Negative Abortion Experiences: Predictors and Development of the Post-Abortion Psychological and Relational Adjustment Scale

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ABSTRACT: Associations between several personal and contextual predictors of negative post-abortion mental health outcomes were explored using a large national sample of U.S. women who sought out post-abortion care from a crisis pregnancy center. The predictors examined included decisional regret, pregnancy wantedness, various forms of pressure, understanding of the procedure, and satisfaction with counseling provided by the abortion facility. Well-established measures of depression, anxiety, and substance abuse in addition to a newly developed assessment of abortion-related outcomes, the Post-Abortion Psychological and Relational Adjustment Scale (PAPRAS) were employed as the criteria in regression models. All analyses included controls for pre-abortion psychological adjustment and various forms of abuse in addition to a number of demographic variables. When the PAPRAS served as the outcome measure, the abortion context variables as a group accounted for 45.8% of the variance in women's post-abortion psychological and relational adjustment scores. Using the same sets of predictors in a series of regression models and employing established measures of general anxiety, depression, PTSD, alcohol abuse, and substance abuse, 3.5% to 8.8% of the variance was explained. Based on psychometric analysis of the PAPRAS, there is evidence that this newly developed instrument holds promise for addressing the unique post-abortion mental health and relational concerns of women.

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Introduction

The U.S. abortion rate has steadily declined over the last several decades; however just under 20% of pregnancies still end in abortion each year (Finer & Zolna, 2016). Despite how common elective abortion is in the population, for a significant percentage of women, abortion marks the beginning of a tumultuous journey colored by feelings of regret, loss, sadness, depression, anxiety, suicidal behaviors, and alienation from others (Coleman, 2011; Dingle, 2007; Fergusson, Horwood, & Boden, 2008; Kero, Hogberg, & Lalos, 2004; Kero & Lalos, 2000; Kero, Wulff, & Lalos, 2009; Kimport, 2012; Kimport, Foster, & Weitz, 2011; Söderberg, Janzon, & Sjöberg, 1998).

The last several decades have witnessed little debate among practitioners and academics alike regarding the well-established risk factors for heightened post-abortion mental health problems. For example, in a chapter written for the *Clinician's Guide to Medical and Surgical Abortion* back in 1999, Baker, Beresford, Halvorson-Boyd, and Garrity provided a table of pre-disposing factors for negative reactions that the authors recommended identifying prior to abortion to allow providers to address specific patient needs. These included belief that the fetus is the same as a 4-year-old, that abortion is murder, low self-esteem, ambivalence about the decision, intense guilt and shame about the abortion, perceived coercion to have an abortion, and commitment to the pregnancy.

In the National Abortion Federation textbook for abortion providers titled *"Management of Unintended and Abnormal Pregnancy: Comprehensive Abortion Care,"* Paul, Lichtenberg, Borgatta, and colleagues (2009) list the following risk factors for adverse psychological reactions to abortion: 1) commitment and attachment to the pregnancy, 2) perceived coercion to have the abortion, 3) significant ambivalence about the abortion decision, 4) putting great effort into keeping the abortion a secret for fear of stigma, 5) pre-existing experience of trauma, 6) past or present sexual, physical, or emotional abuse, 7) unresolved past losses and perception of abortion as a loss, 8) intense guilt and shame before the abortion, 9) an existing emotional disorder or mental illness prior to the abortion, 10) appraisal of abortion as extremely stressful before it occurs, 11) expecting depression, severe grief or guilt, and regret after the abortion, and 12) belief that abortion is the same act as killing a newborn infant.

Similarly, the American Psychological Association Task Force on Abortion and Mental Health described several personal and contextual risk factors for psychological distress in their report released in August 2008. The risk factors included terminating a wanted or meaningful pregnancy, feelings of commitment to the pregnancy, ambivalence about the decision, low perceived ability to cope, pressure from others to abort, opposition to the abortion from partners, family, and/or friends, and a lack of social support from others. Finally, Coleman (2014, 2016) reviewed the world literatures on risk factors for adverse post-abortion mental health and the more robust predictors overlapped with those described above.

A number of studies over the last four decades have documented the prevalence of several of the primary risk factors. For example, employing several variables, Belsey

and colleagues (1977) reported that 68% of 326 abortion patients were at high risk for negative post-abortion psychological reactions necessitating counseling. At three months post-abortion, 72% of those identified as high-risk based on predisposing factors actually had developed adverse reactions (guilt, regret, disturbance of marital, sexual, or interpersonal relationships, or difficulty in coping with day-to-day activities). In Allanson and Astbury's (1995) study, 65% of the women believed that someone would suffer if they continued the pregnancy, 35% reported others advised termination, and 20% reported they considered other people's opinions in their decision. Harvey-Knowles (2012) reported that 31% of women made their pregnancy decision based on persuasive messages from others. In a study recently published by van Ditzhuijzenm, Ten Have, de Graaf, van Nijnatten, and Vollebergh (2015), the data revealed that 17.6% of women with a pre-existing psychiatric history experienced pressure to abort. As noted above, women with pre-existing mental health problems, are already a vulnerable population relative to experiencing adverse psychological consequences of abortion.

Ralph, Gould, Baker, and Foster (2014) analyzed data from 476 minors seeking abortion in San Francisco in 2008. They reported that 10% of the women sought abortion because someone wanted them to, with the largest percentage reporting pressure from their mothers (57%), followed by partners (32%), "everybody' (7%), and another family member (6%). Among those sampled, 31% reported thinking abortion was akin to killing a baby that is already born, 49% had spiritual concerns, and 24% voiced concern regarding God's forgiveness. These authors stated:

> The fact that some young women have some negative feelings about abortion, yet are still presenting for abortion, is common and suggests that pre- and/or post-abortion counseling for young women may help ensure that they can discuss these feelings, carefully consider their options, and receive necessary post-abortion support referrals. (p. 432)

When over 1000 women were asked why they chose abortion, yielding to the desires of others, timing issues, financial concerns, relationship problems, and the belief that having a baby would interfere with work, school or the ability to care for dependents were among the most common reasons provided (Finer, Frohwirth, Dauphinee, Singh, Guttmacher, & Moore, 2005). Based on these data it seems quite probable that many women may not choose to abort if sufficient resources and support from others were made available to them. Deep down many women may desire to carry to term, yet they are unable to justify continuing the pregnancy in light of the circumstances and desires of others closest to them. This disconnect is likely at the core of many of the established risk factors for heightened post-abortion psychological vulnerability.

