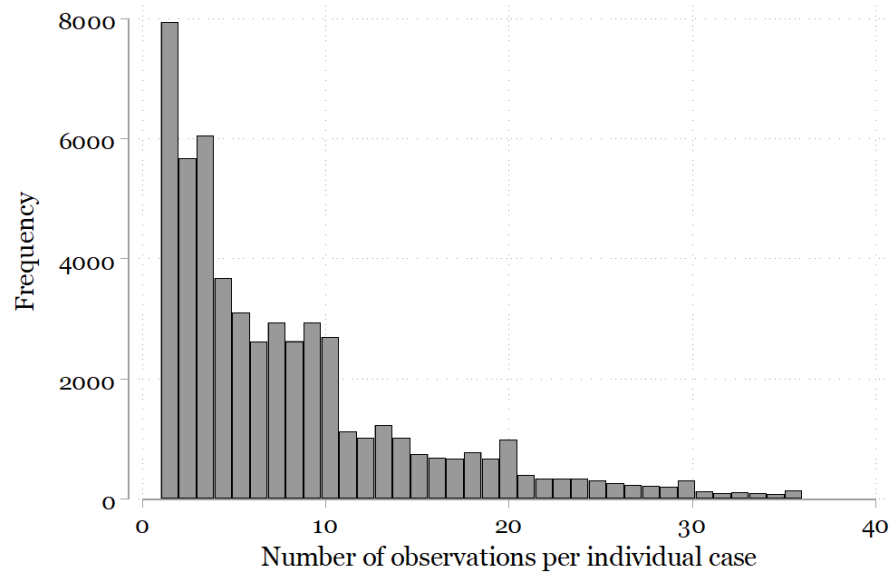


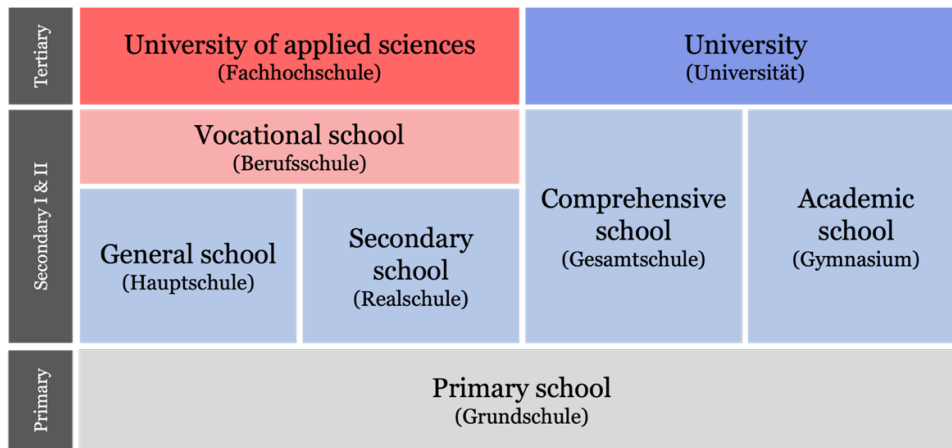
Supplement to:

Decker, Viktor, Thijs Bol, and Hanno Kruse. 2023. "Life-Course Differences in Occupational Mobility Between Vocationally and Generally Trained Workers in Germany." *Sociological Science* 10: 857-879.

