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Jens Peter Thomsen

THE DANISH NATIONAL CENTRE FOR SOCIAL RESEARCH, COPENHAGEN, DENMARK

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Jens-Peter Thomsen
Senior Researcher, PhD

SFI - The Danish National Centre for Social Research
Herluf Trolles Gade 11, DK-1052 Copenhagen

jpt@sfi.dk

Abstract

Studies on educational inequality tend to focus on average educational transitions between social groups, largely disregarding within-group differences. However, in Denmark, among the same group of formally equally highly qualified working-class students, only a little over half progress to university, while the other half do not. I investigate these within-group differences, examining the social characteristics of those who progress and those who do not. I find that parents' non-manual labor working-class jobs such as fine crafts, office and sales-work – are associated with high university progression rates. I also find that university-going experiences in the extended family are positively associated with progression. In addition, there is a large advantage in having a diploma from an upper-secondary institution with high average university progression rates. These results highlight the need for more research on how educational expectations among working-class students are shaped.

Introduction

Despite long-term political commitments to equal opportunity policies in modern societies, children from privileged families are much more likely to progress to higher education than children from less privileged families (Breen, Luijkx, Müller, and Pollak 2009; OECD 2012; Shavit, Arum, and Gamoran 2007). Even in Denmark, substantial class gaps in access to university programs continue to exist (Thomsen 2015) despite massive educational expansion and a redistributive welfare state, with universal government grants and no tuition fees in the education system.

A well-established research tradition on the inequality of educational opportunity has analyzed and documented persistent social disparities in educational transitions, even when scholars look at equally qualified children (i.e., control for their scholastic abilities) (see Jackson 2013 for recent examples). Researchers within this tradition examine how young people's educational pathways are not only attributable to "primary effects" (i.e., the relationship between their scholastic abilities and social origin), but also to "secondary effects" (i.e., if and how, given their abilities, young people realize their educational potentials) (Boudon 1974). Secondary effects aim to explain why, for example, working-class students are systematically underrepresented in the transition to higher education despite being just as qualified as their middle-class counterparts. Secondary effects in educational transitions are substantial in Denmark. As I will detail in the following section, among highly qualified 25-year-olds (those with a high grade point average [GPA] from upper-secondary education, or gymnasium), only about half with unskilled parents pursued a university degree in 2008–2010, while 85% of the children with university-educated parents did so.

Even though the significance of secondary effects has been well researched, studies thus far have exclusively focused on average secondary effects *between* social groups, such as differences in mean outcomes or mean educational attainment rates by status, class, or parental education. In doing so, studies have largely disregarded *within-group* differences, such as those mentioned in the previous paragraph. Why, out of the same group of equally highly qualified students with unskilled parents, do half progress to university while the other half do not? Taking advantage of rich administrative data from Statistics Denmark, this article tackles this research gap by investigating the disparities in higher education continuation rates among the same group of highly qualified working-class students. I ask the following research question: *Among equally highly qualified working-class children, what are the social characteristics of the group that progresses to university studies and the group that does not?*

Background

In Denmark, young people coming out of compulsory school (grade 0–9 covering ages 6–15) can choose to continue in the vocational and educational training (VET) program or enter gymnasium, the three-year higher education preparatory academic program. Roughly two out of three young people coming out of compulsory school progressed to gymnasium in 2010. A diploma from the gymnasium is awarded if the student obtains at least a passing GPA (if he or she receives at least 6 on a scale from 0–13); this will formally grant him or her access to any higher education program, provided that the program has space for all of its applicants.[1] If demand exceeds supply, the program will accept only those students with the highest GPAs.

The Danish higher education system is made up of 1) university institutions with a wide range of traditional liberal arts and professional programs; they offer three-year bachelor's degrees, two-year master's degrees, and three-year doctoral degrees; 2) university colleges, offering three- to four-year semi-professional bachelor's programs (primarily educating teachers, nurses, and child care and social workers); and 3) business academies, offering a number of smaller two- to three-year programs targeted toward various jobs in the private sector. The universities have the largest proportion of young people: among 30-year-olds in 2010, 6% obtained a business academy degree, 19% a university college degree, and 21% a university degree.

Social gaps in progression to university studies

Highly qualified working-class students not continuing to university has been a surprisingly persistent problem in Denmark. Figure 1 shows consistently large and conspicuous continuation gaps among highly qualified (gymnasium GPA ≥ 9) young people from different social backgrounds from 1986–2010. In the latest time period, 2008–2010, only a little more than half of the highly qualified children with unskilled parents (52%) made use of their high gymnasium GPAs to continue into a university program in the latest time period, while as much as 85% of the children with university-educated parents continued. It is exactly these large disparities that have motivated this article.

Figure 1. 25-year-olds with a Gymnasium GPA of 9-9.9. Percentages continuing into a university program (enrolled/completed) by parental education, 1986-2010. Register data.
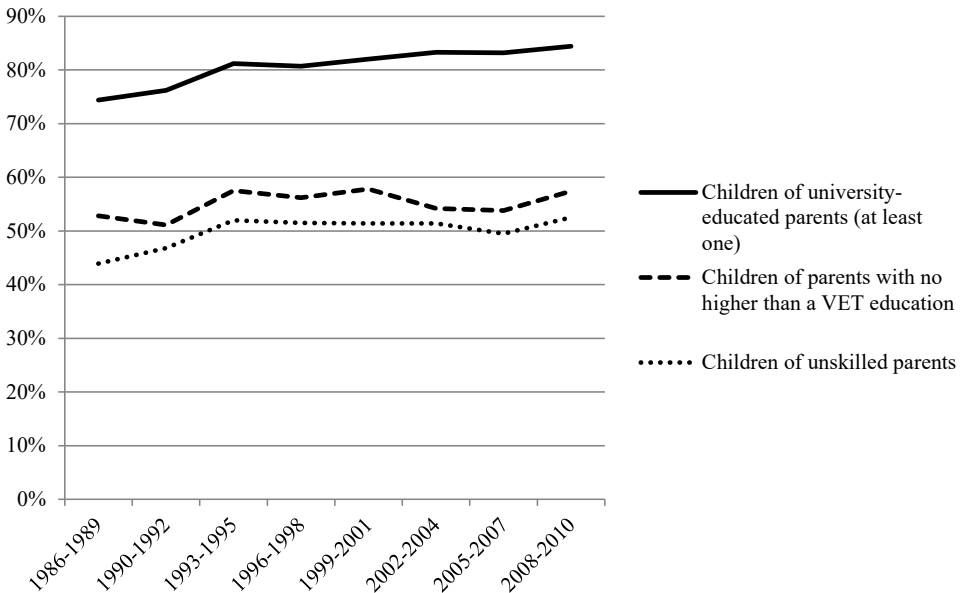
Figure 2 illustrates the latest time period, 2008–2010, depicting the university participation gap across the GPA range for 25-year-olds with university-educated parents and working-class parents (where no parent is skilled beyond the VET level), respectively. The size of the gap between the two groups varies across the GPA range. The gap is large when looking at GPAs within the 7–10 range and small at the tails of the GPA distribution. Most gymnasium students (85%) lie within the 7–10 range (12% have below 7, 32% within 7–7.9, 34% within 8–8.9, 19% within 9–9.9, and 4% have a GPA of 10 or higher).

