Leisure Behavior of Young People: Education-Oriented Activities Becoming Increasingly Prevalent

by Adrian Hille, Annegret Arnold, and Jürgen Schupp

Young people's leisure activities are significantly different today than they were ten years ago. The obvious use of communication and entertainment electronics, such as cell phones, computers, and games consoles is only one aspect—there are also less visible changes: informal activities such as meeting with friends are being increasingly sidelined by education-oriented activities like extra-curricular music lessons or sports. These are the findings of a study conducted by DIW Berlin based on longitudinal data from the statistically representative Socio-Economic Panel Study (SOEP). It shows that education-oriented leisure activities feature in the lives of over 60 percent of all 16-year-olds. Ten years ago, this only applied to 48 percent of all young people of this age. The demand for education-oriented activities has increased across all social classes. Nevertheless, clearly identifiable social differences still remain. Young people from socially underprivileged households are therefore at a double disadvantage, since less favorable conditions at home are compounded in school and during leisure time. Policy-makers have already recognized the need to act here and are attempting to reduce persisting inequalities in leisure activities, for example, by expanding all-day schooling and promoting education-oriented leisure activities specifically for children from low-income families.

Not only does the constant use of cell phones with Internet access appear to have dramatically changed the daily lives of children and adolescents over the past few years, they also face growing demands both in school and in their leisure time. This has been subject of public debate for some time now.[1] In a country like Germany, with its ageing society and finite natural resources, there is growing hope that, above all, investment in a good education, and thus in the human capital of children and adolescents, will guarantee the future competitiveness of the German economy.[2] At the same time, an increasing "instrumentalization and economization of young people's reality"[3] has been observed and warnings against too much parental care voiced. The latest controversial concept of "helicopter parents" implies the existence of a new generation of parents who constantly hover over their children in a similar manner to a surveillance drone.[4] The alleged negative impact of this monitoring and cosseting is the subject of extensive and controversial public debate.[5] This discussion leads to the conclusion that, from the perspective of children and adolescents, there are "excessive demands during childhood"[6] since there has been increased pressure on children and schools alike.

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1 "Druck auf Kinder und Schulen wird größer," Frankfurter Allgemeine Zeitung, June 30, 2013. www.faz.net/aktuell/rhein-main/interview-mit-waldorfpaedagoge-druck-auf-kinder-und-schulen-wird-groesser-12265125.html.

2 C. K. Spieß, "Investments in Education: The Early Years Offer Great Potential," DIW Economic Bulletin, no. 10 (2013): 3–14.

3 Eigenständige Jugendpolitik – Selbstbestimmt durch Freiheit, Gerechtigkeit, Demokratie und Emanzipation. Proposal by the parliamentary group Alliance 90/The Greens (Allianz 90/Die Grünen). Bundestag printed paper 17/11376, November 7, 2012. http://dip21.bundestag.de/dip21/btd/17/113/1711376.pdf.

4 J. Kraus, Helikopter-Eltern: Schluss mit Förderwahn und Verwöhnung (Rowohlt, 2013).

5 For example, "Kampfauftrag Kind," the cover story in SPIEGEL 33, 2013; and I. Kloepfer, „Lob der Helikopter-Eltern," Frankfurter Allgemeine Sonntagszeitung, August 18,2013, 24. www.faz.net/aktuell/wirtschaft/schluss-mit-dem-eltern-bashing-lob-der-helikopter-eltern-12536105-b1.html.

6 N. Minkmar, "Die Überforderung der Kindheit," Frankfurter Allgemeine Zeitung, July 10, 2013. www.faz.net/aktuell/feuilleton/lebensprojekt-kind-die-ueberforderung-der-kindheit-12277772.html.

Box 1

Data

The Socio-Economic Panel Study (SOEP)[1] serves as the data basis for the present analysis. This longitudinal study, comprising an annual representative sample of private households in Germany, has been conducted by the fieldwork organization TNS Infratest Sozialforschung on behalf of DIW Berlin since 1984. Currently, approximately 30,000 people in around 15,000 households participate in the survey.

Since the year 2000, young people who have reached the age of 16 have been surveyed using a separate questionnaire in which they provide retrospective information on events from their childhood, youth, school years, their relationship with their family, future education and career goals, and also current leisure activities.[2] Over 4,000 young people took part in the survey between the years 2000 and 2012. This makes the SOEP the most wide-ranging study of the life circumstances of 16- and 17-year-olds in Germany. The present study is based on survey data for the years from 2001 to 2012.

In order to provide a statistically sound picture of the trends in leisure activities over the past ten years, three periods have been created, each representing four birth years, and the findings reported accordingly. The oldest cohort consists of respondents born between 1984 and 1987; in each case, 16- and 17-year-olds are questioned in the survey years from 2001 to 2004. For the second cohort, the survey years from 2005 to 2008 are combined (birth years 1988 to 1991). The youngest cohort reflects the leisure behavior of 16- and 17-year-olds during the survey years from 2009 to 2012 (birth years 1992 to 1995).

As well as allowing us to analyze changes over this period, as a household survey, the SOEP also provides us with the opportunity to merge the youth data with information obtained directly from the parents in various survey years. Thus, in this study, the multivariate models for every young person use household information from childhood: household income, number of books in the household,[3] and also level of education, and maternal migration background. If the latter information is unavailable for the mother, it is substituted with the equivalent information for the father. If available, all the aforementioned information on the household and parents is collected when the young person is five, or, at the latest, when the family enters the SOEP. Questions on school type, parental contact with the school, and educational aspirations are asked directly to the young people in the relevant survey year.

