



BULGARIA: Does making early education free benefit disadvantaged children?

Giving children access to quality early education can help prepare them for primary school by strengthening their physical, cognitive and socio-emotional development. But many children, especially those from poor and otherwise disadvantaged families, don't have the opportunity to attend preschool. Their families may not be able to afford to send them, may not recognize the importance of early education or may not have access to a quality program. To help all children have the same opportunity to benefit from early education, some programs try to improve children's enrollment in preschool. But what's the most cost-effective way to do this and will all children benefit from earlier access to early childhood education programs?

These questions have particular relevance in Bulgaria, where enrollment among children from the Roma minority in early education programs for children aged three to six years

old lags behind that of other children, who also can face inequalities later on in educational opportunities. State programs in Bulgaria don't charge fees for five and six-year-old children in half-day programs, but they do charge for full day programs and for children aged three to four. The World Bank's Strategic Impact Evaluation Fund (SIEF) supported a study carried out with the Bulgaria-based Trust for Social Achievement to test whether covering the costs of preprimary education would boost enrollment and attendance. The evaluation found that removing fees substantially increased the likelihood both of children being registered in preschool and of attending preschool, while giving families small monthly financial incentives on top of free tuition didn't further improve enrollment. However, the Roma children who enrolled didn't show the same developmental progress as the Bulgarian children, and in some cases, had worse outcomes than children in the control group. Researchers will test children again, right before they enter primary school, to see if they are doing better after a second year of preschool. At the same time, the results have triggered additional research to better understand how to support Roma children as they transition to the classroom.



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Context

In Bulgaria, school is now compulsory for children aged five and six-years-old (known as preschool for children in this age group) and the government offers full-day and half-day programs. Full-day programs, which are preferred by most families, charge about 176 Bulgarian lev (or about U.S. \$112) a year. Half-day programs are free, but families are often asked to contribute monthly to cover transportation, food and school supplies. Because the number of full-day slots is limited, families that want to ensure availability enroll their children in schools' preschool programs at age three or four, which guarantees them a kindergarten slot when they're older. But school at this age isn't free. As a result, poor families in Bulgaria may be less likely to take advantage of early education programs when their children are younger, making it harder

for them to find full-day slots when their children are ready to start at age five. A 2011 European Union regional study looking at the situation of Roma populations in Bulgaria, Hungary, Romania, Slovakia and the Czech Republic found that while more than 75 percent of children aged three to six years old were in a preschool program, about 55 percent of Roma children weren't.

The Bulgarian-based Trust for Social Achievement, a local non-governmental organization created by the America for Bulgaria Foundation to fund programs for economically disadvantaged people, including Roma, worked with SIEF-supported researchers to design and evaluate strategies for increasing early childhood education participation among the poorest families in Bulgaria.

Intervention and Evaluation

The Trust for Social Achievement, in conjunction with local non-governmental organizations, preschools and municipal authorities, created the Springboard for Social Readiness program to identify cost-effective approaches for improving early childhood education enrollment and attendance for the poorest families. The program design included a randomized control trial to measure the impact of different financial incentives and an informational campaign about the importance of preprimary education. In particular, researchers wanted to test if including additional financial incentives generated an increase in preschool participation high enough to make this kind of policy option more effective than simply making preschool free.

- There are approximately 10-12 million Roma in Europe and the vast majority live in deep poverty.
 - One third of Roma children in Eastern Europe go hungry at least once a month
 - 80 percent of Roma parents report wanting a secondary education for their children, but less than a quarter of all Roma children finish high school.
 - Bulgaria has one of the largest Roma populations in Europe with an estimated 700,000 Roma.
- All numbers from report*

Using a list prepared by the Open Society Institute in 2007 of all Bulgarian communities with at least 10 Roma households, the research team identified 236 communities eligible for the study. To be included, a community had to have at least 25 children in the age range of two and five; a school providing preprimary education that was reachable on foot or through free public transportation and that had at least 15 new slots available; and study consent from the local mayor and school principal.

