

Parental Background as a Determinant of Educational Outcomes and the Impact of Educational Expansion in Germany

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Abstract:

This paper aims to contribute to discourse related to the question: “How does parental background influence educational attainment of offspring and what has been the impact of educational expansion in Germany?” The paper suggests that additional training acquired outside the educational system could be a factor contributing to inequalities in the German context. As seen in various official data, social inequality is a significant and important issue in the German education system, even after years of massive educational expansion offering more and more students from various background increased access to higher education.

Key words: education, inequality, parental background, further and additional training

Introduction

According to the PISA-Study 2015¹, Germany's students perform slightly above the OECD average. However, compared to other Western countries, social inequality in educational performance is relatively high in Germany: 16% of the variance of the performance in the PISA-Study can be explained by socio-economic background, which is far above the OECD average of 13% (Ibid). Even though the effect of the socio-economic background on performance has declined in recent years, Germany's high disparity level is still remarkable.

There is an ongoing debate in Germany about the education system and how its specific institutional structure contributes to social inequalities. This debate often centers around the hierarchical tracks offered in the system and the early selection of students into these tracks, as early as ages 10 to 12. Whereas left-wing politicians argue that (early) tracking fosters inequality, conservatives point to advantages of tracking due to efficient learning in homogenous classes.

In the following, I will focus on how parental background influences educational performance and attainment, and whether and in what respect this association has changed in the period of educational expansion. In addition, I will discuss further and additional training outside the

1 OECD, Country Note Germany, PISA-Study 2015 (Programme for international student assessment 2015, Available from: <http://www.oecd.org/pisa/PISA-2015-Germany.pdf> [16.04.2018]).

educational system as another factor exacerbating social inequalities².

This paper is meant to provide an example of how hypotheses regarding inequality in education may be constructed and to stimulate further construction of hypotheses in this field. Using the methodological individualism approach, a hypothesis about the change in the German education system will be derived.

The German education system

Under the German federal system, education is the responsibility of each state (Land), a situation that leads to significant differences in educational administration among states. Children enter school at age six and primary school lasts four years (in some federal states primary school lasts for six years). At the end of primary school, pupils have to choose between different hierarchically ordered tracks. Traditionally, these tracks consisted of **Hauptschule**, the lowest track, **Realschule**, a medium track, and **Gymnasium**, the highest/academic track. Both, *Hauptschule* and *Realschule* prepare students for non-academic careers. Successfully completing *Gymnasium* with what is known as the *Abitur* is the prerequisite for entering higher education. In the 1970s so called **Gesamtschule** (comprehensive schools offering more than one track) were introduced. Since the 2000s, in several federal states the lowest track *Hauptschule* was abolished and replaced with schools offering low and medium tracks under the same roof. In addition, the university entrance qualification was diversified allowing students to obtain either a lower certificate permitting entry into *Fachhochschulreife* (universities of applied sciences) and a higher certificate offering access to the higher tier (universities). Since most of the well-paid jobs are offered to higher education-graduates, attending the right school track is -at least statistically- crucial for one's later earnings. Why may educational tracking foster social inequalities? Parents with higher education themselves are more familiar with the demands and benefits of attending and graduating from *Gymnasium* and are therefore more likely to encourage their child to enter the highest track. Parents with lower education may be more reluctant because they are less familiar with the system, may fear the consequences of their child not doing well in a *Gymnasium*, or may want their child to leave school and enter the labor market early.

Educational expansion

2 Much has been written about the topic of inequality in education in Germany. Effects of ethnicity (Kirsten, C. & J. Dollmann: "Sekundäre Effekte der ethnischen Herkunft: Kinder aus türkischen Familien am ersten Bildungsübergang". in: Baumert, J., K. Maaz, U. Trautwein (ed.) *Zeitschrift für Erziehungswissenschaft*, VS Verlag für Sozialwissenschaften, Wiesbaden 2009.), and on risks (Beck, U., *Risikogesellschaft*, Frankfurt am Main 1986.) and delinquency (Geißler, R., *Kein Abschied von Klasse und Schicht. Ideologische Gefahren der deutschen Sozialstrukturanalyse*, Kölner Zeitschrift für Soziologie und Sozialpsychologie 48 (1996), S. 319–338.) has been studied.