**Figure S1:** Frequencies of numbers of observations per case in the analytic sample

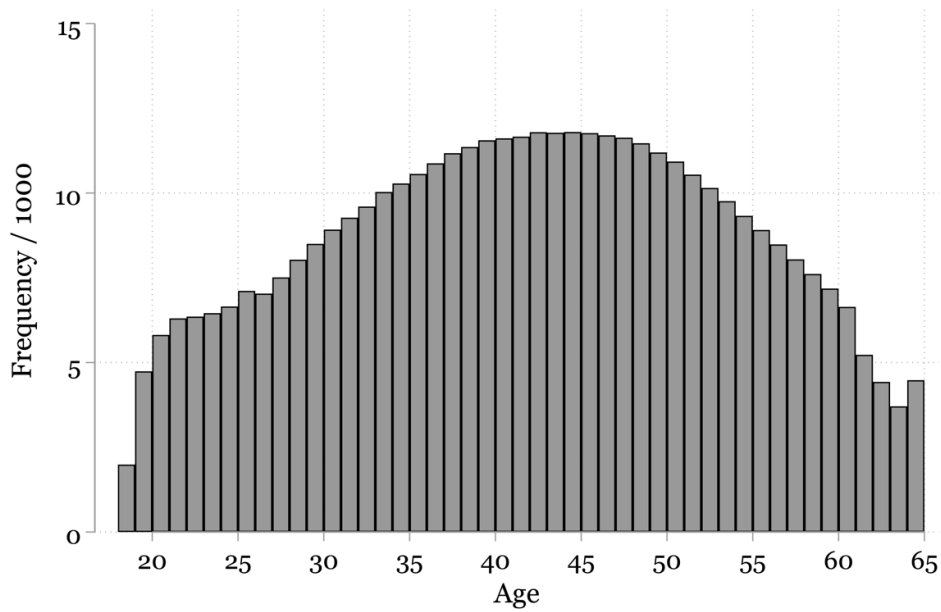


**Figure S2:** Simplified illustration of the German educational system



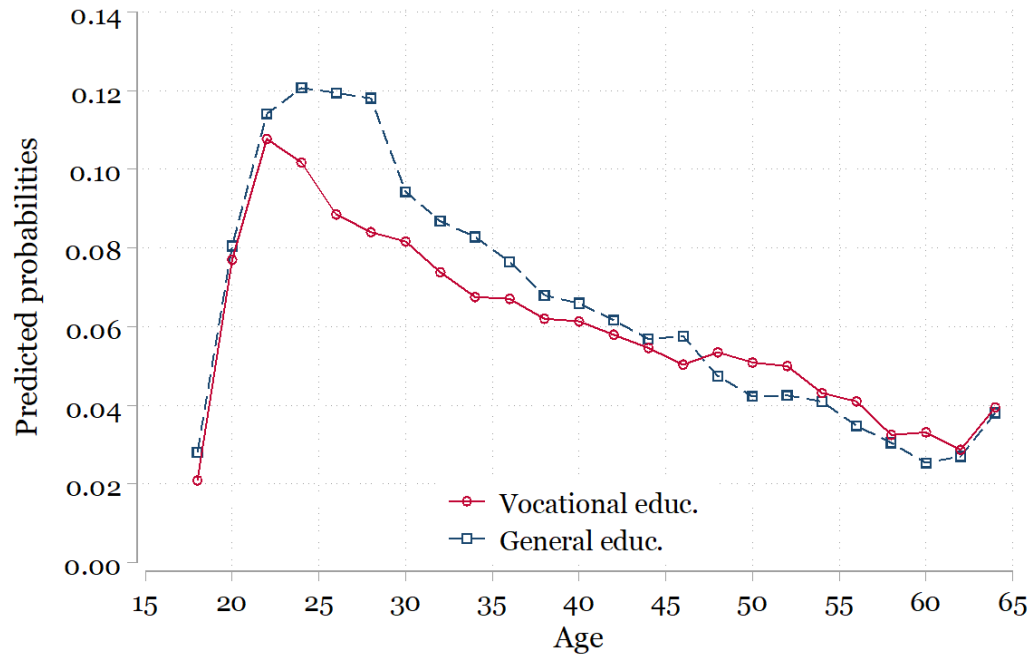
*Notes:* Institutions that award qualifications coded as vocational are displayed in red. Institutions that award qualifications coded as general are displayed in blue. Individuals holding a qualification from an institution marked as grey or who did not complete compulsory education are not part of the analytic sample. Tertiary degrees are presented in darker tones than secondary qualifications.