Researchers held a public lottery in June 2014 to randomize the 236 communities into different treatment groups. The lottery, held at a hotel in the capital, Sofia, was conducted in front of officials from the Ministry of Education, the national Association of Municipalities in Bulgaria, mayors, directors of full-day preschools, non-governmental organizations and others. The organizers videotaped and made the lottery available on YouTube to ensure full transparency.

Researchers employed a cross-cut design to test the impacts of providing information and easing financial constraints. Communities were randomly assigned to two groups—one that received information on the benefits of preprimary education and an introduction to the school system and school officials,

and one that received no information or introduction. Within each of these two groups, researchers further randomly assigned these communities to one of four groups. In one group of communities, preschool for children aged three to four became tuition-free, and any extra fees were fully covered by the program for all children aged three to six. In a second group, households qualified for the same cost-free preschool and received an additional BGN 7 per month (about \$4.20), conditional on their child's attendance. A third group of communities also qualified for cost-free preschool and received a larger monthly stipend of BGN 20 (\$12.50) conditional on attendance. A fourth group continued with no additional assistance for school fees or stipends. Thus, there were a total of eight experimental groups. These included: A control group that received nothing; a group that only received the information program; a group that received free preschool; a group that received free preschool plus the information campaign; a group that received free preschool plus a small conditional cash transfer; a group that received free preschool, a small conditional cash transfer and the information campaign; and a group that received free preschool plus a larger conditional cash transfer; a group that received free preschool, a larger conditional cash transfer; and the information campaign. The information intervention, organized by mainly Roma-led groups, consisted of five public community meetings held over 10 months. In total, 188 communities received the information campaign and 188 didn't, divided across the three treatment groups and one control group.

Sample population:

Average child was 3.9 years old at start

44 percent of parents had not completed grade 4

Half of parents reported some difficulty reading and writing Bulgarian

Families were poor, with a monthly income of BGN 432 (\$260) at baseline, compared to the national average of BGN 957 (\$576)

Only 61 percent of household heads were (self-) employed at baseline.

Prior to randomizing the communities into the different groups, researchers conducted a baseline survey to gather information on the households, such as employment, education, and literacy, along with perceptions of preschool and parental involvement in education activities. The survey, carried out in April 2014, covered all 5,772 households with eligible children

in the 236 communities. The endline survey took place in April-May 2015 and included three unannounced preschool checks during the April-May 2015 period. During the endline survey, the research team also collected child development data. Re-

searchers used the IDELA tool, developed by Save the Children, to measure both cognitive and non-cognitive skills, including language and early literacy, math and problem solving, socio-emotional development, and motor skills.

Results

Simply doing away with tuition costs and other fees turned out to be the most cost-effective approach for increasing preschool enrollment and attendance. Additional financial incentives didn't matter, nor did additional information.

Removing the costs for enrolling children aged three and six years old increased preschool enrollment of Bulgarian and minority Roma and Turkish children alike. Enrollment rose by 14 percentage points overall, or 19 percent, effectively cutting the fraction of unregistered children in half. Attendance, meanwhile, rose by 10 percentage points, or by 22 percent, when measured through unannounced visits to the school. In both cases, this was in comparison with children in the control group didn't have any financial support to access preschool and who didn't receive the information intervention. The informational meetings alone resulted in no statistically significant impacts on registration or attendance.

Making preschool free was enough to encourage families to register their children and send them to school. Offering parents additional conditional cash payments didn't lead to any increase in enrollment or attendance. Twinning the information campaign with free preschool didn't further increase registration or attendance, regardless of whether or not families also were offered conditional cash payments.

Making preschool free also led to increased attendance at the informational meetings.

The information campaign consisted of five community meetings over 10 months. The meetings, which were implemented by local non-governmental organizations, provided parents with information about the benefits of preschool in terms of future success for their children in school and afterwards. The meetings promoted interaction between teachers and school officials, and because they were held in the schools, parents had a chance to see where their children would be enrolled.

