Occupational attainment and career progression in West-Germany

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Abstract

In this paper, we analyze intra-generational mobility from a stratification perspective. Individual mobility is linked with the development of inequality along the life course: Higher occupational mobility increases the chances of advancing from disadvantageous positions and contributes to making the class structure more fluid. Using the German Life History Study, we analyze the career progression of respondents born between the 1920s and the 1970s focusing on their link with the development of inequality over the life course. We look in particular at the effect of educational attainment and class origin over individual careers, along with their changes across cohorts. We find that younger cohorts of men and women enter the labor market later and hold higher prestige occupations. Career progression appears faster at the beginning of the career and on average slower for women, who also start from lower positions. Returns to education seem very high while class background has a lower direct, but still significant, effects.

1. Introduction

The movement of individuals among social positions within a society determines the structure of social inequality. Different possibilities to move along such positions contribute to defining inequalities of opportunities among individuals and indicate the persistence of social advantage and disadvantage. While most of the research has concentrated on intergenerational mobility, i.e. the difference in the social position between actors belonging to different generations, we focus here on intra-generational mobility, which refers to mobility within individual life courses and primarily concerns career progression over the life course. This is a relevant topic in sociology and in stratification research in particular: The possibility of a progression in the course of the career and of advancing from relatively unfavorable position could indeed break the chain of disadvantage in case of fluid class structure or, on the contrary, the absence of any career progression or differences in such progression for different groups might also reproduce or even reinforce the stratification structure (e.g., Mayer and Carroll 1987; Esping-Andersen 1993).

In this paper, we are interested in the extent to which employment careers of men and women in Germany are characterized by the cumulative development of advantage and disadvantage (increasing inequality). The concept of cumulative advantage refers to the fact that small status differences at the start of a career tend to result in even greater differences later on. One reason might be that an initial small advantage can foster early success providing an actor disproportionally with new resources in this way generating growing advantage over time.

Using retrospectively collected life-history data that reconstructed the entire working career (up until the moment of interview) of German men and women born between 1919 and 1971 and applying growth curve analysis of occupational prestige scores over their life courses, we look at the entire career progression and examine the effect of independent variables at different stages.

The period analyzed is characterized by significant aggregate trends such as educational expansion and increasing labor market participation, especially for women, which means that different cohorts have experienced different educational and employment patterns: the question here is whether this also translated into different evolution of the inequality structure over the life course for different cohorts, i.e. for groups of people experiencing societal differences in the structure of education and employment.

We first outline our research questions (section 2), then discuss the specialties of the German context (section 3) and formulate specific hypotheses (section 4). Then we

describe data and methods (section 5) and we conclude with an outline of the results (section 6) and with a discussion (section 7).

2. Background and Research Questions

Key questions in stratification research that uses a life-course perspective include analysis of how inequalities in socioeconomic positions develop over the course of human lives and how experiences and resources in earlier life and earlier generations produce such inequalities (Mayer 2009). In terms of occupational mobility and career development over the life course, specific interest has been given to questions of the pattern of occupational progression and how such key factors as educational attainment and class background affect them, but also to how early occupational positions held affect subsequent occupational success.

In the "classical model" of occupational attainment, the effects of class position are seen to work mainly through educational attainment, which in turn affects one's first job, which have a strong effect on subsequent occupational positions one holds (e.g. Blau and Duncan 1967). This model has dominated much stratification research on occupational mobility and careers, and has also received empirical support. For example, Warren, Sheridan and Hauser (2002) found that one's family background effects operate chiefly by affecting educational attainment. The effects of educational attainment, on the other hand, decrease over time as one gains experience. For Germany, similar results in support of this model have been presented by Carroll and Mayer (1986), Mayer and Carroll (1987), and Hillmert (forthcoming), among others. Our first question thus is how class origin and educational attainment affect occupational attainment over the life course?

- Class can affect later: argument that many return to class of origin later in careers, especially from farming and higher classes (Mayer and Carroll 1987; Jonsson and Erikson)
- Educational effect can be stronger later: "start kicking in",; especially if starts from lower/higher than should; a period of mismatch

Career progression has been found to be high in the early years of one's career -> does it then stabilize?

- Ceiling effects (Sorensen 1975)
- Mismatches between workers and jobs (Mayer and Carroll 1987; Sorensen 2000)

- Increasing work experience and work related human capital, especially at early years (Mincer 1975)
- "Maturation"

Looking at changes over the life-course of people, we want to understand how the stratification structure in society originates: Is it the result of different initial allocation or is it the result of a different evolution of chances over time (be it age, life stage, work experience)?

A first question to understand social stratification processes refers to whether there exists a mature or stable occupational position and, if so, when is that reached. The initial allocation in the occupational structure might already differ for different educational and class origin groups, and career progression patterns might increase or instead cancel such stratification. However, stratification processes might also occur in the course of the life course diverting initial homogeneous conditions. The questions concern the initial (entry) differences and the reproduction of such differences, if any, in the course of the life course.

Are people initially allocated in different positions or do people enter the labor market at similar occupational levels?

If the first is the case, are initial differences cancelled out (people recover from their initial disadvantages, catching up) or is the stratification structure reinforced in the course of career progression (this last relates to a scarring effect such that people carry their initial disadvantages their whole life, or these initial disadvantages even make their career progression more difficult)?

Another interesting question concerns whether there is a general trend such that all cohort progress in the same way or patterns of career progression differ across cohorts. In particular, our interest is in whether there has been a trend in increasing equality of opportunities or instead younger cohorts face an even stronger stratification structure.

We also assume that institutional factors may favor or discourage cumulative advantage. A stratified educational and training systems which transfer inequality to the labor market and lead to unequal starting position, or labor market which disproportionally reward individual success or support status continuity in employment careers, might favor ca, as well as very competitive labor markets. Labor market where coordination is structured by qualification instead, make ca less likely, although inequalities may result from a permanent exclusion of labor market outsiders.

Additionally, gender differences and economic and demographic conditions leading to interruptions in individual careers also affect the accumulation of advantage and disadvantage.