Equipped with knowledge of the many risk-factors for adverse post-abortion reactions, substantive pre-abortion counseling carries the potential to help women make reproductive choices that they are able to comfortably live with. In a review of literature related to effective pre-abortion counseling, Joffe (2013) recommended assessment of the following: the patient is sure of her decision, the extent to which anyone is influencing her decision, perceived social support, feelings on the appointment day, the woman's

perspective on the morality of abortion, past history of mental illness, past experiences with any previous abortion recovery, anticipated emotions following the abortion, and the woman's anticipated view of coping following the procedure. Effective counseling incorporating these elements should reduce the numbers of women making abortion decisions that are not right for them.

The pre-abortion counseling that women typically receive by abortion providers in the U.S. is brief, not conducted in a manner that is sensitive to the uniqueness of women's backgrounds, past experiences, and current situation due to time pressures and lack of appropriate staff training (Coyle, Coleman, & Rue, 2010). Available data indicate that women desire more than what tends to be available. For example, in a study of nearly 1000 women, Vandamme, Wyverkens, Buysse, Vrancken, and Brondeel (2013) reported the following percentages of women desired counseling content to address various topics: 82% information about the procedure, 40% decisions and doubts, 31% their emotions, 36% reasons for the abortion request, 76% information about the consequences, 16% role of others, 31% alternatives to abortion, 18% experiences of others; 8% feelings of guilt, and 7% religious aspects. After counseling incorporating these elements, women evaluated the sessions as extremely positive, they were very satisfied, experienced less distress and greater decisiveness, and they found the counseling to be more helpful than they anticipated it would be. These data directly support the notion that women arriving at abortion facilities are not necessarily sure about their decisions to abort, and they benefit greatly from counseling with professionals who address several parameters of the abortion decision.

The primary objective of this study was to explore associations between several established and relatively unexplored personal and contextual predictors of adverse post-abortion mental health outcomes among women who had sufficiently negative responses to seek out post-abortion care from a crisis pregnancy center. Very few studies have focused exclusively on women who have expressed psychological harm from abortion, and in order to understand this population of women and assist women in the future to make healthy choices, more intensive investigation of these women is clearly warranted.

There is currently no research instrument available in the professional literature specifically designed to address post-abortion mental and relational ill-health. Most studies addressing women's post-abortion psychological health simply link reproductive history with measures of discrete forms of mental illness and quality of relationships indicators. Therefore, a secondary objective of this study was to pilot a new measure wherein the item content relates directly to the abortion experience using a large enough sample to examine its psychometric properties. Although the focus of the Post-Abortion Psychological and Relational Adjustment Scale (PAPRAS) is on adverse consequences, there is also a subscale addressing positive abortion-related outcomes that is reverse scored. No scales are currently available in the literature designed to address the presence or absence of positive aspects of abortion.

Methodology

Participants

In 2012 and 2013, an online survey of 987 women who had undergone a prior abortion was conducted. The data that is the focus of the current study examines reproductive decision-making, pre-abortion counseling provided, and post-abortion adjustment. The majority of the women who completed the anonymous survey had obtained post-abortion counseling services from pregnancy help centers across the U.S., with the primary means for recruitment through the help of CareNet Crisis Pregancy directors nation-wide.

Methodology

CareNet directors throughout the U.S. were contacted and asked to invite women who had visited their centers for post-abortion counseling to participate in an online survey. The survey was made available via the online survey company, Survey Monkey. Interested women were provided general information and a link to complete the survey. Women were assured of the anonymity of their responses and they were provided contact information for the researcher as well as a national abortion recovery help line.

According to the U.S. Department of Health and Human Services, Office of Human Research Protections, a research investigation is exempt from institutional review board review if the following conditions are met: 1) only a survey is involved, 2) no children are examined, 3) the survey is anonymous, and 4) disclosure of the data will not put individuals at risk of criminal or civil liability, or be damaging to their financial standing, reputation, or ability to be employed. This project met all criteria, however the author submitted the project plan to the Human Subjects Review Board at Bowling Green State University in Ohio for confirmation, and she received a letter indicating the study did meet exempt criteria and did not require review.

The primary objective of this survey research was to examine a wide range of potential predictors of problematic post-abortion adjustment. The specific predictors included decisional regret, pregnancy wantedness, various forms of pressure from others, understanding of the procedure, and satisfaction with counseling provided by the abortion facility. The outcome measures included well-established measures of depression, anxiety, and Post-Traumatic Stress Disorder (PTSD) as well as a newly developed broad assessment of abortion-related outcomes. All analyses included controls for pre-abortion psychological adjustment and various forms of abuse in addition to a number of demographic variables. A series of hierarchical multiple regression analyses were conducted in order to accomplish the primary objective.

As stated above, the secondary objective of this study was to examine the psychometric properties of the Post-Abortion Psychological and Relational Adjustment Scale (PAPRAS). Specific analyses conducted to examine the validity of this new scale included the following: 1) an Exploratory Principal Component Factor Analysis with Varimax rotation and Kaiser Normalization, and 2) Pearson correlational analyses to ex-

amine inter-factor correlations and correlations between the individual factors identified and established measures assessing similar or related constructs. Internal consistency estimates using Cronbach's alpha were conducted to examine the internal consistency reliability of PAPRAS total and subscale scores.

