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MEASUREMENT AND RESEARCH SUPPORT TO EDUCATION STRATEGY GOAL I

BOYS' UNDERACHIEVEMENT IN EDUCATION: A REVIEW OF THE
LITERATURE WITH A FOCUS ON READING IN THE EARLY YEARS



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Office of Education
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United States Agency for International Development (USAID)
Arthur Muchajer, Contracting Officer
Penelope Bender, Contracting Officer's Representative

Prepared by

Jyotsna Jha, RTI consultant; and Sarah Pouezevara
RTI International
3040 East Cornwallis Road
P.O. Box 12194
Research Triangle Park, NC 27709-2194
USA

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Cover photo: Schoolroom in Philippines (Sarah Pouezevara)

Table of Contents

List of Figures	iv
List of Tables	iv
Abbreviations	v
Preface and Acknowledgments.....	vi
1. Introduction and Background.....	1
1.1 Gender gap in participation and performance	1
1.2 Which boys, which girls, and which subjects?	6
1.3 Going beyond gender: Race, ethnicity and class	7
1.4 The report: Methodology and limitations	10
2. Factors Influencing Boys' Underachievement.....	11
2.1 Class, ethnicity, and societal structures	13
2.1.1 Socioeconomic background and occupational opportunities.....	13
2.1.2 Race and ethnicity.....	14
2.1.3 Location, language, and other forms of social marginalization.....	15
2.1.4 Family structure and role models.....	15
2.2 Gender socialization and the masculine identity.....	16
2.3 The teacher and the school.....	19
2.3.1 Teacher attitudes and expectations.....	19
2.3.2 Gendered nature of classroom processes and teacher–student relationship.....	20
2.3.3 Laddish behavior and identity construction	22
2.4 The influence of male role models	24
2.5 The home – community – school continuum	25
3. Combating Boys' Underachievement in Education	26
3.1 Lessons from community-based initiatives.....	28
3.2 Lessons from school-based initiatives.....	30
4. Conclusions and Way Forward.....	36
4.1 The issue	36
4.2 The reasons.....	37
4.3 Lessons from experiments and experiences	38
4.4 Contextualizing the lessons	39
Bibliography	41

List of Figures

Figure 1: Boys' and girls' oral reading fluency in Indonesia and the Philippines 8

List of Tables

Table 1. School life expectancy (2002, 2013): Expected number of years of formal schooling from primary to tertiary education..... 2

Table 2. Percentage correct scores, by reading domain, for African countries (2007)..... 4

Table 3. Logistic regression results for selected countries 9

Abbreviations

BELS	Boys' Education Lighthouse Schools (project, Australia)
DfES	Department for Education and Skills (UK)
E3	USAID Bureau for Economic Growth, Education, and Environment
EAP	East Asia and the Pacific
ECLS-K	Early Childhood Longitudinal Study, Kindergarten Class of 1998–1999 (US)
EdData II	Education Data for Decision Making (USAID project)
EGRA	Early Grade Reading Assessment
IBM	identity-based motivation
LAC	Latin America and the Caribbean
OECD	Organisation for Economic Co-operation and Development
PIRLS	Progress in International Reading Literacy Study
PISA	Program for International Student Assessment
RBA	Raising Boys' Achievement (project, UK)
RTI	RTI International (registered trademark and trade name of Research Triangle Institute)
SACMEQ	Southern and Eastern Africa Consortium for Monitoring Educational Quality
SES	socioeconomic status
SLE	school life expectancy
SOBP	Stand Out Boys Project (UK)
TIMSS	Trends in International Mathematics and Science Study
UAE	United Arab Emirates
UNESCO	United Nations Educational, Scientific, and Cultural Organization
UNGEI	United Nations Girls' Education Initiative
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development\

Preface and Acknowledgments

“... the framework used for the present analysis is not that of gender rivalry. On the contrary, this discussion views the issue as another manifestation of gendered social processes and uses the frame of gender equality to understand it.” (Jha & Kelleher, 2006, p. 4)

In the context of increasing attention to girls’ education, why study boys’ underachievement? Over the past decade, USAID—as well as many other organizations and initiatives—has invested a significant amount of resources in measuring reading achievement in the early grades. As more and more data become available—data that can more easily be interpreted across contexts due to the use of a common measurement format, the Early Grade Reading Assessment—it increasingly stands out that boys in the first three grades of primary school score behind girls in almost every situation. Therefore *not* addressing this finding through further analysis would leave a considerable gap in our understanding of the relevance and effectiveness of the educational systems studied. Without further analysis of global trends in boys’ underachievement, we are left with questions such as:

- Are schools failing boys?
- Is it just a case of “let boys be boys, they will catch up later”?
- Is the emphasis on girls’ education misguided?
- Are the assessments somehow biased against boys?
- Do interventions based on assessment results need to explicitly address methods of raising boys’ achievement?

We hope that the following analysis helps put to rest many of these questions, and in fact emphasizes that quality educational systems must be effective for both boys and girls. This may initially mean that the focus should be on access and retention for girls, but relevance for both boys and girls. Beyond grade 3, if both boys and girls persist in high-quality school environments, education achievement has the potential to even out. Yet a consistent message in the literature promoting increased attention to early grade reading is that children who fall behind early, stay behind later on (Gove & Cvelich, 2011). Some of the analysis presented in this literature review confirms that this is the case: It is the lowest achieving boys who do not catch up as they mature. Therefore, being armed with the knowledge that boys are continually underachieving in reading in the early grades does suggest an imperative to focus on strategies that can raise boys’ achievement to be on par with that of girls (while recognizing that in many contexts, both boys and girls need to improve relative to national standards and expectations for productive reading skills).

The challenge, however, as pointed out in this report, is that much of what lies behind boys’ underachievement comes from factors outside of the school environment—namely, social constructions of the masculine identity and behavioral expectations that are not aligned with the structure and content of typical school systems. The report allocates a considerable

amount of space to discussing “hegemonic masculinity,” which is a relatively universal concept, although much of the literature on the topic comes from authors of Anglo-Saxon origin. This notion that socially acceptable male behaviors that are often incongruent with academic achievement are also the ones that maintain male dominance in society is critical to addressing boys’ and girls’ achievement. In fact, rather than drawing attention away from the need to focus on girls’ education, it emphasizes that boys’ underperformance has not been shown to take away the benefits of male advantage in the long run; that is, men continue doing better than women in labor market and leadership positions despite lower academic achievement (according to current measurements). Therefore the focus on girls’ education is still justified, as girls will need both academic achievement and social empowerment to match male advantage in the post-school setting.

Moreover, the review of literature, while not always specific to reading achievement, helps us understand that reading remains the foundation of academic success across subject areas, and as such, current efforts to improve reading instruction in primary schools are well justified. However, where basic reading levels are improving, and as children mature, it is necessary to reconsider the role of a purely academic focus in school and the relevance of the typical model of teacher-centered delivery of centralized curricula. The focus on girls’ education may need to emphasize other life skills and coping strategies more strongly than academic achievement, which appear to come more easily to girls once they are in a stable and safe pattern of attendance. Assessments may also need to adjust to measure behaviors and skills that are more predictive of out-of-school effects. Nonetheless, the staggering increases in academic achievements of girls and young women across the globe still need to be recognized and celebrated—unapologetically—while boys must unabashedly receive more praise and positive encouragement for good academic performance and discipline.

It is also important to remember that gender stereotypes that play a role in male underperformance in the early as well as later years also strengthen stereotypical roles for females. Any movement toward substantive gender equality in education, in which both boys and girls are encouraged to flourish without worrying about stereotypical expectations, will not be possible without addressing the issue of male underperformance alongside female underparticipation.

Although much of what determines male underachievement is outside the control of the school system, there are still many things that schools do to either exacerbate gender stereotypes or mitigate their effects. The literature, while clear in dismissing notions of different “learning styles” for boys and girls, does emphasize that targeted strategies to make content relevant and engaging for boys while protecting them from stereotype threat can improve their academic achievement. Some strategies include pair- and group-talk related to reading and writing; mentoring from older students or adult male role models; integration of the arts—music, dance, theater—as an outlet for healthy masculine identity-building; extracurricular and co-curricular activities that focus generally on character-building and gender equality; conveyance of egalitarian expectations about achievement to all children; and integration of reading across the curriculum rather than “teaching reading” in isolation. In

general, what is good for boys is also good for girls, although the opposite may not be true. It is especially critical to be wary of seemingly simple solutions to the problem of boys' achievement—"boy friendly" texts, single-sex classrooms, more male teachers—which may actually reinforce masculine hegemony or further marginalize girls.

Finally, the literature review also strongly emphasizes that gender cannot be addressed in isolation; the effects of race and socioeconomic status are as influential—if not more—as gender. However, this means that poor, racially marginalized boys are in an even more precarious situation relative to their academic achievement and may need to be the target of specific interventions. Therefore studying strategies for improving boys' achievement in reading can only help raise awareness of good educational practice in general and support strong and inclusive school systems for all. We hope that this report is a first step in thinking about these issues and encouraging further research on what motivates and engages boys in learning to read in and out of school.

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1. Introduction and Background

Differences attributable to gender¹ in education and other sectors constitute a well-known and well-explored subject. However, in education, the focus tends to be on girls' disadvantages in terms of enrollment and retention, as compared with boys. This trend of gender disparity against girls' educational attainment persists in many low- and lower-middle income countries, although signs of change are clearly visible in many cases. A perusal of statistics relating to enrollment rates at primary and secondary levels in various regions reveals that girls are catching up in both access and achievement. Although as of this writing, the gender gap that disadvantages girls continues in some countries in South Asia and West Africa, the size of the gap has declined over the years. On the other hand, this gap has either ceased to exist or has turned in favor of girls at primary level in some other countries, such as India, Bangladesh, Kenya, Tanzania, and Zambia.² This new phenomenon of gender disparity in education to the detriment of boys, or in favor of girls, especially at secondary level, started emerging in several Organisation for Economic Co-operation and Development (OECD) and other high or high-medium income countries from the Caribbean, Pacific, and East Asia in the 1980s and early 1990s (Jha & Kelleher, 2006). As a result, boys' underachievement in education—referring to boys' lower levels of education participation and educational performance compared with girls—is now increasingly the focus of attention. While *participation* refers to enrollment and completion at key milestones, *performance* refers to learning outcomes and specific level of skills attained or knowledge gained.³

1.1 Gender gap in participation and performance

Countries facing this issue of boys' underachievement have reported these trends and demanded at various fora that it receive as much attention under the umbrella of gender inequality as the issue of girls' underachievement did previously (UNESCO Institute of Statistics, *Education for All Global Monitoring Report* [various rounds]).⁴ School-life expectancy (SLE) data at the global level suggest that the trend of boys' underachievement is still present more than 20 years after the first calls for attention to the subject. SLE is defined as the total number of years of schooling that a child entering the school system could expect

¹ We use the term “gender” throughout the paper, except when referring to biological traits at birth, in which case the term “sex” is used, with reference to the definitions provided in Athill and Jha (2009): “Gender means the socially constructed differences between men and women. They differ from one culture and society to another, change over time and define who has power and influence over what. Sex means the biological differences between men and women” (p. 24).

² This analysis is based on a review of data on net enrollment ratios for primary and secondary levels for various years, during 2004–2012, from the UNESCO Institute for Statistics (<http://data.uis.unesco.org/index.aspx?queryid=147>).

³ As in the literature, we use the terms “underachievement” and “underperformance” synonymously, but stress that the term is relative only to the opposite gender; depending on the context, both boys and girls may be “underachieving” relative to national standards or benchmarks.

⁴ The entire series of Global Monitoring Reports, from 2002 to 2015, is available in PDF format from UNESCO's English website, <http://en.unesco.org/gem-report/reports>.

to receive in the future, assuming that the probability of his or her enrollment is equal to prevailing participation rates (UNESCO Institute for Statistics, 2014). SLE is a useful indicator for several reasons. For example, SLE is a more comparable measurement than percent enrollment rates, or stage completion rates, for comparing trends across countries, given widely varying populations and school system structures. The number of years of schooling is necessarily a function of both participation and performance, and therefore we review boys' achievement in terms of SLE below to begin to explore this trend.

Table 1, showing the changes in the SLE for various regions (as defined by UNESCO), reveals that SLE increased for both males and females in every region between 2002 and 2013. Notable is that all the regions maintained their male–female differences during this period: Boys continued to have higher SLE in three regions—Arab states, South and West Asia, and sub-Saharan Africa—while girls continued to have a higher SLE in three other regions: East Asia and the Pacific (EAP), Latin America and the Caribbean (LAC), and North America and Western Europe. The remaining two regions, Central and Eastern Europe, and Central Asia, had almost equal SLEs for males and females.

Table 1. School life expectancy (2002, 2013): Expected number of years of formal schooling from primary to tertiary education

Region/Country	Female			Male			Total		
	2002	2013	Change	2002	2013	Change	2002	2013	Change
Arab States	9.6	11.6	2.0	10.7	12.2	1.5	10.2	11.9	1.7
Central and Eastern Europe	12.8	15.6	2.8	12.8	15.3	2.5	12.8	15.5	2.7
Central Asia	11.4	12.4	1.0	11.6	12.5	0.9	11.5	12.5	1.0
East Asia and the Pacific (EAP)	11.0	13.1	2.1	11.3	12.9	1.6	11.2	13.0	1.8
Latin America and the Caribbean (LAC)	13.3	14.1	0.8	12.8	13.3	0.5	13.1	13.7	0.6
North America and Western Europe	17.0	17.2	0.2	15.3	16.2	0.9	16.4	16.7	0.3
South and West Asia	8.4	11.2	2.8	9.7	11.6	1.9	9.1	11.4	2.3
Sub-Saharan Africa	7.0	8.9	1.9	8.5	10.0	1.5	7.8	9.5	1.7

Source: UNESCO, *Education for All Global Monitoring Report* (multiple years); available from <http://en.unesco.org/gem-report/reports>.

