

Article

# Regional Patterns of Access and Participation in Non-Formal Cultural Education in Germany

Lea Fobel \*  and Nina Kolleck 

Political Education and Education Systems, Leipzig University, 04107 Leipzig, Germany;  
nina.kolleck@uni-leipzig.de

\* Correspondence: lea.fobel@uni-leipzig.de

**Abstract:** (1) Background: The equality of life chances in Germany is often assessed along the lines of a west/east and urban/rural differentiation in which the latter usually perform worse. One currently popular proposal for addressing these inequalities is to strengthen cultural and arts education. The question arises to what extent regional characteristics genuinely influence participation opportunities and to what extent individual resources still play a decisive role. (2) Methods: Using descriptive analyses and multilevel logistic regression modelling, we investigate the distribution of and participation in non-formal cultural education amongst German youth. (3) Results: We find that differences are more complex than a simple west/east or urban/rural divides. Rather, cultural activities must be considered in terms of their character in order to assess the mechanisms at play. There seem to be differences in the dependency on district funding between very peripheral and very central districts that frame the cultural infrastructure. (4) Conclusions: Regional discrepancies are not uniformly distributed across different fields of education or infrastructure. Simplifying statements that classify peripheral regions the general losers can be refuted here. Simultaneously, more comprehensive data could yield significantly more results than we are currently able to produce.



**Citation:** Fobel, L.; Kolleck, N. Regional Patterns of Access and Participation in Non-Formal Cultural Education in Germany. *Educ. Sci.* **2022**, *12*, 13. <https://doi.org/10.3390/educsci12010013>

Academic Editors: Regula Julia Leemann, Kriesi Irene and Rita Nikolai

Received: 14 September 2021

Accepted: 20 December 2021

Published: 29 December 2021

**Publisher's Note:** MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



**Copyright:** © 2021 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

**Keywords:** non-formal education; cultural education; arts education; out-of-school education; youth; associations; rural–urban divide

## 1. Introduction

Cultural and arts education, hereafter referred to as cultural education, have recently been highlighted as key to the promotion of equal opportunities and social cohesion [1]. It is also often seen as a panacea for challenges that arise in the context of regional disparities such as the containment of radicalisation tendencies or the promotion of democratic culture [1]. However, studies show that access to cultural events and cultural education is largely determined by socioeconomic and demographic characteristics and thus not evenly distributed across society. In order to eliminate these disparities, funding programmes have been launched repeatedly, especially in Germany, over the last 20 years to promote access to cultural education [1–3]. In debates on demographic change and regional differences in living conditions, regional aspects of disparities in access and participation are increasingly becoming part of the provision efforts. A special focus in this context are peripheral rural regions, as many challenges of global phenomena manifest themselves particularly in these areas (e.g., ageing and shrinking populations, radicalisation tendencies, etc.). Cultural education is seen to potentially play an influential role in counteracting these social challenges. However, it is especially in rural regions that funding of cultural programmes is often neglected. Moreover, despite the attempt to create equivalent living conditions in Germany, the educational infrastructure is poorly developed in many places and in some cases is even being significantly reduced [4].

Furthermore, cultural programmes are currently shifting from the formal education sector to the non-formal sector. While the share of artistic subjects in the school curricular

is decreasing, a growing number of programmes in non-formal institutions is taking over the functions and contents of cultural and arts education [5]. However, as the funding of non-formal education depends greatly on its character, it is difficult to make general assessments about the causes and mechanisms of their (in)accessibility. These political-administrative issues of cultural participation are accompanied by the well-known and well researched social challenges [6]. Interests, tastes, educational capital and financial resources are not evenly distributed, but they strongly influence the decision whether an individual participates in cultural education or not [7]. Consequently, regional characteristics and their unequal distribution, as well as individual socioeconomic endowments and resources, have a decisive influence on participation in cultural education.

Against the background of educational equity and peripheralisation theories, we examine patterns of participation in non-formal cultural education (NCE) programmes (associations and courses) amongst German youth. Particularly, we aim to examine the extent to which participation in NCE programmes amongst German youth is limited by their socioeconomic background as well as regional economic and geographical characteristics. In doing so, we achieve a differentiated perspective on regional disparities in NCE while also accounting for factors of composition.

## 2. Educational Policy and Theoretical Background

People, resources and institutions are distributed over space in one way or another for very different reasons, and these are not always unjustified disparities [8,9]. One aspect that fuels debates about equivalent living conditions and highlights the unequal distribution of resources is the process of peripheralisation and centralisation [10,11]. Spatial centralisation refers to the accumulation of productivity and infrastructure with a simultaneous disadvantage or peripheralisation of other regions. The processual weakening of economic efficiency simultaneously brings about a drastic change in the regional settlement structure. These dynamics reinforce each other and, in combination, produce a dysfunctional social and technological infrastructure. This is reflected, among other things, in unequal opportunities for participation in terms of employment and cultural offerings, as well as the dismantling of educational institutions [10,11]. Even if attempts are being made to counteract these developments, a general non-identical regional endowment of resources is not always random or unjust but, in some cases, calculated.

Since the German reunification, the creation of equivalent living conditions has been a declared political objective of the German government. The decisive factor for the assessment of whether a distribution is just or unjust is usually based on whether minimum spatial standards or target values are met. In this sense, a certain number of goods or opportunities should be available for a certain number of inhabitants [8]. In the efforts to create equivalent living conditions, some goals have already been implemented, while others are still far from being achieved. Central issues such as the expansion of jobs or transportation infrastructure, as well as dealing with old district debts, have not been decided [12].

Youth work, which includes a large part of non-formal education for youth in Germany, offers the opportunity to respond to current social challenges and to promote equal opportunities [13]. Since 1990, youth work in Germany has been a legally obligatory offer (SGB VIII), and most federal states designated the districts to be the responsible local authorities. Accordingly, it is the responsibility of the districts to identify educational needs as well as to provide and finance appropriate programmes. However, non-formal educational youth programmes are still classified as so-called “voluntary services”. With voluntary services, the municipalities and districts are not actually required to provide these programmes as public services but encouraged to outsource these services to private non- and for-profit providers. This background highlights that non-formal cultural education is also a market for which a certain economic viability can exist.