**Figure S3:** Age distribution in the analytic sample



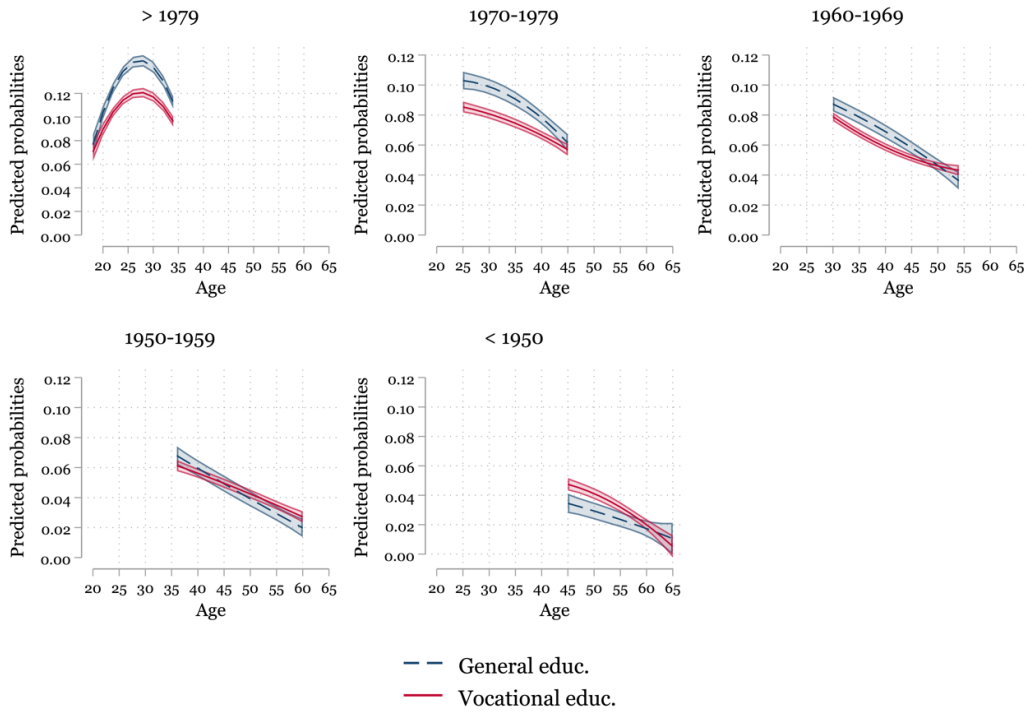
*Notes:* Frequencies are divided by 1000.

**Figure S4:** Predicted marginal probabilities to change occupations by categorical age



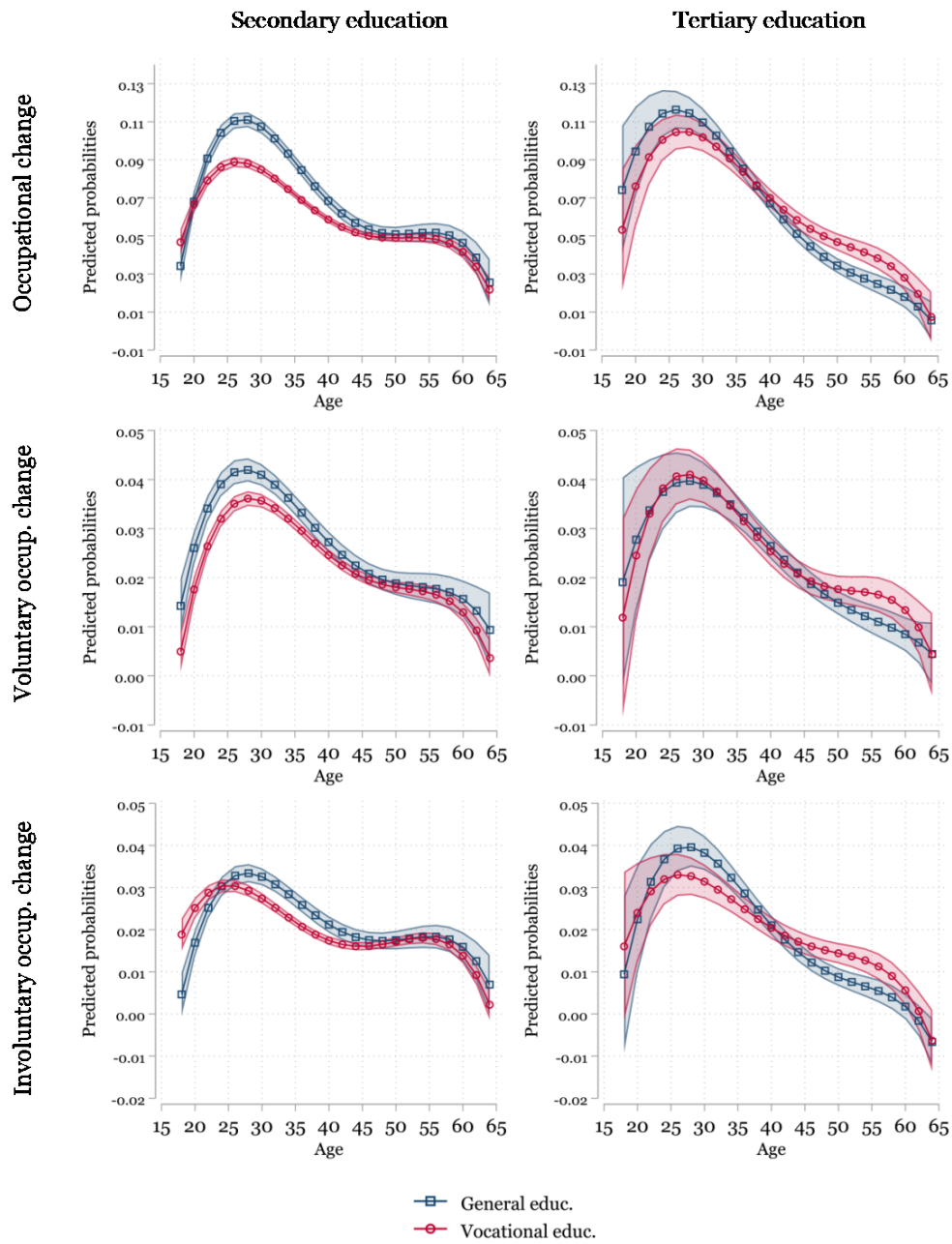
*Notes:* Predictions are obtained from multi-level linear regression with individual random intercept and random age slopes. Age is measured using 2-year interval dummies. Every dummy is interacted with type of education. Predictions are adjusted for level of education, gender, migration background, and contain year-of-birth fixed effects. Areas around prediction lines represent 95% confidence intervals.

