

An experiment on the influence of learning Latin in school on labour market chances in Germany – A profitable investment?

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Abstract

Globalisation makes transnational human capital, like foreign language skills, an increasingly important resource on the labour market. In this context, it is surprising that about one third of German pupils attending the most advanced type of secondary school (Gymnasium) choose to learn Latin as a foreign language.

This article raises the question about the influence of deciding for Latin as foreign language in school on the chances in the labour market. Based on different theoretical approaches expectations about the influence of a classical language profile on the chances of being invited to a job interview are derived. To test these implications, a field experiment was conducted, in which applications with different language profiles were sent out to job postings for executive positions throughout Germany. The results show that choosing a classical language profile increases applicants' job opportunities.

Keywords

Quasi-Experiment, Foreign Languages, Labour Market Inequalities, Educational Inequalities, Discrimination

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1 Introduction

On their way to attain the highest secondary degree in Germany (Abitur), pupils must decide for at least two foreign languages (KMK, 2006). In grade five they have to choose their first language, and in grade six or seven they choose their second language. Although there are lots of possible combinations, it is compulsory to learn English from the fifth grade on and most common to decide between Latin and French as second foreign language in the sixth grade.

Since globalisation is proceeding, transnational human capital, such as foreign language skills, becomes increasingly important for chances on the German labour market (Gerhards & Hans, 2013). In this context, it is a surprising phenomenon that one third of all pupils attending Gymnasium opt against the obvious logic of learning a modern language, and choose Latin as foreign language. Beyond that, the proportion of pupils learning Latin increased between 1999 and 2009 from 26% to 32% (Federal Statistical Office, 2013).

Inspired by this phenomenon, I ask the question what are the effects of learning Latin instead of a modern foreign language on the chances in the labour market?

From human capital theory, signalling theory and the homophily thesis hypotheses are derived about the causal impact of the foreign language profile in school on the labour market chances. To test these a field-experiment has been conducted in which applications of University Graduates has been sent in response to advertisements for executive positions. As dependent variable the proportion of invitations to job interviews has been measured.

For the construction of a theoretical framework and the testing of the derived hypothesis three different language profiles are defined as relevant to be differentiated.

Table 1: Possible language combinations at Gymnasium

| | 1. Foreign language | 2. Foreign language | 3. Foreign language | Profile |
|-----------|---------------------|---------------------|---------------------|--------------------|
| A_{EF} | English | French | None | Purely modern |
| A_{EL} | English | Latin | None | Slightly classical |
| A_{LE+} | Latin | English | Ancient Greek | Strongly classical |

When pupils enter Gymnasium in grade five, they can decide which language they want to learn from grade five on (first foreign language) and which one they want to learn from grade six or seven on (second foreign language). If pupils decide for English as their first foreign language and French as their second foreign language, this will be considered a purely modern language profile (A_{EF}). If pupils decide for English as first language followed by Latin as second language, this will be called a slightly classical profile (A_{EL}). The third option

is to decide for Latin as a first language and English as a second language and will be referred to as strong classical profile (A_{LE+}) (see Table 1). In the case of a strong classical profile, pupils learn both Latin and English from grade five on, but fewer hours are spent on learning English than would have been spent if English was chosen as first foreign language. To test for the impact of humanist language profile the strong classical profile includes learning Ancient Greek as third foreign language.

2 Theoretical Expectations about the causal influence

The language combinations as signal for transnational human capital

According to human-capital theory (Becker, 2009) educational certificates reflect the productivity of an individual. The higher the educational certificate, the higher the productivity and consequently the labour market chances and income that can be expected. Thus educational certificates provide information about the knowledge an applicant has. Based on that information applicants can be compared with regard to the expected productivity.

As pupils can choose individual profiles in the German educational systems, educational certificates do not only differ in terms of their vertical level, but also with respect to the horizontally differentiating profiles. For an occupational position where good skills in math are important, a schooling profile in math signals a potentially higher productivity than a schooling profile in art would. In the course of proceeding globalization (KOF, 2016) foreign language skills are of increasing importance on the job market (Gerhards & Hans, 2013). As Gerhards and colleagues show, the need for foreign language skills is especially emphasized in job advertisements which focus on applicants with a higher educational degree (Gerhards et al., 2016).