The Child and Youth Welfare Act includes cultural education (KJHG § 11) as defined by the Federal Ministry for Family Affairs, Senior Citizens, Women and Youth to enable

participation in the cultural life of society, develop the ability to deal with art and culture in a differentiated manner as well as to act in a creative and aesthetic way. This definition thus refers to the Universal Declaration of Human Rights (Art. 26), which emphasises cultural participation as a human right. Against the background of these legal regulations and administrative structures, the question of implementation inevitably arises. Kraehe's [14] multidimensional framework for educational equity provides a theoretical foundation for the following considerations. Kraehe conceptualises educational justice along six different dimensions: distribution of resources (allocation of material and human assets), access (existence of available experiences and pathways), participation (attendance and non-attendance), recognition (valuing of diverse cultural perspectives), effects (output of educational structures) and transformation (dynamic processes of change). In the context of our study, we will mainly explore questions of resource distribution, access and participation. However, it is important to understand that all results should be interpreted within the broader framework and related to the other dimensions: "Not a single lens can, by itself, adequately render the complex forces that maintain educational disparities" [14]. This perspective becomes particularly relevant with respect to the demographic developments and the German efforts to achieve nationwide equivalent living conditions.

### *2.1. Regional Disparities in the Non-Formal Education System*

In the course of the expansion of education and the efforts to create equivalent living conditions in all regions in Germany, debates on the character of services of general interest have become the focus of politics and the public [15]. Although education is clearly also a component of services of general interest, debates remain about how broadly educational institutions should be defined and included in the efforts [4].

Despite the expansion of secondary school provision in the second half of the last century, regional differences in the education sector are complex and vary depending on the educational field [4]. Although the government's central objectives and measures to ensure equivalent living conditions regarding education are directed mainly at expanding and securing formal educational opportunities, there are also plans to promote extracurricular institutions, programmes and networks. Education in Germany is the responsibility of the federal states and depends on their respective budgets. Therefore, a large part of the public costs of education are borne annually by the federal states and districts, as complex steering processes are required in the districts to enable the interplay of formal, non-formal and informal education [12]. Since public non-formal education programmes within the framework of the Child and Youth Welfare Act are largely financed by the districts, the responsibility of public non-formal education lies at the local level. In fact, educational programmes at education centres and music schools are financed in varying proportions, depending on the federal state, mainly from participant fees, district subsidies and subsidies from the federal state. Particularly in regions with lower-resource schools, for example, voluntary programmes can be important complements to the formal school curriculum. Against the background that external service providers are supposed to take over responsibilities of non-formal cultural education, the question arises, however, whether regions with a higher GDP are not fundamentally favoured. Based on these financing structures, we formulate Hypotheses 1 and 2:

**Hypothesis 1a (H1a).** *The higher the Gross Domestic Product (GDP) of a district, the more likely people are to participate in NCE courses.*

**Hypothesis 1b (H1b).** *The less indebted a district is, the more likely it is that people will participate in NCE courses.*

Research shows that there was a significant decline in the number of new associations founded at the beginning of the millennium and that the variety of associations is still considerably limited in many regions. Additionally, even though the work in youth

associations is traditionally based on voluntary support, associations in cities have a higher proportion of full-time staff than in the smaller districts [16]. It is also found that the umbrella association in urban regions more often advises youth organisations on legal issues or provides conference or seminar rooms [16]. Urban youth associations are more likely to receive funding from higher level institutions while rural associations receive significantly more funding from districts [16]. These findings already indicate that despite generally available financial resources, rural regions are rather dependent on voluntary work. At the same time, it can also be deduced that the financial situation of the district has a greater impact on rural regions, as they more often receive funding from this administrative level.

**Hypothesis 2a (H2a).** *The higher the GDP of a district, the more likely people are to participate in NCE associations.*

**Hypothesis 2b (H2b).** *The less indebted a district is, the more likely it is that people will participate in NCE associations.*

## 2.2. Cultural Education and Participation

We use a broad definition of cultural education that includes socio-cultural as well as artistic-aesthetic aspects of non-formal education to avoid slipping back into the dichotomy of highbrow (e.g., museum or theatre visits) and lowbrow (e.g., visits to the cinema or concerts, socio-cultural events) varieties of NCE. Cultural education, in this sense, includes any learning about, with or through artistic and cultural items or activities [17]. NCE would be described as all educational activities that do not lead to a formal educational qualification but are institutionalized, such as theatre or carnival clubs, or extracurricular cultural education such as music or pottery lessons. We do not include activities that are practiced alone or with friends outside of institutionalised associations, such as private band activities, reading or other interpersonal but informal knowledge exchange. In particular, we consider only non-formal cultural courses and local cultural associations ("Vereine"; see Section 3 for operationalisation). Cultural associations can, for example, be musical associations for music, dance or theatre or cultural associations such as literary societies or art associations, while participation in courses refers to attendance at courses from education centres (*Volkshochschulen*) or music schools.

NCE programmes have the potential to supplement formal school education and expand cultural education programmes beyond traditional offerings [5]. NCE in Germany has grown substantially in recent years, despite major regional differences. Smaller cities and rural areas, in particular, face infrastructural shortages and find themselves in a disadvantaged position [5]. Regions with manifold cultural infrastructure due to cultural tourism and their population structure have more opportunities to offer cultural programmes than rural or peripheral regions in Germany [4,9]. In rural areas in particular, cultural education is mainly characterised by voluntary commitment, mostly provided by associations and largely self-financed through membership fees [16,18]. It also shows that the proximity to educational institutions plays a significant role in questions of participation. Families with fewer resources are often less able or willing to accept long distances for their children's participation, whereas families with a higher social standing are more willing to accept this extra cost [19,20]. The place of residence therefore has a clear influence on participation decisions which are additionally related to socioeconomic statuses [21,22]. While in rather central regions, opportunities of (non-formal) cultural education are more extensive [8,9] and a commitment to long term group activities less necessary to participate in cultural education, we hypothesise:

**Hypothesis 3a (H3a).** *The more peripheral a district, the more likely people are to participate in NCE associations.*

**Hypothesis 3b (H3b).** *The more peripheral a district, the less likely people are to participate in NCE courses.*

However, it is not only the infrastructure of the area that facilitates or hinders participation. In addition, the composition of the population is important [23]. According to Bourdieu [24], one of the most prominent scholars on the function of art and culture in societies, participation in cultural activities is largely determined by social class. As a result, members of the higher classes are more likely to participate in highbrow cultural offerings, while members of the lower classes are more likely to enjoy lowbrow cultural programmes. Furthermore, latent secondary origin effects influence the perception of extracurricular activities as meaningful or valuable [25]. These incorporated beliefs and tastes again promote or hinder participation in cultural activities [25]. Empirical findings confirm that gender [26,27], education [28], wealth [29], and employment [30] are all directly connected to cultural participation [29]. In general, the research literature agrees on the direction of socioeconomic and demographic parameters' influence on the decision to attend high-cultural institutions in particular, as well as the frequency of these visits [31]. Individuals in higher social positions are more inclined to engage in highbrow cultural activities, and these lifestyles are handed down via families through socialization and education to future generations [32]. Family resources impact participation in highbrow culture or other cultural education programmes, with children from higher socioeconomic classes having greater chances and skills to participate in these activities [33]. Children's and youth work, on the other hand, is intended to reach a wide range of children and tries to attract a diverse group of participants by offering grass-root cultural activities. According to studies, there are no strong socioeconomic differences in participation in cultural associations, but there are gender differences [16]. In addition to sports clubs and religious groups, cultural programmes such as singing, music and theatre clubs are most prominent amongst children. Based on these findings, we hypothesise the following:

**Hypothesis 4a (H4a).** *Girls are more likely to participate in NCE associations than boys.*

**Hypothesis 4b (H4b).** *The more socioeconomically advantaged households are the more likely individuals are to participate in NCE courses.*

We also expect a difference between western and eastern federal states, as cultural education was understood and handled differently in the old federal states (former Federal Republic of Germany) than in eastern Germany (former German Democratic Republic) for a long time [34,35]. While in the West there was always a very clear distinction between highbrow and popular culture, which was also accompanied by a very clear distinction of clientele, in the East, the political objective was to make highbrow culture accessible to as many people as possible. [34,35]. Following this notion, it can be expected that access to traditionally rather highbrow cultural programmes, such as courses at music schools or education centres, are more popular in the new federal states than in the old ones:

**Hypothesis 5 (H5).** *Individuals from the new federal states are more likely to participate in NCE courses than their western peers.*

### 3. Methods and Analyses

In this paper, we used individual data from the German National Educational Panel Study (NEPS; [36]) as well as regional data from the German Federal Statistical Office and the Federal institute for Research on Building, Urban Affairs and Spatial Development. From birth until old age, NEPS tracks six cohorts on educational processes and developments, returns to education, various educational environments and specific competences. Within this study, nine waves have been collected since 2010. We decided to conduct cross-sectional analyses using the eighth wave (2016–2017) of the third cohort of NEPS because it is the most recent wave with information on cultural education participation. All

eleventh-grade students at regular or special-needs secondary schools in Germany, as well as those who dropped out after grades 9 and 10, were targeted. Prior to the analyses, regional data from the databases of the Destatis and BBSR were matched with the individual dataset using information from the corresponding years.

### 3.1. Data and Operationalisation

We decided not to aggregate non-formal cultural education, but to look at it in a differentiated way in order to make different mechanisms visible: Therefore, we divided NCE into activities in associations and participation in extracurricular courses. In order to map association activities, information on participation in associations such as theatre groups, orchestras or carnival clubs was used as an indicator. Any activity in cultural associations was considered, regardless of membership ([1] yes, [0] No). Participation in extracurricular courses was operationalised using data on course attendance outside school in this or the previous school year. Responses were coded 1 if they attended any cultural classes at music schools, education centres (*Volkshochschulen*) or youth art schools, otherwise, they were coded 0. Based on our definition of cultural education, we developed a coding scheme to classify individual courses as cultural education. Thus, we included all courses and activities, such as pottery classes, music lessons or woodcraft tutorials without a direct association with economic performance [23]. Sports activities were not coded as cultural activities. It is important to note that the data reflect the self-assessed answers of the respondents. Examples of course activities or cultural association activities were given in the questionnaire, but the respondents had to assign their personal cultural experience themselves into the categories.

Based on previous studies, we included gender ([0] male, [1] female), household size, highest school leaving qualification or current type of school ([0] other, [1] upper secondary education) and immigration status ([0] no/other, [1] first or second-generation) into our analyses. As there were no reliable data on income available, we added the Comparative Analysis of Social Mobility in Industrial Nations (CASMIN; for more information see [37]) of the parents to our analyses as representative of socioeconomic status.

For the small-scale regional analyses, we decided to analyse the data at the district level. We choose so for three reasons: Firstly, many important decisions are made at this level for the provision of infrastructural facilities that are closely linked to the use of cultural services. Furthermore, the most comprehensive regional data in Germany are collected at this level. Important indicators such as GDP or the location of settlements can only be operationalised at the district level. Likewise, merging individual and regional data is only feasible at the district level for reasons of data protection. For the same reason, we modified the data and categorise metric variables. Based on previous studies, we include GDP in deciles, dept per capita ([1] relatively low to [4] relatively high) and level of periphery ([1] very central to [4] very peripheral) as the potentially most important indicators in the context of our analyses. After data preparation, the dataset consisted of 1803 individuals in 202 districts across all 16 federal states of Germany with an average of 8.9 observations per district.

### 3.2. Analyses

For the combined analyses with the individual and regional data, we successively carried out logistic multi-level analyses [38,39]. In order to be able to describe the different formats of cultural education and their mechanisms more precisely, we have carried out all regression analyses for NCE in courses and activities in associations separately.

#### 3.2.1. Associations

Our analyses showed that the log-odds of participating in NCE in associations in an “average” district are  $-1.8$  with a variance in the random effect of  $0.37$ . A Likelihood-Ratio (LR) test confirmed that using a multilevel model fits the data better than a simple logistic regression model (MA1:  $\chi^2(1) = 20.92, p = 0.0000$ ). The test statistic therefore indicated that

the between-district variance is non-zero and relevant for our analyses. The relevance of interclass correlation (ICC) is also displayed in the ICC values in Table 1. The plot (Figure 1) shows the district effect or estimated residuals for all 202 districts in the sample, with the line at zero representing the mean log-odds of participating in cultural associations. For a small number of districts, the 95% confidence interval does not overlap the horizontal line at zero, indicating that the uptake of NCE in associations in these districts is significantly above average (above the zero line). Due to the small sample size per district, the standard errors are quite large, leading to wider confidence intervals. A closer look into the top 23 districts shows that they have a smaller dept per capita (2.0 vs. 2.5) and a slightly less central location (2.3 vs. 2.1). Table 1 shows that adding the regional variables (MA2) significantly reduces the variance between districts. Variance is even further reduced when adding the individual variables (MA3). However, an LR Test ( $\chi^2(1) = 0.73$   $p = 0.3933$ ) indicated that including random slopes into the equation is not necessary. For an individual living in peripheral settlements with little dept per capita (MA2), the log-odds of participating in NCE associations range from  $-1.6$  to  $-0.6$ , depending on the district they live in. This translates to a range in probabilities of  $\exp(-1.6)/[1 + \exp(-1.6)] = 0.17$  to  $\exp(-0.6)/[1 + \exp(-0.6)] = 0.35$ . If that peripheral district had more dept, the probabilities of participating would decrease to a range from  $\exp(-1.72)/[1 + \exp(-1.72)] = 0.15$  to  $\exp(-1.45)/[1 + \exp(-1.45)] = 0.19$ . Individuals in very central districts, however, are significantly less affected by the level of dept per capita as the probability to participate in NCE associations lies in both extreme estimations between 0.06 and 0.17. These results already show that the financial burden of the peripheral districts has a significant influence on the participation of individuals in less central regions. Cultural participation in associations in central regions seems to be relatively unaffected by this mechanism, as the differences in the impact of debt per capita are negligible. However, these differences show no significant effect when tested in MA4/5 (Table 1). We further see that the level of periphery has the strongest significant influence on participation in cultural associations across the analyses. Remarkably, the results also support the impression from the descriptive analyses: There are no significant differences in participation in NCE associations between the two extreme regional categories “very central” and “very peripheral”. When we controlled for individual characteristics, individuals in peripheral districts are more than twice as likely ( $\exp(0.93) = 2.5$ ) to participate than their peers living in very central districts. Even individuals in central districts are still almost twice as likely ( $\exp(0.558) = 1.7$ ) to participate in NCE associations than the reference group. Even though the other regional variables do not have an independent statistically significant influence on the dependent variable, a dependency is shown when the interaction between debt and the level of periphery is included. Now, in MA3, the opportunities for participation have changed greatly. We see that individuals in low-indebted peripheral regions are four times more likely ( $\exp(1.5) = 4.6$ ) to participate in NCE associations than their peers in low-indebted very central regions. We also see that the inclusion of the individual variables does not reduce the effect of the regional variables. Thus, they have no explanatory share in the influence of the regional variables. Among the individual variables, it is girls rather than boys as well as religious individuals and individuals from larger families who are more likely to participate in cultural associations.

