



Study on Gender Behaviour and its Impact on Education Outcomes (with a special focus on the performance of boys and young men in education)

Executive Summary

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This study analyses the impact of gender behaviour on education outcomes in primary and secondary education, with a particular focus on the performance of boys and young men. As well as measuring gender gaps in school education across the EU, the study seeks to **better understand the causes and implications of performance differences between boys and girls.**

The study, conducted by Ecorys between September 2020 and June 2021, involved desk research carried out in all 27 EU Member States, supplemented with in-depth case study research conducted in eight Member States: BG, CZ, FI, DE, IT, LU, PT and SE. As such, this study is **ground-breaking in comparing the situation across 27 national contexts** and seeks to function as a 'discussion paper', laying the foundations for future policy debate and work in this area at EU and Member State level.

1. Boys are underperforming in education across the EU

The study has shown that, despite some variation, there is a clear and worrying general pattern of boys underachieving on most key indicators of educational success across all EU Member States. Also of concern is the evidence that these **gaps begin early**, already by primary education stage (ISCED level 1) and, in some cases, even at pre-school level (although comparative evidence is lacking at this level). Boys' and girls' educational performance were examined across three 'performance domains':

- **Participation rates:** Boys are more likely than girls to be early leavers from education and training (ELET), with 11.8% of males aged 18 to 24 in 2019 compared with 8.4% of girls being early leavers (a gap of 3.4%),¹ although the gender gap has been slowly decreasing. National data also shows that boys have higher exclusion and absenteeism rates than girls and are more likely to repeat a year of schooling.
- **Attainment rates:** PISA,² PIRLS³ and national level data all indicate that girls strongly outperform boys in reading proficiency in every EU Member State, with the average difference roughly equivalent to a year's schooling. A recent narrowing in the gender gap in reading (PISA 2018) was largely due to a decline in girls' performance rather than an improvement in that of boys. PISA and TIMSS⁴ data also show that girls outperform boys in science (on average, girls scored 5 points higher than boys in 2018), especially in the later years of schooling. For mathematics, the picture is more mixed, with PISA 2018 data showing that on average boys marginally outperform girls, but that the gap is steadily narrowing: girls outperform boys in more and more countries (e.g. in Malta, girls outperformed boys by 12 points).
- **Educational choices:** qualitative data clearly shows that boys' and girls' educational and career choices are still strongly influenced by gender stereotypes, with boys being much more likely to choose STEM (science, technology,

¹ Eurostat (2020). *Early leavers from education and training by sex and labour status*. Available at: http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=edat_lfse_14&lang=en

² OECD data is available here: <https://www.oecd.org/pisa/data/>

³ TIMSS and PIRLS data is available here: <https://timssandpirls.bc.edu/>

⁴ *Ibid.*

engineering, mathematics) subjects, while girls typically predominate in subjects such as art, the humanities, care and education. Boys are also more likely to choose vocational rather than academic pathways.

It is important to note, despite overall underperformance compared to girls, there are pockets in which boys *do* perform well (e.g. sport or certain vocational subjects), and that **many girls also underperform at school**. There is also a **complex interaction between gender and other individual background characteristics**, with data showing that children with a migrant background, low socio-economic status (SES), low-income households and minority groups (e.g. Roma) face specific challenges in education, which can in certain cases be compounded by gender factors.