**Figure S5:** For different birth cohort groups: predicted marginal probabilities to change occupations by age



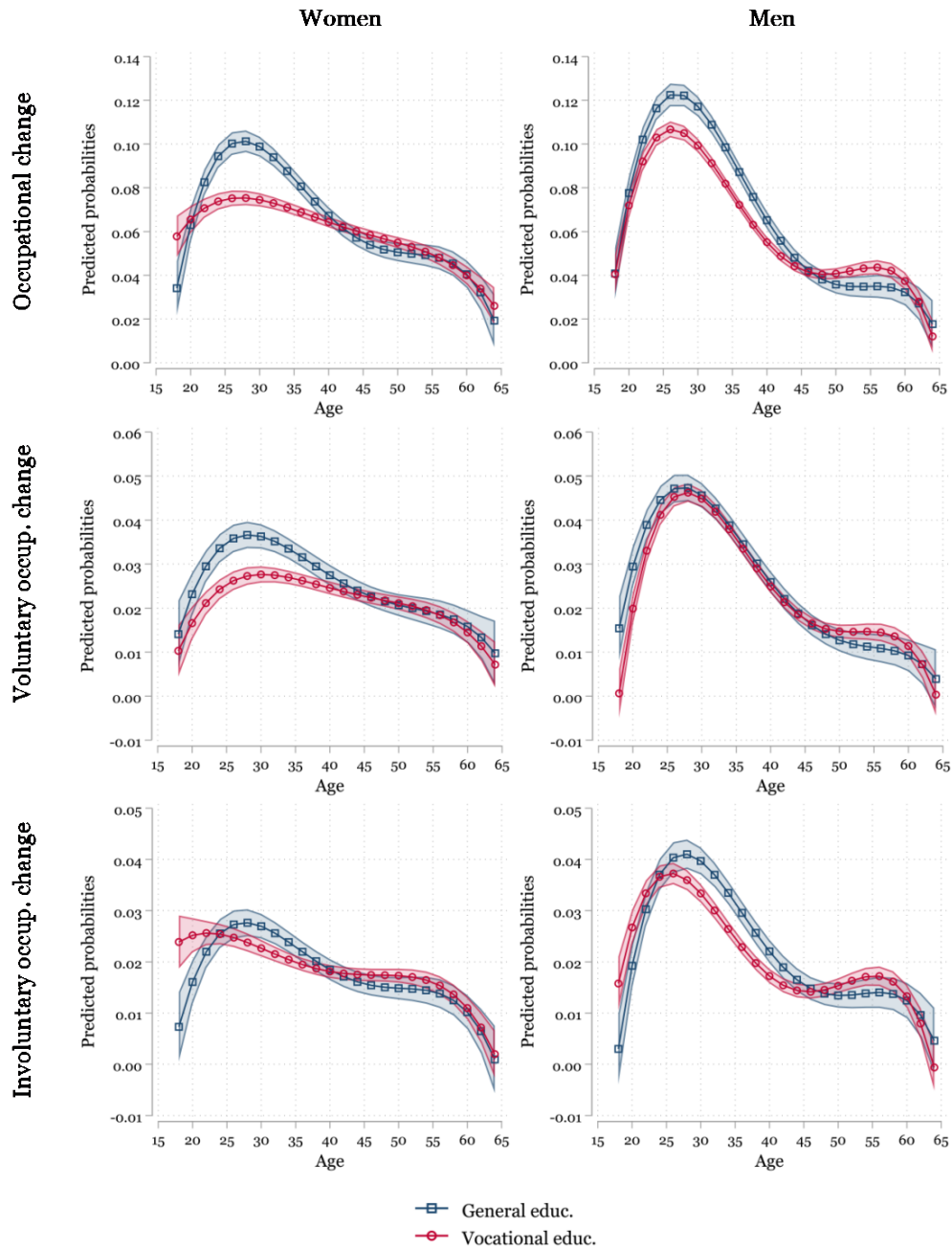
*Notes:* Predictions are obtained from a multi-level linear probability model with individual random intercept and random age slopes. Type of education is interacted with squared age and a categorical birth cohort group variable. Controls for level of education, gender and migration background are included. Areas around prediction lines represent 95% confidence intervals.

