Is Perceived Inability to Procreate Associated with Life Satisfaction? Assessing associations by gender, age and parity over nine annual observations

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Research Question

Fertility rates are below replacement level in most European countries. Most people, however, would still consider having children as a central life goal. Not everybody will be able to realize his or her desire for child due to biological problems procreating. Infertility is a medical condition, defined as the failure to get pregnant within 1 year of trying (Zegers-Hochschild et al. 2017), that can be considered a major source of goal blockage for those currently striving for parenthood. This study investigates whether perceiving biological problems procreating is associated with wellbeing in the general population. To our knowledge this is the first study to use a longitudinal data set of 9 waves. This allows us to study how changes in perceived procreative ability (PIP) relate to life satisfaction within persons over time. We hypothesize that perception of inability to procreate can be considered a "major" disruption in one's life that is associated with lower life satisfaction.

State of the Literature

Goal blockage in various life domains has been shown to have a negative influence on well-being. There is evidence that life satisfaction, a commonly applied measure for wellbeing, is indeed sensitive to blocked goals (Diener & Diener 1995). Prior research on the experience of infertility has focused on the consequences of assisted reproductive technology treatments for psychological outcomes. It is well-established that the experience of infertility and of fertility treatment is stressful for women and men (e.g. Rockliff et al. 2014).

Research on infertility and life satisfaction is rare, and the studies that exist are cross-sectional in nature (Abbey et al. 1991, 1992; McQuillan et al. 2007). Abbey et al. (1991) found that higher infertility stress is associated with lower life satisfaction among people seeking medical help, but, because only a subgroup of those experiencing infertility actually receives treatment, it is difficult to generalize to the entire infertile population. McQuillan et al. (2007) found that, among women who have ever met the criteria for infertility and perceive a fertility problem, life satisfaction is significantly lower for nonmothers. This study however, was cross-sectional in design, and focused only on women.

Self-reports in the form of subjective perceptions about procreative ability are common measures in demographic population surveys (e.g. GGS; pairfam; NLSY; NSFB). However, not all women who meet medical criteria for infertility perceive themselves as having a fertility problem (Johnson et al. 2019) and vice versa not everybody who perceives a problem actually has a medical condition. Benyamini (2011) notes that, although these perceptions are not always medically accurate, they are rational and internally logical from the person's subjective point of view. Perceiving an inability to procreate appears to depend on the individual definition of the situation. And no matter if they are medically accurate; PIP is the basis for initiating action in the form of information-seeking, counselling, or receipt of medical services.

Data and Methods

We use the first nine waves of the German family panel pairfam (2008/09 – 2016/17) to study the effects of within-person changes in PIP and life satisfaction. Pairfam consists of a nationwide random sample of 12,402 women and men from 3 birth cohorts (cohort 1: 1991-1993, cohort 2: 1981-1983: cohort 3: 1971-1973). Our analysis sample consists of heterosexual women and men, 21 years and

older, who are not sterilized. We apply linear fixed effects models (Allison 2009) to study the effects of within-person changes in PIP and life satisfaction.

The dependent variable life satisfaction is based on a single question: “All in all, how satisfied are you with your life at the moment?” where respondents can choose on a scale between “very dissatisfied” (0) and “very satisfied” (10). It has been shown that such single-item life satisfaction measures perform as well as more complex scales such as the “Subjective Well-being and Satisfaction with Life Scale” (Cheung & Lucas 2014).

The focal independent variable, PIP, is based on the following question “Some people are not able to conceive a child or to procreate naturally. As far as you know, is it physically possible for you to conceive a child or to procreate naturally?” Answering options were “definitely yes,” “probably yes,” “probably not,” “definitely not,” plus the residual categories “don’t know” and “I don’t want to answer that.” Those who chose “probably not” or “definitely not” were treated as perceiving an inability to procreate. Those who stated “definitely yes,” or “probably yes” were treated as perceiving an ability to procreate.

Preliminary Findings

Preliminary results reveal that PIP is significantly associated with lower levels of life satisfaction. The association holds when other explanatory variables are added to the model (Table 1). Surprisingly, the association is similar for men and women and does not vary by age. The overall interaction of PIP and parity is not significant. However, looking at different parities, we find that the marginal effect of PIP is significant only for those with no child and one child. This implies that PIP has negative implications for life satisfaction mainly for parities 0 and 1 but not for higher parities.

Table 1. Results of the linear fixed effect panel model on life satisfaction

	Baseline	1	2	3	4
PIP	-0.195***	-0.191***	-0.189***	-0.183***	-0.181***
	(-4.44)	(-4.34)	(-4.32)	(-4.18)	(-4.22)
age anchor		x	x	x	
parity			x	x	
partner yes (ref.= no partner)			x	x	
desire for (further) child				x	
importance of child				x	
VOC benefits				x	
VOC costs				x	
traditional genderrole					x
subjective health bad					x

Source: pairfam waves 1-9

Conclusions

Overall, there is strong evidence that PIP is associated with lower life satisfaction in the general population. This within-person association is very robust to the inclusion of alternative explanations to changes in life satisfaction such as changes in parity, relationship status, and attitudes related to the importance of children in one’s life. This holds for women as well as men. Parity appears to be an important moderator of the effect of PIP: Only those who have not yet reached the two-child norm – which is very pronounced in Europe (Sobotka & Beaujouan 2014) – experience lower life satisfaction when they perceive fertility problems. These findings underline the importance of education to help adults understand their fertility and public support for reproductive health evaluations and treatments.

Literature

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