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Induced abortion and intimate relationship quality in the Chicago Health and Social Life Survey

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SUMMARY

Objectives: To examine associations between abortion and relationship functioning.**Study design:** Independent variables included abortion in a previous relationship and abortion in a current relationship. Perceptions of quality-of-life changes associated with terminating the relationship, conflict, aggressiveness and sexual dysfunction were the outcome measures.**Methods:** Data were derived from interviews with an ethnically diverse urban sample of men ($n = 658$) and women ($n = 906$). Surveys were conducted in person using computer-assisted personal interview technology by the National Opinion Research Center affiliated with the University of Chicago, USA.**Results:** For men and women, the experience of an abortion in a previous relationship was related to negative outcomes in the current relationship; perceptions of improved quality of life if the current relationship also ended and intimate partner violence. Experience of an abortion within a current relationship was associated with 116% and 196% increased risk of arguing about children for women and men, respectively. Among females, experience of an abortion within a current relationship was associated with increased risk for various forms of sexual dysfunction (122–182%), increased risk of arguments about money (75%), increased risk of conflict about the partner's relatives (80%), and increased risk of arguing about the respondent's relatives (99%). Men whose current partners had experienced an abortion were more likely to report jealousy (96% greater risk) and conflict about drugs (385% greater risk).**Conclusion:** Abortion may play a vital role in understanding the aetiology of relationship problems.

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Introduction

Unintended pregnancy is unequivocally a stressful life experience with considerable potential to strain intimate relationships.^{1,2} As a couple contemplates how to proceed with an unexpected pregnancy, many forms of conflict related to each partner's personal preferences, beliefs, morality and commitment to the relationship may arise. Even if a couple is in agreement regarding continuation vs termination of the pregnancy, the resolution chosen may prove stressful to one or both individuals and have an adverse effect on the relationship. Several studies have examined partner relationship quality following unintended pregnancy resulting in childbirth^{3,4}; however, the association between unintended pregnancy ending in abortion and partner relationship quality has received much less attention. Moreover, most published

reports on associations between abortion and relationship issues have been from the female vantage point, with male perceptions largely ignored.⁵ To a large extent, this is not unexpected. Research interests have followed legal precedent wherein women with unwanted pregnancies may unilaterally decide the outcome of pregnancies, independent of their partner's knowledge, beliefs or feelings, under US law since 1976.⁶

A few studies have shown women with a history of abortion to be at increased risk for sexual dysfunction.^{7–11} Among the specific female sexuality variables examined in the literature are sexual desire, frequency of sexual intercourse, orgasm ability and sexual satisfaction. In a recently published study, 6.2% of Russian women and 24% of American women reported sexual problems that they attributed directly to a prior abortion.⁷ In addition, in a longitudinal Swiss study, 31% of women experienced one or more sexual symptoms, including decreased desire and orgasmic ability, associated with post-abortion anxiety, depression and sadness.⁸ Bradshaw and Slade reviewed the research on this topic and concluded that 10–20% of women experience sexual problems in the first

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weeks and months following an abortion, with 5–20% reporting sexual difficulties 1 year later.¹²

Although male responses to abortion have not been studied extensively, sexual problems at 1–3 weeks post-abortion were identified in 18% of a sample of men who self-identified as having been emotionally harmed by a partner's abortion.¹³ Research on abortion and male sexuality in more normative samples is absent from the literature.

Partner communication problems in the aftermath of an abortion have also been identified,¹⁴ and several studies have shown increased risk for separation or divorce following an abortion.^{7,9,14,15} In one of the stronger prospective studies, which had a high initial consent rate, no attrition, a control group and standardized measures, 22% of German women's relationships with their partners had ended 1 year after an abortion.⁹ Rue *et al.* reported that 6.8% of Russian women and 26.7% of American women experienced relationship problems due to an abortion, whereas little relationship benefit was reported by either Russian women (2.2%) or American women (0.9%).⁷ Finally, 7.8% of Russian women and 19.8% of American women indicated that their relationships had ended as a direct consequence of the abortion. In an older study of 100 women with a history of abortion, conducted by Sherman *et al.* (1985), 46% reported that the abortion was a major life crisis and 48% considered that their relationship with their partner was altered significantly. Thirty-three percent of the respondents reported a negative effect on their sexual life.¹⁶