The empirical analyses are based on data from a total of 3,551 young people born between 1984 and 1995. For 3,134 of these respondents, all the above-mentioned information on leisure and demographic background is available. Survey weights enable us to weight the data so that it is representative and can be generalized for 16- and 17-year-olds in Germany from the three birth cohorts.

1 On the SOEP, see G. G. Wagner, J. Göbel, P. Krause, R. Pischner, and I. Sieber, "Das Sozio-oekonomische Panel (SOEP): Multidisziplinäres Haushaltspanel und Kohortenstudie für Deutschland – Eine Einführung (für neue Datennutzer) mit einem Ausblick (für erfahrene Anwender)," in AStA Wirtschafts- und Sozialstatistisches Archiv, no. 2 (2008).

2 J. Schupp, C. K. Spieß, and G. G. Wagner, "Die verhaltenswissenschaftliche Weiterentwicklung des Erhebungsprogramms des SOEP," Vierteljahrshefte zur Wirtschaftsforschung 77, no. 3 (2008): 63–76.

3 The degree of cultural capital that is widely used as a measure in empirical social and education research.

The economics of education is increasingly focusing on the question of how important informal learning outside of school is for children's subsequent success in school and in their careers.[7] Numerous studies also attempt to substantiate the impact of music or sport on child development.[8] Nevertheless, the interplay between extra-curricular activities and success in school has still not been adequately explored to date.[9] Even the possibility of children experiencing adverse psychological effects as a result

7 The skill production model was formalized by F. Cunha and J. Heckman, "The Technology of Skill Formation," American Economic Review 97, no. 2 (2007): 31–47; and F. Cunha, J. Heckman, and H. Schennach, "Estimating the technology of cognitive and non-cognitive skill formation," Econometrica 78, no. 3 (2010): 883–931.

8 In the field of music, the Bastian study in particular has been the subject of extensive public debate; see also H. G. Bastian, Musik(erziehung) und ihre Wirkung: eine Langzeitstudie an Berliner Grundschülern (2000). An overview of the research to date is provided by A. Hille and J. Schupp, "How learning a musical instrument affects the development of skills," SOEPpaper 591 (2013). There are now a number of studies on the subject of sport which have found evidence of its positive effect. C. Felfe, M. Lechner, and A. Steinmayr, "Sports and child development," IZA Discussion Paper 6105 (2011).

9 H. Solga and R. Dombrowski, "Soziale Ungleichheiten in schulischer und außerschulischer Bildung. Stand der Forschung und Forschungsbedarf," Arbeitspapier 171 (Hans-Böckler-Stiftung, 2009): 40.

of intensive early learning cannot be ruled out.[10] These include, for instance, less stamina in difficult situations or problems dealing with bullying by fellow students.[11]

Are popular parenting trends—as also suggested by the media—reflected in the development of young people's leisure behavior? There are a number of youth studies on this subject.[12] However, the wide-ranging data from the Socio-Economic Panel Study, comprising of an annual survey of around 30,000 people in 15,000 households conducted by the fieldwork organization TNS Infratest Sozialforschung enables us to describe changes in leisure behavior in more detail than using surveys conducted specifically on this subject (see Box 1).

The Younger the Cohort, the More Education-Oriented their Leisure Activities

In the past ten years, there has been a significant increase in demand for education-oriented leisure activities such as extra-curricular music lessons or sports (see Figure 1). While only around ten percent of 16- and 17-year-olds in the oldest cohorts analyzed (born between 1984 and 1987, surveyed from 2001 to 2004) were involved in musical activities, the corresponding figure in the youngest cohorts (born between 1992 and 1995, surveyed from 2009 to 2012) was just under 18 percent. A particularly sharp increase in voluntary work was recorded (from 11 to 22 percent). But there was also a considerable rise in the proportion of adolescents involved in sports, dance, or drama during the observation period.

The increased demand for music, sports, dance, and voluntary work is not consistent with the widely held view that young people have considerably less leisure time as a result of the introduction of all-day schooling and the reduction in the number of years spent at Gymnasium (academic-track) schools in almost all German Länder from nine to eight years (G8).[13] The project "Media, Culture, and Sport for Young People" (MediKuS)[14] run by the German Youth Institute (Deutsches Jugendinstitut; DJI) also indicates that attending all-day school limits participation in sporting activities. This apparent contradiction of the SOEP trends can be at least partially explained as a process of shifting away from informal towards education-oriented activities. Indeed, the probability of participating in at least one education-oriented leisure activity a week is higher, the younger the cohort studied, while the probability of participating in at least two informal activities a day, such as meeting with friends, is lower (see Figure 2). In the youngest cohorts, the ratio has even reversed for the first time in favor of education-oriented activities. These developments can be observed among both boys and girls.

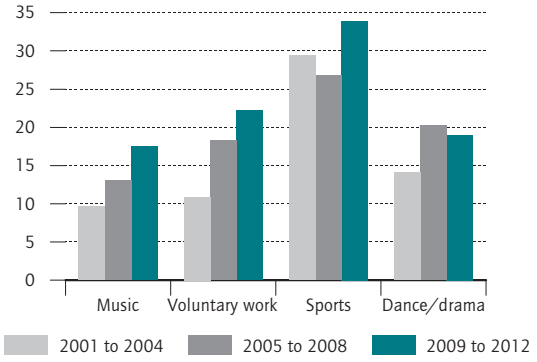
The downward trend of informal leisure activities among young people has primarily resulted from a decline in social activities. For instance, there is a decrease in the proportion who go out with their best friend on a daily basis, from 40 percent in the oldest cohort to 25 percent in the youngest cohort.

