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Gender Dimensions of Educational Access and Achievement in Sri Lanka

August 2018



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# **Gender Dimensions of Educational Access and Achievement in Sri Lanka.**

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**Discussion Paper Series**

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## **Abbreviations and Acronyms**

ADB	Asian Development Bank
DCS	Department of Census and Statistics
ECD	Early Childhood Development
G.C.E. A-level	General Certificate of Education Advanced Level
G.C.E. O-level	General Certificate of Education Ordinary Level
GDP	Gross Domestic Product
GER	Gross Enrollment Ratio
GGI	Global Gender Gap Index
GII	Gender Inequality Index
GOSL	Government of Sri Lanka
GPI	Gender Parity Index
HDI	Human Development Index
HIES	Household Income and Expenditure Survey
ILO	International Labor Organization
LFPR	Labor Force Participation Rate
MOE	Ministry of Education
MRI	Medical Research Institute
NER	Net Enrollment Ratio
NEREC	National Education Research and Evaluation Centre (NEREC)
OECD	Organization for Economic Cooperation and Development
PISA	Program for International Student Assessment
STEM	Science, Technology, Engineering and Mathematics
TIMSS	Trends in International Mathematics and Science Study
UIS	UNESCO Institute for Statistics
UNDP	United Nations Development Program
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNGEI	United Nations Girls Education Initiative
USD	United States Dollar

## Introduction

### 1.1 Country Context

1. **Sri Lanka is a lower-middle income country with an impressive record of achievements in economic and human development.** Despite 26 years of conflict, Sri Lanka, an island country with a population of 20.6 million has stood out from its regional counterparts with high levels of human development. Sri Lanka's score in the Human Development Index (HDI) is 0.766— which put the country in the high human development category (UNDP 2016). The country has also witnessed significant economic growth in recent years: in 2017, its per capita income was USD \$3,842, more than four times that of its GDP in 2002. With these achievements, it has now advanced the economic ladder, from a low to a middle-income country.

2. **Policy makers are keen to build on the country's successes and to ensure that the benefits economic growth are distributed equitably in the population.** Sri Lanka is poised to grow, with a development strategy expressly aimed at fostering strong and equitable growth for its entire population (Bhatta, Ebenezer and Nyugen 2014). Despite its achievements in human development, the country has had persistent pockets of inequity, by region, as well as population sub-group- and social inequity, whether caused by gender, economic disadvantage, or any other factor, over a long period of time, that has limited the potential benefits of growth (Aturupane 1999a; Dundar, Millot, Riboud, Shojo, Aturupane, Goyal, and Raju 2017). Sri Lanka's policy makers recognize this and understand the importance of ensuring equitable growth.

### 1.2 Gender Equality in Sri Lanka

3. **Sri Lanka has strong track record of promoting gender equality but there remains significant room for improvement in this area.** In its most recent assessment, the UNDP ranked Sri Lanka 87<sup>nd</sup> out of 159 countries on the gender inequality index (GII), with a GII of 0.386 (UNDP 2016). Two of the main factors contributing to this low score in Sri Lanka are: i) the high unemployment rates of women; and ii) low levels political representation among women (UNDP 2016). The GII measures inequality between women and men on three dimensions: reproductive health (measured by maternal mortality ratio and adolescent birth rates; empowerment (as measured by political participation and education); and economic status (as measured by labor force participation rates of females and males aged 15 and older). Sri Lanka's GII score indicates that gender equality, as measured along these lines, is low in Sri Lanka. Two of the main factors contributing to this low score in Sri Lanka are: i) the low labor force participation rates of women; and ii) low levels political representation (UNDP 2016).

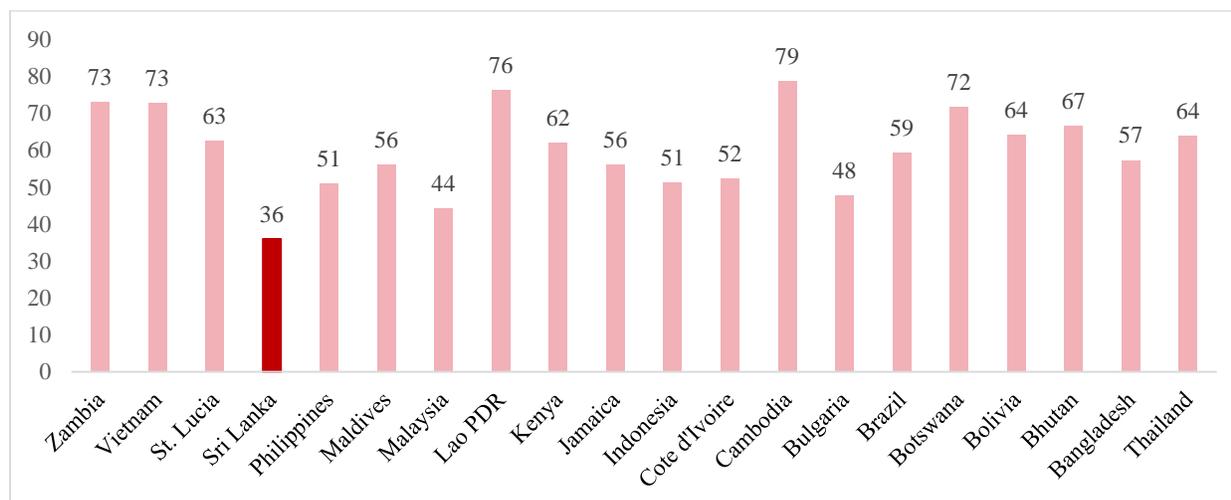
4. **Although Sri Lanka's constitution guarantees equal rights for men and women under the law, inequality persists in some areas of the law, political representation and economic well-being.** The Sri Lankan Constitution guarantees equal rights for girls and women and nondiscrimination on the grounds of sex (Art. 12 (1) and 12 (2)). Still, in certain instances the law discriminates against women: e.g. the father has superior status as the legal guardian of children of marriage, and the mother is the sole guardian of children born outside of marriage. In terms of political participation, women have fully exercised their voting rights since 1931 and Sri Lanka elected the world's first woman Prime Minister in 1960. Still, women's political representation

remains very low- with only 5.8 percent and 4.1 percent representation in the Parliament and Provincial Councils, respectively (ABD 2015). Inequality also extends into the arena of economic security, with a long history of greater levels of poverty in female headed households (Aturupane, Rodrigo and Perera, 1997).

**5. A strong system for universal health care and education has had a positive impact on the health status and educational outcomes of both men and women; but challenges in achieving gender equity persist in these areas as well.** Sri Lanka has had long-standing and widely implemented policies for universal access to health care. Consequently, the average life expectancy is relatively high (79 years for women and 72 years for men) and maternal mortality rates are relatively low (22.3 per 100,000 live births). However, the nutritional status of women and children of women and children remains a challenge for the country. Recent data indicates that the prevalence of anemia is roughly 16.7 percent among pregnant women and 22.2 percent among non-pregnant women, while 18.4 percent of pregnant women and 18.2 percent of non-pregnant women are undernourished (MRI 2012). As with health services, Sri Lanka has had a longstanding commitment to the provision of free primary, secondary and tertiary education, which has resulted in high levels of educational achievement relative to its per capita income (Aturupane, Glewwe, Craig, Tan, and Kaul 2005; Aturupane, Sankar, Saeki, Shojo, Glewwe and Deolalikar 2011a). This has also contributed to the early achievement of gender parity in participation at the primary, and even the lower secondary level (Aturupane, Sankar, Saeki, Shojo, Glewwe and Deolalikar 2011a; Dundar, Millot, Riboud, Shojo, Aturupane, Goyal, and Raju 2017). Now, girls surpass boys in access to, and achievement in education, particularly at the higher levels of the education system. Now, the emerging challenge for gender parity in education in Sri Lanka is underperforming boys.

**6. Women’s participation in the labor force in Sri Lanka is particularly weak.** Overall, the labor force participation rate (LFPR), as a proportion of the total population aged 15–64 was 53.8 percent in 2015 (GoSL Department of Census and Statistics 2015). The gender gap in the labor force participation rate is significant: with 74.7 percent of men participating, compared to only 35.9 percent of women. The female LFPR in Sri Lanka is below the average for middle-income countries and such countries as Bangladesh, Vietnam, Zambia, Thailand, Malaysia, and Philippines (See Figure 1). In 2015, the unemployment rate for Sri Lanka was estimated at 4.7 percent (which is relatively low compared to other countries); but the unemployment rate for females was 7.6 percent, twice that of the male unemployment rate (3.0 percent) (GOSL DCS 2015). Moreover, there has been a longstanding trend that unemployment rates are higher among the more educated rungs of the population in Sri Lanka (Aturupane 1996a, Aturupane 2018). Recent data indicates that 13.5 percent of females with “A-level and above” qualifications being unemployed- almost three times that of their male counterparts (See Table 1). Across sectors, women are sometimes underpaid in comparison to their male counterparts (Gunewardena 2010). They are also concentrated in low productivity and low-income agriculture jobs or in the domestic service industry both in the country and abroad. Gender divisions in the labor market may be a factor in excluding women from higher-income generating occupations (Wijayaweera, 2012). On the other hand, there may be a host of other complex cultural variables that contribute to the low rate of female labor force participation in the country (Gunatilaka 2013).

**Figure 1: Female Labor Force Participation Rate (LPFR) in Sri Lanka and Comparable Lower and Upper Middle-Income Countries.**



Source: ILO Estimates for 2013 or nearest year from World Bank Development Indicators Database (2016)

**Table 1: Labor Force Participation Rate and Unemployment Rates by Gender, Age, Residential Sector, and Level of Education (2015)**

<b>Labor Force Participation Rate</b>			
	<b>Total</b>	<b>Male</b>	<b>Female</b>
<b>National</b>	53.8	74.7	35.9
<b>Unemployment Rate</b>			
	<b>Total</b>	<b>Male</b>	<b>Female</b>
<b>National</b>	4.7	3.0	7.6
<b>Unemployment Rate by Residential Sector</b>			
	<b>Total</b>	<b>Male</b>	<b>Female</b>
<b>Urban</b>	4.6	3.5	6.7
<b>Rural</b>	4.8	2.9	8.0
<b>Estate</b>	3.5	2.7	4.6
<b>Unemployment Rate by Age Group</b>			
	<b>Total</b>	<b>Male</b>	<b>Female</b>
<b>15-24</b>	20.8	16.6	27.4
<b>24-29</b>	9.4	4.4	17.5
<b>30-39</b>	3.1	1.6	5.7
<b>Over 40</b>	1.0	0.6	1.8
<b>Unemployment Rate by level of Education</b>			
	<b>Total (%)</b>	<b>Male (%)</b>	<b>Female (%)</b>
<b>Below GCE O-level</b>	2.7	2.0	4.3
<b>G.C.E. (O/L)</b>	6.4	5.1	9.0
<b>G.C.E. (A/L) and above</b>	9.2	4.7	13.5

Source: Department of Census and Statistics, Labor Force Survey Annual Bulletin 2015.

7. **Although females sometimes fare worse than then their male counterparts in the labor market, they surpass males in educational access and outcomes.** Females clearly lag behind in terms of participation in the labor market, but they outperform boys in terms of achievement in education. This is an important feature, especially given evidence that the impact of schooling on earnings is stronger for females than males; and that over a long period of time education has been closely associated with earnings and economic welfare in Sri Lanka (Aturupane 1993; Aturupane 1996b; Aturupane 1997; Ranasinghe 2008; Himaz and Aturupane 2011; Himaz and Aturupane 2016; Aturupane 2017; Himaz and Aturupane 2018). Nevertheless, this creates a new challenge for gender equality in education in Sri Lanka. Sri Lanka’s long history of providing free primary, secondary and tertiary education has been a major factor in contributing to the achievement of gender equity in terms of access to education at all levels. However, the factors that contribute to boys’ underperformance in education is not well understood. Education has long been considered one of the best tools for reducing inequalities, including gender equality, in a society at large. Indeed, Sri Lanka has been a pioneer in using education as tool to reduce inequality and promote development. As such, analysis of the gender dimensions of education in Sri Lanka is necessary to understand the challenges facing gender equity in educational opportunity and outcomes in Sri Lanka.

### **Objectives of the Report**

8. **The aim of the report is to provide an overview and analysis of the gender dimensions of educational access and achievement in Sri Lanka; with a focus on understanding the emerging trend of boys’ underperformance<sup>1</sup> at all levels of the education system in Sri Lanka.** The report does not intend to obscure the challenges girls continue to face, particularly in transition from school to the labor market, or any other issues of gender equality that may stem directly or indirectly from the education sector. However, the issue of boys’ underperformance has been a growing trend in the country, and the aim of this report is to examine the magnitude of the problem and the factors contributing to it; and to present a set of concrete policy options to address the problem. The first section of the report will briefly review global findings and trends in gender parity in education. This next section will provide a synthesis of qualitative and quantitative research on the gender dimensions of the education sector in Sri Lanka. The report will conclude with a discussion of current and future policy options for Sri Lanka as it pursues a strategy for improving gender equality in the education sector.

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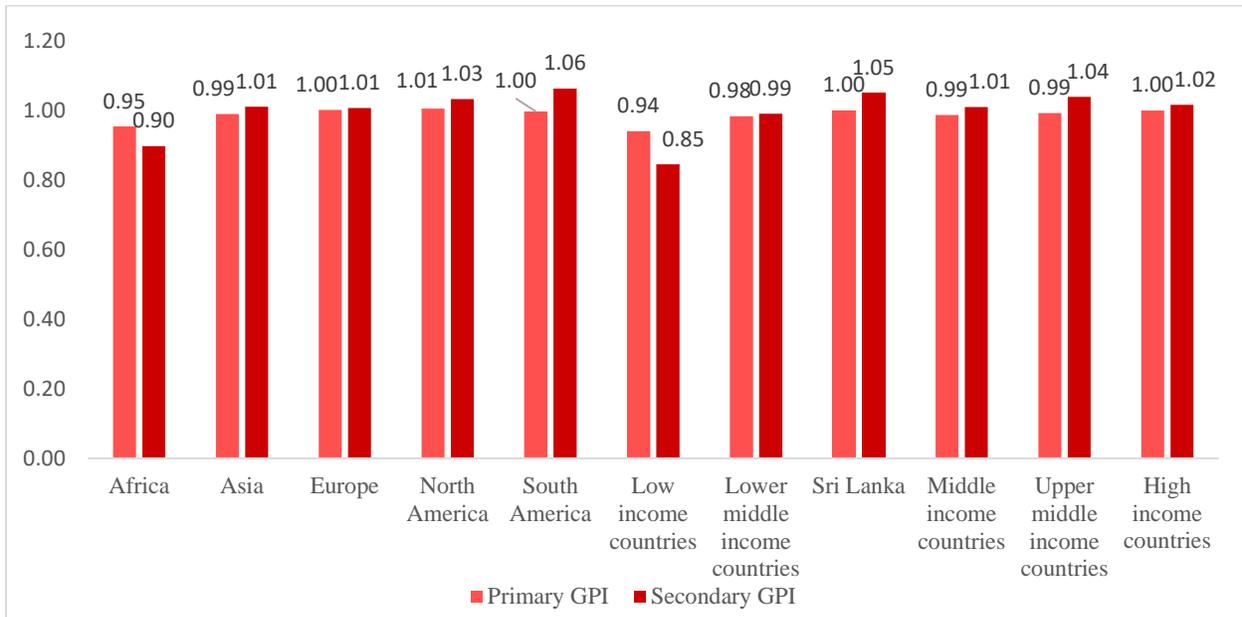
<sup>1</sup> The term “underperformance” is used in this paper to describe boys’ performance (in terms of educational access and achievement) relative to girls’ performance (in educational access and achievement) in Sri Lanka.

# Global Findings on Gender and Educational Participation and Achievement

## 2.1 The Global Picture

9. **Historical gender gaps are closing while new ones are emerging, precipitated by boys' under-participation in education.** Disparity in educational achievement has two dimensions: disparities in participation and disparities in performance (Jha and Kelleher 2006). Historically, girls, particularly in countries with overall low rates of educational participation, have faced significant disadvantages in access to education. This historical gender gap is now closing, particularly at the primary level: a recent analysis of 161 countries finds that the Gender Parity Index (GPI)<sup>2</sup> at the primary level rose from .83 in 1999 to 1.04 in 2012 (UNESCO 2012). This score not only indicates that historical gender gaps are closing in primary school, but that there is new gap emerging, caused by disadvantaged boys (UNESCO 2015). The close of the traditional gender gap has paralleled global progress toward universal primary education- which suggests that in many countries, once girls make it into school, they often outperform boys both in terms of educational progression and academic performance. In Nepal, for instance, the expansion in access to basic education has paralleled an emerging gender gap in educational participation- one that favors girls. Evidence from Cameroon and Cote'Ivoire underscore this point; even in these countries where the intake rate is lower for girls, the transition to secondary school is higher than that of their male counterparts (UNESCO 2012).

**Figure 2: Primary and Secondary GPI, by Region and Income Classification (2014)**



Source: Authors based on data from UNESCO, UIS (2014)

10. **The global picture of gender parity in participation at the secondary level is mixed.** At the secondary level, gender disparity still exists in approximately 63 percent of countries with data

<sup>2</sup> The Gender Parity Index (GPI) is a global index used to measure the relative access to education of males and female.

(UNESCO 2015). In about half of these countries, the GPI is less than .97- indicating boys are still outpacing girls in enrollment and progression. In these countries (mostly low income and concentrated in Sub-Saharan Africa and South and West Asia) much of the gender disparity may be accounted for by initial gender disparities in primary attainment. In the other half of countries (many of them middle and upper middle-income countries concentrated in South America, South East Asia and some of North Africa), the GPI is greater than 1- indicating that girls are outperforming boys in terms of enrollment at the secondary level. In South America, the GPI has stood at 1.06-indicative of an intransigent gender gap that has concerned policy makers in the region (See Figure 2).

## 2.2 Gender Parity in Education in Middle and High-Income Countries

### 1.1.1 Gender parity in access and participation.

11. **Boys’ under-participation is a concern in many middle and upper middle-income countries- particularly at the secondary level (UNESCO 2018).** Many countries that have transitioned from lower to middle or upper middle-income status in the last few decades are facing the challenge of boys’ under-participation, particularly at the secondary level. Unlike most high-income countries, many of these middle and upper middle-income countries are still working towards high levels of participation in secondary education (currently the secondary level NER is 58 percent for lower middle-income countries, 65 percent for middle-income countries, 78 percent for upper middle-income countries and 91 percent for high-income countries) (UIS 2014). In many of these countries, including Brazil, Thailand and Malaysia, the gender disparity in participation in secondary education is largely due to higher drop-out and lower transition and completion rates among boys. In high income countries, such as most Western Europe countries, which have overall higher rates of secondary enrollment, the gender gaps that disadvantaged boys in participation in lower secondary enrolment, have narrowed (from 1.02 in 2000 to 1.01 in 2014), although there remains a slight advantage for girls (UNESCO 2015, UIS 2016).

### Box 1: Boys Underperformance in Education in Malaysia

Malaysia, an upper middle-income country in the South-East Asia, has been challenged by the problem of boys’ underperformance in recent years. Like many of its South East Asian counterparts, such as Thailand and the Philippines, Malaysia is confronted with a “crisis” of underperforming boys. Interestingly, boys enroll in greater numbers in primary school. In secondary school, however, there is a precipitous decline in boys’ enrollment. In other words, a high attrition rate for boys as they enter secondary school. Boys are also falling behind in terms of achievement as well- an analysis of national assessments indicated that girls outperformed boys on all major subjects in primary and lower secondary school. The achievement gap widens even further at the upper secondary level. The results of qualitative research suggest “unsupportive school environments, inappropriate teaching styles, and societal, cultural and gender stereotypes” are some of the main causes for boys’ underperformance in Malaysia. Research pinpoints the following factors as contributing to the problem of boys’ underperformance: a) parents are generally more confident in boys’ ability to get a job without education; b) boys themselves consider school to be for girls- and traits such as hard-work and studiousness to be more feminine; and c) boys and girls have different learning styles and boys prefer a more “hand-on” and practical approach to education (one that the traditional classroom setting does not offer).

Source: Goolamaly (2010) from UNGEI (2012)

12. **In high income countries, there are gender gaps (in favor of girls) in participation at the high end of the educational spectrum.** In most high-income countries, education is compulsory

between the ages of 5 and 16. As such, the gender gap in participation in these countries is more evident when educational participation is optional (OECD 2015). For example, the first-time upper secondary graduation rate, on average, in OECD countries in 2014, was 88 percent for females, compared to only 83 percent for males (OECD 2016a). The female advantage in participation continues at the tertiary level in OECD countries where recent estimates suggest that 15 percent more women than men will complete tertiary (university) education over their lifetime (47 percent women and 31 percent men) (OECD 2014). Interestingly, the female advantage in tertiary education extends beyond high-income countries: women now account for much of the student population in tertiary education in most countries (for countries with data in 2012, 93 out of 149 favored women; while only 46 favored men) (UNESCO 2012).

**13. Although girls are more likely to participate in higher education, they are underrepresented in the Science, Technology, Engineering and Mathematics (STEM) fields.** A deeper analysis of post-secondary education trends in high income countries reveals that there are persistent gender gaps in the fields of study. Analysis from OECD countries indicates that women are underrepresented in science and engineering, and over represented in education and health and welfare (OECD 2016a). On average, in OECD countries, there are three times more male graduates in engineering than female. The science fields show a similar trend. In education, on the other hand, there are four times as many female graduates than male (OECD 2016). Health and welfare fields show a similar trend, with approximately 3.7 times as many OECD females graduating as males with degrees in these fields (OECD 2016a). Gender gaps in higher education have been noted in past studies in South Asia (Aturupane, Fielden, Mikhail, Millot and Wang 2009, Aturupane, Shojo, Fielden and Mikhail 2011b, Aturupane, Ebenezer, Fielden, Gunatilaka, Millot, Shojo and Sofizada 2014, Dundar, Millot, Riboud, Shojo, Aturupane, Goyal and Raju 2017).

### *1.1.2 Gender-wise trends in performance*

**14. International standardized achievement test results suggest that girls' average higher than boys across core subjects and tend to outperform boys on reading by a wide margin; but in mathematics boys tend to outperform girls.** The Program for International Assessment (PISA) results (for countries participating in PISA) across several years indicate that girls, on average, perform better than their male counterparts- in other words, the average achievement on the core PISA domains of mathematics, reading, and science is better for girls than for boys. In fact, an analysis of PISA data from 2000-2009 indicates that in terms of overall achievement across the core PISA domains, girls outperformed boys in 70 percent of countries (52 out of 74) (Stoet and Geary 2015). The same analysis suggests that boys, on average, have better mathematics skills than reading, and girls, on average, have better reading than math skills (Stoet and Geary 2015). For instance, PISA data from 2000 onwards indicates that girls vastly outperform boys on reading- by an average score of 38 points in OECD countries. This is the equivalent of one-year of schooling (OECD 2015). Boys, however, outperform girls on mathematics by an average of 11 score points (across OECD countries) – equivalent to around three months of schooling (OECD 2015). Interestingly, PISA results indicate very little difference in science performance between genders.

**15. Boys are also considerably more likely to be among the lowest performing students.** The results of PISA across multiple years indicate that boys are less likely to achieve basic proficiency in core PISA subjects such as science and reading (OECD 2016b; OECD 2015). PISA 2015 results

indicate that roughly 21.8 percent of boys vs. 20.7 percent of girls are among the low performers in Science. Similarly, in reading 24.4 percent of boys versus 15.5 percent of girls did not achieve the baseline level of reading proficiency (OECD 2016b). Likewise, PISA 2009 and 2012 results also showed that boys were less likely to achieve basic proficiency in these core subjects (OECD 2016b; OECD 2015). Moreover, an analysis of PISA 2012 results indicate that boys were five percentage points less likely to achieve basic proficiency in any of the three core PISA subjects (14 percent of boys' vs 9 percent of girls) (OECD 2015). Low performing students pose a greater challenge for educational systems and societies at large, because they are harder to motivate, and once they fall behind, they are more likely to engage in socially disruptive and unproductive behavior (OECD 2015).

