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Do grandparents transmit a highbrow lifestyle to their grandchildren? Testing Bourdieu's Theory of Distinction.

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Abstract: Pierre Bourdieu's lifestyle theory assumes that a highbrow lifestyle is shaped during childhood and depends on the cultural capital of the family. While the effect of the parents' capital and lifestyle on the children has often been analysed, there is no research that focuses on the three-generational transmission of a highbrow lifestyle. We want to fill this empirical research gap with our research note. The main question of our research is whether the cultural capital and practice of a highbrow lifestyle of the grandparents increases the probability of their grandchildren pursuing a highbrow lifestyle as well. Based on a survey of parents of high school students we can show that not only the parents' conditions of socialisation but also the grandparents' cultural capital and lifestyle have a substantial effect on the probability that the grandchildren play an instrument / sing in a choir and practice a highbrow lifestyle. Furthermore, our analyses show that the grandparents' influence on the grandchildren is only partially transmitted by the parents' capital and lifestyle.

Keywords: Bourdieu, cultural capital, lifestyle, intergenerational transmission

1. Introduction¹

One of the core concepts of Bourdieu's theory assumes that families are the central institution to reproduce social inequalities (Bourdieu 1982; Bourdieu & Passeron 1977; Bourdieu et al. 1991). This thesis is true for all capitals Bourdieu distinguishes but it is especially true for the incorporated capital and the taste and lifestyle connected to that, because a distinguished taste and lifestyle is shaped during childhood. Several empirical studies have shown that there is a connection between the cultural capital of the parents, their lifestyle and the lifestyle of their children (cf. f.ex. Rössel & Beckert-Zieglschmid 2002; Kraaykamp & Van Eijck, 2010; Sullivan 2011; Yaish & Katz-Gerro 2012; XXX 2008; summarised by Nagel & Ganzeboom 2015). According to Bourdieu's

¹ We would like to thank XXX.

theory, one could also assume that the parents' conditions of socialisation lead to a highbrow taste of their children. Therefore, the capital and taste of the grandparents influence the lifestyle of their grandchildren. Looking at the social transmission of a highbrow lifestyle, one could expect that not only the parents but also the grandparents transmit this lifestyle to the children.

The importance of the grandparents has been neglected for a long time, but in recent times, several studies analysed the influence of the latter on the educational (i. a. Sheppard & Monden 2018; Hällsten & Pfeffer 2017) and professional success (i. a. Hertel & Groh-Samberg 2014) of their grandchildren. So far, there has been no study however, that focuses on the three-generational mediation of a highbrow lifestyle. We want to fill this empirical research gap with our article. The focus of our research lies in the question of whether the cultural capital of the grandparents and their highbrow lifestyle increases the probability of their grandchildren to create a similar lifestyle. If such a relation was to be proofed, this would not only enable us to better understand the mechanisms of the reproduction of a highbrow lifestyle but it would also proof the importance and persistence (stated by Bourdieu) of family as a central agent of the reproduction of social inequality.

Pierre Bourdieu is a modern classic, whose core theory is part of sociological training. Therefore, we will, in the second paragraph, focus on those parts of his theories that are relevant to formulate our hypotheses. In the third paragraph, we will explain the set of data that is the basis for our analysis and that enables us to empirically study the transmission of highbrow activities over three generations. The data was collected within a project about distinctive educational practices supported by the German Research Foundation. In this project, parents of German high school ("Gymnasium") students in 8th grade were asked about their education and lifestyle. Furthermore, information on their parents, the grandparents of the children, was collected. The set of data therefore includes information on four grandparents, two parents and one child. We chose an activity we were able to collect easily and reliably in retrospective to measure a highbrow lifestyle: playing an instrument / singing in a choir.

The results of our empirical analyses can be found in paragraph four. Our empirical analyses confirm the formulated core hypothesis: The capital and lifestyle of the grandparents have a significant impact on the probability of their grandchildren playing an instrument / singing in a choir. According to the results, both grandparents'

households had to practice a highbrow lifestyle to transmit it. We present the results of our study and discuss the limits of our research in paragraph five. As we only use one indicator to measure lifestyle (which is a relatively weak empirical basis), this research is of an explorative character and designed to be a research note.