A closer look at the data shows that the disadvantage to boys increased during this period in two regions: EAP and LAC. Although the SLE went up for both boys and girls in these regions, the rate of growth was higher for girls than for boys, therefore increasing the male–female gap during the period 2002–2013. This could be a worrying sign for these regions, as several countries—especially in the Caribbean and Latin America—had initiated certain

policy and institutional reforms during the decade of the 2000s to address the issue, and one would have expected those reforms to show some results.

Although regional data hide the inter-country differences, they help in understanding the global scenario at a broader level. A perusal of country data for enrollment and transition ratios shows that an observation made by Jha and Kelleher (2006) remains true: *underparticipation* for boys is more common in situations of overall low enrollment rates, whereas the relative *underperformance* usually occurs in the context of overall high enrollment ratios. In other words, “Girls tend to perform better than boys in countries where they have equal access to the school system, irrespective of the income level” (Jha & Kelleher, 2006, p. 8).

Participation and performance are interlinked, as better performance helps in continuation and completion, and better participation is essential for performance. Performance in early years is the primary concern in this paper because of the growing evidence of girls outperforming boys, especially in reading. Performance data on learning outcomes are now available from several sources. International or multicountry surveys are the most common sources available and are used for intercountry comparisons as well as in-country analyses. These include:

- Early Grade Reading Assessment (EGRA) data for early primary school years;
- A survey instrument designed by the Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ), administered in school to children in the sixth grade of formal school;
- The Trends in International Mathematics and Science Study (TIMSS), which monitors trends in mathematics and science achievement every four years, in the fourth and eighth grades;
- The Progress in International Reading Literacy Study (PIRLS), which monitors trends in reading achievement at the fourth-grade level; and
- The Program for International Student Assessment (PISA), which measures 15-year-old students’ reading, mathematics, and science literacy every three years.

TIMSS Numeracy and PIRLS Literacy are new instruments that measure learning outcomes at the fourth grade and at the end of primary cycle, respectively, for countries where most children throughout the primary grades are still developing fundamental mathematics and reading skills. As an orally administered reading assessment, only EGRA provides information on pre-fluency skills that can help discern patterns in the early years.

Gender analysis of EGRA results from Africa presents a mixed picture: While boys have outperformed girls in certain reading skills in some countries, the opposite was true in certain other cases. In most cases, there were no significant gender differences in the development of early reading skills, but given that both boys and girls were performing very poorly on most of the instruments’ subtasks, this may simply reflect low variability in results. However, the

specific context matters. In Ethiopia, aggregated results showed no statistically significant gender difference, but when results were disaggregated by school location, girls outperformed boys in urban schools, but boys outperformed girls in rural schools. However, in Kenya, girls at the end of third grade outperformed boys in both rural and urban schools (RTI International 2014a). In Nigeria, boys outperformed girls in Sokoto and Kano states, but girls were ahead in Bauchi and Jigawa (RTI International, 2014b, 2015). In some higher-performing countries such as Jordan, Indonesia, and the Philippines, girls always significantly outperformed boys in reading (Brombacher, Stern, Nordstrum, Cummiskey, & Mulcahy-Dunn, 2016; Stern & Nordstrum, 2014; Pouezevara, DeStefano, Cummiskey, & Pressley, 2014). This again reinforces the conjecture that boys' underperformance is more visible in contexts in which both boys' and girls' participation is high, whereas girls' underperformance is perhaps more common in contexts where girls' participation is also low.

PIRLS 2011 results (Mullis et al., 2012) supported the trend in most countries that girls were achieving much higher average reading scores by fourth grade than boys. Whereas Colombia, Italy, France, Spain, and Israel showed no significant differences between girls and boys, Arabic-speaking countries—including the United Arab Emirates (UAE), Morocco, Qatar, Oman, and Saudi Arabia—showed the highest difference in favor of girls. The results for prePIRLS⁵ (an instrument similar to PIRLS Literacy, administered as a pilot to primary-only children in three countries in 2011 for the first time) showed that fourth-grade girls had higher average reading achievement than boys in both South Africa and Botswana, the only two participating countries from Africa (Mullis et al., 2012). It is important to note that most of the countries that participate in PIRLS are middle- and high-income countries, where overall enrollment parity can be expected.

SACMEQ results also confirmed the same trend in the early years; girls performed significantly better in at least two domains in Botswana, Mauritius, Namibia, Seychelles, South Africa, Lesotho, Swaziland, and Zanzibar. Only in Malawi, Mozambique, Tanzania, Uganda, and Zambia did boys outperform girls (see boldfaced data in **Table 2**). Notably, boys outperformed girls in mathematics in a similar set of countries: Tanzania, Kenya, Malawi, and Mozambique (Jha, Bakshi & Faria, 2012).

Table 2. Percentage correct scores, by reading domain, for African countries (2007)

Country school systems	Narratives		Expository		Document	
	Boys	Girls	Boys	Girls	Boys	Girls
Botswana	53	59	45	51	65	71
Kenya	59	60	52	53	67	65
Lesotho	44	47	37	38	52	52
Malawi	38	38	35	34	44	40

⁵ For more information about the prePIRLS instrument, see the website of the TIMSS and PIRLS International Study Center: <http://timssandpirls.bc.edu/pirls2011/prepirls.html>

Country school systems	Narratives		Expository		Document	
	Boys	Girls	Boys	Girls	Boys	Girls
Mauritius	65	72	52	57	68	73
Mozambique	49	48	35	34	56	55
Namibia	48	52	42	45	56	59
Seychelles	63	74	47	60	67	78
South Africa	49	53	40	44	55	59
Swaziland	59	61	51	52	71	73
Tanzania	67	66	57	54	75	71
Uganda	48	48	40	40	54	52
Zambia	39	40	34	33	44	42
Zanzibar	63	65	43	46	64	66
Zimbabwe	53	56	43	46	58	59
SACMEQ III	53	56	44	46	60	61

Source: Saito (2011), p. 11, based on SACMEQ III data (2007).

Explanatory note: Column headings refer to types of reading that were assessed. “Narrative” prose refers to continuous texts in which the writer aims to tell a story—whether this be fact or fiction. “Expository” prose refers to continuous text in which the writer aims to describe, explain, or otherwise convey factual information or opinion to the reader. “Documents” refer to structured information organized by the writer in a manner that requires the reader to search, locate, and process selected facts, rather than to read every word of a continuous text.

Longitudinal research in the United States using data from the Early Childhood Longitudinal Study, Kindergarten Class of 1998–1999 (ECLS-K), found that although boys and girls had similar performance in kindergarten, girls’ advantage in reading became apparent by third grade and gender differences continued to increase through eighth grade (Dee, 2006; Robinson & Lubienski, 2011). Similar results from the mid-2000s were reported in the United Kingdom, another context where overall enrollments are high for both boys and girls (Shelton, 2008). While there was no significant difference in the number of girls and boys meeting the mathematics benchmark (“Level 2,” the level expected of seven-year-olds), there was a 10-percentage-point gap favoring girls in reading (Shelton, 2008). Shelton warned that this underachievement of boys in literacy, which begins early, eventually leads to many boys entering secondary school with insufficient literacy skills for the demands of the curriculum.

Another study based on analysis of students’ performance over a large number of schools in the UK found that although girls improved their performance in science and mathematics by Stage 4 in the UK, there was no comparable improvement of boys’ performance in language arts subjects (Younger & Warrington, 2005). Several other studies based on the analysis of SACMEQ and PISA results have also echoed this inference: Girls start showing signs of reducing the gaps in mathematics in later years, while the same is not necessarily true for boys in reading—instead, the gaps continue to persist in later years (Jha et al., 2012). Also

important to note is that many of the later-years gaps are also attributed to “poor literacy and numeracy skills acquired during the primary school cycle” (World Bank, 2008, pp. xii–xiii).

1.2 Which boys, which girls, and which subjects?

The studies that have gone beyond aggregate data found that generalizations based on an overall gender gap in performance may not be the best way to understand the issue. For example, Younger and Warrington (2005), in the study referred to above, concluded that

many boys continue to achieve extremely well at school, both academically and in community, extra-curricular and sporting fields; equally, there are some girls whose needs are not recognised within schools and who under-achieve. The core of the issue in many schools revolves around a minority of pupils, rather than a majority; the ‘problem’ needs to be carefully contextualised, both in scale and in response (Younger & Warrington, 2005, pp. 9–10).

Similarly, the longitudinal study reported by Robinson and Lubienski (2011) found that the reading gap favoring females started out evenly distributed from kindergarten through fifth grade, but became increasingly pronounced at the lower end of the distribution, with some narrowing of the gap in the upper end through fifth grade. They concluded that

in reading, females begin school ahead of their male counterparts, but males at the top of the distribution gain at least as much ground as females, while males in the lowest decile fall substantially behind their female peers. Therefore, for reading, the data suggest that during elementary and middle school, we should focus more on the lowest-achieving males (p. 298).

In the context of Australia and New Zealand, experts also recommended focusing on at-risk boys in the early grades. Analysis noted that the *distribution* of scores at secondary level was greater for males than for females; the concern around boys’ underachievement was really related to the “clumping” of boys at the lower ends of this wide distribution (Cuttance & Thompson, 2008).

Some researchers believe that although boys’ underperformance has taken on significance, the gender gaps appear to be small or insignificant, and vary widely with respect to subject matter (Weaver-Hightower, 2003). Others have suggested that low scores in the language arts are often compensated by boys’ attention to more prestigious subjects such as science and math, aligning with gendered expectations of future careers (Stromquist, 2007; Warrington & Younger, 2000). A related explanation is that boys apply themselves less because they are overconfident and they tend to underestimate the difficulty in succeeding in “light” subjects, or they are more confident that they can be successful in the long term despite poor academic performance (Warrington & Younger, 2000; Weaver-Hightower, 2003). Finally, the fundamental concept of testing has also been called into question, and several researchers have concluded that the tests are not “nuanced enough to reflect the complexities involved” (Weaver-Hightower, 2003, p. 485). This aspect, however, remains under-researched and therefore this report also largely remains silent on this issue.

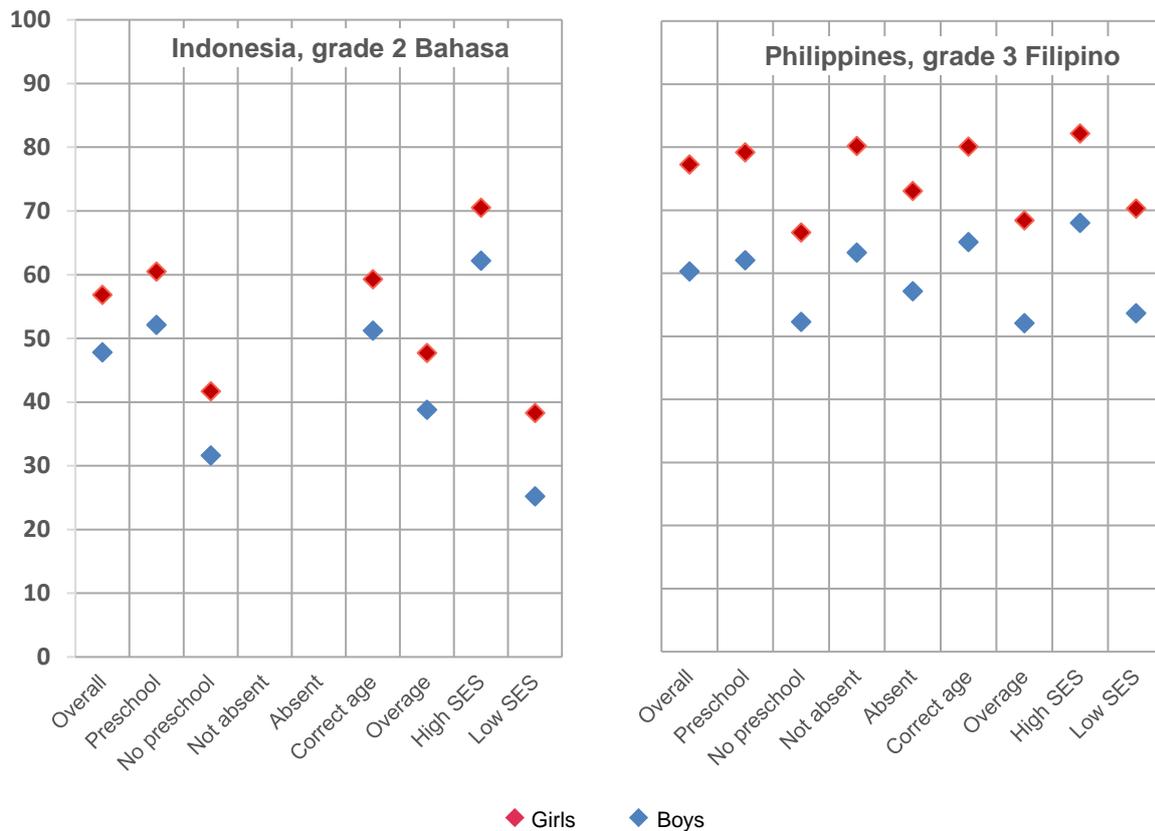
1.3 Going beyond gender: Race, ethnicity and class

The literature also overwhelmingly points toward the need to go beyond gender to truly understand the issue. The way in which variables such as race, ethnicity, and class interact with gender to affect boys' and girls' performance is frequently highlighted in the research. Across the world, children coming from poorer areas or poorer households tend to perform worse than their counterparts coming from richer areas or richer households (see any of the EGRA analysis reports by RTI International authors that are listed in the bibliography or on www.eddataglobal.org). Socioeconomic class, therefore, is considered a very important variable predicting performance for boys and girls, compounding the effect of low achievement for boys. Race is considered to be an important variable, but the effects are not predictable. For example, in a study undertaken in the UK in 2007, white boys from a working-class background were much more disadvantaged than black Caribbean and Asian children; therefore, race alone could not predict performance (Skidmore, Cuff & Leslie, 2007). Performance differences are often associated with implicit or explicit biases or low expectations, evident in classroom dynamics that treat boys and girls differently, as well as *certain* boys and *certain* girls depending on outward characteristics. The roles of race, ethnicity, masculinity, and socioeconomic factors in understanding boys' underachievement are explored in greater depth in Section 2.