**16. Still, high performing boys outperform high-performing girls, particularly in the Science, Technology, Engineering and Mathematics (STEM) fields.** PISA 2015, 2012 and 2009 indicate that girls are less likely to be top performers in Mathematics, Science and problem-solving (OECD 2015; OECD 2016b). In no PISA country do high-performing girls outperform their male counterparts in Mathematics. The gender gap in Mathematics is also wider among top performers than among average performers: among the top 10 percent of students the gender gap (favoring boys) is approximately 20 points (while the average gender gap in Mathematics is 11 points). However, in some countries such as Singapore, Hong-Kong China, and Shanghai-China, top-performing girls do perform on par with their male counterparts, and better than the rest of boys in most other countries (OECD 2015). PISA 2012 data for science indicates that among the top 10 percent of students, boys had an advantage of 11 points over girls. The only exceptions to this are Jordan and Qatar, where high-achieving girls have better scores in science than high-achieving boys. Similarly, PISA 2015 data shows that 8.9 percent of boys' vs 6.5 percent of girls achieved the highest levels of proficiency in Science (level 5 or above) (OECD 2016b). This gender gap in achievement in STEM fields is also paralleled in the subject choices girls make in more advanced levels of the educational system, as well as their career choices. In most high-income countries, girls are significantly under-represented in STEM fields – in 2012, only 14 percent of women entering university choosing science-related fields; as opposed to 39 percent of men in the same year (OECD 2015).

**17. Girls have an advantage in school-based testing and this advantage extends to most subjects (including language, math, and science).** A meta-analysis of data from over 300 studies of school achievement (based on school-based tests) around the world (including from United States, Norway, Canada, Turkey, Germany, Taiwan, Malaysia, Israel, New Zealand or Australia, Sweden, Slovakia, United Kingdom, various countries in Africa and Finland) indicate that girls have a clear advantage in school achievement (Voyer and Voyer 2014). The size of the female advantage is smallest in Mathematics and largest in Language, but nevertheless, this presents a slightly different picture than the one that emerges from standardized assessments such as the Program for International Assessment (PISA). In Australia, for instance, the aggregate results at Grade 12 level show that in the New South Wales Higher School Certificate, for subjects studied by more than 100 students, the girls' average mark was higher than the boys' in 36 of the 40 subjects, by up to 11 per cent (Jha and Kelleher 2006). Data from England tells a similar story with girls performing better in Mathematics and English at Key Stage 1 (Grade 1 and 2) and Key Stage 3 (Grades 7-9) (Younger and Warrington 2005). In the case of England, it is interesting to note that the gender differential in Mathematics favored boys in 1974, but by 2003 had been

reversed in favor of girls. However, the aforementioned meta-analysis also suggests that “the boy crisis,” with boys lagging behind girls in school achievement, is not a new phenomenon, because girls’ grades have been consistently higher than boys’ across several decades (Voyer and Voyer 2014).

### **Box 2: The Dilemma of Boys Under-Achievement in Australia**

In Australia, a high-income country in the Pacific, the underperformance of boys has been the subject of intense debate in recent years. A commonwealth report from 2006 highlights the Australian dilemma well. The report pointed to a string of evidence that girls were outperforming boys in school-achievement across the country. For instance, in 1999, in Grade 12, girls’ grades were approximately 11 percent higher than boys, in 36 out of 40 subjects in South Wales. Likewise, in 1998 girls formed the majority among top performers in 36 out of 45 subjects in Grade 12, in Queensland. Similarly, in 1998, in South Australia, girls formed the majority among top performers in Grade 12 in 27 out of 34 subjects. The same report pointed out that the results of PISA 2000 and 2003 presents a different picture: indicating no significant differences in Mathematics and Science for Australian students. Like other countries, however, twice as many boys as girls achieved the highest proficiency level in mathematics (on PISA 2000 and 2003), and girls performed better than boys in terms of reading literacy. This discrepancy between achievement in school vs. achievement on international assessments underscores out the complexity of the issue of boys’ underperformance.

To address the challenge of underperforming boys, the Government of Australia launched a series of program between 2003 and 2007. The main program, known as the “Success for Boys” initiative provided teachers with a conceptual framework for approaching boys’ education; and included readings, workshop activities and other resources to improve boys’ engagement in classroom activities. It also provided schools with strategies for planning and classroom based action research program. The findings from a post- program evaluation in 2008 suggest that the program’s main successes were: a) raising awareness of boys’ needs and the issues surrounding underperforming boys and; b) increasing student engagement (as measured by teacher perceptions). One of the main challenges for the program was sustainability. Administrators noted that without a dedicated program being implemented in the school, it was highly unlikely that teachers and staff would apply the principles of the conceptual framework in their teaching and engagement strategies. Moreover, there is no evidence that the program had an impact on boys’ performance in school overall; and so while such programs may be effective, it may be difficult to ascertain their impact on boys’ educational performance in the short run.

Source: Department of Education, Employment and Workforce Relations (GoA) 2008; Jha and Kelleher (2006)

**18. Evidence of a correspondence between gender disparity in education and gender disparity on other measures of social or legal equality is inconclusive, at best.** Various studies have explored the question of whether there is a correlation between gender differences in academic achievement and country’s gender equality policies. A series of studies (based on PISA 2003 Mathematics data) suggested that higher levels of gender equality were associated with smaller gender differences in math achievement (Guiso 2008; Else-Quest, Hyde and Linn 2010). This conclusion was called into question with a recent meta-analysis of PISA data from 2000-2012, which found little correlation between gender differences in educational achievement and a country’s score on various measures of gender equality, such as the Global Gender Gap Index (GGI) or the Gender Empowerment Measure (GEM) (Stoet and Geary 2015). Rather, the findings of this analysis suggest that there are many countries, including highly developed countries with progressive gender equality policies, in which boys are falling behind girls in overall achievement.

The authors of this analysis underscore the absence of any clear connection between a country's level of gender equality and gender disparity in educational achievement by highlighting two sets of countries: The first, a set of Nordic countries, including Iceland, Finland, and Norway, which have some of the most progressive gender equality policies but also have some of the largest achievement gaps (in favor of girls) of any of their OECD counterparts; the second, a set of Muslim countries such as Jordan, Qatar and the UAE, which score poorly on measures of gender equality but in which girls still outperform boys, on average (Stoet and Geery 2015).

### **2.3 Factors Contributing to Boys Underperformance: What the Research Says**

19. **Broadly speaking, the literature points to three types of variables (individual, classroom, and societal level) that may help to explain the growing phenomenon of boys' underperformance.** At the individual level, gender differences in the development of non-cognitive skills are often cited as possible contributing factor. Non-cognitive skills usually refer to skills that are not measured by IQ or achievement tests, which facilitate success in the classroom and beyond. They range from traits such as attentiveness, task persistence, resilience, eagerness to learn and self-regulation to learning independence, flexibility and organizational skills. There is mounting evidence to suggest that certain non-cognitive skills may contribute to gender disparities in educational achievement, particularly in the context of school achievement (DiPrete and Jennings 2009, Cornwell, Mustard and Parys, 2013; Weis, Heikamp, and Trommsdorff 2013 and; Yang 2014). One study that focused on the discrepancy between test scores and teacher assessments found that although girls and boys who performed equally well on reading, math and science tests, boys may still be graded less favorably by teachers- but the effect disappears when non-cognitive skills<sup>3</sup> are accounted for (Cornwell, Mustard and Parys, 2013). Moreover, boys who exhibited levels of non-cognitive skills development, similar to their female counterparts, were graded equally well or better by teachers (Cornwell, Mustard and Parys, 2013). There is also evidence that boys and girls develop and exhibit non-cognitive skills and social development at a slightly different pace in early childhood; with girls exhibiting non-cognitive (social) skills at a younger age than boys. Some researchers argue that since girls exhibit more developed non-cognitive skills<sup>4</sup> in preschool and are more "ready for school", they have a head start because they are more confident in school settings (Gurian and Stevens 2004; Matthews, Ponitz, Cameron and Morrison 2009). Others have argued that teachers may inadvertently reward girls' social skills at the pre-school level, which contributes to gender disparity in performance early in the school cycle (Cornwell, Mustard and Parys, 2013).

20. **The other individual-level factor may be broadly categorized as student's attitude towards school; which includes the value they place on education, the amount of time spent on school work, as well as their educational expectations.** Educational expectations, or a student's goals and aspirations for the future, have been cited as key gender differential in academic performance. For example, an analysis of "Monitoring the Future" data from the U.S. from 1980's -2000's showed that educational expectations are the most important factor accounting for gender differentials in academic achievement (Fortin, Oreopoulos, and Phipps 2015). Data from OECD countries shows key differences in girls' and boy's attitude towards

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<sup>3</sup> The non-cognitive skills referenced here are interpersonal skills, a child's engagement in the classroom, how many times a child lost control of themselves (as assessed by a teacher's report on classroom behavior).

<sup>4</sup> Non-cognitive skills referenced here include self-regulation and

school and extracurricular activities, namely that: i) boys are more likely than girls to have negative attitudes towards school; ii) boys are likely to be less ambitious than girls; iii) boys are more likely than girls to arrive late for school; iv) boys are less likely than girls to engage in school-related work out of intrinsic motivation; v) boys use computers differently than girls outside school; i.e. play video -games, download music; and that; vi) boys are likely to spend less time on homework than girls (OECD 2015). Ultimately, these differences are likely to play a role in academic achievement. In addition, research also suggests that boys are much more likely to be susceptible to negative peer-group pressures, which undermine school and educational pursuits – and which may result in academic underperformance (Freeman 2004; DFES 2007; OECD 2015).

**21. Classroom-level variables, such as curriculum and teaching/learning styles, an absence of male teachers, and teacher expectations etc. have also been cited as factors in boys' underperformance.** Teacher gender and teacher expectations have been suggested as other potential factors in the educational gender gap. OECD data suggests that gender differences among teaching staff may also have an impact on how boys perform. Some research has suggested that teacher bias and gender stereotyping has a particularly negative effect on boys and ultimately contributes to their underachievement (OECD 2015; UNESCO 2015). Other research suggests that a teacher's gender will affect the way children learn and ultimately perform in school (Cornwell, Mustard and Parys, 2013). Also, some research indicates that when a class is headed by a woman, boys are more likely to be perceived as “disruptive” and when a class is headed by a man, girls are perceived as being less eager to learn (Dee 2006). It is also important to consider other evidence, which suggests that teacher gender is not such an important factor in the gender gap in performance. A review of research from several countries concluded that it is not the gender of the teacher that is important, but rather gender sensitivity and other competencies that would allow them to engage with their students- both boys and girls meaningfully (Page and Jha 2009 from UNGEI 2015). Gender differences in learning styles has also been set forth as another explanation for boys' underperformance. Research does not support the claim of any clear gender differences in learning styles-but as previously discussed, there is evidence that the pace of neurological development is slightly different in boys and girls, and this may account for perceived differences in learning styles, particularly in young children.

**22. Finally, societal and/or cultural influences on education may also contribute to gender differences in academic performance- particularly in certain cultural contexts.** Research from various societies indicates that cultural practices and gender-based stereotypes may have an impact on boys' attitudes towards school and their overall educational experience. There has been much speculation that boys perceive and associate the traditional education system as feminine. Other researchers have speculated that concepts of masculinity in certain cultural contexts conflict with the image of the traditional school environment (Younger and Warrington 2006). This, in turn, clashes with their desire to conform to culturally constructed notions of masculinity (Jha and Kelleher 2006). Accordingly, those characteristics that are associated with high performance in the school environment- hard work, diligence, etc. are perceived as feminine. Research in Thailand, Malaysia and the Philippines shows that boys in these countries are raised with much more freedom than girls (UNGEI 2006). Similarly, family expectations and involvement is often markedly different for boys and girls. One researcher from Mongolia argues that the socialization of boys into a “dominant stereotyped form of masculinity” (in Mongolia) led to increased need for cash for boys in Mongolia; as a result, boys were more likely to skip school to pursue employment

opportunities (Tumursukh 2011 from UNGEI 2012). Participants from a focus group in Malaysia indicated that “in the Asian context, parents are more lenient with boys. Due to that, girls tend to give more attention to their studies while the boys are running wild” (Goolamally and Ahmad’s (2010) from UNGEI 2012).

## **Gender Dimensions of Access to and Achievement in Education in Sri Lanka**

### **3.1 Snapshot of the Current Education System in Sri Lanka**

23. **Sri Lanka has a well-developed public education system, which consists of 10,000 primary and secondary schools, serving approximately 4 million students.** Basic Education is free and compulsory until grade 11. Of the Government schools, about 4 percent are national schools, managed and financed by the Ministry of Education; the remaining 96 percent are managed and financed by provincial councils (Aturupane, Sankar, Saeki, Shojo, Glewwe and Deolalikar 2011a; Aturupane, Savchenko, Shojo, and Larsen 2014). In the public education system, there are four types of schools: Type 1AB (9 percent of the total), Type 1C (19 percent), Type 2 (37 percent), and Type 3 (35 percent). Type 1AB schools have classes for grades 1–13 or 6–13; they offer all three curriculum streams for the GCE A-level courses (arts, commerce and science). Type 1C schools, which span grades 1-13 or 6-13, offer only GCE A-level courses in the arts and commerce streams. Type 2 schools offer classes only up to grade 11 in preparation for GCE O-level examinations and Type 3 has classes only up to grades 5 or 8. In addition to public schools, there are also private and international schools, which cater to less than 5 percent of total school enrollment. Lastly, there are state-funded *pirivena* (temple) schools, with about 66,000 students enrolled in them. Sri Lanka’s school system can also be categorized by medium of instruction. 63.5 percent of schools are Sinhala only. 29.5 percent of schools are Tamil only. 0.6 percent of schools are Sinhala and Tamil mixed, and the remaining 6.5 percent are English with either Tamil or Sinhala or both mixed in (MoE 2013). Pre-primary education is primarily serviced by the private sector (Bhatta, Ebenezer and Nyugen 2014). Sri Lanka also has a network of public universities and higher education institutions which account for approximately 80 percent of university enrollment (Aturupane 2018).

24. **A long history of free and compulsory basic education has resulted in consistently high rates of school enrollment for several decades.** The net enrollment rate (NER) in primary education is 99 percent and 84 percent in lower secondary education. In higher secondary education, the NER is 70 percent, which is still relatively high for middle-income countries. On average, Sri Lankan students attend school for about 10 years, compared to 6 years elsewhere in South Asia. This success in coverage has been the result of a long history of public investment in, and provision of, education; not only is education free, but there are free textbooks and uniforms, scholarships, a good network of schools and adequate number of teachers in most subjects (Aturupane 2009b; Aturupane 2009c). Sri Lankan households have also had high willingness to pay for education over a long period of time (Aturupane 1999b).

25. **Although basic education is free and compulsory; access to education may not be completely equitable.** Recent research suggests strong correlation between school type (i.e. Type 1AB, 1C, Type 2 and Type 3) and educational achievement (Little, Indika, and Rolleston 2011;

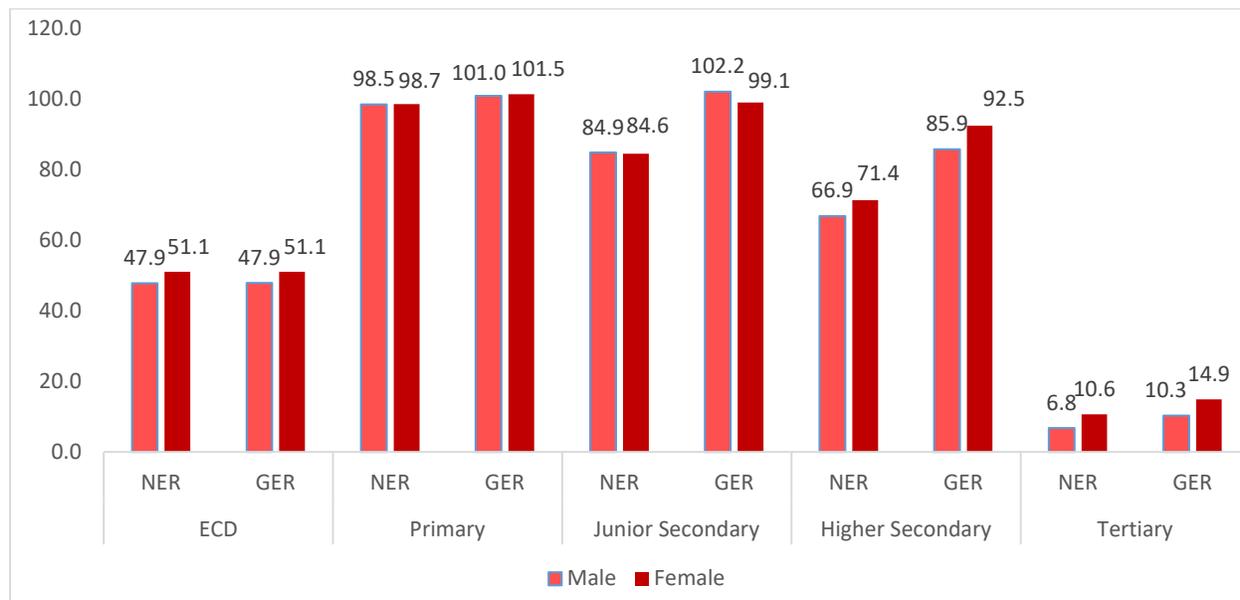
Dundar, Millot, Riboud, Shojo, Aturupane, Goyal, and Raju 2017). This, in turn, suggests that there may be some inequity in access to high quality education based on school locations. Type 1AB schools, which are the only ones offering the science stream are mainly located in cities and towns, while Type 1C and Type 2 are mainly located in semi-urban and rural areas. Accordingly, children from rural or semi-urban areas have much less opportunities to pursue GCE A-level education in the sciences. Although school type may not wholly explain the situation; it is likely to have some contribution to the differences in achievement (Dundar, Millot, Riboud, Shojo, Aturupane, Goyal, and Raju 2017).

26. **Several indicators of quality in Sri Lanka’s basic education system are satisfactory, but there is a notable gender imbalance in the teaching cadre.** Sri Lanka has a well-developed and widely accessible network of public schools. Approximately 39.9 percent of its teaching staff have graduate training, 57.1 percent are trained, 1.1 percent are trainee teachers, and 1.9 percent are untrained teachers. The overall student-teacher ratio is 18:1, which is in accordance with internationally accepted standards. However, there is a significant gender imbalance in the teaching force: of the total number of 226,983 teachers, approximately 28 percent (63,123) are male and 72 percent (163,860) are female (MoE, 2013). This is not unlike many other middle and high income countries; in OECD countries for example, approximately 82 percent of teachers in primary schools and 67% of lower secondary teachers, are women (OECD 2015).

### 3.2 Gender and Access to Education in Sri Lanka

#### 3.2.1. The National Picture

**Figure 3: Net and Gross Enrollment in Pre-Primary through Higher Secondary Education (2012//2013)**



Source: Authors based on HIES 2012/2013 data

**27. Despite slight gender disparities in access to pre-primary education, there are virtually no gender disparities in enrollment in primary or lower secondary education. (See Figure 3).** Overall, enrollment in pre-primary education is low, with a Net Enrollment Ratio (NER) and Gross Enrollment Ratio (GER) in pre-primary education of 49.8 percent and 49.9 percent respectively (HIES, 2012/2013). Low access has historically favored boys in many countries, but in this case, the gender disparity is favor of girls; with an NER of 51.1 percent and 47.9 percent for females and males respectively. Nevertheless, this early disparity dissipates at the primary level, where the NER and GER are 98.5 and 101.1 percent respectively, without any significant gender disparity. There is also virtually no gender disparity at the Lower Secondary level, with male and female NER at 84.9 and 84.6 percent respectively (.003 percent higher for males).

**28. Gender disparities (favoring girls) in educational participation emerge and widen significantly at the Higher Secondary level and continue into the Tertiary level.** Any advantage boys may have at the lower secondary level (Grades 6-9) is reversed at the higher secondary (Grades 10-13) level, where gender disparities become pronounced, in favor of girls. As Figure 3 shows, the higher secondary NER is 66.9 percent for males, which is 4.4 percent lower than the NER for females (71.4 percent). The disparity in the GER is even greater, with female GER approximately 7.7 percent higher than male GER. This trend extends into tertiary enrollment rates: where the NER is 6.8 and 10.6 percent for males and females respectively- clearly a strong advantage for females at the tertiary level. As the discussion in Section, 2.2 indicates, these trends are similar to those seen in many other middle and high-income countries.

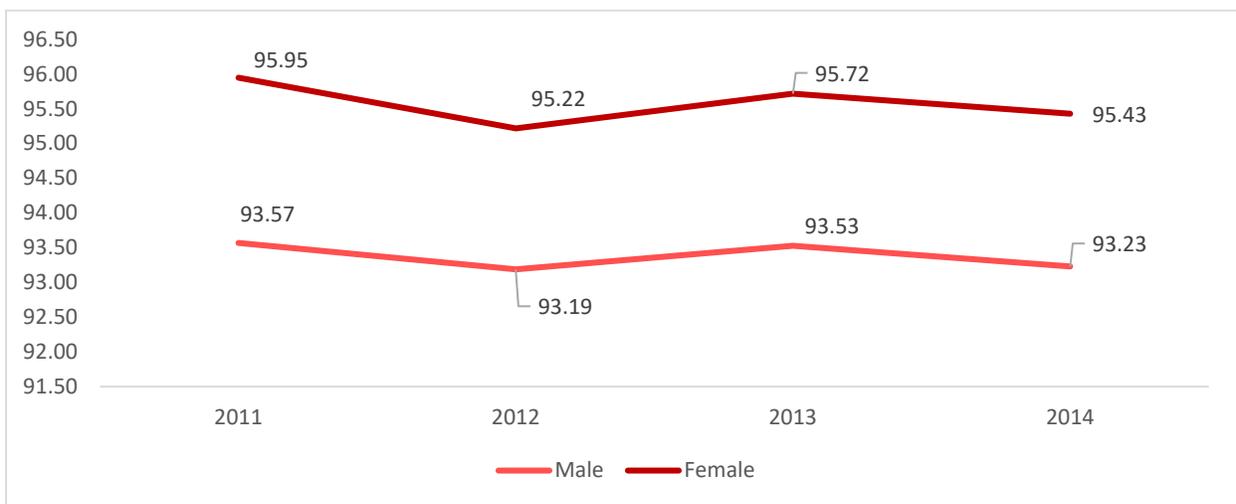
**29. Like most other middle and high-income countries, boys are less likely to transition and more likely to drop out than girls, particularly at higher levels of the education system.** Transition, repetition and drop-out rates are proxy indicators of the internal efficiency of an education system. Generally, these rates are low in Sri Lanka; indicating that the internal efficiency of the education system in Sri Lanka is high, particularly for a developing country. However, there is still a gender gap, with girls outperforming boys. As Figure 4 indicates, from 2011 to 2014, there has been a gender gap favoring girls for Grades 9-10. Overall, the transition rates for females went down slightly from 96.69 percent in 2011 to 96.5 percent in 2014 whereas the transition rates for males went up slightly from 94.68 percent in 2011 to 94.93 percent in 2014. As a result, the gender gap in transition rates in grades 9-10 decreased slightly from 2.01 percent in 2011, to 1.59 percent in 2014. As Figure 5 indicates, the transition rates for males and females from Grade 10-11 also followed a similar pattern, but male transition rates declined a little less and so again, the gender gap, in favor of girls, decreased from 2.38 percent in 2011 to 2.20 percent in 2014.