2. Fundamental assumptions of Bourdieu's theory of the reproduction of lifestyles

The parts of Bourdieu's theory that are relevant to our empirical analyses deal with the analysis of the development and reproduction of lifestyle and especially of highbrow lifestyles. Therefore, we will only give a short summary of those core hypotheses.²

Literature defines the concept of lifestyle in different ways (cf. Otte & Rössel 2011: 11-16). Following Bourdieu's theory, we understand lifestyle as a pattern of leisure- and consumer behaviour. Individuals define lifestyle through their attitudes and aesthetic preferences. These result in different perception and judgement schemes, that Bourdieu describes as habitus, as a "systems of durable, transposable *dispositions*" (http://web.b.ebscohost.com/ehost/ebookviewer/ebook/bmxlYmtfXzU4OTE3NV9fQU41?sid=928183cf-3877-4171-8f28-7d0e060ed038@pdc-v-sessmgr03&vid=0&format=EB&lpid=lp_159&rid=0) (Bourdieu 1977: 72) (Bourdieu 1976: 165). Bourdieu distinguishes three different types of taste, which are similar to an ideal type: the pure or legitimate taste, the taste of the middle classes and the taste oriented towards necessity (Bourdieu 1982: 288 ff.). Taste and therefore the lifestyle of people focuses on different objects in the world: on the apartment furniture, holiday destinations, food, clothes and especially on different art fields. Bourdieu, in line with the three tastes, distinguishes between a lifestyle oriented towards distinction, a pretentious lifestyle and a lifestyle of the lower classes (Bourdieu 1982: 292). Bourdieu's theoretical and empirical focus lies on the analysis of the legitimate taste, which can be manifested in a highbrow lifestyle.

In a next step, Bourdieu establishes a causal link between the typology of taste and lifestyle and the social class position of people. The space of lifestyle and taste is structured in the same way as the space of class position; in accordance to that, Bourdieu talks about the homology of space (Bourdieu 1982: 286). The class position

² There are many overall presentations of Bourdieu's work. One of the best German versions was written by Hans-Peter Müller (1986; 2014).

of a person depends on three different capitals: economic (income and assets), social (social relationships) and cultural capital (institutionalised, objectified and incorporated cultural capital). The cultural capital and especially the incorporated cultural capital are of great importance to the development of taste and lifestyle. For Bourdieu, this includes the ability of people to use aesthetic criteria to assess “things”. The legitimate taste of the upper class manifests itself in the ability to understand the meaning of art (empirically Rössel & Bromberger 2009; Rössel 2011). Even though it is possible to understand the expressive meaning of an artwork without any prior knowledge, only those, who are able to decipher the meaning, will understand the deeper meaning of the artwork. The specific competence to decipher an artwork means classifying the characteristics of an artwork within the stylistic opportunities of an arts field and understanding the references of one artwork to other artworks and styles. The competence of classification is distributed unequally from a social point of view. The upper class and those who possess a lot of cultural capital are able to do so. Members of the upper class use their highbrow lifestyle to distinguish themselves from members of the middle and lower classes and therefore help to build the social construct of a class structure that is expressed in different ways.

According to Bourdieu, family is especially important for the class specific reproduction of a highbrow lifestyle and the taste linked to that (Bourdieu 1991: 64-70). He explains the importance of family with the fact that the ability to decipher art and other highbrow goods is shaped during childhood. This includes reading aloud, reading on one’s own, seeing concerts and plays as well as the time intensive learning of a musical instrument (Bourdieu 1983: 187).³ Bourdieu sees other institutions of socialisation like the school or peer group as less important when it comes to establishing a highbrow lifestyle. The school strengthens the taste determined by the family, as the education in school is oriented towards the highbrow lifestyle of the upper classes (Bourdieu & Passeron 1977) and therefore favours the students with this orientation. Bourdieu’s theory that the family is more important for the reproduction of a highbrow lifestyle than other institutions of socialisation and the degree of individuals’ freedom is controversial. Paul DiMaggio (1982) studied American high schools and pointed out that Bourdieu

³ Harry Ganzeboom (1984) distinguishes two theorems that can be the basis to acquire a highbrow lifestyle. The information theory assumes that you have to have a lot of knowledge to be able to practice a highbrow lifestyle. The status theory however believes that acquiring a highbrow lifestyle is less about knowledge and more about learning the right practice that can be used for distinction. As acquiring knowledge takes longer than learning status rules, family is of utmost importance in the information theory.

overestimated the influence of the family and underestimated other institutions of socialisation. The indicators we collected do not allow us to compare the influence of the family on the reproduction of a highbrow lifestyle to the importance of the school, as we only collected information on families.⁴

A great number of studies has proven the connection between the educational taste and lifestyle of the parents on the one side and the lifestyle of the children on the other side.⁵ Many studies use the institutionalised cultural capital of the parents as a valid and reliable proxy, because you can prove a connection between higher education and highbrow orientation (f. ex. Kraaykamp 2003, XXX & YYY 2002; XXX 2008). Moreover, several empirical studies show that the influence of the parents' level of education on the highbrow lifestyle of the children is mediated by the lifestyle of the parents (f. ex. Nagel 2010; XXX & YYY 2002; Bogt et al. 2011; Kraaykamp & van Eijck 2010; Yaish & Katz-Gerro 2012; Willekens & Lievens 2016): Better-educated parents pass on their knowledge to the children. They transmit their taste and give examples of practising a legitimate taste by exemplifying highbrow activities. Based on these findings, we can formulate two hypotheses for our evaluation:

H1a: There is a positive relation between the education of the parents and the lifestyle of the children.

