship which was not known beforehand. The emotions surrounding the abortion were compounded and enmeshed by the emotions surrounding the newly acquired perspective of the relationship. This finding was most often reported by women whose relationship turned out to be less committed than they had previously perceived.

This study extended the body of information about the abortion and relationship outcomes by virtue of its including women whose abortions were many years ago. Data about a relationship's tenure was examined, unlike most post abortion research which measures relationship outcome within a year or less. For instance, the comments of women who eventually married their partner or who were married at the time of the abortion showed that the relationships which continued confronted many of the same abortion-related
problems as did the ones in which the relationships ended. A simple measure of relationship outcome taken within months of the abortion would often have missed this dimension.

**Childbearing and Medical Concerns**

The section of the questionnaire entitled "Medical Factors" included the question, "Has your abortion in any way (physically or emotionally) had an effect on your childbearing efforts and thoughts about childbearing?" Twenty-one percent of the women responded "no" to the question. Of the women who answered "yes", their more detailed responses resulted in two major categories: childbearing and medical (see Table 6).

**Feelings about childbearing.** The responses categorized under childbearing reflect strong feelings about the abortion surfacing in a subsequent pregnancy, parenting issues, and planning children. Table 6 shows that over 47% of the 225 women responding to this question were concerned about future childbearing and childrearing.

A large number of women (15.4%) wrote that subsequent pregnancies after their abortion prompted feelings or fears that previously were nonexistent. Some of the statements expressed a sense of loss: "I think I will always have three empty gaps in my life that will never be filled; no matter how many kids I have." For other women the pregnancy they carried to term seemed to prompt guilt over the abortion:
During pregnancy with my current children I found out what pre-natal development really was. I also felt the in utero movements. I felt much guilt being thrown up in my face as I raised my children their first few years till I got help. My growing children were a constant reminder of the murder I had committed.

This woman expressed the realization of many women that guilt could be devastating unless they were helped to seek a way to deal with it and move on with life.

The obsession some women had to have children seemed to represent having a replacement baby. One woman described this by saying:

I obsessed about it - finally shook my fist at God and said I don't want to live without children. I'm convinced it was the reason for my two miscarriages before I had live children. I was unable to relax until I held a live child - felt I had to hold those babies in utero by my own power. I had a physical sensation of them dropping out if I relaxed my vigilance. I didn't relax until my five babies were about six weeks old.

Some of the women expressed their desire for more children in the context of either proving they could be good mothers or the realization that they would be a good mother.

One group of women (10.1%) shared that they felt their abortion had a negative effect on their subsequent bonding to and parenting of their children. Often they seemed afraid to acknowledge that their baby was real as this woman did:

I had difficulty enjoying my pregnancy and could not associate being pregnant to having a baby. When my daughter was born via c-section I could not bond with her (I liked her) but for a whole year I could not believe she was mine. I would look at her but I couldn't associate her with my being pregnant.
Table 6  
Outcome of Abortion on Childbearing Efforts and Thoughts

<table>
<thead>
<tr>
<th>Response</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Feelings about childbearing</strong></td>
<td></td>
</tr>
<tr>
<td>Negative feeling in subsequent pregnancies</td>
<td>15.4%</td>
</tr>
<tr>
<td>Inadequate bonding with or parenting of future children</td>
<td>10.1%</td>
</tr>
<tr>
<td>Desire not to conceive again or have another child</td>
<td>10.6%</td>
</tr>
<tr>
<td>Desire or obsession with having another child</td>
<td>8.2%</td>
</tr>
<tr>
<td>Positive effect</td>
<td>2.9%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>47.2%</td>
</tr>
<tr>
<td><strong>Medical fears</strong></td>
<td></td>
</tr>
<tr>
<td>Medical problems perceived to be caused by the abortion</td>
<td>24.1%</td>
</tr>
<tr>
<td>Fear of not being able to conceive again or bear a child</td>
<td>14.9%</td>
</tr>
<tr>
<td>Fear that future children will be handicapped, miscarried, etc.</td>
<td>13.9%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>52.9%</td>
</tr>
</tbody>
</table>

N=225
The statements about inability to bond and inadequacy as a parent were closely related. One woman wrote, "I had thoughts of destroying my firstborn. I had feelings of being a terrible person and an inadequate mother." It took her 16 years to work through all the emotional after effects.

Among the women who said their abortion affected their thoughts about childbearing is a subgroup of about 11% of the women who connected their abortion experience to their desire never to conceive again or an avoidance of having children. Some of this avoidance showed up in "having my tubes tied" and an attempt to "avoid sexual intercourse". Others were clearly afraid to have children.

The strong desire to have another child was expressed by about 8% of the women. One woman said it as simply as, "I find myself wanting a baby more and more."

A small group of women (2.9%) reported that the abortion had what could be considered as a positive effect on their childbearing thoughts. One woman said, "It may have enhanced the beauty of being pregnant somewhat," and another said, "I think I will be giving more love to the children I'll have someday." Others made similar comments especially about the gratefulness for being able to conceive again. One woman said it well, "My thoughts about childbearing truly center around the miracle and the privilege/responsibility of parenting."
Medical fears. Almost one-fourth of the women believed that they had medical problems that were caused by the abortion (see Table 6). Although almost 11% of the women had responded to their abortion with a strong desire never to conceive again, more than 14% of them had a fear of not being able to conceive in the future when they desired a pregnancy. Fear of future infertility had two distinct types of women: those who actually are experiencing infertility and connecting it to their abortion, and those who fear infertility. Women actually experiencing infertility demonstrate two viewpoints of how the abortion caused their infertility. One viewpoint is that the infertility is a punishment or moral consequence for the abortion. They wrote comments such as: "Sometimes I feel I'm not worthy of having children because of what I did," or "I felt this was a punishment from God." The second viewpoint is that the abortion medically caused the infertility as reflected in the following response: "I suffered from scarred tissue in the fallopian tubes, suffered two tubal pregnancies, and lost both tubes. I blame the abortion for the scarring and possible infection (PID) that I suffered."

Many of the responses about fear of being able to conceive in the future also included other fears concerning birth defects or miscarriage. Fear of bearing a handicapped child or fetal death is a very strong theme in this section
of abortion's effects on thoughts concerning childbearing. Almost 14% of the women related their fear to a possible medical consequence of abortion. Most of the responses concerning fear of birth defects, miscarriage, and stillbirths reflect a fear of punishment, such as, "...also fearing to be punished by having a retarded child or have them kidnapped or something. I was obsessed with fear and afraid of being punished for the taking of an innocent life."

