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Emotional Repercussions of Abortion

Kristin Hajek

LMU Munich, Department of Sociology

Kristin.Hajek@soziologie.uni-muenchen.de

There is a widespread opinion that women suffer emotionally from having an abortion, but only few studies have actually investigated how abortion influences women's well-being. Furthermore, studies found mixed results. While some studies found a higher risk of negative repercussions if having an abortion (Coleman, 2006), other studies found no difference between having an abortion or having an unwanted child (Bellieni & Buonocore, 2013). Moreover, longitudinal studies investigating abortions are very scarce and emotional effects on male partners were neglected so far. Therefore, further research is needed investigating this topic.

According to Statistics Germany (Destatis), 99,715 legal abortions took place in Germany in 2014 (55 abortions in 10,000 women). Less than four percent of the women indicated a medical or criminological reason for their decision. Therefore, abortions are a common und understudied phenomenon.

I hope to shed light on the question if depression decreases after an abortion or if women abort because they are depressed. I assume that selectivity plays a crucial role. Women that are depressed might be more inclined to abort than women that are emotionally stable. Therefore, if one does not consider a woman's emotional state prior to pregnancy, one might overestimate the emotional repercussions of abortion.

Hence, I use data from the German Family Panel (pairfam) to investigate men's and women's emotional states before and after getting pregnant and having an abortion. Pairfam is a nationwide multidisciplinary survey focusing on partnership and family dynamics. Over 12,000 men and women from birth cohorts of 1991-93, 1981-83 and 1971-73 are surveyed annually. The first wave was conducted in 2008, at which point the first cohort was about 15-17, the second 25-27, and the third 35-37 years old. Most questions were asked by an interviewer (CAPI mode), but a self-administered module (CASI) was used for more sensitive questions such as sexuality and abortion. A more detailed description of the study can be found in Huinink et al. (2011). I use data from waves 2-7 of the German Family Panel from Release 7.0 (Brüderl et al., 2016).

After excluding observations with missing values, cases with inconsistent data and respondents that participated in the survey only once, the final sample amounts to 4,009 women with 17,596 observations and 3,687 men with 15,820 observations.

Female respondents were asked from wave two onwards if they have had an abortion since the last interview. Male respondents were posed the question if their female partner have had an abortion since the last interview (or since the start of the relationship in case they had a new partner since the last wave). I can't be totally sure of fatherhood but I assume that the men are the father of the child if their partner is getting pregnant. For women 110 abortions were recorded while men stated 76 abortions from their partners.

Depressiveness was measured by an index of ten items from the German translation of the State-Trait-Depression Scale (STDS From Y-2; Spaderna, Schmukle, & Krohne, 2002). The index consists of five items assessing negative mood (Dysthymia) and five items representing positive mood (Euthymia). The items were measured on a scale from 1 to 4. Therefore, the index ranges from 10 to 40. A value of 25 or higher is considered as clinically relevant depression (Lehr, Hillert, Schmitz & Sosnowsky, 2008). The mean value for women is 17.7 (with standard deviation 5.1) and 16.9 for men (with standard deviation 4.6). Over all waves more than seven percent of men and eleven percent of women score 25 or higher on the State-Trait-Depression Scale. As control variables, relationship status, age, number of kids, health status, employment status and household net income are included, as these variables can have an influence on the decision to abort as well as on the person's depressiveness. Furthermore, the panel wave is controlled for.

Linear regression models with cluster-robust standard errors have been specified, and pooled OLS as well as random (RE) and fixed effects (FE) models have been estimated. By using fixed effects panel regression models, I can base the results on a within-person comparison while controlling for time-constant unobserved characteristics and thereby approximate a randomized experiment as closely as possible. Thereby, I can explore if women's potential emotional repercussions of abortion are due to a causal effect or a selective effect. Unobserved heterogeneity caused by time constant variables does not bias the estimation, as only information on intra-individual changes over time is used. Therefore, stable characteristics (e.g. religious affiliation) do not need to be accounted for. For more details on fixed effects estimation, see e.g. Brüderl & Ludwig (2014) and Woolridge (2010).

Having an abortion seems to have a positive effect on the level of depressiveness in women. Therefore, women seem to be more depressed after having an abortion. However, POLS and RE models overestimate the actual effect. In the POLS model women score on average 2.3 higher on the depression scale in the year after an abortion. In the RE model the effect is smaller and in the FE model it is less than half (0.9). In the following years the effect diminishes (with exception of 3 years after abortion). However, the effects of the following years are smaller and not significant in the FE model. Therefore, conventional models would have overestimated emotional repercussions of abortion. The FE model shows no lasting, significant effect on women's depressiveness after an abortion.

An abortion of their wife/girlfriend does not seem to have any effect on the depressiveness of men. In the POLS model we can see one positive and significant effect two years after an abortion but neither the RE, nor the FE model show any significant effects of abortion on depressiveness. Therefore, women seem to be more affected by an abortion than men.

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