The Impact of Occupation and Occupational Gender Segregation on the Transition to First and Second Birth in the Netherlands

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Abstract:

In the last years, there has been a growing interest in the impact of educational and occupational gender segregation on fertility but until today, most studies have not gone beyond including crude measurements of female dominated educational fields or broad occupational classifications. The goal of the present study is to link detailed information about educational and occupational gender segregation to fertility using data from four waves of a Dutch survey that registered complete histories of the respondents educational and occupational career and relationship and fertility transitions. Event history models are used to analyze the transition to first and second birth of roughly 2000 female respondents of the Family Survey of the Dutch Population, taking into account their educational attainment and field of study, occupation and the amount of occupational gender segregation. The industry in which the job is located and educational and occupational characteristics of the partner will also be included.

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Introduction

The fact that men and women make different choices with regard to their education and occupation is a long-standing reality in all industrialized countries and the consequences of the resulting gender segregation on earnings and career chances have been studied widely by scholars from a variety of disciplines (Jacobs & Lim 1995; Charles & Bradley 2002; Smyth & Steinmetz 2008). The last years have witnessed a growing interest in the effect of female dominated educational and occupational fields on fertility. Examinations of the effect of the field of education on fertility have been conducted using data from Sweden (Hoem et al. 2006a/b), Norway (Lappegård and Rønsen 2005), Spain (Martin-Garcia & Baizan 2006), The Netherlands (Kalmijn 1996) and a sample of European countries (Van Bavel 2008). The results suggest that female dominated fields of education which focus on caring and interpersonal skills, impact fertility positively and that studies which lead to jobs with higher starting wages or a more insecure starting position in the labor market are associated with postponing the first birth.

This reflects two possible mechanisms via which female dominated educational and occupational fields might impact fertility. The first is the presence of a preference for caring that is reflected in the educational choice as well as in earlier and higher fertility. The second are working conditions specific to male-dominated jobs that might form a constraint to motherhood by imposing high opportunity costs or economic insecurity. In order to gain more insight into these mechanisms, occupational characteristics should also be taken into account, but until today only a very limited number of studies has linked occupational fields to fertility and these studies used rather broad occupational classifications consisting of ten or less occupational classes (Strand et al. 1996; Zabel 2006; Martin-Garcia 2009). The goal of this study is to engage in a more detailed examination of the impact of occupations on fertility by using a much more fine grained occupational classification than earlier studies. We will also include the educational career as well as the industry in which the job is located.

While there is only a small number of studies linking fertility to field of study or occupation, the idea of a preference of women for jobs with attributes which facilitate caring responsibilities has been one of the explanations for occupational gender segregation. It is argued that women choose jobs not only on basis of the wage paid, but also take into account working conditions. Consequently, jobs which offer relatively low wages but compensating differentials, i.e., non-monetary benefits which are attractive for women with (young) children, are female dominated (Filer, 1985). A related explanation of occupational gender segregation, the self-selection hypothesis, argues that women anticipate withdrawing from the labor market for prolonged periods of time because of childbirth and therefore choose occupation with low wage penalties upon returning (Polachek, 1981). Because jobs which are associated with low wage penalties after periods of withdrawal are usually jobs which also require relatively low human capital, women should be disproportionably represented in the lower occupational segments (Desai & White, 1991). Both arguments predict that women might choose jobs with relatively unfavorable wages or working conditions to balance family responsibilities and work. Results from a Swedish sample however suggest that while women in female dominated occupations with stable and secure employment have very low levels of childlessness and high fertility, women in female dominated occupations in the private

sector with less favorable working conditions (e.g., restaurant and hotel business) have relatively high levels of childlessness (Hoem et al. 2006a).
In order to gain more insight into the different mechanisms via which occupations impact fertility, we aim to answer the following research questions:

1.) *Are female-dominated occupations associated with higher risks of having a first or second child?*
2.) *If there is a positive association between female dominated occupation fields and having a first or second birth earlier,*
    a.) *can this association be explained by the choice for an educational field related to caring and interpersonal skills?*
    b.) *can this association be explained by better working conditions in female dominated occupations in the public sector (i.e., teaching and health care)?*

The Netherlands

This study will use data from the Netherlands, which is a particularly interesting case when female labor force participation is concerned, because the Netherlands combine very high female labor force participation with the highest share of part-time employment in the world (see Table 1). This means that a vast majority of women has participated in the labor market before the birth of the first child, albeit working less than full-time. When fertility is concerned, the Netherlands are among the countries with relatively high fertility in Europe, but the mean age at first birth is high (see Table 1). Within Europe, only Spain, Italy and Switzerland women have a higher mean age at first birth than in the Netherlands. This means that women spend a relatively long time in the labor market between finishing education and giving birth to their first child, making the Netherlands a suitable context to study the impact of occupations on fertility.

Table 1: Main indicators of labor market participation and fertility in the Netherlands and the European Union

	Female labor force participation 25-49, 1999	Female labor force participation 25-49, 2008	Share of women aged 25-49 in part-time work (< 35 hours per week)	Total Fertility Rate 2006	Mean age at first birth 2006[1]
The Netherlands	74%	83,5%	75,3%	1,72	29
European Union (EU15)	69,9%	74,8%	36,6%	1,59	28,4

Source: Eurostat
[1] Source European Demographic Data Sheet 2008

Data

The data that will be used for the analysis come from the Family Survey of the Dutch Population (FSDP), a periodic large scale survey performed in the Netherlands. Four waves have been conducted in 1992, 1998, 2000, and 2003 (Ultee and Ganzeboom 1993; de Graaf et al. 1998, 2000, 2003). The FSDP is unique in that it registers the complete life-courses of primary respondents and their partners with respect to education, occupation, religion, mobility, and marriage through retrospective questioning. The

surveys cover the Dutch population between age 18 and 70 with an overrepresentation of couples. The data are based on structured face-to-face interviews and self-completion questionnaires, which were identical for primary respondents and their cohabiting or marital partners. In total, 4,235 primary respondents have been interviewed in the four waves. In this study, only female respondents will be analyzed, which amounts to sample size of 2000 respondents.

Measures and Method

The transition to first and second birth will be analyzed using event history analysis. The dependent variable, the birth of the first and second child, is measured in months since the 15th birthday of the respondent, respectively in month since the first birth. Information about the level and field of education will be included. Furthermore, we will use detailed information about the occupation of the respondents, the proportion of women within the occupation, and the industry in which the job is located. Periods of non- or unemployment will also be taken into account. Furthermore educational and occupational characteristics of the partner will be included.

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