The PAPRAS addresses the following content domains: depression/sadness, anxiety, negative self-appraisals, risk-taking, drug and alcohol use, suicidal thoughts and behavior, relationship with partner, changes in interpersonal/social behavior, self in relation to the aborted child and future children, and positive, growth promoting and maturing experiences. The scale contains 42 Likert-style items, with five response options and the following point values: Strongly Agree (1), Agree (2), Neutral (3), Disagree (4), Strongly Disagree (5). Eight items address women's perceptions of positive effects of the abortion procedure and these items are reverse scored. Total scores on the measure range from 42 to 210, with lower scores indicating more negative experiences.

Several established measures of mental health problems were also used in this study. The Burns Anxiety Inventory (BAI) (Burns, 1999) is a self-report measure with 33 Likert-type items, including six that address anxious feelings (e.g., anxiety, nervousness, worry, or fear), 11 that tap into anxious thoughts (e.g., feeling that you're on the edge of losing control), and 16 items related to physical anxiety symptoms (e.g., a lump in the throat). Response options range from 0 (*not at all*) to 3 (*a lot*), with total scores reflecting minimal (scores 0-4) to extreme anxiety or panic (scores 51-99). In a sample of psychiatric outpatients, internal consistency for the BAI was found to equal .94 (Burns, 1999). With regard to convergent validity, scores on the BAI were found to be correlated with commonly used anxiety measures, including the Anxiety subscale of the Symptom Check List-90 (Burns, 1999; Burns & Eidelson, 1998).

The Major Depression Inventory (MDI) was designed to measure depression symptoms based on the guidelines set forth by the WHO classification for unipolar depression (ICD-10) and the American Psychiatric Association classification for major depression (DSM-IV) (Bech, Rasmussen, Olsen, Noerholm & Abildgaard, 2001). The instrument measures depressive symptoms on a scale ranging from 0 to 50, with higher scores indicative of more serious depression. Both Bech et al. (2001) and Forsell (2005) validated the MDI using SCAN clinical interviews. Cronbach's alpha was reported to equal .90 by Olsen, Jensen, Noerholm, Martiny, and Bech (2003).

The Post Traumatic Stress Disorder Check List-Civilian (PCL-C) assesses PTSD symptoms in civilian populations and consists of 17 items that correspond to DSM-IV symptoms of PTSD (Weathers, Huska, & Keane, 1991; Weathers, Litz, Herman, Huska, & Keane, 1993). Respondents indicate how much they have been bothered by various symptoms in the past month. PCL-C total scores greater than 50 suggest a PTSD diagnosis. In a sample of 123 Vietnam veterans, PCL-C scores demonstrated an internal consistency coefficient of .97, a test-retest reliability of .96, and convergent validity with other PTSD scales, such as the Mississippi Scale (.93) (Weathers et al., 1993).

The Alcohol Use Disorders Identification Test (AUDIT) (Saunders et al., 1993) is comprised of ten items designed to measure the frequency and quantity of alcohol consumption, drinking behavior, and alcohol-related problems. The AUDIT is widely used instrument with excellent psychometric properties (Reinert & Allen 2007). The response options range from never (0) to daily or almost daily or daily (5), resulting in a potential score range from 0 to 50. A cut-off score of 11 on the test has been found to discriminate between problem and non-problem drinkers (Claussen and Aasland, 1993; Fleming et al., 1991; Holmila, 1995; Tsai et al., 2005).

The Drug Abuse Screening Test (DAST) (Skinner, 1982) is a 28-item measure that uses a yes/no format to screen for drug abuse problems. Excellent internal consistency reliability (0.92) has been reported for the DAST (Skinner, 1982). Potential scores range from 0 to 28, with higher scores indicative of a more severe drug use problem (Skinner, 1982). Strong reliability and validity evidence is available for the DAST (Cocco & Carey, 1998; El-Bassel et al., 1997; Lin, Lee, Pan, & Hu, 2003; McCann, Simpson, Ries, & Roy-Byrne, 2000).

In order to measure various personal and context variable predictors of the above outcomes, several small Likert scales with five response options and similar point values, Strongly Agree (1), Agree (2), Neutral (3), Disagree (4), Strongly Disagree (5), were developed. More specifically, the following scales were designed for use in this study: 1) a 5-item decision regret scale, 2) a 10-item wantedness/emotional involvement in the pregnancy scale, 3) a 12-item dissatisfaction with abortion counseling received scale, 4) a 3-item understanding of the abortion procedure scale, 5) a 6-item pressure from the abortion facility personnel scale, 6) a12-item general pressure to abort/lack of support scale, 7) an 11-item situational pressure to abort scale, and 8) a 15-item pressure from partner scale. Lower scores on each scale indicate more negative orientations to the various constructs. Internal consistency reliabilities for the scales using Cronbach's alpha are reported in Table 5 and the full content of the items is provided in Appendix A.

Results

The women who completed the abortion survey were from every state in the U.S. except for Hawaii. They ranged in age from 20 to 72. The breakdown by participant age categories was 5% between the ages of 20 and 29, 15% between the ages of 30 and 39, 28% between the ages of 40 and 49, 37% between the ages of 50 and 59, and 15% were over 60 years old. The majority of women self-identified as being White, not of Hispanic origin (85%), 8% were Hispanic, 4% were African American, and 3% represented other ethnicities. Reported annual income was $30,000 or less for 20% of the sample, $31,000 to $60,000 for 33% of the sample, $61,000 to $90,000 for 17% of the sample, and for 30% of the participants incomes were reported to be at or above $91,000. In terms of marital status, 76% were legally married; 7% were single and never married; 12% were divorced; 2% was separated; 1% was living with a partner; and 2% were widowed. The sample was generally well-educated, as 41% had earned a bachelor's degree or an advanced graduate degree, and only 2% had not completed high school.

