

# Mental Health Trajectories across Parenthood Transitions: A Longitudinal Cross-National Study

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## Motivation and objectives

Previous research in the Health and Family Demography literatures has examined the impact of parenthood on individual well-being, and whether it occurs differently for men and women. However, studies have omitted a cross-national comparison of mental health changes following parenthood transitions within a large-scale longitudinal framework. Additionally, prior studies have not assessed cross-national variations in mental health dynamics based on socioeconomic status following parenthood transitions, although the normative constraints associated with different socioeconomic backgrounds may result in distinct gender-specific effects.

This study addresses these gaps by comparing mental health trajectories for men and women across childbirths, considering socioeconomic status (SES) and national context using high-quality, large-scale, comparable datasets. We employ a comparative longitudinal framework to: (1) compare gendered mental health trajectories across countries; (2) differentiate gender-based trajectories by socioeconomic groups across countries to assess SES-based variations in the impact of parenthood on mental health; (3) examine both first and second births to determine if cross-national differences across gender and socioeconomic status vary by birth parity; and (4) explore specific mechanisms which may explain variations in mental health by gender, socioeconomic groups, and national contexts.

## Background

Understanding how parenthood transitions shape gendered differences in mental health is of crucial importance for research on gender inequalities over the life course. Studies on mental health and well-being find persistent differences between men and women. Women are shown to have higher levels of psychological distress and affective disorders than men, which is attributed to prevailing gender roles and societal constraints disfavoured women (Cabezas-Rodríguez et al., 2021; Otten et al., 2021). Recent scholarship has been particularly interested in the way gendered well-being is shaped by parenthood as it is characterised by a highly gendered distribution of responsibilities with unequal consequences for men and women.

Previous studies examining parenthood and well-being suggest gender-specific effects (e.g., Baranowska & Matysiak, 2011; Nelson-Coffey et al., 2019), as well as notable variations by national contexts (Aassve et al., 2015; Glass et al., 2016). These cross-national differences in the effects of parenthood on mental health may be due to disparities in policy and normative contexts, which may determine the ease of transitioning into parenthood and shape the expected gendered parenting roles, with potentially distinct implications for men and women (Pollmann-Schult, 2018). Additionally, the national policy and normative context may become more relevant for parental mental health as the family expands and parents experience increasing (gendered) constraints and pressures (Blanchflower & Clark, 2021; Pollmann-Schult, 2014).

Prior research has also identified heterogeneity in the impact of parenthood on mental well-being by socioeconomic status, particularly among women. Findings indicate that higher SES women experience reduced mental well-being benefits from motherhood compared to lower SES women (Floderus et al., 2008; Mikucka & Rizzi, 2019; Sperlich et al., 2011). Thus, women's mental health changes following motherhood may depend on their socioeconomic background and its interplay with national normative elements (e.g., parenting practices, societal stigma of working mothers) and policy contexts (e.g., parental leave regulations, availability of childcare; Hewitt et al., 2017; Schmitz, 2020).

To date, however, no study has systematically compared the effect of parenthood on long-term gendered mental health outcomes across multiple national contexts within a large-scale longitudinal perspective for first and second births. Similarly, no study has empirically assessed whether SES-based differences in mental health across parenthood transitions vary by country in a longitudinal, comparative framework. Our study contributes to the parenthood, gender, and health literatures by identifying cross-national variations in the effect of the first and second parenthood transition on mental health by gender and socioeconomic groups. In doing so, we determine whether and to which extent national contexts shape the link between these life course transitions and gendered mental health trajectories.

## **Data and methods**

We leverage three long-running household panels from Australia (HILDA; 2001-2022, N=13,612), Germany (GSOEP; 2002-2021, N=21,148), and the UK (UKHLS; 2009-2021, N=24,369). The surveys are highly comparable in design and collection method, providing comprehensive information on family structure and socioeconomic circumstances. We use a composite measure of mental health computed from the Short-Form mental health questionnaires available in all three surveys. Individual mental health trajectories are estimated using fixed effects models with a discrete-time variable indicating the years around birth in order to obtain the distributed effect of parenthood transitions over time on mental health outcomes by gender, SES group, and country. We select a sample of respondents having their first and/or second child during the survey, as well as a control group of childless individuals (see Table 1 for sample characteristics).