Instead of fearing that future children would be handicapped, one woman's fear was that her abortion may have caused her child's handicap. She wrote that she "was very grateful I could still have a baby, but when my last child was born handicapped the guilt that the abortion might have caused it was unbearable."

A transition from examining the abortion's effects on the woman's thoughts about childbearing to the abortion's effects on women's childbearing efforts ushers in more medically related concerns. Whether perception or fact, more than 24% of the women attribute subsequent medical problems and infertility to their abortion. For some women, there's a question in their mind about the role their abortion played in later gynecologic problems. One woman wrote, "I have had two miscarriages and a stillbirth (due to placenta abruption) since the abortions. I suspect they are as a result of my three abortions but I have no proof."
Similar questions were reflected about prematurity and a hysterectomy. Although some women believed there was a direct connection between their medical problems and the abortion, others wanted to have more information before drawing the connection.

Most of the responses to this question simply stated a medical problem they associate with their abortion without clarifying the extent to which the woman equated the problem to her abortion. Examples of the named medical problems were miscarriages, incompetency of cervix, ectopic pregnancy, premature labor, cervical cancer, inability to dilate leading to a c-section, scar tissue on fallopian tubes, and infertility.

Discussion of outcome of abortion and canonical variates. An abortion's possible effects on future childrearing thoughts and efforts has received scant attention in previous studies. Greenglass' (1977) finding that women planning to have children had more post abortion neuroses than women not planning children was supported by the responses of women who discussed a fear of infertility because of their abortion. This question was included in the study because of the researcher's clinical experience in which post abortal women commonly expressed fear of not being able to have children in the future or of having a handicapped child. Also frequently mentioned is an obsession with getting pregnant again or with never getting
pregnant again.

The canonical correlation analysis confirmed that infertility (the inability to conceive and bear a child since the abortion) was correlated to post abortion guilt and anger. Most prevalent among the responses from the group who commented on medical problems perceived to be caused by the abortion (24.1%) was that the abortion caused their infertility.

Abortion Decision Basis

Several studies concluded that there was a high incidence of negative psychological sequelae of abortion when the abortion decision was based on fetal abnormality or health reasons (Ashton, 1980). The questionnaire asked to what extent ("none" to "completely") their decision to abort was based on the fact or fear that the baby would be abnormal or the pregnancy would affect the mother's health. If respondents indicated that these were factors in their abortion decision, an open-ended question solicited the specifics of their decision making. Table 7 shows the responses.

Fetal abnormality. Most of the women (79.1%) did not fear fetal abnormality (see Table 7). More than 20% (N=44) of the women responded that their abortion decision was based from "a little" to "completely" on the fact or fear of fetal abnormality. Most (63.8%) of the concern of the 44 women centered around the use of licit and/or illicit drugs.
### Table 7

**Abortion Decision Based on Fear of Fetal Abnormality or Threat to Woman's Health**

<table>
<thead>
<tr>
<th>Fear of fetal abnormality</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
<td>79.1%</td>
</tr>
<tr>
<td>A little</td>
<td>7.4%</td>
</tr>
<tr>
<td>Somewhat</td>
<td>7.4%</td>
</tr>
<tr>
<td>Mostly</td>
<td>3.9%</td>
</tr>
<tr>
<td>Completely</td>
<td>2.2%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>

*N=229*

<table>
<thead>
<tr>
<th>Reason for fear of fetal abnormality</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drugs, alcohol</td>
<td>63.8%</td>
</tr>
<tr>
<td>Events harmful to fetus</td>
<td>10.6%</td>
</tr>
<tr>
<td>General health/genetics</td>
<td>6.4%</td>
</tr>
<tr>
<td>Confirmed fetal abnormality</td>
<td>4.3%</td>
</tr>
<tr>
<td>Age</td>
<td>4.3%</td>
</tr>
<tr>
<td>Other</td>
<td>10.6%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>

*N=44*

<table>
<thead>
<tr>
<th>Threat to woman's health</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
<td>90.9%</td>
</tr>
<tr>
<td>A little</td>
<td>3.5%</td>
</tr>
<tr>
<td>Somewhat</td>
<td>3.0%</td>
</tr>
<tr>
<td>Mostly</td>
<td>2.2%</td>
</tr>
<tr>
<td>Completely</td>
<td>0.4%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>

*N=231*
The fear stemmed from drug use by both partners prior to conception as well as in the first few weeks of pregnancy. The respondents named illicit drugs such as PCP, cocaine, MDA, hallucinogens, crack, pot, crank, and legal drugs such as diet pills, flu medication, sinus medication, and birth control pills. Alcohol consumption and the fear of fetal alcohol syndrome was also listed.

Beside drug use, the other factors contributing to the fear of fetal abnormality were diverse, with only a few respondents sharing similar concerns. For instance, only one woman wrote of a confirmed fetal abnormality.

Two women shared the concern that their age was the reason for fearing fetal abnormality or health concerns. Interestingly, these two were at opposite ends of the childbearing years. One woman was 16 and the other was 41 when they aborted.

A small group reported events occurring early in the pregnancy which the women believed had the potential of damaging the fetus. These involved being beaten up by an ex-boyfriend including "several kicks and punches to my stomach", fasting for five days in an attempt to "justify that an abortion was needed", and receiving a shot to begin her menstrual period before she knew she was pregnant.

One woman's decision to abort was completely based on the fear that the baby would be abnormal because the father was her half-brother. Others named health factors such as
diabetes in the family or being overweight as a potential threat to the baby or the mom's health.

**Woman's health.** Over 90% of the women had no fear that the pregnancy was a threat to her own health (see Table 7). About nine percent of the respondents reported their abortion decision as based "a little" to "completely" on a fear for their own health. Some of the comments implied an emotional or mental health concern such as "My husband thought it would be too much for me", or "A single mother of two with the father unemployed, the pregnancy itself was surrounded with stress, constant nausea and lower abdominal pain."

**Discussion of abortion decision and canonical variates.** The literature documented that abortion decisions based on fetal abnormality or threats to the mother's health are associated with increased incidence of poor post abortion adjustment (Ashton 1980; Lloyd and Laurence, 1985;). In this sample only 9% commented about their own health concerns as the primary reason for the abortion, yet the canonical correlation analysis confirmed its significant positive relationship to post abortion syndrome.