Regarding the number of abortions obtained by the study participants, the range was from 1 to 9, with the majority having experienced only one abortion (69.8%), 19.7% had two abortions, 7.6% had three abortions, and 2.9% had four or more abortions. The majority of the women sampled were 21-years-old or younger when they had their first abortion (70%) and the remainder were 22-years-old or older.

The following analyses were conducted to examine the psychometric qualities of the PAPRAS): 1) a factor analysis to identify sub-domains and establish construct validity; 2) scores on the new measure were correlated with scores on established instruments to provide convergent and discriminant validity evidence; and 3) internal consistency reliability was examined using Cronbach's Alpha for both total and subscale scores.

An Exploratory Principal Component Factor Analysis with Varimax rotation and Kaiser Normalization was conducted. Table 1 provides the data for all extracted factors with eigenvalues of equal to 1 or greater and Table 2 includes all the items, descriptive statistics, and rotated factor loadings. All loadings above .4 are provided and in the few instances wherein a particular item loaded on more than one factor, the factor with the highest loading was assigned the item when further subscale analyses were conducted. As indicated in Table 2, the first factor is comprised of 11 items and relates to negative emotions/increased emotional lability. Factor 2 contains seven items and involves retrospective decision dissatisfaction and feelings of loss pertaining to the child. Factor 3 had seven items load above .4 and they all pertained to positive abortion-related outcomes. Factor 4, with five items deals with negative partner relationship changes. Factor 5 has five items and relates to negative self-appraisals. Factor 6 is comprised of four items and has increased drug and alcohol use content. Finally, Factor 7 has three items involving self-destructive/risk-taking behavior.

Table 1: Factor analysis results for all factors with initial eigenvalues greater than or equal to 1 on the Post-Abortion Psychological and Relational Adjustment Scale

Factor	Initial Eigen-values	Percent of Variance	Cumu-lative Percent	Rotation Sum of Squares Loadings	Percent of Variance	Cumulative Percent	Total
1	14.388	33.461	33.461	5.812	13.516	13.516	14.388
2	3.062	7.122	40.583	4.189	9.743	23.259	3.062
3	2.648	6.157	46.740	3.759	8.743	32.001	2.648
4	1.883	4.379	51.119	3.510	8.163	40.164	1.883
5	1.393	3.240	54.359	3.481	8.096	48.260	1.393
6	1.231	2.863	57.222	3.066	7.131	55.391	1.231
7	1.040	2.419	59.641	1.827	4.250	59.641	1.040

Table 2: Post-Abortion Psychological and Relational Adjustment Scale items, descriptive statistics, and rotated factor loadings.

Items M, SD (potential range 1-5)	Factor						
	1	2	3	4	5	6	7
Q1. Things that I enjoyed before the abortion didn't seem to have much appeal afterwards. (M=2.60;SD=1.21)	.722						
Q2. Life felt like it wasn't worth living because of the abortion. (M=2.75;SD=1.32)	.696						
Q3. I became impatient and short tempered as a result of my abortion. (M=2.61;SD=1.65)	.665						
Q4. The abortion made me much more prone to angry outbursts. (M=2.42;SD=1.26)	.665						
Q5. I wanted to spend more time alone as a result of the abortion. (M=2.55;SD=1.25)	.655						
Q6. I thought about taking my life because I had the abortion. (M=3.29;SD=1.49)	.607						

Q7. I was jumpy and generally anxious as a result of my abortion. (M=2.55;SD=1.22)	.602	.					
Q8. I questioned my decision-making abilities after the abortion. (M=2.38;SD=1.23)	.560						
Q9. Because of abortion-related emotions I was not able to enjoy sexual activity. (M=2.67;SD=1.23)	.474	.					
Q10. I felt alone and very unloved after my abortion. (M=2.01;SD=1.16)	.448						
Q11. I was able to bounce back after the abortion. (reverse scored) (M=2.24;SD=1.24)	.438	.					
Q12. After the abortion I often thought about what my child would have been like. (M=1.76;SD=1.08)		.789					
Q13. I felt myself longing for my child after the abortion. (M=2.16;SD=1.29)		.789					

Q14. I struggled to understand how I was able to go through with the abortion. (M=1.98;SD=1.16)		.653					
Q15. Just thinking about the abortion made me cry. (M=2.16;SD=1.21)		.547			.411		
Q16. After the abortion I was upset with myself for having the abortion to please others. (M=2.13;SD=1.25)		.534			.412		
Q17. I felt I shouldn't have aborted for the reasons I did. (M=1.69;SD=1.08)		.527			.414		
Q18. I found it difficult to be around pregnant women and children because of the abortion. (M=2.45;SD=1.29)	.449	.467					
Q19. My abortion enabled me to accomplish good things in life. (reverse scored) (M=2.00;SD=1.11)			.706				

Q20. Life was generally better after the abortion. (reverse scored) (M=1.76;SD=.94)			.682				
Q21. I felt like I had a new lease on my life after my abortion. (reverse scored) (M=1.90;SD=1.08)			.674				
Q22. The abortion was a maturing experience for me. (reverse scored) (M=2.23;SD=1.27)			.602				
Q23. I felt much more in control of my life as a result of the abortion. (reverse scored) (M=1.82;SD=.99)			.601				
Q24. I experienced a sense of new hope brought on by the abortion. (reverse scored) (M=1.63;SD=1.00)			.580		.431		
Q25. My view of myself changed positively as a result of the abortion. (reverse scored) (M=1.61;SD=1.01)			.401				