The Leisure Time Monitor 2013 (Freizeit-Monitor 2013) published by the Foundation for Future Studies (Stiftung für Zukunftsfragen) also records particularly substanti-

Figure 1

Development of Participation in Music, Voluntary Work, Sports, and Dance/Drama[1]

From 2001 to 2012, data in percent



1 Precise definitions: music once a week + extra-curricular music lessons; voluntary work once a week; sports once a week + participation in competitions; dance/drama once a week. Separate data for three cohorts for the survey years 2001 to 2004 (born between 1984 and 1987), 2005 to 2008 (born between 1988 and 1991), and 2009 to 2012 (born between 1992 and 1995). The differences are statistically significant.
Sources: SOEP v29 (preliminary), 17-year-olds, weighted, n = 3 134; calculations by DIW Berlin.

There has been a sharp increase in the prevalence of music, voluntary work, sports, and dance and drama in young people's leisure time.

10 J. Otto, "Meines kann schon mehr. Englisch für Babies. Ökonomie für Vierjährige. Wenn Eltern dem Förderwahn verfallen," Die Zeit, no. 37, September 6, 2007.

11 Kraus, Helikopter-Eltern (2013).

12 For example, Shell Deutschland, ed., Jugend 2010 – Eine pragmatische Generation behauptet sich (Frankfurt a. M.: 2010); and German Youth Institute, Medien, Kultur und Sport bei jungen Menschen (2013).

13 See, for example, T. Schultz, "Unterricht, der krank macht," Süddeutsche Zeitung, May 10, 2010. www.sueddeutsche.de/karriere/stress-durch-ganztagsschulen-unterricht-der-krank-macht-1.942372.

14 German Youth Institute, Medien, Kultur und Sport bei jungen Menschen (2013). www.dji.de/cgi-bin/projekte/output.php?projekt=1080.

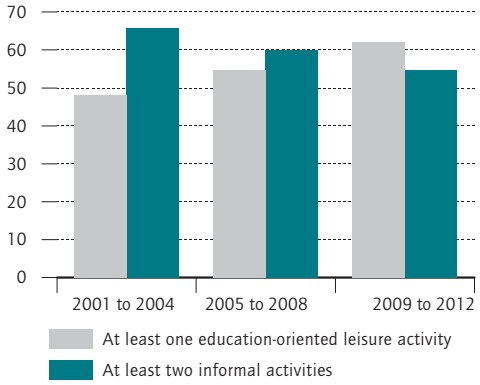
al drops in time available for informal leisure activities such as meeting friends for the youngest age group included in that report (14- to 17-year-olds).[15] On the basis of SOEP analyses, it is not possible to determine whether the time young people have left for these activities has decreased to an extent that affects development because no detailed time budget diaries have been collected, only information on the frequency of young people's typical activities (see Box 2 on leisure behavior today).

Participation in Education-Oriented Activities Heavily Dependent on Parental Home

Publications such as the study on children by the World Vision Institute or the Shell Youth Study describe the strong social differences in the participation of children from different social backgrounds in education-oriented leisure activities.[16] The SOEP analyses also show that young people from higher social classes participate in these type of activities considerably more frequently. In particular, the parents' education is a major factor determining whether their child takes music lessons or joins a sports club. The findings of the present study also show that these differences have not decreased in the last ten years. This seriously undermines the objective of equal opportunities for each child because inequalities in school, at home, and in recreational activities are all mutually reinforcing.

Figure 2

Development of Participation in Education-Oriented and Informal Leisure Activities
From 2001 to 2012, data in percent



Education-oriented activities include the above-mentioned items music, voluntary work, sports, dance and drama. Informally active describes those who practice at least two of the following activities on a daily basis: watching television, playing computer games, "hanging out", spending time with their best friend or group of friends. Separate data for three cohorts for the survey years 2001 to 2004 (born between 1984 and 1987), 2005 to 2008 (born between 1988 and 1991), and 2009 to 2012 (born between 1992 and 1995). The differences are statistically significant.
Sources: SOEP v29 (preliminary), 17-year-olds, weighted, n = 3,134; calculations by DIW Berlin.

Education-oriented leisure activities are increasingly replacing informal activities.

Maternal Education has Major Impact

The data confirms that children from higher social backgrounds more frequently pursue education-oriented leisure activities: 73 percent of children born between 1992 and 1995 (survey years 2009 to 2012) whose mothers have an Abitur (school-leaving certificate that serves as a qualification for German university entrance) or a university degree were involved in activities related to music, dance, drama, or sports, or carry out voluntary work (see Table 1, column 3). For young people whose mothers do not have an Abitur, the corresponding figure was only 54 percent. Similar differences are revealed if the social class is defined by household income, a possible migration background, or cultural capital.[17] When different school types are considered, it becomes evident that young students at Gymnasium schools participate in education-oriented activities considerably more frequently than those attending Haupt- and Realschulen (low- and intermediate-track schools). The findings are similar when a distinction is drawn between young people who aim to go to university and those who plan to train as apprentices.