Although nine percent said fear of their own health and 20% said fear of fetal abnormality were the basis for the abortion decision, the responses would have explained their significant relationship to post abortion syndrome if the question had been asked differently. The question included
"fear" as well as "fact" of fetal abnormality or health threats. Previous studies documenting poor post abortion adjustment were based on samples where the women had medically confirmed problems (Ashton 1980; Lloyd and Laurence, 1985). In this sample, most of the comments indicated fear, not a fact, with only one subject describing an actual case of fetal abnormality. Therefore, the substance of the comments is on the role that fear played in their abortion decision. Some comments pointed to their fear as a means of rationalizing an abortion as in the example of the statement "fasting for five days in an attempt to justify an abortion". A medically indicated abortion may be perceived by the woman as more socially or personally acceptable than a non-medically indicated abortion.

If fetal abnormality or health concerns were the single deciding factor, a woman would likely seek an actual diagnosis before acting. Most probably, other factors were combined with the fears to arrive at an abortion decision.

Although a sample with an actual diagnoses is prerequisite to increased insight on the particulars of post abortion problems, the researcher believes the assessment of Lloyd and Laurence (1985) concerning feelings after an abortion for fetal abnormality is applicable.

...In general, mourning was difficult - there was no grave, no photograph and only occasionally was the fetus seen. The death was passed over, denied,
regarded as a failure of pregnancy and the mother was met by a conspiracy of silence. p. 909

Anger and Suicide

The questionnaire included a section on intense feelings stemming from the abortion experience. Responses about anger and suicide were specifically requested. All 232 women responded. Although anger was toward self and others external to self, suicide was the ultimate anger to self and is discussed here in a separate section.

Anger. In addition to identifying targets of their anger, the women were asked to explain their anger in terms of who they had been angry with and for what reason, what point in time they had been most angry, and anything else they wanted to share about their abortion related anger.

Most of the women's responses identified multiple targets and several reasons for their abortion related anger. For example, one woman shared:

I was angry at my husband for not talking me out of it. I was angry at my doctor for instilling fear in me if I carried my baby to term and I was angry at myself for not asking more questions and for not having faith enough and courage enough to do what I felt was right instead of doing what I felt was expected of me.

Another example of the multiple targets of anger was expressed as:

Myself, because I allowed it and was not responsible enough to stand up for my baby's life. The doctor and his uncaring coldness. The nurse because she was in a field in which she advocated "freedom of choice" and yet held me down physically though I "chose" (while on the table) to not go through with it. Society, as it advocates sex and abortions in one breath, as if it's the best combination known to man. My boyfriend at the
time, because although he did not believe in abortion he "whimped out" when it came to taking responsibility for our situation and because I felt used by him.

Anger at self was the most frequently cited target for the anger. Some women's comments focused on a disappointment with their weakness or lack of courage to have the baby instead of abortion. They were angry about their having "given in" or submitted to someone else's desires for the pregnancy outcome. The following quote illustrate this point: "I was angry at my parents and the father's parents for pressuring me. I was angry at myself for giving in to that pressure and doing what I knew was wrong."

Other women expressed anger at themselves for having gotten into the predicament of an unwanted pregnancy and abortion. Evidence of this type of anger is in the following quotation: "For me I was angry at myself for being stupid concerning birth control and for not finding out all the pros and cons to abortion and keeping the baby.

An anger toward themselves for being ignorant of fetal development and the abortion procedure was also expressed. One woman described her lack of knowledge, "I have been angry at myself for rushing into the abortion before thinking of all my options. Mostly, I feel angry because I didn't research into all my options. It was easier to claim ignorance."

In addition to anger at self, the medical profession
was a frequently cited target of anger. Specifically, the anger was directed at abortion clinic personnel, physicians who performed abortions, and medical professionals who referred for the abortion.

Inaccurate information or no information was described as a reason for the anger at medical professionals. This reasoning was extracted from comments such as the ones which follow:

I now realize, because of medical evidence, that my baby was already a baby when I destroyed his life. Not just a nothing blob. I'm angry at those in the medical profession who close their eyes to truth, take life, and cause untold trauma to those who didn't know better. An informed and educated choice is the only choice. The ignorant really don't have a choice at all!! They are deceived for a price.

Other women's anger toward the medical profession seemed centered on a perceived sense of non-caring. Often the anger was toward abortion clinics and the personnel because "they sell women abortions and really don't care what happens to them afterwards. All they seem to care about is the millions of dollars they can make doing it."

Postabortal women expressed anger at their parents for a variety of reasons. Mothers, more than fathers, were usually the target for the anger. The parent's participation in the abortion decision was targeted by many. Some women felt their parents had forced the abortion. Others were angry that their parents did not support them in their desire to have the baby. Others expressed anger at their parents because of the perceived pressure or coercion
to abort from the parents; "mostly at my father who paid for the abortion and said 'get rid of it'." The lack of understanding of their feelings were expressed by many women. As one woman said, "I was angry with my mother for pressuring me to get the abortion. Also, I was angry with her and my sister for acting as if my feelings were not valid or necessary."

Some of the women expressed a general anger at the poor parenting they received which they felt contributed to their abortion experience. One woman wrote, "I was angry with my mother for always, as a child, letting me know her love was conditional. That if I ever came home pregnant I would not be welcome there."

Repeatedly targeted for post abortion anger was the partner in conception. There was a fine line, in some cases, between the anger at the partner in conception and men in general or at the fact that women, not men, experience the actual abortion procedure. An example that demonstrates this specific, yet generalized, anger is this one, "The man who impregnated me believes in birth control but has an archaic view of women's rights. I am angry that most/majority of the men do not take any responsibility for birth control."

Other women expressed anger at their partners because of a perceived pressure or coercion from them regarding the abortion. One woman who felt compromised said, "I am angry
with the father because he used it against me and also
because he said he would leave me if I had the baby. He
also made the appointment. I wouldn't have done it for
myself. He took me down to the clinic for my appointment."

Although they did not express pressure or coercion,
many women's anger at their partner was due to a perceived
lack of support regarding the pregnancy and abortion. Other
statements regarding anger at the partner in conception were
targeted the way in which the abortion defined the
relationship. This usually took the form of the pregnancy's
exposing the fact that the relationship was not as committed
or as strong as the woman perceived it to be. Upon
realizing this, the woman aborted and expressed anger at the
partner for having been rejected, hurt, or mistaken.
Although the abortion is a significant factor in the anger,
the actual source of the anger is the misconstrued
relationship.