### 3.2.2. Courses

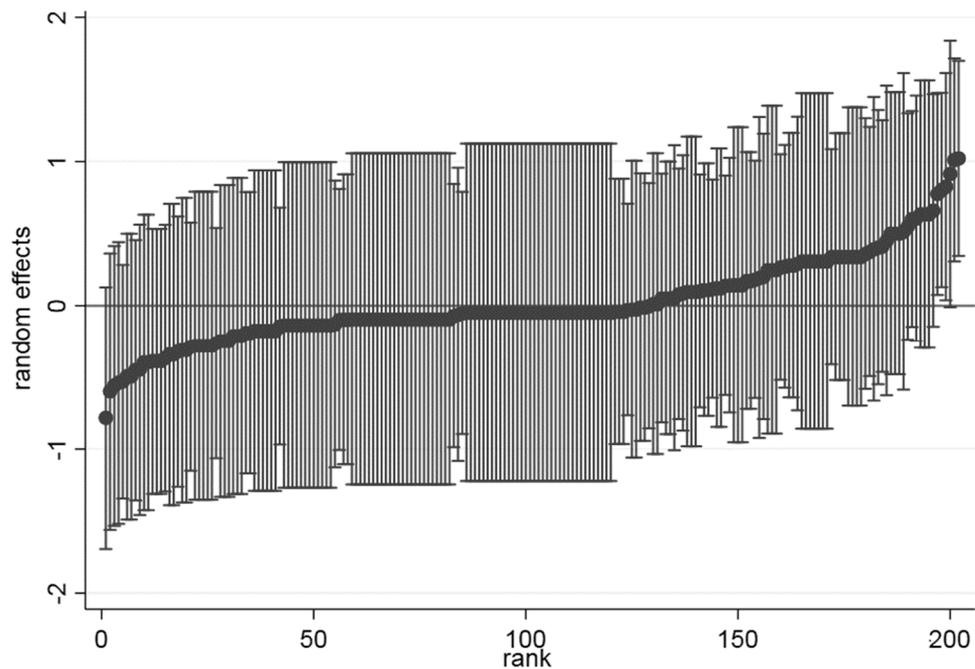
A Likelihood-Ratio Test (MB1:  $\chi^2(1) = 10.40$   $p = 0.0000$ ) confirmed that a multilevel model fits the data better than a simple logistic regression model. The relevance of interclass correlation (ICC) is also displayed in the ICC values in Table 2. The plot (Figure 2) shows the estimated residuals for the districts in the sample. Here, too, for a small number of districts, the 95% confidence interval does not overlap the horizontal line at zero, indicating that the uptake of NCE in courses in these districts is significantly above the mean log-odds of participating. A closer look into these districts demonstrates that they score remarkably higher on average GDP (7.2 vs. 6.2) and have a smaller dept per capita (2.1 vs. 2.5). Depending on the district, individuals' probabilities of participation in NCE courses range

between  $\exp(-3.1)/[1 + \exp(-3.1)] = 0.04$  to  $\exp(0.73)/[1 + \exp(0.73)] = 0.68$  with the confidence intervals in very central and very peripheral districts. The data also show that especially in districts with a rather small GDP, confidence intervals decrease to the lower end when the debt is increasing. These figures already indicate that financial resources are essential when talking about participation in NCE in general.

**Table 1.** Multilevel logistic Regression on NCE participation in associations. Own presentation based on NEPS C8 W8 Data.

	MA1	MA2	MA3	MA4	MA5
Level of Periphery (ref. Very Central)					
Central		0.524 *	0.558 *	1.078 *	−0.216
		(0.228)	(0.217)	(0.454)	(0.871)
Peripheral		0.849 **	0.926 ***	1.525 **	1.070
		(0.283)	(0.273)	(0.557)	(0.856)
Very Peripheral		0.728	0.796	1.542	0.964
		(0.482)	(0.464)	(1.211)	(1.114)
Dept p.c.		−0.131	−0.143	−0.0115	−0.132
		(0.081)	(0.078)	(0.117)	(0.077)
GDP		0.004	−0.000	0.002	−0.029
		(0.041)	(0.039)	(0.0391)	(0.0853)
East (ref. West)		−0.206	−0.162	−0.162	−0.174
		(0.211)	(0.211)	(0.212)	(0.212)
Female (ref. Male)			0.642 ***	0.644 ***	0.645 ***
			(0.140)	(0.140)	(0.140)
Upper Secondary (ref. Other)			0.045	0.023	0.023
			(0.164)	(0.164)	(0.164)
CASMIN			0.062	0.064	0.062
			(0.040)	(0.040)	(0.040)
First/Second Gen. Immigrant (ref. Other)			0.207	0.184	0.199
			(0.263)	(0.263)	(0.262)
HH Size			0.134 **	0.134 **	0.135 **
			(0.045)	(0.045)	(0.045)
Religious (ref. No)			0.423 *	0.419 *	0.394 *
			(0.192)	(0.192)	(0.192)
Central # Dept p.c.				−0.213	
				(0.173)	
Peripheral # Dept p.c.				−0.247	
				(0.212)	
Very Peripheral # Dept p.c.				−0.280	
				(0.421)	
Central # GDP					0.104
					(0.102)
Peripheral # GDP					−0.054
					(0.110)
Very Peripheral # GDP					−0.087
					(0.209)
Constant	−1.840 ***	−1.945 ***	−3.634 ***	−3.997 ***	−3.366 ***
	(0.0982)	(0.475)	(0.577)	(0.626)	(0.910)
Random-Effects Parameters					
var(Constant)	0.374	0.270	0.186	0.164	0.157
	(0.134)	(0.113)	(0.101)	0.098	(0.097)
Observations	1803	1803	1803	1803	1803
ICC	0.102	0.075	0.053	0.047	0.046

Standard errors in parentheses, \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .



**Figure 1.** Ranked districts’ estimated residuals with 95% CIs (Associations). Own presentation based on NEPS C8 W8 Data.

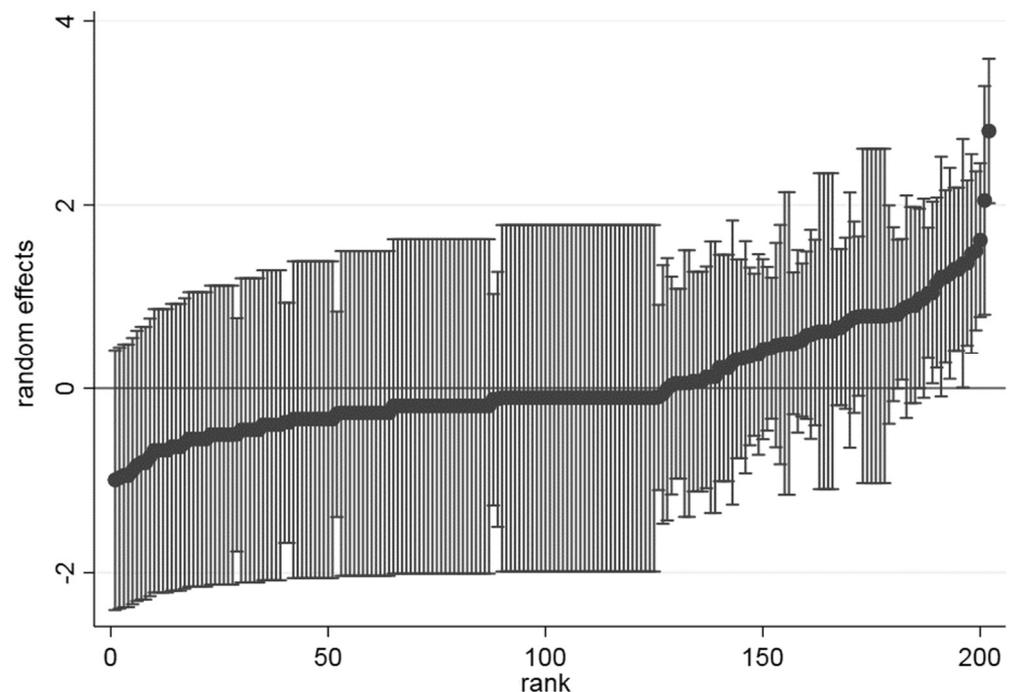
**Table 2.** Multilevel logistic Regression on NCE participation in courses. Own presentation based on NEPS C8 W8 Data.

	MB1	MB2	MB3	MB4	MB5
Level of Periphery (ref. Very Central)					
Central		0.0171 (0.311)	0.360 (0.274)	−0.123 (0.566)	−0.586 (0.990)
Peripheral		−0.292 (0.400)	0.134 (0.366)	0.406 (0.736)	0.107 (0.986)
Very Peripheral		−0.412 (0.697)	−0.077 (0.600)	−1.642 (1.718)	−2.161 (1.491)
Dept p.c.		−0.069 (0.110)	−0.055 (0.098)	−0.120 (0.136)	−0.077 (0.0981)
GDP		−0.009 (0.055)	−0.004 (0.051)	−0.009 (0.051)	−0.064 (0.094)
East (ref. West)		0.472 * (0.197)	0.476 * (0.205)	0.462 * (0.205)	0.479 * (0.205)
Female (ref. Male)			0.774 *** (0.150)	0.766 *** (0.150)	0.768 *** (0.150)
Upper Secondary (ref. Other)			1.815 *** (0.266)	1.832 *** (0.267)	1.842 *** (0.268)
CASMIN			0.351 *** (0.049)	0.351 *** (0.049)	0.349 *** (0.049)
First/Second Gen. Immigrant (ref. No/Other)			0.356 (0.285)	0.366 (0.285)	0.357 (0.285)
HH Size			−0.010 (0.053)	−0.008 (0.053)	−0.009 (0.053)
Religious (ref. No)			0.293 (0.201)	0.298 (0.201)	0.261 (0.201)
Central # Dept p.c.				0.209 (0.215)	
Peripheral # Dept p.c.				−0.160 (0.289)	

Table 2. Cont.

	MB1	MB2	MB3	MB4	MB5
Very Peripheral # Dept p.c.				0.577 (0.571)	
Central # GDP					0.120 (0.118)
Peripheral # GDP					−0.049 (0.136)
Very Peripheral # GDP					0.452 (0.282)
Constant	−2.068 *** (0.142)	−1.848 ** (0.641)	−6.226 *** (0.760)	−6.017 *** (0.793)	−5.612 *** (1.047)
Random-Effects Parameters					
var(Constant)	1.011 (0.283)	1.022 (0.288)	0.552 (0.192)	0.525 (0.185)	0.504 (0.180)
Observations	1803	1803	1803	1803	1803
ICC	0.235	0.237	0.143	0.138	0.132

Standard errors in parentheses, \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .



**Figure 2.** Ranked districts' estimated residuals with 95% CIs (Courses). Own presentation based on NEPS C8 W8 Data.

Different from the models on NCE associations, the between-district variance did not reduce when we added regional variables. Only when we added individual-level variables did variance decreased significantly by half, indicating strong differences in the variables between districts. However, the LR tests ( $\chi^2(1) = 0.74$   $p = 0.3889$ ) that were conducted with the relevant variables in order to test for the necessity of random slopes returned not significant. The individual variables may therefore vary between districts but not enough to include random slopes into our estimations. The results illustrated in Table 2 also show that the only statistically significant regional variable having an effect on participation in NCE courses is the indicator for districts in eastern Germany. Across all models, Individuals living in East German districts are twice as likely to participate in NCE courses than their Western peers. In these models, the educational variables are significant and strong in their effects. Thus, across all models, upper secondary education has by far the strongest

influence on participation in NCE courses. Individuals in upper secondary education are six times more likely to participate than individuals in other types of school.

In addition, the chance of participation in NCE courses increases by 1.5 with each step on the CASMIN scale. Children with parents that completed a university degree have therefore about 12 times the chance of participating than children from families with parents who have not completed their schooling and vocational training.