Q26. I found my partner to be less attractive after the abortion. (M=3.15;SD=1.80)				.850			
Q27. Because of the abortion I wasn't very attracted to my partner afterwards. (M=3.28;SD=1.78)				.825			
Q28. My partner and I fought frequently because of the abortion. (M=3.79;SD=1.71)				.745			
Q29. I felt rejected by my partner after the abortion. (M=3.34;SD=1.75)				.707			
Q30. I resented having an abortion to please my partner. (M=3.39;SD=2.00)				.689			
Q31. I felt terrible about myself due to the abortion. (M=1.61;SD=.98)					.676		
Q32. I didn't feel like the same person after my abortion. (M=1.70;SD=.96)					.628		

Q33. I felt very guilty and ashamed due to the abortion. (M=1.47;SD=.88)					.605		
Q34. I experienced bouts of extreme sadness from the abortion. (M=1.76;SD=1.09)		.465			.492		
Q35. I had low self-esteem and felt unlovable due to my abortion. (M=1.87;SD=1.11)	.428				.458		
Q36. I relied on alcohol and/or drugs to escape troubling post-abortion emotions. (M=2.85;SD=1.50)						.841	
Q37. I drank alcohol excessively as a result of my abortion. (M=2.90;SD=1.47)						.779	
Q38. I used illegal drugs following the abortion because of the distress it caused me. (M=3.59;SD=1.46)						.775	

Q39. I took prescription medication for troubling emotions after my abortion. (M=3.33;SD=1.42)						.415	
Q40. I engaged in more casual sexual activity after my abortion. (M=2.67;SD=1.46)						.445	.641
Q41. I didn't feel I deserved a decent partner because I had an abortion. (M=2.54;SD=1.28)							.555
Q42. I tended to take greater risks after the abortion because my personal safety was less important to me. (M=2.56;SD=1.35)						.478	.521

Table 3 provides a correlational matrix examining associations between the seven factors of the PAPRAS and scores on the established measures of mental health, conducted for the purpose of providing convergent and divergent validity information. All the associations are inverse because lower scores on the PAPRAS are suggestive of more adverse post-abortion mental health and on the other measures higher scores are indicative of the presence of mental health problems. The low to moderate magnitude of the correlation coefficients generally suggest that although the individual factors and

Table 3: Correlations between factors on the Post-Abortion Psychological and Relational Adjustment Scale and established measures of mental health

	Factor 1 Negative Emotion/ Emotional Lability	Factor 2 Decision Difficulty/ Loss	Factor 3 Lack of Positive Abortion-Related Emotions	Factor 4 Negative Partner Outcomes	Factor 5 Negative Self-Appraisals	Factor 6 Drug and Alcohol Use	Factor 7 Risk-Taking Behavior
Burns Anxiety Inventory	-.37*	-.28*	-.14*	-.17*	-.21*	-.24*	-.19*
Major Depression Inventory	-.36*	-.28*	-.15*	-.20*	-.24*	-.18*	-.17*
The PTSD Checklist–Civilian Version	-.41*	-.30*	-.18*	-.20*	-.25*	-.21*	-.20*
Alcohol Use Disorders Identification Test	-.12*	-.07*	-.04	-.10*	-.09*	-.30*	-.14*
The Drug Abuse Screening Test	-.20*	-.09*	-.14*	-.12*	-.12*	-.43*	-.21*

*p <.001

measures of related constructs share variance, there is uniqueness to the factors. This is as expected due to the PAPRAS item content being more directly tied to emotions and behaviors that are perceived by women to have come from the abortion; whereas the established measures are more generalized. The strongest correlations observed were between Factor 1 (Negative Emotion/Emotional Lability) and scores on the BAI (-.37), the MDI (-.36), and the PTSD Checklist (-.41). Also of note was a correlation coefficient of .30 between Factor 2 (Decision Difficulty/Loss) and the PTSD Checklist. Finally Factor 6 (Drug and Alcohol Use) was notably correlated with the AUDIT (-.30) and the DAST (-.43).

Table 4 is a matrix of correlations between all combinations of the seven factors. As revealed in the table, the inter-factor correlations range from .19 and .75, with all significant at p<.001. The fact that most of the coefficients are low to moderate provides justification for separate subscales and for them all to be included on the more comprehensive measure of a global construct, adverse post-abortion psychological and relational functioning, based on the interrelatedness.

Table 4: Correlations between factors on the Post-Abortion Psychological and Relational Adjustment Scale

		Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7
Factor 1		.71*	.58*	.42*	.75*	.49*	.54*
Factor 2			.54*	.35*	.75*	.27*	.33*
Factor 3				.25*	.58*	.30*	.35*
Factor 4					.34*	.21*	.19*
Factor 5						.34*	.43*
Factor 6							.56*

*p <.001

Internal consistency reliabilities for the factors along with basic descriptive statistics are provided in Table 5. Item analysis revealed that elimination of item 11 (“I was able to bounce back after the abortion”) from Factor 1 would result in an increased internal consistency estimate to .90. Removal of item 22 (“The abortion was a maturing experience for me.”) from Factor 3 would increase the internal consistency to .82. On Factor 6, removal of item 40 (“I took prescription medication for troubling emotions after my abortion”) would result in elevation of the internal consistency to .84. The internal consistency reliability for total scores on the PAPRAS was .94, with no item deletions resulting in an increased value. Table 5 also provides internal consistency reliability coefficients, the number of items, and basic descriptive statistics for the personal and contextual predictors of adverse post-abortion outcomes and for all the outcome measures using the current study data.

Multiple regression models were employed to examine the associations between several predictor variables and six indices of adverse post-abortion mental health. By using hierarchical regression models, prior psychological health could be controlled (any form of psychological counseling or a prescription for any psychological medications prior to the abortion procedure) through entering the relevant variables into the first block of the analyses. Several potential third variables were controlled as well in the second block (employment status, marital status, education level, childhood experience of physical abuse, sexual abuse or neglect, experience of a miscarriage, and number of children). The third block of variables was the primary focus and included feelings of

Table 5: Internal consistency reliability, then number of items and basic descriptive statistics for all primary variables.