The anger directed at society was related to the
acceptance, legalization, or endorsement of abortion. One
woman wrote she was angry at "people who say it's o.k. when
it's killing. Government for being so week [sic]. The
media for being so one-sided." Comments about being lied to
by society or comments showing concern that our civilization
would tolerate abortion were written. One woman's anger at
society was "that I wasn't 'allowed' to grieve for my baby.
No one would listen."
Some women expressed anger toward the church stated in terms of the church as an institution, the church as a point of view, Christians as individuals or as a group, and at pastors. Some of the comments reflected anger that the church as an institution was not doing enough to prevent the pain of abortion as evidenced by comments such as: "angry with my church for burying it's head to the issue." One woman wrote that she was angry at, "Christians in general because they were so willing to walk around an abortion clinic. I didn't want to have an abortion but which one of them would help." Pastors were the target of anger by a few of the women who resented the pastor for his role in encouraging the abortion as shown here: "I was angry with a minister that I went to for counsel. He advised me to get the abortion and even called the clinic to set up the appointment. If he had just shared about God's love and strength maybe things would have been different."

Suicide. Respondents were asked if they had ever been suicidal as a result of their abortion. If they answered "yes" they were asked to describe their suicidal feelings. Thirty-six percent of the respondents did indicate suicidal feelings associated with their abortion and some shared about actual suicide attempts. In describing their suicidal feelings these words or phrases repeatedly appeared: overwhelming guilt, sorrow, regret, complete despair, worthless, deep depression, hopelessness, emptiness. One
woman showed intense suicidal thoughts, "The pain and grief were so immense upon me including the tremendous burden of guilt that I could not continue to go on living. I also felt I didn't deserve to live and should be punished."

Discussion of anger and canonical variate. This qualitative complement to the anger scale did much toward elucidating the intensity of some women's post abortion anger. An important difference in the two canonical correlates was that the presence of anger was significant in the first variate and the absence of anger was significant in the second one. The first variate correlated a dimension on post abortion syndrome with social-based post abortion issues, whereas the second variate correlated a dimension of post abortion syndrome with intrapsychic-based issues. The analysis of these comments confirm and elaborate on anger being associated with pressure from others to abort, dissatisfaction with the preabortion counseling and information, and a worsened relationship with the partner.

Interaction with Abortion Providers

The questionnaire asked, "What were your feelings about your interaction with the doctor, hospital, or doctor's office where you had your abortion?"

Of the responses from 231 women, 42.2% indicated a negative interaction with the abortionist and staff. They were characterized by three predominant groups. One frequent negative response attributed poor interactional
skills and an uncaring, cold, uncompassionate attitude from the abortion staff. Some of the words used to delineate this category were cold, insensitive, uncaring, rude, rushed, heartless, unsupportive, mean, abrasive, patronizing, inconsiderate, cruel. A description of the mechanical nature was expressed in this way, "All staff and doctor were very cold. After procedure, in recovery room, I began to cry hysterically. I was 'hushed up' quickly so I wouldn't upset the others."

A second reason for negative reactions to the abortion personnel centered around a lack of interaction, a sense of detachment, depersonalization, impersonal. Repeatedly, the women referred to assembly line, cattle being led to slaughter, being a number instead of a person. Key expressions comprising this group are: nonchalant, businesslike, aloof, distant, impersonal, very clinical.

The third grouping of negative responses to the doctor and staff emerged from dissatisfaction with counseling, information, or education related to the pregnancy and abortion. Words such as deceptive, misleading, betrayed were used. Often the realization of this came years later, "...The 'counselor' told me it was 'just' a 'blob of cells', to picture a mulberry, that's what it looked like. I guess the woman who did the abortion was the doctor. There was no dialog or other interaction with her other than the abortion itself. None of this bothered me at the time -now I have a
lot of feeling about all of this."

A positive feeling characterized the responses of 18.5% (N=231) of the women about their interaction with abortion personnel. They used such words as helpful, kind, friendly, o.k., concerned, nice, caring, wonderful, supportive, cordial. A woman who had a legal abortion in 1972 wrote, "At the early years of abortion being legal I think the staff thought they were honestly helping women - they were very friendly and supportive." Other women who had an abortion much later still expressed positive attitudes about it in this way, "I really liked the people. They were caring and supportive. They made me feel better when I was scared. They were very supportive."

Many respondents (19.4%, N=231) expressed mixed feelings about their interaction with the abortion personnel. For many, they felt positive about one staff member and negative about another. The following comment is an example of this type of mixed feeling: "The only interaction with the doctor was during procedure (she was cold - business-like). Other staff members were friendly; made it very easy for me."

These comments about the women's interaction with the abortion providers gave substance to the finding in the canonical correlation analysis that dissatisfaction with preabortion counseling and information was significantly related to post abortion guilt and anger. From their
comments, the source of the dissatisfaction is their feeling deceived or not receiving adequate information.

The effect of the interaction between abortion provider and abortion patient on post abortion adjustment has received scant attention in the literature. Adler (1979) referred to research documenting a tendency for nurses to be disturbed by their participation in abortion procedures, resulting in potential hostility toward the abortion patient. The responses from this study documented the wide-range and intensity of these women's reactions to their abortion providers.
CHAPTER IV
SUMMARY, LIMITATIONS, IMPLICATIONS, AND RECOMMENDATIONS

Summary

The present body of literature concerning the psycho-social sequelae of abortion has documented a continuum of post abortion experiences ranging from severe trauma to improved functioning. The focus of this project concerned the group who reported painful post abortion experiences to the crisis pregnancy clinic personnel. Specifically, this study looked at how certain demographic, relational, decision-making, and medical variables were related to the various components of post abortion syndrome, which were depression, guilt, grief, stress, depression, and grief.

This study did not attempt to draw any conclusions about the prevalence of post abortion syndrome, but rather, described the phenomena as it affected the 232 subjects who received services from crisis pregnancy centers. These were women who reported they had difficult abortion experiences. The demographic characteristics of this sample are similar in age and marital status to characteristics of U.S. abortion patients in 1987 as surveyed by Henshaw and Silverman (1988) and different from them in race and importance of their faith.
Questionnaires were distributed through a national network of crisis pregnancy centers to women, who by self-report, were experiencing symptoms of post abortion syndrome. The questionnaires, collected from 39 different states, were analyzed using qualitative and quantitative methods.

The primary quantitative analysis, canonical correlation, resulted in two significant canonical variates. The interpretation of these two variates distinguished two dimensions of post abortion syndrome. The first dimension was characterized by high anger and guilt, and a significant absence of grief. The significant antecedent variables which emerged in this first canonical variate all represent social relationships or events over which the women perceived no control or felt victimized. Forty percent of the joint variance was explained. The second dimension was characterized by post abortion guilt and stress but with an absence of anger. The significant antecedent variables which emerged in the second canonical variate were personal or psychological variables for which the woman perceives herself as the agent in her decision. Twenty-five percent of the common variance was explained.

