



Policy Brief

Parental involvement in school activities and reading literacy: Findings and implications from PIRLS 2011 data

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Summary

This policy brief presents evidence demonstrating a positive association between parental involvement in school activities and student performance in the Progress in International Reading Literacy Study (PIRLS) 2011. This association, which was evident in most of the 54 education systems we analyzed, indicates that students enrolled in schools with higher parental involvement tend to have higher reading achievement.

The analysis also showed a positive association between level of parental involvement in school and level of parental education. Thus, parents with lower education levels are likely to participate less in school and vice versa. The conclusions suggest that promoting parental involvement may be an effective strategy for increasing reading achievement, and that this kind of policy intervention could be particularly relevant for schools with students whose parents have lower levels of education.

Policy implications

1. Given the positive association between parental involvement in school activities and student reading achievement in most of the education systems that participated in PIRLS 2011, an association that held even after taking into account differences in parental education, we suggest that education systems:

Put in place policy interventions aimed at increasing levels of parental involvement, as doing so may promote higher levels of student reading achievement.

2. Because parents with lower levels of education tend to get less involved in school activities, we suggest that education systems:

Implement parental involvement initiatives that target schools with students coming from households where parents have lower levels of education.



Introduction

Parents' involvement in their children's education matters. Research on the topic suggests that students whose parents take an active role in their school activities are more likely to attend school regularly, achieve higher grades and test scores, and continue their education beyond high school (Henderson & Mapp, 2002; OECD, 2012). Enhancing parental involvement is a major concern of policymakers in education in many countries. For instance, in the United States, the *No Child Left Behind Act* includes, among its purposes, affording parents meaningful opportunities to participate in the education of their children (US Department of Education, 2001). In the United Kingdom, the government's white paper, *Higher Standards, Better Schools for All* (UK Department for Education and Skills, 2005), seeks to increase parental choice, responsibility, power, and involvement. In Chinese Taipei, the Educational Fundamental Act regulates parental involvement in school affairs during the period of compulsory education (Taiwan Ministry of Education, 1999). Most European and many Latin American countries also have formal initiatives designed to support ties between the school and the family (Miljević-Ridički & Vizek Vidović, 2010; Muñoz Zamora, 2011).

However, regardless of widespread advocacy of increased parental involvement in education, strategies that promote it are not always systematically implemented and are not always equally effective across different societal groups. According to

the *Encyclopedia of the Progress in International Reading Literacy Study (PIRLS) 2011*, most of the 56 participating education systems reported having formal policies to ensure parental involvement in schools. Implementation of these policies varies considerably across countries, however. In approximately half of these education systems, national or regional laws mandate that parents are part of the school governing bodies, while in others parental involvement is encouraged but is not compulsory (Mullis, Martin, Minnich, Drucker, & Ragan, 2012).

With respect to the effectiveness of these policies across different societal groups, previous research points out that strategies to increase parental involvement mainly attract parents who are already involved (Reynolds, 2005). As a consequence, these actions may be unintentionally widening achievement gaps between disadvantaged students and their already advantaged peers.

This policy brief seeks to answer two questions. First, is there a relationship between parental involvement in school activities and student reading achievement in the education systems participating in PIRLS 2011? Second, given that family socioeconomic context, and particularly parental level of education, influence both parental involvement and student achievement (Desforges & Abouchar, 2003), is parental involvement associated with level of parental education within each of the analyzed education systems?

Data

In order to explore the association between parental involvement in school activities and student reading achievement, we used data from the 2011 cycle of the Progress in International Reading Literacy Study (PIRLS), conducted by the International Association for the Evaluation of Educational Achievement (IEA). PIRLS assesses reading literacy at Grade 4 of a representative sample of students in the participating education systems. The study also collects extensive internationally comparable

information on the background characteristics of the students, their parents, teachers, and the schools where they study. The analyses we conducted utilized information on parental involvement in school activities (as reported by school principals), parental level of education (as reported by parents), and student reading achievement (PIRLS achievement scores). This information came from 54 of the 56 education systems that included all relevant data needed for the analyses.

Is parental involvement associated with student reading achievement?