H1b: The lifestyle of the parents significantly mediates the relation formulated in H1a.

Following Bourdieu's argumentation that a highbrow lifestyle requires long practice and an early socialisation and therefore often is transmitted by the family, one could assume that a highbrow lifestyle is transmitted over several generations and not just from the parents to the children.⁶ There is a considerable research gap in this field: The influence of the socialisation context of the parents on a highbrow orientation of the children has been unexplored. According to the empirical results stating that the parents' education and lifestyle have an important impact on the highbrow lifestyle of

⁴ Ineke Nagel and Harry B.G. Ganzeboom (2015) gave a good summary on the current debate. The authors describe Bourdieus' assumption that the family is especially important for creating a lifestyle as a „cultural reproduction model“ and differentiate this from a „cultural mobility model“ that attaches greater importance to other institutions of socialisation.

⁵ In the following, we will only focus on the presentation of some relevant contexts and studies. For a more complete overview see Sullivan (2011), Otte (2011) and Nagel and Ganzeboom (2015).

⁶ In our following empirical analyses, we operationalise the highbrow lifestyle with lived practice on the one hand (playing an instrument / singing in a choir) and with the material manifestation of such a lifestyle on the other hand (book collection).

the children, one could assume that the capital and lifestyle of the grandparents should have a relevant influence on the lifestyle of their grandchildren as well. We presume that parents could transmit a highbrow lifestyle to their children, if this lifestyle was transmitted to them when they were young. Accordingly, our research tries to prove the assumption (in addition to the relations formulated in hypothesis 1a and 1b) that the parents' context of socialisation plays an important role when it comes to the intergenerational transmission of a highbrow lifestyle. This results in two further hypotheses:

Hypothesis 2a: There is a positive relation between the education of the grandparents and the lifestyle of the grandchildren.

Hypothesis 2b: Highbrow practices of the grandparents mediate this effect.

Finally, we assume that the influence of the grandparents on the grandchildren is substantially mediated by the capital and lifestyle of the parents (hypothesis 3a). Because the family is the central institution of socialisation, parents should transmit the capital and orientation their parents transmitted to them. At the same time, we assume that there is a direct effect of the grandparents' culture on the grandchildren, which continues to exist under the control of an indirect effect of the parents' capital and lifestyle (hypothesis 3b). We assume that the grandparents influence the socialisation of the grandchildren; hence, their capital and cultural practice should have an impact on the lifestyle of the grandchildren. The ideal way to test this hypothesis would be to look at the time grandparents and grandchildren spent together. The more time grandchildren spent with their grandparents, the stronger the direct effect of the grandparents on the grandchildren. Unfortunately, we cannot prove this assumption with the data available. We interpret the direct effect of the grandparents' variables on the lifestyle of the grandchildren under the control of the parents' variables as a first indication to support hypothesis 3b. We would like to mention, that there could be an alternative explanation to our formulated hypothesis for a residual effect of the grandparents on the lifestyle of the grandchildren.⁷

So far, three-generational studies only exist with a focus on the analysis of the influence of the grandparents' education on the educational success of the grandchildren. They find conflicting results (cf. Sheppard & Monden 2018). We assume

⁷ For the general problem of measuring direct and indirect effects of three-generational studies see Richard Breen (2018).

that the results concerning the transmission of lifestyles is clearer: Even if the school implies a certain form of cultural socialisation, the first and foremost goal is to convey knowledge, which is displayed in school certificates. In accordance to that, the school is an institution in society that is able to balance some class specific differences with knowledge; there is no other institution however, that could balance different cultural orientations.

3. Data and Methods

The evaluation of a survey conducted with parents of German high school (“Gymnasium”) students in 8th grade forms the empirical basis of our research. The data was collected at 13 specifically selected high schools in West Germany in 2017. ⁸ The collaborating high schools enabled us the field access. They distributed our questionnaires to all parents of the students in 8th grade. Accordingly, we conducted a survey of all 8th grade students of the selected high schools. The parents completed the questionnaire at home and then send it back to us. In this project, we focused on the parents, as we were especially interested in the influence of families on educational decisions. We distributed 2.994 surveys in total. ⁹ We received a response from 1.102 persons who live in 554 different households; this equals a response rate of 37%. After excluding all missing values (“listwise deletion”), we had information on 537 households at our disposal. This is a loss of 3% (n=17) of all households because of “Item-Non-response” in the considered variables. ¹⁰

Both parents were asked about different aspects of their children’s school time and free-time activities as well as about their own socio-structural position and free-time activities. They were also asked to provide information on their parents, the grandparents of the children. We only looked at high school students to eliminate confounding variables (f. ex. performance-related variables that could confound with model variables) and because it enables us to measure the impact of capital and

⁸ The high schools were in Baden-Wuerttemberg, Rhineland Palatinate, Hesse, North Rhine-Westphalia, Lower Saxony and Schleswig-Holstein. Because of the question of the project for which the data was collected, we focussed on the highest number of foreign language classes when choosing the schools.

