

Spieß, C. Katharina; Westermaier, Franz; Marcus, Jan

## Article

Children and adolescents with refugee background less likely to participate in voluntary educational programs - with exception of extracurricular school activities

DIW Economic Bulletin

## Provided in Cooperation with:

German Institute for Economic Research (DIW Berlin)

*Suggested Citation:* Spieß, C. Katharina; Westermaier, Franz; Marcus, Jan (2016) : Children and adolescents with refugee background less likely to participate in voluntary educational programs - with exception of extracurricular school activities, DIW Economic Bulletin, ISSN 2192-7219, Deutsches Institut für Wirtschaftsforschung (DIW), Berlin, Vol. 6, Iss. 34/35, pp. 422-430

This Version is available at:

<https://hdl.handle.net/10419/146521>

### Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

### Terms of use:

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*

# Children and adolescents with refugee background less likely to participate in voluntary educational programs—with exception of extracurricular school activities

By C. Katharina Spieß, Franz Westermaier, and Jan Marcus

Non-compulsory educational programs including extracurricular school activities, child day care centers, and non-formal educational programs, such as sports or music activities outside of school, make an important contribution to social integration. But to what extent do children and their families actually make use of these voluntary programs? On the basis of the Socio-Economic Panel (SOEP) and the joint migration survey of the SOEP and the Institute for Employment Research (IAB), the present report seeks to address this question for the first time with a specific focus on children with a refugee background. The study shows that these children participate in some voluntary educational activities such as extracurricular school activities just as frequently as or even more frequently than other children. However, they are less likely to participate in a parent-child group or to attend a day care center, particularly those under the age of three, than their peers. Further, at both primary and secondary school age, children of refugees participate less often in sports activities outside of school. Efforts to integrate those with a refugee background should therefore also focus on these non-formal educational activities held outside of school and specifically target these children, adolescents, and their families. When it comes to extracurricular school activities, however, a great deal has already been achieved—it is important that we make full use of and continue to tap into this potential.

Education is a key component of social integration, particularly for children and adolescents. The *National Action Plan on Integration*, passed at the 5th Integration Summit in January 2012, emphasizes, once more, the importance of education for the integration of migrants.<sup>1</sup> The focus here is usually on schooling. There are numerous studies examining the academic success of children with and without a migrant background<sup>2</sup>—the emphasis is normally on differences in academic achievements or the transition to different tracks of secondary school. Another area of education that has received less attention to date is voluntary educational programs where participation is optional.

The present report considers children and adolescents with a refugee background. Their circumstances differ from those of children with other migrant background in that they, or their parents, came to Germany as refugees or sought asylum there. The definition of children with a refugee background relies on the information of their parents, who came mostly to Germany during the period from 1990 to roughly 2010 and not as part of the larger increase in immigration in 2014 and 2015. To date, there are no representative data available on the extent to which refugee children who arrived in Germany during the 2014–2015 period participate in education. What we do know, however, is that almost one-third of all asylum-seekers arriving in Germany between January 2015 and April 2016 were under the age of 18, indicating the relevance of the present report for this group of refugees.<sup>3</sup>

<sup>1</sup> See *Nationaler Aktionsplan Integration. Zusammenhalt stärken – Teilhabe verwirklichen* (Berlin: 2012).

<sup>2</sup> On this, see, for example, relevant essays in C. Diehl, C. Hunkler, and C. Kristen eds., *Ethnische Ungleichheiten im Bildungsverlauf. Mechanismen, Befunde, Debatten* (Wiesbaden: Springer VS, 2016).

<sup>3</sup> See Autorengruppe Bildungsberichterstattung, *Bildung in Deutschland 2016. Ein indikatorengestützter Bericht mit einer Analyse zu Bildung und Migration* (Bielefeld: 2016).

## What are voluntary educational activities?

Voluntary educational activities are formal and non-formal educational programs, which are not a mandatory part of an individual's schooling, and also leisure activities with an educational focus. This includes child day care centers, leisure activities such as sports and music outside of the day care center or school, and extracurricular school activities.