#### 4. Results

Our analyses showed that participation in non-formal cultural programmes is very diverse and cannot be generalised across all types of cultural education. Girls, people in upper secondary education and people with higher educated parents were more likely to participate in non-formal cultural courses (H4b). At the same time, participation in cultural associations tended to be characterised by space. Thus, while on average girls were also more likely than men to participate (H4a), people in moderate peripheral or central districts as well as people from larger households and with more religious affiliations were more likely to participate in cultural associations. For a few of our hypotheses, first, positive indications were already found in the descriptive analyses but were not conclusively evident in the inferential statistical analyses (H1a/b, H2a/b). People from higher GDP (H1a/H2a) or lower debt per capita (H1b/H2b) districts did not participate significantly more often in cultural courses or associations than their peers from lower income districts. The linear assumptions, that with increasing level of periphery individuals are more (H3a) or less (H3b) likely to participate was not reflected in our data. However, in case of NCE associations, we saw that it is the intermediate categories in particular where significant differences with the extremes can be found. Nonetheless, in accordance with our hypothesis, participation in cultural associations did not show any significant differences between Western and Eastern Germany, whereas a difference could be found in the case of cultural courses (H5). It is to be expected that, upon examination, we would discover interaction effects showing that the educational background in the new federal states is significantly less decisive for participation than in the old ones.

Overall, our results highlighted the advantages of looking on NCE in a differentiated way. Apart from gender, participation in cultural clubs had no common predictors with non-formal cultural courses. In accordance with the literature and previous findings [26,27], gender was the most constant and robust factor in explaining cultural participation in general.

#### 5. Discussion and Conclusions

The objective of this study was to analyse the extent to which contextual variables at the district level affect young people's participation in non-formal cultural activities and the extent to which socioeconomic characteristics play a role in participation. The results show that participation in cultural formats is not based on one general mechanism, being that economically advantaged and urban-living individuals are much more likely to participate due to their socialization and proximity to respective institutions. Rather, cultural activities must be considered in terms of their character in order to assess the mechanisms at play. Peripheral or financially disadvantaged districts do not automatically hinder participation. Instead, there seem to be differences in the dependency on district funding between very peripheral and very central districts that frame the cultural infrastructure. Based on the theoretical and empirical considerations, we can assume that central and more urban areas have greater flexibility in establishing non-formal cultural programmes with third-party funds, while rural regions are more dependent on public sponsorship by the district.

Our study connects to other predominantly qualitative research, which deals intensively with the forms and the provision of cultural education in rural areas [40] but also with classical sociological lifestyle research [6]. Thus, it holds a bridging position at the intersection of two research fields. Our analyses suggest, in accordance with previous findings [40,41], that participation in NCE in rural and peripheral areas takes place in other forms and based on other resources, e.g., volunteer work, than in rather urban or central

regions [40]. Even though these NCE programmes, which are based on volunteer work and association structures, are central to cultural life in many financially disadvantaged or peripheral regions, they are often overlooked in academic research. Research that investigates the consequences of cultural education for social and political participation should therefore not only look at high-cultural programmes but also take into account the programmes that predominate in rural areas or at least allow these programmes to be included in the analyses [23]. With this approach, the article addresses a currently little considered but very central aspect of education and its regional accessibility. This study therefore makes an important contribution to diversifying the research on cultural and arts participation as well as destigmatising rural and peripheral areas. Even though we were able to show that regional differences in non-formal cultural education are less linear than expected, we cannot make any statements about the quality or diversity of these programmes. Association activities have a long tradition in Germany and in many places are deeply anchored in the village community and can take on diverse orientations. These informal structures could also be a reason for our inconclusive results. Studies show that a large proportion of the work with and in associations is carried out by volunteers. In addition, some clubs could offer courses that are also supported or offered by volunteers [42,43]. These volunteer structures would exist quite independently of financial subsidies and correlations would not show in the data. Unfortunately, we cannot reconstruct these volunteer structures or arrangement of activities with the data.

Another finding of our study in line with related research [6,31] is that the funding programmes of the last 20 years may have improved the situation but have not yet been able to eliminate the social and regional differences in cultural and arts participation [3]. Notably, only because we do not find significant differences in participation in non-formal cultural courses or associations between very central and very peripheral regions, this does not mean that the conditions for participating in NCE are identical. Rather, it is to be expected that in urban and central regions there are many opportunities for short-term cultural education—for example, by visiting museums, theatres or cinemas. Since we only consider two partial aspects of NCE in our analyses, we cannot make any statements about all types of cultural education. We have also limited the analysis to two divides, namely, the west/east divide and the centre/periphery divide. These divides have been considered because of current issues regarding peripheral regions. At the same time, it is important that further studies are open to other boundaries, use other scales and refrain from understanding these scales as something natural [44,45].

The framework for educational equity offers useful points of reference for an analysis of existing cultural education programmes aiming to understand the different aspects of participation as well as the intertwining of inequality dimensions. Future research could connect to this and trace the challenges of cultural education along the individual dimensions. By doing so, a comprehensive understanding of the state of educational equity could gradually be developed. However, the scope of these considerations also prevents us from covering all aspects of educational equity in our analysis. We do not claim to provide a comprehensive overview of cultural educational equity in Germany. Instead, we show the diversity of aspects of resources, access and participation that can be used to trace educational equity. However, our research also shows that the data base in Germany for understanding cultural education programs, especially outside of densely populated areas, is rather poor. Due to the small number of observations per district, the statistical parameters are often too rough to make significant statements. Even though this study focused on Germany, it would be interesting to examine parallels and differences between countries, not least to identify best practice examples. Depending on the data base, mixed-method studies could be used that create a close-knit research design in case studies to consider all relevant aspects of cultural participation in education. Last but not least, current societal trends, such as the impact of the Coronavirus pandemic or climate change on (inter-)national migration movements, will keep studies on educational equity relevant in the coming decades.

**Author Contributions:** Conceptualization, L.F. and N.K.; methodology, L.F.; formal analysis, L.F.; data curation, L.F.; writing—original draft preparation, L.F. and N.K.; writing—review and editing, L.F. and N.K.; visualization, L.F.; supervision, N.K.; project administration, N.K.; funding acquisition, N.K. All authors have read and agreed to the published version of the manuscript.

**Funding:** This research and APC was funded by the Federal Ministry of Education and Research, grant number 01JKL19MET.

**Institutional Review Board Statement:** Not applicable.

**Informed Consent Statement:** Not applicable.

**Data Availability Statement:** This paper uses data from the National Educational Panel Study (NEPS): Starting Cohort Grade 5, doi:10.5157/NEPS:SC3:10.0.0. From 2008 to 2013, NEPS data was collected as part of the Frame-work Program for the Promotion of Empirical Educational Research funded by the German Federal Ministry of Education and Research (BMBF). As of 2014, NEPS has been carried out by the Leibniz Institute for Educational Trajectories (LifBi) at the University of Bamberg in cooperation with a nationwide network.