Figure 2. Percentage gap in university progression between 25-year olds with university-educated parents (at least one) and un-skilled/vocationally trained parents by Gymnasium GPA, 2008-2010. Register data.
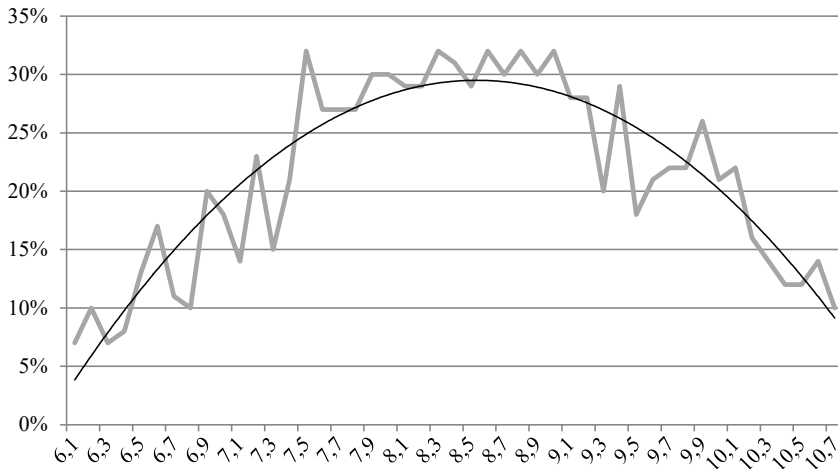
In this article, I explicitly target the differences within a group of children who are *formally equally qualified* and who are all from working-class backgrounds. I define a working-class background as one where no parent has more than a VET diploma and where parents occupied a position normally requiring skills not exceeding the VET level (or were unemployed) when the 25-year-old was 15. I focus on working-class students with a gymnasium GPA of 9 or more. This range contains one-fourth of all students, and it covers GPAs that allows students to choose freely from most university programs.[2] In addition, 83% of all students with a GPA of 9 or more lie within the 9–9.9 range, where the gap between working-class students and students with university-educated parents is the largest. Moreover, I choose to look at disparities in continuation to *university programs* for equally qualified students, as the university institutions are the most socially selective, the most sought after, and the ones (on average) offering the highest economic returns relative to lower-level higher education programs (university colleges and business academies).

Literature review and research question

The gap in existing research

As mentioned in the introduction, a vast body of research has looked at differentials in educational transitions among young people from different social origins (Breen et al. 2009; Gerber and Cheung 2008; Jackson 2013; Shavit et al. 2007; Stevens, Armstrong, and Arum 2008). Explanations for these differentials include 1) disparities in families' economic, social, or cultural resources (Bourdieu and Passeron 1977; Coleman 1988; Jæger and Holm 2007; Lareau 2011); 2) differences in aspirations, expectations, and preferences (Hanson 1994; Jackson 2013; Karlson 2015; Morgan 2005); and 3) institutional barriers faced by working-class students (Lehmann 2013; Mullen 2010; Reay, Crozier, and Clayton 2009; Thomsen 2013). Despite the advances made by the many quantitative and qualitative studies on transition into higher education, many of them nevertheless suffer from two limitations: they either analyze differences in mean educational outcomes between social groups or social classes, or they qualitatively examine the college-going experiences of working-class students without including proper comparison groups of working-class students who are not entering college.[3]

Only a few classic studies deal specifically with within-class differences among eligible working-class children. Kahl's (1953) seminal qualitative study has greatly influenced the later status-attainment literature (see e.g., Morgan 2005). He places weight on within-class differences in familial socialization, finding that some working-class parents are content with a "getting by" strategy for their children, whereas others practice a "getting ahead" strategy (Kahl 1953). Only the offspring who internalize the parental views of "getting ahead" see the value of doing well in school and having college-going aspirations.[4] In a survey-based study, Krauss (1964) finds the college-going aspirations of working-class children to correlate with "middle-class experiences" in the extended family, that is, if the grandparents were employed in non-manual labor occupations, if family or friends had college-going experiences, or if the father had a high-status working-class job. In addition, Krauss finds that the young person's social network, participation in extra-curricular activities, and having attended a predominantly middle-class school increases his or her likelihood of going to college (see also Bozick and DeLuca 2011; Lindholm 2006).

In their efforts to explain why working-class children are excluded from – or choose to forego – higher education, the vast majority of studies on between-class differentials in higher education take as their theoretical point of departure either Bourdieu's (1986, 1977) cultural capital theory or the theory of relative risk aversion (Breen and Goldthorpe 1997). Both traditions acknowledge that young people's educational preferences will be closely linked to the values, norms, and socialization patterns in the family. Depending on social class, parents will adopt different strategies toward their children's upbringing and toward the importance of education and the risks associated with pursuing higher education (see e.g., Lareau 2011; Irwin and Elley 2011; Reay, Crozier, and James 2011).

While the two major theoretical traditions offer strong and convincing explanations of between-class differentials, they have largely disregarded differences *within* the working class. On the one hand, cultural capital theory has given detailed accounts of heterogeneities in middle- and upper-class forms of capital and habitual dispositions (Bourdieu 1986), but the theory has been less sensitive to variations within the working class (Bennett et al. 2009:195ff). On the other hand, relative

risk-aversion theory has been able to explain why there are social class differences in propensities for choosing higher education (Goldthorpe 1996, 2000), but the theory is unsuited for explaining within-class differences if we believe these to be a product of more than just individual idiosyncratic variations. Indeed, when such a large proportion of highly qualified working-class students do not obtain a university degree, this is a strong indication of systematic, non-idiosyncratic variation in need of sociological investigation.

Within-class differences might fruitfully be understood through the micro-class approach proposed by Grusky and fellow researchers (Grusky and Sørensen 1998; Jonsson, Grusky, Di Carlo, Pollak, and Brinton 2009; Weeden and Grusky 2005). This approach shows that parents within specific occupations otherwise aggregated into big social classes may form distinct social communities sharing the same values and expectations on behalf of their children. Within different types of working-class families, this may in turn lead to different preferences for education and to differences in risk-averse behavior toward education. In sum, the micro-class approach suggests that it may be important to pay particular attention to different types of working-class families, as these may reasonably hold different child-rearing practices, leading children to take different educational pathways and hold different expectations toward their education and future work life.

Research question

As laid out above, within-class differences have received little attention in studies on the inequality of educational opportunity. There is not a wide body of literature from which a specific set of hypotheses can be formulated. As a result, I have chosen an open research question: *Among equally highly qualified working-class children, what are the social characteristics of the group that continues to university studies and the group that does not?*

In examining the social characteristics of these two groups, I draw on the empirical studies and theoretical perspectives discussed in the previous section, leading me to pay particular attention to three areas. First, I focus on "middle-class" experiences in the extended family – in this case, whether grandparents, uncles, or aunts have had college-going experiences. These experiences may influence children directly or indirectly. For example, grandparents may indirectly pass on resources and expectations to parents, who in turn pass them on to their children; or, they may directly influence children through regular interactions and/or by compensating for lack of parental resources (Jæger 2012; Ziefle 2016).