Baumert and colleagues empirically find evidence, that learning Latin as first foreign language in the Gymnasium has a negative impact on the development of English skills (Baumert et al., 2010). The reason for this is, that when Latin and not English is chosen as first foreign language, the number of lessons taught in English is decreased. Hence the signal that an applicant has transnational human capital decreases the stronger the classical profile is. Hence the expected productivity of an applicant decreases the stronger the classical profile. From that the expectation follows, that the proportion of positive responses should decrease, the stronger the classical profile is as this shows an increasing lack of transnational capital (Human-capital-hypothesis: $(A_{EF} > A_{EL} > A_{LE+})$).

If this expected effect is truly the consequence of an attribution of productivity with regard to the transnational capital, the extent to which applicants with a modern profile are favoured over applicants with a classical profile should vary depending on other signals for transnational capital (e.g. stays abroad). To test this expectation the applications in the field experiment did not only differ with regard to their language profile. Additionally they varied according to whether an applicant went to a stay abroad during the educational career or not. In absence of a stay abroad as a signal for transnational capital, the advantage of the modern language profile over the classical profiles should be more articulated if the language profiles are a reflection of transnational human-capital (Interaction-hypothesis).

The language combination as signal for the habitus of the upper class

Another expectation about the influence of the language profile in school on the chances at point of career entry can be derived from signaling-theory (Spence, 1973; Stiglitz, 1975). To reduce insecurity about the expected productivity of an applicant, employers search for signals about the expected productivity which are of low costs but reliably. Signaling-theory implies that the value of educational certificates does not primarily lie in the proof of human-capital acquired at school. Rather there are special characteristics associated with the achievement of a certain certificate which are of an independent significance from the knowledge learned in school. Following this reflection the signaling-value of the Abitur does not lie in proofing that the knowledge conveyed through the syllabus has been incorporated. Rather it is a signal for individual characteristics such as diligence or a good working method, which are potentially associated with reaching a higher certificate. The empirical works of Jackson (Jackson, 2001; 2009) and Hartmann and Kopp (Hartmann & Kopp, 2001) give an insight about the personal characteristics which are relevant for attaining an executive position.

Jackson analyses which requirements are called for in job advertisements. She finds out that not only academic certificates but also social skills and other personal characteristics are of high importance, especially for jobs of high status (Jackson, 2001). The relevance of such personal characteristics is emphasized by the work of Hartmann and Kopp too. Based on qualitative interviews with different board members they verify the importance of having the "right" habitus in the recruitment of executive staff. Four characteristics are mentioned as important: Knowledge of the unwritten rule of the higher management-culture, a very well general knowledge, optimism and the willingness of risk-taking and a high degree of personal sovereignty (Hartmann, 2013).

According to Bourdieu such a habitus results from being socialized in a family which is historically close to the system of higher education and in which higher educational degrees date back at least to the generation of the grandparents (see Bourdieu, 1984). If persons who are involved in the selection of executive staff associate such a "positive" habitus with a higher social background, it can be expected that they search in the application documents for signals for a higher social background. The language profile chosen in school can be a useful signal for such a social background as is pictured out in Table 2.

Table 2: Signaling effect of Latin as foreign language for the educational background

| | A_{EF} | A_{EL} | A_{LE+} |
|---|----------|----------|-----------|
| Parents & Grandparents have academic degrees (in %) | 11.5 | 10.7 | 43.7 |

Own calculations based on GSOEP, N=1.021

The percentages in this table are calculated according to the signaling-function of the language profiles for a historically academic background. Whereas only about 10% of the pupils which decided for a purely modern (A_{EF}) or a slightly classical profile (A_{EL}) have parents and grandparents with academic degrees, the proportion is four-times higher in the group of the pupils which decided for a strong classical profile (A_{LE+}). Hence a strong classical profile is a much stronger and more reliable signal for a high educational social background than the other language combinations are. If employers search for applicants which show a "suitable", "right" habitus of the upper class, it can be expected that those applications with a strong classical profile will produce higher acceptance rates than the other two profiles does (Human-capital-hypothesis: ($A_{EF} = A_{EL} < A_{LE+}$)).