A review of data from several countries where RTI has conducted EGRA surveys revealed different patterns in boys' and girls' performance in reading in early grades, depending on the country context. For example, in Indonesia and the Philippines, two Asian countries where students are demonstrating better developed levels of oral reading fluency than elsewhere (for example, countries in sub-Saharan Africa or the Middle East), girls consistently outperformed boys in reading by 19% in Indonesia and by 28% in the Philippines. When we looked at other factors that influenced students' levels of performance in reading, such as attending preschool, being the correct age for grade, or a child's family's socioeconomic status (SES), these two countries were similar in that the amount by which girls outperformed boys remained fairly constant across those other factors (as shown in *Figure 1* below). However, as one can see for Indonesia, SES level made more difference than gender: High-SES boys had average oral reading fluency that was higher than the overall average for girls, and low-SES girls had average oral reading fluency that was lower than the overall average for boys.

In the Philippines, boys and girls who were overage for their grade on average were scoring even lower than their respective peers from low-SES households. Overage boys had the lowest average oral reading fluency. Overage students in Indonesia had lower average reading performance as well, but boys and girls who did not attend preschool in that country were on average performing even less well—that is, almost as low as the students from the poorest families.

Figure 1: Boys’ and girls’ oral reading fluency in Indonesia and the Philippines



Data from two countries in the Middle East—Jordan and Egypt—showed different patterns. In Jordan, girls outperformed boys by a high margin (average oral reading fluency for girls was 45% higher than for boys), and like the Philippines and Indonesia, the gap was fairly consistent across all other factors. Girls and boys who were from low-SES families or who had not attended preschool had the lowest average oral reading fluency when compared to the overall averages for their respective peer groups. In Egypt, the gap between boys and girls was much smaller, and there was less variation across the other categories.

For countries in sub-Saharan Africa, the pattern was similar to that in Egypt, with small (and statistically not significant) differences between boys’ and girls’ performance. Gender differences may have been masked by the low overall levels of performance of students in the early grades. SES status in these countries tended to be a more important determinant of performance than gender.

Data from selected countries can also be used to examine how various factors such as gender, attending preschool, being absent from school, being the correct age for grade, and being from a wealthier household impact students’ performance in early grade reading. **Table 3** shows results from a logistic regression indicating the relationships between each of these variables and whether a student was reading at a level that was in the top 25% of performance for his/her grade and language. Each odds ratio indicates how many times more likely a student with the indicated characteristic was to be in the top 25% of reading performance

compared to those who did not have that characteristic, while holding all other factors constant.

For example, being female in the Philippines meant that a student was 2.76 times more likely to be in the top 25% in reading. Or, more directly, girls were 2.76 times more likely to be top performers in reading than boys. That ratio was 1.37 in Indonesia, 1.60 in Egypt, 2.02 in Jordan, and not significant in Ghana and Zambia. In Indonesia and Ghana, the highest odds ratio was for being in the highest SES category, compared to being in the lowest. High-SES students in those countries were 5.38 and 3.75 times more likely to be in the top quartile of reading performance, whether they were boys or girls. Attending preschool was also a determining factor of top performance in Indonesia, again even more so than gender. Attendance was the most significant factor in Zambia. Students, whether boys or girls, who did not indicate that they had been absent during the week prior to the survey were 1.60 times more likely to be top performers in Zambia than those who said they had been absent.

Table 3. Logistic regression results for selected countries

Factor	Philippines		Indonesia		Egypt		Jordan		Ghana		Zambia	
	Odds ratio	P>t	Odds ratio	P>t	Odds ratio	P>t	Odds ratio	P>t	Odds ratio	P>t	Odds ratio	P>t
Being female	2.76	***	1.37	**	1.60	***	2.02	***	1.16		0.89	
Attending preschool	1.96	***	2.70	***			1.48		1.66	*	1.31	
Not being absent	1.35	**	0.89		1.17		1.78	**	0.83		1.60	***
Correct age for grade	1.83	***	1.43	*	0.59		0.42	**	1.10		1.27	*
High income vs. low	1.61	**	5.38	***			2.2	**	3.75	***		
Constant	1.07		1.06		3.20	***	1.42		1.67	***	1.69	*
<i>n</i>	2450		4320		1656		1474		1683		2156	
Prob > <i>F</i>	0		0		0		0		0		0.03	
Grade	3		2		2		3		2		2	
Year	2013		2013		2015		2012		2015		2014	
Language	Filipino		Bahasa		Arabic		Arabic		Asante Twi		Icibemba	
Average oral reading fluency, boys (cwpm)	60.3		47.8		9.3		19.0		3.2		8.0	
Average oral reading fluency, girls (cwpm)	77.3		56.8		12.0		27.7		2.7		7.8	
Top 25% > (cwpm)	88		108		31.5		55.0		13.3		23.1	

Probability of $P > t$ defined as * = 0.10; ** = 0.05; *** = 0.01.

The above discussed data indicate that in general, girls tend to outperform boys in early grade reading, across a variety of country contexts. However, the relative size of that gender difference and the extent to which other factors may matter more varies considerably across contexts.

1.4 The report: Methodology and limitations

Recognizing the need for a more nuanced analysis of underachievement going beyond simply “boys” versus “girls,” there is no doubt that the issue of consistent underperformance of boys in reading starting in the early years does need greater understanding, especially in countries underrepresented by the research. This report, based on an extensive review of literature, attempts to summarize the factors that explain boys’ underachievement, especially in the context of reading in the early years. It also summarizes interventions undertaken at teacher, school, school-system, community, and policy levels to address this phenomenon.

The report is divided into four major sections. Having established in this first section that a gap indeed exists and that there are several key areas of discourse that explain the trends, Section 2 discusses the factors influencing boys’ underachievement in more detail. Section 3 documents and analyzes the interventions that have attempted to address boys’ underperformance and the contributing factors. The final section summarizes and concludes with recommendations for action.

The intent of this literature review was to focus on disparities in reading achievement in the early years; however, the literature on later years, as well as other subject areas in early and later years, was also used throughout since many of the lessons are also relevant for understanding early years as well. The literature on the issue of boys’ underachievement reviewed for the purpose of this report can be divided into three categories:

1. Academic research-based papers that either are based on a review of existing works in a particular context, or are analytical accounts of certain experiments or results in one country or a region;
2. Research-based work from international agencies such as UNESCO, USAID, UNICEF, and the Commonwealth [of Nations] Secretariat, and also sometimes from national governments; and
3. Documentation of cases or experiments that may be analytical, reflective, or descriptive.

Popular literature, such as newspaper reports, has not been included. The largest number of works comes from the UK, followed by Australia and New Zealand, and the Caribbean (the region as well as from individual countries). East Asia is one of the regions where the issue of boys’ underachievement has been persistent, but not much research has been carried out there.

The report is based on a targeted web-based search, including peer-reviewed journals, and therefore has some limitations. Only the digitized literature was accessible, which also contributed to one key limitation: Most of the works that could be web-accessed concentrated

on the contexts of the UK, USA, Australia, New Zealand, and other primarily Anglophone countries. Only literature in English was included.

In all, 146 resources were collected and roughly 120 were catalogued in a spreadsheet detailing the type and focus of the report. Of these, 96 of the most relevant have been cited in this report. A few indicative indicators of the type and origin of the reports for which detailed data were catalogued in the spreadsheet are as follows:

- 54 references concern OECD countries (UK, USA, Australia, New Zealand, Belgium, Germany, Northern Ireland).⁶
- 25 references concern high- to medium-income countries (Jamaica, Trinidad and Tobago, Bangladesh, Indonesia, Malaysia, Antigua, Armenia, Egypt, Pakistan, Philippines, Seychelles, Slovenia, United Arab Emirates).
- 5 references concern low-income countries (Botswana, Angola, Ghana, Kenya, Nigeria, Samoa).
- 12 references were either global or regional (mostly Caribbean region, or Commonwealth countries).
- 45 came from peer-reviewed sources, while 57 were institutional research reports or other types of grey literature (dissertations, conference papers, working papers).
- Most reports were cross-curricular, but 29 included some analysis of the influence of gender on reading outcomes.
- Similarly, many reports, especially meta-studies or other literature reviews, covered multiple grade levels, but 28 were noted as having a focus on early primary achievement.
- 26 references were a meta-study or mixed-methods research, while only 14 were based on quantitative or experimental methodologies.

There is a dearth of literature for low-income countries and most countries in Asia and Africa, as noted by this summary. Therefore, there is a definite need to interpret and contextualize the analysis in terms of cultural specificities. Nonetheless, there are factors and experiences that can be considered fairly universal and, to that extent, the analysis would hold true for varied contexts.

2. Factors Influencing Boys' Underachievement

Scholars from many countries and disciplines—including psychology, sociology, biology, neuroscience, and education—have tried to explain the prevalence of, and unpack the reasons for, gender disparities in educational achievement. Most literature can be categorized into two

⁶ Countries are listed first in order of frequency of the reports, then in alphabetical order.

main camps, one which attributes gender differences to “nature,” meaning genetic or biological differences between boys’ and girls’ development; and the other to “nurture,” arguing that external influences such as gender role socialization explain the differences (Robinson & Lubienski, 2011). Alternatively, the discourse can be categorized as factors external to the boys, such as the nature of teaching and resources, versus those that implicate the boys themselves—including intellect, potential, and motivation (Warrington & Younger, 2000). Literature on gender role socialization theory can again be divided into two camps: One that sees boys’ underachievement as indicative of increased women’s assertion and the success of campaigns to improve education for girls—in other words, girls are catching up; and the other that asserts that the gap is a result of male privilege in the sense that they are socialized to see themselves as having no need to work hard for anything, including reading or writing (Jha & Kelleher, 2006; Robinson & Lubienski, 2011).

Research studies focusing on biological differences point to the manner and pace with which the brains of boys and girls develop differently, impacting behavior and aptitudes related to educational achievement. For instance, Bonomo (2010) recommended recognition of boys’ need for competition and girls’ need for group learning, among other methods that allow children of both sexes to learn better and faster. Although it may be true that there are physical and biological differences that may affect children’s readiness to learn, the problem is that it is extremely difficult to separate the biological differences from those that result from gender socialization that takes place from birth. As a result, one runs the risk of reinforcing gender stereotypes by attributing to nature the differences that are, in fact, largely a result of socialization (Bailey, 1993). Therefore, researchers have generally moved away from the focus on biological differences, recognizing that although brain development does differ for males and females, drawing conclusions based on that point could be oversimplistic (Leslie, 2012). Scholars from multiple disciplines have increasingly recognized that environmental factors are important in the formation of gender differences in experiences, values, beliefs, and achievement (Robinson & Lubienski, 2011).

More specifically, the perspectives that inform analyses at times vary depending on the country and the region. The four factors that have been used to explain boys’ underachievement, according to Cuttance & Thompson (2008), are: (1) biological differences that affect capacities and interests of the genders; (2) systematic gender biases that discourage boys from taking up perceived “feminine” skills and activities; (3) forms of teaching, curricula, and the assessment of the performance; and (4) socioeconomic characteristics of the boys, such as income, family structure, and parental education. Others have highlighted contextual factors related to occupational practices, the nature of the labor market, the social context of poverty, ethnicity and race relations, migration status, religious affiliation, and social discrimination (De Lisle, Smith, & Jules, 2010; Harland & McCready, 2012; Jha & Kelleher, 2006).

For practitioners working to improve educational outcomes, it is important to focus the discussion on factors that can be addressed through direct intervention. Therefore, another way to dichotomize the factors (excluding the purely biological) is to consider issues present

largely outside the school—class, ethnicity, family, and society—versus those that operate within in the school walls—classroom practice, the teacher–student relationship, teachers’ expectations, and peer relationships—to affect boys’ achievement. For the purposes of this report, we have chosen this structure, and we start by summarizing the outside school factors first and then move to the school as an institution and the processes therein. Nevertheless, it is important to keep in mind that there is overlap in many of the processes and expectations that influence teachers, parents, boys, and girls at home, in society, and at school, as discussed toward the end of this section.

2.1 Class, ethnicity, and societal structures

2.1.1 Socioeconomic background and occupational opportunities

Socioeconomic background or class is not universal in its influence on achievement, but it is heavily indicative of boys’ underachievement. Almost everywhere, the issue of underachievement is more pronounced and persistent for those who are at the bottom of the socioeconomic ladder. For instance, UNICEF (2004) outlined clear linkages between the high incidence of a gender gap in educational outcomes and the socioeconomic background of boys in the Caribbean and South America. Some studies have claimed that in some parts of the Caribbean, such as Antigua, gender is not as important as socioeconomic status, poverty, and social class in school achievement, and the stark difference based on class is much higher than the one with respect to gender (Cobbett, 2014). Dunne and Leach (2005), based on their study in Botswana and Ghana in Africa, pointed to the close correlation between the poverty of the households and boys’ underachievement.