To answer this question, we divided schools into three groups according to the level of parental involvement reported by principals. We then calculated the average reading performance of students for each of these three groups within each education system.

Figure 1 shows the average Grade 4 student reading achievement scores in schools with high, medium, and low levels of parental involvement¹ across the PIRLS 2011 education systems. The education systems are ranked according to their students' average achievement in schools with medium parental involvement. As can be observed, on average in almost all countries, students in schools with high levels of parental involvement (green dots) had higher scores than those students attending schools with medium (yellow dots) or low levels (red dots) of parental involvement. In some countries the dots for some of the categories are not visible because they overlap with the adjacent ones.

Previous research suggests that family socioeconomic context, particularly parental level of education, strongly influences both parental involvement and student achievement (Desforges & Abouchaar, 2003; Hornby & Lafaele, 2011). For this reason, we tested for a potential relationship between student achievement and parental involvement beyond parental level of education.² The question we sought to answer in this regard was this: If all parents had the same level of education, would students studying in schools where parents participated more in school life still show higher reading achievement than students in schools where parents did not participate as often?

Our results show that in 31 of the 54³ education systems analyzed, this was the case. In other words, in these systems, the association between reading achievement and parental involvement was positive and statistically significant even after we took into account the differences in parental education. The 31 education systems are marked with an asterisk in Figure 1.

Is parental involvement associated with levels of parental education?

Most education systems participating in PIRLS 2011 reported having policies in place that aimed to encourage parental involvement in school. Also, as we have already shown, there was a positive association in most of these education systems between parental involvement and student reading achievement above and beyond parental level of education. But do parents tend to get more or less involved in school activities depending on their level of education?

In this section, we investigate whether level of parental involvement in school was associated with level of parental education. Figure 2 presents the percentages of students in schools with different levels of parental involvement who had at least one parent with a university degree (horizontal axis). The education systems are ranked by the percentages in schools with medium parental involvement.

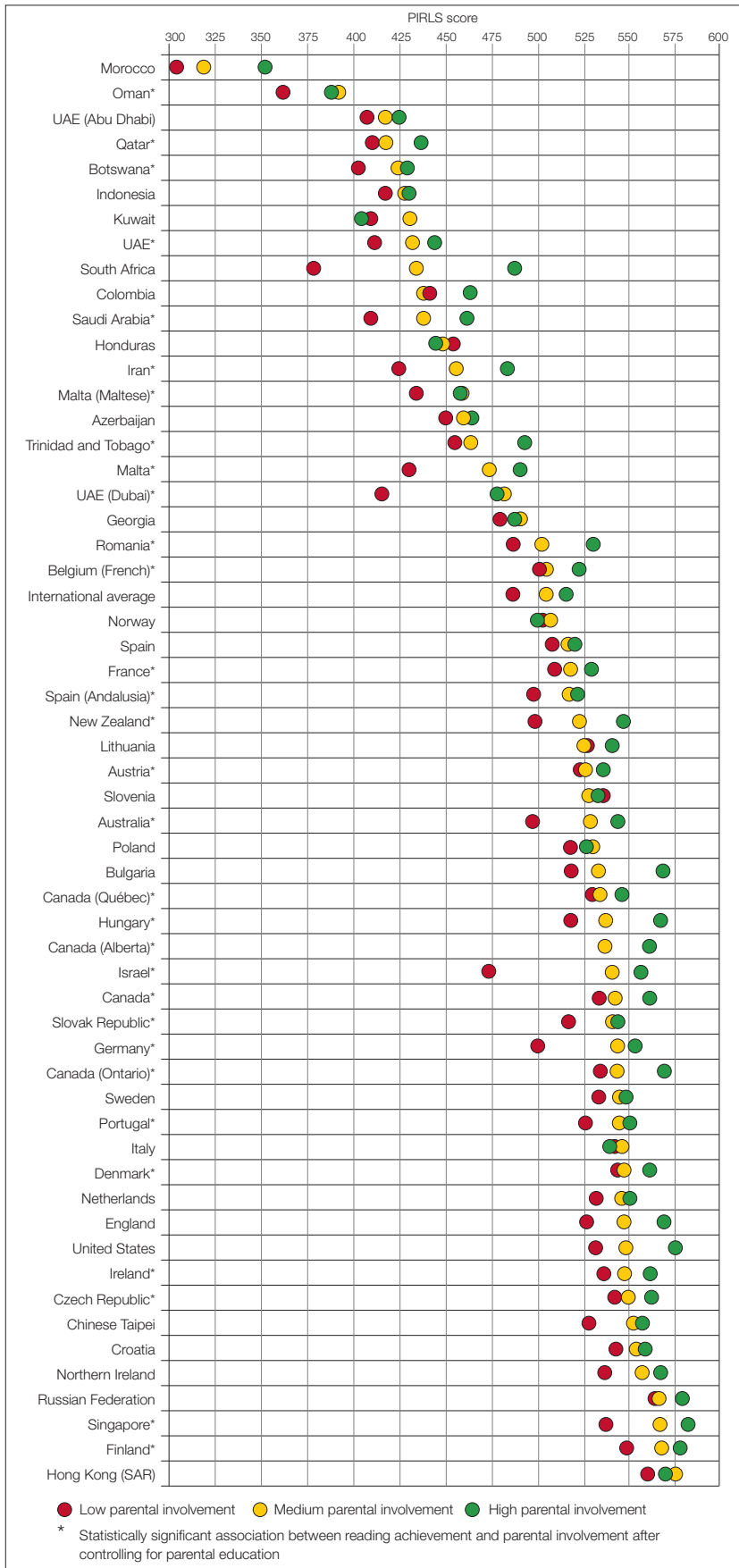
The graph clearly shows that, in most cases, schools with higher parental involvement (green dots) had more students with a university-educated parent than did schools with medium (yellow dots) or low (red dots) levels of parental involvement. In other words, parents with a university degree tended to be more involved in school activities than were parents without a university degree. The countries marked with an asterisk in Figure 2 are those where the percentage of students with at least one parent with a university degree was statistically significantly different in schools with low and high parental involvement. In some countries the dots for some of the categories are not visible because they overlap with the adjacent ones.