Second, I differentiate among types of working-class jobs, as particular types of jobs may be linked to particular family values and educational expectations. Within the working class, there may reasonably different, occupation-specific patterns of socialization leading to different attitudes toward education and educational pathways. Parental preferences for university studies may be more prevalent in families where one or both parents are employed in non-traditional, non-manual working-class jobs, such as office and sales jobs, some service jobs, or fine craftsmanship jobs (e.g., woodworker, ceramist, clockmaker, etc.).

Third, I construct variables on school socioeconomic characteristics and average university continuation rates as proxies for the schooling experiences of the working-class students. Preferences for university studies may be related to having attended "middle-class" compulsory schools or gymnasiums. In addition, they may be related to having attended a gymnasium with a high average university continuation rate, as some gymnasiums may foster preferences for university studies through, for

example, the influence of peers, teachers, and mentors. I address the research question and the three focal points by using Danish administrative registers. In the next section, I detail the data used and outline the research design and methods.

Data and methods

Administrative data

I use administrative data from Statistics Denmark on the entire population of 25-year-olds in 2008, 2009, and 2010 (born 1983, 1984, and 1985, respectively).[5] I collect data from several registers yielding information on demographic, educational, and social origin characteristics, including information on gender, birth cohort, ethnic minority status (immigrant/descendant), region of living at age 15 (i.e., living in the Copenhagen metropolitan area or not), and level of education in the parental generation in the place of living at age 15 (by parish).[6] Educational information on the 25-year-olds includes variables on type of gymnasium attended, gymnasium GPA, average gymnasium continuation rates in the compulsory school attended, and average university continuation rates in the gymnasium attended. In addition, I include dummies for having attended a middle-class compulsory school or gymnasium (where the average parental education level at the school or gymnasium is a higher education).

Social origin data encompass household type at child's age 15 (family type, broken home, number of siblings, number in sibling row), along with parental net income, parental level of education, and type of occupation at age 15. I disaggregate parental type of working-class occupation to single out non-manual or non-traditional working-class jobs. In addition to traditional manual labor jobs, I identify office/sales work (office clerks, sales assistants, etc.), service and care work (hairdressers, health assistants, etc.), and fine craftsmanship (woodworker, ceramist, clockmaker, etc.). Data also include information on education in the extended family: the educational level achieved for grandparents, uncles, aunts, and older brothers or sisters. Finally, having grown up in at-risk homes is captured by identifying whether parents were unemployed at the child's age 15, if parents have had certain medical diagnoses (psychiatric, substance abuse-related somatic, obesity), or a criminal sentence (suspended/custodial) during upbringing (up to child's age 15).

As high-quality administrative data only reach back to the early 1980s, I choose to look at the educational status of 25-year-olds over, for example, 30- or 35-year-olds, because it allows me to include much better information on the educational level of the grandparents (the older the birth cohort, the lower the quality of the grandparent data). The educational status of 25-year-olds is a good proxy for university completion, even though many are still enrolled at this age. In 2005, 97% of those 25-year-olds enrolled in a university program had completed or were still enrolled in a university program at age 30 (85% had completed and 15% were still enrolled).[7]

Models

I use linear probability models to predict university participation. Linear probability models have a number of attractive probabilities features over logistical regression models: probabilities are more intuitive than odds ratios derived from logistical regression models, and linear probability models

allow coefficient comparison across models and sample data (Mood 2009; see Doren and Grodsky 2016 for a recent application of linear probability models predicting college attendance).

I first present a model on university participation with key predictive variables for all 25-year-old students holding a gymnasium diploma. Then, I present a model where the sample is restricted to the subgroup of highly qualified working-class students. This model includes a wide range of individual and background variables. For comparison, I estimate the same model for the other three subgroups of the population of 25-year-old students holding a gymnasium diploma: one for lower qualified working-class students, one for lower qualified middle-class students, and one for higher qualified middle-class students. All four models are shown in Appendix B.[8]

It should be stressed that the models are descriptive, and parameter estimates should not be interpreted as causal effects.[9] As these models do not account for selection, it is reasonable to assume that the students may have strong unobserved characteristics. Nevertheless, my primary aim is to examine social characteristics patterns for a selected subgroup, not to make causal statements. The findings in this article should hopefully lead to more specific hypotheses to be pursued using models allowing for causal inference.

Results

Transition to university for highly qualified working-class students

To present an overview of the continuation rates in the Danish education system, I begin with Figure 3, which contains a flow chart of the educational transitions of 25-year-olds. As educational transitions vary greatly by gender, I look at the transitions for both men and women. Figure 3 shows that 61% of all 25-year-olds have a working-class origin, but only 39% of these continue to gymnasium. In comparison, only 10% of all 25-year-olds have university-educated parents, but 84% of these continue to gymnasium. Figure 3 documents substantial gender differences: among working-class students with a gymnasium diploma, almost two-thirds are women. Of all working-class students with a gymnasium diploma, 15% graduate with a GPA of 9 or more, and 61% of these continue to university – with nearly twice as many women continuing as men.[10] In contrast, among gymnasium diploma-holding students with university-educated parents, 40% graduate with a GPA of 9 or more and 87% of these continue into a university program.

Figure 3 clearly shows that there is social selection into gymnasium both by gender and social origin. A much higher share of students with university-educated parents continue into gymnasium and obtain a high GPA than their working-class counterparts. In addition, many more working-class women than men continue into gymnasium, a pattern well known from other studies documenting the rise of women in the education system (see e.g., DiPrete and Buchmann 2013).

Figure 3. Educational transitions for highly qualified working class students, 2008-2010. Column percentages.

	All	Women	Men
University	61	58	66
University college or business academy	25	28	19
No higher education	14	14	15
	100	100 (N= 3,681)	100 (N= 1,958)

Gymnasium GPA	All	Women	Men
Gymnasium: 9≤	15	15	14
Gymnasium: <9	85	85	86
Total	100	100 (N= 23,975)	100 (N= 13,936)

	All	Women	Men
University	74	72	77
University college or business academy	18	21	13
No higher education	8	7	10
	100	100 (N= 4,805)	100 (N= 3,059)

Social origin of 25 year olds 2008-2010	All
Working-class parents	61
College educated parents (at least one)	29
University educated parents (at least one)	10
Total (N=158,643)	100

39%

67%

84%

Gymnasium GPA	All	Women	Men
Gymnasium: 9≤	25	27	22
Gymnasium: <9	75	73	78
Total	100	100 (N= 17,610)	100 (N= 13,663)

Gymnasium GPA	All	Women	Men
Gymnasium: 9≤	40	44	35
Gymnasium: <9	60	56	65
Total	100	100 (N= 6,888)	100 (N= 6,293)

	All	Women	Men
University	87	87	88
University coll./business academy	8	9	6
No higher education	5	4	5
	100	100 (N= 3,034)	100 (N= 2,189)

Having presented an overview of the transitions to gymnasium and university, I now model the size of the social gap in continuing into university for highly qualified students from different social origins, controlling for key predictive variables and thereby giving a fuller picture of the continuation gap than those presented in Figures 1 and 3. I use a linear probability model, I control for compulsory school grades and gender, and I interact social origin and gymnasium GPA. Figure 4 shows the continuation gaps for students with academic parents vs. students with unskilled parents by gymnasium GPA (see all estimates in Appendix A).