Variable	Cronbach's Alpjha	Number of items	Observed Range	Mean	SD
Decision Regret	.88	5	5 to 25	6.39	2.45
Wantedness/emotional involement in the pregnancy	.80	10	10-50	32.68	10.23
Dissatisfaction with counseling received	.84	12	12-57	22.73	7.20
Understanding of the abortion procedure	.88	3	3-15	8.85	3.81
Pressure from abortion facility personnel	.84	6	6-30	15.08	5.10
General pressure to abort/lack of support to carry	.85	12	12-60	30.42	9.71
Situational pressure to abort	.69	11	11-53	33.28	6.79
Pressure from partner to abort	.82	15	15-78	48.38	11.11
Factor 1: Negative emotion/emotional lability	.88	11	11-55	28.12	9.56
Factor 2: Decision difficulty/Loss	.87	7	7-35	14.29	6.30
Factor 3: Lack of positive abortion related emotions	.80	7	7-35	12/95	5.10
Factor 4: Negative partner outcomes	.85	5	5-30	16.97	7.27
Factor 5: Negative self-appraisals	.86	5	5-25	8.41	4.12
Factor 6: Drug and alcohol use	.79	4	4-20	12.70	4.62
Factor 7: Risk-taking	.73	3	3-15	7.77	3.35
PAPRAS Total scores	.94	42	42-210	101.33	30.07
Burns Anxiety Inventory	.96	33	0-96	18.93	18.82
Major Depression Inventory	.94	12	0-59	14.52	12.76
The PTSD Checklist	.95	17	17-85	32.22	14.31
Alcohol Use Disorders Identification Test	.83	10	0-34	3.77	4.40
The Drug Abuse Screening Test	.89	28	0-26	1.84	3.38

regret, emotional investment in the pregnancy, dissatisfaction with post-abortion counseling received, understanding of the procedure, perception of pressure from the clinic staff, partner pressure, situational pressure, and general feelings of being pressured to abort from others/lack of social support to carry to term.

As indicated in Table 6, the variance in the outcome measures explained by the variables entered into the first two blocks of the analyses was removed from the third block analyses. The data clearly indicates that particular variables surrounding the immediate abortion context operate as powerful predictors of post-abortion

Table 6: Results of regression analyses employing six outcome measures of mental health

Total Scores Post-Abortion Psychological and Relational Adjustment Scale

Model	R	R Square	Adjusted R Square	R Square Change	F Change	Sig. F Change
1	.084	.007	.002	.007	1.50	.223
2	.273	.075	.052	.068	3.77	.0001
3	.730	.532	.512	.458	49.53	.0001

Burns Anxiety Inventory

Model	R	R Square	Adjusted R Square	R Square Change	F Change	Sig. F Change
1	.139	.019	.014	.019	3.86	.022
2	.305	.093	.069	.074	3.91	.0001
3	.416	.173	.134	.080	4.58	.0001

Major Depression Inventory

Model	R	R Square	Adjusted R Square	R Square Change	F Change	Sig. F Change
1	.133	.018	.013	.018	3.89	.021
2	.331	.109	.088	.092	5.45	.0001
3	.422	.178	.143	.069	4.36	.0001

PTSD Checklist

Model	R	R Square	Adjusted R Square	R Square Change	F Change	Sig. F Change
1	.117	.014	.009	.014	2.91	.055
2	.341	.116	.094	.102	5.91	.000
3	.452	.204	.169	.088	5.56	.000

Alcohol Use Disorders Identification Test

Model	R	R Square	Adjusted R Square	R Square Change	F Change	Sig. F Change
1	.06	.004	.003	.004	.59	.550
2	.24	.059	.025	.055	2.05	.040
3	.30	.094	.034	.035	1.32	.232

Drug Abuse Screening Test

Model	R	R Square	Adjusted R Square	R Square Change	F Change	Sig. F Change
1	.093	.009	.004	.009	1.67	.190
2	.332	.110	.086	.101	5.27	.0001
3	.384	.147	.105	.037	1.98	.047

relational and mental health declines. More specifically, when PAPRAS total scores were used as the criterion, all variables were significant (regret: p<.0001; wantedness/emotional: p<.0001; dissatisfaction with counseling: p<.0001; abortion facility pressure: p=.006; general pressure/lack of support p<.0001; situational pressure: p<.0001; partner pressure: p=.034), except understanding of the abortion procedure. As a set, the variables significantly explained 45.8% of the variability in scores on the post-abortion survey.

The set of block 3 variables was independently and significantly related to anxiety scores, explaining 8% of the variability in scores on the BAI. However, the only significant individual predictors of scores on the BAI from the third block were pregnancy wantedness/emotional connection (p=.001) and situational pressure (p=.002). The set of block 3 variables was also significantly related to major depression, explaining 6.9% of the variability in scores on the MDI. However, the only individual predictors of major depression scores from the third block were pregnancy wantedness/emotional connection (p=.001) and situational pressure (p=.004). With regard to PTSD scores, the set of block 3 variables was also significantly related to PTSD scores with 8.8% of the variance explained; however again the only individual predictors of PTSD scores from the third block were pregnancy wantedness/emotional involvement (p<.0001) and situational pressure (p<.0001). When AUDIT scores served as the criterion, the set of block 3 variables was not significant; however feeling pressured by the abortion facility personnel was (p=.029). Finally, the set of block 3 variables was significantly related to DAST scores with 3.7% of the variance explained; yet the only significant individual predictor from the third block was situational pressure.