**Figure S6:** For secondary and tertiary education separately: Predicted marginal probabilities to change occupations, voluntarily and involuntarily by age



*Notes:* Predictions are obtained from multi-level linear probability models with individual random intercept and random age slopes. Type of education is interacted with quartic age. Models are computed for individuals with secondary and tertiary education separately. Controls for gender, migration background, and year-of-birth fixed effects are included. Areas around prediction lines represent 95% confidence intervals.

**Figure S7:** For women and men separately: Predicted marginal probabilities to change occupations, voluntarily and involuntarily by age



*Notes:* Predictions are obtained from multi-level linear probability models with individual random intercept and random age slopes. Type of education is interacted with quartic age. Models are computed separately for women and men. Controls for level of education, migration background, and year-of-birth fixed effects are included. Areas around prediction lines represent 95% confidence intervals.

**Table S1:** Analytic sample restrictions and associated change in case numbers

Criteria	Person-years dropped		Persons dropped	
	N	%	N	%
<b>Initial sample</b>	<b>742,777</b>	<b>1.00</b>	<b>103,449</b>	<b>1</b>
Must be observed as employed at least once	154,271	0.21	35,163	0.34
Must hold at least secondary school-leaving qualification	32,712	0.04	5,313	0.05
Every first observation per person is dropped since measuring occupational change requires information on occupations from the previous year	62,973	0.08	8,884	0.09
Must be between 18 and 65 years of age	43,197	0.06	600	0.01
Must not be in education or retirement, besides also recorded as employed	37,600	0.05	511	0.00
Must not have missing values on any variable used in the analysis.	2	0.00	2	0.00
<b>Sum dropped</b>	<b>330,755</b>	<b>0.45</b>	<b>50,473</b>	<b>0.49</b>