Several variables identified as significant contributors to post abortion syndrome in previous studies also emerged as significant in this study. These variables were: pressure to abort (Shusterman, 1979), the abortion
decision being based on the pregnancy being a threat to the woman's health (Ashton, 1980), a difficulty making the decision to abort (Horowitz, 1978), medical complications associated with the abortion (Shusterman, 1979), and having a late term abortion (Osofsky and Osofsky, 1972).

Two new significant variables introduced in this study were dissatisfaction with preabortion counseling and information and the importance of one's faith. Various measures of religiosity have appeared in other studies but with different wording (Shusterman, 1979).

This study showed that older age at abortion emerged as a significant variable, whereas the consensus among several other studies (Adler, 1979) identified younger age as related to negative post abortion sequelae. Also, this study showed that both an improved relationship with the partner after the abortion was related to higher post abortion guilt, stress, and lower anger, and a worse relationship with the partner afterwards was related to higher post abortion guilt, anger, and lower grief. This finding adds clarity to this issue for which previous studies had conflicting results (Robbins, 1984).

Each section of the questionnaire had an open-ended question in which the uniqueness and depth of the women's experience was further documented. The comments from this qualitative section emphasized the variety in women's experience and underscores the premise of this study that
post abortion syndrome is a complex, multifaceted phenomena.

Limitations

Because of the highly personal and sensitive nature of an abortion experience, research in this area has been severely limited by sampling methods. This study is no exception in that it used a convenience sample. The sample was collected from post abortal women who reported difficult abortion experiences - not from all women who had aborted. There is no way to know if the responses from the 232 women in this study reflect the experiences of all women who have post abortion syndrome. Therefore, generalizations of the results to populations other than the identified one is inappropriate. The expense of achieving a nationwide random sample with a high response rate would be extremely unlikely for future abortion research. Confidentiality would also be a limiting factor, however, improvements could be made. For example, using a matched sampling technique in which demographic characteristics of the sample are paired to match the demographic characteristics of abortion patients nationwide would strengthen the research. Also, samples drawn from a variety of service providers such as crisis pregnancy centers, professional counseling practices, and gynecological practices could be analyzed to rule out possible differences attributed to the characteristics of people who patronize the services.

Another limitation of this study was the use of
retrospective data collection. The subjects were asked to recall events or feelings that occurred in the past. The passing of time potentially introduces factors which can distort reality and alter feelings. Future research can improve on this type of limitation by taking a baseline measure of constructs before pregnancy occurs and following post abortion adjustment using longitudinal methods.

The selection of participants for the study posed a limitation because the counselors' application of the post abortion syndrome diagnostic sheet may not have been uniformly applied. Tighter screening procedures for participants in the study would reduce the possibility of this problem in future research.

Implications and Recommendations

The results of this study have significant implications for future research, for counseling practices, and for social policy. The finding that there are two distinct dimensions of post abortion syndrome helps to conceptualize a method of working with this construct. Two sets of predictor variables, one from forces outside the person and the other from factors under one's control relate differently to the extent of guilt and anger as well as the discrepancy between them.

Post Abortion Syndrome as a Multivariate Construct

This research demonstrated that the components of negative post abortion adjustment (anger, stress,
depression, grief, and guilt) are related to different antecedent variables. Counselors dealing with post abortion problems can anticipate areas needing to be addressed in the context of the two dimensions presented in the study. Work in the areas of personal responsibility, cause-effect relationships, and forgiveness of others may reduce levels of guilt and anger associated with the externally based antecedent variables. Work in the areas of forgiveness and management of internal conflict and stress may reduce the levels of stress and guilt associated with internally based antecedent variables.

Use of a multivariate technique for data analysis also contributed clarity to some of the issues for which there were conflicting results from previous studies. For example, a worse relationship with the partner was correlated to a post abortion experience characterized by much anger, whereas, an improved relationship with the partner was correlated with a post abortion experience of less anger but more stress. The amount of guilt did not change for the two variates.

Future research will contribute increased understanding in the field if the use of multivariate techniques are continued - particularly in operationalizing post abortion syndrome.

Development of Post Abortion Syndrome

The vast majority of post abortion research solicits
women's responses within a short period of time after their abortion (a range of minutes to two years). This study included women whose time since their abortions was longer than two years (range of one month to 39 years). The findings documented that the onset of post abortion syndrome can occur several years after the actual abortion, thereby offering confirmation to Rue's (see Appendix A) conceptualization of abortion as a stressor for post traumatic stress syndrome. The qualitative section in particular lends support to the premise that post abortion psychological problems may surface several years after the experience. The women's comments frequently cited a new or wanted pregnancy and information on fetal development as the precipitants of abortion related emotional difficulties emerging years later. Counseling practices should routinely assess unresolved, abortion-related issues, even years after the event. Health practitioners should be sensitive to the possible emergence of post abortion problems among new obstetric patients who had abortions. Anyone involved in the presentation of fetal development information should be sensitive to the fact that this information may arouse emotional problems in post abortal women.

Research in this area could be extended by examining the development of post abortion syndrome. Possible research questions are: Do the two dimensions of post abortion syndrome represent different phases in the
development of post abortion syndrome? Is there a pattern or patterns of development? Is it possible that certain components of the syndrome carry more salience during a particular phase of development? For example, would depression scores be higher immediately post abortion, whereas anger and guilt represent more residual effects? The questions have heuristic value because of the contribution their answers could make to the recognition and treatment of post abortion syndrome.

**Preabortion Counseling and Information**

This study introduced a new variable to the literature on post abortion syndrome --- satisfaction with preabortion counseling and information. This variable warrants attention by virtue of the fact that it emerged as the most salient of the antecedent variables in the first canonical variate. The responses from the qualitative section indicated a disparity in the provision of preabortion counseling, ranging from excellent to deceptive/manipulative to non-existent.

The fact that dissatisfaction with preabortion counseling and information was significantly related to high anger and guilt scores has implications for a social policy which would ensure quality preabortion counseling. This issue has been previously addressed by the United States Supreme Court in *City of Akron v. Akron Center for Reproductive Health*, 462 U.S. 416 (1983) and
Thornburgh v. American College of Obstetricians and Gynecologists, 476 U.S. 747 (1986). In both cases the court struck down "informed consent" statutes. This research documents the need for policies which provide women with accurate, comprehensive information concerning their pregnancies, their options, and the resources available to them.