⁹ As we did not have any information on how many parents lived in the households, we assumed that two parents lived in one household when we distributed the surveys.

¹⁰ We did not use a multiple imputation procedure, because the missing values correspond to the dependent variable and only 3 % of the households are missing by an „Item-Non-response“. We do not assume that these losses produce a distortion in our main effects.

lifestyle of the grandparents and parents on the lifestyle of the children. At the same time, this limitation leads to a sample that consists of a disproportionately high number of better-educated persons.¹¹

To measure a highbrow lifestyle, we ask all three generations whether they play an instrument / sing in a choir. Even though it is common for empirical research to use more indicators to operationalise a highbrow lifestyle (f. ex. going to classical concerts or the museum) (f. ex. Nagel 2010) this approach is difficult in a three-generational analysis. If the analysis deals with a receptive cultural participation, the answers are of limited reliability, because the children answer questions about the lifestyle of their parents in retrospective (cf. de Vries & de Graaf 2008). If it deals with an active form of cultural participation however, the answers are more reliable, because the parents can give exact answers on the questions of whether their parents, they or their children play(ed) an instrument / sing (sang) in a choir. On the level of the children, we collected data on whether they are going to music school or have a private teacher to learn how to play an instrument or how to sing (Yes=1; No=0). This variable is the dependent variable in all models.¹²

This measurement is problematic however, as playing an instrument / singing in a choir can also include non-highbrow music like playing in a rock band for example. This would only lead to an overestimation of the effect of social origin, if the relation between the social origin and non-highbrow music was stronger than the relation between the social origin and highbrow music. The dependent variable is therefore not ideal to measure highbrow lifestyle, but it leads to an underestimation of the effect and thus provides a conservative estimate of highbrow activities. Even though this is a dichotomous variable, we used robust standard errors instead of logistic regression models to calculate linear probability models. The reasons for this are: (1) A mediation analysis is not that easy with logistic regression models (Mood 2010; Karlson et al. 2011).¹³ (2) The interpretation of the coefficients of the linear probability model is reader-friendly and intuitive. (3) The coefficients of a linear probability model with robust standard errors are not different from those of a logistic regression, if only categorical explaining variables are used.

¹¹ For a more detailed description of the data and especially of the sample, please see the GESIS-data archive: XXX

¹² An overview of the univariate distribution of all variables can be found in table 2 of the attachment.

¹³ Ulrich Kohler and Kristian Bernt Karlson (2010) provide a method to correct the problem mentioned by Mood (2010) in Stata.

The parents were asked whether they play an instrument / sing in a choir and if yes, how old they were when they started. Afterwards, we were able to compare their age with the children's age. We coded the variable with 1 when the parents started to play an instrument / sing in a choir before the child was born; variable 0 stands for those parents who do not play an instrument / sing in a choir or started after the child was born. This follows the theoretical assumption that an early socialisation is very important for the development of taste. Furthermore, the parents were asked whether their mother or father played an instrument / sang in a choir. Per parent, the information on the grandparents was combined in one variable. In our evaluation, we distinguish whether at least one parent of the respective parent played an instrument / sang in a choir or not.

In addition and as a manifestation of a highbrow lifestyle, we also examine whether the parents and grandparents have at least 500 books at home. Even though the number of books could be understood as an operationalisation of the objectified cultural capital, we believe that the possession of books is an expression of highbrow taste, because we interpret the purchase of books as a tasteful preference for literature. On the level of the parents, both parents were asked how many books they have in their households. The answers of both parents were combined in one variable that shows whether they have at least 500 books or not. In 86% of the cases, both parents agreed. If they did not agree, the higher number was chosen.¹⁴ Apart from that, both parents were asked how many books their parents had when they were young. We created a variable that distinguished whether no (=0), one (=1) or both (=2) grandparents possessed at least 500 books. We used this to show the conditions of socialisation of both parents. In times of digitisation and permanent access to information, one might ask how the possession of books still is a distinctive feature today. A few years back, the possession of the Encyclopaedia Britannica was a sign of an incorporated cultural capital. Today, everyone (no matter his or her social class) can access lexical information via the internet. Following this argument, we analyse whether the effect of the grandparents' books collection on the parents' musical career is different or weaker than the effect of the parents' books collection on the children's musical career.