**Figure 4: Transition rates at the National Level for Grade 9-10 from 2011-2014, by Gender**



Source: Authors based on MoE data

**Figure 5: National Level Transition rates from Grade 10-11 from 2011-2014, by Gender**



Source: Authors based on MoE data

30. **Likewise, girls’ survival rates are also consistently higher than boys, both at the lower and higher secondary level.** An analysis of national survival rates between 2011 and 2014 indicate that girls have consistently outperformed boys. As with enrollment rates, there is a negligible difference between boys and girls in the survival rate to Grade 5, but a gender gap becomes apparent at higher levels of the educational system (See Figure 6). While there is little gender disparity in enrollment rates, there is widening gender gap in the survival to grade 9: In 2011, the survival rate to grade 9 was 91.5 percent for males and 95 percent for females. In 2014, the survival rate was 91 percent for males and 96 percent for females- indicating that the gender gap has widened slightly from 3.38 percent in 2011 to 4.08 percent in 2014. The gender gap widens even further when looking at survival rates to Grade 11. In 2011, the survival rate was 80.1 percent for males and 87 percent for females (a gap of 6.88 percent in favor of girls). In 2014, gap narrowed slightly with a survival rate of 82 percent for boys and 88.3 percent for girls (a gap of 6.21 percent).

**Figure 6: Difference in Survival Rates between Males and Females for Grade 1-5, 1-9 and 1-11 from 2011-2014**



Source: Authors based on MoE data

### ***3.2.2 Gender disparities in educational participation at the sub-national level***

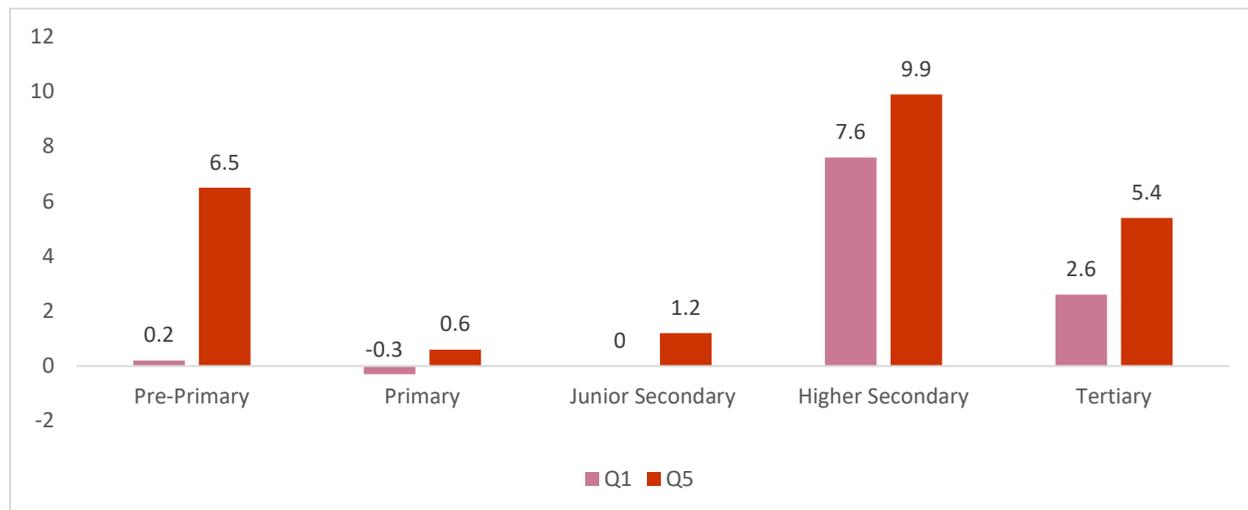
31. **Apart from the Northern Province, there are no clear trends in gender disparity in access to education at the provincial level.** An analysis of enrollment, transition, and survival rates by provinces does not reveal any consistent gender disparity in educational participation at the provincial level- except for the Northern Province (See Annex 2). As Figures 1-7 in Annex 2 indicates, the Northern Province stands out with consistently wide gender disparities (in favor of girls) in enrollment and progression rates at the lower level. The Eastern Province also displays this gender gap across several indicators of access. While this regional disparity cannot be discounted, it is important to note that the trends here may be impacted by the other factors; notably, the long running conflict in these two provinces, which may have contributed to lower transition and survival rates for boys.

### ***3.2.3 Gender disparities in educational participation among different socio-economic groups***

32. **There is a clear trend in gender disparity among different socio-economic groups- with the gender gap widest among the wealthiest segment of the population at every level of the education system.** Females in the wealthiest quintile have a greater advantage over their male counterparts, than females in the poorest quintile. Enrollment data, presented in figure 8, 9 and 10 in Annex 2 indicates that at every level, from pre-primary through tertiary education, the gender gap, in favor of females, is widest in the wealthiest quintile of the population. As Figure 7 shows, the gender gaps between the poorest and wealthiest quintiles are most pronounced at the pre-primary level, where there is virtually no gender disparity in enrollment in the poorest quintile; but in the wealthiest quintile, female enrollment is 6.5 percent greater than males. The gender gap is also significant at the higher secondary level, where it is 7.6 percent in Q1, as compared to nearly 10 percent in Q5. At the tertiary level, the gender gap in wealthiest quintile is more than double that of the gender gap in the poorest quintile (See Figure 7). It is also interesting that at the primary

level, the gender gap in the poorest quintile is in favor of boys by 0.3 percent- while it shifts in favor of girls in the wealthiest quintile.

**Figure 7: Gender disparities in net enrollment in the wealthiest and poorest wealth quintiles (2012/2013)**



Source: Authors based on HIES 2012/2013 data

Note: These disparities are in favor of girls; except in Q1 at the Primary level, where the gap is in favor of boys.

### 3.3 Gender and Educational Achievement in Sri Lanka

**33. Disparities in educational achievement begin at the primary level; with boys underperforming on all national measures of educational achievement.** The Ministry of Education, GoSL conducts an annual examination in the last year of primary school known as the Grade 5 Scholarship examination. The examination is used to determine eligibility for entrance into highly competitive “national schools”- i.e. those scoring above the “cut-off” score are the top performers. The results of Grade 5 exam over a four-year period (2011-2014) indicate that the percentage of high performers (scoring over 100) has increased among both females and males, but females have consistently outperformed males; with the gender gap widening from 1.2 percent in 2011 to 2.4 percent in 2014 (See Table 2 and 3). In 2014, a larger proportion of females than males were average performers (64 percent of females as opposed to 54 percent of males) but notably, a larger proportion of males than females were low performers- which is perhaps more concerning, because it highlights that boys are underperforming.

**34. The results of a standardized national assessment -National Education Research and Evaluation Center (NEREC) Grade 4 assessment also confirm this trend.** The NEREC Grade 4 evaluation is comprised of two parts: First Language (Sinhala, Tamil), Second Language (English) and Mathematics. On the 2013 NEREC Grade 4 first language, females outperform males significantly in all three first-language assessments. As Figure 1, 2, and Table 3 in Annex 3 indicates, females on average performed, approximately 8 percent better than males in Sinhala, 11 percent better than males in Tamil, and 8 percent better than males in English. However, as Table 1 in Annex 3 indicates, on First-language Sinhala, there are more high achievers than low achievers among both males and females, and more high achievers among females. With Tamil, males form

a greater proportion of low achievers (See Table 2 in Annex 3). On English, a larger proportion of both groups are low achievers, but still, females form the larger share of high achievers (See Table 4 in Annex 3). On Mathematics, females perform better than males (62.45 percent to males' 58.34 percent) (See Table 5 in Annex 3). Although the achievement gap is not as wide as the first-language results, there are a larger percentage of low achievers among males as opposed to females (27.7 percent of females scoring below 50 percent vs. 36.13 percent of males) (See Table 6 in Annex 3).

**Table 2: Percentage of “High Performers” on Grade 5 scholarship performance between 2011 and 2014 by Gender**

	2011	2012	2013	2014
<b>Female</b>	11.0%	11.7%	10.6%	16.8%
<b>Male</b>	9.8%	9.8%	9.7%	14.4%

Source: Ministry of Education Statistics

**Table 3: Breakdown of 2014 Grade 5 Scholarship Exam Performance, by Gender**

	Highest	Average Performers	Low Performers
<b>Female</b>	16.8%	63%	20.2%
<b>Male</b>	14.4%	54%	31.6%

Source: Ministry of Education Statistics

35. **Females also outperform males at the lower secondary and higher secondary level.** As Table 4, indicates there was only small difference in the number of male and female students who sat for the G.C.E. O-Level (with that gap narrowing between 2011 and 2014). There was, however, a consistent gender gap in performance. In 2011, 65.69 percent of females compared to only 50.29 percent of males qualified for the G.C.E A-level examinations; a gap of almost 16 percentage points. Although the pass rates rose for both groups by 2014, with 57.47 percent of males and 75.5 percent of females passing, they increased more sharply for females than males, which increased the gender gap to nearly 18 percentage points. Province-wise analysis indicates that the gender gap is generally between 17-22 percentage points across provinces, except for the Northern and Eastern provinces- where the gender gaps are smaller (10-11 percentage points) (See Annex 3). The results of the 2013 NEREC Grade 8 First Language, Mathematics, and Science Assessments also reveal a similar trend of underperforming males. As Tables 7-10 in Annex 3 indicates, females have outperformed males in all three subjects. While the gender gap is smallest in Mathematics, males form a higher percentage of males of low performers. In Science, the average gender gap is small but there is a higher percentage of males among the low performers and a lower percentage of males among the higher performers.

**Table 4: Summary of GCE O Level Performance from 2011 to 2014, by Gender**

	2011		2012		2013		2014	
	No. Sat	% qualified	No. Sat	% qualified	No. Sat	% qualified	No. Sat	qualified %
Male	145,607	50.29	145,287	53	143,184	55.29	137,762	57.47
Female	149,933	65.69	149,051	71.55	143,856	73.09	139,652	75.5

Source: Ministry of Education Statistics

Note: % qualified refers to those qualifying for the G.C.E. A-Level examinations

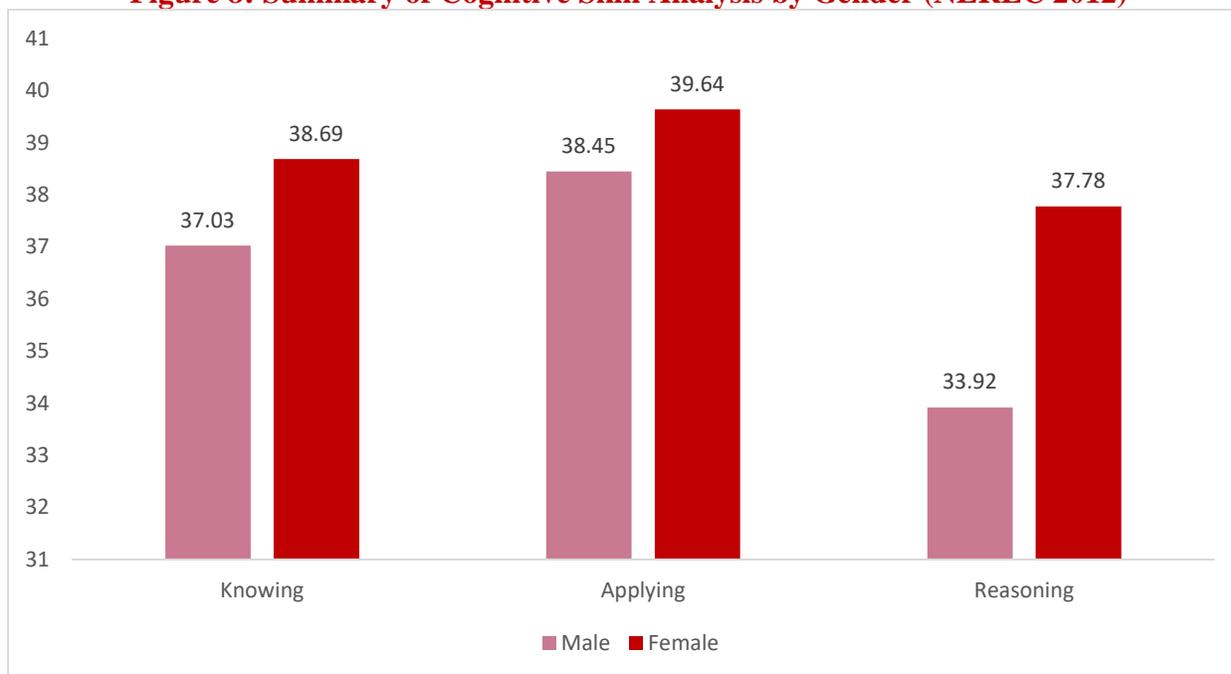
36. **Preliminary data suggests that females may outperform males on international assessments at the primary level, but not at the secondary level.** Although Sri Lanka has not officially participated in the Trends in International Mathematics and Science Study (TIMSS) assessment, in 2013, a component of this assessment was incorporated into a standardized national assessment (the NEREC grade 4 and grade 8 assessments). The TIMSS Grade 4 results are low overall for Sri Lanka (The national mean score was 31.55)-the mean score shows an advantage for females (32.97 for females as opposed to 30.22 for males) (See Table 11 in Annex 3). Moreover, as Figure 8 indicates, on the skills component of the Grade 4 assessment, females perform better than their male counterparts on all three skill types: knowing, applying and reasoning. The results of the TIMSS component of the Grade 8 assessment are different: although the TIMSS Grade 8 assessment were low overall, but there is no significant gender disparity in achievement (a mean score of 25.31 and 24.62 for females and males respectively) (See Table 5). Interestingly, this shows that there may be a slightly different trend in Sri Lanka, as compared with countries such as Australia (as discussed in Box 2), where there is a clear discrepancy between achievement on school based testing and achievement on standardized international assessments.

**Table 5: Summary of TIMSS Grade 8 Achievement, by Gender**

Student Gender	Mean	Standard Deviation	Standard Error of Mean	Skewness	Percentile (p25)	Median (p50)	Percentile (p75)
Female	25.311	13.875	0.74	1.204	15.714	21.429	32.857
Male	24.624	14.714	0.082	1.269	14.286	20.000	31.429
All Island	24.984	14.285	0.055	1.234	14.286	21.429	32.857

Source: NEREC (2013)

**Figure 8: Summary of Cognitive Skill Analysis by Gender (NEREC 2012)**



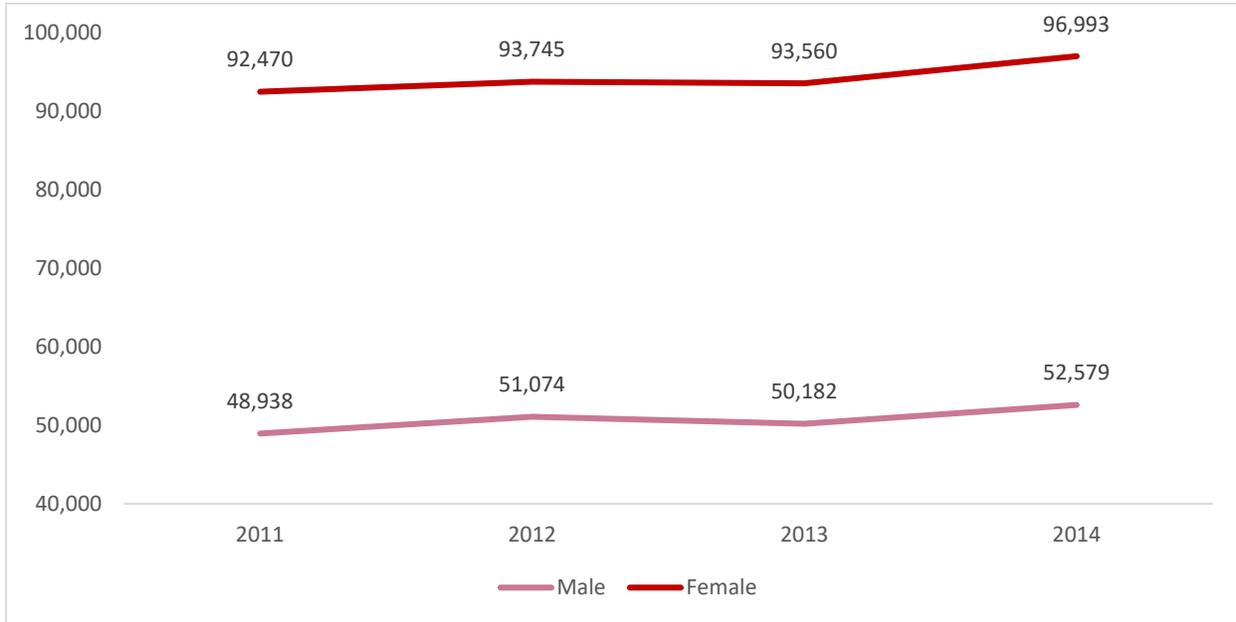
Source: NEREC (2012)

37. **Females continue to outperform boys at the higher secondary level.** Approximately 39 percent more females than males sat for the A-level exams (143,604 females compared to 103,772 males)-this of course may be partly because they qualified for the A-level exams at a higher rate than males, as discussed above. Here again, females significantly outperformed males: with 66.5 percent of the females compared to 50.7 percent of the males qualifying for admission to universities in 2014. GCE A-level data between 2011-2014 shows that over time, there has been rise in enrollment for both males and females-as well as a narrowing of the gender gap in enrollment and pass rates between these years (as shown in Figure 9 and Figure 10). Nevertheless, the disparities remain significant. With a 17.5 percent difference (in favor of females) in pass rates in 2011 and a 16.8 percent difference in pass rates in 2014.

38. **Gender disparities at this level also vary by subject stream; with males choosing the Physical Sciences in much greater numbers than females.** As Table 12 in Annex 3 indicates, there is also a significant difference in enrollment and pass rates subject wise. In the Physical Sciences, significantly more males than females sat for the exam from 2011-2014. Nevertheless, this enrollment gap has been narrowing since 2011, with 60 percent more males sitting in 2011, as opposed to 56 percent more in 2014. Of those who sat, the pass rates are slightly higher for females, with 53 percent passing and 46 percent of males passing. Moreover, although pass rates for both group have increased over time, female pass rates are also increasing faster than males, with the gap in pass rates widening from 4.6 percent in 2011 to 6.8 percent in 2014. In the Bio-Sciences, twice as many females as males sat for the exam in 2011- 2014 and females have passed at higher rates than males (See Table 13 in Annex 3). In Commerce, like the Physical Sciences, more males sat for the exam in 2011 (approximately 12 percent more) but by 2014, an equal number of males and females sat for the exam. Females, have significantly outperformed males in pass rates over all (22 percent in 2011 and 17 percent in 2014). However, unlike other subjects, the pass rates have

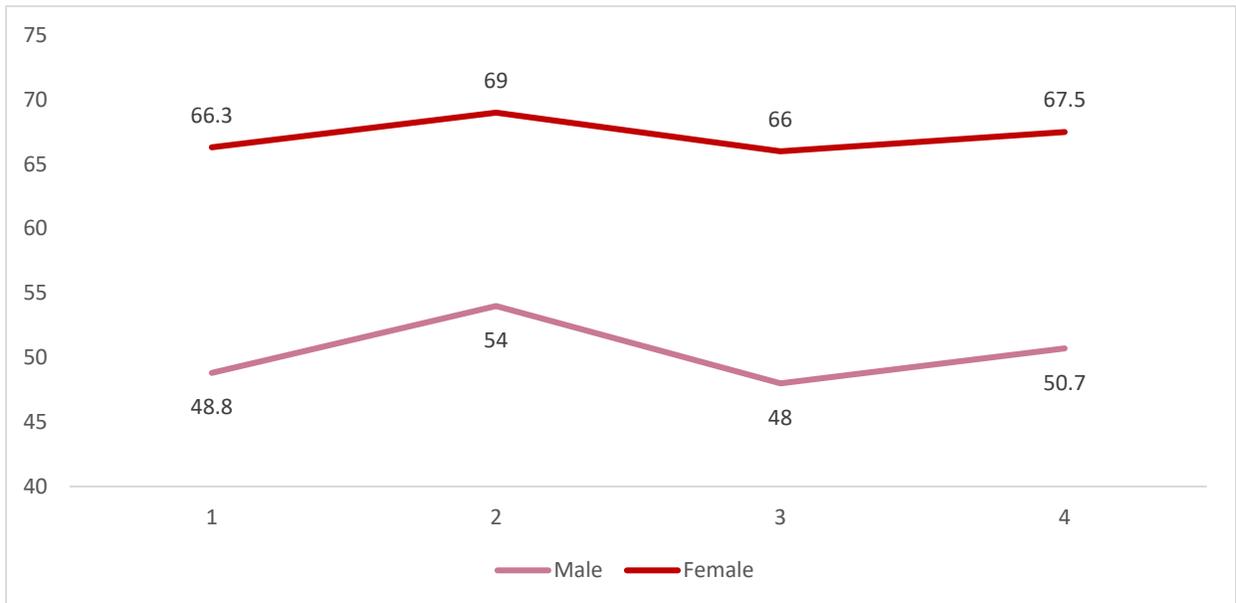
increased more for males (approximately 10 percent for males and 6 percent for females) from 2011-2014. In the Arts, like the BioSciences, females outnumber males inordinately, in terms of the number who sat for the exam and those who passed.