Facing the Issue

Unfortunately, the prevalence of post abortion syndrome (an issue not addressed by this study) has been added to the controversy over abortion. It is unethical to treat the presence or absence of post abortion difficulty as a weapon for the abortion debate because it uses the emotions of wounded women as the battlefield. It is essential that researchers, practitioners, and policy makers move beyond the controversy to face the issue: there are men and women carrying the burden of unresolved psychological sequelae from their abortion experiences who would benefit from help with this problem. Their pain needs to be validated as existing, named, treated with expertise, and, most importantly, their pain needs to be prevented. Practitioners and policy makers who incorporate these findings will have more constructive policies and treatment.
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Shusterman, L. R. (1979). Predicting the psychological consequences of abortion. Social Science and Medicine, 13, 683-689.


APPENDIX A
LETTER TO DIRECTORS OF CRISIS PREGNANCY CENTERS
APPROVAL FORM
AND
POST ABORTION SYNDROME DIAGNOSTIC CRITERIA
Dear Director:

My name is Helen Vaughan and I am director of the Crisis Pregnancy Center in Greensboro, North Carolina. I am requesting your help on a research project concerning post abortion syndrome (PAS). I believe that thorough, scientific research is desperately needed to document the nature of PAS and to provide data relevant for pre- and post-abortion counseling. My hope is that you will share this view and will contribute your time to this project. If your center is willing to participate in the study, please detach and mail the approval form at the bottom of the page.

Enclosed are copies of the questionnaire to be distributed to women who come to your centers indicating symptoms of PAS. The attached post abortion syndrome diagnostic criteria is the reference for symptoms of PAS for you to use. Please be aware of the fact that the questionnaire may elicit emotional reactions among the women for which immediate intervention will be required. Post abortion counseling in your center or referral to a local professional may be necessary.

The enclosed questionnaires contain letters explaining the research and asking the women to participate. It takes between and 15 and 30 minutes to fill out (based on responses from women who piloted the questionnaire from Greensboro Crisis Pregnancy center). Confidentiality is stressed and the women are instructed to return the questionnaire to you in a sealed envelope.

Please begin immediately distributing the questionnaires and mail them as they are returned to you. If you can distribute more than the enclosed number of questionnaires, please call me to send you more or duplicate the one enclosed. If you will let me know the total number of stamps used for this project, I will reimburse your center. The last day to mail completed questionnaires back to me will be January 31, 1990.

I will share with you the results of the research. If you have questions or comments, please call me during the day at (919) 274-4901 or in the evening at (919) 656-7552.
Your help with this project is greatly appreciated. Thank you very much.

Sincerely,

Helen Vaughan, M.Ed.
Director

I am familiar with the research proposal and approve the distribution of the questionnaire at our center. We are equipped to provide counseling and/or referral for professional counseling to the clients who indicate a need.

Signed:________________________________________

Position:________________________________________

Name of Center:________________________________

Address:________________________________________

Please return to: Helen Vaughan
4405 High Rock Road
Gibsonville, N. C. 27249
POST ABORTION SYNDROME:

Diagnostic Criteria*

A. Stressor: The abortion experience, i.e., the intentional destruction of one's unborn child, is sufficiently traumatic and beyond the range of usual human experience so as to cause significant symptoms of reexperience, avoidance, and impacted grieving.

B. Reexperience: The abortion trauma is reexperienced in one of the following ways:
1. recurrent and intrusive distressing recollections of the abortion experience
2. recurrent distressing dreams of the abortion or of the unborn child (e.g. baby dreams or fetal fantasies)
3. sudden acting or feeling as if the abortion were recurring (including reliving the experience, illusions, hallucinations, and dissociative (flashback) episodes including upon awakening or when intoxicated)
4. intense psychological distress at exposure to events that symbolize or resemble the abortion experience (e.g. clinics, pregnant mothers, subsequent pregnancies)
5. anniversary reactions of intense grieving and/or depression on subsequent anniversary dates of the abortion or on the projected due date of the aborted child

C. Avoidance: Persistent avoidance of stimuli associated with the abortion trauma or numbing of general responsiveness (not present before the abortion), as indicated by at least three of the following:
1. efforts to avoid or deny thoughts or feelings associated with the abortion
2. efforts to avoid activities, situations, or information that might arouse recollections of the abortion
3. inability to recall the abortion experience or an important aspect of the abortion (psychogenic amnesia)
4. markedly diminished interest in significant activities
5. feeling of detachment or estrangement from others
6. withdrawal in relationships and/or reduced communication
7. restricted range of affect, e.g. unable to have loving or tender feelings
8. sense of foreshortened future, e.g. does not expect to have a career, marriage, or children, or long life

D. Associated Features: Persistent symptoms (not present before the abortion), as indicated by at least two of the following:
1. difficulty falling or staying asleep
2. irritability or outbursts of anger
3. difficulty concentrating
4. hypervigilence
5. exaggerated startle response to intrusive recollections or reexperiencing of the abortion trauma
6. physiologic reactivity upon exposure to events or situations that symbolize or resemble an aspect of the abortion (e.g., breaking out in a profuse sweat upon a pelvic examination, or hearing vacuum pump sounds)
7. depression and suicidal ideation
8. guilt about surviving when one's unborn child did not
9. self devaluation and/or an inability to forgive one's self
10. secondary substance abuse

E. Course: Duration of the disturbance (symptoms in B. C. and D) of more than one months' duration, or onset may be delayed (greater than six months after the abortion).

APPENDIX B

LETTERS TO SUBJECTS

AND

CONSENT FORM
Dear Friend:

I am in a doctoral program at the University of North Carolina at Greensboro and am director of the Crisis Pregnancy Center in Greensboro. In order to better understand how women who have had difficulty with an abortion feel, I am doing a research project. Your help with this research would be greatly appreciated. I'm asking you to take 15 to 20 minutes to fill out the attached questionnaire.

Every effort will be made to keep the information you share completely confidential. Your answers will always be reported as a summary of the 200 women who fill out the questionnaires and never as an isolated case. In no way will your honest answers to this questionnaire be used in a way which could identify you.

Although it would be most helpful to answer all questions, you do not have to answer any questions that you do not wish to answer and you may refuse to complete the questionnaire. In no way will your decision affect the services you receive from this agency. There is a possibility that answering the questions may be upsetting. The person who gave you this questionnaire can provide or refer you to appropriate counseling if needed.