We measure the cultural capital of the parents and grandparents (as it is usually done in the respective literature) by looking at their educational background. We created a

¹⁴ The analyses were also conducted with other codes for „Robustness-Check“. The results do not differ substantially from the findings presented here.

dichotomous variable of all parents and grandparents that distinguishes whether the respective (grand-) parent has a university degree or not.¹⁵ The parents were divided into three groups: (1) no, (2) one or (3) both parents have a university degree. The information on the grandparents was combined in one household-variable. This variable makes a difference between no university degree, only the parents of one parent have a university degree or the parents of both parents have a university degree. Furthermore, the gender of the children was controlled in all models, because other studies have shown that girls more often follow a highbrow orientation than boys (cf. z.B. Rössel & Beckert-Zieglschmid 2002; Rössel 2011).

Our main interest lies in the question of whether there is a direct causal effect of the education and taste of the grandparents on the grandchildren's intention to follow this highbrow lifestyle.¹⁶ As the methodical requirements for the empirical collection of causal effects are quite elaborate and such a measurement requires an experimental design, we want to point out that our data does not allow a causal analysis in the strict sense of the word. We only examine whether the assumptions derived from theory are empirically supported or not. We only consider the gender of the child as a control variable, because we cannot derive any expectations with regard to specific variables that have to be controlled to prevent a distortion of the expected main effect from our assumptions. Nevertheless, we analysed whether the results are robust when considering other control variables. We take into account the following covariates: "migration background", "household income", "professional status" and "one-person household". They were included separately in the medium set, as well as all together in the full set. As the additional covariates do not have an impact on the main effect,¹⁷ we do not consider these covariates when presenting the results.

¹⁵ To measure the education background of the grandparents and parents we also used the highest school-leaving qualification instead of the academic degree only. The results of the alternative operationalisation do not lead to substantially different results. We therefore operationalised the education background with the academic degree, because we want to operationalise a more privileged education background. The "Abitur" (German school leaving examination, equivalent to the A-Levels) does not seem to be suitable for such a measurement, because it was devalued by the education expansion.

¹⁶ Here, we follow the definition of a contra-factual conception of causality. For the problem of measuring causal effects, see Judea Pearl (2010).

¹⁷ There is a direct and significant effect from a migration background to playing an instrument / singing in a choir: In households where at least one parent has a direct or indirect migration background, the probability of the child playing an instrument / singing in a choir is lower than in households where no parent has a migration background.

4. Results

First, we analyse (paragraph 4.1) the intergenerational transmission of a highbrow lifestyle from the parents to the children and then from the grandparents to the grandchildren (hypotheses 1a/b & 2a/b).¹⁸ Second, (paragraph 4.2) we look at the question of whether the effect of the grandparent's variables on the lifestyle of the grandchildren is a direct effect that continues to exist after considering the parents-variables (as possible mediators) (hypothesis 3a/b).¹⁹

4.1 *The intergenerational transmission of a highbrow lifestyle*

Models 1 and 2 and table 1 examine whether the well documented relation between the cultural capital of the parents and their lifestyles on the one hand and the highbrow activities of their children on the other hand can be proven with our data as well. The results support hypothesis 1a, which stated that the education of the parents has an impact on the highbrow orientation of the children. It is noteworthy that the effect for just one parent with a university degree is substantial but not significant. One reason for that could be the low number of cases. Having two parents, who hold a university degree, has a substantial and significant impact on the probability that the child plays an instrument / sings in a choir.

Model 2 considers the highbrow lifestyle of the parents as well. The results show that half of the effect of the parents' education is mediated by their highbrow practice. The analysis supports most of hypothesis 1b as well. While there is no significant effect of highbrow taste in form of books, this is not true for playing an instrument / singing in a choir. There are relevant differences between just one musical parent or two musical parents. Adding the effects of the parents' education and their practice, one can see that children with one academic parent and one musical parent have a 22 percentage points higher probability of playing an instrument / singing in a choir than children for

¹⁸ Following Richard Breen (2018), this approach is unproblematic from an empirical point of view, because we do not examine mediations in the analyses in paragraph 4.1.

¹⁹ In a recently published article, Richard Breen (2018) points out that the collection of a direct causal effect of the grandparents on the grandchildren under the control of the parents' influence is difficult. Breen recommends to use the „Directed Acyclic Graphs“ (DAG, cf. Elwert 2013) to identify potentially confounding variables that could lead to a bias when measuring the direct effect of the grandparents on the grandchildren by controlling the variables on the level of the grandparents. Following this criticism, we thought about the theoretical relevance of other covariates for our survey design and evaluation. Had we not considered these covariates, the expected main effect would have been distorted. To empirically check the “robustness” of the effect as well, we considered – as described in the text – different sets of covariates in our analyses. The results are robust in all different covariate sets.

whom this is not the case.²⁰ Having two academic and musical parents increases the probability by 39 percentage points.