In the last 60 years, during a period known as “educational expansion”, the share of students attending *Hauptschule* has declined, while the share of students attending *Gymnasium* increased (Statistisches Bundesamt, different years a). Prior to this change, students attending *Gymnasium* had been a small “elite group” (about 10% of the total number of students). Mostly children of highly educated parents attended *Gymnasium*. Nowadays, almost 40% of students in Germany attend *Gymnasium*, which is why these schools have lost their former elite status. In contrast, while 60 years ago, 75% of students were attending *Hauptschule*, today only 10% do so³. These 10% of students remaining at the *Hauptschule* today have gained for themselves a selective status, but in a negative sense: Students with poorly educated parents or coming from migrant families are overrepresented⁴. This social selectivity may impose several problems for the students. An over-proportional number of students with problems at home or general learning difficulties are put together, hampering each other's efforts to achieve educational success. In addition, being a socially highly selective group, the students at the *Hauptschule* are often seen in a negative light by the general public. Opportunities in the labor market for school leavers from *Hauptschule* have decreased as employers prefer applicants with higher educational qualifications.

Another consequence of this educational expansion is an increase in the supply of high-skilled labor. As more and more students leave general school with the *Abitur*, more and more school leavers are entitled to enter higher education and are actually doing so. In 2016, there were more than 3.5 times as many students in Germany as in 1975⁵, which cannot be fully explained by the increase in population resulting from reunification⁶.

3 Statistisches Bundesamt, Fachserie 11, Reihe 1, Schüler/ -innen nach Klassen / Jahrgangsstufen, Schularten und Geschlecht, (different years b).

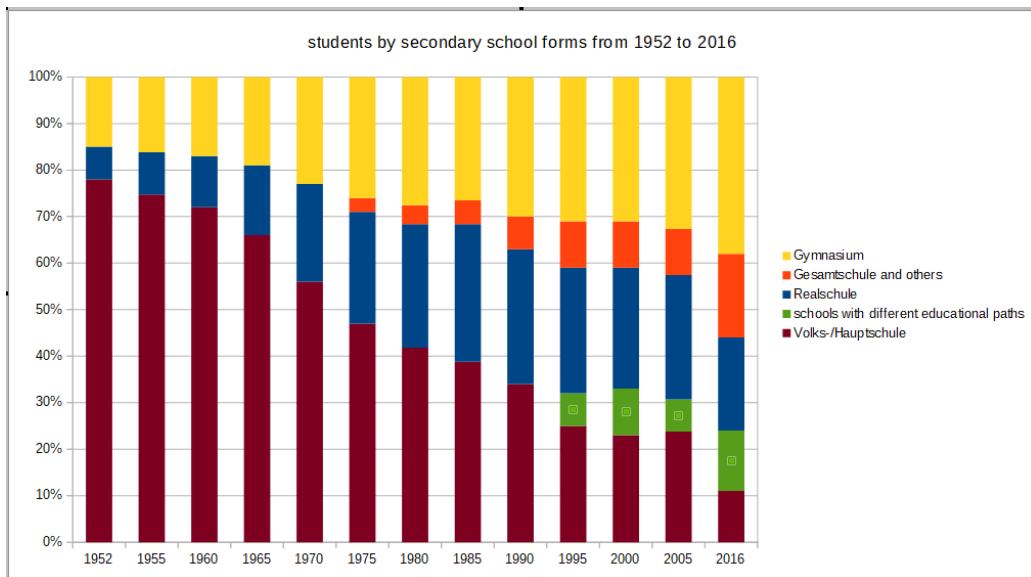
4 Statistisches Bundesamt, Statistisches Jahrbuch 2017, (2017) Available from: https://www.destatis.de/DE/Publikationen/StatistischesJahrbuch/Bildung.pdf?__blob=publicationFile [09.01.2018].

BAMF (Federal office for migration and refugees), working paper 13 (2008), Available from: https://www.bamf.de/SharedDocs/Anlagen/DE/Publikationen/WorkingPapers/wp13-schulische-bildung.pdf?__blob=publicationFile [03.05.2018].