Belonging to a low-income household impacts boys’ underachievement differently from girls in several ways, primarily through underparticipation, leading to underperformance. This includes direct pressure on boys to join the labor force at an early age; socialization patterns that push boys against the “discipline of learning”; and a short-term view of the future that ignores academics as a desirable and viable, long-term life option. Boys far outnumber girls among children engaged in economic activities in several Asian and African countries, such as Bangladesh, Botswana, Lesotho, and Mongolia. Children’s work, even in limited amounts, does adversely affect the child’s schooling through low attendance and time to learn (Ahmed & Ray, 2011; Dunne & Leach, 2005; Jha & Kelleher, 2006; United Nations Girls’ Education Initiative [UNGEI], n.d.). The nature of occupational practices prevalent in particular contexts also plays a role. Countries where boys and men are more commonly engaged in traditional occupations such as herding, cattle grazing, hunting, and agriculture also report early withdrawal of boys from schooling. A predominance of low-skill-demanding job opportunities, where schooling is not a prerequisite, also leads to early withdrawal of boys from schools, especially for households with poor socioeconomic backgrounds (Jha & Kelleher, 2006; UNGEI, n.d.). For example, one report focusing on understanding the reasons for boys’ underachievement in Mongolia, Malaysia, the Philippines, and Thailand concluded that a combination of labor market pressures and class on one hand, and gendered classrooms and low expectations from teachers as well as families on the other hand, explains these

trends (UNGEI, n.d.). These findings are similar to those of a few other studies that have looked at multicountry cases (Jha et al., 2012; Jha & Kelleher, 2006).

In many countries, the differentiation starts early: Data from the Philippines indicated that 90 percent of the highest wealth quintile boys of the pre-primary age group were enrolled in schools, compared with 44 percent from the lowest wealth quintile; moreover, the number of out-of-school boys aged 5–15 years engaged in economic activity was twice that of girls (UNGEI, n.d.). The short-term view of life for marginalized working-class groups becomes important here, as the connection between education and the job seems very far away, especially if the need for a payday is immediate. Postponement, therefore, of earning capabilities does not seem to be rational to some of the boys. Therefore, this attitude plays a role from the early years, when boys start paying less attention to academics (Archer, Pratt & Phillips, 2001).

2.1.2 Race and ethnicity

Class alone does not necessarily explain the trend in full. Class and ethnicity need to be understood together for greater clarity on their role in boys' underachievement, first to the extent that certain ethnic groups—those that are considered marginal in given contexts—are much more overrepresented among the economically poor. Second, race and ethnicity also determine individual identity, subculture, and one's relationship with the dominant culture. In the context of the UK, the literature largely revolves around the Afro-Caribbean community, but references to Bangladeshi and Turkish boys are also common in the context of the UK. In Australia, references to aboriginals and Torres Strait Islander boys being more disadvantaged than others is common, and in New Zealand, boys from Maori community and children of immigrant families of other Pacific islands are considered more marginalized than others. Research coming from the Caribbean and Latin America often mentions black boys in the context of gender disparity in education (Jha & Kelleher, 2006). Studies from different parts of the world have highlighted the greater susceptibility of black boys to be drawn toward the call of street culture and gang peer pressure, which ultimately pushes them against schooling and learning, even where they are not a minority (Brown, 2001; Sewell, 1998; West, 1999).

Certain ethnic groups are more marginalized within the working-class poor. For instance, the working class in the UK, among whom the phenomenon is most persistent, is composed of native blacks, native whites, and migrants from South Asia, Africa, South America, and Eastern Europe; the myriad contexts in which these diverse working-class individuals are placed influence the educational outcomes of boys in different ways (Archer et al., 2001). The fact that Indian and Chinese boys have largely continued to be high achievers in various contexts, despite being visible minorities in most multiethnic contexts, can also be explained to some extent by the fact that not all minorities inhabit the same monoculture of subaltern masculinity (Connell, 2005).

Archer & Yamashita (2003) explained that minorities in multiethnic and multicultural scenarios generally have the disadvantage of being both invisible (in schools, policy, and theory), and hyper-visible (in discourse, in streets, in universities). This implies that boys

from minority communities are constantly constructing identities of race. Often, because children from minority communities, such as African-Caribbean communities, are placed within predominately white settings, they end up being a “visible” minority and thereby attracting negative stereotypes. Therefore, in this context, although the boys may be “pro-learning,” movement between the dominant culture and the subculture impacts the boys’ achievement negatively for boys coming from a poor socioeconomic background and belonging to ethnic minorities (Graham, 2011).

2.1.3 Location, language, and other forms of social marginalization

The issue of ethnic minorities, although very important for multiethnic settings, does not offer much explanation when it comes to countries that are not necessarily multiethnic. In such contexts, it becomes important to contextualize marginalization and then gauge whether there is any linkage between marginalization and boys’ underachievement. For instance, linguistic minorities have been shown to face a disadvantage because of the medium of instruction in Malaysia (UNGEI, n.d.). Language can be an important issue in many other contexts. Jha et al. (2012), based on a review of several studies in different contexts, also concluded that location, in addition to class, matters significantly in defining who these underachieving boys are. In the context of Africa, Trong (2009) studied PIRLS 2006 data and concluded that rural and poor boys were most at risk of being poor readers. In the context of UAE, Ridge (2011) concluded that males from poorer and more isolated emirates were at an even greater risk of not participating in higher education, because schools located in those areas were likely to get less competent and less interested teachers. Based on analysis of data from the 2005 to 2007 national assessments of educational achievement in language arts and mathematics in Trinidad and Tobago, it appears that a higher number of schools reporting high gender differences in favor of boys (i.e., boys underachieved to a greater degree) were located in the rural areas; this is in contrast to what was found to be true for African countries (De Lisle, 2010; De Lisle et al., 2010). In other words, both boys and girls underachieve in rural areas in Trinidad and Tobago—but boys to a larger degree—whereas boys’ underachieving is higher in urban areas in Africa.

2.1.4 Family structure and role models

Research from several continents also has pointed toward a relationship between school achievement and family structures, with boys from single-parent homes, especially women-headed households, doing poorer than children from coupled families. For example, it has been reported that fathers do serve as good role models for reading skills as compared with mothers in Australia and New Zealand (Cuttance & Thompson, 2008). In other contexts, such as the UK, the active role of fathers has also been positively correlated with better educational outcomes for children, using measures such as examination results, attendance, criminal behavior, quality of relationships, and mental health (Shelton, 2008). Dunne and Leach (2005) documented the adverse impact of poverty and livelihood related migration on boys’ underachievement in Botswana and Ghana. Challender (2004) highlighted the pressure on boys to earn in the absence of fathers who often left to work in the mines, in the case of

Botswana. The literature coming from the Caribbean has often linked women-headed households and women teachers to male underachievement in education, but more recent literature has questioned that assertion (Reddock, 2004). Given that no similar characteristics have been recorded for mothers, it is hard to tell whether the problem is the role model of fathers, or just the lack of two supervisory parents. A study based on parental survey and attitude in Seychelles showed high correlations between boys' achievement and the family structure, the educational attainment of the parents, and the parents' views on equality. If the parents treated the boys on an equal footing with the girls, boys' performance in school was better (Geisler & Pardiwalla, 2010).

One problem with focusing on male role-modeling with the family is that it tends to neglect the larger context of religious and other societal structures, which also influence the relationship between dominant masculinities and school achievement (Frank, Kehler, Lovell, & Davison, 2003). For instance, the Church continues to hold a very important place in Samoan society, and church-run schools tend to promote very gender-stereotypical socialization. Gender notions of what is feminine and what is masculine are very strong, and schools, especially those run by churches, tend to reinforce those in every respect (Afamasaga, 2009). Clarke (2005) noted a similar phenomenon in Jamaica.

What emerges from the above discussion is overwhelming evidence to show that race, socioeconomic status, ethnicity, and location, as well as the nature of the households and society, have a link with boys' underachievement. However, how these unfold, and how they impact the education of boys in different contexts, varies from place to place. Nevertheless, a broad association is visible almost everywhere, supporting the notion that it is not just a general representation of "boys" that are underachieving, but some boys in some circumstances (Frank et al., 2003), and that this relationship needs to be made more contextualized for specific countries and situations.

2.2 Gender socialization and the masculine identity

Implicit in the above discussion of society and family structures is the notion of gender socialization, which influences boys' underachievement by creating expectations of appropriate behavior for both boys and girls. The social forces that contribute to this socialization could be the family, religious institutions, media, peer groups, and social networks (Clarke, 2005). The "men as providers" and the "women as nurturers" roles are defined and groomed quite early, and even though there are many experiences to the contrary, the gender norms remain fairly stable across contexts. This manifests itself in the division of household duties, with girls relegated to household tasks and boys having to do "heavy" work outside (Clarke, 2005). Being outside, boys are also more encouraged to socialize in groups, making group membership highly valued, and therefore, masculine performance more critical. As a result, boys who remain at home are believed to be not well-socialized, and indoor activities such as homework are stigmatized and not socially acceptable or accepted in the peer group. A recent study of boys' underachievement in Indonesia (Immajati, 2016), through focus group discussions with teachers and students, found a recurrent theme of boys using

more of their free time to play outside the home (cycling, playing football, online games, PlayStation, children's games, etc.), with girls more often staying at home. However, the extent to which parents and peers encourage and condone these behaviors was not addressed in the report. Their conclusions were that the gender gap in educational attainment tended to be attributable to the differing motivations and interests of boys versus girls, rather than differences in cognitive abilities; and that the role of supportive family environments was critical for both boys and girls.

There is no dearth of literature analyzing gender and racial bias in common school-age reading materials, although the literature on boys' underperformance does not delve into this subject directly. Yet it is important to address, in the discussion of the ways in which schooling may emphasize or exacerbate notions of gender, the role that children's literature and even common government-issued textbooks play. Peterson and Lach (1990) reported on studies that demonstrated the ways in which gender portrayals influence a variety of cognitive processes, including comprehension and recall of material. Consequently, gender stereotypes affect readers' perception of others, their own self-concept, and their potential for achievement.

An important fact linked to boys' underachievement in education is that it does not necessarily translate into lower economic and political participation later (Jha & Kelleher, 2006). The literature has raised this issue in varying manners by pointing out the continued secondary position of women in society despite better school performance, and the fact that women need higher educational qualifications for employment equivalent to that of men (Mahony, 1998; Figueroa, 2000). This brings the issue of gender socialization to the fore, as working hard at academics is considered to be associated with effeminate qualities that do not correspond with the working-class male identities (Abraham, 2008). For example, in their study of participants and nonparticipants in higher education in the UK, Archer and colleagues (2001) contrasted working-class masculinity with the values of the middle class, construed as an unfavorable "other." This "other" often was described in effeminate, negative ways, such as being interested in books or wearing spectacles, rather than being social and "doing" things.

The consequence of this conceptualization is that there seems to be a greater relationship between girls' gender identity and academic self-efficacy—that is, the mere belief that one is competent and able—as compared with boys (Vantieghem, Vermeersch & Van Houtte, 2014). This implies that gender-normed behaviors for girls align more with the behaviors associated with better academic performance and therefore lead girls to have higher performance. The emphasis on discipline, organization, practice, and hard work, especially for a nonphysical pursuit, was perceived to be feminine and therefore undesirable for boys and men. In the Caribbean, macho identity was found to result in a sense of contempt for largely female teachers, while girls were "conforming, participating, doing their work and sitting quietly" (Clarke, 2005). Such notions of masculinity become oppressive and "hegemonic" when any deviations, even in the use of language or love of a sport, is seen as moving away from being masculine. As such, masculinity theories delve into the origins of the male traits and

behaviors that are used to explain boys' underachievement (Vantieghem et al., 2014, p. 361). That masculine identities exist and affect school achievement is fairly universal, although the way masculine identities are constructed differs based on class, social, and ethnic contexts; and the way they play out in relation to school and society differ according to the context (Archer et al., 2001; Clarke, 2005).

Schools are an important site where classed masculinities and other gender stereotypes are fostered (Archer et al., 2010; Bigler, Hayes, & Hamilton, 2013). Therefore it is important to focus on hegemonic masculinity in the context of boys' underachievement, as it seems to be the root cause impacting several other factors, such as school and classroom environment, and teacher–student, family, and peer dynamics. In simple terms, hegemonic masculinities in this context refer to notions that are dominant in a society and that push boys toward following a particular kind of behavior and making specific choices—so much so that if boys do not fall into line, they are isolated and at times bullied. It is also important in designing appropriate responses to academic failure. For example, Dunne and Leach (2005) noted that students responded in gendered ways to vulnerability and dropout in Botswana, with girls becoming pregnant and boys forming male youth gangs. The construction of a hegemonic masculine identity is “historically and culturally situated,” has multiple dimensions and versions, has hegemonic structures and discourses built into them, and is played out and acted upon in lived social realities (Cuttance & Thompson, 2008). The importance of hegemonic masculinities is recognizing that it tends to create power relationships within different forms of masculinity, in that it privileges one over the other, and creates normalcy around a particular form of masculinity that overemphasizes sexuality, physicality, strength, sporting abilities, and social dominance (Martino, 1996).⁷

A review of literature relating to homophobia in the context of countries such as Australia, Jamaica, the United States, and the UK helps in understanding the relationship between hegemonic masculinity and its implication for boys' underachievement (Jha & Kelleher, 2006). Research from Australia, for instance, has highlighted the fact that the use of words with homophobic overtones start as early as primary school, with negative reference to boys who are deviants—e.g., doing well in reading, being liked by teachers, and so on (Plummer, 1999). Jha and Kelleher also pointed out that the notions of hegemonic masculinity and a macho male identity usually are linked with particular socioeconomic and ethnic groups: “Boys from working-class backgrounds are more likely to continue with anti-school manifestations of masculinity...whereas boys from middle-class background find an alternative manifestation of masculine identity in intellectual pursuit” (Jha & Kelleher, 2006, p. 45). Although it is believed that the gender ordering of various forms of masculinities, and the privileges associated with it, become very prominent when boys start to hit puberty, research has also highlighted the fact that signs of such identity, behavior, and attitudes

⁷ Note that not all notions of masculinity are necessarily *hegemonic*—or anti-academic, for that matter. For instance, Chinese boys have always done better academically because the notions of masculinity in that context are not at odds with academic performance.

become visible much earlier (Connell, 2005; Plummer, 1999). Therefore, although the role of hegemonic masculinity in the context of boys' underachievement has been explored much more for adolescence and corresponding school years, the discussion is relevant for early years as well. However, there is a need to examine (1) how these notions impact teacher–child relationships and teachers' expectations as well as the classroom environment even in the early years, and (2) how the aspects of socioeconomic background, race, and ethnicity interact with the issue of masculinity to impact various dynamics in and outside school, and in turn affect boys' reading achievement. The present report addresses these questions after examining the processes related with teachers and school.