Along with the parents' social background, the school type also determines opportunities for education-oriented leisure activities. There are often better leisure activities on offer in Gymnasium schools than in Real- and Hauptschulen.[18] Irrespective of the social class, it is not surprising, therefore, if students at Gymnasium schools are more frequently involved in musical or sporting activities.

15 U. Reinhardt, Freizeit-Monitor 2013 (Hamburg: Stiftung für Zukunftsfragen, 2013). www.stiftungfuerzukunftsfragen.de/uploads/media/Forschung-Aktuell-249-Freizeit-Monitor-2013.pdf.

16 See the summary of these studies discussed by D. Engels and C. Thielebein, Zusammenhang von sozialer Schicht und Teilnahme an Kultur-, Bildungs- und Freizeitangeboten für Kinder und Jugendliche. Documentation commissioned by the Federal Ministry of Labour and Social Affairs, Institute for Social Research and Social Policy, Cologne.

17 Here, cultural capital is measured by the number of books in the parental household, a measurement used widely in inequality research.

18 Solga and Dombrowski, „Soziale Ungleichheiten" (2009): 36.

Box 2

Leisure Behavior of Young People Today

What do young people do in their leisure time nowadays? An evaluation of data from the Socio-Economic Panel Study (SOEP) provides detailed responses to this question: 87 percent of young people born between 1992 and 1995, surveyed in the years from 2009 to 2012, said that they listened to music every day, making this the most common daily leisure activity (see figure). Currently, 75 percent of young people watch television on a daily basis and 65 percent surf or chat on the Internet every day.[1] The most popular weekly leisure activities include sports, doing nothing or "hanging out", and going out with a best friend or group of friends. Approximately half of all young people surveyed said that they never engaged in any activities in the fields of dance and drama, music or voluntary work.

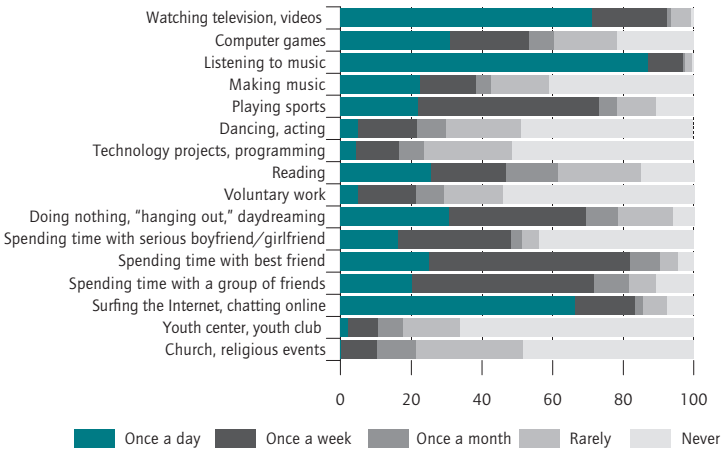
The Shell Youth Study[2] (2010) produced similar findings. In this study, young people were given a list of 18 different activities and asked to select the five which they most often engage in during the course of a week. The most frequently cited activities included surfing the Internet, listening to music, watching television, and meeting with friends. However, due to its survey methodology, the Shell Study was unable to draw any conclusions about the extent of time use for each activity.

The present study by DIW Berlin uses a factor analysis to determine regular correlations in the response behavior to questions about leisure activities and breaks the information down into different types. A comparison between the three birth cohorts can be used to identify trends in leisure time use. The correlations between the responses to the various questions are analyzed in dimensions that are independent from one another. Each dimension explains a proportion of the data variance. By definition, the first dimension explains the largest proportion of data variance and this proportion declines with each successive dimension used as a basis for the analysis. Finally, the study analyzes the significance of the role played by each leisure activity (each variable) for the corresponding dimension (correlates with the corresponding dimension). If a series of variables strongly correlate with one dimension, this typically means that the response behavior strongly correlates between these variables.

Figure

Overview of Leisure Behavior

Birth cohorts 1992 to 1995, data in percent



Survey years 2009 to 2012.

Sources: SOEP v29 (preliminary), 17-year-olds, weighted, n = 858; calculations by DIW Berlin.

Television, listening to music, and surfing the Internet are particularly popular leisure activities among young people.

The factor analysis of the data on the leisure activities of young people described above takes the responses from the years between 2009 and 2012 into account (see table). The item "hanging out with a girl/boyfriend" is excluded as this question does not apply to a large number of study partici-

1 The activities Internet, youth center, and church have only been measured since 2006.

2 See Shell Deutschland, ed., Jugend 2010 – Eine pragmatische Generation behauptet sich (Frankfurt a. M.: 2010).

pants who do not currently have a girl/boyfriend. Further, questions which were only included in the survey from 2006 are also excluded from this analysis (Internet, church, and youth center).

Four factors describe the typical pattern of leisure behavior. The coefficients in the table show the correlation between the leisure activity and the relevant factor. Only values of over 0.3 are shown. The first factor describes young people interested in social/cultural activities, i.e., those who play music and dance, act, or regularly do voluntary work. The correlation in response behavior with regard to the informal leisure activities is consolidated in the second factor. This type is categorized as relaxed or sociable as they like to listen to music, read, and "hang out", but also like to meet with friends and play sports. A further leisure type could be categorized as "technology enthusiast". The "technology enthusiast" is characterized by the fact that they primarily enjoy playing computer games and programing. Finally, there is the individual leisure type who likes playing on the computer, watching television, and "hanging out".