Very little research attention has focused on abortion as a risk factor for intimate partner violence; however, a few studies have shown an association between a history of abortion and increased risk for violence during a subsequent pregnancy.^{17,18} Associations between abortion and relationship conflict and intimate partner violence are logical based on research indicating that anger is a common post-abortion emotional response.^{7,19,20} Intimate partner violence encompasses physical, sexual or psychological violence, and approximately 25–54% of women report exposure to intimate partner violence during their lifetime.²¹ The urgency of investigating previously unexamined correlates of intimate partner violence, such as induced abortion, is underscored not only by the numbers affected by this serious form of personal suffering, but by data suggesting that victims are at increased risk for medical and psychosocial comorbidity.²¹ This study examined women as perpetrators of intimate partner violence; however, according to statistics gathered by the US Department of Justice, 85% of victimizations by intimate partners in recent years were against women.²² Moreover, in the same report, 33% of female murder victims were identified as having been killed by an intimate, compared with 4% of male murder victims.

Correlations between abortion history and relationship quality could be explained by third variables associated with the choice to abort and relationship problems. Few previous investigations of associations between abortion and partner relationship quality have included sufficient controls for potentially confounding third variables. Among the possible third variables are age, sexual risk-taking behaviours (e.g. group sex, number of sexual partners), a childhood or adult history of sexual abuse, and other sources of stress including poverty and feelings of estrangement from one's parents.^{23–26} Third variables which may decrease the likelihood of abortion and relationship problems include personal commitment to one's religion and marital status.^{7,24,26}

In addition to insufficient attention to men and few controls for potential third variables, previous studies have focused exclusively on the impact of a prior abortion on the partnership of the woman who conceived the pregnancy and her partner. No studies to date have compared the relative psychological or relational impact of a history of one or more abortions prior to the current partnership

with an abortion occurring in the context of the current partnership. Although very few studies have examined the long-term mental health implications of abortion, the available longitudinal data indicate that while some women do not manifest post-abortion psychological problems, others may carry the pain of a difficult abortion experience for years, emotionally cycling symptoms of intrusion and re-experience, denial and avoidance.^{7,20,27} If negative emotions associated with an abortion are not acknowledged or resolved, dysfunctional coping can carry over into relationships and create additional impairment.^{20,28}

Aims

The present study was designed to address some of the gaps in the previous research by examining associations between abortion history prior to and within a current partnership, and several indicators of adverse relationship functioning (perceptions of quality-of-life changes associated with relationship termination, sexual dysfunction, verbal conflict and intimate partner violence). Controls were instituted for a variety of demographic, personal, relational and situational variables found to be significantly correlated with the decision to abort. Data were derived from interviews with a large ethnically diverse urban sample of men and women. The hypothesis examined was that abortion history with a previous partner and with a current partner would be associated with more negative intimate relationships, as reported by both men and women. Specific aspects of relationships examined included sexual dysfunction, verbal conflict, intimate partner violence perpetrated by the respondent and the respondent's partner, and perceptions of how the respondent's life and the life of his/her partner would change for the better or worse if the relationship ended. Hypotheses predicting differences in variables measuring relationship quality based on sex and the past or present context of the abortion were not formulated due to limited relevant previous research.

Methods

Data source

The data source for this investigation was the Chicago Health and Social Life Survey (CHSLS). Data were collected in 1995 and 1997 under the direction of Edward O. Laumann, PhD, George Herbert Mead Distinguished Service Professor, Department of Sociology, University of Chicago, USA. Designed to advance understanding of the causes and consequences of adult sexual behaviour in the USA, the CHSLS consists of 2114 cases, including 890 cases which constitute a representative cross-section of Chicago and 1224 cases that include four samples from ethnically and socially diverse neighbourhoods. Respondents were non-institutionalized men and women between the ages of 18 and 61 years, who spoke either English or Spanish with sufficient fluency to participate in the interview.

Participants

The cases used as the basis of the current analyses included women ($n = 906$) and men ($n = 658$) who were sexually active with at least one partner in the last 12 months. Among the women sampled, 684 (75.5%) reported no history of abortion, 137 (15.1%) reported an abortion with a previous partner, and 77 (8.5%) indicated an abortion with their current partner. Most of the men reported never having had a partner who aborted a pregnancy (503, 76.7%), 100 men (15.2%) reported a previous partner who had an abortion, and 53 men (8.1%) reported an abortion with their current partner. The average age of women in the sample was 34.54

[standard deviation (SD) 10.05] years, and the average age of men in the sample was 35.58 (SD 10.48) years. Additional demographic information for the study population is provided in Table 1.