2.3 The teacher and the school

The teachers, the school, and the practices that find their expression in the school are important to the extent that they may both exacerbate and address the issue of boys' underachievement. What becomes most important here is whether the school is aware and successful in recognizing, and then in breaking, the images and expectations related to class, ethnicity, race, and gender, experienced outside school from an early age—or not. This section explores the interrelated aspects of teacher attitudes and expectations, classroom processes, and the teacher–student relationship—which are largely within the control of the school—as well as “laddish” behavior (explained in Section 2.3.3) and peer dynamics, which necessarily influence the effectiveness of those in-school processes.

2.3.1 Teacher attitudes and expectations

Teacher attitudes and expectations play a major role in children's performance. In Jamaica, for instance, teacher–student interactions differed in terms of participation and level of feedback, depending on teacher expectations (Clarke, 2005). Moreover, some evidence indicates that boys react to teachers' expectations about their poor performance, and it is likely that even those boys who want to study are not supported by the schooling system and the larger hegemonic masculine discourse that negatively influences boys' academic behavior (Watson-Williams & Riddell, 2011). A study of schools in the Seychelles concluded that the expectation that boys perform and behave less well than girls partially accounts for a lack of interest in school among boys (Ministry of Education and Youth, 2002). Another study from the Seychelles supported the notion that

many of the school processes and procedures, teacher attitudes and expectations were heavily gendered and were seen to be working against the interests generally of boys, affecting their participation and educational outcomes. Girls were the preferred gender at school and teachers held high expectations for them, while boys were labeled as lazy, irresponsible, and lacking in motivation.... Boys were also clustered in the low-ability classes because of ability-streaming practices. (Geisler & Pardiwalla, 2010, p. 66)

Several studies from Australia and the UK have established that expectations of low or high performance, even when implicitly communicated, can have a significant impact on

differences in how boys and girls perform in the classroom (Connell, 2005). Stromquist (2007) and Page and Jha (2009), based on an international review of research on classroom processes in seven countries from three different continents, arrived at a similar conclusion regarding teacher attitudes and expectations: In countries where teachers do not have high expectations of boys, they tend to underachieve, although there are some exceptions. This is an important inference, and the fact that this conclusion comes from a large number of countries with diverse cultural contexts makes it even more noteworthy. Smith (2003) reexamined the underachievement debate in the UK, and argued that the very measurement of underachievement—for example, cognitive differences in language learning—could be due to the bias of the teachers, who hold gendered ideas of work that can be done by boys and girls. Whatever the reason for low or high expectations, the fact is that the expectations of high and low performance for both girls and boys have an impact on the performance that they expect out of themselves. The dilemma, then, is that teachers, through various means, may be creating the gender disparity that they are also held accountable to address (Hodgetts, 2010).

2.3.2 Gendered nature of classroom processes and teacher–student relationship

Often, boys and girls choose their performance based on their own contexts, and the framework of language is a huge factor that determines these choices (Martino, 1996). Students’ awareness of teachers’ differential expectations influences their own expectations for themselves (Cobbett & Younger, 2012; Hartley & Sutton, 2013). Research in Australia commonly found binary constructions of boys and girls reflected in the language used by teachers in the classrooms (Stromquist, 2007). Words such as “nice,” “hardworking,” and “having potential” come with their own cultural connotations based on the social context and the gendered behavior of teachers and students (Martino, 1996), and can affect students’ acceptance and understanding of their identities with respect to their school environments.

Research indicates that it is prevalent in Australia, the UK, and the United States to find that both male and female teachers perceive girls as being easier to teach, compliant, and less likely to challenge authority, whereas boys require a more authoritarian control for them to be taught (Stromquist, 2007; Younger & Cobbett, 2014). What this also implies is that girls were singled out more if they transgressed any gender-typed behavior, with teachers making the expected behavior of compliance much more salient (Younger & Cobbett, 2014). These kinds of gendered expectations also mean that teachers are concerned about quiet boys, but not quiet girls. The boisterous girls will be immediately corrected, and boisterous boys will be tolerated to a point, before they become a problem (Martino, 1996). As a result, there is certain rhetoric even within the classroom around acceptable behaviors for girls and boys. In fact, research has indicated that within a short time of being schooled, children have very clear gendered notions of who speaks and who listens (Godinho, 2007).

The studies vary in their interpretation of who occupies the linguistic space in the classroom and for whose benefit. Godinho (2007) argued in the Australian context that girls tend to take up the linguistic space with a lot of elaborate and detailed responses as compared with boys. In contrast, boys tend to shout down girls. They found that girls were less likely to ask

questions, and responded orally more often than boys, and often these translated into the different social roles and learning styles adopted by boys and girls (Butt, Weeden & Wood, 2004). Other studies, almost 10 years later in the same UK context, also indicated that attention was given primarily to individuals who were disruptive in class, and while it was negative, boys were given double the attention as compared with girls. Even in classroom participation, girls were not called on to speak, and because of the gender norms prevailing for girls, they were rendered almost invisible (Younger & Cobbett, 2014). Stromquist (2007) cited a US-based study (Garrahy, 2001) to depict how teachers who perceived themselves to be gender neutral in reality practiced very stereotypical behaviors in terms of favoring girls in the use of educational resources in the classroom and favoring girls in reading sessions. These teachers also assigned projects that forced children to remain within gender expectations. Studies that we reviewed from other countries in Africa, South Asia, and the Caribbean were fewer in number, but all of these affirmed the reflections of gender-stereotypical expectations being clearly present in the classrooms (Page & Jha, 2009; Stromquist, 2007).

Teachers' gendered expectations manifest themselves differently in different contexts. In many countries experiencing boys' underachievement, it means boys draw more negative attention, while in some cases teachers prefer to ignore them. Watson-Williams and Riddell (2011), whose report featured research from Jamaica, noted that girls were often closely supervised while boys were allowed to indulge in recreational activities that took them out of the classroom. Abdullah (2009) reported similar experiences in Malaysian secondary schools, where

the difference in the disciplinary actions taken against boys may reflect an acceptance by the teachers that boys are irresponsible and there is nothing they can do about their behavior. This may further reinforce the boys' attitude that there is no penalty, or simply that they get a lighter reprimand for their bad behavior. (Abdullah, 2009, p. 124)

Studies from Brazil reported that boys and girls were treated quite differently in the educational process as a whole, at home, at school, and on the street; and that negative discrimination in the form of punishments was particularly identified as having an adverse impact on boys (Carvalho, 2008, as cited in Jha & Faria, 2012). This also means that although boys might have been underachieving in results, they were dominating in the classrooms, engaging the teacher in negative attention, and taking up the "linguistic" and physical space in the classrooms (Martino, 1996). However, neither negative attention from teachers—even when it implied occupying larger linguistic space in the classroom—nor indifferent attitude of teachers helped the boys, as it implied low expectations from teachers in both cases; subsequently, low teacher expectations often translated into low self-expectations for boys. Stromquist (2007) also acknowledged the contradiction in the literature, which shows on the one hand that "boys in general receive more attention than girls in nations with very different social and political contexts" (p. 11), yet they are underperforming relative to girls. Her proposed explanations are in line with many of those expressed thus far, largely having to do

with stereotypical masculinity: negative attitudes toward reading, a preference for being outdoors, lack of concern for academic success and the future labor market, etc.

The bulk of attention is still devoted to boys in the classroom, and power dynamics within the classroom still favor boys over girls. The discussion of classroom dynamics, therefore, must acknowledge the problems of boys' underachievement, but also frame it in the larger context of low self-esteem exhibited by girls in the classroom, as well as girls' inclusion and legitimacy within the gendered classroom, to help both boys and girls (Younger & Cobbett, 2014).

2.3.3 Laddish behavior and identity construction

Identity-based motivation (IBM)—meaning that people act in ways that feel congruent with gender norms—is a theory that has been used to explain boys' underperformance. According to IBM, boys and girls get clues about how to behave in the classroom; if success does not feel “gender-congruent,” then it will be rejected (Elmore & Oyserman, 2012). That means, if a certain subject area is perceived as “feminine,” then boys will reject it; thus, another factor affecting classroom dynamics is gendered encouragement toward different subject areas. For example, if language arts is perceived to be not masculine, then homework for any of the language classes will be interpreted as “hard” by men and therefore perpetuate the vicious cycle of boys' underachievement. As boys get older, peer acceptance seems to be more important than academic success, and if the dominant male culture views enthusiasm for school as “uncool,” then previously high-achieving boys may disengage (Vantieghem et al., 2014). Therefore, teachers have to be cognizant of either inadvertently or deliberately creating gender-based connotations related to different subjects (Younger & Cobbett, 2014).

The need for “macho” identity and “laddish behavior” of boys in school has been considered one of the main reasons for the underachievement of boys in many country contexts (Burns & Bracey, 2001; Butt et al., 2004; Jha & Kelleher, 2006; Jha et al., 2012). Laddish behavior or culture, a term used in the 1990s in the UK context to explain the anti-school behavior of working-class boys, has now found its way into academic discourse around the issue of boys' underachievement. Laddishness is often considered to be a group behavior that is performed against this stereotype threat, and is often termed as “attention-seeking” by teachers (Jackson, 2010). Boys often use laddish behavior within the classroom as a defense mechanism against stereotype threat, which means they behave in a way that avoids being singled out, even if it is not necessarily the behavior they believe to be correct (Hartley & Sutton, 2013).

The signs of laddishness start early, and there often seems to be an inevitability that boys will test out hegemonic masculinity in society and in the classroom (Keddie, 2003; Plummer, 1999). However, the link between laddishness and anti-school behavior is not always linear; research from the UK suggests that while boys can be laddish, it can change within the classroom environment, and it is still not clear which students take laddishness into the classroom and which do not (Jackson, 2010). The answer may lie in IBM, referred to above, which differs from stereotype threat in that it postulates that identity—and an identity-related course of action—is “dynamically constructed from situational cues,” and as such can be

influenced or manipulated by educators (Elmore & Oyserman, 2012, p. 10). On the other hand, explaining boys' underachievement by their laddish behavior could create blindness around the underachievement of both boys and girls who have a genuine problem with academic achievement instead of mere "mischief" or "unruly behavior" (Younger & Cobbett, 2014).

Several research studies have explored the issue of the construction of social identities within schooling, and the impact it has on psychosocial development. Many studies, for example, have examined identity construction to understand the ways in which boys adapt to the "bad boy" identity. Researchers argue that it would be erroneous to think that boys are rejecting education only for the fairly "facile" identity of "bad boys" (Stahl & Dale, 2013). One of the barriers that have been found within traditional schooling systems is that boys are often caught in a vicious cycle of not being able to follow work at school, getting bored with lessons that were no longer comprehensible, falling behind in school, maintaining contentious relationships with teachers, and overall, not making connections between schoolwork and their own achievement aspirations (Harland & McCready, 2012).

Teachers are often unaware of the ways in which subcultures work (Graham, 2011). They are also unaware of the ways in which they are reinforcing the hegemonic masculinities that allow for boys and girls to not relate to the existing structures within the schooling system. The consequences of this systematic blindness for boys and girls are very real. For example, boys can often become targets of incessant bullying and harassment if they are perceived to be "sissies" or feminine in any manner (Frank et al., 2003; Plummer, 1999). Those who do not measure up to the physical standards set by the particularities of hegemonic masculinity are often targeted even by teachers, who want to train boys into performing the traditional masculinities to reduce their chances of being bullied (Frank et al., 2003). Even while self-perceived femininity is more connected with greater achievement levels, self-perception of identity seems to matter in attitudes toward school and achievement within schools, as illustrated by the poor performance of both boys and girls in Belgium (Vantieghem et al., 2014). Therefore, stances against school environments are not always exclusive with regard to boys, but have to do with the relationship of identity construction to school achievement (Archer & Yamashita, 2003; Vantieghem et al., 2014). Nor are boys a homogenous group—race, ethnicity, and class, as described earlier, also factor into identity construction. In fact, research has indicated that underachievement of both boys and girls can be measured through the relationship of self-assessed gender identity and self-efficacy (Vantieghem et al., 2014).

It has, therefore, been contended that the embrace of hegemonic masculinity is often prompted by schools' inability to counter the prevalent notions of the gender regime, and therefore, that it contributes to the idea of hegemonic masculinity already prevalent in students' lives. While at post-primary level, these hierarchies and roles play a much more important role, such notions and relationships may also determine the gendered nature of classroom at primary level itself. Scholes (2013) demonstrated that a lot of the boys felt at risk with the changing roles that they were playing in and out of school. Many boys also felt that as they transitioned from primary to secondary, they were increasingly exposed to

bullying and other students being “mean.” Also, boys from a lower socioeconomic background seemed to be internalizing the lessons of hegemonic masculinity in terms of show of strength, aggression, and competition as a way of organizing their school life (Plummer, 1999; Scholes, 2013).