**Table 1** Sample description

	WOMEN		
	Australia	Germany	UK
<b>Mental health score</b>			
Survey average	45.8 (11.1)	48.5 (7.6)	46.4 (8.5)
Within-individual variation	7.5	6.7	7.2
<b>First births (N)</b>	2,194	2,308	2,419
<b>Second births (N)</b>	1,642	2,279	2,340
<b>Time between births</b>	2.8 (1.8)	4.1 (3.0)	2.9 (1.6)
<b>Age at first observation</b>	25.2 (8.0)	29.0 (9.1)	27.7 (9.0)
<b>Education</b>			
Low	0.16	0.30	0.11
Medium	0.53	0.49	0.51
High	0.31	0.21	0.38
<i>N</i>	6,693	9,903	12,375
	MEN		
	Australia	Germany	UK
<b>Mental health score</b>			
Survey average	48.0 (8.1)	50.8 (7.3)	48.8 (7.8)
Within-individual variation	6.6	6.2	6.5
<b>First births (N)</b>	1,926	1,998	1,906
<b>Second births (N)</b>	1,335	2,007	1,806
<b>Time between births</b>	2.7 (1.7)	4.0 (3.1)	2.8 (1.4)
<b>Age at first observation</b>	27.1 (10.0)	32.0 (11.6)	30.7 (11.6)
<b>Education</b>			
Low	0.22	0.29	0.16
Medium	0.56	0.49	0.51
High	0.22	0.22	0.33
<i>N</i>	6,919	11,245	11,994

Source: HILDA v21; GSOEP v38; UKHLS v12.

## Preliminary results

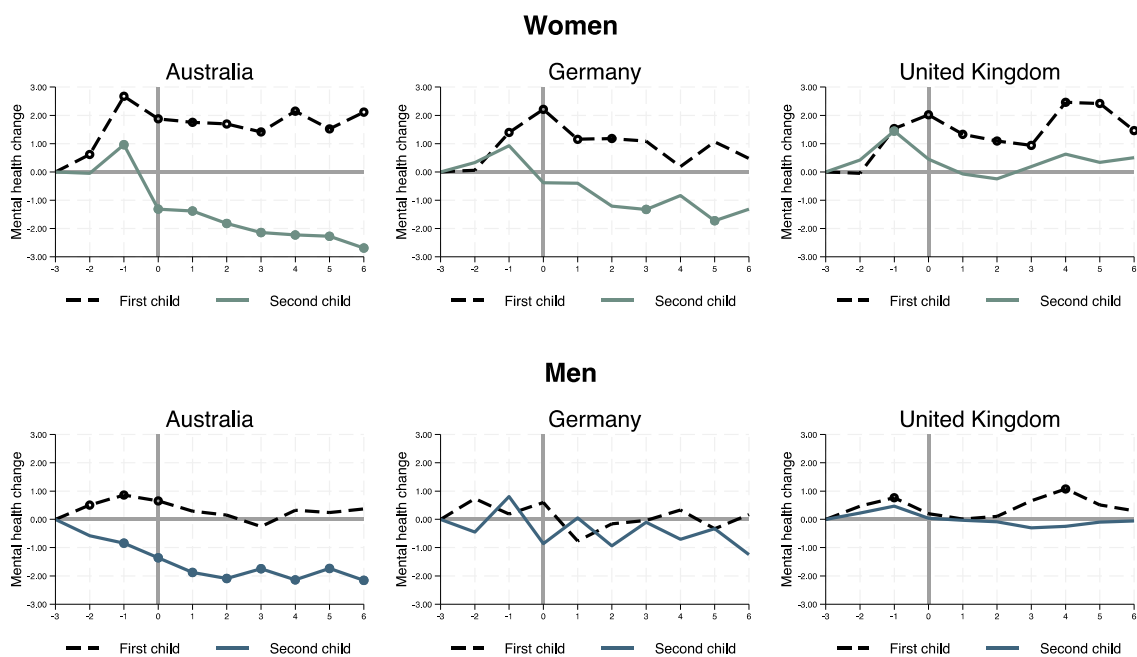
Preliminary results show that: (1) the first childbirth consistently increases overall mental health, with more substantial benefits for women than men across all countries (see Figure 1); (2) the second childbirth negatively affects the mental health of Australian men and women in both the short- and long-term as well as of German women in the medium-term, whereas British men and women are unaffected (see Figure 1); (3) socioeconomic heterogeneity in these effects vary by country, gender, and birth parity, with more apparent disadvantages for women of higher socioeconomic background in the UK following the first childbirth.

## Conclusion and future steps

Overall, preliminary results suggest that higher birth parity is associated with greater variation in gendered mental health across countries, particularly among women. Additionally, the first transition into parenthood is differentially associated with mental health across socioeconomic groups for women, contingent on the national context. These results indicate that policy and cultural factors are at play in shaping gendered health and family dynamics over the life course.

Future steps of this study will include examining whether couple-level mechanisms explain these variations in mental health across gender, socioeconomic groups, and countries. We will explore if couple-level characteristics (e.g., income, employment configurations, gender roles) contribute to the observed gender gaps in mental health changes and if there are systematic couple-level processes taking place across all national contexts. Utilising a couple-level approach, these analyses will provide novel empirical contributions to the study of gender, health, and life course trajectories within a comparative perspective.

**Figure 1** Changes in mental health in the years around the first and second birth from fixed effects linear models for men and women by country



*Notes:* Fixed effects models estimates with reference category at - 3 years, separate models for men and women by country. Points denote a statistically significant trajectory coefficient at the 0.05 level.

*Source:* HILDA v21; GSOEP v38; UKHLS v12