Procedure

Surveys were conducted in person using computer-assisted personal interview technology by the National Opinion Research Center affiliated with the University of Chicago, USA. Participants were told that information derived from the study would help service providers to understand critical social and health issues related to sexual behaviour, and they were informed that they had been scientifically selected to represent people living in the Chicago area. Participation was voluntary, and the respondents were assured that the information they provided would be strictly confidential and could not be linked back to them.

Main outcome measures

Variables extracted included abortion history, variables likely to operate as predictors of the choice to abort, and outcome variables pertaining to the respondents' most current partnerships, which are described in detail below. The variables explored as predictors of the decision to abort included sociodemographic variables (age, ethnicity, marital status, income, education, religious denomination, frequency of religious attendance), family of origin variables (closeness to mother and father during childhood, age at which they left home), sexual abuse history (having been touched before 13 years of age, a history of ever being forced to have sex), and sexual risk-taking behaviour (number of one night stands, participation in group sex).

Perceptions of quality-of-life changes if relationship ended

In the context of 10 items, respondents were asked to rate how various areas of their life and their current partner's life would be different if they separated. Five items dealt with the respondent's own life situation, and five dealt with the respondent's assessment

of how his/her partner's life would change upon separation. The five content areas assessed were standard of living, social life, overall happiness, sex life and being a parent. Response options ranged from 1 (much worse) to 5 (much better), and total potential scores ranged from 10 to 50. Internal consistency reliability was moderately high using the female (0.84) and male (0.82) data.

Intimate partner violence perpetrated by the respondent

Intimate partner violence on the part of the respondent and the respondent's current partner were measured with 11 items: argued heatedly, yelled/insulted, sulked, threatened to hit/throw, threw something, pushed, hit with hand, hit with a hard object, beat up, threatened with a knife or gun, and used a knife or gun. A score of '0' was assigned if a behaviour had not occurred in the past 12 months, and a score of '1' was assigned if the behaviour had occurred, with total potential scores ranging from 0 to 11. The internal consistency reliability using Cronbach's alpha was sufficient for the intimate partner violence scale using the female data (0.75) and male (0.73) data.

Conflict scale

The conflict scale consisted of 10 items wherein the respondents were asked whether or not the following issues were sources of arguing/fighting with their current sexual partner: jealousy, sex, money, drinking, children, partner's relatives, respondent's relatives, drugs, friends and household chores. A score of '0' was assigned if an item was not a source of conflict, and a score of '1' was assigned if the item was a source of conflict, with total potential scores ranging from 0 to 10. The internal consistency reliability using Cronbach's alpha was low on this scale (0.51 using female data and 0.50 using male data); therefore, item-level data were analysed as opposed to using a composite score.

Sexual dysfunction scale

The sexual dysfunction scale had eight common items on the male and female scales: lack of interest, difficulty in interesting partner, lack of pleasure, avoiding sex, climaxing too fast, not climaxing, pain during intercourse, and feeling anxious during sex with one's current partner. The male scale also had an item pertaining to difficulty with erection, and the female scale had an item measuring trouble with lubrication during sex with one's current partner. A score of '0' was assigned if an item was not a problem, and a score of '1' was assigned if the item was a problem, with total potential scores ranging from 0 to 9. The internal consistency reliability using Cronbach's alpha was low on this scale (0.53 using female data and 0.38 using male data), prompting exclusive examination of item-level data.

Results

Correlational analyses were conducted to identify sociodemographic, family of origin, sexual abuse and risky sexual behaviour predictors of women's decision to abort and men's partner's choice to abort as covariates in the primary analyses. Using the female data, less frequent religious service attendance ($P < 0.0001$), not having been close to one's mother during childhood ($P < 0.01$), not having been close to one's father during childhood ($P < 0.05$), having left home at an early age ($P < 0.05$), having been touched sexually prior to 13 years of age ($P < 0.0001$), a history of being forced to have sex ($P < 0.0001$), a history of more one night stands ($P < 0.0001$), and having participated in group sex ($P < 0.0001$) were significant predictors of the decision to abort. Only four male variables were found to be significant predictors of the partner's decision to abort: less frequent religious attendance ($P < 0.01$), having been touched before 13 years of age ($P < 0.05$), participation

Table 1
Demographic characteristics of male and female study participants.