Day care centers play a crucial role: these establishments are particularly important for children with a migrant or refugee background<sup>4</sup> because they facilitate the acquisition and day-to-day use of the German language.<sup>5</sup> This is especially relevant because, for the vast majority of day-care children with a migrant background, German is not the main language spoken at home.<sup>6</sup> Not only can early childhood education contribute to the successful integration of children but also of their parents, provided the establishments are geared toward supporting the families of children with a migrant background.<sup>7</sup> Further, a wide range of studies in the field of education economics highlight the benefits of early education compared with measures implemented at a later age.<sup>8</sup>

Non-formal educational programs generally include leisure activities with an educational focus that take place outside of day care centers and schools. Although these activities are provided outside the context of traditional educational establishments, they still demonstrate a certain level of structured learning. Programs include sporting, music, and artistic activities but also cover other areas such as parent-child groups and involvement in youth organizations. As well as learning the specific skills taught in these groups, these environments provide children and young people with the opportunity to acquire a wide range of other experiences and, if they do not yet speak fluent German, also improve their language skills. Research in education economics also provides evidence that these non-formal educational programs have other

positive effects, in terms of both cognitive and non-cognitive skills.<sup>9</sup> On the whole, take-up of programs like this has strikingly increased over the past few years: while a total of 48 percent of all 16- to 17-year-olds participated in activities with an educational focus in 2001, this figure had increased to 62 percent in 2012.<sup>10</sup> Also the legislature highlights the importance of these non-formal educational activities for the integration of children and adolescents with a refugee background.<sup>11</sup> If children with a migrant or refugee background fail to participate in these activities or only do so in small numbers, compared to their peers, there is a danger they may fall behind.

The third type of voluntary educational program comprises extracurricular school activities, in the areas of sports and music, for instance. In this context, interaction with other children and other learning experiences can also make a vital contribution to integration.

However, due to the voluntary nature of all of these programs, we cannot expect equal levels of take-up among all children and adolescents. Cultural differences might be one reason for this; another decisive factor is how the parents perceive the significance of these activities for their children's education. It is also possible that the differences in levels of take-up do not stem from the migrant or refugee background but can be explained by parental education or maternal employment.<sup>12</sup> Costs and other aspects of these programs can also result in different take-up levels. Participation in sports clubs outside of school is, on average, cheaper than music lessons, for example and, due to financial restrictions, we can therefore expect to see more discrepancies in take-up when it comes to music.<sup>13</sup> It may also be the case that children with a refugee background differ from other children with a migrant background in terms of their participation in voluntary educational activities because they have not been living in Germany for very long or because their residency status is still unresolved.

**4** This is why, in its most recent report, the *Aktionsrat Bildung* recommended early attendance in day care centers by children with a refugee background (*Aktionsrat Bildung, Integration durch Bildung. Migranten und Flüchtlinge in Deutschland* (Münster: Waxmann, 2016), 138.

**5** See, for example, B. Becker, "Der Einfluss des Kindergartens als Kontext zum Erwerb der deutschen Sprache bei Migrantenkindern," *Zeitschrift für Soziologie* 35 (6) (2006): 449-464; B. Becker, "Wer profitiert mehr vom Kindergarten? Die Wirkung der Kindergartenbesuchsdauer und Ausstattungsqualität auf die Entwicklung des deutschen Wortschatzes bei deutschen und türkischen Kindern," *Kölner Zeitschrift für Soziologie und Sozialpsychologie* 62(1) (2010): 139-163.

**6** See Autorengruppe Bildungsberichterstattung, *Bildung in Deutschland 2016*.

**7** See, for example, the recent *Aktionsrat Bildung, Integration durch Bildung*.

**8** For a summary, see F. Cunha, J. J. Heckman, L. Lochner, and D. V. Masterov, "Interpreting the Evidence on Life Cycle Skill Formation," in *Handbook of the Economics of Education*, eds. E. A. Hanushek, S. Machin, and L. Woessmann (2006), 5: 1-765.

**9** For a recent study with other literature references, see C. Cabane, A. Hille, and M. Lechner, "Mozart or Pelé? The effects of adolescents' participation in music and sports," *Labour Economics* (forthcoming in 2016).

**10** A. Hille, A. Arnold, and J. Schupp, "Leisure Behavior of Young People: Education-Oriented Activities Becoming Increasingly Prevalent," *DIW Economic Bulletin*, no. 1 (2014): 26-36.

**11** German Bundestag, "Draft law for the improvement of accommodation, care, and assistance for migrant children and young people," German Bundestag printed paper no. 18/5921 (2015).