3. The German context

Germany is characterized by a conservative welfare regime, which is transfers-oriented and makes very limited attempts to de-familialize women. Historically, the West German institutional setting is associated with long-term employment relationships and a flexibly coordinated economic system (Soskice 1999). Both features reflect an ideal of skilled employment, life-long occupational continuity and long-term commitment between employers and employees (Mayer 1997). However, the ideal of the stable uninterrupted occupational track has always been a norm that was actually restricted to a specific subgroup of the labor market, the traditional mid-career male core-worker.

The West German institutional framework was designed to create and maintain these kinds of industrial relations (Kurz, Hillmert and Grunow 2006). The industrial structure in Germany is advanced and highly differentiated. The labor market is strongly based on qualifications and has strong occupational boundaries, such that occupational mobility tends to be much lower than job mobility. The high standardization and certification of the occupational system produce a very closed occupational structure, where the possibilities to be mobile are limited. Job stability is high, as a consequence of the widespread vocational training and of the unique structural aspects of German firms: work organisations are weakly differentiated, there are relatively few types of positions to which employees might move and involuntary termination of employees is uncommon, due to an internal policy of codetermination. In the German context occupations are mostly well-defined by state-licensed training and credentials as well as rules of access and performance. The high investments in occupational training, due to the nature of the vocational training systems as well as the track tertiary studies, and the consequent wish to reap the returns matching these investments in time, cost and opportunity costs leads to a relatively high degree of occupational stability. Job changes mainly have a voluntary nature, which also makes them more substantively meaningful. However, it should also be noted that in the German vocational training system there always was and still is an inbuilt tendency for triggering occupational mobility. Small manufacturing firms and services tend to train more personnel than they actually keep long term after the training. The necessity to be occupationally mobile is especially salient for men in manual occupations with little future perspectives. As a result a considerable number of persons have at least to change firms from a “training” to a “labor market” occupation and often also make an occupational

shift after having stayed with their training firm for a while. The early career is thus a core phase for further career development.

-High degree of gender segregation in employment and a high degree of division of labor between genders.

-Standardization of employment and small wage dispersion.

-Social selectivity in the educational system is relatively high.

During the past 60 years processes of globalization have strongly impacted the German labor market and economy. Many changes occurred: the prolongation of education and training, demographic fluctuations, sectoral changes, the upgrading of the occupational structure, increasing female labour force participation.

Different cohorts experienced different labor market situations due both to variation in the size of the cohorts that have left the educational system and to business cycle effects.

Since the 1960s the link between educational positions has become closer due to increasing institutional differentiation. Higher education levels have expanded while general school qualifications without vocational training or tertiary education have been reduced, which may have further lowered the chances of persons who did not meet the minimum standard of having a vocational degree. The development towards occupational upgrading in association with the educational expansion of the late 1960s and 1970s has led to higher overall levels of general schooling across cohorts. Especially the share without occupational training severely declined. The adaptation of existing training curricular, of the dual system and the university education to the innovations and spread of information and communication technology should have helped to maintain a high degree of occupational closure of the German system which supposedly prevented an increase in occupational mobility due to a larger degree of overlap in skill requirements across occupations.

Since the mid-1950s the demand for labor has changed considerably due to cyclical and structural developments (staggering of the business cycle, shift in the core sectors, technological improvements). The labor market went through the oil price shock between the end of the 1960s and mid 1970s, faced a rise in unemployment rates at the beginning of the 1980s, a short economic boom right after the reunification and another rise in the unemployment rates in the 1990s.
Due to international competition and technological innovation, there has been an overall decline in the demand for labor, in particular for unskilled (manual) labour, for this latter group also due to the general upgrading of the qualification requirements of

jobs. Since the 1980s Germany has faced a process or rationalization and reorganization on the firm level, characterized by decentralization, downsizing and outsourcing strategies, a rising number of mergers and acquisitions and a flattening of management hierarchies which has led to a decreasing availability of management positions and to a general diminishment of upward career patterns. Despite some reforms to the core of employment, there is still a high level of institutionalized regulation for the core of employment relations in Germany.

However, the employment structure changed noticeably in the last decades in West Germany. Severe sectoral shifts, which occurred the employment shares of the three core sectors and altered the occupational composition. The primary (agricultural) sector shrank and the production sector decreased since the early 1970s, while the public sector grew until the mid 1980s. The occupational structure changed strongly, with a drastic reduction in the share of blue collar workers and a robust increase in the share of white collar workers instead.

Individual occupational mobility might be affected by such changes according to the extent to which the occupational training system is flexible enough to react towards the shifts on the demand-side of labor. The interesting question concerns the degree to which these shifts have generated individual-level occupational mobility, as it is plausible to assume that part of the restructuring has taken place across cohorts.

4. Hypotheses

-general development of occupational status over the life cycle
-impact of educational attainment and class origin over the life cycle
-changes across cohorts in career progression

Hp could be on:
-patterns over the life course
-entry level
-cohort differences, in entry levels and patterns over time into the labor market
-gender, educational, class origin differences, in entry levels and patterns over time into the labor market
-gender, educational, class origin differences by cohorts

On the basis of the specific characteristics of the German system, we first formulate a series of hypotheses on the development of career progression over the life course for different cohorts as well as on the role of education and class origin on such patterns. We are interested in both the entry levels and the evolution of the occupational status

over the career and we pay special attention to the accumulation of advantage or disadvantage over the life course, which indicates whether social stratification is reproduced or even intensified or is instead slackens off over time.

HP 1 (evolution of occupational status with time into the lm)

-HP 1a (general trend and gradient): We expect a positive relationship between time in the labor market and occupational status, leading to higher occupational status with increasing time into the labor market.

However, we expect occupational mobility to be fairly low overall resulting in relatively stable careers, after a period of settling in.

[consequences > probably to be moved later in the text] Therefore, there are only moderate changes in overall inequality at any given point in time. Stable career patterns lead to continuous accumulation of advantage and disadvantage on the individual level, carrying the risk of social exclusion for the disadvantaged.