The language combination as signal for social similarity

The theoretical expectations about the effect of the foreign language profile on the selection process assume so far that the language profile is recognized as a general signal for the expected productivity. From homophily-thesis (Lazarsfeld & Merton, 1954; McPherson et al., 2001) an alternative expectation can be derived. According to that, the effect of the language profile depends on the language profile of the human resource manager making the personnel decisions. As human resource managers are uncertain about the expected productivity of an applicant, signals for an applicant being similar to them have a positive impact as they reduce the uncertainty. Tajfel and Turner prove (1985: Minimal-Group-Theory) that very small indications of similarity lead to a preference for people of the in-group over people from the out-group. Mayhew and colleagues explain this phenomenon with the notion that

demographic similarity is a sign for similar knowledge (Mayhew et al., 1995). Building on this it is expected, that signals of similarity reduce insecurity about productivity, because it increases the believed reliability of the assessment of the human resource manager. From that it follows, that the effect of the language profile depends on the language profile of the human resource manager. When the human resource manager has knowledge in the old languages applicants with knowledge in the old languages should have better chances for being invited to an job interview. When human resource managers have only knowledge in modern languages, applicants with a modern language profile should be better of (Homophily-thesis).

Especially the effects formulated in the signaling- and the homophily-thesis can be considered as non meritocratic. As Mastekaasa finds out such non-meritocratic effects are of less relevance when the application process is standardized, meaning that the personal influence of the human resource manager is reduced and previously as relevant defined factors are of higher importance (Mastekaasa, 2011). Accordingly it is expected, that effects of the language profile, which are in line with the expectations in the signaling- and homophily-thesis do not influence the chances for being invited to a job interview, when the applications process is standardized.

3 Methods and Data

To test the hypothesis derived from the different theoretical approaches a field-experiment has been conducted. Applications with different language-profiles has been sent to job advertisements for executive positions. The dependent variable is the proportion of invitations to a job interview. The independent variable was the language profile chosen at school. In total 130 advertisements were selected to which the applications were sent. To each one of these advertisements, applications from all experimental conditions were sent, so there was no random assignment. To test for homophily-thesis fan additional survey has been conducted, where a questionnaire, asking about the language-profile, has been sent to the human resource managers which were quoted as being responsible for the selection of applicants in the job advertisements.

The job advertisements

Between February 2014 and September 2014 applications to 130 job advertisements for executive positions in Germany has been sent. In all of them a Masters-Degree in business administration was formulated as requirement. It was necessary to focus on one field of executive positions because otherwise the adjustment of the applications for the jobs

advertised would have been huge expenditure. As job advertisement which formulated a degree in business administration were most frequent I decided to focus only on such positions.

Due to time- and cost-reasons only such job advertisements where considered for which it was possible to hand in the application documents electronically. That was possible for most of the jobs advertised. Furthermore advertisements where not considered if it was necessary to complete cognitive tests during the application or, due to ethical reasons, if the company had less than 500 employees. Sources for job advertisements where the portals fazjob.net, stepstone.de and stellenmarkt.de.

The applications

As experimental conditions the three different language profiles already shown in Table 1 where differentiated. Besides this three language-profiles an additional language constellation, consisting of English as first and Hebrew as second foreign language was created (A_{EH}). With this language constellation it was tested if a possible effect of a strong classical profile is due to a particular signal resulting from the language profile, or just to a higher salience of the rarely chosen language profile. Like Ancient Greek, Hebrew is learned very rarely in german schools, so effects of salience can be controlled for when comparing the proportion of job interview-invitations of A_{EH} and A_{LE+} .