The lower half of the table first illustrates the stability of these factors over time. For each of the three cohorts, the table shows, on average, how closely the response behavior of the young person corresponds with the relevant leisure type. It is noticeable that, over the past ten years, the prevalence of young people interested in social/cultural activities and also the "technology enthusiast" has strongly increased. The significance of "relaxed-sociable" leisure behavior has decreased slightly.[3]

The distinction made in the report between the education-oriented and informal leisure activities of young people is defined as follows: young people who tend towards education-oriented leisure activities are those who are engaged in activities in the fields of music, sports, dance, and drama or who do voluntary work at least once a week. In the case of music and sport, an additional prerequisite is that the young person attends an extra-curricular music lesson or takes part in sports competitions.[4] Young people are deemed to be involved in informal leisure activities if they participate in at least two of the following activities on a daily basis: watching television, playing computer games, "hanging out" with their best friend, or going out with a group of friends. The lower part of the table shows that these leisure types correspond with the types from the factor analysis: an above-average proportion of those young people who participate in education-oriented leisure activities often belong to the leisure type interested in cultural/social activities, while those engaged in informal activities are more likely to be categorized as a sociable type.

Table

Factor Analysis: Leisure Behavior Response Pattern
Birth cohorts 1992 to 1995

	Cultural/ social	Sociable	Technology enthusiast	Individual
Playing music	0.55			
Dance, drama	0.55			
Voluntary work	0.51			
Listening to music		0.36		
Playing sports		0.37		−0.46
With best friend		0.43		
With group of friends		0.41	−0.35	
Computer games			0.45	0.49
Working with technology			0.64	
Watching television				0.46
"Hanging out"				0.3
Reading				−0.45
Explained variance in percent	15.5	13.5	10.6	10.5
Correlation with cohorts				
Birth cohorts 1984 to 1987	−0.48	0.11	−011	0.12
Birth cohorts 1988 to 1991	0.06	−0.02	−0.12	0.12
Birth cohorts 1992 to 1995	0	0	0	0
Correlation with types of leisure activity				
Education-oriented leisure activities	0.36	0.19	0.02	−0.14
Informal leisure activities	−0.15	0.46	−0.2	0.4

Survey years 2009 to 2012.

The upper part of the table shows which leisure activities are correlated with the relevant types. Only correlations of over 0.3 are shown.

Sources: SOEP v29 (preliminary), 17-years-old, unweighted, n = 858; calculations by DIW Berlin.

The leisure behavior of young people can be categorized according to four types: those interested in cultural/social activities, sociable, technology enthusiasts, and individualists. In the past ten years, the proportion of young people interested in cultural/social activities has increased sharply.

3 This is in line with the finding that changes are more likely to occur across birth cohorts than over a life cycle. S. Stadtmüller, A. Klocke, and G. Lipsmeier, "Lebensstile im Lebensverlauf – Eine Längsschnittanalyse des Freizeitverhaltens verschiedener Geburtskohorten im SOEP," Zeitschrift für Soziologie 42, no. 4 (2013): 262–290.

4 This type of quality indicator cannot be created for dance and drama as this information is missing in the SOEP.

Table 1

Social Differences in Participation in at Least One Education-Oriented Leisure Activity[1]
Distinction according to socio-economic status, school type, parental contact with school, and educational aspirations, 2001 to 2012, data in percent

	2001 to 2004	2005 to 2008	2009 to 2012
Total	48	55	62
Distinction according to socio-economic status			
Mother has no Abitur or university degree	44	49	54
Mother has an Abitur or university degree	56	67	73
Lower income quintile	39	46	48
Second income quintile	50	54	54
Third income quintile	39	48	69
Fourth income quintile	47	51	64
Upper income quintile	62	73	80
Mother with migration background	40	58	58
Mother without migration background	50	54	63
Fewer than 50 books in household	35	47	47
50 to 200 books in household	48	57	63
Over 200 books in household	63	62	75
Distinction according to type of school attended			
Haupt- or Realschule	45	49	55
Gymnasium	66	68	80
Distinction according to parental contact with school			
Parents take an interest in school performance	51	59	73
Parents participate regularly in parents' evenings	51	57	65
Parents do not participate regularly in parents' evenings	40	50	55
Distinction according to educational aspirations			
Young person plans to complete an apprenticeship	41	49	51
Young person aims to go to university	67	65	77

1 Proportion of young people who participate in at least one education-oriented leisure activity. Education-oriented activities include the above-mentioned items music, voluntary work, sports, dance and drama. Separate data for three cohorts for the survey years 2001 to 2004 (born between 1984 and 1987), 2005 to 2008 (born between 1988 and 1991), and 2009 to 2012 (born between 1992 and 1995). The differences are statistically significant.
Sources: SOEP v29 (preliminary), 17-year-olds, weighted, n = 3,134; calculations by DIW Berlin.

Social differences in participation in education-oriented leisure activities have remained constant since 2001.