5 Statistisches Bundesamt, 3.4 Schüler/ -innen nach Klassen / Jahrgangsstufen, Schularten und Geschlecht (2016), Available from:

https://www.destatis.de/DE/Publikationen/Thematisch/BildungForschungKultur/Schulen/AllgemeinbildendeSchulen2110100177004.pdf?__blob=publicationFile [27. 12. 2017].

6 The students in the GDR have not been included in the statistic until the reunification 1990. This contributes to the multiplication of the number of students in Germany over the last 40 years. However, the population of the GDR is not big enough to explain it to a full extend.



Source: own figure, from Statistisches Bundesamt, different years a.

There is a large body of research regarding reasons for this educational expansion. Geißler⁷ states that there is a functional need for a specialized workforce in modern societies. Because of this growing demand, the labor supply will adapt to this need. This happens when higher education enables younger members of the labor force to fit into specialized human capital-intensive jobs. Conflict theory⁸ predicts a self-reinforcing investment in education: People invest more in education because of its increased importance for success in their careers. Commonly, this results in a situation in which each individual sees others investing in their education so, in order not to act against social norms or not to downgrade oneself in comparison, each individual faces an extra incentive to invest in his or her own education.

Observed inequality in Germany

Data by the Statistisches Bundesamt⁹ (2017) shows extreme differentiation in enrollments based on parental educational levels. At the *Hauptschule*, the parents of enrollees are for the most part poorly educated. Only a small minority has parents who are university graduates. The opposite situation obtains at the *Gymnasium* (see table 2). As expected, students with highly educated parents are more likely to enter the *Gymnasium* after primary school, while students with low educated parents are more likely to enter *Hauptschule*. This is somehow puzzling because increased access to the highest educational paths due to educational expansion would suggest a decrease in inequality.

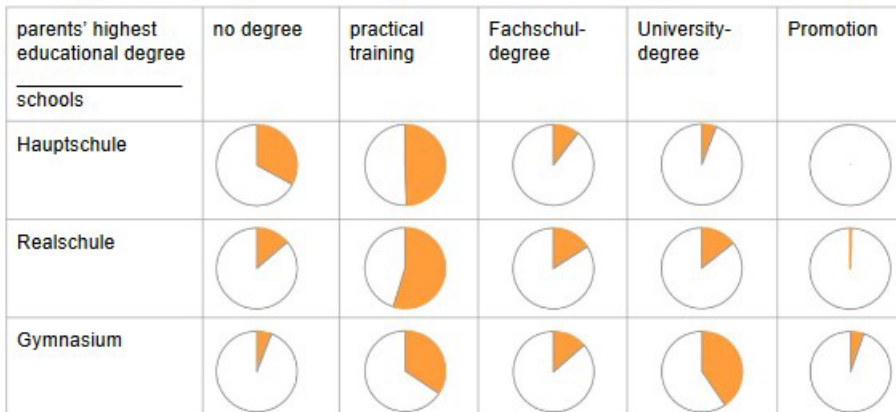
7 Geißler, R., *Die Sozialstruktur Deutschlands*. Wiesbaden: Verlag für Sozialwissenschaften (2014).

8 Collins, R., *Functional and Conflict Theories of Educational Stratification*, *American Sociological Review*, 36 (1971), pp.1002-1019.

9 Statistisches Bundesamt, *Statistisches Jahrbuch 2017*, (2017) Available from: https://www.destatis.de/DE/Publikationen/StatistischesJahrbuch/Bildung.pdf?__blob=publicationFile [09.01.2018].

This should also be the case because small, highly-educated elite groups are no longer capable of defending their status against the rest of society.

Shares of students attending different school forms classified according to their parents' highest educational degree



Source: Statistisches Bundesamt 2017¹⁰

Individualistic theory

The following theoretical considerations are built upon Pierre Bourdieu's work on different forms of capital in society. Parents offer social, cultural and economic resources (“capital”) to their children that affect their educational attainment. In the educational sector, cultural, social and economic resources¹¹ can be transformed into opportunities, which can in turn be transformed into own outcomes, meaning the cultural, social and economic capital of offspring during work life. For example, the social networks of parents can be mobilized to impact positively their children’s educational outcomes; cultural capital refers to cultural resources such as books, familiarly with arts and manners that affect educational success. Likewise, economic resources help to bear the direct and indirect costs of education.