**Figure 9: Enrollment in G.C.E A-Level Examinations, by Gender from 2011-2014**



Source: Authors, based on Ministry of Education Statistics

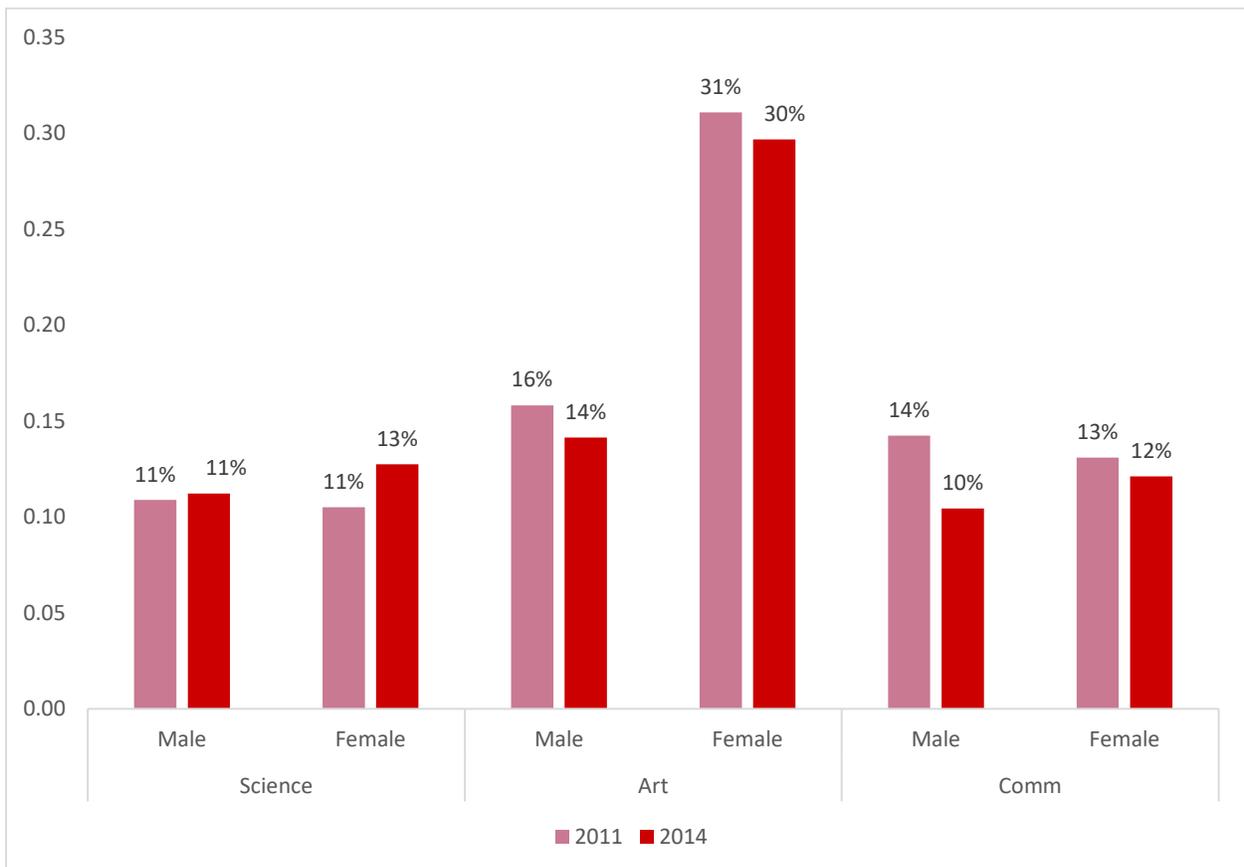
**Figure 10: Pass Rates on G.C.E A-Level Examinations, by Gender, from 2011-2014**



Source: Authors, based on Ministry of Education Statistics

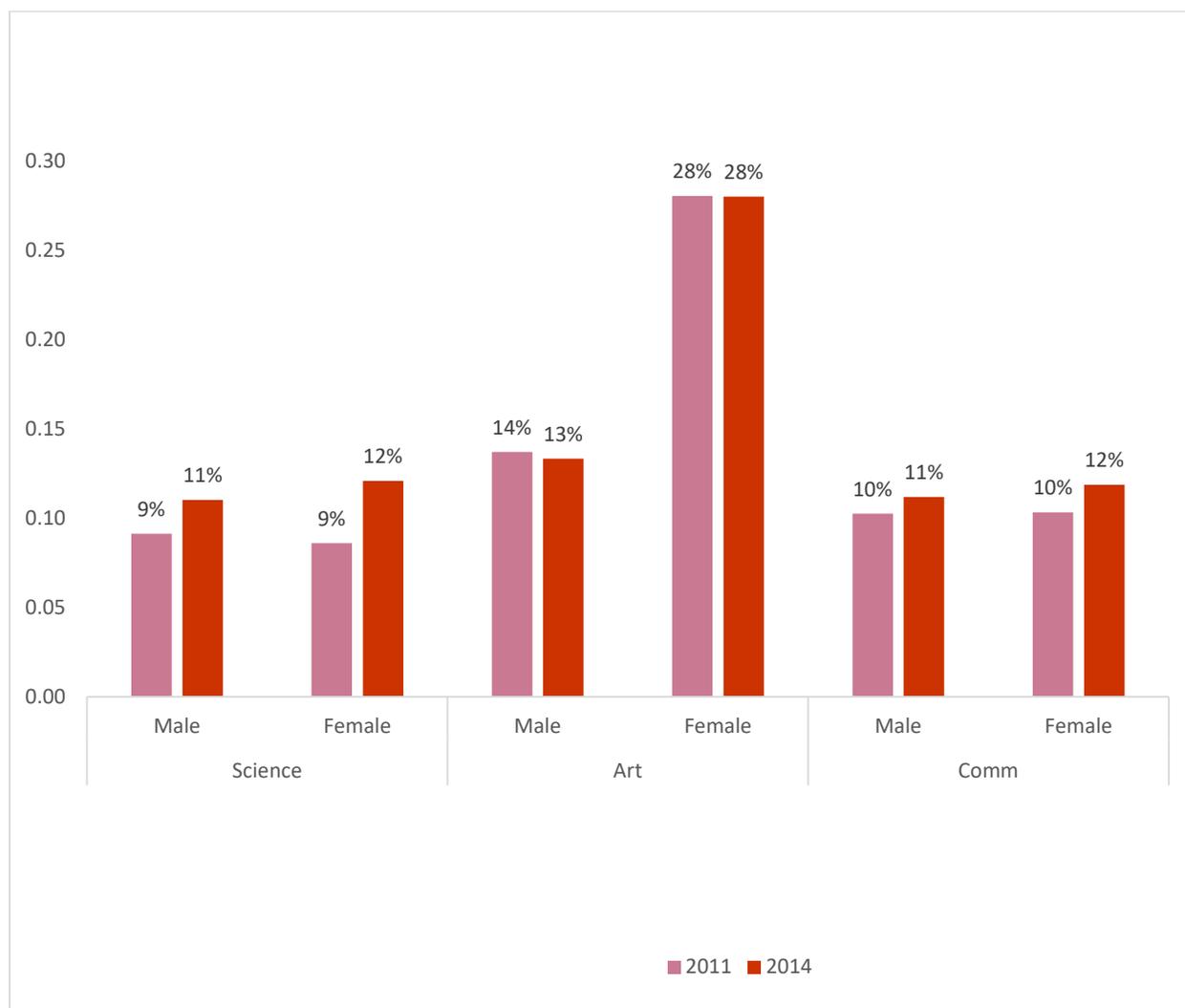
39. **There are gender disparities in terms of subject choice at the collegiate level, particularly in the Arts and Technology.** Although a similar percentage of males and females enrolled in Science in 2011-2013, in 2014, female enrollment in Science surpassed males by 2 percent. In Commerce, enrollment was slightly higher for males in 2011, but by 2014, enrollment was higher for females. In 2013, a new subject, “Technology” was introduced and male enrollment has been higher than females (in 2014, 6 percent of males 3 percent of females enrolled in Grade 12 and 5 percent of males and 3 percent of females in Grade 13). Trends in subject-wise enrollment at the collegiate level (for Grade 12 and 13) also indicates some clear gender disparities. As Figure 11 indicates, Grade 12 enrollment in 2011 males and females enrolled in Science at the same rate. However, in 2014, there has been a slight increase in the percentage of females enrolling in Science (from 11% to 13%). In the Arts, Females significantly outnumber males in enrollment (16 percent and 31 percent for males and females respectively in 2011 and 14 percent and 30 percent in 2014 respectively). As Figure 12 indicates, enrollment in Grade 13 also shows similar trends to Grade 12 enrollment, which males and females enrolling at same rate in Science, until 2014, where females slightly outnumber males in enrollment. In both Grade 12 and 13, males outnumber females in enrollment in Technology, a new subject stream at the Collegiate level (See Tables 14 and 15 in Annex 3).

**Figure 11: Percentage Enrolling in Science, Art, and Commerce in Grade 12, by Gender between 2011 and 2014.**



Source: Authors, based on Ministry of Education Statistics

**Figure 12: Percentage Enrolling in Science, Art, and Commerce in Grade 13, by Gender between 2011 and 2014.**



Source: Authors, based on Ministry of Education Statistics

40. **The trend in gender-disparity, subject wise, is even more evident at the tertiary level.** As Table 6 indicates, 2012 data shows that women significantly number males in total enrollment at the Tertiary level, but there are clear gender disparities in subject-choice. Women make up a significant majority of candidates in the Arts, Education, Law, Medicine-related fields, and the Visual and Performing Arts. To a lesser degree they outnumber males in the areas of Medicine, Management, “other areas”. But, males dominate in the areas of Engineering and IT/Computer Science. Accordingly, the composition of tertiary education in Sri Lanka is like that of tertiary students in most other developed countries. In the OECD for instance, men are more heavily represented in engineering (only 28 percent of university graduates in engineering are women); while enrollment in Science is less imbalanced (where 41 percent of graduates in science are women); and women significantly outnumbering men among graduates in health and welfare (at a rate of 75 percent) (OECD 2015).

**Table 6: Male/Female Enrollment at the Tertiary Education Level by Gender (2012)**

Faculty	Male (%)	Female (%)	Total
Arts/HSS/Ed/Law	29.4	70.6	26,837
Management	46.3	53.9	15,401
Medicine	47.1	52.9	5,776
Medical Related Fields including Dental Science	33.5	66.5	3,394
Science	41.5	58.5	16,231
Agriculture	41.3	58.7	3,512
Engineering	77.9	22.1	6,885
IT/Computer Science	65.8	34.2	1,186
Visual and Performing Arts	22.7	77.3	2,427
Other	45.7	54.3	3,290
Total	41.5	58.5	84,939

Source: Gunawardena (2013)

### **3.4 Exploring Gender Dimensions of Educational Access and Performance in Sri Lanka: Perspectives from the field.**

41. **To better understand the factors contributing to boy’s underperformance, a series of focus group discussions were undertaken in the Northwestern and the Central Province of Sri Lanka.** The aim of the focus group discussions was to better understand: a) the perception of gender disparities in educational access and outcomes of various stakeholders at the school level; b) probable reasons for these gender disparities; and c) potential ways to address the gender gap.

42. Methodology: The North Western and Central Provinces were chosen for the following reasons: 1) Both provinces had large gender gaps (in favor of girls) in educational participation and performance; 2) the North-Western Province is socio-economically diverse, with very wealthy districts such as Kurunagala, as well as very poor districts such as Puttalam and; 3) The Central Province has a large plantation sector, with its own unique cultural and socio-economic context. The school selection process were based on two factors, school type and accessibility. Within the North-Western Province, two schools were chosen in Kurunagala – 1 Type 1AB (School 1- Royal Wayamba) and 1 Type 1C school (School 2- Maspota). In the Central Province, two schools in the plantation sector of the Nuwareliya district were chosen- 1Type 1C (School 3- Barathi T.M.V.) and 1 Type 2 (School 4- Carlabeck). Focus group discussions were conducted with teachers and school administrators of Grade 10/11 students, Grade 11 male and female students, and parents of male and female students who were in, or had completed Grade 10 and/or 11. A total of 18 focus

group discussions with these stakeholders in the school sector. Annex 1 provides a detailed profile for each of the four schools (including gender-disaggregated G.C.E. O-level results for each school) as well as a summary of the focus group discussions.

43. In addition to the focus group discussions, other discussions and meetings were held with key stakeholders at the zonal level (in the Nuwareliya and Kuranugala zones, at the Provincial level (with the Central and NW Province), and at the Central level, with the Ministry of Education. The following is a summary of key messages from these focus group discussions and interviews.

### ***1.1.3 Key Messages from the Focus Group Discussions***

#### ***General Observations***

44. **The focus group discussions highlighted significant differences between the schools/school communities in their awareness levels and concern for the issue of gender disparity in educational outcomes;** and awareness levels appeared to be loosely correlated with the magnitude of the gender gap in that school. The high-performing school had a smaller gender gap in achievement and a lesser awareness of, and interest in the issue; in contrast the plantation sector schools appeared to have a greater awareness and concern for the issue. G.C.E O-level data from the four schools revealed that the magnitude of the gender disparity in G.C.E. O-level achievement was far less in the high performing school- School 1 (89 percent overall, 88.5 percent male and 90 percent female- compared with the Kurunagala district average pass rate of 70 percent pass overall (60 percent male and 81 percent female pass rate). In the other three schools, the magnitude of the gender disparity in performance was far more pronounced and the teachers and school administrators in these schools appeared to be more aware and more concerned about the problem. Stakeholders in the plantation sector schools had noticeably more awareness and concern for the issue. Education officials surmised this may be because the plantation community is tight-knit and the impact of low-performing boys is felt more directly by all members of the community.

45. **A lack of systematic gender-disaggregated data collection and dissemination, particularly on educational achievement may be contributing to the lack of awareness and attention to boys' underperformance.** Officials in the provinces and at the Center expressed a general awareness of the problem of boys' underperformance. However, none of them could identify magnitude of the problem, due to a lack of gender-disaggregated data collection and dissemination, particularly in terms of educational achievement. Moreover, there was a pervasive belief that even though boys were less focused, and did not perform as well in school, they ultimately perform better in Math, and on the A-levels generally. Interestingly, the O-level data from the four schools contradict the perception that boys perform better on Math- even in the school where the gender gap was smallest (School 1), girls outperformed boys in Mathematics. Nevertheless, in both provinces this was repeatedly offered as a response to the "seeming" problem of boys' underperformance. Other officials in the Kurunagala zone indicated that they were made aware of the problem through the NEREC report. It is important to note that there is some data such as survival rates, which is systematically gender-disaggregated and monitored. However, discussions with education officials only highlighted the need for more systematic gender-disaggregated data collection, reporting and monitoring.

46. **Children's daily schedules are heavy and packed with academic activity; they appear to have little time to engage in extra-curricular activities and sports, especially if they want to perform well academically.** Across all schools, it seemed that children had long days that often started between 4-5 am in the morning. They went to bed at 10-11 pm on average. In School 1, extra classes and tuition were interspersed through their week- with tuition at least 3 times a week. In Maspotha, children had tuition about 2 times a week. In the plantation sector tuition was less frequent; possibly because children had to travel longer distances to attend tuition classes in town and/or the cost of tuition was too prohibitive. In effect, children, particularly in the high-performing school had intensely packed academic schedules and appear to be surviving on very little sleep. In School 1, two groups of boys were interviewed-high performers and low-performers. It was clear from these discussions that the achievement of high performers came at the expense of both sleep, outdoor activity and sports. Parents of high-performing boys stopped their participation in sports when it was time to begin preparation for the G.C.E. O-level exams. In general, boys did not seem to participate in sports and extra-curricular activity as much as girls. Boys in the Central Province did not participate in sports in school, but seemed to spend more time playing outside school than their counterparts in the Northwestern Province. When boys were asked about why they felt that there were not performing, boys in School 2 proposed that it was because they were not attentive in class and that they fell asleep often, unlike girls. In all cases, children's schedules appear to be quite loaded, requiring them to start studying early, and going to bed late. Research indicates that adolescents need 9-9.5 hours' sleep a day. Although this is true for both boys and girls, the impact of sleep deprivation, combined with low-levels of physical activity may manifest itself differently in boys and girls.

#### *Common Perceptions/Stereo-types of Gender and Education*

47. **Based on the qualitative research conducted for this report, in Sri Lanka, education is often perceived to be less important for boys than for girls, in terms of their prospects in the labor market.** Education is less important for boys than for girls, in terms of their prospects in the labor market. This was, perhaps, the clearest and most striking message communicated by all groups. Boys expressed more confidence in their earning abilities/job prospects regardless of educational achievement. Parents, students (both boys and girls) and even teachers concurred with the belief that boys don't need education as much as girls- they were confident that boys would find work and support themselves regardless. It is interesting to note that this finding is similar to that of studies in South East Asian countries, such as Malaysia where boys are also underperforming (See Box 1). The parents who participated in our focus groups seemed especially convinced that girls need an education more than boys; whether it is to find a job, or even to have good marriage prospects; once again similar to the perceptions of parents in Malaysia (see Box 1). Boys, themselves seemed confident that, regardless of their educational achievement, they would find a way to earn a living and support themselves. Girls, on the other hand, seemed to think that their options would be very limited without strong educational achievement.

48. **Another common perception revealed in the qualitative research was that boys don't need to work as hard to achieve the same academic results as girls.** This message was expressed by all groups, except for teachers. Parents, boys, and even girls expressed a greater confidence in the natural academic abilities of boys. As proof of this, two parents volunteered anecdotes of their sons who had performed better on exams than their female counterparts,

although they seemed to put in less effort. Boys themselves, in many instances, felt that they were better students than girls- but when asked specifically about who was at the top of their own cohort- they conceded, in all four cases, that there were more girls at the top. In another instance, girls seemed resigned to the belief that although they probably studied harder than boys, boys would do equally well or better in the end- a sentiment expressed by boys as well. In two of the schools (School 1 and 3), boys were confident that even though the girls worked harder, they would do better in the exams. The G.C.E O-level exam results in School 4 clearly contradicted this belief. In another school, School 1, there was no clear trend in performance to support boys' high levels of confidence in their own abilities. Nevertheless, in this school, boys asserted that "male students have a better understanding of things, they are able to think on their own and figure out things out better than female students". They went on to say that "girls work harder in the classroom but boys score higher". Teachers were the one group who did not express the belief that boys don't need to work as hard as girls to succeed academically. Nevertheless, all groups attributed hard work and a strong work ethic, to females, rather than male students. It was interesting to note that in School 1, both the boys and girls noted that boys who studied more, were more likely to get bullied. This was an interesting finding, considering that research from other countries, with similar cultural contexts, indicates that hard work, and studiousness, are considered "feminine traits"- in other words, putting in effort and working hard, undermines masculinity (UNGEI 2012).

*Identifying potential factors that may explain boys' underperformance.*

49. **A prevalence of under-age employment opportunities for boys:** This was repeatedly cited as a key reason for boys' underperformance in all school except for School 1(perhaps because of the different socio-economic composition of the school population). In School 2, the rural school in Kurunagala, participants cited employment opportunities for boys in the agricultural sector (on Coconut plantations) as a key reason for boys' underperformance. In Nuwaraeliya (in the plantation sector), the school community as well zonal and provincial education officials cited employment opportunities for boys as the main reason for boys dropping out, or not performing up to standards. In the plantation sector in particular, it appears that many boys are motivated by the prospect of jobs in Colombo (in the restaurant industry, three-wheeler driving etc.). The prospect of quick earnings and the lure of an urban lifestyle appear to be the main factors causing them to abandon their education. There is also some evidence that boys who work in Colombo may be provided with incentives to recruit more of their young friends to leave school and work in Colombo. Girls, on the other hand, do not have these employment opportunities and so do not face this particular challenge.

50. **Differences in parental oversight of boys and girls:** Across all schools, differences in parental oversight of boys and girls, was cited as a key reason for boy's underperformance. Both parents, teachers, and students agreed that parents kept a tighter rein on girls- who, in turn, had less freedom outside the home, and less freedom to do what they wanted with their extra-curricular time. Interestingly, waning parental oversight over boys also coincides with the timing of the Grade 5 scholarship exam. Post-exam, children enter pre-adolescence, and teachers pointed out that parents are generally more concerned about protecting and overseeing their female children during their pre-adolescent and adolescent years. So, while female children have continuous and intense oversight throughout their school years, parental oversight over boys appears to wane by Grade 6.

51. **Teacher gender and teacher attitudes:** Interestingly, almost all boys indicated that they preferred a male teacher to a female teacher. In School 2, boys indicated that female teachers frequently resorted to corporal punishment as a means of discipline. They also felt that female teachers were partial to female students, but felt that male teachers treated all students equally. Some students indicated, that they preferred a female teacher for more difficult subjects- but thought that, in general, male teachers were more friendly, and relatable. It is interesting to note that most of the girls interviewed also preferred a male to a female teacher. In addition to students, parents also felt that boys would perform better if there were more male teachers in the system. Parents felt that boys feared and respected male teachers more than female teachers and this, in turn, would help them to perform better. Here, parents seem to suggest that fear is productive- in that boys are more likely to do what is required of them in school, because fear makes them feel accountable for their responsibilities in school. Parents also suggested that, for boys, their relationship to the teacher plays an important role in their commitment to doing well in the class- i.e. whether or not they would complete homework etc. For instance, one parent observed that her son would work hard if he liked the teacher, or not, if he did not like the teacher. Teacher attitudes was also cited as factor in children's performance. More than one parent indicated that teachers focused on girls more because they were studious; and that teachers stopped paying attention to children who did not pay attention in class.

52. **Stronger peer-group pressures for boys:** Almost all groups agreed that peer- group pressures were much stronger for girls and had a role to play in boys' performance. They agreed that boys were more susceptible to the influences of their friends and these relationships, in turn, had a negative impact on their educational outcomes. It was also noted that girls could also be distracted by their relationships, but in general, they had better control of their relationships and the influence of these relationships on their education. Interestingly, in one school (Wayamba Royal), girls observed that the boys who were high-performers were less likely to spend time with other boys, but would rather keep to themselves- indicating that the high-performers may be less susceptible to peer group influences.

53. **The absence of positive role models for school boys:** According to zonal officials, particularly in Nuwareliya, an absence of positive role models for boys in the plantation sector (i.e. men from the plantation sector who have joined a white-collar profession) is a contributing factor to boys' underperformance. Instead, they pointed out, it is common to see negative role models, i.e. boys who leave school early to pursue jobs in Colombo. Officials suggested that a program to introduce positive role models/ mentors can improve boys' performance. None of the boys in the plantation sector indicated any strong professional goals or aspirations. Interestingly, only one group of boys (in Wayamba Royal) had clear professional ambitions; and these boys cited community and family role models as their main professional inspirations.

54. **School curriculum and assessment methods:** Teachers repeatedly cited learning and assessment methods as another factor in boys' performance. They don't believe that boys have the patience to write long answers- so in subjects for which they would have to provide long answers, boys generally perform more poorly than girls. In general, teachers indicated that boys did well in subject matter that was more hands-on, and practically-oriented, and girls performed better in subject matter that required extensive reliance on textbooks and memorization. Again, this finding is similar to findings of the study in Malaysia, presented in Box 1; where respondents felt that boys

needed more practical, hands-on activities to do well. NWP education officials voiced a similar perspective. They suggested both the curriculum and assessment methods as key factors in boy's underperformance. They also proposed that moving towards more school based assessments might help in improving boys' performance. Moreover, they correctly pointed out that girls are not doing well in terms of the labor market, despite their educational achievements and speculated that this may be the result of an educational system that does not challenge/prepare girls to make a successful transition to the labor market. As one official pointed out: "Girls are driven by school expectations- they perform to the bar set for them- but they seem unwilling to go beyond that". Ultimately, these officials felt that the curriculum and assessment methods were disadvantaging both boys and girls in different ways, and some reforms might be warranted to ensure that both groups could gain maximum benefit from their educational opportunities.

## The Way Forward

### 4.1 Summary of the Main Findings

55. **Sri Lanka, like many upper middle and high-income countries, is facing notable gender disparities in educational participation and performance.** The analysis of educational participation and achievement data for Sri Lanka clearly shows that girls are outperforming boys at every level of the educational system. They are participating in education at higher rates than boys, particularly at higher levels of the education system. Girls are also consistently outperforming boys on all measures of achievement in the educational system. It is interesting to note that, while there are no clear sub-regional trends, gender disparities in educational participation are widest at top of the wealth quintile. Also, as is the case in many other countries, Sri Lanka's girls are under-represented in certain educational streams; namely the physical sciences, engineering and technology.

56. **In line with global findings, the qualitative research on boys' underperformance in Sri Lanka suggests several key factors, including societal and cultural influences, curriculum and learning styles, peer group pressures, and attitudes to education that are likely having an impact on boys' educational performance.** The focus group discussions revealed a set of social and cultural influences that may be having an impact on boys' performance; these include cultural perceptions of the relative importance of education for boys vs. girls; gender-stereotypes about the innate academic ability of boys and girls; and differences in parental oversight of boys and girls. The focus groups discussions also indicate that there may be classroom level variables such as curriculum and assessment methodology; the structure of the school day and the academic workload; and the lack of male teachers in the system- all of which may be having an impact on boys' performance. Thirdly, the interviews and focus group discussions suggest that student behavior and attitudes- such as a lack of professional ambition among boys and the absence of positive role models are also important factors affecting boys' educational performance in Sri Lanka. Finally, the interviews and discussions underscored a key factor that in boys' underperformance: the availability of under-age employment opportunities for boys in urban areas of the country.

57. **A key concern for Sri Lanka is also that girls' educational outcomes are not translating into labor market outcomes.** It is also important to note here that despite girls' educational advantage; boys and men still have a strong advantage in the labor market. Education officials are rightly aware of this problem and argue that current education system may have a role to play in this disconnect. They speculate that the education system (the curriculum and emphasis on rote learning) may be disadvantaging girls as much as boys- because the system is failing to challenge girls to think and prepare themselves for entering the labor market. Moreover, discussions with education officials also revealed that an absence of positive role models for boys is a concern, particularly in certain part of the country where there are, instead, many negative role models for boys. In these discussions, education officials did not specifically mention the absence of positive role models for girls, but given the extremely low levels of labor force participation among women, and particularly the most educated women, it is quite likely, that there may be a lack of positive role models for girls as well.

58. **Finally, the discussions also revealed that there is no systematic monitoring of gender-disaggregated educational achievement data in Sri Lanka.** As the focus group research indicates, there is some lack of awareness of, and concern over this issue among most stakeholders in the educational sector, i.e. policy makers, teachers, administrators, parents and students. This is mostly likely due to limited monitoring of educational outcomes from a gender perspective, i.e. there is no systematic collection and monitoring of data gender-wise (particularly achievement data). The lack of data also makes it hard to hone in on the problem; i.e. is it an issue in high-performing schools or in low performing schools only; which zones and divisions is the problem more prevalent in etc.

