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## On the Distribution of a Child's Place of Birth Depending on the Mother's Level of Education

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### Abstract

The question is whether mothers chose a particular location, such as a hospital or their own home for a home birth, as a function of their academic or nonacademic education level, and whether there is a direct relationship to that education level and choice. This question is relevant to ask because births in nonphysician settings are associated with increased complication rates, and increased maternal education could thus be considered a protective factor, if a difference is found.<sup>6</sup>

**Keywords:** Breastfeeding, Breastfeeding behaviour, Breast milk, Mothers, Image of women, Gynaecology, Obstetrics, Paediatrics.

### Introduction

The issue of choosing the place of birth of the child depending on the education of mothers is a relevant topic that has not been explored yet. This article shows the relationship between the selection of the place of birth and the academic or non-academic level of education of the mother.

It refers to a previous study (Harrich, F. H. M., Zum Wandel des Stillverhaltens von Müttern im Großraum Düsseldorf zwischen 1951 und 1990-Eine Oral History Studie, p. 29, Düsseldorf, 2020) and in combination with two other studies forms a quintessence (Heininger, L., On the change in breastfeeding behaviour in the FRG between 1950 and 1990, p. 29, Düsseldorf, 2014., Freiin Teuffel

von Birkensee, A. C., The breastfeeding behaviour of female academics in the period from 1950 to 1990, p. 65, Düsseldorf, 2014.).<sup>6</sup>

### Material and Method

The comparable papers in this meta-analysis are named as listed below:

Study B: "On the change in breastfeeding behaviour in the FRG between 1950 and 1990-An Oral History Study" by Luisa Heininger.<sup>8</sup>

Study C: "On the Change in Breastfeeding Behaviour of Mothers in the Greater Düsseldorf Area between 1951 and 1990-An Oral History Study" by Friederike Helene Margarethe Harrich.<sup>7</sup>

The three research studies listed and compared were conducted as retrospective studies.

In all three studies, survey data were collected by means of a telephone interview, a postal questionnaire, or

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a personal interview, or the survey was conducted using a combination of the above method.

The telephone interview and the postal questionnaire have the advantage that they significantly reduce the effect of social desirability of peers in the form of impression management and self-deception.

There is little difference between the questionnaires, and they are based on a standardized questionnaire that has been slightly modified for the respective studies. They contain largely identical questions.

In this meta-analysis, only statistically comparable questions are compared. The time periods examined in the studies differ slightly.<sup>4, 6, 7, 8</sup>

In conclusion, Study B focused on non-academic women and Study C had a mixed study population. The study design provides opportunities for comparison of the cohorts.<sup>4, 6, 7, 8</sup>

The following two tables show the cohort distribution.

**Table 1: Cohort classification in study B.<sup>6</sup>**

Cohort 1	Cohort 2	Cohort 3	Cohort 4
Birth of the first child between 1950 and 1960	Birth of the first child between 1960 and 1970	Birth of the first child between 1970 and 1980	Birth of the first child between 1980 and 1990

**Table 2: Cohort classification in study C.<sup>6</sup>**

Cohort 1	Cohort 2	Cohort 3	Cohort 4
Birth of the first child between 1951 and 1960	Birth of the first child between 1961 and 1970	Birth of the first child between 1971 and 1980	Birth of the first child between 1981 and 1990

The following is the percentage of women in different educational situations who chose different locations for the birth of their first child.

**Table 3: Distribution of birthplaces of the first child, Study B.<sup>4</sup>**

	Cohort 1	Cohort 2	Cohort 3	Cohort 4
Birth centre (with midwives, without doctor)	0 %	0 %	4 %	0 %
Home birth	16 %	12 %	8 %	0 %
Hospital	84 %	88 %	88 %	100 %

**Table 4: Distribution of birthplaces of the first child, Study C.<sup>7</sup>**

	Cohort 1	Cohort 2	Cohort 3	Cohort 4
Birth centre (with midwives, without doctor)	0 %	0 %	0 %	0 %
Home birth	0 %	9,1 %	18,2 %	0 %
Hospital	100 %	90,9 %	81,8 %	100 %

When comparing the study results of the percentage of places of birth of the first child of the study participants in study B and C (no information was provided on this in study A), both similarities and differences become clear. The majority of women, between 81.6% and 100%, gave birth in a hospital in all cohorts and in both studies compared.<sup>6, 7, 8</sup>

The visible difference is seen when looking at the delivery rates of home births. This was 16% in Cohort 1 of Study B and fell to 12% in Cohort 2 and by a further 4% to 8% in Cohort 3. In cohort 4 of this study, no woman had a home birth.<sup>6, 7, 8</sup>

This is different in the analysis of the results from study C. Home births were recorded in cohorts 2 and 3 with values of 9.1% and 18.2% respectively.<sup>6, 7, 8</sup>

## Conclusion

The difference in the study results is clearly visible and shown in figures 3 and 4, but is too small, so that no correlation can be established between academic and non-academic education and the place of birth of the children. Thus, an intervention at the mother's level of education does not increase the willingness to deliver in a facility with doctors.<sup>6, 7, 8</sup>

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