Centre for Education Research and Innovation (CERI)
Education and Social Progress (ESP)

Promoting social and emotional skills for societal progress in Rio de Janeiro
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Introduction

What is the one wish children around the world may have in common? It is probably rather simple; most of them just want to be happy, healthy and safe. For thousands of children in Brazil, safety can be a real challenge. Constant insecurity, violence and stress characterise the reality of children living in low-income neighbourhoods and shantytowns, also known as favelas. For these children, focusing in the classroom or maintaining motivation to perform well is certainly more difficult than for most children from the OECD countries. The heavy emotional baggage and very intense stress they must carry in their everyday life do not place them in a favourable disposition to learn. Not surprisingly, children from disadvantaged backgrounds who frequently witness violence tend to struggle at school and demonstrate low academic performance. In order to achieve academic success, these children first need to learn how to cope with stressful situations, work with others in a harmonious way and pursue long-term goals. All these are domains of social and emotional skills also needed to be active, responsible and peaceful community members. Moreover, social and emotional skills together with cognitive skills are also essential for success beyond school such as labour market, family life and other crucial aspects of individuals’ life.

Social and economic challenges

Brazil’s strong economic performance and efforts to tackle poverty have contributed to a number of positive results. Poverty (measured against the national poverty line) has fallen from high levels of 35% to under 20% over the last twenty years. Bolsa Família has played an important role in poverty reduction. While in most OECD countries income inequality increased in the 2000s, it reduced remarkably in Brazil from a Gini coefficient of 60 in 1995 to 55 in 2009 (Ferreira de Souza, 2012; OECD, 2013b). Furthermore, the declining levels of inequality have triggered the emergence of a middle-class whose needs raise demands for more efficient public services and policies stimulating higher productivity levels. With a recent slowdown in the economy, these demands are likely to increase. Despite a reduction in poverty and extreme poverty levels, the country still faces a big gap between the haves and the have-nots. Brazil continues to be one of the most unequal countries in the world.

Safety is a daily concern for many Brazilian families, as violence is often present in contexts of high disparity. Criminal acts pervade shantytowns. Brazil is the 7th most violent country in the world (Waiselfisz, 2013), with more than 1 million people murdered between 1980 and 2011, of which 39% were youth aged 14 to 24 (The Associated Press, 2013). Violence in Brazil has however reduced during recent years, with a massive decline of homicide rates in the Southeast region of the country, and the State of Rio de Janeiro more particularly. Despite a modest decline in national homicide rates over the past decade, a great number of children still live at the daily sound of armed guns and gang disputes. The fragile context in which many Brazilian children grow up is thus far from being conducive to healthy human development. Feeling safe and growing in a stress-free environment are key for creating an appropriate learning environment.

Fast growing education system with diverse challenges

Brazil’s education system is governed under three systems (Federal, State and Municipal). Schools under the three systems are set by the Federal Constitution as autonomous and responsible for both the elaboration of their pedagogical proposals and the administrative and financial management of their institutions (UNESCO-IBE, 2010). The education system has two levels: Basic Education and Higher Education (see Table 1). The management of Basic
Education is divided mainly between the states and the municipalities, while Higher Education remains under both the State and Federal Governments’ umbrella. Municipal schools possess a clear monopoly with respect to fundamental education provision. They are also found to outnumber state schools regardless of the education level examined (Instituto Nacional de Estudos e Pesquisas Educacionais Anisio Teixeira and Ministério da Educação, 2013).