**12** One of the few studies examining the possible reasons for the low levels of take-up at child day care centers among children with a migrant background is, for example, The Expert Council of German Foundations on Integration and Migration (SVR), eds., "Obstacle Course to Day Care: Why parents with a Migration Background are Less Likely to Send Their Children to Day Care," *Policy Brief* (Berlin: 2013).

**13** On average, membership fees for sports clubs are €3.10 per month, while music schools tend to charge an average of €38 per month for their courses (Cabane et al., "Mozart or Pelé").

## No systematic findings on participation of children with refugee background available to date

Relevant studies show that attendance at child day care centers and participation in other non-formal educational programs depends on various socioeconomic factors;<sup>14</sup> these frequently, but not always, include children's migrant background. The most recent *Education in Germany* report shows a further decline in the differences in levels of take-up between children in day care centers with and without a migrant background in the past ten years. Nevertheless, children under the age of three with a migrant background are still far less likely to attend day care centers.<sup>15</sup> The differences are particularly pronounced if only children who speak very little German at home are taken into consideration—overall, these children are underrepresented in child day care centers. More detailed analyses show that, to a certain extent, the differences in levels of take-up go hand in hand with other socioeconomic differences such as parental education, household size, or maternal employment.<sup>16</sup>

More considerable differences between children with and without a migrant background can be identified when we look at take-up of other voluntary educational programs outside of the child day care center. Below school-age children with a migrant background are less likely to participate in sports and artistic activities.<sup>17</sup> Children who speak no or very little German at home are less likely to be active members of sports clubs, for instance. There is no evidence of these differences when we look at participation in extracurricular school activities, however.<sup>18</sup>

Some findings regarding differences in levels of take-up in voluntary educational programs among children with and without a migrant background are therefore already available. However, to the best of the authors' knowledge, no systematic analyses based on representative data specifically focusing on children and adolescents with a refugee background have been published

<sup>14</sup> For a summary, see Wissenschaftlicher Beirat für Familienfragen, eds., *Migration und Familie. Kindheit mit Zuwanderungshintergrund* (Wiesbaden: Springer VS, 2016).

<sup>15</sup> See Autorengruppe Bildungsberichterstattung, *Bildung in Deutschland 2016*.

<sup>16</sup> See, for example, F. Peter and C. K. Spieß, "Kinder mit Migrationshintergrund und in Kindertageseinrichtungen und Horten: Unterschiede zwischen den Gruppen nicht vernachlässigen!" *DIW Wochenbericht*, no. 1/2 (2015): 12–21 and Wissenschaftlicher Beirat für Familienfragen, eds., *Migration und Familie*.

<sup>17</sup> This correlation continues to exist even if other socioeconomic factors are taken into account; see P. Schober and C. K. Spieß, "Frühe Förderung und Betreuung von Kindern: Bedeutende Unterschiede bei der Inanspruchnahme besonders in den ersten Lebensjahren," *DIW Wochenbericht*, no. 43 (2012): 17–31; Wissenschaftlicher Beirat für Familienfragen, eds., *Migration und Familie*, and Autorengruppe Bildungsberichterstattung, *Bildung in Deutschland 2016*.

<sup>18</sup> Wissenschaftlicher Beirat für Familienfragen, eds., *Migration und Familie*.

to date. This is the starting point for the present report, which examines participation in these voluntary educational activities among children and adolescents with a refugee background.

Due to the small sample size, it is not possible to conduct separate analyses of children who are refugees themselves and those whose parents are refugees. The two groups are therefore combined, although the lion's share of cases studied are children of refugee parents. For the sake of linguistic simplicity, we use the term "children of refugees" for this group or, as a synonym, "children with a refugee background."

The analyses presented in this report are based on data from the Socio-Economic Panel (SOEP) study and the IAB-SOEP migration survey, a subsample of the SOEP.<sup>19</sup> Below we illustrate the extent to which children of refugees in different age groups participate in voluntary educational programs. The take-up rates are compared with those of children with a migrant background (but no refugee background) and children with neither a migrant nor a refugee background.<sup>20</sup> The majority of the analyses described here are based on data surveyed between 2006 and 2014.<sup>21</sup> As far as possible, data for each child was used from several different years during this period.