Figure 4. University continuation gaps by gymnasium GPA for students with academic parents vs. students with unskilled parents. 25-year-olds in 2011.
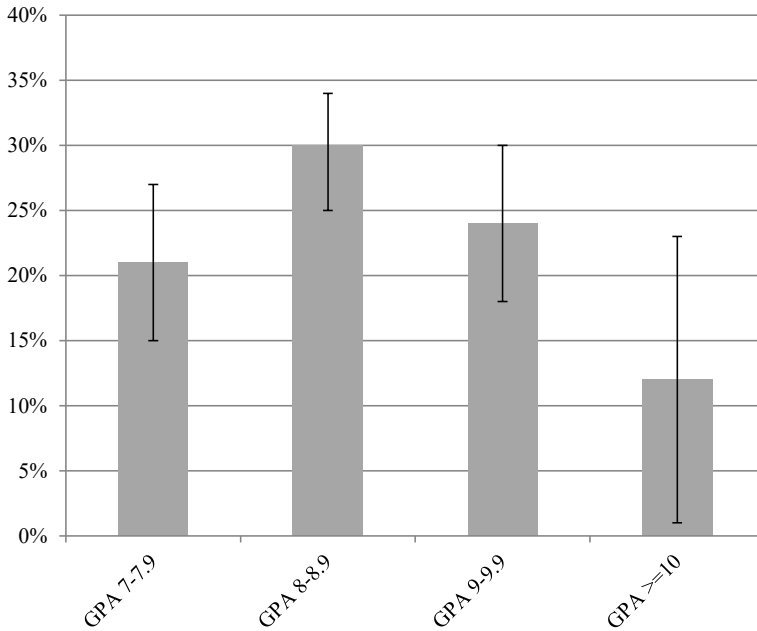
Note: The gaps and confidence intervals are calculated from the linear probability model in Appendix A. Gaps for GPA<7 not significant. Unskilled=parents have no education beyond compulsory school. Academic=at least one parent has a university degree.

Figure 4 shows significant and large disparities in university progression depending on social origin and gymnasium GPA: for those with a GPA in the 9–9.9 range, university progression for students with university-educated parents is 24 percentage points higher than it is for the working-class students. This gap comparable to that reported in Figure 1, but somewhat smaller as Figure 4 includes controls for compulsory school grades. Importantly, the size of this gap is likely to be a conservative estimate, as scholars report that models not accounting for selection in educational transitions (caused by selection on unobservables) are likely to produce downwardly biased social origin effect sizes ("waning coefficients") (see Holm and Jæger 2011). Working-class students making the transition to university will be a more selected group than middle-class students making the same transition. Estimates for both groups will be downwardly biased, but more so for the group of working-class children. In other words, if selection on unobservables could be properly accounted for, the social gap in continuation rates would likely be bigger.

The social characteristics of highly qualified working-class students

I now turn my attention more directly to this article's research question: examining the social characteristics of the highly qualified working-class students who continue to university and those who do not. Table 1 lists individual and social origin characteristics for highly qualified working-class students by their university program participation status. Many substantial differences emerge among those who continue and those who do not.

Table 1. University participation status (completed/enrolled) for highly qualified (GPA>=9) working class children by various characteristics. 25-year-olds in 2008-2010. Row percentages (unless otherwise specified).

	University attendance			University attendance	
	No	Yes	(table continued)	No	Yes
Gender			**Parental characteristics (by child's age 15)**		
Men (N=1,960)	34	66	**Parents net income (1000 DKR) (N=5,320)**	427	447
Women (N=3,686)	42	58	**Parents divorced**		
Minority status			Divorced (N=951)	42	58
Immigrant/descendent (N=205)	19	81	Not divorced (N=4,322)	39	61
Not Immigrant/descendent (N=5,441)	40	60	**Household type**		
Type of Gymnasium attended			Lived with both parents(N=4,322)	39	61
General academic track (N=2,664)	26	74	Biological parent+partner (N=507)	43	57
Higher preparatory track (HF) (N=673)	54	42	Single mother (N=630)	33	66
Mercantile track (N=1,843)	50	50	Single father (N=123)	48	52
Technical track (N=466)	41	59	Other (N=51)	37	63
Average GPA at gymnasium attended (quintiles) (N=5,435)			**Fathers type of working class job**		
Lowest	48	52	Father manual WC (N=2,987)	42	58
2	45	55	Father non-manual WC (N=400)	41	59
3	39	61	Father office WC (N=574)	35	65
4	32	68	Father unclassifiable (N=485)	37	63
Highest	25	75	**Mothers type of working class job**		
Average progression rate to university from Gymnasium attended (quintiles) (N=5,512)			Mother manual WC (N=1,221)	46	54
			Mother non-manual WC (N=2,007)	40	60
Lowest	55	45	Mother office WC (N=1,377)	35	65
2	46	54	Mother unclassifiable (N=560)	36	64
3	34	66	**Parent have had a suspended/custodial sentence in the student's childhood (up to age 15)**		
4	29	71	No (N=5,570)	39	61
Highest	21	79	Yes (N=76)	43	57
Attended middle class compulsory school			**At least one parent have had a medical diagnose in the student's childhood (psychiatric, substance abuse-related somatic, obesity)**		
Aver. parental educ. at school<HE (N=4,987)	40	60	Yes (N=133)	49	51
Aver. parental educ. at school=HE (N=659)	29	71	No (N=5,513)	39	61
Middle class gymnasium			**One or both parents was unemployed (1 week or more)**		
Aver. parental educ. at gymn. <HE (N=4,096)	43	57	Yes (N=1,088)	39	59
Aver. parental educ. at gymn. =HE (N=1,550)	27	73	No (N=4,558)	38	62
Number of siblings (N=5,645)			**Household was in greater Copenhagen**		
0	39	61	Yes (N=1,030)	29	71
1	37	63	No (N=4,450)	41	59
2	42	58			
3	47	53			
4 or more	51	49			
Sibling placement (N=5,645)					
Only child(+twins)	39	61			
1st	48	52			
2nd	40	60			
3rd	44	56			
4th or more	47	53			
Uncle/aunt university educated					
No (N=2,992)	41	59			
Yes (N=225)	31	69			
Grandparent university educated					
No (N=3,541)	41	59			
Yes (N=71)	11	89			
Grandparent college educated					
No (N=3,217)	41	59			
Yes (N=395)	31	69			
Older sibling university educated					
No (N=1,856)	56	54			
Yes (N=796)	29	71			

Notes: N=5,646. For brevity, type of working class job is more aggregated than in Table 2. HE=Higher Education (business academies, university colleges, universities). The variables measuring average GPA and continuation rates to university from Gymnasium attended are constructed using all students in the year the 25-year-old graduated, and the 25-year-old is excluded to avoid endogeneity problems. Compulsory school grades are not available for the 1983-85 cohorts. One could suspect that those highly qualified working-class students not opting for university were negatively selected on traits captured through, for example, compulsory school grades. However, using the same restricted data-set as in Figure 4 reveals that the difference between compulsory school math grades is very small: highly qualified working-class students continuing to university has a mean grade of 8.37 (with SD of 2.13) and those not continuing has a mean grade of 8.31 (with SD of 2.10).