-HP 1b (*occupational status maturity hypothesis):* Given that the status scales of occupations have a limited number of positions, the chances of an occupational upgrade decrease the further one is in the career and the higher one goes in the occupational ladder. The structural possibilities of an occupational upgrade might decrease over the course of the career, but also its returns might vary and the marginal utility of work experience is expected to be higher at the beginning of the career. We therefore expect a ceiling effect such that occupational status becomes stable after reaching a certain ceiling point. Studies of occupational mobility and income attainment over the life-course support the hypothesis of occupational maturity around the age of 30.

>>By cohort?

-HP 1c (work experience across cohorts): We expect a trend towards higher levels of mobility across cohorts due to increasing difficulties of finding (adequate) employment after completing education. due to the increasing frequency of career interruptions, heterogeneity of career patterns has increased.

We expect an increasing attachment to the labor force for women, which should show up both in higher entry levels as well as in stronger career progression over the life cohorts across cohorts.

HP 2 (Entry position): While labor market entry takes place relatively late in Germany, we expect positions to be allocated already early in the career, due to the qualificational labor market.

>>By cohort?

HP 3 (Gender): We expect women's careers to be less stable than men's, with overall lower levels of occupational status.

>>*by cohort)* However, due to educational expansion, to women's increasing participation in the labor market and to shorter interruptions in their careers, we expect increasing similarities between the inequality patterns of men and women in younger cohorts.

HP 4 (Education): Formal qualifications are expected to be strong predictors of occupational positions.

HP 5 (Class origin): We expect social origin to play an important role in positioning actors on the labor market already at the beginning of their careers. As a result of both the selective educational system and the close link between qualifications and labor market positions, we expect the effect of social origin to extensively work through education (*indirect social origin through education*). We also expect that the effect of social background is relatively stable across the career, which would lead to the perpetuation of inter-generational stability, carrying the permanent risk of social exclusion of marginalized groups.

5. Data, variables and method

Data

The GLHS is a retrospective study which collects data on the individual life courses of people belonging to specific birth cohorts (retrospective cohort study). It was carried out since 1983 at the Max Planck Institute Berlin under the direction of Prof. Karl Ulrich Mayer and collected retrospective data for about 8,500 men and women from 20 selected birth cohorts in West Germany and more than 2,900 men and women from 13 selected birth cohorts in East Germany. It consists of a set of singular retrospective standardized interviews (face to face or telephone) with persons belonging to certain birth cohorts and drawn from representative samples who were asked, at a specific moment, questions about their past.. The data cover a comparatively long time frame allowing for analyses that go back a period of time in history (Buchholz & Grunow, 2003) and permit to construct a complete retrospective career history of the respondents, who were asked the monthly beginning and ending dates of each job or self-employment spell they had ever experienced. They were also asked to identify the occupation, the branch of industry, the size of the firm, and the wages at the start and the end of each job and self-employment episode. Finally, respondents were asked to indicate whether occurring job shifts refer to in-firm or between-firm job moves.

We are using the aggregate dataset (Gesamtdatenbank), which contains data from four different surveys. Specifically, the life histories of a first sample of 2,172 respondents representative for the Federal Republic and West Berlin from the cohorts born 1929-1931, 1939-1941 and 1949-1951 were collected from 1981 and 1983 (LV-West I). In the years 1985-1987 other 1,412 men and women belonging to the cohort 1919-1921 were interviewed (LV-West II). 2,008 respondents from the birth cohorts 1954-1956 and 1959-1961 took part in the 1988/1989 GLHS survey (LV-West III). Furthermore, a follow-up survey (LV-West 64/71), in which 2909 West German respondents belonging to the birth cohorts 1964 and 1971 were interviewed, was conducted in 1998-99.

Additionally, we have updated the life course of the respondents from the 1971 cohort with the information gathered in a follow-up interview conducted in 2005.

We have valid information for 4065 men and 4109 women, who in total reconstruct 769,333 and 626,301 months respectively.

We measure occupational status by occupational prestige measured according to Treiman (SIOPS). Our preference for such measure against other measures such ISEI for example was dictated but the fact that the SIOPS seems to be more reasonable to capture the occupational status of women.

>>Mean siops: men 42 (st. dev. 11.32); women 40.17 (st. dev. 11.64)

Independent variables:

-parents' social class is constructed using the dominance principle in which the highest class position of the parents determined one's class background (Erikson, 1984) and is measured using a five-class EGP scale, which differentiated between the higher (EGP I) and lower (EGP II) service classes, higher routine non-manual workers, supervisors, and higher-grade technicians (EGP IIIa and V), the self-employed and farmers (EGP IV), and the working class (EGP IIIb, VI, and VII).

-educational attainment is constructed combining general schooling and vocational or academic training, resulting in a categorical variable with 5 categories: The lowest education corresponds to those not reporting or not having completed any education and those with very low education ('allgemeiner (einfacher)', '8. Klasse qualifizierender hauptschulabschluss') and no vocational training. The following level, which is used as reference category in the following multivariate analyses, is represented by those who completed schooling but had no vocational training. Those who had vocational training are divided into three additional categories, according to whether they obtained a lower vocational training (facharbeit), they got abitur (=?) or university degree.

-work experience indicates potential work experience, measured as time since one started her/his first 'real' job, defined as a job lasting at least six months. (Potential) work experience is measured up to 25 years and is specified using five five-year linear splines. In this way we capture changes in the effect of work experience smoothly, avoiding therewith abrupt drops, since we impose continuity in the effects, allowing them to change gradually within each five year category by estimating linear slopes for each range so to avoid inappropriate jumps which would be generated by a simple dummy variable approach and without imposing stronger functional form on the relation between work experience and occupational prestige, so to assess the question of occupational maturity with more flexible assumptions of functional form.