## Below school-age children of refugees frequently underrepresented in voluntary educational programs

Children of refugees are far less likely to go to a child day care center (see Figure 1). While 16 percent of children of refugees under the age of three attended a day care center, at the same age, 25 percent of children with a migrant background (but no refugee background) were in day care centers, and 32 percent of children with neither a migrant nor a refugee background. These differences in levels of take-up tail off substantially during the *Kindergarten* or pre-school years (age three to around six, depending on when a child actually enters school). Although children of refugees in this age group are less likely to attend a child day care center than other children, the figure is still at least 90 percent and the differences compared to the other groups are not statistical-

<sup>19</sup> On this, see the box in the Editorial of this issue of *DIW Economic Bulletin*.

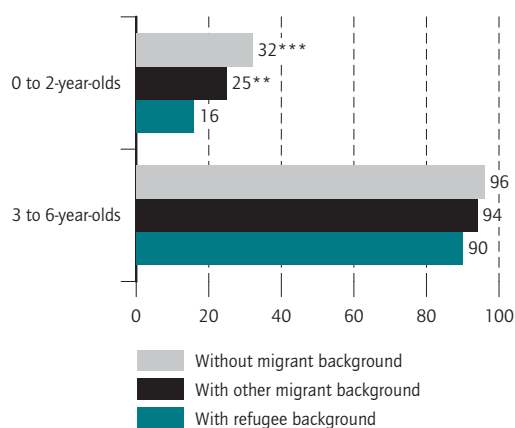
<sup>20</sup> Further analyses not presented here also differentiate according to respondents' length of stay. The differences in take-up levels tend to be smaller, the longer children have been living in Germany—extracurricular sporting activities at school, however, are an exception here too.

<sup>21</sup> For the analyses of children, we use information on the same children from different survey years. The analyses of adolescents are restricted to one observation per person. All standard deviations calculated to determine the significance level take multiple observations of children into account and are clustered at the household level.

Figure

**Child day care center participation by migrant and refugee background<sup>1</sup>**

Participation rates in percent



Significance of differences compared to group with refugee background: \*\*\* 1 percent, \*\* 5 percent, \*10 percent. Significance tests rely on standard errors that are clustered at the household level. Observations in person-years for 0 to 2-year-olds: 12,222. For 3 to 6-year-olds: 13,063.  
<sup>1</sup> Children below compulsory school age.

Source: SOEP.v31, years 2006–2014, weighted. Estimations by DIW Berlin.

© DIW Berlin 2016

Children of refugees attend day care centers less often, especially when they are younger than three.

ly significant.<sup>22</sup> In other words, children with a refugee background certainly attend day care centers at age three

<sup>22</sup> The take-up rates both of children less than two years and children between three and six years with no migrant background are not precisely compatible with the data from the official children and youth welfare statistics. See Autorengruppe Bildungsberichterstattung, *Bildung in Deutschland 2016*. This is because no completely clear distinction could be drawn between the age groups due to missing data on the birth months of some children included in the sample.

and over but in early childhood, when language acquisition is easier than later on, children with a refugee background are still underrepresented in these programs.

However, if we examine the attendance of children below school age in other voluntary educational activities outside the day care centers such as sports, early childhood music, and parent-child groups, a somewhat different picture emerges (see Table 1): children of refugees are just as likely to participate in sporting activities such as children’s gymnastics or swimming as other children with a migrant background (around 30 percent in each case). What is striking, however, is that virtually no children and parents with a refugee background attend a parent-child or other similar groups—these activities are therefore far less likely to help those with a refugee background interact with other families for building up social networks.

**Primary school children of refugees less likely to participate in sports and music activities outside of school**

At primary school age, children of refugees are equally likely to participate in voluntary educational programs within school as other children. When it comes to extra-curricular school activities in sports, the take-up rates among children of refugees are, in fact, significantly higher than among those with and without a migrant background (see Table 2). The situation is quite different, however, when we take a look at educational activities held outside of school: here, children of refugees are distinctly underrepresented. While 66 percent of children in these age groups with no migrant background and 56 percent of these children with other migrant background take part in sports outside of school, the corresponding figure for children of refugees is only 41 percent. These differences are statistically significant and a

Table 1

**Participation in non-formal educational programs by children below compulsory school age**

In percent

	Children’s gymnastics, sports, swimming	Early childhood music classes	Parent-child groups and others <sup>1</sup>	Observations in person-years
Without migrant background	42	16***	11***	14,837
With other migrant background	30	10	6***	5,589
With refugee background	31	7	1	252

Significance of differences compared to group with refugee background. \*\*\* 1 percent, \*\* 5 percent, \* 10 percent. Significance tests rely on standard errors that are clustered at the household level.