It can be assumed that the choice of and participation in leisure activities is not only a result of young people's motivation. The social science literature also refers to other influences, stating that parents from higher social backgrounds increasingly often take it for granted that their children will participate in education-oriented leisure activities. They see enrolling them for music lessons or at a sports club as part of their duties as parents, leading the American sociologist Annette Lareau to coin the term "concerted cultivation".[19] Against this background, increased efforts by parents to improve the relative starting position of their own children compared to others by encouraging them to engage in extra-curricular educational activities are also plausible. A successful child is widely viewed as a status symbol, which is in turn indicative of belonging to the upper class.[20] According to Lareau, although the parents of working class children are also prepared to invest in their offsprings' future, unlike parents of other social classes they trust that their children know themselves what activities best suit their needs.[21]

No Reduction in Social Inequality in Leisure Activities

The SOEP data go beyond previous findings and allow us to examine change in social inequality with regard to

19 A. Lareau, Unequal Childhoods: Class, Race and Family Life, 2nd ed. (University of California Press, 2011).

20 A debate which is regularly quoted in the press: L. Herzog, "Die neue Klassengesellschaft: Gleiche Chancen?," FAZ, August 4, 2013; and A. Steinle, "Das Baby-Projekt," Manager Magazin, August 1, 2007. From a sociological point of view, the objective of these parents is to transfer their own status to the next generation; on this, see P. Bourdieu and J.-C. Passeron, Reproduction in education, society and culture, vol 4. (SAGE Publications Limited, 1990).

21 Lareau, Unequal Childhoods (2011).

Table 2

Regression of Determinants of Education-Oriented Activities[1]
Marginal effects of probit estimate, 2001 to 2012

Dependent variable: participation in at least one education-oriented leisure activity	Coefficient	Standard error
Mother with no Abitur/university degree	−0.205***	0.052
Birth cohort 1984 to 1987* Mother with no Abitur/university degree	0.084	0.065
Birth cohort 1988 to 1991* Mother with no Abitur/university degree	0.069	0.07
Cohorts (reference group: birth cohort 1992 to 1995)		
Birth cohort 1984 to 1987	−0.17***	0.053
Birth cohort 1988 to 1991	−0.094	0.058
Mother with migration background	−0.026	0.042
Household income (reference group: middle quintile)		
Lower income quintile	−0.064	0.041
Second income quintile	0.008	0.04
Fourth income quintile	−0.008	0.039
Upper income quintile	0.141***	0.041

*1 Explanatory model for participation in at least one education-oriented leisure activity. Education-oriented activities include the above-mentioned items music, voluntary work, sports, dance and drama. The following characteristics were kept constant but not shown in the table: sex, number of brothers and sisters, birth order (first-born), number of rooms in the household, region type (rural), federal state. *** Significant (1% level), ** significant (5% level), * significant (10% level).*
Sources: SOEP v29 (preliminary), 17-year-olds, weighted, n = 3 134; calculations by DIW Berlin.

Parental education has a greater impact on participation in education-oriented leisure activities than any other characteristic.

education-oriented leisure activities during the last ten years.

The proportion of young people who participate in at least one education-oriented leisure activity has continually increased in all subgroups (level of education and maternal migration background, household income, cultural capital, school type, parental contact with the school, and young people's educational aspirations), for young people both from privileged and disadvantaged families (see Table 1). However, the social inequality has not decreased: in 2012, the socio-economic differences in leisure behavior were the same as ten years previously. This development is particularly evident for maternal education. Here, the gap between privileged and disadvantaged families was even wider.

Further Analyses Confirm Significance of Parental Education

An examination of the different patterns of participation behavior in education-oriented leisure activities using a multivariate regression model[22] also confirms that of all socio-demographic factors affecting young people's leisure behavior, the parents' level of education stands out as an influential factor. Even if the effects of household income, migration background, household composition, and region of residence are taken into account and kept constant, parental education largely determines whether or not young people pursue education-oriented leisure activities. The probability of participating in at least one of these activities is over 20 percentage points lower for young people whose mothers have neither an Abitur nor a university degree than for other young people (see Table 2). Over time, the significance of parental education has increased even further. The maternal migration background and level of household income play a considerably less important role with regard to pursuing an education-oriented leisure activity.

The results of the multivariate regression model also confirm that the above-mentioned fundamental increase in participation in education-oriented leisure activities in all social classes over time is indeed statistically significant. Even after education, household income, migration background, and household composition are all taken into account, the proportion of those who are actively involved in music, sports, drama or voluntary work rose by 17 percentage points. Therefore, no change in the average household characteristics over time has been observed, but an actual increase in participation in these activities.

22 The aim of the model is to calculate what characteristics determine participation in at least one education-oriented leisure activity. Marginal effects of a probit model are represented for each variable. These indicate by how many percentage points the probability of participation in music, sport, drama, dance, or voluntary work varies if the corresponding sociodemographic characteristic applies. Each coefficient indicates this change, assuming that all other characteristics remain constant.

Table 3

Regression for the Determinants of Life Satisfaction[1]
Change on a scale from 0 to 10, 2001 to 2012

Dependent variable: satisfaction	Coefficient	Standard error
Participation in education-related leisure activities		
(reference group: no participation in education-related leisure activities)		
Participation in exactly one education-related leisure activity	0.249***	0.067
Participation in at least two education-related leisure activities	0.589***	0.084

*1 Explanatory model for life satisfaction (OLS regression). Education-oriented activities include the above-mentioned items music, voluntary work, sports, dance and drama. The following characteristics were kept constant but not shown in the table: gender, maternal education and migration background, household income, number of siblings, birth order (first-born), number of rooms in the household, region type (rural), Land. *** Significant (1% level), ** significant (5% level), * significant (10% level).*
Sources: SOEP v29 (preliminary), 17-year-olds, weighted, n = 3,134; calculations by DIW Berlin.