In the expectations derived from human capital theory it was assumed, that a positive effect of a purely modern language profile should decrease in the presence of other signals for transnational human capital. To test this assumption and thereby gaining better insights in the mechanisms of a possible effect of the language profile, for each of the four language profiles one condition with and one condition without a stay abroad during university was created. Hence for each of the 130 job advertisements eight different applications where sent. Table 3 gives an overview over the eight conditions.

A typical application in Germany includes a cover letter, curriculum vitae with a photograph and educational certificates as well as certificates of previous working experience. To isolate the effect of the language profile, it was necessary to hold all other possible factors constant that could influence the probability of a positive feedback to the application. Simultaneously the applications had to be diverse to not attract attention because of their similarity.

For each of the eight applications a one-page cover letter was created, which was adjusted for each job advertisement. The adjustment was necessary to create a high probability of success of the application (Kaas & Manger, 2012).

Table 3: Overview over the different application-conditions

| Stayed abroad? | A_{EF} | A_{EL} | A_{LE+} | A_{EH} |
|----------------|-------------|-------------|-------------|-------------|
| No | Condition 1 | Condition 2 | Condition 3 | Condition 7 |
| Yes | Condition 4 | Condition 5 | Condition 6 | Condition 8 |

As the sex and age of an applicant influences the chances for being considered in the application process (Jacob & Klein, 2013), all applicants were male and between 26 and 27 years old. In the photographs all applicants showed a "typical german" phenotype as ethnic background influences job-chances too (Kaas & Manger, 2012). Because of that the names of the applicants (Bertrand & Mullainathan, 2004) were all "typical german" too. Furthermore the given name is a signal for the social background of a person (Jackson, 2009), so only such names were taken into account, which are quite similar in terms of characteristics associated with them. For this on portals (vornamen.com/babyclub.de) given names were researched which are quite similar regarding the association of to central characteristics (e.g. intelligence).

All applicants reached the general matriculation standard (Abitur) at state schools with an overall grade varying between 1.6 and 1.9 (In the German educational system the scale ranges from 1(very good) to 6 (insufficient)). The applicants held a Bachelor of Science in Business Administration (overall grade between 1.6 and 1.9) and were close to finishing their Master of Science in Business Administration. They went to different universities which are relatively similar according to their Prestige in Business Administration (Assessed based on Wirtschaftswoche, 2013). Furthermore all applicants had collected first occupational experience by having completed one short term internship (4-6 weeks) and a longer internship (10-12 weeks). In addition the curriculum vita's included information about performance-related scholarships the applicants had received as well as social engagement. Information about the language profile of the applicants could be derived from the curriculum vitae and from the Abitur-certificate.

In two pretests the equivalence of the eight applications was validated. Therefore student (Pretest 1; N=42) and human resource managers (Pretest 2; N=24) had to evaluate the eight experimental conditions as well as twelve additional applications according to the probability

that they would invite the applicant to a job interview. For the pretest the variation in the language profiles between the applications was removed. In both pretests no systematic differences in the evaluation of the eight applications was found.

Depending on the job advertisements the applications were reached in per mail (not standardized) or via a digital platform (standardized).

The data collection

After the applications had been sent to the job-advertisements eight weeks were waited for a feedback to the applications. When the applicant was invited to a job interview the application was considered successful. Within 48 hours the companies were told that there is no longer interest in the job advertised. When there was a negative feedback, or no feedback at all the application was considered as not successful. For 128 of the 130 applications at least for one of the eight applications a feedback from the company was received. The both job-advertisements for which for none of the applications a feedback was received were coded as missings. Beside the proportion of invitations to a job interview depending on the language profile, in the data the information was included if the application process was standardized or not. An application process was considered to be standardized when the submission of the applications was made over a digital platform. In that case it was necessary to fill out several inquiries such like command in English or other languages and so forth.