-cohorts: 1920, 1930, 1940, 1950, 1955, 1960, 1964, 1971 (8 cohorts entered as dummies with 1930 as reference)

-number of children is a continuous numeric time-varying variable indicating the number of children

Method

To analyze occupational attainment and career progression, we apply growth curve modeling (Halaby, 2003; Steele, 2008, Härkönen and Bihagen Forthcoming) (Barone, Lucchini and Schizzerotto Forthcoming). Although less used in research on occupational mobility and career progression (however, see Härkönen and Bihagen, forthcoming; Barone, Lucchini and Schizzerrotto, forthcoming), these methods provide a useful way for summarizing patterns in occupational attainment over the life course. By simultaneously summarizing occupational attainment trajectories over the whole life course and enabling inclusion of independent covariates to explain these patterns, these methods can be seen as being located between (analytical) event history models and (more synthetic) sequence analysis methods (Mayer 2009). For our purposes, the baseline specification of the model can be written as

$$y_{it} = \beta_0 + \sum_{k=1}^{5} \beta_{1k} Exp_{itk} + \beta_2 Cohort_i + \beta_3 Educ_{it} + \beta_4 Classbg_i + \beta_5 Kids_{it} + \mu_i + \varepsilon_{it} \qquad (1).$$

The model includes the five five-year splines, and dummies for cohorts, education, class background, and a linear specification for the number of children. The model also includes a person-specific unobserved factor μ (random effect) and an error term ε and also allow us to estimate the variance of the two error terms, μ and ε, so that we can decompose the total variance in occupational attainment into variation associated to differences between individuals and variation associated to differences within individuals (over their life course). Furthermore, we can assess how these components change when we include additional independent variables.

In our models, careers were right-censored at age 50 or 25 years of experience, whichever occurred first.

We first estimate a baseline model in three separate steps: First we estimate an 'empty' model (Model 1), without any covariates, which simply decomposes the total variance into variance between individuals and variance within individual life courses, i.e. over individual careers. The random effects estimates present the estimates of the variance of the random effect coefficient around the constant (between respondents), and the residual variance (within- individuals, i.e. across individual careers). In a second step (Model 2), we introduce two time variables: cohorts (as dummies) and work experience (as splines). In a third step (Model 3), we also add variables for class background, educational attainment and number of children.

To account for possible sample selection bias arising from selection into work, which we assumed might be relevant for women in the German traditional housewife model, we also try a two step Heckman selection model, with the presence of a child under 3 as an instrument.

In addition, we also estimate models with interaction terms to examine how occupational attainment varies across the career by birth cohort, class background, and educational attainment, we add interactions between work experience on the one hand and cohort, class background, and education on the other.

6. Results

Employment and occupational status across the life course

As a background to the later analyses, we first examine employment patterns across the cohorts, both over the life course and over historical time (Figure 1). Later cohorts of men and women enter the labor market at later ages (as can be seen from the lower rates at younger ages), as is well known, due to lengthened education. For men, employment rates reach high levels (~90 %) when the men are in the thirties, and exceeded 80 % already in the twenties among men in the oldest cohorts. The peculiar employment pattern of men born between 1919 and 1921 can be explained by the second world war, as becomes clear from the upper right-hand figure.

Figure 1

The life course employment patterns of women in the older cohorts are characterized by a peak during the early twenties, and a decrease thereafter. These patterns fit the earlier female life course, in which early employment was interrupted by marriage and family formation, but with employment levels partly recovering in the later years (Blossfeld and Drobnič 2001). Women's employment patterns changed in the later cohorts so that, similarly to men, women entered the labor market at later ages and experienced increasingly limited dips in their employment rates in the prime child-bearing and –rearing years. Overall, then, these figures confirm the well-known patterns of (at least partial) convergence of male and female employment patterns across the life course.

Figure 2

Next, we turn to analyzing to the main question of our paper and look at occupational attainment patterns across life courses. The descriptive results in Figure 2 present these at the population level. One can find a clear trend of occupational upgrading across the cohorts, both for men and for women, which is in contrast to the findings by Härkönen and Bihagen (Forthcoming) for Sweden, in which they reported upgrading mainly only for women. The figures also show interesting patterns on (average) occupational attainment levels over the life course. Men's patterns appear to have remained rather similar across the cohorts (even with general occupational

upgrading from one cohort to the next, starting from the first job) with increasing average occupational attainment levels untils the 30s, a development that then slows down somewhat. However, the youngest cohorts appear to make career progress even at later ages. For women, one can detect more cohort change, as average occupational attainment levels did not change much after age 20 in the oldest cohorts, but continued improving at later ages in the later years (and in this sense as well becoming more like men's life course occupational attainment patterns).

These figures show how overall differences across cohorts in occupational attainment levels in adulthood result both from different levels at early stages of working life and from different growth rates at later stages. However, these results describe averages across entire cohorts and tell less about differences in individual careers. For these analyses, we next turn to our results from growth curve analyses.

Growth curve models

Selection: age 15-50; Work experience: max 25

From Model 1, the 'empty' model, we can see that a substantially higher share of overall variance in occupational prestige results from variance across individuals rather than across individual careers (rho=constant variance/(constant + residual variance)

Table 1

From Model 2 it results that work experience and cohort explain only a small share of the variance between and across individuals. This model allows us to argue about career progression with work experience and about differences in occupational status across cohorts. Career progression seems faster at the beginning of the career and then slows down. Women seem to progress at the very beginning of their career, and then further after more than 15 yrs.

Men: start from average 35 and gain on average 3.18in 25 yrs

Women: start lower (HP 3), i.e. 32 and gain on average 2.25 in 25 yrs

For men, there seems to be a trend of occupational upgrading over cohorts until those from cohort 1955 and then the occupational status increases again for respondents born in 1971. For women, we find a trend of occupational upgrading with the exception of cohort 1960. (see HP 1)

From Model 3, we get insight into the role played by education, class origin and familial situation (as expressed by the number of children). Adding these 3 variables reduces the between-individual variation by ~37% for men and 28% for women.