Young people who participate in education-oriented leisure activities are happier on average.

Interplay between School, Family, and Leisure Time

The social differences in participation in education-oriented leisure activities show no evidence of decreasing across different age groups and exacerbate the existing inequality of educational opportunities. Young people from less privileged social classes are at a double disadvantage: not only do they lack the stimulus for extra-curricular education initiated by more education-oriented parents but they also have fewer opportunities to make use of the indirect educational effects of music, sports, dance, drama, and voluntary work. Educational economists also refer to the interplay between different skills.[23] For instance, early investments in education increase the productivity of later developments. In other words, those who learn at an early age learn better later in life. Particularly if early learning is not encouraged by parents, significantly greater effort is needed to compensate for the resulting deficits later. Moreover, modern forms of schooling increasingly expect students to have competences acquired in extra-curricular activities.[24] Since they are also unable to benefit to the same extent from extra-curricular acquisition of skills as young people from more well-to-do families, this amplifies the problems and challenges for young people who already have greater difficulties in school due to their social background.

Irrespective of the potential benefits of education-oriented leisure activities, there is currently a debate on whether these can have adverse effects on children and adolescents. With regard to this issue, information on young people's subjective life satisfaction was consulted and, again using multivariate regression models, the determinants of young people's life satisfaction were examined. The results show a significant positive coefficient, also taking into account further socio-demographic characteristics. This proves that young people who pursue an education-oriented leisure activity report a higher level of life satisfaction in the survey on average (see Table 3). Young people who participate in two or more of these activities show even higher levels of satisfaction.

Policy-Makers Have Recognized the Need to Act

The first PISA study in 2000 showed that educational attainment in Germany is closely linked to social background—to a greater extent than in most other OECD countries.[25] The findings of the study were the subject of extensive public debate and led to a number of school reforms. For example, almost all German Länder introduced the shorter eight-year Gymnasium program (G8) and also expanded all-day schooling. But the government recognized that there was a need to act not only with regard to school learning but also learning from extra-curricular activities. In its 12th Child and Youth Report dated 2005, the German government stressed the need for effective political intervention to reduce social inequality in extra-curricular activities.[26] Only recently did the German Bundestag address a proposal by the parliamentary group Alliance 90/The Greens focu-

23 On what is known as the skill complementarity, see Heckman, "The Technology of Skill Formation" (2007); and Heckman and Schennach, "Estimating the technology" (2010).

24 Solga and Dombrowski, "Soziale Ungleichheiten" (2009).

25 See, for example, Max Planck Institute for Human Development, Pisa 2000: Die Studie im Überblick: Grundlagen. Methoden und Ergebnisse (2002), 13.

26 Solga and Dombrowski, "Soziale Ungleichheiten"(2009): 37 and Federal Ministry of Family Affairs, Senior Citizens, Women and Youth, Zwölfter Kinder und Jugendbericht. Bericht über die Lebenssituation junger Menschen und die Leistungen der Kinder- und Jugendhilfe in Deutschland (2005). www.bmfsfj.de/doku/Publikationen/kjb/data/download/kjb_060228_ak3.pdf.

sing on the increasing economization of young people's everyday lives as well as social inequality in extra-curricular learning.[27] Thus, the inequality in extra-curricular activities has now become part of the political agenda. But what courses of action are even open to a government that will have a lasting impact on young people's leisure time?

Expansion of All-Day Schooling

The German government supported the expansion of all-day schooling through its four-billion-euro investment program "The Future of Education and Care" in 2003. One of the objectives of all-day schooling is to shift leisure activities to the school sector and thus disassociate them from parental resources. There are two forms of all-day schooling. In "obligatory all-day schooling," children are supervised throughout the whole day, alternating between lessons and leisure activities. In an open all-day school, classes only take place in the mornings. In the afternoons, children can choose from a range of extra-curricular activities on a voluntary basis. According to the Bertelsmann Stiftung, in the 2011/2012 school year, around 14 percent of students in primary school (elementary school) and lower secondary school (Haupt- and Realschule as well as Gymnasium schools up until the tenth grade) attended an obligatory all-day school. Around 17 percent of students were in open all-day schools. In this type of school, however, there is a risk of social selection. Children from higher social classes might not participate in the afternoon activities because their parents hope that extra-curricular activities outside of school will be more stimulating for their children. Therefore, the Bertelsmann Stiftung is critical that the majority of funding from the investment program "The Future of Education and Care" is being spent on expanding open all-day schooling. It claims that the program has not achieved its full potential with regard to equal opportunities.[28]

There has been insufficient research to date on whether all-day schooling will be able to reduce social inequalities in leisure activities. It is clear, however, that children from lower social classes gain better access to leisure activities through all-day schooling.[29]

SOEP-based studies show an increase in the number of all-day schools, particularly elementary schools.[30] But a sharp rise in all-day schooling can also be observed among adolescents. While 14 percent of young people attended an all-day school in 2006, this share had increased to 22 percent by 2012. The level of voluntary participation among young people within the school community is also rising. While 65 percent of adolescents participating in SOEP reported active participation in at least one after-school club in 2001, the corresponding figure in 2012 was 77 percent. This indicates that leisure activities have indeed shifted to schools as a result of the expansion of all-day schooling.