Table 4: Distribution of the central variable in the analysis (N=1.024 (8*128))

| | Variable | Measurement | Distribution (%) |
|-----------------------|---|-------------|--------------------|
| Dependent Variable | Accepted vs. Rejected | 0 | Rejected 51.9 |
| | | 1 | Accepted 48.1 |
| Independent Variables | Language-combination | 1 | A_{EF} 25.0 |
| | | 2 | A_{EL} 25.0 |
| | | 3 | A_{LE+} 25.0 |
| | | 4 | A_{EH} 25.0 |
| | Stayed abroad | 0 | No 50.0 |
| | | 1 | Yes 50.0 |
| | Standardized application process | 0 | No 79.7 |
| | | 1 | Yes 20.3 |
| | Language profile Human Resource Manager | 0 | Not classical 48.3 |
| | | 1 | Classical 51.7 |

For a further evaluation of the homophily-thesis, information about the language profiles of the human resource managers to which the applications were sent was necessary. Under the guise of conducting a survey about managerial staff, these human resource managers were asked in which languages they have knowledge. The questionnaires were sent to them via mail and e-mail. For 92 out of the 128 job advertisements an unequivocally contact person could be found. Out of this 92 Persons 58 filled the questionnaire out and sent it back. So for 45.3% of the job-advertisements which were under investigation in the field-experiment, information about the language profile of the human-resource manager exists. 48.3% had only knowledge in modern foreign languages (no classical background) and 51.7% had either knowledge in Latin or knowledge in Latin and Ancient-Greek (classical background). Table 4 gives an overview over the distribution of the central variables.

4 Empirical Findings

The presentation of the results is structured in four parts. In the first part the effect of the three main-language profiles on success-rates will be in the center of the analysis. To test if a positive impact of the strong classical profile is due to a special signal or just the result of a higher salience, in the second part the success rates for the strong classical profile will be compared to those of English, Hebrew-Profile.

In part three the effect of a stay abroad on the effect of the language profiles on the success rates will be examined and in the last part four the effects through which the language profiles influence the success rates is under investigation.

The results are presented in cross-tables. Due to the experimental design confounding variables are controlled for. Nonetheless some influencing variables has been measured and tested if they do affect the correlation between language profile and success rate. They have been found to not do so; therefore they are not considered relevant in the following analysis.

The influence of the language profile on the success of the application

The proportion of invitations to a job-interview, depending on the language profile in the application, is presented in Table 5. Based on these results a first evaluation of the hypothesis derived is possible. With 55.5% the application with the strong classical profile (A_{LE+}) produced by far the highest success-rate. With 43.0% the purely modern profile (A_{EF}) is about 12% behind and the slightly classical profile (A_{EL}) is nearly 20% behind the strong classical profile, producing only 35.9% positive feedback on the application.

The order $A_{LE+} > A_{EF} > A_{EL}$ does not fit with one of the hypothesis completely. According to the human-capital-hypothesis the proportion of success should decrease the higher the classical profile. According to the signaling-hypothesis the strong-classical profile should be superior to the others, but no difference between a modern and a slightly classical profile should exist.

Table 5: Proportion of invitations to job-interviews, Condition 1-3 (Table 3)

| N=384 (3*128) | A_{EF} | A_{EL} | A_{LE+} | Significance |
|---------------|----------|----------|-----------|--------------------------|
| Invitation | 43.0 | 35.9 | 55.5 | Chi ² = 10.13 |
| Rejection | 57.0 | 64.1 | 45.5 | p = 0.006 |

It can be argued, that both effects work together with the signaling-effect being superior to the human-capital-effect. Following this argumentation, human resource managers search for signal for the "right" habitus as well as for signals for transnational-human capital. Therefore the highest success-rate for A_{LE+} is due to its signaling-effect for the "right" habitus. The advantage of A_{EF} over A_{EL} is due to the positive signal of A_{EF} for transnational capital. From A_{EL} neither a signal for the "right" habitus, nor for transnational capital results, making it the least attractive language profile for executive managers.

Salience as alternative explanation?