**Conflicts of Interest:** The authors declare no conflict of interest.

## References

- Brütt, M. EU-Funding for Culture 2021. Creative Europe Desk Kultur, Bonn. 2020. Available online: [https://kultur.creative-europe-desk.de/fileadmin/9\\_Infodesk/EU-funding-for-culture2021-2027\\_CEDKultur2020.pdf](https://kultur.creative-europe-desk.de/fileadmin/9_Infodesk/EU-funding-for-culture2021-2027_CEDKultur2020.pdf) (accessed on 10 August 2021).
- European Commission. Culture and Creativity—Previous Programmes. 2021. Available online: <https://ec.europa.eu/culture/resources/previous-programmes> (accessed on 20 August 2021).
- BMBF LSFörderrichtlinie (2018–2022)—BMBF Bündnisse für Bildung. 2021. Available online: <https://www.buendnisse-fuer-bildung.de/de/foerderrichtlinie-1719.html> (accessed on 20 August 2021).
- Weishaupt, H. Bildung und Region. In *Handbuch Bildungsforschung*; Tippelt, R., Schmidt-Hertha, B., Eds.; Springer Fachmedien Wiesbaden: Wiesbaden, Germany, 2018; pp. 271–286. Available online: [https://www.researchgate.net/publication/323157744\\_Bildung\\_und\\_Region](https://www.researchgate.net/publication/323157744_Bildung_und_Region) (accessed on 17 August 2021).
- Liebau, E. Kulturelle und Ästhetische Bildung. In *Handbuch Bildungsforschung*; Tippelt, R., Schmidt-Hertha, B., Eds.; Springer: Wiesbaden, Germany, 2018; pp. 1219–1239.
- Notten, N.; Lancee, B.; van de Werfhorst, H.G.; Ganzeboom, H.B.G. Educational stratification in cultural participation: Cognitive competence or status motivation? *J. Cult. Econ.* **2015**, *39*, 177–203. [CrossRef]
- Blossfeld, H.-P.; Shavit, Y. Persisting barriers: Changes in educational opportunities in thirteen countries. In *The Structure of Schooling: Readings in the Sociology of Education*, 3rd ed.; Arum, R., Beattie, I., Ford, K., Eds.; Sage: London, UK, 2015; pp. 274–287. Available online: [https://www.researchgate.net/publication/331101596\\_Persisting\\_barriers\\_Changes\\_in\\_educational\\_opportunities\\_in\\_thirteen\\_countries](https://www.researchgate.net/publication/331101596_Persisting_barriers_Changes_in_educational_opportunities_in_thirteen_countries) (accessed on 16 August 2021).
- Fischer, C.S. Toward a Subcultural Theory of Urbanism. *Am. J. Sociol.* **1975**, *80*, 1319–1341. [CrossRef]
- Fischer, C.S. The Subcultural Theory of Urbanism: A Twentieth-Year Assessment. *Am. J. Sociol.* **1995**, *101*, 543. Available online: <http://www.jstor.org/stable/2781994> (accessed on 17 August 2021). [CrossRef]
- Eder, J. Peripheralization and knowledge bases in Austria: Towards a new regional typology. *Eur. Plan. Stud.* **2019**, *27*, 42–67. [CrossRef]
- Kühn, M. Peripheralization: Theoretical Concepts Explaining Socio-Spatial Inequalities. *Eur. Plan. Stud.* **2015**, *23*, 367. Available online: [https://www.researchgate.net/publication/273332599\\_Peripheralization\\_Theoretical\\_Concepts\\_Explaining\\_Socio-Spatial\\_Inequalities](https://www.researchgate.net/publication/273332599_Peripheralization_Theoretical_Concepts_Explaining_Socio-Spatial_Inequalities) (accessed on 16 August 2021). [CrossRef]
- Bundesministerium des Innern, für Bau und Heimat. *Unser Plan für Deutschland—Gleichwertige Lebensverhältnisse Überall: Schlussfolgerungen von Bundesminister Horst Seehofer als Vorsitzendem Sowie Bundesministerin Julia Klöckner und Bundesministerin Dr. Franziska Giffey Schlussfolgerungen von Bundesminister Horst Seehofer als Vorsitzendem Sowie Bundesministerin Julia Klöckner und Bundesministerin Dr. Franziska Giffey als Co-Vorsitzenden zur Arbeit der Kommission, “Gleichwertige Lebensverhältnisse”*; Bundesministerium des Innern, für Bau und Heimat: Berlin, Germany, 2020.
- Besse, L.; Loncle, P. Non-formale Bildung und Jugendarbeit in Frankreich: Ein historischer und soziologischer Blick auf Angebote und Zielgruppen. In *Non-Formale Bildung: Chance oder Herausforderung für die Jugendarbeit? Erkenntnisse einer deutschfranzösischen Fachtagung*; Deutsch-Französisches Jugendwerk (DFJW), Deutsches Jugendinstitut (DJI), Institut national de la jeunesse et de l'éducation populaire (INJEP): Paris, France, 2018; pp. 111–134.
- Kraehe, A.M.; Acuff, J.B.; Travis, S. Equity, the Arts, and Urban Education: A Review. *Urban Rev.* **2016**, *48*, 220–244. [CrossRef]
- Autorengruppe Bildungsberichterstattung. *Bildung in Deutschland 2018: Ein Indikatorengestützter Bericht mit Einer Analyse zu Wirkungen und Erträgen von Bildung*; Deutsches Institut für Internationale Pädagogische Forschung: Bielefeld, Germany, 2018.
- Seckinger, M. DJI—Jugendverbandserhebung: Befunde zu Strukturmerkmalen und Herausforderungen. München: Dt. Jugendinstitut. Available online: [http://www.dji.de/bibs/64\\_11664\\_Jugendverbandserhebung2009.pdf](http://www.dji.de/bibs/64_11664_Jugendverbandserhebung2009.pdf) (accessed on 12 August 2021).