Although most of this research pertains largely to the later school years, the available evidence suggests that these inferences hold true for the early years as well. Boys as young as age 4 seem to have internalized the lowered expectations of achievement, and these societal expectations seem to fuel a self-fulfilling prophecy. One of the measures to protect children from these stereotypes is to ensure that they are hearing egalitarian expectations in the classroom (Hartley & Sutton, 2013).

2.4 The influence of male role models

The researchers studying male underachievement in early years have emphasized the importance of having a male role model. It is often suggested that female teachers are responsible for boys’ underperformance because they do not know how to deal with boys, or because the prevalence of women in the profession makes boys think of it as a female-only profession (Jha et al., 2012). However, other research, especially Brownhill (2010), contends that this is too simplistic a formulation to justify a “male model” scenario. This model has also been critiqued for its “one-dimensional, essentialist way of conceiving gender” (Brownhill, 2010, p. 3).

Nonetheless, given the evidence that gendered notions of academic engagement are socially constructed, one of the often-repeated recommendations to remedy boys’ participation in the educational system is to create male role models that can embody the benefits of education and can work against the hegemonic, anti-school discourse (Brownhill, 2014). These remedies usually arise from the idea that working-class boys often are living in households headed by a single adult female and therefore lack a “male presence” in their lives (Burns & Bracey, 2001). In addition, it is also often believed that “feminization” of the teaching profession and schools has meant that there are not enough positive role models for boys, and that in some cases, teachers might actually discriminate against boys (Clarke, 2005). Even school administrators believe that the masculine form of teaching—strict, disciplinarian, and aggressive—is the only form of dealing with laddish kids in the class and that these values have significant social power (Jackson, 2010). But, as discussed earlier, this perspective can be counterproductive if it reinforces laddish behavior or if boys perceive harsh discipline as a stereotype-threat and continue to behave in a laddish manner in their defense.

In Trinidad and Tobago, male teachers were observed to be perpetuating prevalent masculine stereotypes by embodying behaviors similar to those of their male students and therefore legitimizing “masculinity” (Mohammed, 2009). The very idea of more male role models is problematic if the same hegemonic masculinity that is documented to be one of the factors working against boys’ achievement is also imitated by role models themselves (Brownhill, 2014). Creating hegemonic male authority figures can reinforce the gendered power structures, create the perception of a monoculture, and discourage respect for other forms of

authority (Jackson, 2010). Additionally, the qualities of strength and trust that male teachers are supposed to imbue are not exclusively “masculine” and can be embodied by any individual, regardless of gender (Brownhill, 2014). For example, Brownhill cited “kindness” as one of the most important attributes of a mentor, both men and women.

Moreover, there is substantial evidence to show that female teachers do not necessarily behave in a singular manner. As summarized above, while it is common for boys to receive negative attention in many cases, it is not uncommon to find women teachers who favor boys in the classroom, tend to overestimate their abilities, and pay more attention to boys in class without necessarily trying to direct them toward better engagement with studies (Clarke, 2005). As discussed earlier, when teachers ignore boys’ laddish behavior, choosing not to act also reinforces particular kinds of masculinities. So, hegemonic masculinities can be reinforced regardless of the gender of the teacher. Francis and Skelton (2005) echoed this opinion; they termed the calls for more male teachers in primary schools in many countries—including the United Kingdom, North America, Australia, New Zealand, and across Europe—a simple reading of the complex situation. A decade earlier, Connell (1995) had argued “women are bearers of masculinity as well as men” (Connell, 1995, p. 230).

Francis et al. (2008), reporting on a qualitative study in UK primary schools, found that the teacher’s gender was not the most influential variable in primary pupil-teacher relations or boys’ engagement, but rather “the quality/ability of the teacher, rather than whether they are male or female” is the children’s primary concern (p. 22). Also Page and Jha’s (2009) multi-country study—Seychelles, Trinidad and Tobago, Malaysia, Pakistan, India, and Nigeria—concluded that gender sensitivity and other competencies, not being male or female, supported meaningful engagement with boys and girls alike. In other words, the modeling of desirable characteristics and qualities that children would like to emulate is not restricted to only one of the genders (Brownhill, 2010). This is why the hiring of male teachers to boost boys’ underachievement has been heavily contested as being simplistic and not based on the complexity of influences that underlie boys’ underachievement in schools (Brownhill, 2014).

2.5 The home – community – school continuum

Researchers writing about boys’ underachievement are divided in their opinions regarding which plays the greater role in boys’ underachievement: school, or home and society. However, there seems to be a move in the last two decades toward consensus among researchers that neither school alone nor home alone can be held responsible; there is a need to examine the environmental factors, as manifested both in school and outside school, and to understand what school does to reinforce them or what school can do to change the situation. There is also a greater realization that for children, the environment is a continuum, and all experiences together contribute to and shape their identity and affect their behavior and capacities.

It is important to understand that whether peer dynamics put pressure on boys to behave in a particular manner conforming to the expectations of “masculine” identity, or whether teachers’ expectations are shaped by their perception of boys’ and girls’ abilities, neither case

is solely a result of schooling processes or relationships formed in the school. Teachers as adults also have general perceptions about children and about boys and girls; and peer relationships and expectations form outside of school and often outside home. For instance, in the Seychelles,

boys are sidelined by teachers and fellow female students in schools, while at home they are not made to feel as welcome as girls.... Girls have a wider span of gender roles to choose from, while men are stuck in a narrow definition of negatively loaded masculinity, which denies them emotionally balanced lives. (Geisler & Pardiwalla, 2010, p. 81)

Figueroa (2000) pointed out that boys are put at a disadvantage in Jamaica when women teachers or mothers fail to discipline them—believing this to be a male prerogative—because the women are condoning exploration of aggressive masculine identity. He argues that this practice, linked with “male advantage,” is hurting boys’ interests. Jones and Myhill (2004a and 2004b) have pointed out that teachers’ low expectations of boys are not a result of their disbelief in their ability but instead are guided by their belief that boys have innate and latent abilities, and an inclination to misbehave despite being bright. This belief is predominant among both parents and teachers, beginning in the early years. Teachers’ perceptions and beliefs about boys coming from particular communities shape their expectations from childhood. However, it is not always that teachers are at fault; there are outside pressures to “identify” and “address” problems and boys’ underachievement in a specific manner that is not always useful in addressing them (Hodgetts, 2010).

Overwhelming evidence now emanates from different parts of the globe to suggest that schools and teachers tend to reinforce gender-loaded perceptions regarding the abilities of boys and girls. These perceptions, in turn, shape the schools’ and teachers’ expectations, which play a major role in boys’ underachievement in education, especially in reading and language-related performance. Teachers generally remain unaware of these processes and their impact on boys’ achievement levels, and as a result end up strengthening the negative behavior patterns rather than changing them. For boys, and also for girls, there is a continuum in terms of the expectations around their roles, and they accordingly continue to perform or underperform. This, however, is a simple account of a complex process and, as mentioned earlier, the ways in which boys tend to negotiate this stereotyping and peer pressure seem to further push them toward laddishness.

3. Combating Boys’ Underachievement in Education

The literature on the issue of boys’ underachievement does point toward some possible solutions and approaches that may help. While certain macro issues such as labor market participation remain outside the bounds of education-based or community-based initiatives, a lot still can be done through work in the school, or through initiatives that focus on the

community and parents. Some scholars in countries facing persistent trends of boys' underachievement view it as a matter of urgent public accountability to address this issue; by not addressing it and creating alternate forms of masculinity, teachers and administrators are essentially abrogating their "moral, ethical, and political responsibility" (Keddie, 2003, p. 300). While this may be a strong statement, the need to address this issue is indeed urgent in certain countries and regions.

In this context, it is important to understand that although the incidence of underachievement is relatively higher and more prevalent among boys coming from groups that are marginalized due to their socioeconomic positioning or ethnicity, or both, not all boys coming from marginalized backgrounds and contexts necessarily underachieve. There is literature, especially in the UK context, that documents a "strong and longstanding tradition of valuing education and learning" among the working class, emphasizing the importance of the specificity of contexts in which these narratives function and influence behavior (Abraham, 2008). Abraham attests that the two attitudes are not necessarily contradictory and can coexist in working-class cultures. For example, some studies have documented that social constructions of mobility, affluence, and financial security are also highly valued among working-class men, which dovetails with the value systems of the middle class (Archer et al., 2001). The following review of initiatives to address the issue of boys' underachievement in education and their impact, though largely coming from the UK, suggests that what is true for UK is, or can be, largely true elsewhere as well.

The past two decades have witnessed several large and small initiatives on boys' school achievement, started either by governments or by civil society groups. Some national governments have taken high-level measures; for instance, the Australian Parliament set up a Standing Committee to look into the issue in 2002, and subsequently in 2004–2005 funded projects intended to improve the academic and social outcomes of boys (Boys' Education Lighthouse Schools, BELS), and to contribute to the knowledge base around boys' education. Around the same time, the Department for Education and Skills (DfES) in the UK collaborated with the University of Cambridge to support a four-year project involving more than 50 schools, known as the Raising Boys' Achievement Project. Several countries in the Caribbean have also been trying out one policy or another in a quest for a solution. Following its multicountry research studies on boys' underachievement and gender analysis of classroom processes, the Commonwealth Secretariat supported school-based projects in several member countries, including India, Malaysia, Seychelles, and Trinidad and Tobago, which led to the publication of *The Gender-Responsive School: An Action Guide* (Atthill & Jha, 2009). The guide, meant to be applicable across country contexts, provides strategies to address gender bias through changing attitudes.

In all these countries, civil society-led interventions have also been started, especially in the sphere of developing community and peer-level support groups for both teachers and students. International agencies such as the Commonwealth Secretariat, UNICEF, USAID, and the World Bank have also been active at global, regional, and country levels to support both research and piloting of strategic interventions. In addition, several research studies have

attempted to analyze and distill the principles that help in understanding how to raise boys' academic achievement. As a result, a growing body of knowledge exists to inform strategies designed to address boys' underperformance. This section assembles this knowledge under two broad headings: community-based initiatives and school-based approaches. These two sections are, however, more for ease of reading, as these are necessarily complementary and some of the school-based interventions also include community outreach initiatives.

3.1 Lessons from community-based initiatives

Robinson (2013), based on an analysis of high-achieving Afro-Caribbean boys in the UK, emphasized the role of peer, family, and community support. Peer groups are important socializing forces, and can have positive and negative influences, as described above. For example, the transition from primary to secondary school education can be a difficult phase for some students because of the psychological and social changes that are simultaneously happening at these ages, which can negatively impact academic performance. Among the protective and supportive factors that can make the transition smoother are strong friendships and sibling networks. Students in this study created, on their own, alternative support structures with their peers, which helped buttress their performance in schools. A strong sense of community, racial identity, and family support enabled boys to be resilient against, or even try to prove wrong, negative stereotypes and low expectations. The protective factors with respect to “negative” influences appeared to be self-esteem and confidence; in fact, autonomy and rejection of peer influence was part of their self-defined masculine identity (Robinson, 2013). It is important that such peer groups are deliberately mentored or oriented to act against the influence of hegemonic influences; otherwise, they risk strengthening the masculine influence rather than weakening it. Reorienting such groups means using the same method of peer influence but with alternative socialization values and processes.

Social capital, in the form of social networks within the groups as well as familial networks, has helped to combat the effect of negative stereotypes and to protect students' achievement in school. In a lot of social contexts, the social capital generated by parents has a strong effect on how children negotiate and create social capital in peer groups (Robinson, 2013). Scholes (2013) also illustrated the varying degrees with which students navigate the anti-reading rhetoric around masculinity successfully, primarily through the support of family social capital and parental expectations.

Gross (2008; see *Box 1*) argued for early interventions to enhance the life-chances of children, largely boys, who are at risk and therefore likely to underperform or drop out. He argued that it is important to target home, school, and community simultaneously, working on the child's family relationships, social relationships and academic success. Based on an analysis of more than 100 randomized controlled trials in the UK and elsewhere, Gardner (2008, as cited in Gross, 2008) found that community-based parenting programs are one of the most promising early intervention measures that can modify parenting practices and improve outcomes in children, especially among disadvantaged families. To have the maximum effectiveness, such interventions should start early, when boys are as young as four to eight years old. It is

important to intervene before unhelpful patterns of family behavior become entrenched and are therefore harder to alter.

BOX 1: LESSONS FROM EFFECTIVE PARENTING PROGRAMMES

The evidence, based on the analysis of a large number of parenting programmes and their impact, suggests that effective parenting programmes need to include:

- basic “skills” input on how to promote children’s learning, how to set clear and consistent boundaries for children, how to reward appropriate behaviour with praise, how to use “time out” when children behave inappropriately;
- adjunct training in problem solving, communication and self-control which is designed to help parents cope more successfully with negative life stresses and marital conflict, and without which there may not be great benefits from the skills programmes;
- work that fosters supportive networks for the parents, by basing group parent training work in the community, with parents each having a buddy within the group for mutual support, for example; and
- promoting parents’ involvement with schools and with the community—for example, “homework” assignments that give parents examples of questions they might ask teachers and ways in which they might share their knowledge of their child with teachers.

Source: Gardner (2008), as summarized in Gross (2008). Reproduced from Gross (2008), p. 22.

Several civil society-funded programs encouraging supportive parenting in the UK have claimed success in impacting positive behavior outcomes for boys. For instance, the Birmingham City Council collaborated with several nongovernmental organizations that helped address underachievement among boys from the white working class and boys from ethnic minority groups through strategies such as offering parent support programs, youth groups, and community groups; providing workshops, mentoring, and training; and working with teachers and schools (Birmingham City Council, 2008). These experiences reportedly resulted in positive outcomes for boys’ academic performance in primary school, especially when combined with school-based interventions that also engaged parents and promoted supportive parenting.