An alternative explanation for the high success-rate of the strong classical profile (A_{LE+}) is, that it is a language-constellation which is chosen rarely by pupils and which therefore has a higher degree of salience than the others. In this case the strong classical profile would just be more often recollected by the human resource managers in the multitude of applications.

To test for this alternative explanation an application was sent with having English and Hebrew as foreign languages. This language constellation is comparably scarce to the strong classical profile. Therefore it should produce comparable success rates if the high success rate of the strong classical profile is simply the result of high salience.

Table 6: Proportion of invitations to job-interviews, Condition 3&7 (Table 3)

| N=256 (2*128) | A_{EH} | A_{LE+} | Significance |
|---------------|----------|-----------|-------------------------|
| Invitation | 39.1 | 55.5 | Chi ² = 6.91 |
| Rejection | 60.9 | 45.5 | p = 0.009 |

As can be seen from the results presented in Table 6, this is not the case. The condition A_{EH} produces a success rate somewhere between the purely modern and the slightly classical profile (39.1%) but far behind the strong classical profile (55.5%). Accordingly the positive effect of the strong classical profile on the success rate of the application seems not to be due to a higher salience, but to a specific signal resulting from that.

The effect of a stay abroad on the effect of the language profile

From human capital theory, the expectation was formulated, that the differences in the success-rates depend on the existence of other signals for transnational human capital. The argument was, that the language profile reflects the volume of transnational-human-capital an applicant has. According to the resulting human-capital-hypothesis the success-rates should increase when the classical part in the language profiles decrease. That this is not absolutely the case was already shown in this analysis. If the advantage of the purely modern profile over the slightly classical profile (Table 7) is a result of a human-capital-signal of the language profile, the differences should be affected by the presence of another, stronger, transnational-human-capital-signal. As such a signal a stay abroad was derived and applications with the different language profiles were once sent without and once with the information that the applicants has stayed abroad during the time of study. In the presence of a stay abroad it is expected, that the advantage of the purely modern profile over the slightly classical profile decreases. In the presence of the stay abroad as signal for transnational human capital, the language profile should be of less relevance. Furthermore the advantage of the strong classical profile over the purely modern profile should increase for applicants with a stay abroad. In the presence of a stay abroad as transnational-capital-signal, the "disadvantage" of the language-profile should be of less relevance and the full signaling-effect should be of higher relevance.

The first line of Table 7 contains the results already known from Table 5. These show the proportion of invitations to job interviews for the different language profiles without a stay abroad. In the second line the proportion of invitations to job-interviews for the corresponding language profile with a stay abroad are presented. The third line shows the effect of the stay abroad on the success-rate for each language profile. This is the proportion of invitations for job-interviews of the applications with versus without a stay abroad.

There are two fundamental findings from this analysis. Firstly there is a positive effect of a stay abroad on the probability of a positive feedback to an application. Compared to the applications without a stay abroad the applications with a stay abroad produce success-rates which are about 10% higher. Secondly the effect is independent from the language profile.

The success-rate of the purely modern language-constellation increases by 10.9%, the success-rate of the slightly classical profile by 9.4% and the success-rate of the strong classical profile by 10.9%. There seems to be no difference of the effect depending on the language profile. If the language profile and a stay abroad would be signals for the same human-capital-factors, than the effect of a stay abroad should vary depending on the amount of transnational-human-capital reflected already by the language profile. That seems not to be the case.

Table 7: Proportion of invitations to job-interviews, Condition 1-6 (Table 3)

| N=768 (6*128) | A_{EF} | A_{EL} | A_{LE+} | Significance |
|---------------------|----------|----------|-----------|--------------|
| No stay abroad | 43.0 | 35.9 | 55.5 | p = 0.006 |
| Stay abroad | 53.9 | 45.3 | 66.4 | p = 0.003 |
| Effect: stay abroad | + 10.9 | + 9.4 | + 10.9 | |

The mechanisms behind the effect of the language profile

An analysis of the influence of the standardization of the applications process and the relevance of the language profile of the executive manager give more detailed insights into the mechanisms behind the effect of the language profile.