**TABLE 1. OVERVIEW OF BRAZIL’S PUBLIC EDUCATIONAL SYSTEM**

<table>
<thead>
<tr>
<th>General programme</th>
<th>Specific programme</th>
<th>International denomination</th>
<th>Grades/Years</th>
<th>Theoretical age</th>
<th>Authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early childhood education</td>
<td>Pre-school</td>
<td>Initial education</td>
<td>4 years</td>
<td>0-3</td>
<td>Municipalities</td>
</tr>
<tr>
<td>Fundamental Primary education</td>
<td></td>
<td>1st grade</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>2nd grade</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3rd grade</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4th grade</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>5th grade</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lower secondary school</td>
<td>6th grade</td>
<td></td>
<td>6-10</td>
<td>Municipalities, States</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7th grade</td>
<td></td>
<td>11-14</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>8th grade</td>
<td></td>
<td>15-17</td>
<td>States</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9th grade</td>
<td></td>
<td>15-17</td>
<td>States</td>
</tr>
<tr>
<td>Youth and Adult education</td>
<td>Elementary education/Lower secondary school</td>
<td>1st-9th grade</td>
<td>Minimum age: 15</td>
<td>Municipalities, States</td>
<td></td>
</tr>
<tr>
<td>High-school/ Secondary education</td>
<td>Upper secondary education</td>
<td>1st form</td>
<td></td>
<td>15-17</td>
<td>States</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2nd form</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3rd form</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vocational and technological education</td>
<td>Upper secondary education</td>
<td>Forms 1 - 3</td>
<td>Minimum age: 18</td>
<td>Municipalities, States</td>
<td></td>
</tr>
<tr>
<td>Youth and Adult education</td>
<td>Upper secondary education</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduate</td>
<td>Bachelor’s</td>
<td>2, 400 hours</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Higher diploma</td>
<td>2, 800 hours</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Technological diploma</td>
<td>1, 600 hours</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post-Graduate</td>
<td>Master’s</td>
<td>2 years</td>
<td>18 or older</td>
<td>Federal Government, States</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PhD</td>
<td>2 years</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Professional degree</td>
<td>3 years</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Specialisation courses (certificate)</td>
<td>360 hours</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Primary education generally offers three shifts per educational level: the morning, the afternoon and the evening shift (for youth and adults). Children therefore receive approximately four hours of classes every day, unless they are enrolled in a school that offers ‘integral’ or ‘enlarged’ education. ‘Integral’ education refers to a full day of schooling, while ‘enlarged’ education merely adds one hour or two to the usual four hours slot.

Education has a strong potential to improve economic and social outcomes (OECD, forthcoming b). Yet, half of Brazilians have left education before they reach the age of 18 (OECD, forthcoming a; PNAD/IBGE, 2013). Moreover, many of those who attend school until the age of 18 do not go beyond the primary level of schooling; that of fundamental education. School drop-out rates and age-grade gaps (i.e., enrolment at grades below those age-appropriate) are major educational concerns in Brazil, both of which find their roots in grade repetition. In Brazil, more than one in three (36%) 15-year-old students had repeated a grade at least once in primary or secondary school which reflects one of the highest rates of grade repetition among countries participating in PISA. Grade repetition in Brazil is negatively associated with performance in mathematics and is more prevalent among disadvantaged students. The pervasiveness of grade repetition in Brazil has been linked to high dropout rates and high levels of student disengagement. School drop-outs also account for 3.7% of the national student population (UNICEF, 2012:30).
In addition, Brazil faces an important challenge of improving the attractiveness of the teaching profession, as currently Brazilian teachers tend to have lower job satisfaction and self-efficacy as well as higher degree of absenteeism from teaching than their colleagues in many OECD and partner economies (OECD, 2008). Despite the progress observed in recent PISA achievement tests, Brazilian students still lag behind their OECD peers. Educational attainment remains low in Brazil with only 43% of 25-64 years-old having attained at least upper secondary education, against 75% for OECD countries on average (OECD, 2013a).

Low academic achievement can accelerate the process of early entry into the labour market. Employment rates are high among the Brazilian population, especially among young persons. Fifty percent of young people (aged 15-24) are employed in Brazil against 37.8% in OECD countries on average (OECD, forthcoming a). However, young Brazilians face many labour market difficulties: youth unemployment rates are three times higher than that of adults; the number of young people neither in employment nor education (the so-called NEET population) is significantly higher than in a typical OECD country; and, the quality of jobs is poor compared to jobs held by youth in OECD countries (one in two young persons works in the informal sector) (OECD, forthcoming a).

The importance of raising social and emotional skills

The socioeconomic challenges facing Brazil call for a better way to mobilize education to address the needs of the children. One way to improve their future prospects is to enhance their social and emotional skills such as perseverance, self-esteem and emotional stability. Evidence suggests that these skills drive not only children's educational outcomes but also variety of labour market and social outcomes (OECD, forthcoming b). Moreover, they can be enhanced through schools, families and communities. Although any policy maker, teacher or parent would recognise the importance of social and emotional skills for children's lifetime success, they would probably lack information on the specific ways in which these skills can be enhanced.