Variable	Men (n = 658)	Women (n = 906)
Marital status		
Never married	40.0%	36.1%
Married	48.6%	49.3%
Divorced/separated	4.1%	13.5%
Widowed	0.8%	1.0%
Ethnicity		
White	48.2%	48.5%
Black	25.4%	29.4%
Hispanic	20.4%	17.9%
Other	6.0%	4.2%
Individual income		
\$30,000 or less	71.7%	90.8%
Over \$30,000	28.3%	9.2%
Education		
Less than high school	20.8%	25.3%
High school diploma	33.4%	31.6%
Associate or technical degree	13.0%	17.3%
Bachelor's degree	20.8%	19.3%
Masters, doctorate or professional	12.1%	1.8%
Religion		
None	11.2%	8.5%
Protestant	36.0%	36.8%
Catholic	45.9%	46.7%
Jewish	2.7%	1.7%
Other	4.1%	4.3%

in group sex ($P < 0.05$), and a history of more one night stands ($P < 0.0001$).

In order to assess the relationship between abortion history (no history, abortion with a previous partner, abortion with a current partner) and the dependent variables measured with multiple item scales (perceptions of how one's life and one's partner's life would change if the relationship were terminated, and aggressive behaviours by the respondent and his/her partner), a series of analyses of covariance were employed using the variables revealed to be significant predictors of the choice to abort as covariates. Tables 2 and 3 contain the adjusted and unadjusted results for the analyses conducted with the female and male data, respectively.

Results using female data

As indicated in Table 2, having an abortion prior to the current partnership compared with no abortion history was associated with perceptions of more improved quality of life for the respondent and/or her partner if the relationship was terminated. Higher levels of intimate partner violence by the respondent were indicated by those who had experienced an abortion in the current partnership compared with women with no history of abortion and women who had experienced an abortion in a previous relationship.

Two of the multiple item scales had low internal consistency reliability using the female data (conflict and sexual dysfunction), prompting the decision to examine the data at the item level. Results of a series of logistic regression analyses are presented in Tables 4 and 5. As indicated in Table 4, after adjusting for covariates, women who had experienced an abortion with their current partner, compared with women without a history of abortion, were 75% more likely to argue about money, 116% more likely to argue about children, 80% more likely to argue about the partner's relatives, and 99% more likely to argue about the respondent's relatives.

Women who had experienced an abortion in their current relationship, compared with women without a history of abortion, had the following elevated sexual risks: 112% more likely not to experience climax, 135% more likely to climax too fast, 182% more likely to report pain during intercourse, 158% more likely to report feeling anxious during intercourse, and 117% more likely to indicate difficulty interesting a partner in intercourse (see Table 5). In addition, compared with women without a history of abortion, women who had experienced an abortion in a previous relationship were 188% more likely to experience pain during intercourse.

Results using male data

As indicated in Table 3, men whose partners had experienced an abortion in a previous relationship reported higher scores on the measure of quality-of-life changes for self and partner if the relationship ended, compared with men who had never had a partner

with an abortion experience. Furthermore, compared with men with no prior partner history of abortion, the experience of an abortion with a current or previous partner was associated with more violent behaviour by the respondent.

As with the female data, item-level analyses using logistic regressions were conducted for the conflict scale and the sexual dysfunction scale using the male data in light of low internal consistency reliability when the items were combined to form composite scales. As indicated in Table 4, men whose partners had experienced an abortion in the current relationship, compared with men whose partners had never experienced an abortion, were 96% more likely to report conflict based on jealousy, 195% more likely to indicate arguing about children, and 385% more likely to report arguing about drugs. Compared with men with no partner history of abortion, those with a history of an abortion prior to the current relationship were 75% more likely to argue about children with their current partner. Finally, no differences in any of the individual male sexual dysfunction items were associated with a past or current partner's abortion.