We analyse the influence of the cultural capital and lifestyle of the grandparents on the probability that the grandchildren will practice a highbrow lifestyle in model 3 and 4. At large, the effect of the grandparents on the grandchildren is quite similar to the effect of the parents, but differs in detail.²¹ While there is only a significant positive effect on the probability of a musical child with two academic parents, this effect is significant with only one academic grandparent (model 3). One possible explanation for this difference is the fact that a university degree was socially more exclusive in the grandparents' generation (before the education expansion), while this is not the case for the parents' generation. Whether these differences in the effects can be traced back to a decreasing function of educational degrees as a marker for distinction, cannot be examined conclusively with our data. In model 3 (education only) we see a significant difference between just one parent having academic grandparents or both, in model 4 (education & lifestyle) however, this cannot be confirmed anymore. As for the parents, half of the effect of education is mediated by the lifestyle of the grandparents as well. Therefore, the analyses about the grandparents support hypothesis 2a and hypothesis 2b.

The influence of the grandparents on the lifestyle of their grandchildren distinguishes itself from one other aspect of the influence of the parents. The most significant cause variable is not the practice of playing an instrument / singing in a choir but the extensive book collection to express highbrow taste (model 4). This result seems to be plausible as the social interaction between parents and children and therefore the impact and control is closer than between grandparents and grandchildren. If grandchildren visit their grandparents, books as a material manifestation of lifestyle are always present, while they probably do not always make music.

The results presented in model 3 and 4 support the main hypothesis of our article that the establishment of a highbrow lifestyle is deeply anchored in family tradition. This

²⁰ The 22 percentage points are the sum of the regression coefficient for „one parent academic“ (0,03) and „one parent plays an instrument / sings in a choir“ (0.19). The 39 percentage points for „two parents academic“ (0.12) and „two parents play an instrument / sing in a choir“ (0.27) were calculated the same way.

²¹ To further validate the data, we calculated the transmission of a highbrow practice between grandparents and parents in table 3 in the attachment. This shall make sure that there is no distortion in the analysis because the grandparent variables were collected in retrospective. The results correspond with the results in model 1 (table 1).

relation is only empirically clear if you consider the parents' conditions of socialisation and the capital and lifestyle of the grandparents.

To see whether the possession of books is still an indicator for a privileged position in the cultural field, it could be interesting to compare the effect of the parents' books collection on the probability of the children playing an instrument / singing in a choir with the effect of the grandparents' books collection on the probability of their children, thus the parents, playing an instrument / singing in a choir. If you calculate both effects in different models, you notice that the first effect is at 0,16 (0,04) and 7 percentage points higher than the latter (0,23(0,04)).²² Accordingly, this can be seen as an indication for the existence of a "Decay of Indicators". Our data does not allow us to give a final answer to the question of whether this is the reason for the difference.

4.2 The direct impact of the grandparents: direct effect or mediation by the parents?

After we have proven that education and lifestyle of the grandparents have a significant impact on the highbrow practice of the grandchildren, we still have to answer the questions whether the characteristics of the grandparents have a direct effect or whether these effects are mediated by the characteristics of the parents (hypothesis 3a/3b). Model 5 and 6 in table 1 give an answer to this question, because we do not only consider the variables of the grandparents but also see whether the parents hold a university degree or practice a highbrow lifestyle.

Model 5 only focusses on the parents' education. The result is clear: the parents' education has no influence on the lifestyle of their children; the effects of the variables already considered do not change either. The explanatory capacity of the full model – measured using R²- remains unchanged. The parents' conditions of socialisation, measured by looking at the education and cultural practice of the grandparents, present an independent predictor for a highbrow practice of the grandchildren. Even more: They have a greater influence than the education of the parents.

Model 6 additionally considers the highbrow lifestyle of the parents. Unlike the academic degree of the parents, playing an instrument / singing in a choir also has a positive and significant effect on the probability of children playing an instrument /

²² These are the coefficients of a linear probability model with a dependent variable „play an instrument / sing in a choir“ and the explanatory variable „book collection“. The results are not displayed, but can be provided upon request.