17. Kolleck, N.; Büdel, M. Kulturelle Bildung in Ländlichen Räumen: Vorstellung der Forschungsvorhaben der BMBF-Förderrichtlinie. Kulturelle Bildung Online. 2020. Available online: <https://www.kubi-online.de/artikel/kulturelle-bildung-laendlichen-raeumen-vorstellung-forschungsvorhaben-bmbf> (accessed on 8 August 2021).
18. Schneider, W. (Ed.) *Weißbuch Breitenkultur: Kulturpolitische Kartografie eines Gesellschaftlichen Phänomens am Beispiel des Landes Niedersachsen*; Universitätsverlag: Hildesheim, Germany, 2014; Volume 29.
19. Forrest, D. Is it worth subsidising regional repertory theatre? *Oxf. Econ. Pap.* **2000**, *52*, 381–397. [[CrossRef](#)]
20. Bedate, A.; Herrero, L.; Sanz Lara, J.Á. Economic valuation of the cultural heritage: Application to four case studies in Spain. *J. Cult. Herit.* **2004**, *5*, 101–111. [[CrossRef](#)]
21. Otte, G.; Lübke, H.; Balzer, D. Macht Stadtluft aktiv? Die Nutzung außerhäuslicher Kulturangebote im Stadt-Land-Vergleich. In *Forschung zu Kultureller Bildung in Ländlichen Räumen: Methoden, Theorien und Erste Befunde*; Kolleck, N., Büdel, M., Nolting, J., Eds.; Beltz: Weinheim, Germany, 2021; pp. 219–242.
22. Rössel, J.; Weingartner, S. Opportunities for cultural consumption: How is cultural participation in Switzerland shaped by regional cultural infrastructure? *Ration. Soc.* **2016**, *28*, 363–385. [[CrossRef](#)]
23. Fobel, L.; Kolleck, N. Cultural Education: Panacea or Amplifier of Existing Inequalities in Political Engagement? *Soc. Incl.* **2021**, *9*, 324–336. [[CrossRef](#)]
24. Bourdieu, P.; Bennett, T. *Distinction: A Social Critique of the Judgement of Taste*; Routledge: London, UK; New York, NY, USA, 2010. Available online: <https://ebookcentral.proquest.com/lib/gbv/detail.action?docID=1433990> (accessed on 5 July 2021).
25. Boudon, R. *Education, Opportunity, and Social Inequality: Changing Prospects in Western Society*; Wiley Series in Urban Research; Wiley: New York, NY, USA, 1974.
26. Coulangeon, P. Changing policies, challenging theories and persisting inequalities: Social disparities in cultural participation in France from 1981 to 2008. *Poetics* **2013**, *41*, 177–209. [[CrossRef](#)]
27. Christin, A. Gender and highbrow cultural participation in the United States. *Poetics* **2012**, *40*, 423–443. [[CrossRef](#)]
28. Frey, B.S.; Meier, S. The Economics of Museums. *SSRN J.* **2003**, *1*, 1017–1047. [[CrossRef](#)]
29. Katz-Gerro, T. Cross-National Cultural Consumption Research: Inspirations and Disillusions. In *Lebensstilforschung*; Rössel, J., Otte, G., Eds.; VS Verlag für Sozialwissenschaften: Wiesbaden, Germany, 2011; pp. 339–360.
30. Katz-Gerro, T. Highbrow Cultural Consumption and Class Distinction in Italy, Israel, West Germany, Sweden, and the United States. *Soc. Forces* **2002**, *81*, 207. Available online: <http://www.jstor.org/stable/3086532> (accessed on 6 July 2021). [[CrossRef](#)]
31. Falk, M.; Katz-Gerro, T. Cultural participation in Europe: Can we identify common determinants? *J. Cult. Econ.* **2016**, *40*, 127–162. [[CrossRef](#)]
32. Ecarius, J.; Groppe, C.; Malmede, H. *Familie und Öffentliche Erziehung*; VS Verlag für Sozialwissenschaften: Wiesbaden, Germany, 2009.
33. Aschaffenburg, K.; Maas, I. Cultural and Educational Careers: The Dynamics of Social Reproduction. *Am. Sociol. Rev.* **1997**, *62*, 573. [[CrossRef](#)]
34. Fobel, L.; Kolleck, N. Kulturelle Bildungsteilhabe in Deutschland. Zur Bedeutung von Komposition und Kontext für die Wahrnehmung non-formaler kultureller Bildungsangebote am Beispiel der innerdeutschen Ost-/West-Dichotomie. In *Ostdeutschland 4.0—Über die Nützlichkeit einer Kategorie*; Vogel, L., Lorenz, A., Pates, R., Eds.; Springer: Berlin, Germany, 2021.
35. Keuchel, S. (Ed.) *Das Jugend-KulturBarometer: “Zwischen Eminem und Picasso . . . ”; mit einer Ausführlichen Darstellung der Ergebnisse des JugendKulturBarometers Sowie Weiteren Fachbeiträgen zur Empirischen Jugendforschung und Praxisbeispielen zur Jugend-Kulturarbeit*; ARcult: Bonn, Germany, 2006.
36. Blossfeld, H.-P.; von Maurice, J. Education as a lifelong process. *Z. Erzieh.* **2011**, *14*, 19–34. [[CrossRef](#)]
37. Zielonka, M.; Pelz, S. *NEPS Technical Report: Implementation of the ISCED-97, CASMIN and Years of Education Classification Schemes in SUF Starting Cohort*; Leibniz Institute for Educational Trajectories: Bamberg, Germany, 2015.
38. Steele, F. Module 7 (Concepts): Multilevel Models for Binary Responses Introduction. Centre for Multilevel Modelling. Available online: <http://www.bristol.ac.uk/media-library/sites/cmm/migrated/documents/7-concepts-sample.pdf> (accessed on 20 August 2021).
39. Leckie, G. Module 7: Multilevel Models for Binary Responses—Stata Practical. Centre for Multilevel Modelling. Available online: <http://www.cmm.bris.ac.uk/lemma/course/view.php?id=13> (accessed on 20 August 2021).
40. Kegler, B. *Soziokultur in Ländlichen Räumen: Die Kulturpolitische Herausforderung Gesellschaftsgestaltender Kulturarbeit*; Kopaed: München, Germany, 2020.
41. Krimmer, H.; Priemer, J. Zivilgesellschaft Verstehen: Ziviz-Survey 2012. Available online: [https://www.bertelsmann-stiftung.de/fileadmin/files/user\\_upload/ZiviZ\\_Survey\\_2012.pdf](https://www.bertelsmann-stiftung.de/fileadmin/files/user_upload/ZiviZ_Survey_2012.pdf) (accessed on 25 August 2021).
42. Paarlberg, L.E.; Nesbit, R.; Choi, S.Y.; Moss, R. The Rural/Urban Volunteering Divide. *VOLUNTAS* **2021**, *1–4*. [[CrossRef](#)]
43. Simonson, J.; Kelle, N.; Kausmann, C.; Tesch-Römer, C. (Eds.) *Freiwilliges Engagement in Deutschland: Der Deutsche Freiwilligensurvey 2019*, 1st ed.; Springer Fachmedien: Wiesbaden, Germany, 2022.
44. Moore, A. Rethinking scale as a geographical category: From analysis to practice. *Prog. Hum. Geogr.* **2008**, *32*, 203–225. [[CrossRef](#)]
45. de Souza, P. *The Rural and Peripheral in Regional Development: An Alternative Perspective*, 1st ed.; Routledge: London, UK; New York, NY, USA, 2018; Volume 124. Available online: <https://www.taylorfrancis.com/books/9781315211183> (accessed on 10 December 2021).