Parents’ resources may have an impact on their children’s success in the educational system, reproducing the inequality existing in the parents’ generation. The educational system structures this reproduction by defining choices and subsequent opportunities, e.g. by restricting access to higher education to *Abitur*-holders. While this system has remained virtually unchanged since the foundation of the Federal Republic, during this same period, the education expansion took place and the shares of students attending the different school forms changed significantly affecting

10 Statistisches Bundesamt, Statistisches Jahrbuch 2017, (2017) Available from: https://www.destatis.de/DE/Publikationen/StatistischesJahrbuch/Bildung.pdf?__blob=publicationFile [09.01.2018].

11 Bourdieu, P., Die feinen Unterschiede. Kritik der gesellschaftlichen Urteilskraft. Suhrkamp, Frankfurt am Main 1982, (French: La distinction. Critique sociale du jugement. Paris 1979).

opportunity structures. In other words, ratios of students attending various schools may have changed but resources allocated at the beginning of an educational career continued to become transformed into outcomes.

The role of further and additional training

In this part of the paper, the hypothesis of the role of further and additional training is developed. James Coleman's "Coleman-boat" is employed as a meta-theoretical concept¹² to derive this hypothesis. Inequality in labor market outcomes is to a great extent generated by employers, because they have the power to decide who will get a certain job and who will not. Assuming that the majority of employers are rational and not corrupt, they will pick candidates who are the most suitable for job openings. The suitability of an employee is often determined by official school or university grades and by qualifications acquired through additional training. Assuming that the supply of highly educated graduates grows faster than demand, it stands to reason that competition among candidates will increase. In this case, further and additional training may help students to differentiate themselves from their peers and to increase their individual labor market chances. If the acquisition and participation in further and additional training is associated with parental background in the same way as discussed above, then advantages are secured and social inequality is maintained. By further and additional training, I mean (costly) services aimed either to reinforce success within the official education system or to help students to gain knowledge in addition to what can be acquired through public education, such as private lessons or language- or EDV certificates. If all employing organizations face the same oversupply of applicants, then the importance of additional qualifications increases and a general internalization of further and additional training into the application process may occur.

This general internalization creates an incentive for students and/or their parents to invest in further and additional training. Now, the different endowment of resources comes into play: Some parents can afford much additional training, others only a little and others yet, none at all. Indeed, actual data shows that high-income households spend not only absolutely, but also relatively more on education than low-income households¹³ (see table below). In a competitive labor market, the students with more additional training may have advantages over students with none. Therefore, the result is that social inequality, generated by monetary inequality in the parents' generation is passed on to the next generation.

12 Coleman, J. "Social Theory, Social Research, and a Theory of Action", in: *The American Journal of Sociology* Vol 91 (1986), pp. 1309-1335.

13 Statistisches Bundesamt, Fachserie 15, *Wirtschaftsrechnungen, Konsumausgaben privater Haushalte* (2013).

	monthly household income in € / percentage of expenditures							
	<900	900-1300	1300-1500	1500-2000	2000-2600	2600-3600	3600-5000	5000-18000
Private consumption in total	872	1136	1384	1640	2055	2557	3239	4504
% for education	0.7	0.7	0.7	0.8	0.7	0.8	0.9	1.1
total amount for education in €	6.10	7.95	9.89	9.84	14.39	20.46	29.15	49.54

note: 1€ equals approximately 135 JPY

Source: Statistisches Bundesamt 2013¹⁴

Conclusion

The debate about the education system is still ongoing. Many factors contribute to the educational success of a student. In this paper, the hypotheses building on the effect of the parental background has been pushed a little bit further. Additional training may offer a path through which a part of the inequality in Germany can be explained.

One interpretation of this internalization of further and additional training in the application process is that monetary capital has gained importance in predicting success in job-hunting. However, educational level of the parents and their income are highly correlated, so it is not a straightforward solution to the puzzle. It could also be that the high level of inequality is rather due to processes of conveying cultural capital between parents and children. It remains for further research to separate the effects of cultural and economic capital more clearly, through quantitative analysis of both parent-child relations and monetary inequality.

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¹⁴ Ibid.

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