Social and emotional skills in Rio de Janeiro education system

Brazil has number of public programmes to support the most vulnerable segments of its society including, for instance, innovative education programmes aimed at helping disadvantaged students. These initiatives are in line with the goals of education set by the Brazilian Constitution, which relates the role of education to the “full development of individuals, their preparation for the exercise of citizenship and their qualification for work” (Ministério da Educação, 2013:1). In 2010, school was made mandatory from age 6. However, by 2015 compulsory pre-school is to start at age 4, with cognitive, socio-emotional and physical development as core objectives of early childhood education (Planalto Governo, 1996; Planalto Governo, 2013). The Brazilian education system thus explicitly acknowledges the importance of social and emotional skills, alongside cognitive skills. Its newest pre-school resolution further demonstrates the efforts in providing every child with an opportunity to develop these skills from an early age.

Exploratory work with an emphasis on social and emotional skills has begun in Brazilian public primary and secondary schools. Innovative programmes and school models such as the Open School and the Double School seek to diversify students’ learning experience and raise their resilience, discipline, autonomy and self-confidence, among other skills. Brazil’s work on social and emotional skills is based on international evidence suggesting that these skills drive children’s socioeconomic outcomes and wellbeing. Policies to raise social and emotional skills, while beneficial for the whole population, might be particularly favourable for disadvantaged children. Recent evidence suggests that stress associated with growing up in poverty negatively
affects children's brain development and their brain functioning in adulthood (Angstadt et al., 2013). Thus, equipping students with strong social and emotional skills from an early age could be an effective channel to help children face their challenging environment. An overview of existing programmes in Brazil and Rio de Janeiro is presented in Table 2.

There are common characteristics among the programmes presented in Table 2. The

TABLE 2. SOCIAL AND EMOTIONAL SKILLS INITIATIVES IN BRAZIL AND RIO DE JANEIRO

<table>
<thead>
<tr>
<th>Programmes</th>
<th>Objectives</th>
<th>Content</th>
<th>Target level</th>
<th>Target school</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ensino Médio Innovador (Innovative High-School)</td>
<td>Broadening the learning experience.</td>
<td>Development of a dynamic curriculum (i.e. arts, sciences, communication, maths) and provision of pedagogical counselling. Full day of school.</td>
<td>Upper secondary education</td>
<td>State schools</td>
</tr>
<tr>
<td>Escola Aberta (Open School)</td>
<td>Fusion between the academic environment and the community.</td>
<td>Organisation of educational, sporting and cultural activities. Opening of school units during weekends in neighbourhoods of social vulnerability.</td>
<td>Primary and secondary education</td>
<td>State and Municipal schools</td>
</tr>
<tr>
<td>Rio de Janeiro (state and municipality)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Escolas do Amanhã (Schools of Tomorrow)</td>
<td>Social and collective development of children, decrease of school drop-out rates, improvement of school achievement and reduction of violent behaviours and social inequalities.</td>
<td>Teachers trained to use a pedagogical methodology tailored to address the needs of students from low-income neighbourhoods who frequently witness violence. Promotion of community integration practices with the Educating Neighbourhood programme aims at extending children's learning experience beyond the school. Scientists of Tomorrow programme aims at enhancing students' interest in sciences. Health at School programme aims at promoting healthy behaviours and diseases transmission. Full-day of school and provision of reinforcement classes for the weakest students.</td>
<td>Primary and secondary education</td>
<td>Selected municipal schools among most violent neighbourhoods</td>
</tr>
<tr>
<td>Ginásio Carioca (Carioca Gymnasium) and Ginásio Experimental (Experimental Gymnasium)</td>
<td>Promotion of peace and citizenship values, diffusion of cultural knowledge and support in helping children develop life plans.</td>
<td>Teacher-facilitated counselling. Training on the use of new technologies in addition to the more traditional subjects of instruction.</td>
<td>Lower secondary education</td>
<td>Municipal schools</td>
</tr>
<tr>
<td>Dupla-Escola (Double-School)</td>
<td>Provision of vocational courses in an attempt to enhance students' interest in school and better prepare them to their future.</td>
<td>Development of students' autonomy and promotion of mind-sets, skills and competencies that aim at the full development of children. Full-day of school.</td>
<td>Upper secondary education</td>
<td>State schools</td>
</tr>
<tr>
<td>SuperAção (SuperAction)</td>
<td>Help students become conscientious citizens, future professionals and develop entrepreneurial skills.</td>
<td>Organisation of a Young Readers in Action module from which a variety of activities are run, often including team work, to help students develop both cognitive and socio-emotional skills.</td>
<td>Lower and upper secondary education</td>
<td>State schools</td>
</tr>
</tbody>
</table>

Schools of Tomorrow, Carioca and Experimental Gymnasium, Double school, SuperAction, Innovative High-School and the Open School programmes have all adopted a curriculum that breaks with traditional curricula. They integrate new modules that offer a more practical type of learning, based on the needs of evolving modern societies. As such, classes on the use of new technologies or communication have given another flavour to children’s school experience.