singing in a choir in the full model. Similar to model 2, the practice of playing an instrument / singing in a choir and not the materialisation of a highbrow lifestyle in form of possessing books has an impact on the children and their decision to play and instrument / sing in a choir. There is no difference between only one parent playing an instrument / singing in a choir or both. A comparison of the meaning of the parent-variables in model 2 and 6 show another difference: While two academic parents have a positive effect in model 2, this effect does not exist anymore when considering the grandparents at the same time (model 6). A comparison between model 2 (parents only) and model 6 (full model) shows that the predictive power increases by 6 percentage points; a comparison of model 4 (grandparents only) and model 6 demonstrates that the predictive power increases by 3 percentage points. In comparison to the variables of the parents, the grandparents' variables present the better predictors. Taking the lifestyle of the parents into consideration increases the predictive power of the full model but has almost no effect on the variables of the grandparents. The coefficients of the grandparents' cultural capital do not change. Parts of the effects of cultural orientation (books, playing an instrument / singing in a choir) are however mediated by the parents' lifestyle. Still, the results show that the characteristics of the grandparents have a substantial and significant effect on the lifestyle of the grandchildren – regardless of the parents. The data hereby confirms our main hypothesis.

5. Conclusion and Outlook

Bourdieu's theory of lifestyles assumes that the family shapes a highbrow lifestyle during childhood. While there has been a lot of research on the influence of the parents' capital and lifestyle on their children, there has so far not been a research focussing on a three-generational transmission of a highbrow lifestyle. This is where our research comes in. Does the cultural capital and practice of a highbrow lifestyle of the grandparents increase the probability of their grandchildren to pursue a highbrow lifestyle as well? On the basis of a survey conducted with parents of students in 8th grade we can show that not only the conditions of socialisation of the parents but also the grandparents' cultural capital and lifestyle have a substantial effect on the probability of their grandchildren playing an instrument / singing in a choir and pursuing a highbrow lifestyle. Furthermore, our analyses show that the grandparents' influence on the grandchildren is partially transmitted by the parents' capital and lifestyle. Even after taking into account the parents, the capital and practices of the grandparents still

have a substantial effect on the grandchildren's lifestyle. In accordance to that, the parents' context of socialisation turns out to be a relevant cause variable for the explanation of a highbrow culture of the grandchildren.

Finally, we would like to discuss some possible limits of your analyses. The fact that only students from German high schools and their parents were questioned means that our sample leads to a distortion towards better-educated households. Our main interest however does not lie in a representative description of the distribution of different lifestyles but in examining a causal relation derived from theory. Therefore, we assume that our sample does not have a distorting effect on the examined relation. A possible second limitation results from the specific gathering of data on the grandparents' capital and lifestyle. Gathering these variables from the parents in retrospective could be seen as less valid than a direct survey of the grandparents. Unfortunately, neither our set of data nor any other survey enables us to question them directly. As we only took into account those variables that can be gathered easily in retrospective, we assume that our results have not been distorted substantially. A third methodical limitation to our data basis appears in all cross-sectional studies. Without panel data, no one can say whether the effects are causal or not. Due to the comprehensive study on the two-generational transmission of lifestyles, it seems plausible that we do have causal effects. A further evaluation of this question is necessary. A fourth limitation appears due to the design of the study. As we only focus on students in 8th grade in German high schools, we are not able to draw the line between the "cultural reproduction"-assumption and the "cultural mobility"-assumption (cf. DiMaggio 1982; Nagel 2010). As we only take into account students of one school year, the effect of a potential socialisation of the school remains constant. A useful extension of the study would be to consider other institutions that transmit highbrow culture as well. Fifth, we would like to mention that we only use one indicator to survey the lifestyle of three generations. We had to limit our study to increase the validity of the grandparents' lifestyle variables in retrospective. We could have increased the content of the empirical research, if the intergenerational transmission over three generations had not only been proven for one dimension of a highbrow lifestyle but for a number of practices that constitute a highbrow lifestyle.

Taking into account the explicit empirical results that show a clear effect of the grandparents' variables, we assume that our results can be a good first basis for further studies examining the three-generational transmission of a highbrow lifestyle despite

our formulated limitations. Does this mean that future studies should try to survey all relevant information on the level of the grandparents? The clarity of the results suggests such a conclusion. At the same time, all future studies should address two weaknesses of our study. (1) We cannot say a lot about the specific mechanisms responsible for the influence of the grandparents on the lifestyle of their grandchildren. Future studies should for example deal with the question of whether the force of the grandparents' effects is moderated by the time spent together or not. (2) We focussed on playing an instrument / singing in a choir. This can lead to an overestimation of the grandparents' effect on the highbrow practice of the grandchildren, because playing an instrument / singing in a choir requires a lot of time and years of practise. In accordance to that, it is possible that the grandparents' impact on other highbrow practises, like going to the opera, is weaker. This should be considered in future studies. The effects we found are in total very clear so that we can recommend taking a closer look at the grandparents' level.