<sup>1</sup> Includes artistic activities to a limited extent.

Source: SOEP.v31, years 2006–2014, weighted. Estimations by DIW Berlin.

© DIW Berlin 2016

Refugees and their children seldom participate in parent-child groups.

Table 2

**Participation in voluntary educational programs by children of primary school age**

In percent

	Extracurricular school activities			Non-formal educational programs outside school			Total			Observations in person-years
	Sports	Music	Other	Sports	Music	Other <sup>1</sup>	Sports	Music	Other	
Without migrant background	23***	17	23	66***	27***	12***	73***	37***	32***	9,159
With other migrant background	30	15	22	56**	17*	9***	66	27	29*	2,652
With refugee background	37	16	19	41	10	1	58	21	19	207

Significance of differences compared to group with refugee background. \*\*\* 1 percent, \*\* 5 percent, \* 10 percent. Significance tests rely on standard errors that are clustered at the household level.

<sup>1</sup> Art classes, youth organizations, youth groups, and youth centers.

Source: SOEP.v31, years 2006–2014, weighted. Estimations by DIW Berlin.

© DIW Berlin 2016

Primary school students with a refugee background are less often involved in sports and music classes outside school.

similar pattern can be observed for music and other educational activities outside of school. Even if we examine participation in area-specific voluntary educational activities as a whole, i.e., we combine programs organized within and outside of school in one specific field (such as sports, music, etc.), it is apparent that children with a refugee background are still underrepresented in sports, music, and other areas. The higher take-up levels of children with a refugee background in extracurricular sporting activities within school cannot offset the lower participation in sporting activities outside of school: while 73 percent of children with neither a refugee nor a migrant background take part in either extracurricular sporting activities or a sports club outside of school, the corresponding figure for children with a refugee background is only 58 percent.

Overall, these findings point to the important function of schools as an engine for integration, on the one hand,

going beyond the regular mandatory school curriculum. On the other hand, there are also clear indications that the potential of educational activities outside of school to support social integration is not yet being fully exhausted.

### Children of refugees more likely to participate in extracurricular sporting activities within school

The situation is similar among children of secondary school age: children of refugees are more likely to participate in extracurricular school activities with a sports and music focus (see Table 3). In this age group a total of 32 percent of children with a refugee background are enrolled in an extracurricular sporting activity while just 22 percent of children with no migrant or refugee background participate in these groups. When it comes to educational programs outside of school, however, children of refugees are less likely to participate than chil-

Table 3

**Participation in voluntary educational programs by children of secondary school age**

In percent

	Extracurricular school activities			Non-formal educational programs outside school			Total			Observations in person-years
	Sports	Music	Other	Sports	Music	Other <sup>1</sup>	Sports	Music	Other	
Without migrant background	22*	13	23	59***	22	21***	66**	29	38	13,549
With other migrant background	30	14	23	53*	18	11	64*	26	31	3,114
With refugee background	32	19	20	40	16	8	52	23	27	261

Significance of differences compared to group with refugee background. \*\*\*1 percent, \*\* 5 percent, \* 10 percent. Significance tests rely on standard errors that are clustered at the household level.

<sup>1</sup> Art classes, youth organizations, youth groups, and youth centers.

Source: SOEP.v31, years 2006–2014, weighted. Estimations by DIW Berlin.

© DIW Berlin 2016

Children of refugees are more often active in extracurricular activities in sports.



Table 4

**School engagement and participation in voluntary educational programs by adolescents**

In percent

	School engagement throughout entire school career			Current participation in non-formal educational programs outside school						Observations
	Extracurricular activities in sports	Other extracurricular activities <sup>1</sup>	Class president	Weekly sport practice and participation in competitions	Weekly sports	Weekly playing music/singing and music lessons	Weekly playing music/singing	Weekly dance/theater	Volunteer work in clubs/social services, weekly	
Without migrant background	25**	50	33	29	68	15***	28	18	17	3,122-3,187
With other migrant background	23**	47	27**	26	64	11**	24*	19	14	747-775
With refugee background	39	41	44	32	70	5	38	23	11	100-101

Significance of differences compared to group with refugee background. \*\*\* 1 percent, \*\* 5 percent, \* 10 percent. Significance tests rely on standard errors that are clustered at the household level. <sup>1</sup> Includes the participation in school theater or dance groups, choir, orchestra, school band, school magazine or other extracurricular school activities.