Boys and ethnic minorities attend university more often than girls and ethnic majorities, bearing witness to prior selection: first, as Figure 3 shows, it is a lot more common for women than men to be highly qualified working-class students, and female students tend to choose university colleges much more than their male counterparts. Second, working-class minority students who have achieved a gymnasium GPA of 9 or more are often highly motivated students aiming for lucrative professional university programs such as medicine or engineering (Thomsen 2012).

Table 1 also shows that having a grandparent, aunt/uncle, or older sibling with a university degree increases the likelihood of university program participation. In addition, the likelihood of university program participation is higher if parents hold a non-manual working-class job. Furthermore, the higher the average progression rate to university from the gymnasium attended by the working-class student is, the higher the likelihood that the student will continue into university. We can also see that those that continue into university studies much more often hold a diploma from the general academic track in gymnasium. This is not surprising given that choosing the gymnasium track signals plans to continue into higher education continuation. Students choosing the mercantile track will, for example, be more likely to continue into the business academies than students choosing the general academic track, where the primary aim is a university degree. The table also shows that those not progressing more often have a diploma from the "higher preparation" track – a track often chosen by older students with more disrupted educational pathways.

Linear probability model results

The figures presented in Table 1 indicate substantial and noticeable group differences depending on the university participation status of the highly qualified working-class students. However, I am primarily interested in the net contribution of each variable to the likelihood of continuing to university studies. For this purpose, I turn again to linear probability models. Table 2 shows the model results for the sample restricted to the group of highly qualified working-class students, with university attendance/completion status as the dependent variable.

As mentioned, I will pay particular attention to my three focal points – extended family, type of parental job, and schooling experiences – in my presentation of the model estimates. I use model estimates for the three other groups (Appendix B) as comparison. Obviously, some social characteristics may increase or decrease the probability of university participation in a similar way for all groups, whereas some characteristics may be associated with a particularly high (or low) probability of university participation for the group of interest: the highly qualified working-class students.

The extended family

First, I capture university experiences in the extended family through dummy variables of having university-educated grandparents and university-educated uncles or aunts.[11] In addition, I examine whether having a university-educated older brother or sister might increase the likelihood of university progression. The model estimates in Table 2 show substantial increases in likelihoods of university continuation for working-class students with university-educated grandparents. The probability of continuing to university increases by 23 percentage points for students with university-educated grandparents – keeping in mind that this is a large effect for a small group (only 2% of highly qualified working-class students have university-educated grandparents compared to 8% among highly

qualified middle-class students). In addition, having a university-educated uncle or aunt raises the likelihood of university participation by 6 percentage points, while a university-educated older brother or sister is associated with an increase of 11 percentage points. Having a university-educated older brother or sister seems to be of equal importance across all four groups (see Appendix B), while having a university-educated grandparent seems to be a particular benefit for the group of highly qualified working-class children.[12]

Jæger (2012) finds substantial independent effects of grandparental education on children's educational success, and the results in Table 2 suggest that university-educated grandparents may exert a large influence on their grandchildren's educational choices. This influence may likely come in the shape of direct interactions with grandchildren, or as more indirect influences, where grandparents may pass on resources and educational expectations that the working-class parents in turn pass on to their children ("skipping a generation"). A similar argument can be made for uncles and aunts. In addition, university-educated older brothers and sisters may act as role models, inspiring and increasing educational expectations among their younger brothers and sisters.

Types of parental working-class jobs

Second, I turn my attention to types of parental working-class jobs. Recall that Kahl (1953) suggested that children from working-class homes with high expectations would be more likely to progress to college, and that Krauss (1964) found that children of working-class parents with "white-collar"-like jobs more often would progress than their peers from "blue-collar" working-class homes. I have disaggregated working-class occupations, singling out different types of non-manual or non-traditional working-class jobs: office/sales work (office clerks, sales assistants, etc.), service and care work (hairdressers, health assistants, etc.), and fine craftsmanship (woodworker, ceramist, clockmaker, etc.). I have done so in order to examine whether particular kinds of parental working-class jobs will be associated with higher university continuation rates for highly qualified working-class children. Weeden and Grusky (2005), disaggregating social classes into specific occupations ("microclasses"), argue that norms, values, and socialization processes may differ substantially within traditional "big" social classes, such as the working class. In line with this argument, I expect that some types of working-class occupations will be more associated with university-going expectations than others: for example, children with working-class parents in office and sales jobs could be more inclined to progress to business schools at the university level, and children with working-class parents in the fine crafts could be more likely to continue into creative or liberal arts university studies.

Table 2 reveals some important differences in university status depending on parents' type of working-class job. Looking at the mother's job type first, the estimates support the assumption that non-traditional working-class occupations are associated with higher continuation rates to university: all else being equal, compared to having mothers in manual industrial work (primarily factory and machine work), children are 5 percentage points more likely to progress to university if their mothers are in office/sales jobs, and no less than 20 percentage points more likely if their mothers are occupied within fine crafts. These results show that there is a case for disaggregating working-class occupations, suggesting that within-class gaps in university progression can be explained in part by singling out types of jobs, where parents may reasonably hold educational values that lead their children to have higher expectations for university studies. Importantly, there are no differ-

ences when it comes to the father's type of working-class job: all estimates are negligible and insignificant. However, mothers' job types are also more diverse than fathers' job types – most fathers have manual occupations.[13]

Table 2. Linear Probability Model predicting university enrolment/completion status for highly qualified working-class students.