The effect of work experience is reduced for men, while for women is reduced only for shorter work experience and increases for longer experience. The effect of cohort is reduced but follows a similar pattern *(in Sweden the occupational advantage of the younger cohorts instead disappeared, indicating that it was due to improved resources (in particular higher education).* In Germany there seems to be an effect of cohort besides the effect which goes through education.> how to explain? changes in the occupational structure/labor market/economy/technological change?

As far as returns to education are concerned, both men and women seem to benefit greatly from increasing education and each additional level of education attained seems to guarantee higher prestige, with higher returns for women (careful in comparing coefficients across models though). [see HP 4]

Class background also seems to matter in determining occupational status, especially for men. [see HP 5]

>*Differently from Sweden I do find differences between working class (egp5) and entrepreneurial or farming background.*

Occupational prestige differences due to educational attainment appear larger than those due to class background. However, class background also has an indirect effect operating through education /* *Hillmert argues this with a path model and I see that the effect of class is reduced when we add education to the model*/*

Each additional child reduces occupational prestige, with a much strong effect for women and a slight but significant effect for men.

** ***Interaction models***

Furthermore, we look at whether cohort, education and class origin effects change over one's career.

Here, we first look at the Wald test indicating the significance of the interaction of the variable of interest (cohort, class background, education) with work experience, which indicates whether cohort, class origin and educational differences differ over the course of the career. Then to ease the interpretation, we plot the predicted values.

>> *Interactions cohort*work experience*

At first, we are interested in cohort differences in career progression, to understand where the career lags of some cohorts come about and whether respondents enter the labor market in less prestigious jobs, or instead their careers progress at a slower pace.

Overall, the Wald test doesn't indicate significant differences in career progression with over the life course (i.e. with work experience) across cohorts, neither for men nor for women.

Figure 3

Male respondents belonging to different cohorts seem to start their careers in job positions with different prestige (HP 2). The first cohort (1920) of respondents who entered the labor market before or around the time of WWII seem to have better status than the cohorts immediately following. From cohort 1930, successive cohorts seem to start their careers from progressively higher positions, until cohort 1960, the "oil crisis' cohort, which seems instead to have worse conditions. Respondents born in 1964 instead, while starting from relatively low position, catch up in the course of their career, reaching higher status than previous cohorts. The youngest cohort 1971 enters at higher levels and improves more than the previous cohorts.

The entry levels of women by cohort seem even more differentiated than men's (range from 30 to 38 for women vs from 30 to 35 for men). While women's career seem to progress towards higher positions in the first 5-10 years after the start, careers seem to stabilize or even drop later. The "oil crisis" cohort (1960) seems to particularly suffer from entry levels lower than the previous two cohorts and doesn't seem to recover from that initial disadvantage in the course of the career. ***different from Sweden!*

Class background

The interactions between class background and work experience are not jointly significant for women. For men only they are significant at the 5% level.

Figure 4

Looking at career progression by class origin, we find that both men and women form different class background already start their career in positions with different prestige (HP 5). Those differences do not disappear over the career and actually increase

between those with (higher/lower) service background and the others, especially for men. Men from service background seem to improve their position at a higher pace in the first 5/10 years in the labor market, although progression continues later on. Respondents from lower class origins follow a similar pattern although the pace seems slower and the slow down occurs earlier. For those from technical background -egp IV-, careers seem stable already 5 years after the start.

Women from all the class backgrounds seem to experience an increase in the prestige of their occupations, increase which seems more marked at the beginning and at the end of the career while more stable in the middle. Differences among class backgrounds seem to remain more or less the same.

For men compared to women we see more differentiation by class and sharper career progression, leading to higher final positions.

Education

The joint interaction effects between educational attainment and work experience do not seem significant.

Figure 5

Plotting the predicted SIOPS scores by educational attainment levels across working careers, career progression patterns over the life course do not appear to vary much by educational level and occupational prestige differences by education at the beginning of the career seem to be maintained with work experience. For both men and women we see huge differences in the entry levels according to the educational level, which seems, according to our hypothesis (HP 4) to be a strong predictor of occupational positions.

Overall, educational differences seem larger than class differences, although class is likely to have an indirect effect going through education.

In the case of men in particular, the lowest educated seem to have a slow but constant improvement in their occupational prestige, while university educated progress more in the middle of their career and those with vocation-fachhoch-abi (translate) have a sharper progress in the first 10 years in the labor market.

Women from all educational groups seem to experience a very minimal improvement in their occupational prestige: the lower educational group improves more at the beginning of the career, while higher educated improve later so that eventually

differences in occupational prestige by education seem to be maintained during the working career.

7. Conclusions

- The "classical model" of occupational attainment fits the German case rather well: even with occupational mobility, there is limited chances for career progression to overcome differences between individuals in occupational attainment; rather, the first job matters a lot
- Longer stage of career progression than in Sweden, but maybe because it's just slower given the highly structured nature of the German system
- Not that much differences by education, highly educated start high, some catch up a bit
- Some indications that those with high class backgrounds continue progressing longer, thus "approaching their class of origin", similar to what we found, but maybe even clearer here
- In general, results resemble those from Sweden.