Discussion

The results of this study provide strong evidence for increased risk of relationship problems associated with an abortion experience, as reported by both men and women. Specifically, for males and females in the sample, an abortion in the context of a previous relationship, compared with no abortion history, was associated with stronger perceptions that the quality of life of the respondent and his/her partner would be improved if the current relationship ended. In addition, male and female respondents who experienced an abortion within the current partnership reported engaging in significantly higher rates of intimate partner violence compared with those who had never experienced an abortion. Finally, compared with no history of abortion, an abortion within a current partnership was associated with 116% and 196% increased risk of arguing about children for female and male respondents, respectively.

The pattern of results relative to other analyses differed based on gender. When the prior and current abortion history groups were compared, significantly higher rates of intimate partner violence were reported by the females who had more recent abortion experiences. No difference was observed between these two groups using the male data. The association between abortion and intimate partner violence may be of longer duration and may tend to generalize more readily for men than women. The findings are consistent with data related to male-perpetrated intimate partner violence. Specifically, a review of the research revealed that 90% of 'systematic, persistent, and injurious' violence is perpetrated by men.²⁹

Additional gender differences included heightened risk for sexual dysfunction related to specific sexuality items, and verbal

Table 2

Intimate partner relationship comparisons based on abortion history using female data ($n = 906$).

Independent variable groups, Adjusted means (SE)	Dependent variable	F-test result	Significant group differences for adjusted results
1. No history of abortion: 22.49 (0.27) 2. Abortion before current partnership: 24.17 (0.17) 3. Abortion in current partnership: 23.55 (0.81)	Perceptions of quality-of-life change if partner left. Scores range from 10 to 50, with higher scores indicate higher quality	8.61, $P < 0.0001$; 3.14, $P = 0.034^a$	1 and 2
1. No history of abortion: 1.93 (0.08) 2. Abortion before current partnership: 1.86 (0.18) 3. Abortion in current partnership: 2.50 (0.24)	Violence by respondent. Scores range from 0 to 11, with higher scores indicating more violence	2.48, $P = 0.085$; 2.82, $P = 0.060^a$	1 and 3; 2 and 3

SE, standard error.

^a Controlled for respondent's reported closeness to mother, closeness to father, age at which they left home, frequency of religious attendance, touched prior to 13 years of age, history of having been forced to have sex, participated in group sex, number of one night stands.

Table 3Intimate partner relationship comparisons based on abortion history using male data ($n = 658$).

Independent variable groups, Adjusted means (SE)	Dependent variable	F-test result	Significant group difference for adjusted results
1. No history of abortion: 21.88 (0.27)	Perceptions of quality-of-life change if partner left. Scores range from 10 to 50, with higher scores indicate higher quality	4.82, $P = 0.008$; 2.68, $P = 0.070^a$	1 and 2
2. Abortion before current partnership: 23.42 (0.62)			
3. Abortion in current partnership: 22.51 (0.82)			
1. No history of abortion: 1.67 (0.08)	Violence by respondent. Scores range from 0 to 11 with higher scores indicating more violence	5.30, $P = 0.006$; 3.86, $P = 0.021^a$	1 and 2; 1 and 3
2. Abortion before current partnership: 2.08 (0.18)			
3. Abortion in current partnership: 2.21 (0.25)			

SE, standard error.

^a Controlled for respondent's frequency of religious attendance, touched prior to 13 years of age, participated in group sex, number of one night stands.

conflict about relatives and money associated with current female abortion experience, but not with male abortion experience. In addition, abortion in a current relationship was only associated with heightened risk for verbal conflict related to jealousy and drugs for the male data, and a past partner abortion was associated with 75% increased risk for arguments about children with the current partner. Increased risk of sexual dysfunction associated with an abortion in the current relationship ranged from 122% to 182% using female data for the following specific variables: no

climax, climaxing too fast, pain during intercourse, anxiety associated with intercourse, and difficulty interesting one's partner. A past abortion was related to 188% increased risk of experiencing pain during intercourse with a current partner.

Although discussion of possible reasons for all the gender differences detected is beyond the scope of this paper, a few key differences are addressed. The difference in the pattern of results involving sexuality is consistent with research pertaining to sexual behaviour among men and women who have experienced

Table 4

Logistic regression analyses for individual items on the conflict scale.