	University attendance	SE
Grandparent has university college degree (ref: no one has a degree)	0.01	0.03
Grandparent has university degree (ref: no one has a degree)	0.23***	0.05
Aunts or uncles has university degree (ref: no one has a degree)	0.06*	0.04
Older siblings has university degree (ref: no one has a degree)	0.11***	0.02
Number of siblings (ref: no siblings)	-0.01	0.01
Number in sibling row (ref: 1st)	-0.02**	0.01
Mothers type of working class job		
Office/sales work	0.05**	0.02
Craftsmanship	-0.03	0.09
Fine crafts	0.20**	0.10
Service/care work	0.04	0.02
Primary industry work	-0.01	0.08
Technical work	-0.00	0.05
Unclassifiable/other	0.07**	0.03
Fathers type of working class job		
Office/sales work	-0.00	0.02
Craftsmanship	-0.01	0.02
Fine crafts	0.04	0.07
Service/care work	0.01	0.04
Primary industry work	0.01	0.03
Technical work	0.03	0.04
Unclassifiable	0.02	0.03
Average progression rate to university from Gymnasium attended (ref: lowest quintile)		
2nd	0.04*	0.02
3rd	0.11***	0.03
4th	0.17***	0.04
Highest quintile	0.22***	0.05
Average GPA at Gymnasium attended (ref: lowest quintile)		
2nd	-0.02	0.02
3rd	-0.03	0.03
4th	-0.06*	0.03
Highest quintile	-0.08**	0.04
Type of Gymnasium (ref: traditional academic track)		
Higher Preparatory track	-0.26***	0.03
Mercantile track	-0.13***	0.03
Technical track	-0.11***	0.03
Middle-class compulsory school (ref: average parental educ. at school<HE)	0.01	0.03
Middle-class gymnasium (ref: average parental educ. at school<HE)	0.01	0.02
Gender (ref: male)	-0.11***	0.02
Minority status (ref: not immigrants/descendants)	0.14***	0.04
Household type at age 15 (ref: living with both parents)		
Biological parent+partner	-0.05*	0.03
Single mother	0.04	0.03
Single father	-0.14**	0.06
Not living at home	0.09	0.09
One or both parents has a medical diagnose (ref: none has a diagnose)	-0.19***	0.05
Constant	0.61***	0.05
Observations	3,884	
R-squared	0.11	

Note: Includes controls for birth year, and controls (all insignificant) for region of living at age 15, parents' income, parents' unemployment, and if parents has a suspended/custodial sentence. See appendix for all estimates. N for all highly qualified working-class students is 5,147. The lower model N is due to missings on variables. Using clustered standard errors (by compulsory school institution) increases missings, but estimates using clustered standard errors only differ marginally from the model presented where robust standard errors (SE) are used. *** p<0.01, ** p<0.05, * p<0.1.

Third, the model includes several variables capturing educational trajectories and proxies for schooling experiences. Schooling experiences, such as peer influence and role models, may lead some working-class children to develop aspirations for university progression. I argue that such schooling experiences may be reflected in variables capturing 1) whether the working-class student attended a predominantly middle-class compulsory school or gymnasium, and 2) whether the working-class student attended a gymnasium with a high average university continuation rate.

While attending a middle-class school or gymnasium has no effect on university status, attending gymnasium with a high average university continuation rate to university substantially increases the likelihood of university attendance for highly qualified working-class students. Students holding a diploma from a gymnasium in the top fourth and fifth with regard to average university progression rates increase their likelihood of attending university by 17 and 22 percentage points, respectively (compared to those in the bottom fifth). While this pattern is also found among students in the other three groups (see Appendix B), the percentage point increase is particularly high for the group of highly qualified working-class students.[14] In short, being in a social setting where university continuation is widespread seems to be an advantage for working-class students.

While high average university progression rates may increase the likelihood of university attendance, having peers graduating from gymnasium with a high GPA may, in contrast, be an obstacle for the probability of university progression. Having a diploma from a gymnasium with an average GPA in the top fifth decreases the likelihood of university attendance by 8 percentage points (compared to coming from a bottom-fifth gymnasium). These results could suggest that high achieving working-class students may evaluate themselves less favorably and be less likely to progress to university if they have been in an environment with many high achievers (i.e., the frog pond effect, see Davis 1966). However, the results could also be a gate-keeping effect (i.e., an effect of increased competition for sought-after university programs, as the working-class students [unsuccessfully] aim for the same highly selective programs as their high-achieving middle-class counterparts). Regardless, the negative association between university progression and having been in a high-achieving environment is much smaller than the positive association between university progression and having attended a gymnasium where a large share of the students continue to university.[15]

In addition, type of gymnasium attended significantly predicts university status in expected ways: compared to having attended the general academic track in gymnasium, the more applied-oriented tracks of the technical and trade gymnasiums decreases the likelihood of university attendance, most likely because a larger share of these students will pursue applied-oriented studies in business academies or enter into the job market immediately after their gymnasium graduation. Having a diploma from the higher preparatory track makes highly qualified working-class students 26 percentage points less likely to attend a university program than those who graduated from the academic track. This is, again, not a surprising result, given that the higher preparatory track is often chosen by mature students with more disrupted educational pathways for whom university continuation may not be their first choice.

Also evident in Table 1, highly qualified working-class women are less likely to progress to university than men. One explanation for this is that female students with a high gymnasium GPA more often choose university college programs than their male counterparts. The other explanation is that highly qualified working-class men are a more selected group than woman, with possibly stronger unobserved characteristics (such as perseverance, motivation, etc.). A similar explanation applies to why ethnic minority students are more likely to progress: those working-class ethnic minority students that make it through gymnasium and end up with a high GPA are highly motivated students, often aiming for lucrative professional programs at the university level, such as medicine, dentistry, and engineering (Thomsen 2012). Living with a single father is disadvantageous, just like if one or both parents have one of the aforementioned medical diagnoses.

Conclusion

Studies on educational transitions have largely focused on differences in mean educational outcomes *between* social groups, disregarding *within-group* differences. However, the within-group differences in university continuation rates documented in this article are of a magnitude too large to be attributable to random idiosyncratic variations. The magnitude of these differences has led me to investigate the social characteristics of those who continue to university and those who do not among the same group of equally highly qualified working-class children. Building on influential but older studies by Kahl (1953) and Krauss (1964), I have paid particular attention to three areas: university-going experiences in the extended family, qualitatively different types of parental working-class jobs (linked to differences in socialization, beliefs, values, cultures, and expectations), and schooling experiences that may reasonably foster university-going expectations.

My results suggest that university-going experiences among members of the extended family may play a particularly important role in working-class children's route to university. There is a strong association between university progression and having university-educated grandparents in particular, but having university-educated uncles, aunts, older sisters, or older brothers also increases the likelihood of university progression. While older brothers and sisters may assert a direct influence as role models, highly educated grandparents may reasonably raise their grandchildren's expectations through direct interaction with their grandchildren or by passing on educational values and expectations to their children who in turn pass them on to theirs. Importantly, highly educated grandparents may act as a proxy for latent traits that, for one reason or another, did not manifest themselves in the parent-generation, but did so for the children (skipping a generation).

Among the working-class children's own parents, I have argued that educational values may differ substantially. Type of job can act as a proxy for educational values, and some types of parental working-class occupations are more associated with university expectations than others. The model results confirm that non-manual types of working-class jobs – particularly, the fine crafts, but also office/sales and service/care work – are associated with high propensities for university continuation. Notably, these differences pertain only to the mother's type of working-class job, as no differences are found for fathers. The fact that there are no significant differences for the father's type of working-class job may be related to the fact that this type of job is more homogenous, with the ma-

jority being occupied within traditional, manual working-class jobs. The lack of differences may, however, also be an indicator of the importance of mothers in familial socialization, interaction, and communication (i.e., in the familial processes leading to the intergenerational transfer of educational expectations). Although much work still needs to be done, other studies also point to the importance of uncovering the influence of mothers on their children's educational trajectories (Ball 2003; Beller 2009; Lareau 2011; McLanahan 2004).