1. To the best of our knowledge, the impact of these programmes has not been discussed in academic research.
Teaching these types of modules allows students to familiarise themselves with equipment they may not have access to (i.e. a computer at home), and promotes students’ interest and motivation in doing well in school, by making very concrete the fact that what they are learning can be relevant to a future career aspiration (i.e. working in communication or the IT sector). Another interesting feature of these programmes is the explicit linkage between the school and the community. For example, the Open School and Schools of Tomorrow conduct cultural and sporting activities within and outside schools to bring closer school and community learning contexts. This community approach to learning brings emphasis to the belief that learning also happens beyond schools’ realm, and that community learning is an important and influential aspect of children’s life and, hence, development. Through volunteering and other activities, students for example get to develop essential teamwork and collaboration skills that will help them as citizens, professionals and family members. Many of them also incorporate new pedagogies, as described in Box 1. Although rigorous evaluations are not available to objectively test the effectiveness of these approaches, they are potentially promising avenues to enhance children’s social and emotional skills. The pedagogical approach mentioned above is broadly in line with effective intervention programmes from the United States and few other countries (OECD, forthcoming b).

**Box 1. Programmes for skills development in Rio de Janeiro: a focus on SuperAction**

SuperAction (SuperAção) was launched in partnership with the Ayrton Senna Institute and is targeted at Rio de Janeiro state schools. The SuperAction programme promotes a new model of education that places human development at the centre of teaching and learning. More precisely, SuperAction focuses on the development of social and emotional competencies in young people to prepare them in becoming conscientious citizens and future professionals. A Young Readers in Action module was introduced to channel this development. This module takes place in a room different than the classroom (also called the reading room), in which children can read together and discuss. The aim is to create a different learning environment for youngsters for whom traditional teaching methods are not effective. Full of resources, the reading room is seen as an environment in which students can not only read and do research, but also interact with peers. Within this module, a variety of activities are run to help students develop both cognitive and socio-emotional skills around four axes. The first axis is ‘learning to be’, referring to students’ motivation and self-confidence; the second is ‘learning how to live together’, calling for students’ collaboration skills; the third ‘learning how to do’ calls for their ability to work in teams and the fourth ‘learning to find out’ refers to students’ capacity to understand texts and take pleasure in reading (Instituto Ayrton Senna, 2014).

**New data collection on social and emotional skills in Rio de Janeiro**

Despite the previously described educational initiatives and the growing interest in social and emotional skills; there is little empirical evidence on skills, learning and social progress in Brazil. In order to bridge this gap, the Ayrton Senna Institute (Instituto Ayrton Senna, IAS) and the OECD jointly launched a data collection initiative in the state of Rio de Janeiro (see Box 2 for descriptions of the survey). The survey had two main purposes: a) investigating the psychometric performance of a number of scales measuring social and emotional skills such as Big 5 personality traits, grit, and self-control, among others; b) providing preliminary information on the associations between skills, contexts and outcomes. Note that the information in the survey was self-reported and as such it may be affected by response biases (e.g. social desirability, when responses reflect the desire to portray oneself in the most positive light rather than the reality - see Podsakoff et al., 2003). Thus, the generalizability
of the data needs to be treated with caution and confirmed by future research. Moreover, the data is cross-sectional, i.e. the information was collected from many respondents at one time point. Hence, the results cannot provide much information on the causal mechanisms of skills formation or social progress. Instead this initiative serves as the first illustration of the predictive relationships between contexts, skills and outcomes in the state of Rio de Janeiro. The following sections present preliminary results illustrating the nature of the collected data.

Box 2. IAS and OECD data collection in Rio de Janeiro: sample and collected measures
The IAS and OECD data collection took place in Rio de Janeiro State schools, with children answering paper and pencil questionnaires during 40 minutes, in presence of their teachers. The sample consisted of 24,605 children from grades 5 (1,389 children 11.9 years old on average); grade 10 (14,309 children 16.4 year old on average); and grade 12 (8,512 children 18.2 year old on average). In general, there were slightly more girls than boys represented in the sample (58.2% of respondents were girls). More information on the sampling procedures and the measures is provided by Santos and Primi (2014).