Tables and Figures

Table 1. Growth curve models

	Men						**Women**					
	Mod 1		*Mod 2*		*Mod 3*		*Mod 1*		*Mod 2*		*Mod 3*	
work exp												
0-5			0.305**	[9.30]	0.161**	[4.89]			0.206**	[6.41]	0.155**	[4.86]
5-10			0.242**	[7.50]	0.174**	[5.10]			0.046	[1.17]	0.055	[1.37]
10-15			0.138**	[4.34]	0.124**	[3.75]			-0.024	[-0.49]	-0.007	[-0.14]
15-20			0.080*	[2.26]	0.065	[1.82]			0.133*	[2.41]	0.156**	[2.84]
20-25			0.128**	[3.38]	0.110**	[2.88]			0.072	[1.26]	0.09	[1.58]
Cohort (ref: 1930)												
1920			2.214**	[3.01]	1.678**	[2.92]			2.791**	[4.30]	1.162	[1.93]
1940			2.322**	[2.87]	1.391*	[2.24]			3.591**	[4.34]	2.268**	[3.21]
1950			5.745**	[6.83]	3.480**	[5.27]			7.535**	[8.98]	4.650**	[5.84]
1955			6.251**	[8.05]	3.305**	[5.26]			9.507**	[12.66]	5.176**	[6.58]
1960			5.010**	[6.38]	2.572**	[4.03]			7.764**	[10.00]	3.389**	[4.07]
1964			5.573**	[7.69]	3.165**	[5.28]			11.131**	[15.12]	6.879**	[8.72]
1971			7.193**	[9.75]	4.510**	[7.45]			13.021**	[17.47]	8.769**	[10.83]
Education												
lower sec					1.12	[0.49]					-6.813	[-1.74]
upper sec					4.218**	[4.52]					3.092**	[3.03]
upper sec voc					7.035**	[6.76]					8.353**	[7.23]
tertiary					15.050**	[11.19]					13.922**	[7.76]
Class background (ref:working class)												
EGPI					8.459**	[9.28]					5.811**	[7.33]
EGPII					6.283**	[8.55]					4.105**	[6.16]
EGPIIIa-V					3.387**	[7.86]					2.706**	[5.48]
EGPIV					1.320**	[3.11]					2.085**	[4.75]
No. Kids					-0.039	[-0.39]					-0.513**	[-3.27]
Constant	42.020**	[231.69]	35.464**	[60.58]	30.840**	[36.94]	40.253**	[216.88]	32.126**	[56.06]	30.272**	[41.36]
r2_between	0		0.007		0.397		0		0.119		0.371	
r2_within	0		0.042		0.083		0		0.008		0.04	
sigma_u	11.453		11.113		8.574		11.787		11.048		9.234	
sigma_e	5.175		5.064		4.956		5.177		5.157		5.073	
rho	0.83		0.828		0.75		0.838		0.821		0.768	
chi2	0		404.758		1013.209		0		638.805		1447.907	
N	612087		612087		612087		487706		487706		487706	
t statistics in brackets												
="* p<0.05	** p<0.01"											

Figure 1. Employment by cohorts across the life course and over historical time, West German men (upper panel) and women (lower panel)

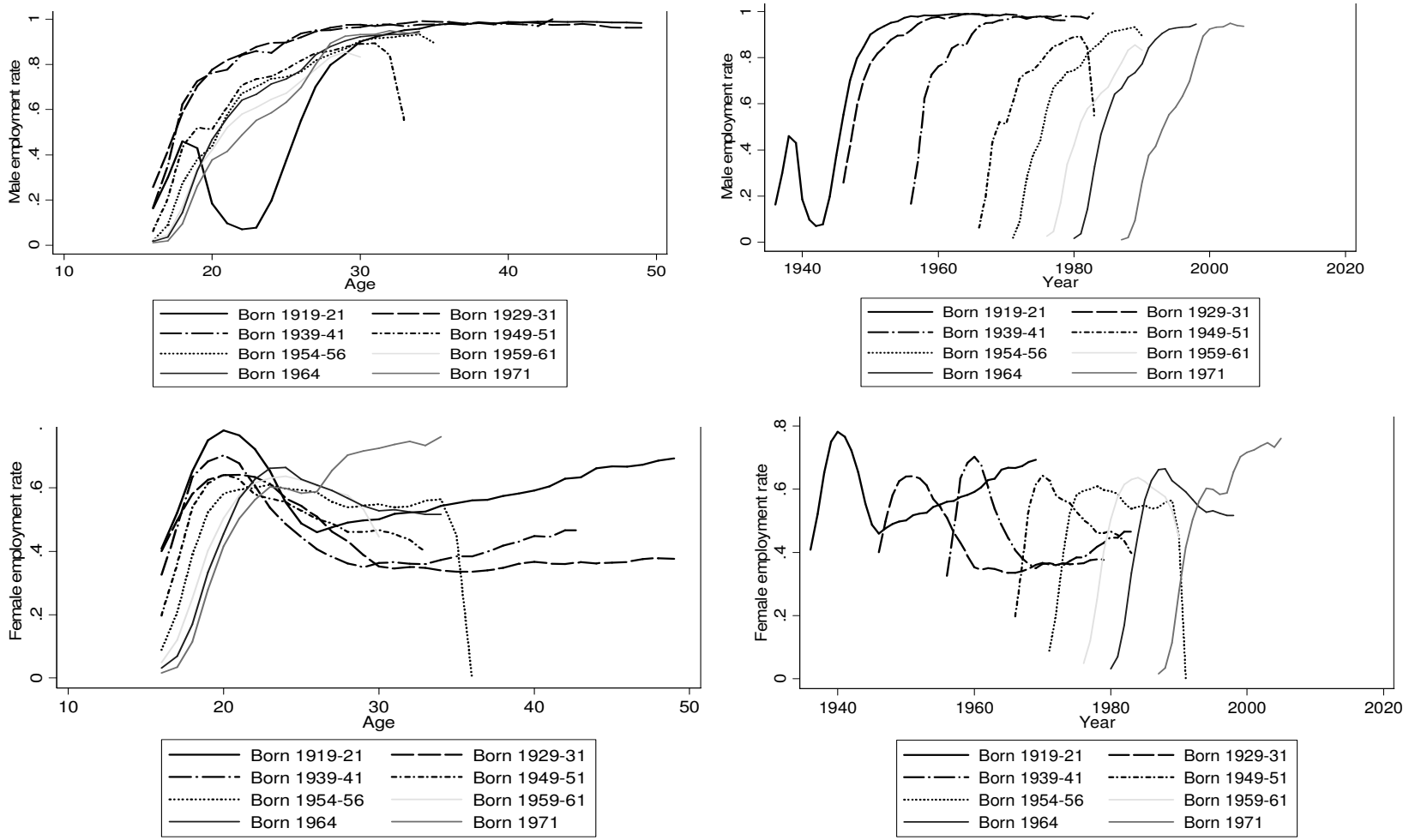


Figure 2. Occupational attainment by cohort across the life course and over historical time, West German men (upper panel) and women (lower panel)