While the extended family and parental type of job variables may act as proxies through which educational expectations are transferred to the working-class child, the educational institutions may be another important factor. The model results show that there is a large advantage in having a diploma from a gymnasium with high average university progression rates. As highly qualified working-class students are particularly encouraged to progress to university in educational environments with high average progression rates, their university-going peers may play an important role in working-class students' decision to continue to university.

Explaining secondary effect differentials, that is, social disparities in educational choices net of cognitive abilities, remains a major task for sociologists. Raising educational expectations for working-class students is crucial if expectation and progression gaps between the social classes are to be lessened. This article has pointed to important areas of attention, but as the models clearly do not capture the whole story, there is a need for further examinations of the transmission mechanisms that prompt some working-class children to progress to university and some not to. Large-scale qualitative studies may aid in uncovering the origins of parental university-going ambitions, or "getting-ahead" strategies, and how they are passed on to their children, resulting in displays of perseverance, determination, high hopes, and high expectations. If some types of parental working-class jobs are associated with increasing propensities for university progression, it could prove rewarding to investigate how expectations form in different working-class families. In addition, if motivation for university continuation is increased by attending gymnasiums with high average progression rates, it may be worth considering whether gymnasiums, particularly those with a high proportion of working-class students, could work with mentors and advisors in order to increase progression rates for these students (see e.g., Avery 2010).

Importantly, the premise of this article has rested on the argument that equally highly qualified children ought to have roughly similar average university continuation rates regardless of social origin. Yet, scholars have questioned whether inequality in preferences is necessarily inequality in educational opportunity (e.g., Swift 2004). Gifted working-class children may choose different but equally successful paths in life, leading to high economic returns despite them not being highly educated. However, the data do not support this assumption: the average net income among highly qualified working-class children aged 45 in 2010 shows that those who obtained a university degree earned 47% more than those who did not (DKK 474,000 vs. DKK 323,000).[16] Strictly speaking, we cannot deduce that the students without a university degree would have enjoyed the same income as their peers with a degree had the students themselves obtained a degree from university. However, the income gap is unlikely to be attributable solely to selection (i.e., that the students without a degree would have some unobservable negative traits that would have led them to have lower economic returns at age 45 regardless of them obtaining a university degree). The strong negative correlation between high income and not having a university degree most likely reflects that foregoing university is not a financially lucrative strategy. In addition, the argument that inequality in prefer-

ences is not necessarily inequality in educational opportunity overlooks the many ways in which working-class children are structurally excluded from choosing university studies in the same numbers as their middle-class counterparts, ranging from differences in familial resources and child-rearing techniques to educational barriers, including teacher/supervisor biases and experiences of being estranged from and unfamiliar with middle-class educational settings. In short, highly qualified working-class children may choose to forego university, but structural or institutional barriers may also discourage them from doing so.

Notes

[1] The grading scale was changed in 2007, but for the cohorts analysed in this paper, the old grading scale from 0–13 applies.

[2] In 2006, 92% of all study places offered in university institutions did not require a GPA greater than 8.9.

[3] Unless otherwise specified, I use the general terms "college" and "higher education" interchangeably.

[4] In two later studies, Marjoribanks (1995, 1997) identifies similar "getting-ahead" and "getting-by" parental strategies, finding support for the importance of parents valuing upward mobility.

[5] To increase the size of the target group, highly qualified working-class students, I pool data for three cohorts: 25-year-olds born from 1983–1985.

[6] There are app. 2700 citizens per parish in Denmark.

[7] Author's own calculations based on administrative data.

[8] The linear probability model coefficients presented in this article are similar to the derived predicted average and marginal effects for the corresponding logit and probit models (see Angrist & Pischke 2009: 103ff for a discussion on using the models interchangeably).

[9] The models presented do not account for selection in educational transitions. I have tried to set up several models accounting for selection, such as Heckman's selection model (Stata's Heckprob command) and the multinomial transition model (Karlson 2011). While these models have advantages in accounting for selection in educational transitions when using a relatively small number of explanatory variables, they do not work well if the research question is more open-ended and the researcher wants to include a large number of predicting variables with many potential interactions and with different variables at different levels in the transition models. In addition, models accounting for selection often require an instrument variable to provide exogenous variation in the probability of making the transition to the next educational level (i.e., a variable that affects the probability of university progression, but not through any of the other independent variables). It is notoriously difficult to identify credible instrument variables for these models. None of the models accounting for selection worked satisfactorily, primarily because my aim is to examine a large number of social characteristics within a subpopulation of highly qualified working-class students. As a result, I have chosen linear probability models, finding these models to give the fullest and most easily interpretable depiction of the variables.

[10] As I focus on highly qualified working-class students in Figure 3, that is, students with a GPA of 9 or more, where parents are unskilled or hold a VET diploma, the university continuation rate is somewhat higher than the ones depicted in Figure 1, where the group was more disaggregated (differing between unskilled and vocationally trained parents and only looking at the 9–9.9 GPA range).

[11] As the level of education was much lower in the grandparents' generation, I include university college for grandparents.

[12] Estimates are significantly different from estimates in the other three models shown in Appendix B.

[13] I ran the model separately for sons and daughters to see if the pathways of sons would be more strongly associated with their fathers' types of job. First, running the models separately for sons and daughters did not substantially change the size of the estimates in general, second, the mothers' types of job were associated with university progression the same way for sons and daughters, but the effects were larger for daughters.

[14] Estimates are significantly different from estimates in the other three models shown in Appendix B.

[15] I tested if the model was over fitted by including stepwise the variables capturing if the student had a diploma from 1) a high achieving gymnasium and 2) a gymnasium with a high average progression rate. This did not change the size and direction of the estimates.

[16] Author's own calculations based on administrative data.

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Appendix A. Linear Probability Model predicting University Attendance for students with a Gymnasium diploma. 25-year-olds in 2011.

	University attendance	SE
Female	-0.07***	0.01
Exam grades compulsory school – Danish	0.01***	0.00
Exam grades compulsory school – Math	0.01***	0.00
Parental education (ref: unskilled)		
VET (no higher)	-0.01	0.02
Business academy/University college (no higher)	0.02	0.02
University degree (at least one)	0.06*	0.04
Gymnasium GPA (ref: below 7)		
7-7.9	0.09***	0.03
8-8.9	0.26***	0.03
9-9.9	0.41***	0.04
10-13	0.59***	0.10
Parental education*GPA (ref: unskilled)		
VET*7-7.9	-0.02	0.03
VET*8-8.9	-0.01	0.03
VET*9-9.9	0.08**	0.04
VET*10-13	0.07	0.10
Business academy/University college*7-7.9	0.03	0.03
Business academy/University college*8-8.9	0.10***	0.03
Business academy/University college*9-9.9	0.17***	0.04
Business academy/University college*10-13	0.11	0.10
University*7-7.9	0.12***	0.04
University *8-8.9	0.21***	0.04
University *9-9.9	0.23***	0.05
University *10-13	0.11	0.10
Constant	-0.03	0.02
Observations	28,144	
R-squared	0.27	

Note: As compulsory school grades are not available before 2002, at which time the 25-year-olds born 1983-85 has left compulsory school, the model is run on a less rich data-set for 25 year olds in 2011, with fewer variables available than those used in later models. Compulsory school grades only contribute marginally to university attendance status. Robust standard errors. *** p<0.01, ** p<0.05, * p<0.1.