The data includes information on: children's social and emotional skills, standardised cognitive test scores (in mathematics and Portuguese language), demographic information as well as information on socioeconomic status (e.g. mother's education, number of books in the household, car ownership) and social outcomes (including bullying, subjective happiness and feelings of closeness to the family, etc.). Among the social emotional skills, this report focuses on the Big 5, which are Conscientiousness, Agreeableness, Neuroticism (also known as Emotion Regulation), Openness and Extraversion. These skills can be well understood by looking at their more specific descriptors known as facets, Costa & McCrae (1992) provides a list of important facets corresponding to each of these factors:

- **extraversion**: gregariousness, assertiveness, activity, adventurousness, enthusiasm, warmth
- **agreeableness**: trust, straightforwardness, altruism, compliance, modesty, sympathy
- **conscientiousness**: efficiency, organisation, dutifulness, achievement striving, self-discipline, deliberation
- **neuroticism (or emotional instability)**: anxiety, irritability, depression, self-consciousness, impulsiveness, vulnerability
- **openness**: curiosity, imagination, aesthetics, actions (wide interests), excitability, unconventionality

**Differences in the levels of social and emotional skills across Grades 5, 10 and 12**

The present data captures an important moment in youth's lives. Grade 5 corresponds to late childhood and the beginning of adolescence, while Grades 10 and 12 encompass the period of late adolescence and early adulthood. These are key periods for social and emotional development. Soto and colleagues (2011) show that from late childhood into adolescence average levels of agreeableness and conscientiousness rapidly decrease, and then increase again from early adulthood on. In line with Soto and colleagues' findings, conscientiousness of boys and girls in the Rio sample generally decreases between Grade 5 and 12, however analyses reveal that while there is a sharp decrease between Grades 5 and 10, conscientiousness of boys and girls begins to increase again between Grades 10 and 12, although to levels still lower than in Grade 5 (Figure 1). The drop in Conscientiousness between Grades 5 and 10 is more dramatic for boys than for girls. In contrast to Soto and colleagues' findings, the present data shows that Agreeableness and Openness grows steadily between Grades 5 and 12 for both boys and girls. Boys increase in their levels of Extraversion between Grade 5-12, while girls'...
Extraversion stabilises between Grades 10 and 12 in the Rio sample. Interestingly, the present data shows pronounced differences between the developmental changes in Neuroticism for boys and girls, where boys experience sharp decrease, especially between Grades 5 and 10, while girls show a relatively smaller increase, as visible in Figure 2, which is largely in line with the findings of Soto et al. (2011).

**FIGURE 1. DIFFERENCES IN LEVEL OF CONSCIENTIOUSNESS IN GRADES 10 AND 12, AS COMPARED TO GRADE 5, AMONG BOYS AND GIRLS**

**FIGURE 2. DIFFERENCES IN LEVEL OF NEUROTICISM IN GRADES 10 AND 12, AS COMPARED TO GRADE 5, AMONG BOYS AND GIRLS**

*Note: Figures 1 and 2 present marginal changes in means levels in social and emotional skills among children in Grade 10 and 12 in comparison to Grade 5. Differences in the means are all statistically significant.*

**Relationships between social and emotional skills and contexts**

Family environments matter for skills development, both cognitive and social and emotional. Although the current data cannot speak of causal relationships, it allows for exploration of the relationships between family contexts and skills. For example, maternal education can directly affect skills development, with more educated mothers being more aware of ways to stimulate skills, particularly cognitive skills, and thus incorporate these into their home learning practices (Noelke, forthcoming). However, little is known about the exact influence of maternal education on the development of social and emotional skills. The present data shows maternal education is positively associated with children's socio-emotional skills, but the strength and significance of this association varies by type of skill. Overall children with highly educated mothers tend to report higher levels of cognitive skills, openness, agreeableness and extraversion compared with their peers with mothers with low levels of education. But, these relationships are statistically significant only for cognitive skills and openness. Surprisingly, for children in Grades 10 and 12 higher maternal education is associated with lower level of conscientiousness.
FIGURE 3. RELATIONSHIP BETWEEN MATERNAL EDUCATION AND SKILLS

Note: Figure 3 shows the contrast between mothers with no education or primary education and those with tertiary education in children's skills distribution for Grades 5, 10 and 12, where negative values signify that mothers with higher education have children with lower skills, and vice versa. Statistically significant effects are marked by an asterisk. In general, the effects for Grade 5 represent trends (no statistically significant effects), all effects were significant in Grade 10 apart from agreeableness, and only effects for openness, language and math were significant in Grade 12, based on separate regression analyses controlling for sex.