Source: SOEP.v31, years 2000–2014, weighted. Estimations by DIW Berlin.

© DIW Berlin 2016

Adolescents with a refugee background are more often elected class president than their peers.

dren with no migrant or refugee background. For this age group, too, the increased participation in voluntary activities within school cannot completely offset the lower levels of take-up in programs outside of school: if we combine sports activities within and outside of school, the take-up rate among children with a refugee background is significantly lower than among other children. However, when we look at music and other activities, children with a refugee background participate just as much as children with other migrant background.

Further, adolescents were also surveyed retrospectively about the extent to which they had participated in voluntary educational programs over their entire school life to date. Their responses confirm that children of refugees frequently take part in extracurricular school activities (see Table 4). Children of refugees did in fact significantly more often participate in extracurricular sporting activities within school (39 percent) than other children (23 to 25 percent). Just under half of those surveyed had already attended other extracurricular school activities despite sports; here, the differences in levels of take-up between the groups studied are not particularly great. One striking finding is that 44 percent of adolescents with a refugee background were elected class president at least once during their school time. The rate among adolescents with no refugee background was much lower.

At the time the survey was conducted, there were no major differences between the three groups with regard to take-up of sporting activities outside of school. However, only five percent of adolescents with a refugee background took a music class outside of school which means they were significantly underrepresented compared to children with no migrant background (15 percent). This is presumably not down to a lack of interest in music

since the share of adolescents with a refugee background who are involved in a musical activity of some kind on a weekly basis is higher than among other groups. However, with regard to participation in weekly dance or acting activities and voluntary work, no major differences are evident. Roughly one in ten adolescents with a refugee background does voluntary work—at least in terms of a weekly and therefore very regular commitment.

### Socioeconomic characteristics only partially explain differences in levels of take-up

The question arises as to whether the differences in take-up rates between the three groups of children and adolescents outlined above can in fact be attributed to a refugee or migrant background. It is possible that other socioeconomic characteristics such as parental education and income also have an impact and that these other characteristics explain the association between refugee background and participation in voluntary educational activities. In order to determine whether this is the case, based on statistically significant differences in levels of take-up taken from previous analyses, the present study uses linear probability models to estimate the effect of a refugee and/or migrant background on participation in voluntary educational activities. Differences with regard to specific characteristics of the parents (such as education, the age, and employment status), of the household (such as household income, size of place of residence, single-parent status, region, and survey year), and of the child (such as age, sex, and number of siblings) are controlled for.

With respect to the attendance of a child day care center under the age of three, the findings show that there are no statistically significant differences between chil-

Table 5

### Participation in voluntary educational programs by children, controlling for migrant and refugee background, child, mother, and household characteristics

Coefficients from linear probability models in percentage points<sup>1</sup>

	Not yet school age			Primary school age				Secondary school age		
	Child care center for 0 to 2-year-olds	Early childhood music classes	Parent-child groups and others	In school	Outside school			In school	Outside school	
				Sports	Sports	Music	Other	Sports	Sports	Other
Refugee background	1.40	-3.83**	-4.84***	11.78***	-13.67***	-7.48***	-8.50***	10.25***	-11.21***	-16.86***
Other migrant background	0.05	-2.12***	-3.88***	8.23***	-7.13***	-2.80**	-3.88***	6.40***	-4.25***	-11.02***
Reference category: no migrant or refugee background										
At least one parent with medium level of education (ISCED 3+4)	1.50	0.96	3.00***	2.04	9.98***	5.77***	3.95***	-0.46	6.24***	4.77***
At least one parent with higher level of education (ISCED 5+6)	5.69***	8.04***	5.45***	2.18	19.04***	22.55***	7.19***	0.57	15.21***	7.63***
Reference category: both parents with lower level of education										
Observations in person-years	12,583	21,055	21,055	12,284	12,284	12,284	12,284	16,621	16,621	16,621
R <sup>2</sup>	0.36	0.11	0.09	0.04	0.13	0.16	0.03	0.02	0.09	0.03

Significance level: \*\*\* 1 percent, \*\* 5 percent, \* 10 percent. Significance tests rely on standard errors that are clustered at the household level.