Discussion

For over a half century academics have studied the post-procedure psychological adjustment of women who have undergone elective abortions. The vast majority of studies published have used simplistic measures of mental health or have incorporated instruments that are designed to assess mental illnesses in the general population. This approach has likely failed to capture the breadth and depth of the psychological experiences of women, because abortion is a unique exposure by its very nature. In abortion, unlike with other medical procedures, women consent to end the life of a biologically distinct human being. More comprehensive assessments and examination

of abortion context predictors of mental health are necessary to fully understand and respect the experiential diversity. The current study was designed to address these needs using data gathered from an online survey of nearly 1000 women, who had contacted a crisis pregnancy for post-abortion counseling services at some point after an abortion.

A series of regression models was conducted examining feelings of regret, emotional investment in the pregnancy, dissatisfaction with pre-abortion counseling received, understanding of the procedure, perceptions of pressure from the abortion clinic, partner pressure, situational pressure, and general pressure/lack of social support to carry to term as predictors of post-abortion psychological functioning measured in a variety of ways. The regression equations included controls for prior psychological functioning and a number of demographic variables. The results revealed that when the newly developed measure, the PAPRAS served as the outcome measure, the abortion context variables as a group accounted for 45.8% of the variance in women's post-abortion psychological and relational adjustment scores. At the individual variable level, all the above variables except understanding of the procedure were significant predictors. The third block variables are all amenable to intervention in order to reduce the numbers of women undergoing abortions when another option is more consonant with their personal needs and values. Women's convictions and feelings should be discussed with a trained counselor and clinic personnel should carefully screen potential patients for evidence of pressure that may result in a woman choosing abortion to please others or due to life circumstances.

The large amount of explained variance for the first regression model is in contrast to the 3.5% to 8.8% for the other models using the same sets of predictors and employing established mental health measures. Despite limited unique variance, the third block effects were still significant for the BAI, the MDI, the PTSD Checklist, and the DAST, but not for the AUDIT. For anxiety, depression, and PTSD as outcomes the only significant individual predictors were pregnancy wantedness and situational pressure. For drug use, situational pressure again was a significant predictor and for alcohol use disorders pressure felt by abortion clinic personnel was a significant predictor.

The fact that pregnancy wantedness/emotional investment in the pregnancy turned out to be a robust predictor of anxiety, depression, and PTSD scores is not a surprise given that this is risk factor that has been known for some time. In addition to counseling women to assess and discuss the level of emotional investment and desire to continue the pregnancy prior to securing consent, providers should make the choice not to abort once inside a clinic an easy process with women directed to community resources necessary to maintain their pregnancies.

Situational pressure was a robust, significant predictor of PAPRAS, BAI, MDI, PTSD and DAST scores. The items comprising this variable are provided in Appendix A. Women scoring high on this measure generally reported lives immersed in trying to care for themselves, often with difficulty and daily life struggles wherein seeing a way to bring a child into their lives seemed next to impossible. Had many of these

women been offered tangible resources and support to continue their pregnancies, mental health consequences might have been averted. Most communities in the U.S. now have well-developed systems in place to provide women with assistance to choose birth, and oftentimes the programs focus far beyond provision for the mother during pregnancy and the birth to help secure living accommodations, vocational training, and educational opportunities. For example, Healthy Start has been assisting woman, children, and families since 1991 with programs in place in 37 states. Healthy Start offers the following services:

- *Health Care* including prenatal, postpartum, well-baby, adolescent care, reproductive life planning, and women's health.
- *Enabling Services* including case management, outreach, home visiting, adolescent pregnancy prevention, childbirth education, parenting skill-building, self-esteem building, transportation, translation, child care, breastfeeding and nutrition education, father support, housing assistance, job training, and prison/jail-based services
- *Public Health Services* including immunization and health education (e.g., smoking cessation)

There is a logical explanation for the discrepancy in the amount of shared variance explained by the abortion context variables relative to the PAPRAS vs. the established measures of mental health. The PAPRAS requires the respondent to reflect back on the time of the abortion; whereas the other measures of mental health are based on recent emotions and behaviors. The majority of women experienced significant levels of distress at some point after the procedure as measured by the PAPRAS. The average score was 101 on scale from 42 to 210, which translates out to an average item value of 2.40 (between agree and neutral) relative to the various negative effects. In contrast, although the means for the established measures suggest some women were experiencing mental health struggles at the time they completed the survey, many were not resulting in a reduction in variability and power to detect effects. This appears to be a sample comprised mostly of women who were generally psychologically healthy prior to the abortion, evidenced serious struggles specific to the abortion, and are psychologically healthy many years later. The women sought out resources for coping and were likely assisted by post-abortion recovery services offered by CPCs, resulting in improved mental health.

Several small Likert scales were developed for the current study to measure various personal and context variable predictors of adverse post-abortion mental health functioning (regret, wantedness/emotional involvement in the pregnancy, dissatisfaction with abortion counseling received, understanding of the abortion procedure, pressure from the abortion facility personnel, general pressure to abort/lack of support, situational pressure to abort, and pressure from partner). Each of these scales demonstrated good internal consistency reliability and most were predictive of post-abortion mental and relational health. Future research should involve modification of the scales for ad-

ministration prior to an abortion and ultimately these scales can be used to screen for women at risk for negative post-abortion responses.

Although an abortion typically only takes minutes to perform, the personal and relational effects are potentially long lasting and as varied as the individuals who walk through abortion clinic doors. Certainly some women perceive an unintended pregnancy and an abortion as mere inconveniences that are quickly remedied and forgotten. However, as evidenced by this very large readily available sample, scores of other women experience significant conflict and struggle to assimilate their choices into existing self-schemas. The intrapersonal complexity of abortion is compounded by interpersonal dynamics and a society that is highly conflicted about the procedure.

The PAPRAS holds promise for addressing the unique mental health concerns of women who have struggled to regain their psychological health after an abortion given the clear factor structure that emerged, strong internal consistency reliability, and low to moderate correlation with established measures of mental health. Although this study revealed strong psychometric properties, the author encourages others to adopt it with various populations of women with abortion experience. In particular, this survey instrument should be piloted with a normative sample of women seeking abortion services, ideally administered simultaneously with assessments of current mental health functioning.