The number of books at home is another indicator of the home learning environment. Books can be a direct learning tool for children not only for improving their literacy but also for enhancing their social and emotional development. For instance, recent research shows that reading literary fiction improves readers’ understanding of other people’s emotional and mental states, which is essential for empathy (Kidd & Castano, 2013). Similarly in the Rio study, books are related to a number of skills. Figure 4 shows that children who have more than a hundred books have higher social and emotional and cognitive skills than those who have no books (with increases in all conscientiousness, extraversion, agreeableness and openness and a decrease in neuroticism).

FIGURE 4. RELATIONSHIP BETWEEN THE NUMBER OF BOOKS IN A HOUSEHOLD AND SKILLS DISTRIBUTION

Note: Figure 4 shows the contrast between children with no books with those with more than a hundred books on skills distribution, where negative values signify that those with a higher number of books have lower skills, and vice versa. All coefficients are statistically significant, based on separate regression analyses controlling for grade and sex.
The positive relationship between social and emotional skills and the number of books can also result from children’s social and emotional skills driving the number of books at home: the more skilled children may also be more likely to take the initiative to take books to their homes. In order to investigate the causal mechanisms the current data is insufficient, and a longitudinal or experimental perspective needs to be adopted in the future.

**Relationships between skills and outcomes**

Diverse skills matter for diverse outcomes. The Rio de Janeiro data collection focused on social outcomes, such as happiness and school safety (bullying). Literature shows that social and emotional skills are predictive of feelings of happiness; particularly, lower levels of neuroticism (or higher levels of emotional stability) are associated with higher levels of happiness (OECD, forthcoming b). In other words, those who can manage their emotions tend to be happier than those who do not (Ozer and Benet-Martinez, 2006). Figure 5 illustrates that in the Rio sample youth with lower neuroticism, higher conscientiousness and extraversion tend to be considerably happier than those high in neuroticism, low in conscientiousness or low in extraversion.

**FIGURE 5. THE RELATIONSHIPS BETWEEN SKILLS AND CHILDREN’S FEELING OF HAPPINESS**

Note: Figure 5 presents the coefficients associated with increasing the standardised skills measures by one unit on the subjective feeling of happiness as reported by the respondent. Negative values mean that increasing the skill is associated with lower happiness. Statistically significant effects are marked by an asterisk. Only coefficients of conscientiousness, extraversion and neuroticism are significant, based on logistic regression with all the skills as predictors and controlling for grade, sex, maternal education and the number of books.

Bullying is a key concern of schools across the world, including Brazil. The literature suggests that social and emotional skills might be a good protection against becoming a victim of bullying; agreeableness and emotional stability are associated with lower bullying rates. Children who are friendly, who can work with others and who can manage their emotions are less likely to be bullied (Tani et al., 2003). Figure 6 shows that agreeableness and openness are associated with significantly lower chances of being a victim of bullying in the Rio sample. This suggests that the more friendly and curious children are, the less likely they are to become victims of bullying. Other social and emotional skills do not show a significant association.
FIGURE 6. THE RELATIONSHIPS BETWEEN SKILLS AND THE PROBABILITY OF BECOMING A VICTIM OF BULLYING

*Note:* Figure 6 presents the coefficients associated with increasing the standardised skills measures by one unit on the probability of becoming a victim of bullying. Negative values mean that increasing the skill lowers the probability of being a victim of bullying. Statistically significant coefficients are marked by an asterisk. Only coefficients of agreeableness and openness are significant, based on logistic regression with all the skills as predictors and controlling for grade, sex, maternal education and the number of books.

**Key messages for policy and research**

Brazil is a country in transition, and the number of new initiatives presented in this report shows that social and emotional skills are one of the topics on the political, social and cultural agenda of the country. Long-term evaluations and studies dedicated to examining skills formation are needed to provide stronger evidence for ‘what works.’ Understanding the exact mechanisms of social and emotional and cognitive skills development is essential for equipping Brazilian children for happier, safer and wealthier futures.