Funding of School and Extra-Curricular Leisure Activities

Education-oriented leisure activities are increasingly funded by the state in order to allow more children from socially underprivileged households to participate. The "education and participation package" (Bildungs- und Teilhabepaket) introduced in 2011 subsidizes school trips, for example, as well as the acquisition of school supplies, and provides funding for members of clubs or associations or for music lessons. While the first two options have a high take-up, only around 15 percent of households entitled to apply for a grant for other education-oriented leisure activities in fact did so in the first year the program existed.[31] However, 78 percent of children and adolescents from these households were actually already members of the relevant club or association. Only 22 percent of those who made use of the funding joined a club thanks to the education and participation package.[32] This equates to 3.3 percent of all eligible children and adolescents. Possible reasons for this may be that the subsidy of ten euros per month is too low or that there are considerable bureaucratic hurdles to overcome during the application process.

Another example is the program "An Instrument for Every Child" (JeKi) which enables children to have free musical instrument lessons in school for a year. The lessons can subsequently be continued at a reduced cost.[33] JeKi was introduced in North Rhine-Westphalia in 2007 by the local government there and has now been taken

27 Alliance 90/The Greens, Eigenständige Jugendpolitik (2012).

28 K. Klemm, Ganztagsschulen in Deutschland – eine bildungsstatistische Analyse (2013). Commissioned by the Bertelsmann Stiftung. www.bertelsmann-stiftung.de/cps/rde/xbcr/SID-9659BBB8-1B622031/bst/xcms_bst_dms_38554_38555_2.pdf.

29 E. Klieme, H. Holtappels, T. Rauschenbach, and L. Stecher, "Ganztagschule in Deutschland. Bilanz und Perspektiven," in H. Holtappels, et al., ed., Ganztagsschule in Deutschland. Ergebnisse der Ausgangserhebung der "Studie zur Entwicklung von Ganztagschulen" (StEG) (Weinheim: 2007), 353–382.

30 J. Marcus, J. Nemitz, and C. K. Spieß, "Ausbau der Ganztagsschule: Kinder aus einkommensschwachen Haushalten im Westen nutzen Angebote verstärkt," Wochenbericht des DIW Berlin , no. 27 (2013): 11.

31 H. Apel and D. Engels, Bildung und Teilhabe von Kindern und Jugendlichen im unteren Einkommensbereich (2012). A study on the implementation phase of the education and participation package commissioned by the Federal Ministry of Labour and Social Affairs.

32 Apel and Engels, Bildung und Teilhabe (2012).

33 This is 20 euros per month in North Rhine-Westphalia.

up throughout Germany. Researchers at the University of Bielefeld have found that socio-economic status does not play a major role in whether or not the lessons are continued.[34] Here, it has apparently been possible to successfully disassociate participation in an education-oriented leisure activity from social background.

Conclusion and Outlook

Participation in education-oriented leisure activities such as music or sports lessons has increased considerably over the past ten years: While only 48 percent of all 16- and 17-year-olds participated in at least one of these activities in 2001, the corresponding figure in 2012 was 62 percent. This trend was observed across all social classes. However, there has been no reduction in socio-economic differences with regard to participation in education-oriented activities: Young people from socially underprivileged households still participate in such activities less frequently than those from well-off families.

Political projects such as all-day schooling or funding of extra-curricular leisure activities are indeed heading in the right direction and able to provide young people from socially underprivileged families with the opportunity for non-formal learning in the absence of suitable support and encouragement from home. But a lot more could still be done. Social inequality in extra-curricular activities is also reaching a significant level, which is all the more serious because this and inequality in school are mutually reinforcing. Policy-makers need to ensure fair starting opportunities for young people from an educationally underprivileged family background, too.

There has been insufficient research to date on the impact of the use of leisure time on skills development, as well as on young people's choice of career and course of study. For instance, there are only a small number of empirically sound studies or field experiments on the effect of specific leisure activities.[35] Transfer effects of the program "An Instrument for Every Child" are currently being examined in the parallel research program for this project.[36]

In view of such uncertainties and gaps in the research, it also still remains to be seen to what extent "helicopter parents" in fact manage to achieve their goal of optimum advancement of their children by enrolling them in education-oriented leisure activities. At least for the moment, the findings of the present study also serve to show that fears that young people are increasingly stressed and unhappy are unfounded: young people who participate in education-oriented leisure activities show a significantly higher level of life satisfaction on average than young people who spend their leisure time pursuing alternative activities.

Adrian Hille is a Research Associate for the Socio-Economic Panel Study (SOEP) at DIW Berlin | ahille@diw.de
Annegret Arnold is a Student Research Assistant at DIW Berlin | aarnold@diw.de
Jürgen Schupp is Director of the Socio-Economic Panel Study (SOEP) at DIW Berlin | jschupp@diw.de

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34 T. Busch and U. Kranefeld, "Wer nimmt an JeKi teil und warum? Programmteilnahme und musikalische Selbstkonzepte," in Koordinierungsstelle, ed., JeKi-Forschungsschwerpunkt (brochure) (Bielefeld: 2013), 46–49.

35 For an overview, see, for example, OECD, Arts for art's sake: The impact of arts education (Paris: OECD, 2013) and the review in Hille and Schupp (2013).

36 Jeki parallel research program. www.jeki-forschungsprogramm.de/.

DIW Berlin—Deutsches Institut
für Wirtschaftsforschung e. V.
Mohrenstraße 58, 10117 Berlin
T +49 30 897 89 -0
F +49 30 897 89 -200

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