59. Taking these findings into account, the following policy options should be considered for improving gender equality in educational participation and achievement in Sri Lanka.

#### **4.2 Policy Options for Addressing Gender Disparities in Sri Lanka**

60. **Mainstream gender-wise monitoring of educational participation and achievement data at the national and sub-national level.** One of the key findings from the qualitative research conducted for this report is a general lack of awareness among all stakeholders, i.e. teachers, administrators, parents, and policy makers as to the extent of the problem of boys' underperformance. One of the ways in which to address this issue would be to ensure that more of the data on the education system is systematically collected and disseminated in a gender-disaggregated format; and ultimately that educational performance and participation is monitored gender-wise. This will help to ensure that there is a greater awareness of the problem of boys' underperformance among both policy makers and stakeholders at all levels of the system.

61. **Establish school-based programs to raise awareness of cultural and societal norms and stereo-types that may be affecting boys' performance; and ensure that these programs are championed by school leadership.** Cultural and societal norms and stereo-types are deeply entrenched and identifying effective strategies to address them is a challenge. Researchers have emphasized that gender stereotypes form early and therefore it is important to address them as early in the school cycle as possible, even at the pre-school level (Struthers 2016). Two programs, one Australia and one in Jamaica, attempted to address the issue. The school in Jamaica experimented with interventions such as counseling and adopting transparent approaches to engagement between teachers and students, with the specific goal of dismantling gender stereo-types about school etc. The Australian school attempted to transform the school into a learning organization- without specifically trying to change boys' stereo-types of masculinity. In the end, the Jamaican school was not as successful in transforming the gender-based stereo-types as the Australian school. Researchers hypothesize that this may have been in part due to the difference in school leadership- at the Australian school, the principal's vision to create an open, transparent and engaging learning space for all students may have been a more powerful factor in changing student's perceptions of learning (Jha and Kelleher 2006). This program underscores the importance of school leadership in shaping the culture and environment of a school (Aina and Cameron 2010). Ultimately, training for principals and school leadership should include sensitization to gender-based stereo-types that may influence the performance of both male and female students. There is less documented global experience with programs that address entrenched gender-based stereo-types outside the school setting. However, "family workshops and

information about the effects of gender bias can also increase the awareness and critical thinking about ways that families communicate gender stereotypes to children (Small 2003)".

### **Box 3: Raising Boys Achievement: Addressing Boys' Underperformance in Primary and Secondary Schools in England.**

The debate around boys' underperformance has been long-standing in England. There is evidence that since the late 1980s girls have, on average, been performing better than boys, with a relatively narrow gap in Mathematics, a wider gap in English, but a negligible one in Science. On threshold pass measures (of +5A-C) on the GCSE exam, a gap in favor of girls emerged in 1988 and has stayed relatively consistent-with 63.4 percent of girls vs. 53.8 percent of boys achieving at least 5 + A-C in the GCSEs in 2006. Not surprisingly, the issue of boys' underperformance has been subject of increasing concern for policy makers and education stakeholders in the country. In 2000, the 'Raising Boys' Achievement Project' (RBA) was launched as an attempt to identify and test strategies to address underperforming boys. The four-year project focused on issues associated with the apparent differential academic achievement of boys and girls at key stage 2 and key stage 4 in schools across the country. The program adopted the following four strategies, which appeared to have been successful in raising boys' achievement in some schools (known as originator schools) in the country:

- **Pedagogic:** classroom-based approaches centered on teaching and learning (e.g. focusing on making boys successful and satisfied readers, rather than teaching reading; focusing on understanding and adapting to individual learning styles of students)
- **Individual:** essentially a focus on target-setting and mentoring (e.g. targeting and mentoring of individual students)
- **Organizational:** ways of organizing learning at the whole school level (e.g. single sex classrooms within co-educational schools).
- **Socio-cultural:** approaches which attempt to create an environment for learning where key boys and girls feel able to work with, rather than against the aims and aspirations of the school (e.g. a key leader and key befriender scheme in secondary schools- targeting and supporting those students whose manner and behavior exerted power and influence within their peer group).

Findings from the implementation of this program suggest that these strategies can be effective in raising boys' achievement- as well as girls' achievement. So in the short term they may actually increase the gender gap, but also address more deeply embedded school and socio-cultural obstacles to achievement. Secondly, the implementation experience from the program suggests that intervention strategies must be developed over time, evaluated and refined by experience- in other words, they must be highly contextualized in order to be effective.

Source: Younger and Warrington (2005)

62. **Develop school-based programming to introduce positive role models in schools for boys, particularly in disadvantaged areas of the country.** There are various programs being implemented locally in the U.S. aimed at providing boys with positive role models. For instance, the Project MALES in Texas connects undergraduate students from the University of Texas at Austin with Austin-area high school males. The "Raising Boy's Achievement" scheme in England, discussed in Box 3 experimented with a unique approach to developing positive role models in school. This approach known as the "key leader / key befriender" scheme attempted to engage key

image makers in a formative year (year 11) and to incorporate them positively into the life of the school (Younger and Warrington 2005). This proved to be successful strategy in raising boys' achievement in some schools in England. In the Sri Lankan context, it may also be important to develop a program to provide boys with role models/mentors who are working professionals (e.g. doctors, accountants, business leaders etc.). This may be particularly important in disadvantaged settings, where boys are unlikely to have the opportunity to engage closely people who have achieved professional success in various fields, and can inspire them to do the same.

**63. Undertake an institutional review of aspects of the traditional school structure, curriculum, and assessment methodology that may have an adverse impact on boys' performance.** The literature points to a variety of strategies to improve pedagogical practices as a means of engaging boys and improving their academic performance. These include: highly structured lesson plans; frequently changing classroom activities; positive reinforcement of achieved outcomes; personal interviews for the purposes of target setting; and various modes of hand on learning, (Cuttance and Thomson 2008). The focus groups discussions and qualitative research conducted for this report, also highlight aspects of the Sri Lankan curriculum, school schedule and structure that may need to be reexamined in an effort to address underperforming boys (these include the timing of the grade 5 scholarship exam; the current assessment methodology; the tightly packed school schedules and the amount of outdoor activity built into children daily schedules). It will be important for a set of educational stakeholders and experts to conduct a focused review of various aspects of the educational system, to assess how they can be reformed in ways that are beneficial to the performance of all students, boys and girls.

**64. Explore ways to address the problem of boys' premature participation in the labor force.** This policy option is outside the direct purview of education authorities. Nevertheless, it is important to take note of here, as it was repeatedly cited as one of the main reasons for boys' under-participation and under-performance in school. Sri Lanka has ratified various international protocols and conventions on fair labor, including the ILO convention on the Minimum Age to Employment. Moreover, the country has increased the age of compulsory education to 16 years, which should serve to discourage child labor. However, as an ILO report indicates, the worst forms of child labor in Sri Lanka are in the informal sector and there is a need for better mechanisms to enforce existing labor standards in the country (ILO 2010). Curtailing boys' opportunities to enter the labor market early may require the cooperation of stakeholders in various sectors of the Government- i.e. improved enforcement of child labor laws etc. However, if this issue can be addressed and dealt with effectively, it may prove to have a significant impact on boys' performance, particularly in the more disadvantaged areas of the country. Although, this is an area where the education sector has less control, it may be possible for the education sector to provide incentives for boys to stay in school longer. There is abundant evidence on incentives to keep girls in school, such as conditional cash transfers etc. however, there is little documented evidence of the use of these interventions have not been used to keep boys in school. Nevertheless, it may be worth it for Sri Lanka to developing and consider piloting some of these incentives for boys.

**65. Increase attention to the link between education and labor market outcomes.** To ensure that both sexes benefit equally from educational opportunity, it is important to pay attention to the link between education and labor market outcomes. In Sri Lanka, despite girls' strong performance in education, they are still underrepresented in the labor market- and moreover, the broken link is

more even more pronounced among women with higher levels of educational achievement. There is more research needed to understand the low levels of labor force participation among women. This, in turn, can help to lay the groundwork for policy options that may address this problem. As this study indicates, one of the reasons for the lack of attention to boys' educational underperformance is their strong labor market participation rates, regardless of educational achievement. Ultimately, the low levels of women's participation in the labor force disadvantages the country as a whole and a first step to rectifying the issue is to understand the potential causes of this trend.

## **Annex 1: Focus Group School Profiles and Summary of Results**

### **Annex 1: Focus Group Summary by School**

#### **Profile of Royal Wayamba**

**Kurunagala District:**

**G.C.E O-Level Results (2015):** 70% pass rate overall (60% male and 81% female pass rate)

**Location:** Kurunagala Zone, located in the city of Kurunagala, NW Province)

**School Type:** 1AB School which has both Sinhala and Bi-Lingual Medium.

**Student Population:** 3,200 students

**Student-teacher ratio:** 40-1

**Profile of the School:** School caters to students who are competitive but cannot secure admission in other leading schools in the city of Kurunagala. The students are from a mixed socio-economic background, both wealthy and poor students attend the school (but generally the poorer students in the school are high-performers who are there on merit). Students travel from distant areas to attend the school (almost 60/70 km away). There are no teacher shortages but class rooms are overcrowded. According to school administrators, this constrains teacher movement and oversight in the class room and results in insufficient attention to the students.

As the results below indicate, there is no clear gender disparity in performance. In Math, for instance, girls have, on average, performed better than boys. However, boys have performed as well, or better than girls, among the top performers (A) but also constitute the majority of the low-performers in Math. In Science and English, boys seem to be performing better than girls, on average. In History, there seems to be little difference in the performance of girls and boys, on average. Even among low performers, the performance is mixed gender-wise. It is not surprising then, that school administrators, did not sense this was a pressing issue for them.

A total of 5 focus groups were conducted at Wayamba Royal consisting of: Group 1: 10 Grade 10/11 high-performing boys; Group 2: 10 Grade 10/11 low-performing boys; Group 3: 10 Grade 10/11 Girls; Group 4: 12 parents of Grade 10/11 boys and girls and; Group 5: Grade 10/11 Biology, English, History, Sinhalese, Math and Civic Education teachers along with the school principal and school vice-principal.

### GCE O-Level Results for Wayamba Royal (School 1)

<b>Math</b>																				
<b>Year</b>	<b>Total Number Sat</b>		<b>Total Number Passed</b>		<b>% pass</b>		<b>A</b>		<b>%</b>		<b>B</b>		<b>C</b>		<b>S</b>		<b>W</b>		<b>W %</b>	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
2014	115	122	92	104	<b>80</b>	<b>85</b>	<b>40</b>	<b>49</b>	45	55	14	15	20	19	18	21	23	18	<b>56</b>	<b>44</b>
2013	144	130	116	117	<b>80</b>	<b>90</b>	<b>33</b>	<b>35</b>	49	51	13	22	35	36	35	24	28	13	<b>68</b>	<b>32</b>
2012	147	140	120	122	<b>82</b>	<b>87</b>	<b>38</b>	<b>27</b>	58	42	19	25	30	36	33	34	27	18	<b>60</b>	<b>40</b>

<b>Science</b>																				
<b>Year</b>	<b>Total Number Sat</b>		<b>Total Number Passed</b>		<b>% pass</b>		<b>A</b>		<b>%</b>		<b>B</b>		<b>C</b>		<b>S</b>		<b>W</b>		<b>W %</b>	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
2014	115	122	100	102	<b>87</b>	<b>84</b>	<b>36</b>	<b>36</b>	50	50	13	13	20	21	31	32	15	20	<b>43</b>	<b>67</b>
2013	144	130	137	117	<b>95</b>	<b>90</b>	<b>32</b>	<b>25</b>	56	44	19	21	47	40	39	31	07	13	<b>35</b>	<b>65</b>
2012	147	140	137	131	<b>93</b>	<b>94</b>	<b>26</b>	<b>20</b>	57	43	36	34	42	46	33	31	08	09	<b>47</b>	<b>53</b>

<b>English</b>																				
<b>Year</b>	<b>Total Number Sat</b>		<b>Total Number Passed</b>		<b>% pass</b>		<b>A</b>		<b>%</b>		<b>B</b>		<b>C</b>		<b>S</b>		<b>W</b>		<b>W %</b>	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
2014	115	122	91	60	<b>79</b>	<b>49</b>	<b>11</b>	<b>16</b>			13	16	42	34	25	24	24	32	<b>43</b>	<b>57</b>
2013	144	130	113	113	<b>78</b>	<b>87</b>	<b>13</b>	<b>22</b>	37	63	13	17	42	43	45	31	31	17	<b>67</b>	<b>33</b>
2012	147	140	129	122	<b>88</b>	<b>87</b>	<b>19</b>	<b>17</b>	53	47	18	29	58	55	34	21	18	18	<b>50</b>	<b>50</b>

<b>History</b>																				
<b>Year</b>	<b>Total Number Sat</b>		<b>Total Number Passed</b>		<b>% pass</b>		<b>A</b>		<b>%</b>		<b>B</b>		<b>C</b>		<b>S</b>		<b>W</b>		<b>W %</b>	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
2014	114	122	110	117	<b>96</b>	<b>96</b>	47	59	44	56	18	14	27	22	18	22	04	05	<b>44</b>	<b>56</b>
2013	144	130	133	118	<b>92</b>	<b>91</b>	45	47	49	51	21	21	39	31	28	19	11	12	<b>48</b>	<b>52</b>
2012	147	140	134	130	<b>91</b>	<b>93</b>	20	23	47	53	23	34	52	39	39	34	13	10	<b>57</b>	<b>43</b>

## Annex 2: Summary of Results from Focus Group Discussions at Wayamba Royal

<b>Teachers and School Administrators</b>	
<b>Theme</b>	<b>Message</b>
General Student Observations	<ul style="list-style-type: none"> <li>● The standards of students have dropped in recent years- the number of students who do well in their exams have dropped but the grades of the highest ranked children have increased</li> <li>● Textbooks and curriculum seem to play a role in student learning- they are shortcomings in the textbooks which make contribute to weak learning.</li> <li>● It is difficult to hold the attention of students in general.</li> <li>● Children are not reading as much, there are too many distractions, i.e. technology, mobile phone, television etc.</li> <li>● Children do not seem to read and study much outside the classroom.</li> </ul>
Differences between girls and boys study habits and capabilities	<ul style="list-style-type: none"> <li>● Girls seem to be ahead of boys in school because they study more.</li> <li>● Girls pay more attention.</li> <li>● Girls are more organized in their studies (i.e. they take notes)</li> <li>● Boys don't take notes etc. and tend to leave their textbooks at school.</li> <li>● Girls seem to have a greater desire to do well.</li> <li>● Academic performance differences between boys and girls start in Grade 6- if a child passes the Grade 5 scholarship exam, the parents continue to work with them. If they fail, parents start to pay less attention to their performance.</li> <li>● Character and habitual changes are more pronounced in Grade 9 (third term) and on to 10th grade.</li> <li>● English seems to be the exception- boys seem to put effort into it and girls are more silent during English classes.</li> </ul>
Reasons for the difference between boys and girls	<ul style="list-style-type: none"> <li>● Girls have less freedom to do what they want and so they tend to study more.</li> <li>● Boys who study get bullied by weaker students</li> <li>● It is more difficult to get parents of boys to come to PTA meeting than parents of girls</li> <li>● Of the students who don't complete homework, most are boys</li> <li>● 80% of girls vs. 50% of boys' complete homework on a regular basis</li> <li>● Tight class seating arrangements make it difficult for teachers to approach/address the behavior of all children.</li> <li>● Financial background of students may also have an impact.</li> <li>● Boys try to find the shortest easiest way to the top- to employment- regardless of education.</li> <li>● Girls want to use education to rise to the top.</li> <li>● Boys look for the shortest way to answer questions</li> <li>● Involvement in sports also affects boys' performance, once they get involved in sports their study standards decrease.</li> </ul>
Awareness of the problem of	<ul style="list-style-type: none"> <li>● They were not aware of the problem- students get promoted even if they are not performing.</li> <li>● They believe boys excel in the advanced levels.</li> <li>● They think that girls are "ahead" of boys in school, because they work harder.</li> </ul>

underperforming boys	
Potential ways to address underperforming boys	<ul style="list-style-type: none"> <li>• Parents have a role to play</li> <li>• Changing the format of exam papers because boys generally prefer short answer questions as opposed to essays</li> <li>• Children who are underperforming in 8<sup>th</sup> grade should be not be automatically promoted.</li> <li>• After the grade 5 scholarship exam, parents stop paying attention to their kids until 11<sup>th</sup> grade- if a child passes the scholarship exam their parents keep working with them, otherwise their parents ignore them.</li> </ul>
<b>Parents</b>	
<b>Theme</b>	<b>Message</b>
Extracurricular habits/ religious activities (TV watching/ computer games etc.)	<ul style="list-style-type: none"> <li>• Boys want to play on the computer/ watch TV, parents try to restrict their TV/ computer time. One parent said their child was always on the computer because he had IT as a subject. Some said there was a struggle (with watching TV/playing computer games, but for the most part they do listen to parents). Sons seem to fear their fathers more. NO such challenge with daughters.</li> <li>• Some children participate in temple activities, most do not play sports, only a small number participate in cricket, football etc.</li> <li>• They are lazy, they like to play but not do sports, they would rather watch TV</li> <li>• The boys are lazy, not the girls. One parent said his son puts in effort if he likes the teacher</li> </ul>
School Tuition and out of school study habits and Parental monitoring	<ul style="list-style-type: none"> <li>• If they like the teacher, they study and do their homework. They like to work for teachers who are nice to them.</li> <li>• Some parents said students only refer to textbooks not notes, many said their children are reluctant to read text books. They don't like to take notes.</li> <li>• They ask for help when then need it.</li> <li>• Some do, some don't like tuition but most only attend because they have to.</li> <li>• Most go to group classes , some in public halls some in friends' homes</li> <li>• They study on their own. Some parents (boys) said they only start studying when they received the exam timetable.</li> </ul>
Understanding the Gender Gap and Potential Solutions	<ul style="list-style-type: none"> <li>• More parents of girls indicated their child's future goals.</li> <li>• Boys leave textbooks, girls do not.</li> <li>• Boys don't have the perseverance to study, but they thought that it was the same when they were younger.</li> <li>• They may have more freedom around O-levels</li> <li>• More difficult to control boys, maybe their hormonal changes, girls get more attention around adolescence, it is explained to them what is going on with their bodies, to boys it is not.</li> <li>• Daughters are sheltered but boys are not, they are more exposed to the world</li> <li>• When children stop paying attention in class, teachers stop paying attention to them</li> <li>• Teachers tell them the standards of boys are very low. They are unruly etc.</li> </ul>

	<ul style="list-style-type: none"> <li>Parents say that their children are aware of options to study further, abroad, even if they don't do well in school. One parent said his son plans to do that.</li> <li>They feel that kids from the village work the hardest, their sons don't because they have everything so they don't understand the value of education.</li> </ul>
Common Perceptions	<ul style="list-style-type: none"> <li>They feel that boys should be able to do better than girls because they are more capable but they don't put in effort</li> <li>Boys would do better with male teachers because they fear male teachers more</li> </ul>
<b>Boys 1</b>	
<b>Theme</b>	<b>Message</b>
<b>Daily Habits and Extracurricular Activities</b>	<ul style="list-style-type: none"> <li>They wake up very early- between 4-5:00 am and many study before school begins</li> <li>They have school tuition classes four days week ( including Saturday and Sunday)</li> <li>They go to bed at about 11:00 pm</li> <li>They don't play sports very often (stopped because of O-level preparation) or do much physical activity</li> </ul>
<b>Study Habits</b>	<ul style="list-style-type: none"> <li>A parent (usually mother) or sibling helps with homework</li> <li>They study for about 1-1.5 per day (in addition to homework and tuition classes)</li> <li>Their mothers have regular oversight over school work</li> </ul>
<b>Curriculum</b>	<ul style="list-style-type: none"> <li>They feel the textbooks are adequate</li> <li>They feel that they can learn the curriculum without extra classes</li> </ul>
<b>Opinion on Teachers and School</b>	<ul style="list-style-type: none"> <li>Their ideal teacher is male, someone with experience but young enough so they can relate to the students. For the most difficult subjects, they prefer a female teacher.</li> </ul>
<b>Career and Aspirations</b>	<ul style="list-style-type: none"> <li>They are very goal oriented- aspire to be doctors, engineers, accountant, etc.</li> <li>They have role models in these fields, among friends and family and this has inspired them in their respective goals</li> </ul>
<b>Perceptions of Gender differences</b>	<ul style="list-style-type: none"> <li>They believe that girls study harder, but that boys do better in the end.</li> <li>Boys don't need to study as hard to do as well.</li> </ul>
<b>Boys Group 2</b>	
<b>Daily Habits and Extracurricular Activities</b>	<ul style="list-style-type: none"> <li>Wake up between 4-6 am and get home between 2-3 pm- have lunch and go out to play</li> <li>Attend tuition classes in the afternoon on some days</li> <li>They spend more time on extracurricular activities- such as playing on the phone and computer, cricket, and watching TV</li> <li>None of them play sports in schools.</li> </ul>
<b>Study Habits</b>	<ul style="list-style-type: none"> <li>Some of them study in the evenings (apart from doing homework) most do not.</li> </ul>

	<ul style="list-style-type: none"> <li>• Their parents have little control over their study habits</li> </ul>
<b>School Curriculum</b>	<ul style="list-style-type: none"> <li>• They seem to dislike Math and Science the most- these difficulties start in Grade 9. They like IT, English and the Arts</li> </ul>
<b>Opinion on Teachers and School</b>	<ul style="list-style-type: none"> <li>• They ideal teacher is relatively young (30-35) and female.</li> <li>• Girls and Boys are divided into two sides of the classroom and they feel that teachers mostly focus their attention on female students.</li> </ul>
<b>Career and Aspirations</b>	<ul style="list-style-type: none"> <li>• They all want to A-levels but they want to do Arts and Commerce- because they expect those fields to be easier</li> <li>• Half want to go to university, the others want to find work.</li> <li>• Their aspirations lean toward more practical, apprentice-oriented fields such as mechanics, electricians, IT technician, cooking etc.</li> </ul>
<b>Perceptions of Gender differences</b>	<ul style="list-style-type: none"> <li>• Girls are better in studies, the majority at the top are girls, at the bottom are boys.</li> </ul>
<b>Girls</b>	
<b>Daily Habits and Extracurricular Activities</b>	<ul style="list-style-type: none"> <li>• All wake up between 4-5 am. Most wake up on their own. Get dressed, some of them study before school. Leave for school between 5:30 and 6:30 am.</li> <li>• Get home between 2:30 and 3:30 pm.</li> <li>• Everyone attends school tuitions classes – on Tuesday, Wed and Thursday and sometimes on Saturday and Sunday. They get home from tuition or 5:30 pm.</li> <li>• They also attend extra after school classes, which cover syllabus not taught in schools.</li> <li>• On days that they go home directly, they sleep after school for a few hours.</li> <li>• Sometimes watch TV</li> <li>• Go to sleep between 9- 11 pm.</li> <li>• They watch TV, some read novels, some are not allowed to read novels.</li> <li>• Sometimes they spend time on Facebook, talk to friends in the neighborhood.</li> <li>• They all have internet access. Some are only allowed to use it for study purposes, and one said they are only allowed to use it in the presence of their father.</li> <li>• They use the internet to watch youtube videos.</li> <li>• Some students have mobile phones. Only talk on the phone when necessary, most don't use it every day.</li> <li>• One student said she plays sports- another said she is part of the church choir.</li> <li>• All attend Sunday school sometimes.</li> </ul>
<b>Study Habits</b>	<ul style="list-style-type: none"> <li>• They complete homework in school if they can, otherwise they take it up. Most weekdays they study for a couple of hours at home.</li> <li>• Sometimes they study individually, sometimes as a group.</li> </ul>

	<ul style="list-style-type: none"> <li>• There is a lot of pressure at home to do well, and it mostly comes from mothers.</li> <li>• They think boys ignore their parents' pressure.</li> </ul>
<b>School Curriculum</b>	<ul style="list-style-type: none"> <li>• They all said they study for term exams every day at home.</li> <li>• They have all thought and started preparing for next term exams.</li> <li>• They receive the most homework in Mathematics, Sciences, Sinhalese, and history. It takes about two hours a day to complete homework.</li> <li>• Of the favorite subjects: English- 1, Science- 4Commerce- 2Mathematics- 5Literature-1Geography-1History-2Tamil-1Sinhalese-1Music-1</li> <li>• Those who like Math said it was because it was easy to learn the methods and not too much to study.</li> <li>• The least favorite subject for some was IT.</li> <li>• Some said they have a heavier workload from school, others said from tuition classes.</li> </ul>
<b>Opinion on Teachers and School</b>	<ul style="list-style-type: none"> <li>• They prefer male teachers between the age of 30 and 40.</li> <li>• They are generally happy with their teachers- for some subjects such as Mathematics, they say their tuition teacher is better.</li> <li>• They would prefer a male teacher in general, because female teachers are stricter. For the most difficult subject they would prefer a female teacher because they feel that female teachers take more time to explain subject matter.</li> </ul>
<b>Career and Aspirations</b>	<ul style="list-style-type: none"> <li>• They all had professional aspirations: Management-1 Doctor-3Banker-1 Lawyer-2 Engineer -2 Dram and Music-1</li> <li>• Most say they have had these aspirations from a young age- some because they saw family members in those profession or watching the news and TV.</li> <li>• All want to complete their A-levels. They would like to be rich in 10 years. They want jobs they are happy with and that make a lot of money.</li> <li>• They don't want to be teachers because they think teachers have a lot of responsibility more than doctors- and that they work harder than doctors.</li> </ul>
<b>Perceptions of Gender differences</b>	<ul style="list-style-type: none"> <li>• They think that boys don't study because they don't see education as a practical option to securing employment. They think they can get employed regardless.</li> <li>• They have a more practical mind than girls.</li> <li>• Boys who do well tend to keep to themselves, not play with other boys.</li> <li>• Top performing boys do not come to school at term exam time, they cut class and stay at home and prepare. Teachers don't notice this because the classes are large.</li> </ul>

### Profile of Maspotha (School 2)

**Kurunagala District:** G.C.E O-Level Results (2015): 70% pass rate overall (60% male and 81% female pass rate)

**Location:** Kurunagala Zone, located outside in the city of Kurunagala, NW Province

**School Type:** 1AB School with A-level Arts

**Student Population:** 580

**Student-teacher ratio:** 12-1

**Profile of the School:** Maspotha is located in a semi urban area, approximately 10 km away from Kurunagala City. Parents who cannot afford to send their children to the city schools tend to admit their children. The vast majority of children who attend the school are from daily-wage earning families. According the school administrators, the school's parents not educated enough to motivate the children to study. Often, both parents are working in menial, hard-labor jobs and they have no time to supervise or monitor their children. As a result, most children are not highly motivated to study or oriented to pursue professional goals.