Nevertheless, the results from the social and emotional skills data collection in Rio de Janeiro provide useful insights into the powers of social and emotional skills and its relationship with learning contexts. The analyses suggests that a) social and emotional skills vary considerably across grade levels, b) learning contexts explain differences in children’s social and emotional skills, and c) different skills are associated with different outcomes. Maternal education was strongly associated with fostering cognitive skills, while showing limited associations with social and emotional skills. Agreeableness was strongly associated with lower chances of being a victim of bullying, but it did not matter for the subjective experience of happiness. Given the cross-sectional nature of the data, the direction of the effects is open for the debate: it could be that the experience of not being a bully makes one more open to new experiences, instead of openness lowering one’s chances of becoming a bully.

The results from Rio de Janeiro is broadly in line with the growing number of causal evidence, which illustrates that social and emotional skills are as important as cognitive skills in securing life success (OECD, forthcoming b). The ability to work with others or achieve goals is important at different stages of individuals’ life course. US-based interventions with a strong component of fostering children’s social and emotional development have shown a positive impact on later life outcomes, including educational attainment, earnings and crime. Similarly, the Dominican Youth Employment Programme, aimed at developing skills among youth in the similar age group as the one of the OECD-IAS study (age 16-28), shows positive returns on employment rates, earnings and fewer teenage pregnancies in youth participants (Borghans et al., 2014). This report concludes with reflections on policy and research.
Effective teaching practices fostering skills development require support and training

A number of effective interventions such as the United States’ Project STAR and Chicago Child-Parent Centre have identified teacher training as a key element of their programmes (Borghans et al., 2014). Review of U.S.-based evidence suggests that social and emotional learning depends on school’s adoption of specific programmes that teach skills in a sequenced, active, focused and explicit way and that teachers may need guidance on implementation of these principles (Durlak et al., 2011). While more research is needed to establish whether such principles would also work in Brazil, it is clear that teachers can benefit from guidance and system-wide support. This might be particularly important in Brazil, where teaching is not widely regarded as an attractive career and teachers report facing issues such as lack of respect from students (OECD, 2010). Thus, improving the attractiveness and image of the teaching profession is likely to help improve the Brazilian educational system to better enhance children’s social and emotional skills. Improving pedagogies and including more practical teaching experience at the university level, as well as allocating enough resources to guarantee ongoing support and training for teachers already working, could help enhance teachers’ practices, and consequently, improve the effectiveness of social and emotional learning.

We can considerably enhance policy relevant evidence-base by collecting longitudinal data of children and assessing the impact of existing programmes

Rio de Janeiro and the rest of Brazil are laboratories of innovative practices. Several promising programmes aiming to raise children’s social and emotional skills and educational attainment have been implemented in the past decade, as presented in the preceding sections. However, little is known about their long-term effectiveness. Rigorous evaluations of existing programmes are necessary to understand which practices are most effective in fostering the development of diverse skills in Brazil. Future research should also devote considerable efforts to collecting detailed information on children’s skills progression, the changing learning contexts as they progressively develop their skills over time and the socioeconomic outcomes of these skills. This will help identify the contributions of different learning contexts and stakeholders: schools, families and communities that drive children’s lifetime success. Every child should be given the opportunity to develop the range of skills that will shape their well-being. A strong evidence base on the successful tools that can be used for skills development is key to help parents, teachers and community leaders equip Brazilian children with the skills necessary to meet the challenges of the modern world as Brazil undergoes further development.
References


Projeto Uerê (2014), Projeto Uerê Pedagogia, projetouere.org.br


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1. The Gini coefficient is 0 when everybody has the same income and 100 when one person has all the income. Brazil’s Gini index is significantly higher than that of the typical OECD country (31 on average) and of most BRICS countries, which rank as follows: China (41), India (38), Indonesia (37), Russia (42) and South Africa (70) (OECD, 2013).

2. A National Education Plan (Plano Nacional de Educação) defines the goals and priorities of these three systems since 2001 (OECD, 2011). Interestingly, municipalities have grown in responsibility. Rio de Janeiro is one of the 27 Brazilian States (including the Federal District) that has best proceeded to the municipalisation of primary and lower-secondary school education. The state system went from handling 13% of fundamental education in 2007 to 5% in 2011 (SEDEUC, 2011:17-18).