Please sign if you are willing to fill out the questionnaire. Once this consent letter and your questionnaire are received, the consent letter will be permanently separated from the questionnaire. If you are willing to participate but do not wish to have your name on this consent letter, please have the person who gave you the questionnaire sign as a witness.

Consent

I am willing to participate in the research by answering the questionnaire.

__________________________  ________________
Signature  Date

I am willing to participate, but prefer not to have my name on the consent letter.

__________________________  ________________
Signature Of Witness  Date
Once you have finished, place the questionnaire in the envelope, seal it, and return it to the person who gave it to you.

Thank you very much for your help.

Helen Vaughan, M.Ed.
Day (919) 274-4901
Evening (919) 656-7552
APPENDIX C

POST ABORTION QUESTIONNAIRE
POST ABORTION QUESTIONNAIRE

The following questions are about your abortion experience and your feelings about it. If you have had more than one abortion, then select the most difficult experience and answer all the questions in relation to that one abortion. Please circle the number of your answer.

YOUR DECISION TO ABORT

Q-1 What are your personal views on the issue of abortion now?

Q-2 Are those views different from what they were when you had your abortion?
   1 - YES  2 - NO

Q-3 How much did you feel supported by family and friends in your decision to abort?
   1 - VERY SUPPORTED  2 - SOMEWHAT SUPPORTED  3 - NEITHER SUPPORTED NOR UNSUPPORTED
   4 - SOMEWHAT UNSUPPORTED  5 - VERY UNSUPPORTED

Q-4 How much did you feel pressured by other people to abort?
   1 - NOT AT ALL  2 - A LITTLE  3 - SOMEWHAT  4 - MUCH  5 - VERY MUCH

Q-5 How difficult was it for you to make up your mind to have the abortion?
   1 - NOT AT ALL  2 - A LITTLE  3 - SOMEWHAT  4 - MUCH  5 - VERY MUCH

Q-6 As you look back on it, how satisfied are you now with the counseling and/or information you had when you were making your abortion decision?
   1 - VERY SATISFIED  2 - SOMEWHAT SATISFIED  3 - NEITHER SATISFIED NOR DISSATISFIED
   4 - SOMEWHAT DISSATISFIED  5 - VERY DISSATISFIED

YOUR RELATIONSHIP WITH THE FATHER OF THE BABY (PARTNER) (Please circle the number of your answer.)

(A question about the partner with whom you conceived the abortion pregnancy.)

Q-7 Did you conceive the aborted pregnancy from rape or incest?
   1 - YES  2 - NO

Q-8 How close was your relationship with your partner at the time of the conception?
   1 - VERY DISTANT, UNSTABLE, NOT IN A RELATIONSHIP  2 - SOMEWHAT DISTANT
   3 - NEITHER CLOSE, NOR DISTANT
   4 - SOMEWHAT CLOSE  5 - VERY CLOSE, STABLE, COMMITTED

Q-9 What effect do you think the abortion had on your relationship with your partner?
   1 - GREATLY IMPROVED  2 - SOMEWHAT IMPROVED  3 - DID NOT AFFECT
   4 - SOMEWHAT WORSENED  5 - GREATLY WORSENED

Q-10 Did your partner know about the abortion?
   1 - YES  2 - NO

Q-11 If so, how supportive of your decision to abort was your partner?
   1 - VERY SUPPORTIVE  2 - SOMEWHAT SUPPORTIVE
   3 - NEITHER SUPPORTIVE, NOR UNSUPPORTIVE
   4 - SOMEWHAT UNSUPPORTIVE  5 - VERY UNSUPPORTIVE

Q-12 What eventually happened with your relationship with your partner? (Please write out your answer.)

MEDICAL FACTORS (Please circle the number of your answer.)

Q-13 To what degree did you have medical complications associated with your abortion? (i.e., excessive pain during the procedure, incomplete abortion, serious infection, permanent damage, etc.)
   1 - NONE  2 - A LITTLE  3 - SOME  4 - MUCH  5 - VERY MUCH  6 - UNKNOWN

Q-14 Have you been able to conceive and bear a child since your abortion?
   1 - YES  2 - NO  3 - HAVEN'T TRIED - DON'T KNOW

Q-15 Has your abortion in any way (physically or emotionally) had an effect on your childbearing efforts and thoughts about childbearing?
   1 - YES  2 - NO

If yes, please explain your answer in more detail.
Q-16 To what degree was your abortion decision based on the fact or fear that the baby would be abnormal.
1 = NOT AT ALL  2 = A LITTLE  3 = SOMEWHAT  4 = MOSTLY  5 = COMPLETELY
(If you circled number 2, 3, 4, or 5 for Q-16, please answer Q-17.)

Q-17 Exactly what made you fear total abnormality.

Q-18 To what degree was your abortion decision based on the fact or fear that the pregnancy would affect your health.
1 = NOT AT ALL  2 = A LITTLE  3 = SOMEWHAT  4 = MOSTLY  5 = COMPLETELY
(If you circled number 2, 3, 4, or 5 for Q-18, please answer Q-19.)

Q-19 Exactly what made you fear that the pregnancy would affect your health.

Q-20 How many weeks pregnant were you at the time of your abortion? ________________ weeks

Q-21 What type of abortion did you have?
1 = SUCTION ASPIRATION  2 = D - C (DILATION AND CURETTAGE)
3 = D - E (DILATION AND EVACUATION)  4 = SALINE  5 = PROSTAGLANDIN
6 = DESCRIBE THE TYPE YOU HAD IF YOU DON'T REMEMBER THE NAME.

Q-22 Have you had other pregnancies besides the aborted one?
1 = YES  2 = NO
If you answered "Yes", please fill in the blanks below about all pregnancies, including the aborted one.

<table>
<thead>
<tr>
<th>Outcome of Pregnancy</th>
<th>(Put a check in the spaces which apply to you.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Had Baby</td>
<td>Aborted</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q-23 When abortion are you referring to when you answer this questionnaire? (Write in the date.)

Q-24 What were your feelings about your interaction with the doctor and staff at the clinic, hospital, or doctor's office where you had your abortion?

Q-25 How was your abortion paid for? (Check all that apply.)
1 = YOUR MONEY  2 = YOUR PARTNER'S MONEY  3 = INSURANCE
4 = GOVERNMENT MONEY (MEDICAID, STATE ABORTION FUND, HEALTH DEPARTMENT)
5 = OTHER

Q-26 Was your abortion legal?
1 = YES  2 = NO

FEELINGS ABOUT THE ABORTION NOW (Please circle the number of your answer.)