2. The causes of boys' underperformance are multi-systemic and interrelated

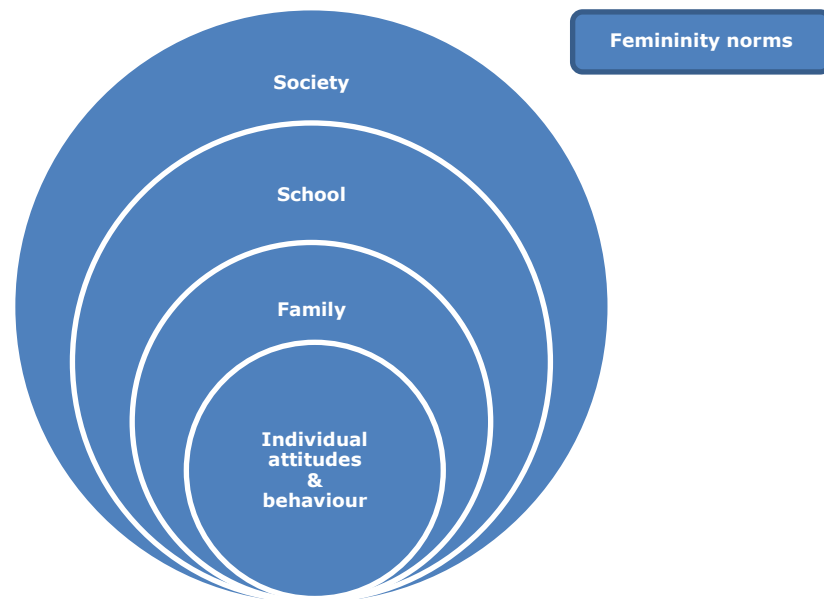
As shown in the study, causes of boys' underperformance at school are multidimensional and often mutually reinforcing, underlining the **importance for policymakers and practitioners to understand and address all the factors influencing boys' educational performance**. Building on the work of Dr Margriet van Hek,⁵ the study proposes a theoretical framework, illustrated in the Figure below. Without seeking to be exhaustive, the model groups the factors under four key interlocking domains: individual attitudes and behaviour, family, school and societal factors, which are each influenced by norms of masculinity and femininity. Masculinity norms include machoism and other forms of toxic masculinity, and these heavily influence the way children, their parents, teachers and wider society think and behave. The study includes a theoretical model of cultural identifiers about male identity called '**the Man Box**', which was developed as part of a 2017 study in the USA, Mexico and the UK, gathering people's views on "what it means to be 'a real man'".⁶

Factors impacting school success or failure for boys

Masculinity norms

⁵ Van Hek, M. (2017). *Gender equality in educational attainment and reading performance*. BOXPress.

⁶ Heilman, B., G. Barker and A. Harrison (2017). *The Man Box: A Study on Being a Young Man in the US, UK, and Mexico*, Washington, DC and London: Promundo-US and Unilever. Available at: <https://promundoglobal.org/resources/man-box-study-young-man-us-uk-mexico/#>



Source: Ecorys

The **individual attitudes and behaviours** of boys and girls to reading, learning and school, as well as the activities that they engage in outside school, are a crucial factor for school success. Our study shows for example that boys are less likely to have positive attitudes towards school and learning than girls, are more likely to externalise problems in the form of disruptive behaviour and are less likely to read than girls. The latter affects their development of basic skills in reading literacy and language proficiency, which are foundational skills for all learning. **Family factors** encompass a range of elements related to the cultural, social and socio-economic resources of parents, including the perpetuation (or erosion) of gender stereotypes at home. Our study has shown that boys are possibly more affected than girls by parental support, and that gender stereotyping at home remains prevalent in most households in the EU and is common in ECEC. ECEC institutions also have a key role to play in working with parents to ensure that children develop the socio-emotional and cognitive skills necessary to a fulfilling educational experience.

In terms of **school (and wider education system) factors**, the study highlights the importance of a positive school climate (anti-bullying, school-oriented – as opposed to non-effort – peer culture, absence of ‘toxic’ masculinity norms, active student participation in school bodies) and high-quality teacher support and interaction, free of gender stereotyping (rather than increasing the number of male teachers) as key elements to strengthening boys’ educational outcomes. Certain styles of instruction and classroom management are also less conducive to engaging and motivating boys, gender stereotyping is still highly prevalent in school textbooks across the EU, and several features of education systems can deepen gender gaps. For example, standardisation of school curricula and learning materials and higher levels of differentiation (streaming or early tracking), including early separation into vocational/academic pathways, can contribute to the persistence – and sometimes also deepening – of gender gaps in education outcomes (to the advantage of girls).