1 PIRLS asked school principals to check one of five response categories when reporting level of parental involvement. To present the results more clearly, we collapsed the principals' answers into three categories: very low or low, medium, and high or very high.

2 The measure of parental level of education we used was the level for the parent (i.e., either the father or the mother) who had attained, according to the parents' responses, the highest level of education.

3 Because England and the United States did not collect data on parental education, we excluded these countries from the list of education systems when controlling for this variable.

Figure 1: Average Grade 4 student reading achievement scores in schools with different levels of parental involvement, by country; PIRLS 2011



Source: International Association for the Evaluation of Educational Achievement (IEA), Progress in International Reading Literacy Study (PIRLS) 2011.

Figure 2: Percentage of Grade 4 students in schools with different levels of parental involvement who had at least one parent with a university degree, by country: PIRLS 2011



Source: International Association for the Evaluation of Educational Achievement (IEA), Progress in International Reading Literacy Study (PIRLS) 2011.

Conclusions

We consider that the findings of our analysis have the following policy implications:

1. Policy interventions directed toward increasing parental involvement in school activities could help enhance students' reading achievement.

Our analyses indicated that in most of the education systems participating in PIRLS 2011, students in schools with high parental involvement achieved better reading literacy scores than did students attending schools where parents were less involved. This association held even after we took into account parental education. We therefore suggest introducing initiatives that position parental involvement in school activities as a potential means of supporting improvement in student reading achievement.

2. Strategies aimed at enhancing parental involvement are especially relevant in schools with students whose parents are less educated.

Given that less educated parents tend to be less involved in school activities, we suggest that policymakers direct specific attention to developing strategies that have the potential to enhance parental involvement in schools whose students come from households with low levels of parental education. Such initiatives should take into account the barriers to involvement already identified in the literature. For example, parents with low levels of education often have limited time and financial resources to invest in their children's education. They also may lack the necessary

skills to assist their children academically and to gain information on educational processes, such as curriculum, subjects, and instruction (Bellibas & Gumus, 2013). They may furthermore be intimidated by the prospect of involvement in school affairs (Thurston & Navarrete, 2011).