Q-27 Below is a list of comments made by people after their abortion. Please check each item indicating how frequently these comments were true for you DURING THE PAST SEVEN DAYS. If they did not occur during that time, please circle the "not at all" number.

During the past week:

<table>
<thead>
<tr>
<th></th>
<th>NOT AT ALL</th>
<th>RARELY</th>
<th>SOMETIMES</th>
<th>OFTEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>I allowed myself to be exposed to reminders of it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I thought about it when I didn't mean to.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I never thought about it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I avoided letting myself get upset when I thought about it or was reminded of it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I was aware that it is a memory that does not bother me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I tried to remove it from memory.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I had trouble falling asleep or staying asleep because of pictures or thoughts about it that came into my mind.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I had waves of strong feelings about it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I had dreams about it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I stayed away from reminders of it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I was able to talk about it without getting upset.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I felt as if it hadn't happened or it wasn't real.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I tried not to talk about it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I was aware that I have resolved my feelings about it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I tried not to think about it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I tried not to think about it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Any reminders brought back feelings about it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>My feelings about it were too raw to num.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I was pleased with my experience.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Reminders of it have not bothered me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
Some women experience guilt from an abortion and some women do not. Place a mark on the line below to show the amount of guilt you experienced in relation to your abortion.

No Guilt

Extreme Guilt

Below are statements sometimes made by women about their abortion experience. If you have ever had, or if you presently have, these experiences, circle the number which describes that experience.

<table>
<thead>
<tr>
<th>Statement</th>
<th>COMPLETELY TRUE</th>
<th>MOSTLY TRUE</th>
<th>PARTLY TRUE</th>
<th>MOSTLY FALSE</th>
<th>COMpletely FALSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have been able to accept the loss of the aborted baby.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>At times I still feel the need to cry for the aborted baby.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I still get upset when I think about the aborted baby.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I rarely think about the aborted baby.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I am preoccupied with thoughts about the aborted baby.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I am unable to accept the loss of the aborted baby.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I have pain in the same area of my body as the aborted baby.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Sometimes I feel just like the aborted baby.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I rarely have crying or sad moods for the baby.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I seem to get upset each year at about the same time</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>that the baby was aborted.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I rarely get upset when I think about the aborted baby.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Have you ever been suicidal as a result of your abortion?

1 - YES
2 - NO

If you answered "yes" to Q-30, please describe your suicidal feelings.

INSTRUCTIONS FOR QUESTIONS: Below is a list of ways you might have felt or behaved. Please tell me how often you have felt this way during the last seven days because of your abortion.

(Please answer each item.)

During the last seven days:

I was bothered by things that usually don't bother me. 1 2 3 4 5
I did not feel like eating; my appetite was poor. 1 2 3 4 5
I felt that I could not shake off the blues even with help from my family or friends. 1 2 3 4 5
I felt that I was just as good as other people. 1 2 3 4 5
I had trouble keeping my mind on what I was doing. 1 2 3 4 5
My sleep was restless. 1 2 3 4 5
I was happy. 1 2 3 4 5
I talked less than usual. 1 2 3 4 5
I felt lonely. 1 2 3 4 5
People were uninterested in me. 1 2 3 4 5
I enjoyed life. 1 2 3 4 5
I had crying spells. 1 2 3 4 5
I felt sad. 1 2 3 4 5
I felt that people didn't like me. 1 2 3 4 5
I could not get "going". 1 2 3 4 5

Many women who have difficulty with an abortion have anger as part of their post abortion experience. Below are some common targets for post abortion anger. Please circle the degree to which your anger has been directed towards the listed targets. If anger has not been a part of your post abortion experience, then circle all of the "none" numbers.

I have had anger toward:

<table>
<thead>
<tr>
<th>Target</th>
<th>Very Much</th>
<th>Much</th>
<th>Some</th>
<th>A Little</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>Myself</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>My Parents</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>My Relatives</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Friends</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>The Medical Profession</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>The doctor who did the abortion</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>The Abortion Center Personnel</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>God</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>My Church</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Men</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Society</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

If you checked that you had anger, please explain more about the anger. For example, what have you been angry with and for what specific reason? At what point in time have you been angriest? Please share anything you can about your anger.

QUESTIONS ABOUT YOU

How old are you?

How old are you at the time of your abortion?
Q-37 What is your marital status now? (Circle the number next to your answer).
1 - Single, Never Married  2 - Separated  3 - Married  4 - Divorced  5 - Widowed
Q-38 What was your marital status at the time of your abortion?
1 - Single, Never Married  2 - Separated  3 - Married  4 - Divorced  5 - Widowed
Q-39 What race are you?
1 - White  2 - Black  3 - Hispanic  4 - Indian  5 - Oriental  6 - Other
Q-40 What is your educational background? (Circle the highest level you completed.)
1 - Less than seventh grade  2 - Junior high school (8th grade)  3 - Partial high school (10th or 11th grade)
4 - High school graduate (whether private preparatory, parochial, trade, or public school)  5 - Partial college (at least one year) or specialized training
6 - Standard college or university graduation  7 - Graduate professional training
Q-41 If you are presently married, what is the educational background of your husband? (Circle the number of the highest level he completed.)
1 - Less than seventh grade  2 - Junior high school (8th grade)  3 - Partial high school (10th or 11th grade)
4 - High school graduate (whether private preparatory, parochial, trade, or public school)  5 - Partial college (at least one year) or specialized training
6 - Standard college or university graduation  7 - Graduate professional training
Q-42 Describe your occupation and what you do__________________________________________________________
Q-43 If you are presently married, what is your husband's occupation?__________________________________________
Q-44 What is your religion?
1 - Protestant  2 - Catholic  3 - Jewish  4 - Other  5 - None
Q-45 What is the importance of your faith in your personal life?
1 - None  2 - A Little  3 - Some  4 - Much  5 - Very Much
Q-46 Where do you live now (city and state)?_____________________________________________________________
Q-47 In what city and state did you have the abortion?_____________________________________________________
Q-48 Would you have an abortion again?_________________________________________________________________

OPTIONAL

The next phase of this research is to actually talk to women about their abortions. This would require sharing your name and telephone number if you would like to be contacted. If you agree to be called, everything about this questionnaire and the telephone call will be kept confidential. In no way will any information from the questionnaire be used to identify you.

Q-49 Do you give the researcher permission to call you to confidentially discuss this questionnaire?
1 - Yes  2 - No

If you agree to be called to further discuss your post-abortion experience, please fill in the following:
Your Name__________________________________________________________
Your Area Code and Phone Number____________________________________
The best time to reach you_____________________________________________