**Table S2:** Descriptive statistics for the original sample and the analytic sample

	Original sample			Analytic sample		
	Mean	SD	Valid N	Mean	SD	Valid N
<b>Occupational change</b>	0.037		742,777	0.062		412,022
yes (1)			27,455			25,645
no (0)			715,322			386,377
<b>Vocational education</b>	0.595		90,321	0.652		52,976
vocational (1)			53,782			34,542
general (0)			36,539			18,434
<b>Level of education</b>	0.154		90,321	0.175		52,911
tertiary (1)			13,894			9,273
secondary (0)			76,427			43,703
<b>Voluntary occup. change</b>	0.014		742,777	0.024		412,022
yes (1)			10,470			9,866
no (0)			732,307			402,156
<b>Involuntary occup. change</b>	0.011		742,777	0.198		412,022
yes (1)			8,647			8,154
no (0)			734,130			403,868
<b>Age</b>	46.170	17.376	742,773	41.435	11.707	412,022
<b>Gender</b>	0.503		103,442	0.483		52,976
female (1)			52,015			25,631
male (0)			51,427			27,345
<b>Migration backgr.</b>	0.345		103,449	0.263		52,976
mig. backgr. (1)			35,745			13,974
no mig. backgr. (0)			67,704			39,002
<b>Year of birth</b>	1966	21	103,445	1967	16	52,976
<b>Birth cohort groups</b>			103,445			52,976
< 1950 (0)			22,630			7,262
1950-1959 (1)			13,079			8,538
1960-1969 (2)			19,504			13,098
1970-1979 (3)			18,231			11,328
> 1979 (4)			30,001			12,750

**Table S3:** Multilevel linear probability models predicting occupational change

	Occupational change					
	M1	M2	M3	M4	M5	M6
Vocational educ.	-0.011*	-0.006*	-0.005*	-0.007*	-0.007*	-0.004*
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)
Tertiary educ.		-0.007*	-0.000	-0.001	-0.001	-0.000
		(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Female		-0.001	-0.000	-0.000	-0.000	-0.001
		(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Migration backgr.		-0.002	-0.002	-0.002	-0.002	-0.002
		(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Age/10			-0.019*	-0.019*	-0.036*	-0.036*
			(0.001)	(0.001)	(0.001)	(0.001)
Age/10 * Voc. educ.			0.005*	0.006*	0.016*	0.016*
			(0.001)	(0.001)	(0.002)	(0.002)
Age2/10				-0.003*	-0.002*	0.016*
				(0.001)	(0.001)	(0.002)
Age2/10 * Voc educ.				0.002*	0.001	-0.004*
				(0.001)	(0.001)	(0.002)
Age3/10					0.006*	0.006*
					(0.000)	(0.000)
Age3/10 * Voc. educ.					-0.003*	-0.003*
					(0.000)	(0.000)
Age4/10						-0.004*
						(0.000)
Age4/10 * Voc. educ.						0.001*
						(0.000)
Cohort fixed effects	No	Yes	Yes	Yes	Yes	Yes
Intercept	0.072*	0.006	0.038	0.049	0.029	0.050
	(0.001)	(0.085)	(0.086)	(0.086)	(0.086)	(0.086)
Intercept variance	0.004*	0.003*	0.000*	0.000*	0.000*	0.000*
Residual variance	0.055*	0.055*	0.055*	0.055*	0.055*	0.055*
Slope variance: Age			0.003*	0.000*	0.000	0.000*
Slope variance: Age2				0.003*	0.000	0.000
Slope variance: Age3					0.003*	0.000
Slope variance: Age4						0.003*
Observations	412022	412022	412022	412022	412022	412022
<i>AIC</i>	-6709	-9684	-10619	-10649	-10901	-11211
<i>BIC</i>	-6665	-8722	-9625	-9622	-9841	-10118

*Notes:* M2-M6 contain year-of-birth fixed effects. Standard errors are presented in parentheses. Level of significance: \*  $p < 0.05$ .