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Appendix A: Abortion Context Predictors of Post-Abortion Psychological Distress

Pregnancy wantedness/emotional involvement in pregnancy

1) I felt emotionally connected to my child prior to the abortion.

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

2) When I discovered I was pregnant, I experienced some joy.

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

3) At the time of my abortion, I was certain I did not want to have a child.*

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

4) The idea of having a child was not appealing to me right up to the time of the procedure.*

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

5) I experienced a sense of wholeness and well-being early in the pregnancy.

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

6) I never really bonded to my unborn child before the abortion.*

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

7) I cherish the time I had with my child before the abortion.

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

8) I was not ready to be a parent and I thought I might emotionally harm the child if I gave birth.*

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

9) I was excited to be pregnant prior to the abortion.

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

10) I had no desire to have a child while pregnant.*

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

Understanding of the abortion procedure

1) When I chose to terminate, I did not believe abortion meant ending a human life.*

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

2) I thought I just had a clump of cells removed, not a human being.*

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

3) When I aborted I did believe the fetus was a human being.

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

Regret of decision to abort

1) If I could go back in time, I would not abort again.

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

2) I will always regret my abortion.

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

3) My abortion was a serious mistake.

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

4) I am glad I had an abortion.*

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

5) I would do anything to undo my abortion decision.

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

Situational pressure to abort

1) Based on my situation, I felt powerless to avoid an abortion.

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

2) I felt pressured by life circumstances to abort.

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

3) My life was a mess and I felt I should not bring a child into it.

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

4) I felt I had to abort because I did not want anyone to know I was involved with the child's father.

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

5) I had used drugs and/or alcohol and I was worried I had damaged the child.

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

6) I could barely take care of myself and the thought of taking care of a child was overwhelming.

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

7) I didn't see how to introduce a child into my life with my educational/occupational plans.

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

8) I was at a place in my life where I really could have had a child.*

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

9) I felt I had abort in order to save my life.

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

10) I was afraid I would not have anywhere to live if I decided to have the child.

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

11) There was nothing going on in my life that would have made having a child particularly difficult.*

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

General pressure from others/lack of support to carry to term

1) If I had made my decision entirely on my own, I never would have aborted.

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

2) No one said they were there for me and I knew if I had the child I would be on my own.

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

3) Others made me feel I would be very selfish to carry to term.

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

4) I didn't feel any pressure from others to abort.*

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

5) I didn't want anyone to know how irresponsible I had been.

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

6) I can't recall anyone trying to convince me to abort.*

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

7) My decision to abort was entirely free from even subtle pressure from others.*

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

8) I wish there had been just one person who offered me the support I needed to carry to term.

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

9) No one told me it would be okay if I chose to carry to term.

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

10) I aborted my child to make others happy.

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

11) People told me my life would be miserable if I had a child.

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

12) Others made me feel I had to abort because I wasn't married to my partner.

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

Pressure from abortion facility personnel

1) I felt as if people at the abortion clinic thought it was best for me to have an abortion.

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

2) I wasn't pressured by the abortion counselor (s) to abort.*

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

3) The abortion counselor(s) helped me to arrive at my own decision regarding the abortion.*

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

4) I felt the abortion counselor wanted me to just go through with the procedure.

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

5) The counselor(s) at the abortion clinic made it clear she/he thought an abortion was my best option.

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

6) I was told by abortion clinic personnel that any doubts would fade quickly after the procedure.

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

Dissatisfaction with counseling/information received prior to abortion

1) The counseling I received at the abortion facility was brief.

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

2) The counselor(s) at the abortion facility did not ask about any pressure I felt to abort.

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

3) I was counseled with sensitivity to my individual feelings and unique life circumstances.*

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

4) I felt I could really trust the abortion counselor(s) at the clinic to provide accurate information.*

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

5) The counselor(s) at the abortion facility seemed cold and uninterested in me.

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

6) I was not encouraged by the abortion counselor(s) to explore all options.

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

7) I was not provided practical information at the clinic on options other than terminating.

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

8) I was told by the abortion counselor (s) that I could expect to feel fine after the procedure.

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

9) I was told by the abortion counselor (s) that physical risks are extremely rare and are more common with childbirth.

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

10) I was not provided with any information regarding emotional or psychological risks associated with an abortion.

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

11) The counseling that I was provided with at the abortion clinic was adequate.*

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

12) The abortion doctor spent time with me explaining the procedure before performing the abortion.*

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

Pressure from partner to abort

1) My partner told me the decision was mine, but I knew he wanted me to terminate.

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

2) My partner said if I carried to term, he would not take an active role in the child's life.

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

3) My partner was careful not to try to influence me to abort.*

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

4) My partner said he would break up with me if I did not terminate my pregnancy.

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

5) I did not feel pressured from my partner to abort.*

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

6) My partner said he would support whatever choice I made.*

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

7) I aborted my child because I knew my partner wanted me to.

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

8) I aborted my child because I was afraid I would lose my partner if I did not.

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

9) My partner did not try to influence my decision one way or the other.*

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

10) My partner influenced me to abort using logical arguments such as, "Wouldn't it be better to wait and have a baby when we're really ready and able to love our child?"

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

11) My partner was furious about the pregnancy and said I had no choice but to abort.

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

12) My partner told me it would be fine to have the child, but I knew deep down he didn't mean it.

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

13) My partner tried to appear supportive of the pregnancy, but I knew he was very burdened by it.

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

14) I didn't want to put my partner through a pregnancy he wasn't ready to deal with.

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree

15) My partner said he would physically hurt me if I did not terminate my pregnancy.

____Strongly Agree ____Agree ____Neutral ____Disagree ____ Strongly Disagree