Other work with Birmingham’s adolescents helped them enhance their self-esteem and be interested in schooling (Birmingham City Council, 2008). Similarly, a few youth support programs for adolescent boys in the Caribbean are reported to have helped promote positive behaviors and to have had a positive impact on academic outcomes for boys (UNICEF, 2004). The following section on school-based interventions provides several cues regarding how schools can reach out to parents, and to what extent that can help in raising boys’ performance in education.

In the case of adolescents, skill education is being identified as an effective alternative for responding to hegemonic masculinity, especially in the Caribbean and Latin America. The high-level Regional Caribbean Conference on Keeping Boys Out of Risk, held in Jamaica in May 2009, as part of the joint World Bank–Commonwealth Secretariat’s Regional Caribbean Initiative on Keeping Boys Out of Risk, also organized a regional contest to identify and promote existing best practices that target at-risk youth, highlight the importance of human

development, and focus on empowerment of youth. Submissions from 11 Caribbean countries showed remarkable diversity in approaches and activities focusing on at-risk youth in the region. These were small-scale initiatives but are important pointers for policy interventions. One common thread was a focus on mentoring and developing a sense of self-worth among adolescents and youth, something important for schools to learn from. A second was a focus on community and parental engagement in the process of developing and implementing the program. While it is important to look closely at these initiatives for lessons learned, it is also important to ensure that options such as vocational and technical education are not viewed as “second-rate,” especially when heavy public investments are at issue. For instance, in Brazil, the number of technical institutes nearly tripled in less than a decade, the annual budget for vocational institutes has gone up, and the scope of such institutes has been widened to include more modern and relevant subjects. Nevertheless, degrees and certifications from these programs still are widely perceived as lower in status than a university degree (Jha et al., 2012).

3.2 Lessons from school-based initiatives

Younger and Warrington (2005), based on their work with several British schools, classified the school-based approaches into four categories: pedagogical, individual, whole-school, and sociocultural. But they later concluded that a mixed approach that applies these approaches appropriately is most effective (see *Box 2*). They argued against any justification for supporting specific interventions designed solely to suit boys’ style. In general, they concluded that whatever is good for boys is also good for girls—namely, active, engaging classroom activities focusing on diverse skills and involving a range of creative pedagogies (art, poetry, drama). These kinds of approaches, coupled with interventions that help create spaces for expression and success, seemed to lead to positive results. Another study of a four-year project focusing on boys aged 11–16 years in Northern Ireland had similar findings. Approaches allowing for small group work, paired group work, storytelling, uses of artistic expression, and role playing to encourage discussion proved to have a positive impact on the boys (Harland & McCready, 2012).

An analysis of the BELS project in Australia yielded similar findings with regard to the successful use of dance, drama, and music. Evidence from several projects showed that boys who earlier considered themselves failures exhibited signs of having greater self-esteem when involved in such activities. The strategies employed for two separate groups of boys—struggling boys and disengaged boys—were differentiated from each other. The boys who were struggling were taken as novices and were assumed have difficulty learning. The strategies used with them consisted of highly structured learning processes focused on developing reading and writing skills. The boys who were disengaged were involved in activity-based projects with a supervising adult. Cuttance and Thompson (2008) found that projects where boys collaborated with an adult male in authentic reading and writing tasks were helpful in improving their language skills.

BOX 2: LESSONS FROM THE RAISING BOYS' ACHIEVEMENT PROJECT IN UK

The Raising Boys' Achievement Project (RBA) was a four-year project (2000–2004) in which the Department of Education and Skills (DfES) and the University of Cambridge studied interventions that could help in reducing differences in academic achievement of boys and girls at key stage 2 and key stage 4 in schools in England.* Working with over fifty primary, secondary and special schools in England, they identified and tested strategies having the potential to make a difference to boys' (and girls') learning, motivation and engagement with their schooling, and consequently to raise levels of academic achievement.

The process had involved schools working together in seventeen learning triads (each triad consisting of one Originator School – that already had some strategies in place to enhance the boys' performance without adversely affecting the girls' performance – and two Partner Schools).

Intervention Strategies

To start with, the strategies were grouped into four different areas:

1. Pedagogic: classroom-based teaching and learning
2. Individual: focusing on target-setting and mentoring
3. Organizational: whole-school level changes
4. Socio-cultural: working to create a positive environment for learning.

They concluded that by integrating all of these approaches, schools achieve maximum impact, yet socio-cultural approaches are of central importance if schools are to be successful in “challenging images of laddish masculinity and ladettish femininity, and getting peer leaders ‘on side’ and engaged with their schooling” (p. 9). Moreover, they emphasized the role of school and community collaboration in designing and sustaining approaches that are appropriate to the context, rather than simply imposed from elsewhere. Finally, the critical role of leadership support and commitment by all staff, and a school culture of high expectations and celebration of achievement,

were noted as important preconditions to implementation of any of the strategies.

Pedagogic approaches

Noting that boys usually fall behind in reading and writing, the pedagogic approaches reviewed focused on literacy. They concluded that a holistic approach that provides opportunities for reading, writing, speaking, and listening, and that encourages boys to become successful and satisfied readers (as opposed to merely “teaching reading”) can significantly improve boys' achievement. This can be achieved through strategies such as establishing paired reading schemes, having a wide range of texts available, and giving pupils time to reflect upon and talk about ideas and topics they enjoyed from their reading. Similarly, where writing was predominant, strategies such as role-playing, or paired and group talk about story lines, aspect of plot, setting and characters improved boys' story writing.

The project rejected the notion of a predominant “learning style” (for example, kinesthetic learning) for boys as opposed to girls; instead, the recommendation was to adopt a variety of interactive teaching strategies that engage different learning modalities.

Individual approaches

Individual approaches based on target-setting and mentoring for particularly low-achieving boys identified many challenges and successes. First, there is the need to be wary of focusing scarce resources on a minority of students, and secondly ensuring that mentors give sufficient time and credibility to the process or else there is a risk of demotivating the students. They found that certain pre-conditions, if in place, can be successful in developing a sense of self-efficacy and an acceptable self-image that aligns with academic success. These preconditions include:

- realistic but challenging expectations based on contextualized, individual data;
- frequent time and support for teachers to set and monitor those individual targets;

- mentors serving as mediators between the subject teacher and the student to negotiate and encourage, respectively;
- mentors balancing being supportive and collaborative with being assertive and demanding.

Whole school organizational approaches

Under this category of interventions, the study looked carefully at single-sex versus co-educational schools. While recognizing that this is a complex subject that must be approached with caution (since boys-only classrooms may in fact reinforce some stereotypes in addition to being more challenging to teach), there is some evidence that girls and boys may feel at ease and uninhibited in single-sex classrooms.

The conclusion reached is that single-sex classrooms *for some subjects* can be successful if classrooms:

- are proactive and assertive, communicating high expectations with frequent praise;
- encourage a team identity in the classroom, supported by informality and common interests among students and teachers;
- have support from senior management for the use of single-sex classrooms as a central part of school culture;
- raise awareness among local government, parents, community and staff.

Sociocultural approaches

These approaches attempt to counteract the effects of masculine identities that cause boys to act in nonconformist ways that run counter to academic achievement. Strategies included: citizenship initiatives linked to clubs or student councils; a focus on the arts—drama, poetry, dance—with participation from artists-in-residence; paired reading schemes between older and younger pupils; and “key leader” and “key befriender” schemes that target and involve students seen as influential in the peer group. The conditions found to be in place in schools where achievement and aspirations were transformed included:

- head teachers’ acknowledgement of underachievement and support for creative curricular activities to address it;
- appropriate and committed “key befrienders” who were willing to work with others and model non-stereotyping behaviors;
- schools’ ability to create a conducive school “style” that emphasizes attendance, behavior, and learning above social activity during the school day.

*Stage 2 refers to age group 7–11, and school years 3–6. Stage 4 refers to age group 14–16, and school years 10–11, in the UK.

Source: Younger & Warrington (2005).

The Commonwealth Secretariat’s pilot project at lower-secondary and secondary stages in Seychellois schools showed that participation of boys in a wide range of social activities, such as engagement in household and community spaces, could lead to improvement in the performance of boys (Geisler & Pardiwalla, 2010). This project also emphasized the need to abandon the practice of streaming, in which boys are generally lumped together in low-ability streams, which further isolates and de-motivates (Atthill & Jha, 2009). In the Caribbean and South American contexts, the focus on skill-development coupled with mentoring programs is reported to have helped (Orlando & Lundwall, 2010).

Supporting the need for creating alternatives to give boys an experience of success, Stahl and Dale (2013) noted that boys who had low cultural capital and who did not find formal schooling engaging became very proactive and confident in certain activities outside of the formal curriculum, such as music. They argued that working-class boys who are not doing well academically can avoid being labeled as “failing” if they engage in other skill areas in

which they can succeed; as a result, they may be able to reengage academically. In this case, music-making contributed to masculine identity formation by requiring practice, dedication, attention to detail, and a skill that they were able to develop over time, all characteristics that support their stereotypical notions of masculinity. A study of Slovenian secondary school students emphasized the importance of reading in the home as a way to increase cultural capital—itsself a predictor of academic achievement—especially among students whose parents have low educational status (Flere, Krajnc, Klanjšek, Musil, & Kirbiš, 2010).

Another subject-specific course of action comes from a study from Australia, which showed that schools were overly dependent on book-based fiction, and did not necessarily value adequately the kind of technical or nonfiction literature that boys were often more adept at and that is highly desirable in the professional world. Other studies have highlighted the need for diversifying texts to show alternative masculine and feminine identities and then for discussing these texts “in a way that helps students explore their individual positions in the dominant discourse” (Cuttance & Thompson, 2008, p. 25). Their suggested alternatives have included critical analysis of film, television, newspapers, and magazines and their portrayal of gender roles, to increase boys’ interest and lead them to analyze and challenge their own ideas of masculinity. Additionally, the same review of literature found indications that multimodal texts, technologies, and forms of expression (oral, written, electronic, and visual) supported boys’ literacy development. Younger and Warrington (2005) also found that when teachers planned interactive lessons with different learning styles—e.g., visual, auditory, or kinesthetic (note, however, that boys are not by default more accustomed to kinesthetic learning)—and an integrated approach to literacy, many boys improved their reading achievement by twice what was expected within national test parameters.

While pedagogical strategies such as making language arts more appealing to boys through boys’ focused literature has been adopted by Australia and New Zealand, a more fundamental question is being neglected: What is it that boys actually want to achieve, and are their perceptions of these achievements reflected and framed within the school environments in which they function? Without fundamentally answering these questions in the sociocultural contexts in which boys function, it will be difficult to devise strategies that would work in practice. As in the case of Stahl and Dale (2013), above, when boys were perceived by their peers as being “successful in an activity that requires perseverance, skill and verbal/linguistic dexterity,” they were much more likely to be integrated into the classrooms and able to negotiate discriminatory school environments. Shelton (2008), analyzing some of the UK experiences, also supported the use of sociocultural approaches to help address the dominant idea of masculinity within the school system and hence the issue of underachievement, as these approaches undergird other approaches.

One way to combat reproducing hegemonic, racist, classist structures is through teacher facilitation within the classroom. Because students are often taking their cues about knowledge construction and learning through the framework and scaffolding built by the teachers themselves, teachers are often the best targets for interventions. Research has suggested that when teachers provide the space to examine power differences between

different social groups, the learning is much more situated within the classroom and can help combat societal pressures on boys and girls (Godinho, 2007). This could include leading open discussions on these issues that are carefully negotiated, as well as integrating such spaces into the tasks and dialogues on other subjects. Atthill and Jha (2009) reported positive shifts in boys' behavior and engagement in schools when teachers openly discussed these issues in combination with positive attention to both boys and girls in the classroom. The Commonwealth Secretariat's project, "Action Gender in School," in several countries in Africa, South Asia, and the Caribbean, emphasized the need to create classroom and schooling practices that are gender-responsive and to question stereotypes, as a way to help both boys and girls to challenge existing gender regimes (Atthill & Jha, 2009).

A number of studies recommended showing teachers how to avoid reinforcing gender regimes by favoring boys for "achievement," and girls for "obedience," as these gendered expectations create patterns of self-fulfilling prophecy that can drive girls away from the sciences and mathematics, and boys away from languages. In general, there is ample evidence that when teachers plan their curriculum around boys' interests and the corresponding response is not favorable, boys are often blamed for "not trying hard enough," or having "potential," but being uninterested. Girls, on the other hand, are assumed to have worked hard when they demonstrate understanding (Clarke, 2005; Stromquist, 2007). Jackson (2010) argued against the use of laddish strategies to handle laddish behavior, as it reinforces gender stereotypes of feminine and masculine behavior and such strategies can make it difficult for the teachers who are non-laddish in nature. Hence, whole-school policies that all the staff of the school have agreed to are more helpful in this regard. Strategies to tackle laddishness that seek to achieve both social justice and improved learning should be long term in nature; hence, policy makers should realize that although there is no quick fix to the problem, gradual or interim measures should not be discounted.

One method suggested for teachers to use is to encourage students to believe that they "will" succeed in a particular activity. Research in Belgium indicated that students who were encouraged in this manner were much more likely to succeed (Vantieghem et al., 2014). One way to tackle the notion of hegemonic masculinity is to have classrooms engage in critical thinking and critical linguistic activities around any practice, or even about prevalent gender norms, so that they themselves can identify the various ways in which boys undertake activities to sustain heteronormative masculinity (Frank et al., 2003). This kind of active involvement helps to unpack competing and contradictory understandings that are very situation- and context-specific and allows boys to really engage with the discursive structural forces around them.