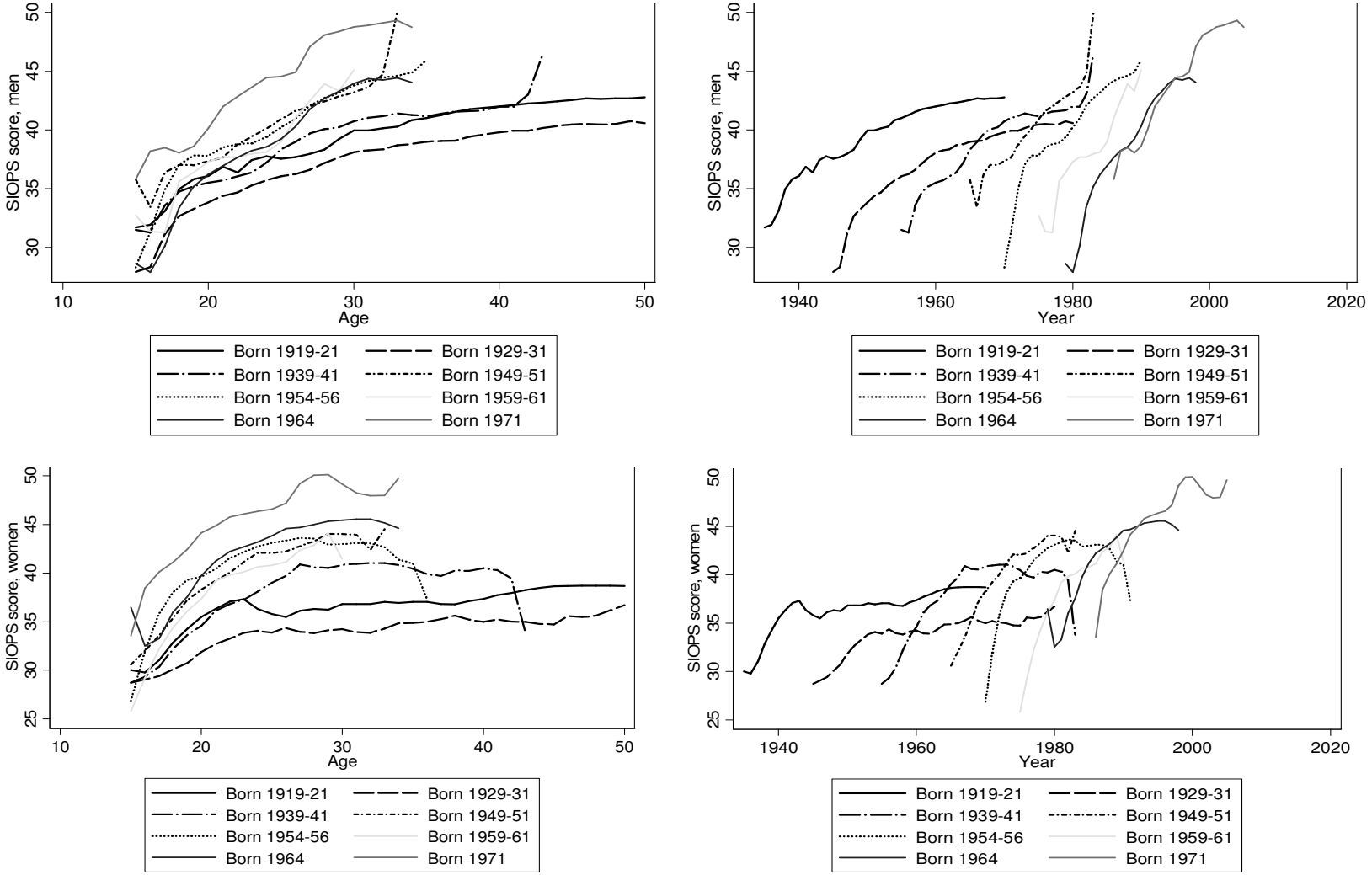
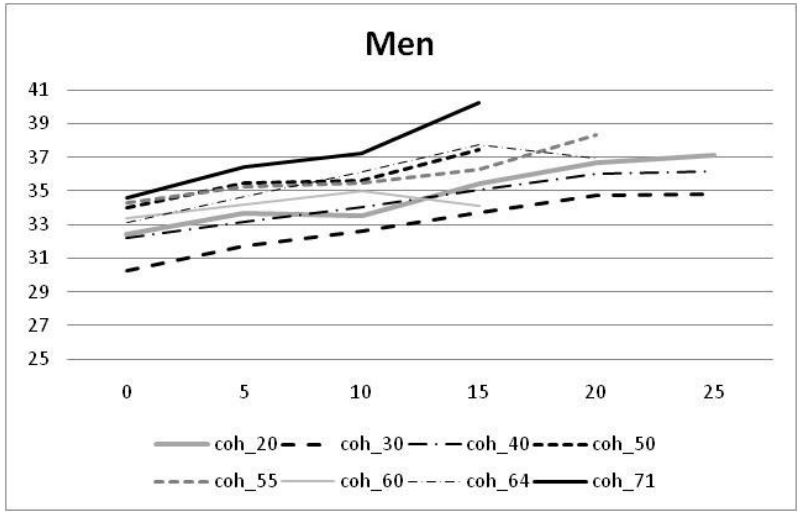


Figure 3. Cohort and Work Experience Interaction Model

		Chi2	df	p	
Experience*Cohort	Men	32.17	27	0.2259	none
	Women	31.57	24	0.138	coh55, coh