Item	Comparison groups	Female data	Male data
		Significant odds ratio, P -value, 95% CI	Significant odds ratio, P -value, 95% CI
Jealousy	No abortion	NS	NS
	Abortion before current partnership	NS ^a	NS ^b
	Abortion in current partnership	1.60, $P = 0.035$, 1.035–2.48	2.00, $P = 0.015$, 1.14–3.48
Sex	No abortion	NS ^a	1.96, $P = 0.020$, 1.11–3.45 ^b
	Abortion before current partnership	NS	NS
	Abortion in current partnership	NS ^a	NS ^b
Money	No abortion	NS	NS
	Abortion before current partnership	NS ^a	NS ^b
	Abortion in current partnership	1.78, $P = 0.009$, 1.16–2.72	NS
Drinking	No abortion	NS	NS ^b
	Abortion before current partnership	1.75, $P = 0.019$, 1.10–2.80 ^a	NS ^b
	Abortion in current partnership	NS ^a	NS ^b
Children	No abortion	NS	NS
	Abortion before current partnership	NS ^a	1.75, $P = 0.040$, 1.026–2.99 ^b
	Abortion in current partnership	2.036, $P = 0.002$, 1.29–3.22	2.77, $P = 0.001$, 1.49–5.17
Partner's relatives	No abortion	2.165, $P = 0.003$, 1.31–3.57 ^a	2.95, $P = 0.001$, 1.57–5.56 ^b
	Abortion before current partnership	NS	NS
	Abortion in current partnership	NS ^a	NS ^b
Respondent's relatives	No abortion	1.93, $P = 0.011$, 1.16–3.20	NS
	Abortion before current partnership	1.80, $P = 0.039$, 1.00–3.14 ^a	NS ^b
	Abortion in current partnership	NS	NS
Drugs	No abortion	NS	NS
	Abortion before current partnership	NS ^a	NS ^b
	Abortion in current partnership	1.99, $P = 0.021$, 1.11–3.58 ^a	4.32, $P = 0.003$, 1.63–11.43
Friends	No abortion	NS	4.85, $P = 0.002$, 1.79–13.18 ^b
	Abortion before current partnership	NS ^a	NS
	Abortion in current partnership	NS	NS ^b
Chores	No abortion	NS	NS
	Abortion before current partnership	NS ^a	NS ^b
	Abortion in current partnership	NS	NS

CI, confidence interval; NS, not significant.

^a Controlled for respondent's reported closeness to mother, closeness to father, age at which they left home, frequency of religious attendance, touched prior to 13 years of age, history of having been forced to have sex, participated in group sex, number of one night stands.^b Controlled for respondent's frequency of religious attendance, touched prior to 13 years of age, participated in group sex, number of one night stands.

Table 5
Logistic regression analyses for individual items on the sexual dysfunction scale.

Item	Comparison groups	Female data	Male data
		Significant odds ratio, <i>P</i> -value, 95% CI	Significant odds ratio, <i>P</i> -value, 95% CI
Lack of interest	No abortion	NS	NS
	Abortion before current partnership	NS ^a	NS ^b
	No abortion	1.49, <i>P</i> = 0.021, 1.06–2.08	NS
No climax	Abortion in current partnership	NS ^a	NS ^b
	No abortion	NS	NS
	Abortion before current partnership	NS ^a	NS ^b
Climax too fast	No abortion	1.88, <i>P</i> = 0.014, 1.14–3.12	NS
	Abortion in current partnership	2.12, <i>P</i> = 0.009, 1.21–3.71 ^a	NS ^b
	No abortion	NS	NS
Pain during intercourse	Abortion before current partnership	NS ^a	NS ^b
	No abortion	2.34, <i>P</i> = 0.028, 1.10–5.01	NS
	Abortion in current partnership	2.35, <i>P</i> = 0.051, 1.00–5.55	NS ^b
Not pleasurable	No abortion	1.62, <i>P</i> = 0.039, 1.02–2.56	NS
	Abortion before current partnership	2.88, <i>P</i> = 0.001, 1.57–5.07	NS ^b
	No abortion	NS	NS
Anxiety about intercourse	Abortion in current partnership	2.82, <i>P</i> = 0.001, 1.57–5.07 ^a	NS ^b
	No abortion	NS	NS
	Abortion before current partnership	NS ^a	NS ^b
Trouble with lubrication	No abortion	NS	NS
	Abortion in current partnership	NS ^a	NS ^b
	No abortion	2.23, <i>P</i> = 0.014, 1.17–4.24	NS
Trouble with erection	Abortion in current partnership	2.58, <i>P</i> = 0.005, 1.32–5.03 ^b	NS ^b
	No abortion	1.71, <i>P</i> = 0.021, 1.09–2.69	NS
	Abortion before current partnership	NS ^a	NS
Avoided sex	No abortion	NS	NS
	Abortion before current partnership	NS ^a	NS ^b
	No abortion	1.65, <i>P</i> = 0.037, 1.03–2.63	NS
Hard to interest partner	Abortion in current partnership	NS ^a	NS ^b
	No abortion	NS	NS
	Abortion before current partnership	NS ^a	NS ^b
	No abortion	NS	NS
	Abortion in current partnership	2.17, <i>P</i> = 0.023, 1.07–4.41 ^a	NS ^b
	No abortion	NS	NS