<sup>1</sup> Also controlling for the variables: sex of child, single-parent household, number of siblings, age of mother, employment status of both parents, equivalised net household income, municipality size, East-West indicator, and indicator variables for all survey years and the child's age.

Source: SOEP, v31, years 2006–2014, weighted. Estimations by DIW Berlin.

© DIW Berlin 2016

#### Socioeconomic characteristics do not explain the differences in participation in non-formal educational programs.

dren of refugees and children with no refugee or migrant background when maternal employment status, parental education, and other characteristics are taken into account (see Table 5). The association between refugee background and day care center attendance identified earlier is therefore due to these other factors. Nevertheless, the fact remains that children with a refugee background under the age of three are underrepresented in day care centers.

However, the picture that emerges with regard to non-formal educational programs is quite different: although taking parental education and employment history into account slightly reduces the differences, children with a refugee background are far less likely to participate in parent-child groups. The probability of them attending one of these groups is still five percentage points lower; once the other parental characteristics are controlled for, however, no differences to those with a migrant background are observed.

The differences in participation rates in voluntary educational programs among primary and secondary school children discussed above cannot be entirely explained by factors other than refugee background: children of refugees are still more likely to participate in extracurricu-

lar sporting activities but are significantly less likely to participate in educational activities outside of school (in sports and music, for instance)—even if socioeconomic characteristics are taken into account, meaning that we can exclude the possibility of, for example, household income explaining the aforementioned associations.

If socioeconomic characteristics are controlled for, take-up rates in extracurricular sporting activities among adolescents with a refugee background over the entire school life are no higher than among children with and without a migrant background (see Table 6). The increased probability of being class president at least once over the young person's entire schooling is also no longer statistically significant when socioeconomic characteristics are controlled for. Only the lower level of regular participation in music classes observed among adolescents with a refugee background continues to apply when socioeconomic characteristics are taken into account—the difference between this group and those without a migrant background is eight percentage points.

With regard to differences between children with and without a migrant background (and with no refugee background), our analysis confirms the findings of previous studies: participation in a range of voluntary educa-



Table 6

### Participation in voluntary educational programs and school engagement by adolescents controlling for migrant and refugee background; child, mother and household characteristics

Coefficients from linear probability models in percentage points<sup>1</sup>

	School engagement throughout entire school career		Current participation in non-formal educational programs outside school	
	Sports	Class president	Weekly playing music/singing and music lessons	Weekly playing music/singing
Refugee background	4.77	4.09	-7.55***	3.20
Other Migrant background	0.03	-1.59	-4.92***	-2.99
Reference category: no migrant or refugee background				
At least one parent with medium level of education (ISCED 3+4)	0.14	-0.28	2.72	6.05**
At least one parent with higher level of education (ISCED 5+6)	7.93***	6.22*	16.84***	17.41***
Reference category: both parents with lower level of education				
Observations in person-years	4,192	4,192	4,117	4,117
R <sup>2</sup>	0.03	0.02	0.10	0.09

Significance level: \*\*\* 1 percent, \*\* 5 percent, \* 10 percent. Significance tests rely on standard errors that are clustered at the household level.

<sup>1</sup> Also controlling for the variables: sex of child, single-parent household, number of siblings, age of mother, employment status of both parents, equalised net household income, municipality size, East-West indicator, and indicator variables for all survey years and the child's age.

Source: SOEP.v31, years 2000–2014, weighted. Estimations by DIW Berlin.

© DIW Berlin 2016

Children with a refugee background participate significantly less often in music classes outside school than children without any migrant background.

tional activities is directly correlated with migrant background—socioeconomic characteristics such as parental education and household income alone cannot explain the differences. In almost all of the areas analyzed, the take-up probability among children with another migrant background is somewhere between that of children with no migrant background and those with a refugee background. This is evident from the regression coefficients for children with an other migrant background, which are always lower than the coefficients for children with a refugee background but—in most cases—still have the same (plus or minus) sign (i.e., the deviation is in the same direction relative to the comparison group of children with neither a refugee or other migrant background).

The findings on the impact of parental education are also confirmed by previous analyses. The correlations in all calculations point in the expected direction: the higher the level of parental education, the greater the probability of a child attending day care center below the age of three. The same also applies to early childhood music and educational programs organized outside of school for different age groups. With regard to participation in extracurricular sporting activities, however, the impact of parental educational background is negligible. Maternal employment status (coefficients are not shown in the table) is significant particularly with regard to day care center attendance under the age of three. The figures clear-

ly show that children in this age group whose mothers are in full-time employment in particular are more likely to attend child day care center.