In a first step it was differentiated between applications processes which where standardized and such which where "normal" (= not standardized). In 102 out of the 128 job postings (79.7%), the applications had to be handed in via e-mail to the person which (supposedly) was in charge of making the personnel decision. These are considered as being non-standardized as there is potentially a high influence of the individual preferences of the person in charge for making the personnel decision on the outcome of the application process. The other 26 job-advertisements (20.3%) demanded to hand in the applications via a standardized internet-platform. Empirical results (Mastekaasa, 2011) suggest that in such standardized application processes the influence of individual preferences on the decision for an applicant should be lower. Therefore the impact of non-meritocratic factors should be on a lower level. As it is not expected that human resource managers define a signals for a certain habitus as official selection criteria, it is expected, that there is no positive effect of a strong classical profile on success-rates in standardized application processes. In Table 8 the proportions of positive feedback to the applications are presented. In line one the success-rates for the different

language profiles in non-standardized, "normal" application processes is written down. In the second line the success-rates in the standardized processes are presented.³

Table 8: Proportion of invitations to job-interviews, Condition 1-3 (Table 3)

| N=384 (3*128) | A_{EF} | A_{EL} | A_{LE+} | Significance |
|----------------------|----------|----------|-----------|--------------|
| Normal process | 41.2 | 33.3 | 57.8 | p = 0.002 |
| Standardized process | 50.0 | 46.2 | 46.2 | p = 0.950 |

Taking a look at the results in line one we found the picture we already know from the previous analysis. The strong classical profile produces the highest success-rate, followed by A_{EF} and A_{EL} being in the last place. When focusing on the success-rates in the standardized application processes, the picture completely changes. Compared to the success-rate in the "normal" application process, the proportion of invitations to job interviews increases strongly for the purely modern, and the slightly classical profile, but decreases for the strong classical profile. The changes in the success rate lead to a situation, in which there is no difference of any relevance in the success-rates of the different language profiles. 50.0% of the applications with the purely modern profile are successful, 46.2% of the applications with the slightly classical and the strong classical profile are successful. The differences are neither significant, nor relevant. In standardized application processes the language-profile appears to be of non-relevance at all. The results suggest, that the effect of the language-profile in "normal" applications processes is due to non-meritocratic effects, which do not appear when the individual influence of the human resource manager on the personnel decision is reduced (= standardized application process).

So far it was suggested, the non-meritocratic influence which leads to an advantage of the strong classical profile is due to a signal for the social background which is articulated with the "right" habitus. Based on the homophily-hypothesis it was suggested, that there is no general association of the language-profile with the expected productivity. Instead the effect of a language profile depends on the language profile of the human resource manager. In the homophily-hypothesis it was assumed, that a match of the language profile between applicant and human resource manager reduces the insecurity of the human resource manager as it signals individual closeness and similarity. Therefore it would signal the belonging to a group which shares normative orientations. From the belonging to a certain group potential benefits

³ For reasons of simplicity the table does only include the results for the conditions without a stay abroad. The results do not differ.

from "Vergemeinschaftung" could arise. Hence if the human resource manager has only knowledge in modern languages, applicants with a purely modern profile should achieve the highest success rates, whereas applicants with a classical profile should achieve higher success rates, when the human resource manager has knowledge in classical languages.

In Table 9 the proportion of job-interviews for each language-profile is presented, differentiated after the language-profile of the human resource manager (HRM).

In the first line the success-rates in job-postings in which the HRM had knowledge in Latin or in Latin and Ancient-Greek are presented. In the second line the success-rates in job-postings in which the HRM had only knowledge in modern languages are shown.