Those children who live in the area around the school, but are very bright and perform well, tend to go to other schools located in Kurunagala city. As a result, there is absence of high performing role models for the lower students at the school. According to school administrators, irregular attendance is an acute problem in the school, and results in poor performance. Also, most of the boys attending the school, tend to go for seasonal labor jobs in nearby coconut plantations. Interestingly, according to parents and teachers, these students do not work to supplement household income, but use these earnings to buy phones and other personal items.

Teacher and administrators at this school seem to have an awareness of the problem of boys' underperformance. However, it is interesting to note that contrary to the O-level results (show below), teachers indicated that there were some high-performing boys, even though the majority were low-performers. The table below, clearly indicates that in 2014, in all subjects, with the exception of Sinhala, there were no high-performing boys.

A total of 4 focus groups were conducted at Maspotha consisting of: Group 1: 10 Grade 10/11 high-performing boys; Group 2: 10 Grade 10/11 Girls; Group 3: 8 parents of Grade 10/11 boys and girls and; Group 4: Grade 10/11 Science, English, Buddhism, History, ICT, Sinhalese and Civic Education, teachers along with the school principal.

<b>Math</b>																				
<b>Year</b>	<b>Total Number Sat</b>		<b>Total Number Passed</b>		<b>% pass</b>		<b>A</b>		<b>%</b>		<b>B</b>		<b>C</b>		<b>S</b>		<b>W</b>		<b>W %</b>	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
2014							0	2	0	100	0	1	3	3	4	7	15	11	58	42
<b>Science</b>																				
<b>Year</b>	<b>Total Number Sat</b>		<b>Total Number Passed</b>		<b>% pass</b>		<b>A</b>		<b>%</b>		<b>B</b>		<b>C</b>		<b>S</b>		<b>W</b>		<b>W %</b>	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
2014							0	1	0	100	0	0	2	4	6	5	12	7	63	37
<b>Language-Sinhala</b>																				
<b>Year</b>	<b>Total Number Sat</b>		<b>Total Number Passed</b>		<b>% pass</b>		<b>A</b>		<b>%</b>		<b>B</b>		<b>C</b>		<b>S</b>		<b>W</b>		<b>W %</b>	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
2014							0	4	0	100	1	3	7	5	6	4	6	2	75	25
<b>History</b>																				
<b>Year</b>	<b>Total Number Sat</b>		<b>Total Number Passed</b>		<b>% pass</b>		<b>A</b>		<b>%</b>		<b>B</b>		<b>C</b>		<b>S</b>		<b>W</b>		<b>% pass</b>	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
2014							2	4	33	67	0	3	5	6	5	2	8	5	62	38

### Summary of Results from Focus Group Discussions at Maspotha

#### Teachers and School Administrators

<b>Theme</b>	<b>Message</b>
General Student Observations	<ul style="list-style-type: none"> <li>• They see the standards of students, particularly male students having gone down significantly.</li> <li>• Boys don't have much of a desire to learn.</li> <li>• In Science, both groups are low performing.</li> <li>• Male students do not read/study their textbooks so they fall behind.</li> <li>• The majority of boys are weaker than girls but there are a few strong performing boys</li> <li>• Top 5 in one cohort was girls.</li> <li>• Boys are good at technology (practical skills) but weak in theory.</li> </ul>

Differences between girls and boys study habits and capabilities	<ul style="list-style-type: none"> <li>• Girls are a little better than boys in reading</li> <li>• Both boys and girls lack the desire to study in depth but it is more prominent in boys</li> <li>• Problems become more evident in the 7th grade. Students lose focus after grade 5.</li> <li>• Boys are more interested in IT/computers</li> </ul>
Reasons for the difference between boys and girls	<ul style="list-style-type: none"> <li>• Parents have a lot to do with it- parents going overseas for work.</li> <li>• They believe they can earn money even if they are not educated</li> <li>• The use of cell phones.</li> <li>• Children who come from the city are in general better performing than those who come from the village.</li> <li>• Parental involvement is an important factor.</li> <li>• TV is a problem</li> <li>• Girls are more protected at home, have less freedom and so they are more focused.</li> <li>• Boys are allowed to have mobile phones, have freedom etc.</li> <li>• Boys also tend to make money while they are still in school, working in retail, working in the fields, catering etc.</li> <li>• Some girls do also, but seems to be more prevalent in boys.</li> </ul>
Awareness of the problem of underperforming boys	<ul style="list-style-type: none"> <li>• They seem to be strongly aware of the problem, have discussed it among themselves and with parents.</li> </ul>
Potential ways to address underperforming boys	<ul style="list-style-type: none"> <li>• Textbooks are a problem, they need to be tailored to students.</li> <li>• Girls like to use textbooks, boys like to use technology.</li> </ul> <p>Students are not fit mentally or physically- they don't like to do much physical activity-even sports or playing outside, they like to be on their laptops or watching TV</p>
Common perceptions and stereotypes	<ul style="list-style-type: none"> <li>• Boys find it easier to earn money even without an education.</li> <li>• Students see people, including parliamentarians doing well without any O or A level qualifications/</li> </ul>
<b>Parents</b>	
<b>Theme</b>	<b>Message</b>
Extracurricular habits/ religious activities (TV watching/ computer games etc.)	<ul style="list-style-type: none"> <li>• 4 am or 4:30 am all children get up at this time, to study and get ready for school. They leave for school at 6:30 am. They eat breakfast at home and bring a snack to school.</li> <li>• They have lunch, sleep for an hour or two. Have a bath, attend extra classes.</li> <li>• Some parents do allow their kids to watch tv, others do not. There is generally a struggle about TV watching.</li> <li>• They generally don't go out to play, some watch TV at home. Most parents said they don't allow their sons to watch</li> <li>• They go to Sunday school at the temple</li> </ul>

School Tuition and out of school study habits and Parental monitoring	<ul style="list-style-type: none"> <li>• They go for tuition about 3 days a week/ they come back around 6 pm</li> <li>• One parent said that they check their child's homework on a daily basis another said they check on a monthly basis.</li> </ul>
Understanding the Gender Gap and Potential Solutions	<ul style="list-style-type: none"> <li>• Parents think girls are more driven.</li> <li>• Financial difficulties, parents working overseas/ or working too much and not having the time to oversee kids are other reasons that kids are not succeeding.</li> <li>• Boys get into a bad circle of friends and go off track in their education.</li> <li>• Girls are more afraid of the consequences and do stay on track.</li> <li>• They say girls are more motivated than boys.</li> <li>• Parents are stricter with sons than daughters.</li> <li>• Male teachers may help boys to perform better because boys fear/ respect male teachers more</li> <li>• Principle said they have not looked at the O-level results gender wise.</li> </ul>
Common Perceptions/Stereotypes	<ul style="list-style-type: none"> <li>• No strong stereo-types were suggested.</li> </ul>
<b>Boys 1</b>	
<b>Theme</b>	<b>Message</b>
<b>Daily Habits and Extracurricular Activities</b>	<ul style="list-style-type: none"> <li>• They wake up at 5:00 am and get to school by 7:00 am</li> <li>• Get home at 2:30 pm</li> <li>• Some have a nap.</li> <li>• They have tuition on Saturday and Sunday</li> <li>• Extra Math tutoring on Friday.</li> <li>• They all study at night- till about 11 pm</li> <li>• Watch TV.</li> <li>• They play cricket and volleyball on the weekends only.</li> <li>• They play games on their phones for 3-4 hours a day.</li> </ul>
<b>Study Habits</b>	<ul style="list-style-type: none"> <li>• Parents check their work</li> </ul>
<b>Curriculum</b>	<ul style="list-style-type: none"> <li>• Weakest- English, Math.</li> <li>• Best- Sinhala, Buddhism history</li> <li>• They feel that they used to score higher in Math in Grade 6 and it has gradually gone down.</li> </ul>
<b>Opinion on Teachers and School</b>	<ul style="list-style-type: none"> <li>• They prefer a male teacher, because female teachers hit them. They prefer someone between 3—40. They feel their current teachers are too old.</li> </ul>

<b>Career and Aspirations</b>	<ul style="list-style-type: none"> <li>• Some have plans for A-levels, Math-1, Art-5, Commerce-1, Undecided- rest. Rest will decide after results come out.</li> </ul>
<b>Perceptions of Gender differences</b>	<ul style="list-style-type: none"> <li>• They think equal numbers of boys and girls pass O-levels.</li> <li>• They think a reason boys might not be doing well is mobile phones</li> <li>• The majority at the bottom of the class are boys.</li> </ul>
<b>Girls</b>	
<b>Daily Habits and Extracurricular Activities</b>	<ul style="list-style-type: none"> <li>• Wake up at 4- 4:30 am. Some study before school for 45 minutes or so. They get home between 2-2:30 pm .</li> <li>• They have lunch, shower, and take a nap.</li> <li>• They do homework in the evenings.</li> <li>• They attend extra classes on Saturdays and Sundays.</li> <li>• They watch TV for about two hours, and go to sleep by 9:30 -10 pm.</li> </ul>
<b>Study Habits</b>	<ul style="list-style-type: none"> <li>• They study, do homework for approximately two hours.</li> <li>• Some girls attend the extra classes given at schools</li> <li>• These students expressed general disinterest in their studies- i.e. saying they don't remember what they study, they study only 1 subject a day, they don't always read their textbooks.</li> <li>• They receive extra tutoring on Saturday and Sundays. Mostly in Maths and Science, English and IT.</li> <li>• They attend group tuition classes (30-40 students). They get extra homework from these classes. Most of the girls do their homework from these classes.</li> <li>• Most students find the exams difficult, because they feel they did not study enough. They score low on Mathematics.</li> <li>• They don't own mobile phones.</li> </ul>
<b>School Curriculum</b>	<ul style="list-style-type: none"> <li>• Favorite subjects</li> <li>• Sinhalese-1</li> <li>• Art-1</li> <li>• English-1</li> </ul>
<b>Opinion on Teachers and School</b>	<ul style="list-style-type: none"> <li>• They prefer male teachers, between 30-40</li> </ul>
<b>Career and Aspirations</b>	<ul style="list-style-type: none"> <li>• Except for one, the others did not express clear aspirations.</li> </ul>
<b>Perceptions of Gender differences</b>	<ul style="list-style-type: none"> <li>• They think there is a difference between boys and girls performance.</li> <li>• There is one boy in the top 5, none in the next 5. The last five are all boys.</li> <li>• They feel that they work harder but still don't do as well as boys do.</li> </ul>

**Profile of Carla Beck Maha Vidyalayam (School 3)**

**Nuwareliya District:** G.C.E O-Level Results (2015): 59% pass rate overall ( 52% male and 65% female pass rate)

**Location:** located in the Nuwareliya Zone, C Province, within a tea plantation

**School Type:** Type 2

**Student Population:** 569

**Student-teacher ratio:** 24-1

The school is within a tea estate, approximately 8km away from the town of Thalawakele. Almost all the students are children of tea plantation workers, who reside on the estate. According to the principal there is little help from the estate and parents in monitoring the activities of the children, rather the school has to take a lead role in following up on the students. The principle expressed an awareness of the problem of boys' underperformance. In spite of interventions aimed at addressing the issue, such as parental awareness programs and extra classes for underperforming students, the school authorities admit they cannot seem to motivate students, particularly boys, to study. As the results below indicate, although the pass rates are generally low, particularly for those who qualified for the A-levels with Mathematics, the rates are significantly much higher for girls. In spite of these results, it was not clear whether school authorities considered this gender disparity in achievement to be a pressing issue.

A total of 4 focus groups were conducted at Carla Beck MahaVidyalayam consisting of: Group 1: 10 Grade 10/11 high-performing boys; Group 2: 10 Grade 10/11 Girls; Group 3: 9 parents of Grade 10/11 boys and girls and; Group 4: Grade 10/11 History, English, Math, Health Science, Literature, Science, Home Economics, and Commerce teachers along with the school principal.

**GCE O-Level Results for Carla Beck**

Year	Total Number Sat		Total Number Passed - with Mathematics		% pass- with Mathematics		Total Number passed without Mathematics		% without Mathematics	
	M	F	M	F	M	F	M	F	M	F
2014	10	22	1	5	10	23	1	1	10	4.5
2013	13	16	2	7	15	44	2	2	15	12.5
2012	12	16	3	5	25	31	1	3	10	19

## Teachers and School Administrators

Theme	Message
General Student Observations	<ul style="list-style-type: none"> <li>• Parents don't seem to take as much of an interest in children's education- there is a difference between the interest levels of city and plantation parents</li> <li>• They see more of an interest, openness, curiosity, in the current batch of students</li> <li>• They say that students, especially boys seem more ambitious now, they used to want to be a driver etc. now they want to lawyers, doctors etc.</li> </ul>
Differences between girls and boys study habits and capabilities	<ul style="list-style-type: none"> <li>• Boys and girls are equally good in reading, boys are better in logical reasoning, maths,</li> <li>• Girls are better at encoding- mainly because boys are careless.</li> <li>• Both boys and girls miss classes, but girls follow up and make sure they catch up on what is missed.</li> <li>• Girls are better at completing their homework.</li> <li>• Girls are better in subjects where they have to memorize more, boys are better in understanding the fundamentals of maths and physics.</li> <li>• Boys need more practical approaches to learning, girls are okay with watching and studying.</li> </ul>
Reasons for the difference between boys and girls	<ul style="list-style-type: none"> <li>• Boys are victims of their environment- friendships, bad influences etc.</li> <li>• Up to grade 5, parents are attentive and students are regular in attendance etc. but parents don't get involved again to grade 10-parents neglect boys until grade 9/10</li> <li>• Girls are better at giving long answers, boys like to write short answers.</li> <li>• Too much TV watching is what is hurting the performance of boys- although they say that both groups watch too much TV/ movies (girls watch TV and boys watch movies). They spend too much time outside playing with friends etc.</li> <li>• Boys think that they can get employment without an education. They see the example of some boys who left school, and still make a lot of money (see examples from page 8).</li> </ul>
Awareness of the problem of underperforming boys	<ul style="list-style-type: none"> <li>• They see that boys' performance is below that of girls and that boys are dropping out of school to go work in Colombo.</li> <li>• It is not clear whether they see boys' underperformance as a pressing concern.</li> </ul>
Potential ways to address underperforming boys	<ul style="list-style-type: none"> <li>• Although writing longer answers is difficult for boys, they don't necessarily think it is a bad thing.</li> <li>• Parents should be more involved.</li> <li>• They need good role models.</li> <li>• More activity based study.</li> </ul>

	<ul style="list-style-type: none"> <li>• Scholarship exam should be postponed to grade 8 or 9.</li> <li>• They think male teachers may help boys to perform better because they are more feared by the boys.</li> </ul>
<b>Parents</b>	
<b>Theme</b>	<b>Message</b>
Extracurricular habits/ religious activities (TV watching/ computer games etc.)	<ul style="list-style-type: none"> <li>• Most wake up at 4:30/5:30 am and study till 6:00/ 7:00 am.</li> <li>• School gets over at 2:00 pm. They get home at 3:00 pm if they have extra classes otherwise a bit earlier, they garden, attend Sinhala classes, and study. Parents of girls said they come home and study, parents of boys said they come home and tend to play outside/ watch TV and have dinner and go to bed.</li> <li>• Most kids watch some TV, especially on the weekends.</li> <li>• One parent said their child participates in Hindu temple worship.</li> <li>• Boys play outside, either on the playground, or sports like cricket. Girls don't have a chance to play because of family restrictions.</li> </ul>
School Tuition and out of school study habits and Parental monitoring	<ul style="list-style-type: none"> <li>• One parent said the home environment for studies is difficult because it is cramped and small.</li> <li>• Parents say they find it hard to monitor kids homework- essentially because they don't know the subject matter well enough and kids can use that against them.</li> <li>• There are no private tuition classes in the estate sector.</li> <li>• Parents seem to think the atmosphere at home is conducive to studying and say their kids study but they are not happy with the results- especially Mathematics.</li> </ul>
Understanding the Gender Gap	<ul style="list-style-type: none"> <li>• Most parents said they don't face the problem of boys who have left school being in the community, but unemployed- most of them go to Colombo</li> <li>• Parents say the reason boys don't do well is because they waste their time watching TV- sports or other shows.</li> <li>• Some parents suggest girls are more docile and compliant, boys are more difficult to control and less submissive.</li> <li>• They say that the problem start at around age 9. Some parents expressed a fear that kids would commit suicide if pushed or disciplined</li> <li>• They suggest that boys who leave for Colombo and come back to the estate are well-dressed and have material things- that makes it attractive for kids to drop out of school and go to Colombo.</li> <li>• They don't blame the school but felt that the lack of A/L classes inhibited kids.</li> </ul>
<b>Boys</b>	
<b>Theme</b>	<b>Message</b>

<b>Daily Habits and Extracurricular Activities</b>	<ul style="list-style-type: none"> <li>• Wake up between 3:30 and 6 am.</li> <li>• Some study.</li> <li>• They get home by 3 pm, have lunch, and play. Wake up between 3:30 and 6 am.</li> <li>• Some study.</li> <li>• They get home by 3 pm, have lunch, and play.</li> <li>• They play soccer and cricket.</li> <li>• They play games on their mobile phones for ½ hour to 3 hours.</li> </ul>
<b>Study Habits</b>	<ul style="list-style-type: none"> <li>• They start studying at 6 pm, they study every day. Their parents and siblings help them. Their parents punish them when they score low.</li> </ul>
<b>Curriculum</b>	<ul style="list-style-type: none"> <li>• Favorite subjects- health, science, ag. Science.</li> <li>• Least favorite- Math.</li> <li>• They did better in Math in Grade 6 and it went down from there.</li> </ul>
<b>Opinion on Teachers and School</b>	<ul style="list-style-type: none"> <li>• They prefer a male for Math and English, female in Tamil.</li> <li>• They prefer a male teacher overall, between 30-35.</li> </ul>
<b>Career and Aspirations</b>	<ul style="list-style-type: none"> <li>• Most want to do A-levels.</li> </ul>
<b>Perceptions of Gender differences</b>	<ul style="list-style-type: none"> <li>• Boys are at the very top and very bottom.</li> <li>• In the last four years, many more girls than boys passed the O-Levels</li> <li>• They think the reason boys are not doing well is that they are too playful. Girls study hard. They think that girls are attentive, and boys tend to fall asleep in class.</li> <li>• They think girls are better at memorizing.</li> <li>• They felt that girls study harder, but they believed they do better on exams.</li> </ul>
<b>Girls</b>	
<b>Daily Habits and Extracurricular Activities</b>	<ul style="list-style-type: none"> <li>• They wake up between 5 -5:30 am</li> <li>• They are in school by 7 (prefects) or 7:30 am.</li> <li>• Classes begin at 7/7:30 am</li> <li>• Regular school closes at 2:00 pm.</li> <li>• Extra Evening classes finish at 4 pm.</li> <li>• If they don't have classes they get home, eat, watch TV, and play sports, or play outside. All were involved in sports except for one girl</li> <li>• They attend tuition classes on Saturdays and Sundays- for Math and Science.</li> </ul>

	<ul style="list-style-type: none"> <li>• They watch TV. All were involved in sports except for one girl.</li> <li>• They participate in health clubs, youth clubs at school. They do speech, drama, floor decoration etc.</li> </ul>
<b>Study Habits</b>	<ul style="list-style-type: none"> <li>• They study for about two hours in the evening, have dinner, and go to bed.</li> <li>• They don't have any disturbances at home.</li> </ul>
<b>School Curriculum</b>	<ul style="list-style-type: none"> <li>• Favorite subjects-</li> <li>• Maths, Science,</li> <li>• Least favorite- HISTORY and English.</li> <li>• Most want to choose Science or Commerce for A-Level.</li> </ul>
<b>Opinion on Teachers and School</b>	<ul style="list-style-type: none"> <li>• They prefer a female teacher around 50 years old.</li> </ul>
<b>Career and Aspirations</b>	<ul style="list-style-type: none"> <li>• Most want to be doctors</li> <li>• Accountant-1</li> </ul>
<b>Perceptions of Gender differences</b>	<ul style="list-style-type: none"> <li>• Boys always take the first three spots, girls after them.</li> <li>• More boys in the last five.</li> <li>• They have seen the difference between boys and girls, in the 0-level results, boys are doing worse.</li> <li>• 3 girls and no boys proceeded to A-level from last batch.</li> </ul>

### Profile of Barathy Tamil Maha Vidyalayam (T.M.V.) (School 4)

**Nuwareliya District:** G.C.E O-Level Results (2015): 59% pass rate overall (52% male and 65% female pass rate)

**Location:** Nuwareliya district, C Province, within a tea plantation

**School Type:** Type 1C

**Student Population:** 495 (Male-233, Female- 262)

**Student-teacher ratio:** 26-1

It is IC school located in a tea estate closer to Thalawakale town, a suburb of Nuwareliya City, and somewhat economically active area. Majority of students are from the estate, but at least 20% students coming from Thalawakele town. Among the O/L students there are parents from the estate as well as from small traders of the town. Thalawakele town also has a I AB school where most of the children from affluent families of this area go to. The distance between Barathy Maha Vidyalayam and Thalawakele MMV is approximately 4km. Those who excel in O/L at Barathy MV go to Thalawakele MMV for A/L Science.