## Conclusion

The findings of the present report show that children with a refugee background are just as likely to participate in some voluntary educational programs as other children, if not more so in fact. This primarily applies to extracurricular school activities. However, children of refugees are less likely to participate in voluntary educational activities outside of school. During the very early years, these children are also underrepresented in child day care centers and particularly in parent-child groups: programs tackling this issue by directly and early addressing children with a refugee background and their families are therefore useful and necessary. These measures could help to exploit the potential of early child care centers and education programs far more fully than has been the case to date. In order to better reach out to and support children and families with a refugee background, programs should emphasize their intercultural focus both within the establishments themselves and also in terms of the advisory services provided. Further intercultural skills training or the explicit recruitment of voluntary and paid staff with a migrant or refugee background are possible steps that sports clubs and the suppliers of music pro-

grams outside school could take, for instance. A number of valuable measures have already been implemented. Further steps must now be taken<sup>23</sup> and their effectiveness evaluated. There is certainly a need for such measures to be implemented in this sphere—both by civil society and by the state at central government, federal states, and municipal governments. Integration in the formal as well as non-formal education sector both requires additional resources to be invested.<sup>24</sup>

---

**23** For an overview of examples of measures implemented, see also *National Action Plan on Integration*.

**24** On this, see also the "Draft law for the improvement of accommodation, care, and assistance for migrant children and young people" which strongly emphasizes that they "(should) maintain the possibility of developing their potential and integrating into society through access to formal and non-formal educational activities" (on this, see German Bundestag, "Draft law for the improvement of accommodation": 1).

**C. Katharina Spieß** is Head of the Department of Education and Family at DIW Berlin and Professor at the Freie Universität Berlin | [kspiess@diw.de](mailto:kspiess@diw.de)

**Franz Westermaier** is a Research Associate in the Department of Education and Family at DIW Berlin | [fwestermaier@diw.de](mailto:fwestermaier@diw.de)

**JEL:** I20, J13

**Keywords:** Early education, day care, non-formal education, migration background, refugee children.

As the central educational establishment, school has the capacity to encourage the integration of children with a refugee background in extracurricular school activities, for instance. These programs have considerable potential which we must use to the full and (continue to) foster—yet another reason why children of refugees should attend school as soon as possible after arriving in Germany.

What is still open to question is the extent to which the findings outlined in the present report can be applied to the children and adolescents who arrived as refugees in the last two years—this can only be answered by analyzing as yet unavailable data. However, the findings presented here give some indications of starting points for the integration of children and adolescents with a refugee background, specifically in the field of voluntary educational programs.

**Jan Marcus** is a Research Associate in the Department of Education and Family at DIW Berlin and Juniorprofessor at the University of Hamburg | [jmarcus@diw.de](mailto:jmarcus@diw.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

#### Publishers

Prof. Dr. Pio Baake  
Prof. Dr. Tomaso Duso  
Dr. Ferdinand Fichtner  
Prof. Marcel Fratzscher, Ph.D.  
Prof. Dr. Peter Haan  
Prof. Dr. Claudia Kemfert  
Dr. Kati Krähnert  
Prof. Dr. Lukas Menkhoff  
Prof. Karsten Neuhoff, Ph.D.  
Prof. Dr. Jürgen Schupp  
Prof. Dr. C. Katharina Spieß  
Prof. Dr. Gert G. Wagner

#### Reviewer

Karl Brenke  
Dr. Daniel Kemptner  
Dr. Katharina Wrohlich

#### Editors in chief

Sabine Fiedler  
Dr. Crijte Hartmann  
Dr. Wolf-Peter Schill

#### Editorial staff

Renate Bogdanovic  
Dr. Franziska Bremus  
Prof. Dr. Christian Dreger  
Sebastian Kollmann  
Dr. Peter Krause  
Ilka Müller  
Miranda Siegel  
Dr. Alexander Zerrahn

#### Layout and Composition

eScriptum GmbH & Co KG, Berlin

#### Sale and distribution

DIW Berlin  
ISSN 2192-7219

Reprint and further distribution – including extracts – with complete reference and consignment of a specimen copy to DIW Berlin's Communication Department (kundenservice@diw.berlin) only.  
Printed on 100 % recycled paper.