CI, confidence interval; NS, not significant.

^a Controlled for respondent's reported closeness to mother, closeness to father, age at which they left home, frequency of religious attendance, touched prior to 13 years of age, history of having been forced to have sex, participated in group sex, number of one night stands.

^b Controlled for respondent's frequency of religious attendance, touched prior to 13 years of age, participated in group sex, number of one night stands.

involuntary loss of a child before or after birth.^{30–32} Most notably, bereaved men have been found to find sexual intimacy comforting and to experience little or no loss of interest, whereas bereaved women tend to report diminished or no interest in sexual activity. Women who have experienced involuntary loss of a child tend to view sexuality as a reminder of how the lost child was conceived, fear pregnancy and a possible repeated loss experience, and/or find sexual pleasure incompatible with mourning.³⁰ Future research pertaining to the relationship between abortion history and female sexuality should explore women's reasons for sexual problems to see if any of these psychological processes are operative, and to explore others that are unique to voluntary perinatal loss.

The associations between abortion with a current partner and verbal conflict pertaining to drug use (385% increased risk) and jealousy (96% increased risk), observed exclusively among the men sampled, may also be related to gender differences in bereavement, as the male pattern of response to perinatal loss tends to be less adaptive and less easily resolved, thereby increasing the likelihood of efforts to self-medicate and possibly engendering feelings of insecurity in relationships. Specifically, Puddifoot and Johnson found that men were more prone to periods of despair long after perinatal loss than women.³³ Although the intensity of male perinatal grief tends to diminish over time, a long-term study revealed

that levels of grief remained mild to moderate 5 years after perinatal loss.³⁴ This male inclination to experience chronic grief with perinatal loss is presumed to be due to the fact that they are often overlooked for support at the time of the loss.³⁵ A pattern of coping alone may reduce the likelihood of self-disclosure and increase defensive communication behaviours such as interpersonal hostility and jealousy.^{19,20}

There were mixed findings pertaining to increased risk of relationship problems associated with an abortion in the context of a prior relationship compared with an abortion with a current partner. In many instances, there were significant differences between groups reporting no history of abortion and history of an abortion with a previous partner or current partner. However, more significant effects for both the men and the women sampled were related to abortion in a current partnership as opposed to abortion with a previous partner. This pattern is logical based on more time having elapsed for healing since the abortion, and based on the fact that any ill feelings surrounding an abortion are more inclined to be directed toward others with personal responsibility for the pregnancy/termination. Nevertheless, the findings suggesting that an abortion with a previous partner may be related to adverse outcomes in a later relationship underscore the need for professionals to encourage abortion-related counselling when individuals

have experienced an abortion before embarking on a new relationship. Pre-marital therapy should include complete histories of both individuals, including their reproductive histories, significant losses and relationship coping skills. By recognizing the valence of unresolved pain associated with a past abortion, pastoral, mental health, and marriage and family therapists will be better able to help couples to prevent problems from overwhelming their intimate partnerships.