Appendix B. Linear Probability Model predicting University Attendance for highly qualified working-class students (model A), lower qualified working-class students (model B), lower qualified middle-class students (model C), and highly qualified middle-class students (model D)

	Model A Sample: highly qualified working-class students		Model B Sample: lower qualified working-class students		Model C Sample: lower qualified middle-class students		Model D Sample: highly qualified middle-class students	
	University attendance	SE	University attendance	SE	University attendance	SE	University attendance	SE
Gender (ref: male)	-0.11***	0.02	-0.06***	0.01	-0.07***	0.01	-0.05***	0.01
Minority status (ref: not immigrants/descendants)	0.14***	0.04	0.11***	0.01	0.05***	0.01	0.07***	0.02
Number of siblings (ref: no siblings)	-0.01	0.01	-0.02***	0.00	-0.04***	0.01	-0.05***	0.01
Number in sibling row (ref: 1st)	-0.02**	0.01	0.00*	0.00	0.01*	0.00	0.00	0.00
Living in the capital area at age 15 (ref: living elsewhere)	0.02	0.02	-0.02***	0.01	-0.01	0.01	0.00	0.01
Birthyear (ref: 1983)								
1984	0.04**	0.02	0.00	0.01	0.02**	0.01	0.02*	0.01
1985	0.02	0.02	-0.00	0.01	0.01*	0.01	0.02**	0.01
Average progression rate to university from Gymnasium attended (ref: lowest quintile)								
2nd	0.04*	0.02	0.05***	0.01	0.04***	0.01	0.08***	0.02
3rd	0.11***	0.03	0.06***	0.01	0.07***	0.01	0.09***	0.02
4th	0.17***	0.04	0.09***	0.01	0.10***	0.01	0.12***	0.02
Highest quintile	0.22***	0.05	0.17***	0.02	0.14***	0.02	0.16***	0.03
Average GPA at Gymnasium attended (ref: lowest quintile)								
2nd	-0.02	0.02	-0.01	0.01	0.02*	0.01	-0.02	0.02
3rd	-0.03	0.03	-0.00	0.01	0.01	0.01	-0.04*	0.02
4th	-0.06*	0.03	-0.02*	0.01	-0.01	0.01	-0.06***	0.02
Highest quintile	-0.08**	0.04	-0.05***	0.01	0.01	0.01	-0.07***	0.02
Type of Gymnasium (ref: traditional academic track)								
Higher Preparatory track	-0.26***	0.03	-0.16***	0.01	-0.23***	0.01	-0.25***	0.02
Mercantile track	-0.13***	0.03	-0.06***	0.01	-0.09***	0.01	-0.16***	0.02
Technical track	-0.11***	0.03	-0.05***	0.01	-0.12***	0.01	-0.12***	0.02
Middle-class comp. school (ref: average parental educ. at school<HE)	0.01	0.03	0.03***	0.01	0.05***	0.01	0.03***	0.01
Middle-class gymnasium (ref: average parental educ. at school<HE)	0.01	0.02	0.00	0.01	0.00	0.01	-0.02	0.01
Mothers type of working class job (ref: manual industrial work)								
Office/sales work	0.05**	0.02	0.02**	0.01	NA		NA	
Craftsmanship	-0.03	0.09	-0.03	0.02	NA		NA	
Fine crafts	0.20**	0.10	0.02	0.04	NA		NA	
Service/care work	0.04	0.02	-0.00	0.01	NA		NA	
Primary industry work	-0.01	0.08	0.03	0.03	NA		NA	
Technical work	-0.00	0.05	0.07***	0.02	NA		NA	
Unclassifiable/other	0.07**	0.03	0.02**	0.01	0.06***	0.02	0.06**	0.03
Fathers type of working class job (ref: manual industrial work)								
Office/sales work	-0.00	0.02	0.03***	0.01	NA		NA	
Craftsmanship	-0.01	0.02	0.01	0.01	NA		NA	
Fine crafts	0.04	0.07	0.02	0.02	NA		NA	
Service/care work	0.01	0.04	0.03**	0.01	NA		NA	
Primary industry work	0.01	0.03	0.02**	0.01	NA		NA	
Technical work	0.03	0.04	0.03**	0.01	NA		NA	
Unclassifiable/other	0.02	0.03	0.04***	0.01	0.08***	0.01	0.06***	0.02
Parents net income (1000 DKR)	0.00	0.00	-0.00	0.00	0.00***	0.00	0.00	0.00
Parent unemployed (ref: not-unemployed)	0.00	0.02	0.00	0.01	0.00	0.01	0.01	0.01
Household by age 15 (ref: lived with both parents)								
Biological parent+partner	-0.05*	0.03	-0.02***	0.01	-0.02***	0.01	-0.01	0.01
Single mother	0.04	0.03	0.01	0.01	0.00	0.01	0.01	0.01
Single father	-0.14**	0.06	0.03	0.02	-0.04*	0.02	-0.00	0.03
Not living at home	0.09	0.09	-0.05***	0.02	-0.04	0.04	0.01	0.06
Parent has a suspended/custodial sentence (ref: no sentence)	0.03	0.07	-0.05***	0.02	0.00	0.03	0.06	0.05
One or both parents has a medical diagnose (ref: none have a diagnose)	-0.19***	0.05	-0.02*	0.01	0.00	0.02	-0.01	0.03
Grandparent has university college degree (ref: no one has a degree)	0.01	0.03	-0.00	0.01	0.00	0.01	0.00	0.01
Grandparent has university degree (ref: no one has a degree)	0.23***	0.05	0.04	0.03	0.06***	0.01	0.01	0.01
Aunts or uncles has university degree (ref: no one has a degree)	0.06*	0.04	0.03*	0.02	0.04***	0.01	0.02	0.01
Older siblings has university degree (ref: no one has a degree)	0.11***	0.02	0.09***	0.01	0.10***	0.01	0.06***	0.01
Constant	0.61***	0.05	0.21***	0.01	0.25***	0.02	0.70***	0.04
Observations	3,884		28,707		28,853		12,074	
R-squared	0.11		0.07		0.10		0.09	

Notes: Highly qualified=GPA>=9; Lower qualified = GPA<9; Working-class=parents with no more than a VET education in working-class jobs (or unemployed) at child's age 15. Middle-class=at least one parent has a higher education and/or non-working class jobs (or unemployed) at child's age 15. Robust standard errors.
*** p<0.01, ** p<0.05, * p<0.1.

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