Overall level, this school has mediocre achievement- and clearly worse among boys as the table below indicates. The school authorities suggested that this may be because boys did not show any strong interest in studies, and rather, to go to Colombo to work in the restaurant business, or driving three wheelers. Interestingly, student attendance does not seem to be issue for the school- as they have over 90% attendance. The principle and teachers seem to be aware of the problem of boys' underperformance (indicated in the results in the table below). The principle attributed the problem to the job opportunities for boys in Colombo, a lack of good role models for boys, and a lack of parental (particularly father's involvement).

A total of 4 focus groups were conducted at Barathy Tamil Maha Vidyalam consisting of: Group 1: 10 Grade 10/11 high-performing boys; Group 2: 10 Grade 10/11 Girls; Group 3: 11 parents of Grade 10/11 boys and girls and; Group 4: Grade 10/11 English, Art, IT, Tamil, Islam, Math, Commerce, History and Science teachers along with the school principal.

### G.C.E. O-Level Results for Barathy T.M.V.

Year	Total Number Sat		Total Number Passed		% pass	
	M	F	M	F	M	F
2015	28	13	13	12	46	92
2014	20	27	7	13	35	48
2013	28	31	13	5	46	20

### Teachers and School Administrators

Theme	Message
General Student Observations	<ul style="list-style-type: none"> <li>• Children are quicker at grasping information now (as opposed to previous cohorts)</li> <li>• They are more likely to questions things now, less submissive- think more critically.</li> <li>• More children sit for the A/L now.</li> </ul>
Differences between girls and boys study habits and capabilities	<ul style="list-style-type: none"> <li>• Girls complete their homework more often than boys</li> <li>• Boys have a better understanding of subject matter than girls.</li> <li>• Boys have better encoding and decoding ability</li> <li>• Boys have better encoding and decoding abilities</li> <li>• Boys are better at practical side of science, girls are better at memorizing.</li> <li>• Boys tend to read English textbooks better than girls, girls read history better.</li> <li>• Both seem to perform equally well on A/L and O/L</li> <li>• Boys have more creative minds, girls are better at memorizing.</li> </ul>
Reasons for the difference between boys and girls	<ul style="list-style-type: none"> <li>• Girls are better at memorizing.</li> <li>• Boys are more interested in employment as soon as possible, they think they have skills that will get them employed regardless of education- technical skills such as IT, motor repair, computer repair, electrical wiring etc.</li> <li>• Parents also encourage boys to get employed.</li> <li>• Boys who get good marks on the O/L do not go to get employed</li> <li>• Parents of poor students are not likely to get involved</li> <li>• Girls are more hardworking</li> <li>• Boys find it difficult to write long answers.</li> </ul>
Awareness of the problem of underperforming boys	<ul style="list-style-type: none"> <li>• They seem to think boys and girls are doing equally well in the O-level and A-level exam – just depended on the year. In 2014, less girls than boys, in 2015 more girls than boys.</li> <li>• They see that girls perform better than boys on exams.</li> <li>• The principle expressed awareness of the issue, and said he had tried to raise it in the SDC but there was little response from SDC members.</li> </ul>
Potential ways to address underperforming boys	<ul style="list-style-type: none"> <li>• They think that boys going to Colombo to work is a large part of the problem.</li> <li>• Teachers did not have suggestions on how to address the problem</li> <li>• The principle attributed the problem to a lack of male teachers, a lack of career guidance, job – opportunities for boys in Colombo, and a lack of parental engagement.</li> </ul>

Common perceptions and stereotypes	<ul style="list-style-type: none"> <li>• They felt boys had more “negative qualities”- not expounded on</li> </ul>
<b>Parents</b>	
<b>Theme</b>	<b>Message</b>
Extracurricular habits/ religious activities (TV watching/ computer games etc.)	<ul style="list-style-type: none"> <li>• Get up between 4 and 5 am. Some study before school. After school some study after dinner and late into the night- till 11 pm.</li> <li>• Boys play outside on a daily basis, girls are not given the same freedom to play outside.</li> <li>• Also, they say girls don’t have the time to play</li> </ul>
School Tuition and out of school study habits and Parental monitoring	<ul style="list-style-type: none"> <li>• Some parents send their kids to another town for extra tuition on weekends (only for Science, Math and English)</li> <li>• Parents say they don’t have to monitor their kids- they study on their own. They don’t feel like they can monitor them because they don’t have the subject knowledge.</li> <li>• Parents seem interested in what their kids are studying but they don’t feel that they have the capacity to monitor well.</li> <li>• Most parents seem to think the home environment for studying is good. Kids are not disturbed.</li> </ul>
Understanding the Gender Gap	<ul style="list-style-type: none"> <li>• Parents in this group don’t ‘seem to see much difference in the way boys and girls study.</li> <li>• One parents said that mothers are generally strict with girls- because they think studying is important even for girls’ marriage prospects. For boys on the other hand, it seems that they feel even without education, they can get a job and earn a living.</li> <li>• Most parents seem to encourage their kids to study and try to provide them with their resources to do so.</li> <li>• They attribute boys underperformance to bad influences- seeing boys who did not study earning an good income (eg. Provided)</li> <li>• One parent said his nephew did very well in the O-level but refused to continue studying and went to work.</li> <li>• Another gave the example of a boy and girl in another family- both did very well in school but both discontinued their studies.</li> <li>• Most indicated that boys are not keen on continuing after O-level or 10<sup>th</sup> grade. Some because they have earning prospects that relatively good without the education.</li> <li>• They seem to encourage girls to study because they feel that boys have job prospects even without studying.</li> <li>• Parents indicate that peer influences and role models play a large role- children are motivated by good role models and also bad ones.</li> </ul>

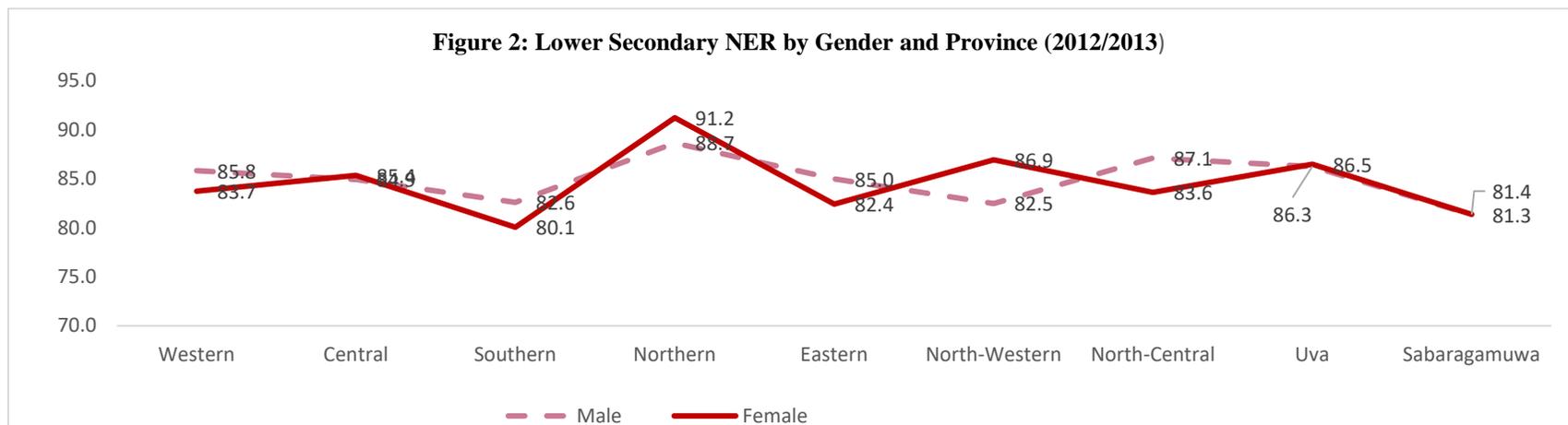
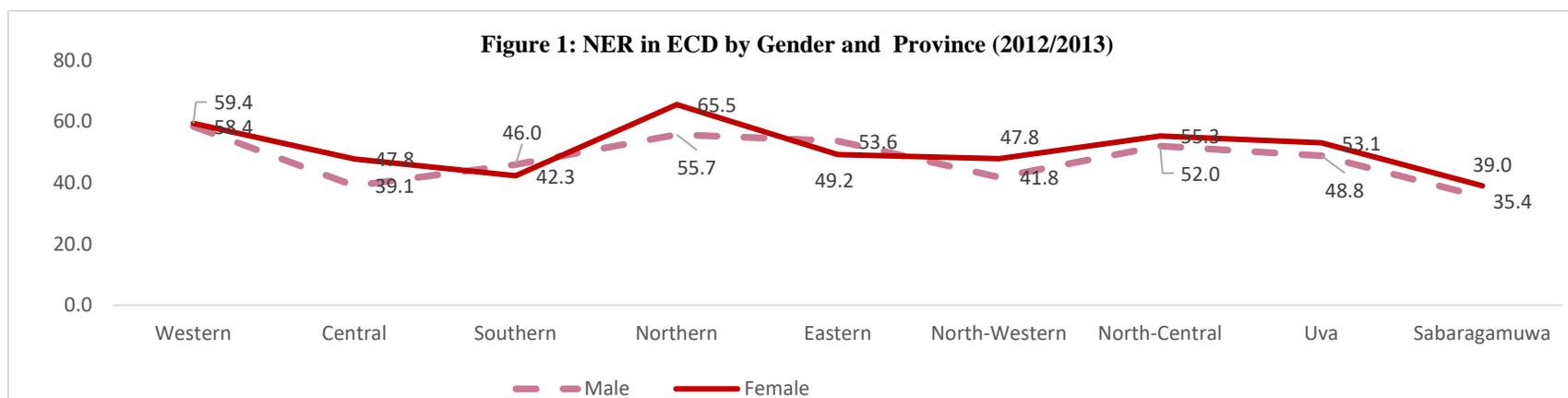
<b>Boys</b>	
<b>Theme</b>	<b>Message</b>
<b>Daily Habits and Extracurricular Activities</b>	<ul style="list-style-type: none"> <li>• Between 3-6 am. Most study in the morning for some time.</li> <li>• They leave for school at 7 am.</li> <li>• Most attend tuition classes.</li> <li>• They watch TV, play volleyball, cricket, netball, etc.</li> <li>• They play mobile games</li> </ul>
<b>Study Habits</b>	<ul style="list-style-type: none"> <li>• They parents help them with their studies.</li> </ul>
<b>Curriculum</b>	
<b>Opinion on Teachers and School</b>	<ul style="list-style-type: none"> <li>• They prefer a male teacher between 30 and 35 years of age.</li> </ul>
<b>Career and Aspirations</b>	<ul style="list-style-type: none"> <li>• One said army, another mechanic, others said they would decide after the results come out.</li> </ul>
<b>Perceptions of Gender differences</b>	<ul style="list-style-type: none"> <li>• Lowest performers are boys.</li> <li>• They feel girls do better because boys are playful or attentive.</li> <li>• Boys can get employed easily in restaurants in Colombo.</li> </ul>
<b>Girls</b>	
<b>Daily Habits and Extracurricular Activities</b>	<ul style="list-style-type: none"> <li>• Wake up between 5 -5:30 am.</li> <li>• Study for a little while.</li> <li>• Leave for school at 7 am.</li> <li>• They attend tuition classes on Saturday and Sunday.</li> <li>• They get home at 4/430. Most don't take a nap. They play cricket.</li> <li>• They study from 6-9 pm, some till 11:00 pm</li> <li>• They play cricket, watch news on TV. Play netball or volleyball.</li> <li>• They watch movies on weekends.</li> </ul>
<b>Study Habits</b>	Their mothers check their homework
<b>School Curriculum</b>	<ul style="list-style-type: none"> <li>• Favorite subjects: Science, Music.</li> <li>• Least favorite- English</li> </ul>
<b>Opinion on Teachers and School</b>	<ul style="list-style-type: none"> <li>• Gender does not matter, between 30-35 years old.</li> </ul>
<b>Career and Aspirations</b>	<ul style="list-style-type: none"> <li>• None expressed any clear aspirations or ambitions</li> </ul>

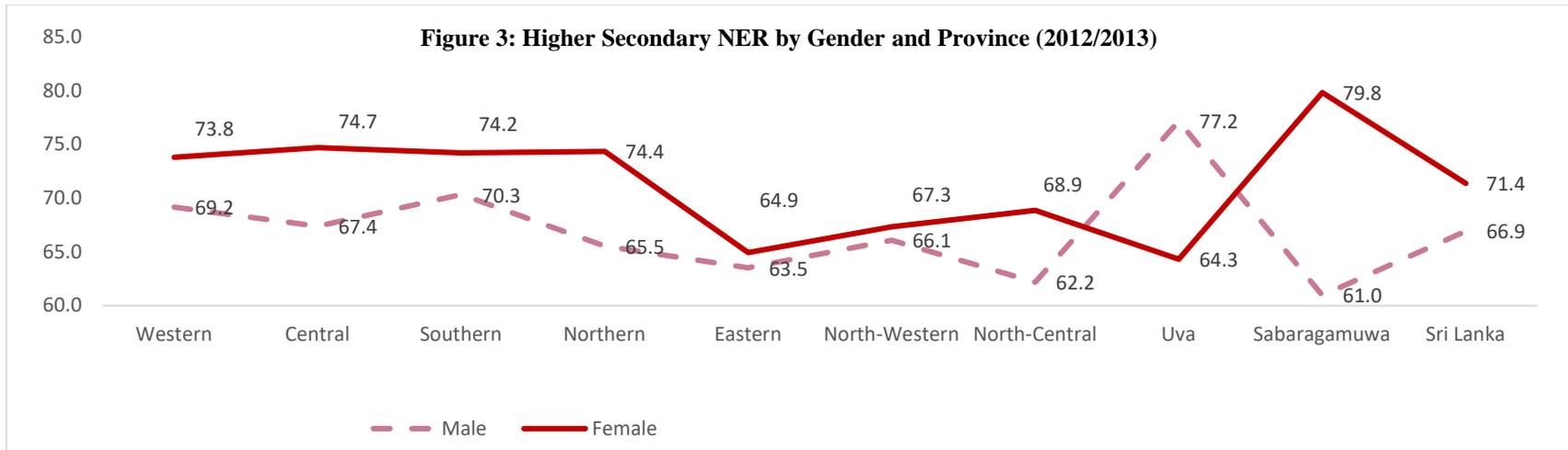
<b>Perceptions of Gender differences</b>	<ul style="list-style-type: none"><li>• Girls generally fare better.</li><li>• Top 5 are boys, bottom five are boys.</li><li>• More girls pass the O-levels</li><li>• They think a reason boys don't do well is there is financial pressure at home and so they leave studies to work.</li></ul>
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### Annex 3: Gender Dimensions of Access to Education in Sri Lanka

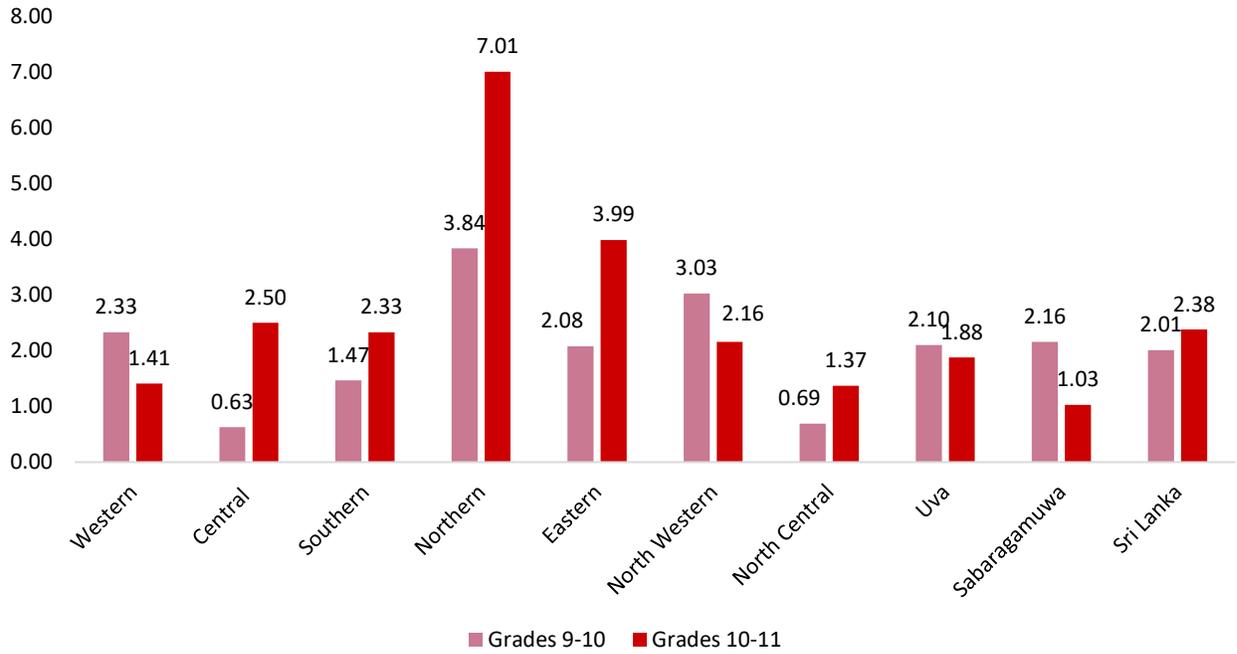
This Annex contains figures describing the analysis of data on access to education in Sri Lanka, by gender, school level and by Province

#### 1. Enrollment Rates by Province in Sri Lanka

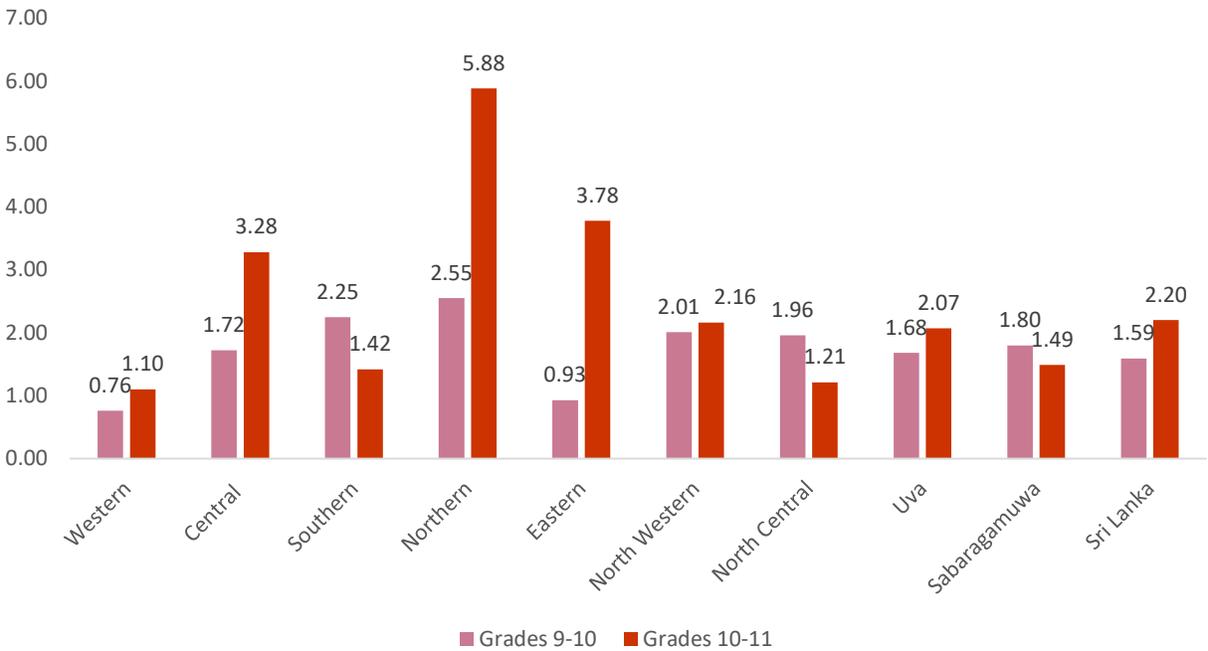


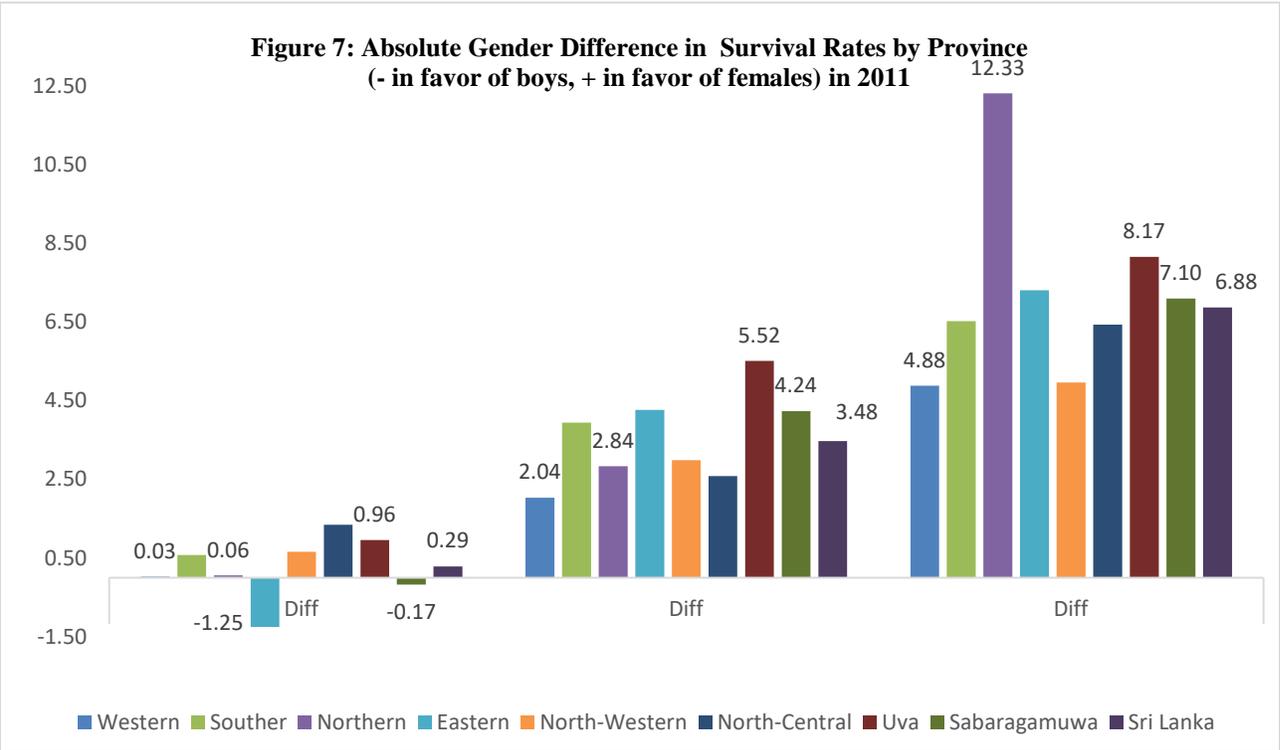
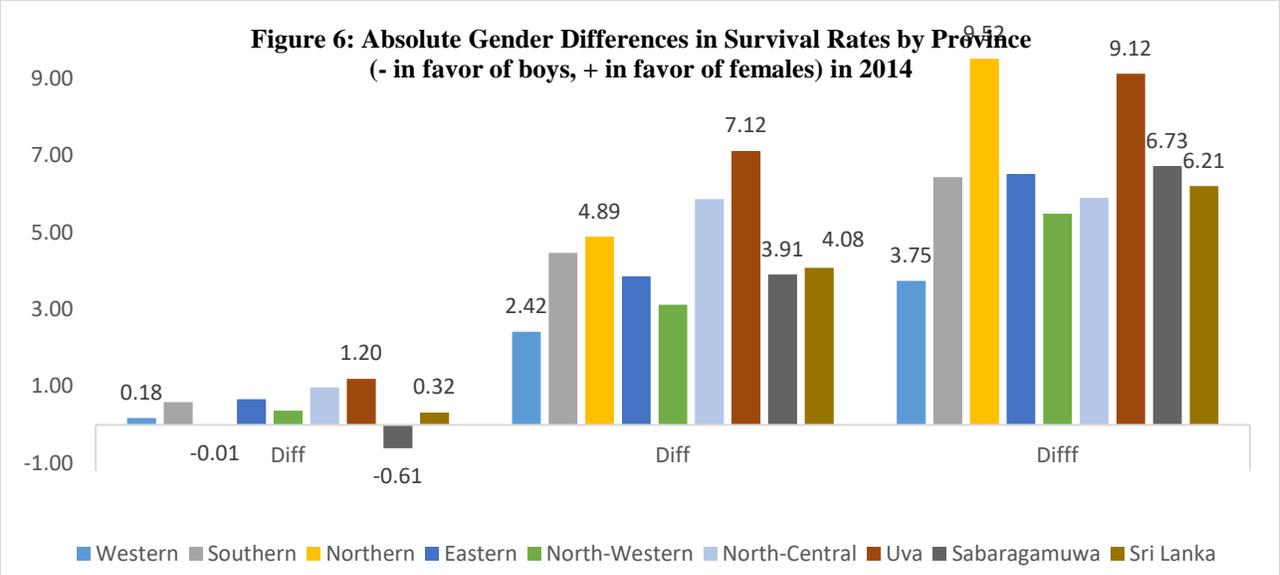