The results strongly support the homophily-hypothesis. Focusing first on the effect of the language profile, when the HRM has a classical-language profile the results show that the success-rates increase with increasing classical profile. Whereas there is only a relatively modest effect of a slightly classical profile compared to a purely modern profile (+10.0%), there is a huge effect for a strong classical profile. In the population of classically educated HRM's two out of three applications from applicants with a strong classical profile are of success. Only 30% of applications with a slightly classical profile and only 20% of applications with a purely modern profile are of success in this group. This is an absolutely remarkable effect. When applicants are equally qualified with respect to all other aspects, having a strong classical profile when the HRM has one too, appears to be a great benefit. Focusing on the results in the modern-educated HRM-group we found another ranking. Here the purely-modern language-profile in the applications receives the highest success-rate with 64.3%. This is comparable to the success-rate of the strong classical profile in the group of the classical-educated HRM's. The success-rate for a slightly classical profile appears comparably high, too with 28.6%. When taking a look at the success-rate of the strong classical profile in the modern-educated HRM-group we found, that they do not discriminate to an extent as the classical-educated HRM's do. Whereas the classical HRM's clearly prefer the strong classical applicants over the purely modern applicants (66.7% vs. 20.0%), the modern-educated HRM's have a much slighter preference of the purely modern applicants over the strong classical applicants (64.3% vs. 50.0%).

This suggests, that in general homophily must be considered the relevant aspect in explaining the effect of language profiles on the success-chances of an application. But furthermore it seems that signals for social background, such as the strong classical profile, have an impact

too. Hence the purely modern HRM's prefer applicants which are similar to themselves but furthermore do not discriminate applicants with a strong classical profile, as they appear to have the "right" habitus. Clearly further analyses are necessary to test this implication but the presented results of this experiment suggest this conclusion.

Table 9: Proportion of invitations to job-interviews, Condition 1-3 (Table 3)

| N=174 (3*58) | A_{EF} | A_{EL} | A_{LE+} | Significance |
|-----------------|----------|----------|-----------|--------------|
| “Classical” HRM | 20.0 | 30.0 | 66.7 | p = 0.000 |
| “Modern” HRM | 64.3 | 28.6 | 50.0 | p = 0.027 |

The overall positive effect of a strong classical profile is the result of classically educated HRM's having a very strong preference for only strong classical profiles, whereas modern-educated HRM's have a preference for modern language profiles, but do not discriminate strong classical profiles so much. In conclusion all HRM's have a preference for applicants which are similar to themselves, but furthermore evaluate strong-classical applicants positive.

5 Conclusion

Starting point of this article was the question of the effect of choosing Latin and Ancient-Greek in school on the chances in a globalizing labor market. From different theoretical approaches (Human-capital, Signaling-theory, Homophily-thesis) expectations were formulated on how the language-profile of an applicant could influence the evaluation of this applicant by the responsible human resource manager. To test the expectations a quasi-experiment has been conducted, where applications with varying language-profiles were sent to job-postings for executive positions. As the experiment took place under real life conditions and the researcher had full control over the treatment conditions, the results show high internal and external validity. Instead of a random assignment of the treatment conditions over the different job-postings all experimental conditions were sent to all job-postings.

The results show that the language profile in school does affect the chances in the labour market in Germany. Compared to a purely modern language profile, choosing a slightly classical profile negatively affects the chances of being invited to a job interview whereas choosing a strong classical profile has a positive effect on the chances in the labour market. A further analysis of the mechanisms behind these effects suggests that the effects of the language profile on the success-rates are due to homophily on the one side and a positive signalling effect of a strong classical profile for the "right" habitus, meaning a high social

background, on the other side. These effects clearly seem to be due to influences of the individual HRM as they do not appear in standardized application processes.

It has to be taken into consideration that the effects found only refer to the first step of the application process, the written application. Hence they do not reflect effects of the language profile on the chance to really gain a position. But as the invitation to a job interview is the first necessary step to have a chance to gain a job, the results are of high importance. Furthermore it can be suggested, that individual preference appear to be strong at the stage of a job interview too.

As the positions the applications where sent to where job postings for executive positions and those are associated with high status and high incomes, the results of this study are of high social relevance too. Furthermore, like other studies focusing on the relevance of horizontal differences, they help to explain the effect of social background on occupational careers which do exist even controlling for educational careers (Stawarz, 2013).

6 Literature

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