3. Policymakers need to remember that reading achievement is influenced by multiple factors.

In preparing this policy brief, we analyzed only two of these factors—parental level of education and parental involvement in school activities. However, other factors such as student attitudes and socioeconomic background as well as teacher and school characteristics are also known to have an impact on student learning (see, for example, Hattie, 2009). More work is needed in order to identify the factors that influence the contribution of parental involvement to student achievement in specific contexts. Preferably, in order to be able to identify causal relationships, this work should consider research designs that include analysis of longitudinal data and randomized trials. A good example is a recent large-scale controlled experiment run in a disadvantaged educational district in France. This study demonstrated that parental school involvement can be significantly improved through simple participation programs and that such policies have the potential to develop students' positive behavior and attitudes toward school (Avvisati, Gurgand, Guyon, & Maurin, 2014).





References

- Avisati, F., Gurgand, M., Guyon, N., & Maurin, E. (2014). Getting parents involved: A field experiment in deprived schools. *The Review of Economic Studies*, 81(1), 57–83.
- Bellibas, M. S., & Gumus, S. (2013). The impact of socio-economic status on parental involvement in Turkish primary schools: Perspective of teachers. *International Journal of Progressive Education*, 9(3), 178–193.
- Desforges, C., & Abouchaar, A. (2003). *The impact of parental involvement, parental support and family education on pupil achievements and adjustment: A literature review*. Nottingham, UK: DfES Publications.
- Hattie, J. A. C. (2009). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. Oxon, UK: Routledge.
- Henderson, A. T., & Mapp, K. L. (2002). *A new wave of evidence: The impact of school, family, and community connections on student achievement*. Austin, TX: National Center for Family and Community Connections with Schools.
- Hornby, G., & Lafaele, R. (2011). Barriers to parental involvement in education: An explanatory model. *Educational Review*, 63(1), 37–52.
- Miljević-Ridički, R., & Vizek Vidović, V. (2010). *Parental involvement in the life of schools* (policy brief). Zagreb, Croatia: Network of Education Policy Centers.
- Mullis, I. V. S., Martin, M. O., Minnich, C. A., Drucker, K. T., & Ragan, M. A. (2012). *PIRLS 2011 encyclopedia: Education policy and curriculum in reading* (Vol. 1: A–K). Chestnut Hill, MA: TIMSS & PIRLS International Study Center, Lynch School of Education, Boston College.
- Muñoz Zamora, G. (2011). La democracia y la participación en la escuela: ¿cuánto se ha avanzado desde las normativas para promover la participación escolar? [Democracy and participation in school: How much progress has been made since the policy to promote school participation?] *Revista de Estudios Y Experiencias En Educación*, 10(19), 107–129.
- OECD. (2012). *Parental involvement in selected PISA countries and economies* (Vol. EDU/WKP(2012)10). Paris, France: OECD Publishing.
- Reynolds, J. (2005). *Parents' involvement in their children's learning and schools* (policy discussion paper). London, UK: Family and Parenting Institute.
- Taiwan Ministry of Education. (1999). *Educational Fundamental Act*. Taipei City, Chinese Taipei: Author.
- Thurston, L. P., & Navarrete, L. A. (2011). Rural, poverty-level mothers: A comparative study of those with and without children who have special needs. *Rural Special Education Quarterly*, 30(1), 39–46.
- UK Department for Education and Skills. (2005). *Higher standards, better schools for all: More choice for parents and pupils* (Cm 6677). Norwich, UK: The Stationery Office.
- US Department of Education. (2001). *No Child Left Behind Act of 2001, Title 1, Part A. Section 1118, Parental involvement excerpt from education code*. Washington, DC: Author.

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About the IEA

The International Association for the Evaluation of Educational Achievement, known as IEA, is an independent, international consortium of national research institutions and governmental agencies, with headquarters in Amsterdam. Its primary purpose is to conduct large-scale comparative studies of educational achievement with the aim of gaining more in-depth understanding of the effects of policies and practices within and across systems of education.

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