**Figure 4: Gender Differences ( in favor of females) in Grade 9-10 and 10-11 transition rates in 2011 by Province**

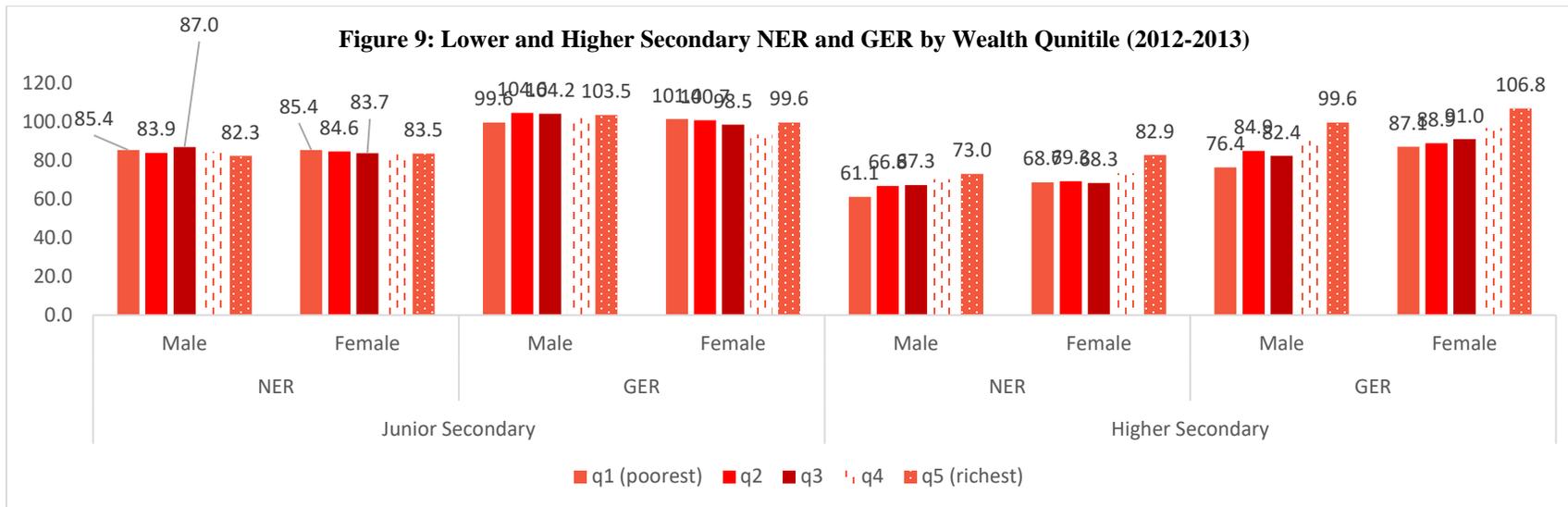
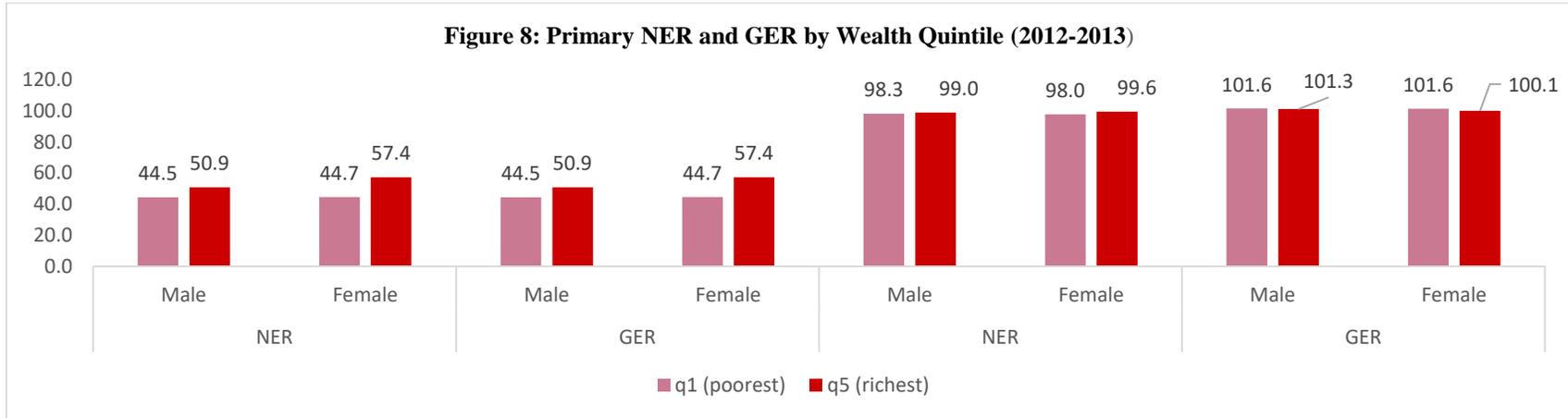


**Figure 5: Gender Differences in Transition rates (in favor of females) from Grades 9-10 and 10-11 in 2014 by Province**





## 2. Enrollment Rates by Wealth Quintile

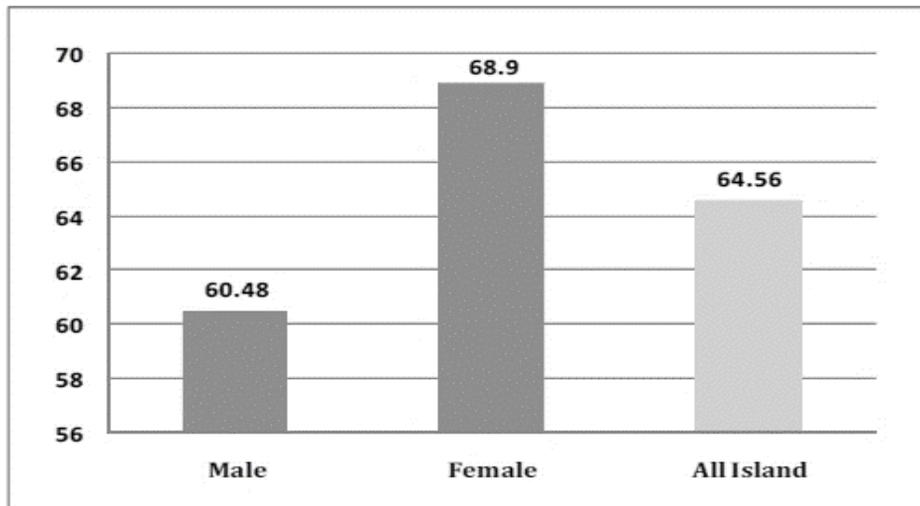


## Annex 4: Gender Dimension of Educational Achievement in Sri Lanka

This Annex includes an analysis of data on educational achievement in Sri Lanka by Gender at the national level and in some cases, by Province.

### NEREC Grade 4 Results

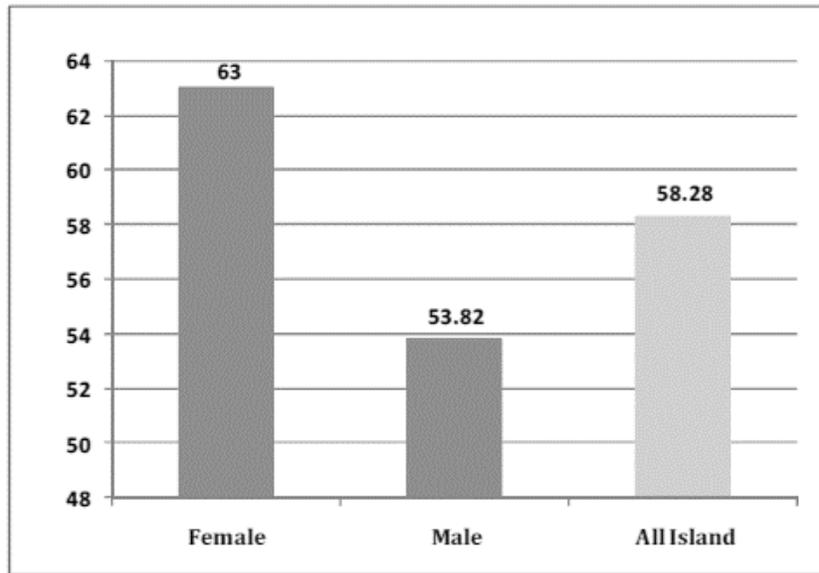
**Figure 1: NEREC Grade 4 Achievement (Mean Values) by Gender in a First Language- Sinhala**



**Table 1: NEREC Grade 4 Gender-wise cumulative percentages in a First Language- Sinhala**

Class Interval	Female (%)	Cumulative Percentage	Male (%)	Cumulative Percentage
90 to 100	12.00%	100.00%	6.50%	100.00%
80 to 89	24.10%	88.00%	16.50%	93.50%
70 to 69	17.10%	63.90%	15.60%	77.00%
60 to 69	18.00%	46.80%	16.70%	61.40%
50 to 59	11.90%	28.80%	14.20%	44.70%
40 to 49	7.20%	16.90%	10.10%	30.50%
30 to 39	5.90%	9.70%	9.90%	20.40%
20 to 29	2.20%	3.80%	5.60%	10.50%
10 to 19	1.30%	1.60%	3.80%	4.90%
0 to 9	0.30%	0.30%	1.10%	1.10%
Total	100.00%		100.00%	

**Figure 2: NEREC Grade 4 Achievement (Mean Values) by Gender in a First Language- Tamil**



**Table 2: NEREC Grade 4 Gender-wise cumulative percentages in a First Language- Tamil**

Class Interval	Female (%)	Cumulative Percentage	Male (%)	Cumulative Percentage
90 to 100	16.00%	100.00%	8.60%	100.00%
80 to 89	19.10%	84.00%	15.80%	91.40%
70 to 79	12.80%	64.90%	10.40%	75.60%
60 to 69	12.60%	52.10%	10.80%	65.20%
50 to 59	9.60%	39.50%	10.50%	54.40%
40 to 49	5.80%	29.90%	8.30%	43.90%
30 to 39	9.10%	24.10%	10.70%	35.60%
20 to 29	6.40%	15.00%	9.00%	24.90%
10 to 19	6.90%	8.60%	12.00%	15.90%
0 to 9	1.70%	1.70%	3.90%	3.90%
Total	100.00%		100.00%	

**Table 3: NEREC Grade 4 Achievement (Mean Values) by Gender in a First Language- English**

Student Gender	Mean	Standard Deviation	Standard Error of Mean	Skewness	Percentile (p25)	Median (p50)	Percentile (p75)
Female	55.67	25.321	.063	-0.120	32.50	57.50	77.50
Male	47.97	25.361	.061	0.247	25.00	42.50	70.00
<b>All Island</b>	<b>51.68</b>	<b>25.632</b>	<b>.044</b>	<b>0.068</b>	<b>27.50</b>	<b>50.00</b>	<b>75.00</b>

**Table 4: NEREC Grade 4 Gender-wise cumulative percentages in a First Language- English**

Class Interval	Female (%)	Cumulative Percentage	Male (%)	Cumulative Percentage
90 to 100	9.49%	100%	6.09%	100%
80 to 89	14.26%	90.51%	9.35%	93.92%
70 to 79	14.22%	76.25%	12.29%	84.57%
60 to 69	11.45%	62.03%	9.40%	72.28%
50 to 59	9.00%	50.58%	8.40%	62.88%
40 to 49	9.11%	41.58%	9.29%	54.48%
30 to 39	11.96%	32.47%	14.40%	45.19%
20 to 29	13.73%	20.51%	19.48%	30.79%
10 to 19	5.70%	6.78%	9.23%	11.31%
0 to 9	1.08%	1.08%	2.08%	2.08%

**Table 5: NEREC Grade 4 Achievement (Mean Values) by Gender in Mathematics (2013)**

Student Gender	Mean	Standard Deviation	Standard Error of Mean	Skewness	Percentile (p25)	Median (p50)	Percentile (p75)
Female	62.45	21.206	0.053	-0.433	48	65.00	80
Male	58.34	23.119	0.055	-0.202	40	60.00	78
<b>All Island</b>	<b>60.32</b>	<b>22.311</b>	<b>0.038</b>	<b>-0.319</b>	<b>42</b>	<b>62.50</b>	<b>80</b>

**Table 6: NEREC Grade 4 Gender-wise cumulative percentages in a Mathematics (2013)**

Class Interval	Female (%)	Cumulative Percentage	Male (%)	Cumulative Percentage
90 to 100	9.64%	100.00%	9.52%	100.00%
80 to 89	16.86%	90.36%	14.52%	90.48%
70 to 69	17.34%	73.50%	13.30%	75.96%
60 to 69	16.39%	56.16%	13.66%	62.66%
50 to 59	12.30%	39.77%	12.86%	48.99%
40 to 49	11.59%	27.47%	12.55%	36.13%
30 to 39	8.59%	15.88%	11.89%	23.58%
20 to 29	4.80%	7.29%	7.52%	11.69%
10 to 19	1.77%	2.49%	3.03%	4.18%
0 to 9	0.72%	0.72%	1.15%	1.15%
<b>Total</b>	<b>100.00%</b>		<b>100.00%</b>	

**Table 7: Summary of Achievement in NEREC English Grade 8 by Gender (2012)**

Student Gender	Mean	Standard Deviation	Standard Error of Mean	Skewness	Percentile (p25)	Median (p50)	Percentile (p75)
Female	42.98	23.895	0.128	0.680	24	36.00	60
Male	36.86	22.207	0.124	1.027	20	28.00	48
<b>All Island</b>	<b>40.04</b>	<b>23.301</b>	<b>0.090</b>	<b>0.836</b>	<b>22</b>	<b>32.00</b>	<b>56</b>

**Table 8: Summary of Achievement in NEREC Grade 8 Mathematics by Gender (2012)**

Student Gender	Mean	Standard Deviation	Standard Error of Mean	Skewness	Percentile (p25)	Median (p50)	Percentile (p75)
Female	52.518	20.5271	0.1100	0.228	35.0	50.000	70.0
Male	50.263	21.3916	0.1196	0.332	32.5	47.500	67.5
<b>All Island</b>	<b>51.439</b>	<b>20.9757</b>	<b>0.0811</b>	<b>0.268</b>	<b>35.0</b>	<b>47.500</b>	<b>67.5</b>

**Table 9: Cumulative Percentage for NEREC Grade 8 Mathematics by Gender**

Class Interval	Female (%)	Cumulative Percentage	Male (%)	Cumulative Percentage
90 to 100	4.00	100.00	4.00	100.00
80 to 89	9.70	96.00	9.00	96.00
70 to 79	11.70	86.30	11.40	87.00
60 to 69	13.14	74.60	10.40	75.60
50 to 59	13.40	61.46	12.10	65.20
40 to 49	17.10	48.06	15.30	53.10
30 to 39	18.14	30.96	20.70	37.80
20 to 29	11.00	12.82	14.00	17.10
10 to 19	1.71	1.82	2.80	3.10
0 to 9	0.11	0.11	0.30	0.30

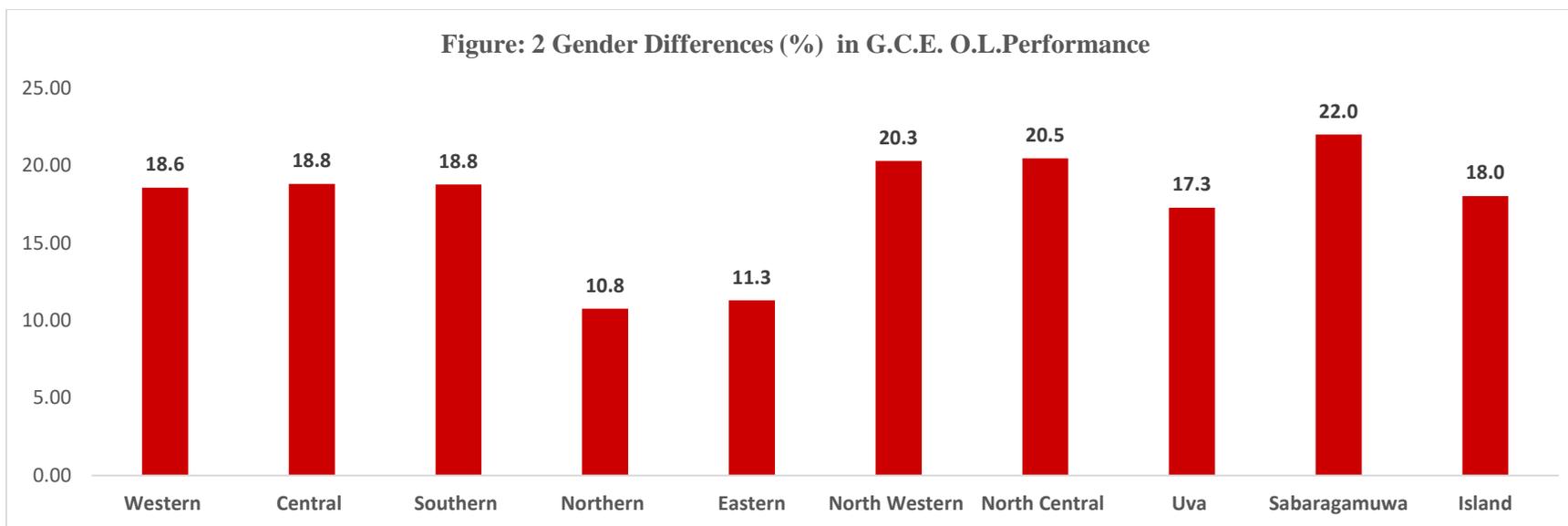
**Table 10: Summary of NEREC Grade 8 Science by Gender (2012)**

Student Gender	Mean	Standard Deviation	Standard Error of Mean	Skewness	Percentile (p25)	Median (p50)	Percentile (p75)
Female	43.56	21.102	0.113	0.413	27	41.00	59
Male	40.19	21.648	0.121	0.503	23	36.00	56
<b>All Island</b>	<b>41.95</b>	<b>21.431</b>	<b>0.083</b>	<b>0.447</b>	<b>25</b>	<b>39.00</b>	<b>58</b>

**Table 11: Summary of TIMSS Grade 4 Achievement by Gender**

Gender	Mean	Standard Deviation	Standard Error of Mean	Skewness	Percentile (p25)	Median (p50)	Percentile (p75)
Female	32.97	18.743	0.046	0.605	17.95	29.49	44.87
Male	30.22	19.648	0.047	0.713	14.10	25.64	43.59
<b>All Island</b>	<b>31.55</b>	<b>19.264</b>	<b>0.033</b>	<b>0.650</b>	<b>15.38</b>	<b>28.21</b>	<b>44.87</b>

**Figure: 2 Gender Differences (%) in G.C.E. O.L.Performance**



**Table 12: Enrollment and pass rates in GCE A-levels between 2011-2014**

	Physical Science		BioScience		Commerce		Arts		Other		Total	
	No. En	% passed	No. En	% passed	No. En	% passed	No. En	% passed	No. En	% passed	No. En	To. No. Passed
<b>2014</b>												
<b>Female</b>	10029	52.58	30010	54.05	32564	70.93	69377	74.21	1624	56.47	143604	96993 (67.5%)
<b>Male</b>	22611	45.82	13970	51.54	32509	53.85	33134	51.54	1548	28.10	103772	52579 (50.7%)
<b>2013</b>												
<b>Female</b>	9559	53.62	27494	54.54	31664	67.62	71762	71.24	1456	62.09	141935	93560
<b>Male</b>	22393	46.38	12766	48.68	34873	46.83	33589	50.24	1128	33.24	104749	50182
<b>2012</b>												
<b>Female</b>	8536	49.64	26189	57.00	27903	80.11	71608	72.19	808	65.72	135044	93745
<b>Male</b>	20236	44.44	12223	51.54	28948	62.82	32686	53.25	634	30.28	94727	51074

2011												
<b>Female</b>	8255	49.65	27664	51.74	27099	65.37	76062	73.65	449	72.38	139529	92470 (66.3%)
<b>Male</b>	20514	45.05	13553	48.53	30370	43.46	35510	55.80	286	37.06	100233	48938 (48.8%)

**Table 13: Gender differences in A-Level % passed from 2011 and 2014**

<b>Physical Science</b>		
	Increase in No. Enrolled	Increase in the percentage passed
<b>Female</b>	1774	2.92
<b>Male</b>	2097	0.78
<b>Bio Science</b>		
<b>Female</b>	2346	2.31
<b>Male</b>	417	3.01
<b>Commerce</b>		
<b>Female</b>	5465	5.56
<b>Male</b>	2139	10.39
<b>Arts</b>		
<b>Female</b>	6685	0.56
<b>Male</b>	-2376	-4.26
<b>Other</b>		
<b>Female</b>	1175	-15.92
<b>Male</b>	1262	-8.96
<b>Total</b>		
<b>Female</b>	4075	1.27%
<b>Male</b>	3539	1.84%

**Table 14: % of Students Enrolled in Grade 12 Subjects by Gender for Sri Lanka**

	<b>Science</b>		<b>Art</b>		<b>Commerce</b>		<b>Tech</b>	
	Male	Female	Male	Female	Male	Female	Male	Female
<b>2011</b>	0.11	0.11	0.16	0.31	0.14	0.13		
<b>2012</b>	0.11	0.11	0.17	0.30	0.12	0.12		
<b>2013</b>	0.11	0.11	0.16	0.30	0.11	0.11	0.03	0.02
<b>2014</b>	0.11	0.13	0.14	0.30	0.10	0.12	0.06	0.03

**Table 15: % of Students Enrolled in Grade 13 by Gender for Sri Lanka**

	<b>Science</b>		<b>Art</b>		<b>Commerce</b>		<b>Tech</b>	
	Male	Female	Male	Female	Male	Female	Male	Female
<b>2011</b>	0.09	0.14	0.28	0.10	0.10	0.09		
<b>2012</b>	0.11	0.15	0.30	0.15	0.14	0.11		
<b>2013</b>	0.11	0.15	0.28	0.12	0.12	0.11		
<b>2014</b>	0.12	0.13	0.28	0.11	0.12	0.12	0.05	0.03

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