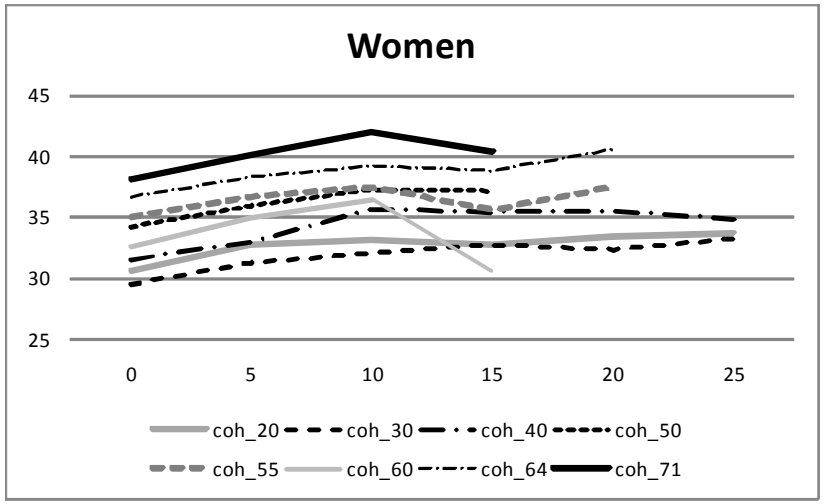


Figure 4. Class Background and Work Experience Interaction Model

Experience*Class background	Men	33.15	20	0.0325	ls	5% ns
	Women	12.98	20	0.8783	none	

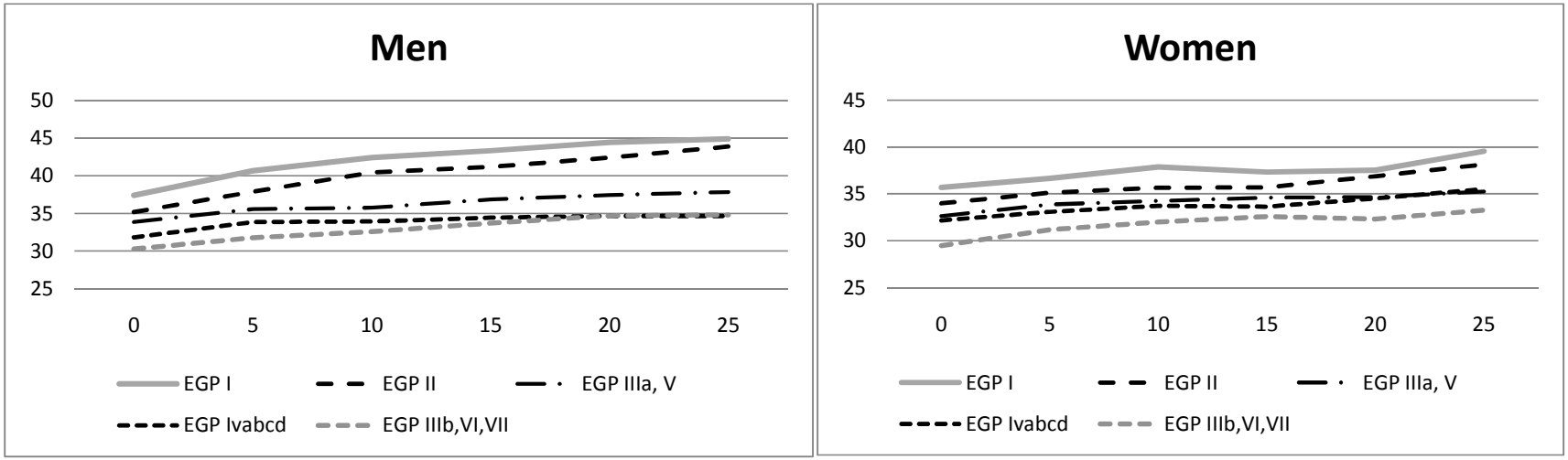
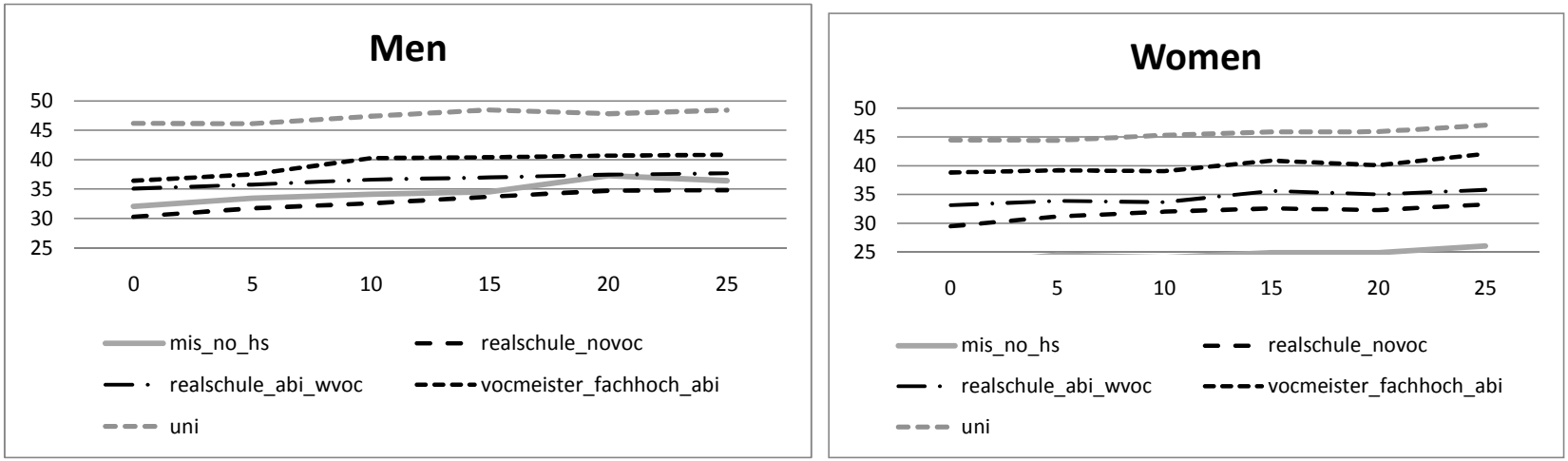


Figure 5. Education and Work Experience Interaction Model

Experience*Education	Men	18.66	14	0.1784	none
	Women	17.23	11	0.1013	edu4, edu3



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