In communities that didn't receive any intervention, only 5.6 percent of households attended some form of information sessions in the school. In the areas that just received the information campaign, parents were 28 percentage points more

likely to attend an information session. But when the costs of preschool were covered, meeting attendance was 64 percentage points higher. As with the case of enrollment and attendance in preschool, adding conditional cash transfers to the offer of information didn't lead to any further increase in the likelihood that a family would attend a meeting.

The information campaign had a positive impact on parent's understanding of the importance of early education and improved their aspirations for their daughters, especially within Roma and other minority communities.

In communities where the informational meetings were held, whether alongside financial incentives or not, parental knowledge rose across all eligible groups. When broken down by background, knowledge rose the most among Roma and Turkish families.

The information meetings also had positive impacts on parental aspirations for their children, especially for girls. Families that had access to the informational campaigns said the education of girls should stop 0.8 years later than families in the control group. When financial incentives were combined with informational meetings, families were more likely to believe that it was good for girls to delay having children. Likewise, informational meetings alone and combined with financial incentives improved the likelihood that families would see a secondary school education and higher as appropriate for girls.

However, the program didn't benefit children's cognitive development, and in some developmental domains, it even had negative effects that were worse for Roma and Turkish children.

Neither providing information about preschool nor easing the financial constraints associated with it significantly improved



literacy, numeracy, or social-emotional skills. In fact, estimated average impacts were negative for children's numeracy skills among groups receiving information, free access, additional financial incentives, or a combination of the interventions. This means that when compared to children in the control group, which didn't receive access to free preschool or the information campaign, children in the treatment groups actually showed a decline in numeracy skills. These negative effects were seen only among minority Roma and Turkish children, but not the Bulgarian children. In addition, among the Roma and Turkish children who had access to free preschool, there was a decline in their social-emotional skills when compared with children in the control group.

It's unclear why participating in preschool didn't improve children's development, but it's possible that one year in school was too short a period for any improvements to appear. Researchers are now conducting a follow-up study to determine if preschool exposure may have positive impacts three years after the program. Nearly three quarters of the Roma and Turkish children don't speak Bulgarian at home and so the transition into a classroom, where the language of instruction is Bulgarian, may take a while. However, the negative effects of the in-

tervention on child development are also visible on Roma and Turkish who do speak Bulgarian at home.

Lower parental involvement, combined with teacher quality, also may explain why children's cognitive and social-emotional skills didn't improve when they went to preschool.

Parents whose children attended the full-day kindergarten reported that they were less likely to read a book, tell a story, or sing to their child. In the control communities, for example, 69 percent of parents report telling their child a story, as compared with only 48 to 59 percent in the treatment communities, depending on the exact intervention. Parents seem to have viewed kindergarten as a replacement for what they normally would have done at home. The change was particularly prominent within minority families. Social-emotional skills require a stable and confident interpersonal relationship, which children were likely receiving at home. In the classroom, however, they may not have bonded with their teacher. Moreover, in the absence of a Roma teaching assistant in the classroom, there may have been cultural gaps between minority students and school staff.

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Conclusion

Giving disadvantaged children access to preschool is an important first step to ensure an even playing field, so that all children begin primary school with the tools they need to succeed. But as the results of this evaluation underscore, simply lifting barriers to enrollment isn't always enough and disadvantaged children may need additional resources to ensure they are fully benefitting from educational services.

Researchers are looking into the possibility of creating a more supportive environment for disadvantaged children—by engaging with community mediators and hiring additional Roma teaching assistants to ensure that the needs of minority children are met. Researchers also are continuing to follow the children in the study to measure any long-term impacts from the program.

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THE WORLD BANK, STRATEGIC IMPACT EVALUATION FUND
1818 H STREET, NW WASHINGTON, DC 20433

Series editor: Aliza Marcus; Writer: Daphna Berman

For more information, contact Aliza Marcus, SIEF Senior Communications Officer at amarcus@worldbankgroup.org