**Table S4:** Multilevel linear probability models predicting voluntary occupational change

	Voluntary occupational change					
	M1	M2	M3	M4	M5	M6
Vocational educ.	-0.004*	-0.002*	-0.002*	-0.001	-0.001	-0.002
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Tertiary educ.		-0.002*	0.001	0.000	0.000	0.000
		(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Female		-0.002*	-0.002*	-0.002*	-0.002*	-0.002*
		(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Migration backgr.		0.001	0.001	0.001	0.000	0.000
		(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Age/10			-0.007*	-0.007*	-0.014*	-0.014*
			(0.000)	(0.000)	(0.001)	(0.001)
Age/10 * Voc. educ.			0.002*	0.002*	0.003*	0.003*
			(0.000)	(0.000)	(0.001)	(0.001)
Age <sup>2</sup> /10				-0.002*	-0.001*	0.004*
				(0.000)	(0.000)	(0.001)
Age <sup>2</sup> /10 * Voc. educ.				-0.000	-0.000	0.000
				(0.000)	(0.000)	(0.001)
Age <sup>3</sup> /10					0.002*	0.002*
					(0.000)	(0.000)
Age <sup>3</sup> /10 * Voc. educ.					-0.000	-0.000
					(0.000)	(0.000)
Age <sup>4</sup> /10						-0.001*
						(0.000)
Age <sup>4</sup> /10 * Voc. educ.						-0.000
						(0.000)
Cohort fixed effects	No	Yes	Yes	Yes	Yes	Yes
Intercept	0.027*	0.002	0.015	0.025	0.013	0.024
	(0.001)	(0.054)	(0.054)	(0.054)	(0.054)	(0.054)
Intercept variance	0.001*	0.001*	0.000*	0.000	0.000	0.000
Residual variance	0.023*	0.023*	0.023*	0.023*	0.023	0.023
Slope variance: Age			0.001*	0.000*	0.000	0.000
Slope variance: Age <sup>2</sup>				0.001*	0.000	0.000
Slope variance: Age <sup>3</sup>					0.001	0.000
Slope variance: Age <sup>4</sup>						0.001
Observations	412022	412022	412022	412022	412022	412022
AIC	-380436	-381697	-382044	-382125	-3821297	-382439
BIC	-380392	-380735	-381049	-381098	-381291	-381412

*Notes:* Limited to observations where individuals either did not change occupations or changed occupations voluntarily (identified based on type of termination of prior position). M2-M6 contain year-of-birth fixed effects. Standard errors are presented in parentheses. Level of significance: \*  $p < 0.05$ .

**Table S5:** Multilevel linear probability models predicting involuntary occupational change

	Involuntary occupational change					
	M1	M2	M3	M4	M5	M6
Vocational educ.	-0.000 (0.001)	-0.001 (0.001)	-0.000 (0.001)	-0.003* (0.001)	-0.003* (0.001)	-0.002 (0.001)
Tertiary educ.		-0.005* (0.001)	-0.003* (0.001)	-0.003* (0.001)	-0.003* (0.001)	-0.003* (0.001)
Female		-0.003* (0.001)	-0.003* (0.001)	-0.003* (0.001)	-0.003* (0.001)	-0.003* (0.001)
Migration backgr.		-0.003* (0.001)	-0.003* (0.001)	-0.003* (0.001)	-0.003* (0.001)	-0.003* (0.001)
Age/10			-0.005* (0.000)	-0.005* (0.000)	-0.011* (0.001)	-0.011* (0.001)
Age/10 * Voc. educ.			0.001 (0.000)	0.001 (0.000)	0.006* (0.001)	0.006* (0.001)
Age <sup>2</sup> /10				-0.001* (0.000)	-0.001* (0.000)	0.006* (0.001)
Age <sup>2</sup> /10 * Voc. educ.				0.002* (0.000)	0.001* (0.000)	-0.000 (0.001)
Age <sup>3</sup> /10					0.002* (0.000)	0.002* (0.000)
Age <sup>3</sup> /10 * Voc. educ.					-0.002* (0.000)	-0.002* (0.000)
Age <sup>4</sup> /10						-0.002* (0.000)
Age <sup>4</sup> /10 * Voc. educ.						0.000 (0.000)
Cohort fixed effects	No	Yes	Yes	Yes	Yes	Yes
Intercept	0.020* (0.000)	0.002 (0.049)	0.013 (0.049)	0.017 (0.049)	0.013 (0.049)	0.023 (0.049)
Intercept variance	0.001*	0.001*	0.000*	0.000*	0.000*	0.000
Residual variance	0.019*	0.019*	0.019*	0.019*	0.019*	0.019
Slope variance: Age			0.000*	0.000*	0.000*	0.000
Slope variance: Age <sup>2</sup>				0.000*	0.000	0.000
Slope variance: Age <sup>3</sup>					0.000*	0.000
Slope variance: Age <sup>4</sup>						0.000
Observations	412022	412022	412022	412022	412022	412022
AIC	-456742	-457328	-457630	-457648	-457701	-457883
BIC	-456698	-456367	-456635	-456621	-456641	-456855

*Notes:* Limited to observations where individuals either did not change occupations or changed occupations involuntarily (identified based on type of termination of prior position). M2-M6 contain year-of-birth fixed effects. Standard errors are presented in parentheses. Level of significance: \*  $p < 0.05$ .