In terms of curriculum, the literature suggests that curriculum must incorporate knowledge, understanding, experience, and histories of various kinds of people. The curriculum must not focus solely on men or women, but instead engage with the diversity of experience of various different social constructs, especially with respect to the ways in which race, sex, class, and religion impact social structures of family, work, and relationships (Martino, 1996). Both girls and boys require knowledge about the ways in which social practices are constructed,

and it is possible that with this knowledge, they can unpack the social constructs around them, and understand the ways in which pedagogies provided by schooling can help them in critically examining their social worlds.

In its Primary National Strategy, the Department for Children, Schools and Families (2007) in the UK highlighted valuing the participation and contribution of boys, encouraging every child to try new activities, and discouraging stereotype formation about the roles of boys and girls as the key features of an effective approach. It argued that efficient teachers of young children need to learn how boys in particular play at home and use that knowledge as a starting point in school. The Strategy specified that teachers also need to respect rather than ridicule the individual cultures of the students and their families, and involve the families of the children in discussions to share changes that could strengthen boys' engagement in academic activities. Additionally, the learning environment in the school should be enabling and supportive, and extracurricular activities should be given importance. The success of the Stand Out Boys Project (SOBP)⁸ in helping UK boys in their early years to improve their behavior and reading outcomes also lends weight to the effectiveness of approaches that combine classroom and home interventions, and enable positive contact and engagement among the child, teachers, and parents. SOBP sought to address behavioral and other challenges through "a typology of compliance, relationships and communication as the focus for both assessment and intervention" (Forrest, 2014, p. 3).

Assessment tools and techniques are another classroom-based method that is supported by the literature. Assessment is considered important for measurement of change, but it is equally important to communicate expectations, and to identify areas for remediation. Clearly setting expectations for all students and objectively measuring outcomes for girls and boys alike may be one of the best ways to overcome the implicit biases of the classroom and teachers. Demie & Lewis (2014) found in a study of schools that were raising the achievement of working-class boys in a London borough that the use of data to monitor students and trigger interventions was a core element of the approach. On the other hand, tracking boys into low-ability groups was not recommended (Younger & Warrington, 2005). It was found by Butt et al. (2004) that a bias often found among boys against writing assessments can be overcome by the introduction of interesting topics; that is, when boys are interested in the subject matter, their writing is on par with that of girls. The same study also found that clearly indicating the ways in which to improve, and moving away from a grade-point system to more comments, also helped boys understand and use the criteria for assessment better. Overall, Butt et al. concluded that when teachers make learning expectations clear and support students with strategies for success, all students benefit.

There is now substantive evidence from multiple contexts to suggest that while single-sex settings can be advantageous for some interactions, exclusive single-sex schools are not a universal solution. Dee (2006), in a study of the U.S. Early Childhood Longitudinal Study

⁸ SOBP was sponsored by the Paul Hamlyn Foundation (2012–2014).

data, found “an average positive impact on student achievement of 4 percent of a standard deviation whenever the teacher–student gender was the same” (p. 73). Yet while some single-sex classes may help both boys and girls, as the atmosphere may be more relaxed and students may face less embarrassment in asking questions, and be less defensive, some researchers have argued that it is not advisable to have only single-sex schools, as the risk of normalizing or legitimizing the stereotypical masculine or feminine behavior is very high (Afamasaga 2009; Akhtar, 2009; Davis, 2002; Lloyd, 2011; Younger & Warrington, 2005). Therefore, a suggested compromise is to have select, single-sex classes for both boys and girls for certain subjects or lessons while maintaining the coeducational nature of the larger school.

Several studies have pointed out that school leadership is critical in transforming schooling processes, culture, and ethos (Atthill & Jha, 2009; Jha & Kelleher, 2006). Teachers and school leaders can play major roles in bringing about changes in school culture and the way it influences gender roles and expectations. Therefore, it is critical to emphasize ongoing professional development of teachers. Teachers need to be oriented to understand issues around equity and diversity, including those to do with gender, race, ethnicity, poverty, and hegemonic masculinity, as well as the ways in which these play out in the classroom and influence students’ behaviors and responses to schooling. They also need to be oriented to solutions that have helped elsewhere. Several schooling norms, policies, and processes would need to change and be made more gender-responsive in order to enable better learning outcomes for both boys and girls. Thus, school leadership is crucial for encouraging consensus around shifts in policies and practices among teachers as well as among parents.

4. Conclusions and Way Forward

4.1 The issue

Boys’ underachievement in reading is a real issue, but the gap between girls’ and boys’ achievement is not reason for panic, as some researchers have implied. In general, boys tend to perform worse than girls in reading and other language arts in some parts of the world, while the opposite is true in some other parts. School life expectancy is less for boys than for girls in certain regions (East Asia and the Pacific, Latin America, and the Caribbean, and North America and Western Europe), and boys tend to underperform in a good number of countries in these regions. A few countries outside these regions have also reported similar trends. Yet boys’ underperformance in reading in the early years does not necessarily lead to adverse effects on future schooling or labor market prospects.

Moreover, deeper investigations indicate that not all boys underperform. There are several important points to note in this regard: First, boys are overrepresented in the lower socioeconomic strata, among ethnic minorities, and in single-parent households in a majority of the studied countries. But that does not mean all boys from poor, ethnic minority, or single-parent households underperform. The second fact is that data from some countries

show that the gender gap in reading and literacy skills emerges early and does not necessarily close in later years for all students; the gaps are higher for those who are in the lowest percentiles of scores. Third, the incidence of boys' underperformance is more common for countries in which overall enrollments for both boys and girls are high. Finally, gendered achievement depends very much on geographic location within countries, although the pattern is not stable across countries; in some places, boys underachieve to a greater degree in rural areas, while in others it is urban males who are at a disadvantage.

Although the gender gap is visible in the data for most cases where reading performance has been measured since the early years of schooling, most of the available research and literature have delved into differences between adolescent boys and girls. This is perhaps because the trends become more obvious and the traits associated with underperforming boys become much more visible in later years. However, there are enough pointers available in the literature to suggest that the lessons learned about the phenomenon from later years can be applied to understand the gaps in the early years as well. In fact, the argument for starting interventions early is present throughout, as gaps in later years are often attributed to contributing factors that were left unaddressed in the early years.

4.2 The reasons

Gender stereotypes, gendered socialization, and gendered expectations both at home and in school are considered to be the main reasons for this trend to have emerged and be sustained so consistently across different contexts. Overwhelming evidence is now available from diverse sources and countries experiencing boys' underperformance to suggest that boys are generally considered to be intelligent but lazy and mischievous, while girls are considered hardworking, obedient, and organized. Accordingly, parents expect girls to behave and study, while "boys will be boys," and teachers' expectations are also shaped by these stereotypes. Hence, teachers expect girls to perform better even if they do not necessarily believe that they are "more intelligent." Notions of masculinity start forming and influencing boys from an early age, and these ideas become "hegemonic" later, especially for those who come from lower socioeconomic strata or face other forms of marginalization in their personal lives. Masculine behaviors, including a rejection of "feminine" subjects such as reading, also become a defense mechanism against teachers and school, who communicate stereotypical images and expectations. The home environment, peer-group influences and school-related factors all reinforce each other in terms of expectations, and any deviation from the masculine norm is hard and risky, as it involves facing ridicule and isolation.

Gendered stereotypes and expectations affect both boys and girls adversely, but this effect does not necessarily manifest itself in terms of worse academic performance for girls. However, it is important not to lose sight of that fact, lest the analysis become gender-blind. For instance, some literature suggests that the trend of boys' underachievement is a repercussion of women's empowerment and social movements to improve access and quality of education for girls. Such arguments miss the facts that boys' underachievement in education needs more nuanced understanding, and also that girls continue to face

disadvantages in the labor market and hold secondary positions in most societies, including those in which boys are underperforming in education. Therefore, it is critical to look for solutions for boys' underachievement in a manner that does not use the gender lens as a binary, and to enable both boys and girls to flourish in education as well as in other aspects of their adult lives. It is also important to go beyond gender and understand the role of other aspects of marginalization in pushing boys away from school and academics.

4.3 Lessons from experiments and experiences

Both governments and civil society organizations have made several efforts and supported initiatives to address this issue in some parts of the world during the past two decades. These experiences have a lot to offer in terms of knowledge about what works and what does not work. Although largely emanating from a few countries, these lessons are important for other settings as well, of course with due contextualization and required modifications. The experiences suggest that it is important to address boys' success in reading through interventions that involve both parents and schools simultaneously, and the results are far more significant if they start early.

Examples exist of parents becoming involved in their children's education independently of the school, as well as through school programs, and both have been helpful. Well-designed workshops and contact programs that help parents understand the importance of parental support and encouragement, and also make them question their own beliefs, attitudes, and expectations as parents, have been proven to help boys change their own outlook and commitment toward reading and school.

The school environment plays a vital role. Strategies that appear to support boys' early reading achievement involve boys in planning; give them more opportunities for oral expression; include various forms of expression, such as art, music, and drama; and allow for cooperative learning. Creating alternative or parallel activities (e.g., integrating reading with music or physical movement) may help boys experience success and then apply similar strategies to academic learning, in early and later years. Note, however, that the literature cautions against applying the stereotype that boys prefer or need kinesthetic learning or that there is any "boy friendly" pedagogy; both boys and girls benefit when learning is diversified and engages different approaches. Creating a nonthreatening atmosphere involving informal and nonconfrontational teacher–student relationships that avoid stereotypical expectations can creatively nurture both boys and girls. In general, most of these are principles of good teaching, and what is good for boys has also been found good for girls. Once teachers understand the nature of gendered classrooms and other forms of marginalization, and how they manifest in boys' (and girls') behavior, the design of interventions becomes evident. However, school leadership is critical for making the environment and processes of the school conducive to implementing the interventions.

School leadership also plays a very important role in designing effective policies. Streaming for low ability and other such practices have been found to contribute negatively to boys' performance, and therefore are undesirable. Single-sex classrooms can be tried for some

subjects if doing so helps students to engage and express themselves without being defensive, and therefore gives them a voice; but single-sex schools may not be a good solution for performance gaps. This type of separation may strengthen stereotypes, as the notions of hegemonic masculinity or femininity could be even stronger in single-sex schools, as some country experience suggests. However, evidence also suggests that creating some opportunities for single-sex spaces can be helpful (Mohammed, 2009; Page & Jha, 2009; Younger & Warrington, 2005).

In other words, making the school and its processes more “gender responsive” rather than remaining “gender blind” or “gender neutral” seems to be the answer. It is important to pay attention to gender differences in terms of behaviors, expectations, roles, images, self-efficacy, self-confidence, and aspirations to understand their impact on learning in many different areas, including reading, and then respond accordingly. Gender-responsive solutions are based on relevant gender analysis, and are designed to change the situation. The specific choice of solutions depends on the specific features of the context.

4.4 Contextualizing the lessons

An important point about the issue of boys’ underachievement in education is that although there are some commonalities, it remains essential to fully understand each specific situation before recommending a solution. For this reason, De Lisle et al. (2010) recommend “place-based policies” that take into account the location of gendered achievement and, as such, interlinked socioeconomic factors that are at work. Citing ECLAC findings, De Lisle and colleagues (2010, p. 415) also cautioned against system-wide approaches “grounded on the assumptions that (1) all males underachieve and (2) they underachieve because they dislike school or have adopted inappropriate gender identities and behaviors (ECLAC, 2001)” that ignore specific geographic achievement. Instead, focused interventions aim to improve teaching and learning for all, and to enhance school-community relations.

Contextualization is all the more important because a good part of the existing literature comes from high- and middle-income country contexts, while other countries and regions remain under-studied. For instance, the literature from East Asia and Pacific is heavily slanted toward Australia and New Zealand. Similarly, the English-language literature for successful experiments largely comes from Australia, UK, and a few other Commonwealth countries. Therefore, despite the high potential for replication of these methods, it becomes important to contextualize the knowledge first.

The following steps suggest ways to contextualize the available knowledge.

- 1. Develop an understanding of trends and features of a possible gender gap by analyzing country data pertaining to school participation, completion, performance, and other similar indicators.** This process would help in understanding the specific nature of the issue in a country: whether it is universal or specific to some locations, whether it is common for all ages or specific to particular age groups, whether particular socioeconomic groups demonstrate

separate trends, and so on. It would also help to understand the gaps that are present or absent in specific domains and abilities, such as reading. Longitudinal data are particularly valuable for identifying whether trends persist or increase at higher grades, and whether patterns are evident in the distribution of scores.

Given that countries are at different stages in terms of statistics as well as research capacities, the status of data availability could also vary. Therefore, it is possible that some countries will not have all the statistics and information they need for understanding the relevant trends. In such a situation, researchers can use proxies for indicators rather than collecting new data; only if time and funds allow, new data can also be generated. For instance, if a country has enrollment and completion data, but not data on learning outcomes for specific subject areas, a sample survey could be especially conducted for this purpose. The need for new data, however, should be carefully and systematically established, as this can be a time- and resource-intensive exercise.

2. **Map the sociocultural, socioeconomic, and institutional contexts, to help understand possible relationships with the trends identified in the education-related indicators.** For instance, it would be important to know what the labor market trends and practices are with respect to boys and girls, men and women. Similarly, an understanding of religious and cultural beliefs, popular discourse, and institutional norms vis-à-vis boys and girls could be helpful in defining hegemonic masculinity in each context. Ethnic composition and related realities would also be important to understand the effect of positionality and visibility of various ethnic subcultures.
3. Once a clear understanding of the local context develops, it is important to **match the data with the context**, to gauge relevance and applicability of any proposed solutions. Specific cases from actual practice in similar contexts could produce relevant insights that otherwise would not be generalizable.

In the end, it is important to remember that any situation in which disparities in boys' educational achievement is at issue will have commonalities with other contexts, as well as unique aspects. The body of literature related to this issue is large and, despite being concentrated in a few locations, comes from diverse contexts, and therefore reduces the burden of rediscovering everything from scratch.

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