Post-abortion behavioural changes may also strain a relationship. For example, the abortion could lead to negative emotions including anger, as indicated earlier, which increase the risk for withdrawn, antagonistic or partner-directed violent behaviour. Abortion history in women has been linked with increased risk of anxiety,^{36,37} depression,^{38,39} sleep disturbances,⁷ substance use/abuse,^{40,41} various negative emotions⁷ and even suicide.⁴² For instance, a literature review revealed that 8–40% of women experience anxiety following abortion, with up to 30% experiencing clinical levels of anxiety and/or high levels of general stress 1 month after the abortion.¹²

The available data indicate that male reactions to a partner's abortion may include relief, regret, guilt, grief, insecurity, depression, anxiety, thoughts of the fetus, feelings of loss, feelings of voicelessness/powerlessness in the abortion decision, confusion regarding responsibility, repressed emotions and anger.^{5,20,43–46} Males in the USA and many other countries throughout the world lack the formal right to decide whether or not to terminate a pregnancy, and male participation in the decision is at the discretion of women. Even men who are encouraged by their partners to participate in the decision may refrain, preferring not to interfere with what they view to be the woman's choice.^{43,44} Regardless of the degree of male involvement, feelings of powerlessness, resentment issues and depression may lead to relationship withdrawal, or increase the likelihood of men engaging in intimate partner violence. These effects may likewise occur when a woman opts to carry a pregnancy against her partner's wishes. The 'overarching attitudinal characteristic' of abusive men is the belief that they have special rights without responsibilities, justifying unreasonable expectations regarding their needs, and they justify violence as self-defence when they believe they have been wronged. An abortion experience may then precede an initial act of violence or it may exacerbate already apparent tendencies.⁴⁷

The strengths of this study include the use of a large, diverse sample, professional data collection, inclusion of men, and controls for potentially confounding third variables. The primary limitation was the inability to control for pre-abortion relationship problems due to data restrictions imposed by the use of secondary data. Women often decide to abort due to relationship problems,^{48,49} and the direction of effects is therefore difficult to assess. Longitudinal investigations are needed with extensive assessments of relationship quality prior to reproductive decision making in order to provide a clearer resolution to the directionality issue. Ideally, such studies will be nationally representative and include many relationship dynamic variables, because this area of study has been very limited despite the fact that abortion is a common medical procedure. More confidence in the effects occurring in the expected direction and time sequence is afforded when examining the results indicating that an abortion occurring in the context of a previous relationship was associated with current relationship difficulties. Another interpretation is that individuals who choose abortion may be more inclined to have less stable relationships due to psychological or personality factors such as self-centeredness or emotional instability. However, this latter explanation seems unlikely as most studies designed to examine psychological and personality correlates of the choice to abort vs deliver have failed to identify such discriminators.⁵⁰

An additional limitation of this study was the relatively low percentages of men and women reporting a past abortion. This could be partly due to the fact that the sample comprised many young adults. Abortion under-reporting is a universal problem associated with research on the topic; however, research indicates that individuals who are most negatively impacted by an abortion are the least likely to disclose.^{51–53} In a European study published 10 years ago,⁵³ one-third of the women who had an abortion declined to be interviewed about their experience 1 year later. These researchers found that non-participation when approached at follow-up was related to sociodemographic variables, which have been linked with increased vulnerability and morbidity in association with other medical problems. Therefore, with full disclosure, the effects detected would be expected to be even more pronounced.

The correlational evidence linking abortion experience to relationship problems provided in this report should serve as an impetus for researchers to conduct studies exploring mediational mechanisms in an effort to understand more precisely how these variables are related. Relationship conflicts arising from an abortion experience may emerge during the decision-making process, with negative psychological effects on the part of one or both parties potentially adding to earlier conflicts, or it is possible that new relationship problems will emerge after the procedure. There are numerous potential sources of stress on one or both partners which could be associated with the decision to abort and relationship problems, including: (1) guilt for not wanting/feeling ready to take on the responsibilities of parenting, (2) belief that the relationship is not strong enough to endure raising children together, (3) lack of confidence in the other's ability to parent, or (4) moral or religious objections to abortion.

Unfortunately, studies designed to explore associations between abortion and relationship problems have not examined the emotions and behaviours underlying intimacy impairment. As the existing research on individual post-abortion psychological adjustment has progressed substantially in recent years, inclusion of assessments of the wide array of emotional and behavioural reactions to abortion should help to address the question of how abortion impacts these vital relationships in our lives.

Relationship problems obviously have complex situational, personal and dyadic origins which differ dramatically between couples. As researchers endeavour to understand the numerous antecedent conditions to intimate partner relationship difficulties, more concentrated consideration should be given to abortion history as one of the many factors capable of introducing or exacerbating negative relationship dynamics.

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