Table 1: Linear probability model (dependent variable: Child plays an instrument / sings in a choir, 0=No, 1=Yes), (robust S.E. in brackets, cluster-corrected by school), N=537 (household level)

	Parents→Child Model 1	Child Model 2	Grandparents Model 3
Grandparents			
Institutionalised cultural capital (education; Reference: Both parents have no academic parents)			
• One parent has academic parents			0.23*** (0.07)
• Both parents have academic parents			0.36*** (0.12)
Highbrow Lifestyle			
Manifestation: Grandparents' book collection (Reference: both grandparents households have less than 500 books)			
• In one grandparents' household at least 500 books			
• In both grandparents' households at least 500 books			
Practice: playing an instrument / singing in a choir (Reference: No)			
• At least one parent of one parent			
• At least one parent of both parents			
Parents			
Institutionalised cultural capital (education; Reference: non-academic)			
• One parent academic	0.08 (0.05)	0.03 (0.04)	
• Both parents academic	0.24** (0.08)	0.12* (0.07)	
Highbrow Lifestyle			
Manifestation: Parents' book collection (Reference: less than 500 books)			
• At least 500 books		0.08 (0.06)	
Practice: playing an instrument / singing in a choir (Reference: no parent)			
• One parent		0.19*** (0.05)	
• Both parents		0.27*** (0.05)	
Control variable			
Gender (female)	0.14*** (0.03)	0.14*** (0.04)	0.14*** (0.04)
Model fit			
R ²	0.06	0.11	0.09
Prob>F	0.00	0.00	0.00

Significance: *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$ (two-sided hypothesis test)

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Attachment

Table 2: Univariate distribution of the variables, N=537		<u>Variable</u>	<u>Characteristics</u>	<u>Distribution</u>	
Dependent Variable				<u>N</u>	<u>%</u>
Did your child go to classes outside of school (this school year or last school year)? (Please tick all correct answers)	Child plays an instrument / sings in a choir [Response category: Lessons in a music school or with a private teacher (f. ex. Instrumental-, Singing lessons)]	Yes		286	53,3
		No		251	46,7
Explanatory Variables					
Which highest school leaving qualification or university degree do you have? (Please only state the highest degree)	Parents: Academic degree [Response category: University degree / PhD / habilitation]	No parent		291	54,2
		One parent		136	25,3
		Both parents		110	20,5
How many books do you have at home (approx.)? (Please do not count any newspapers, magazines, e-books or schoolbooks. Note: one meter on a bookshelf contains approx. 50 books).	Parents: book collection	Less than 500 books		295	54,9
		At least 500 books		242	45,1
Do you play an instrument, sing in a choir, a band or do you take singing lessons?	Parents: playing an instrument / singing in a choir before the child was born	No parent		206	38,4
		One parent		239	44,5
		Both parents		92	17,1

How old were you when you started playing an instrument / singing?

Which highest school leaving qualification or university degree has [your mother] / [your father]? (Please only state the highest degree)	Grandparents: Academic degree [Response category: University degree / PhD / habilitation]	Both parents have no academic parents	379	70,6
		One parent has academic parents	123	22,9
		Both parents have academic parents	35	6,5
If you think about your childhood: How many books did your parents have?	Grandparents: book collection	Both grandparents' households <500 books	359	66,8
		In one grandparents' household at least 500 books	121	22,5
		In both grandparents' households at least 500 books	57	10,6
If you think about your childhood: Did [your mother] / [your father] play an instrument / sang in a choir or band?	Grandparents: playing an instrument / singing in a choir	The parents of both parents do not play an instrument / sing in a choir	177	33,0
		At least on parent of one parent plays an instrument / sings in a choir	248	46,2
		At least one parent of both parents plays an instrument / sings in a choir	112	20,8
Control variable				
Is your child female or male?	Gender	Female	274	51,0
		Male	263	49,0

Table 3: Linear probability model: The grandparents' influence on the probability that the own children play an instrument / sing in a choir (0=No, 1=Yes); robust S.E. in brackets); N=1.045 (individual level), cluster corrected for belonging to one household

	Grandparents→Parents	
	Model 1	Model 2
<u><i>Institutionalised cultural capital (Education; Reference: non-academic)</i></u>		
One parent academic	0.20*** (0.05)	0.05 (0.05)
Both parents academic	0.16** (0.06)	0.01 (0.07)
<u><i>Highbrow Lifestyle</i></u>		
Material Manifestation: book collection (Reference: Less than 500 books)		
At least 500 books		0.16*** (0.04)
Practice: playing an instrument / singing in a choir (Reference: No parent)		
One parent plays an instrument / sings in a choir		0.19*** (0.03)
Both parents play an instrument / sing in a choir		0.34*** (0.05)
<u>Control variable</u>		
Gender (Reference: Male)		
Female	0.15*** (0.03)	0.14*** (0.03)
<u>Model fit</u>		
R ²	0.04	0.13
Prob>F	0.00	0.00

Significance: *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$ (two-sided hypothesis test)