Finally, **societal factors** also have a major impact on how boys and young men

perform in the education system. There is a complex interplay of factors at work making it difficult to pinpoint cause and effect: attitudes, actions and behaviours of pupils, parents and teaching staff are influenced by wider society, while at the same time wider society reflects the gender stereotypes held by the individuals and communities of which it is composed.

3. Boys' underperformance in education has a wide range of implications

The study shows that the underperformance of boys at school has **wide-ranging impacts, both for the individuals concerned, but also on wider society**. It is important to highlight here that there is rarely simple causality and that these effects are somewhat cyclical – gender stereotyping is also a problem among the adult population, subsequently reflected in boys' education and socialisation. The study distinguishes between 'direct' and 'indirect' implications.

'Direct' implications are where there is clear evidence of a direct link with low performance in compulsory education. Evidence shows, for instance, that boys' lower performance in school education translates into lower participation rates in higher education (the gap in 2019 was 10% in favour of girls, and this continues to grow) and lifelong learning (where the gap has been widening in the last three years). Tertiary education subject choices are also strongly influenced by gender stereotypes, contributing to the ongoing masculinisation and feminisation of different professions and sectors. Although, on average across the EU, men still hold a more favourable position on the labour market compared with women (e.g. the employment rate for men was 12% higher than for women in 2019, women earn less than men), there is an important sub-group of men with low levels of education in low-paid and low-skilled work. The increasing digitalisation and automation of the labour market, exacerbated by rapid changes as a result of the Covid-19 pandemic, means that the demand for low-skilled and manual labour, which traditionally provided a source of employment for men with low levels of education, will continue to decrease, making it even harder for them to gain access to the labour market.

There are also a number of more **'indirect' implications**, where a causal link with poor education outcomes is difficult to prove conclusively on the basis of existing research. Some evidence however was found showing that men with incomplete studies are at higher risk of ill-health and suicide. In addition, some research shows that there may be a link between reading difficulties and antisocial behaviour, and that having a low level of education is one of the risk factors for joining extremist movements. Men with lower levels of education may also have more difficulties forming stable intimate relationships, leading to demographic implications.

4. Policies and programmes aiming to tackle boys' underperformance are piecemeal and rarely systemic

Finally, the study presents a variety of policy and project examples from across all EU Member States which seek to address some of the key issues underlying the gender gap in compulsory education, its societal implications, and more specifically the challenges facing boys and young men. Three broad types of approaches were

identified:

- a) **Policies or programmes directly addressing boys' underperformance at school.** These were overall relatively rare, piecemeal and generally addressed only one cause (or outcome) of boys' underperformance, rather than seeking to tackle contributing factors in a holistic manner. On occasion, the programmes themselves are designed based on interpretations of data not supported by research, running the risk of falling into gender stereotypes about what boys (or girls) need, or myths on how to improve boys' performance (e.g. due to the higher number of females in the teaching profession, several countries focus on recruiting more male teachers, while research shows that the quality of teachers is primordial, not their gender).
- b) **Policies or programmes tackling key educational issues related to boys' underperformance,** targeted at both boys and girls. These included for example national strategies to reduce early leaving from education and training (ELET) and absenteeism, targeted provision for specific disadvantaged groups (e.g. migrants, pupils with SEN), national literacy and numeracy strategies, anti-bullying, anti-radicalisation, violence prevention, mental health and wellbeing initiatives.
- c) **National gender mainstreaming or gender equality action plans.** The educational issues addressed in these wider gender equality strategies tended to only address one (or a limited number) of causes or implications of gender inequality in education, focusing particularly on breaking down stereotypical career or subject choices, and were often primarily targeted at girls (e.g. attracting more girls to STEM). Other education-focused measures included: training teachers to be more gender-sensitive, toolkits for gender equality in the classroom, tackling gender stereotypes in textbooks, monitoring of gender equality in education and gender-focused evaluations of educational materials.

5. Recommendations

Drawing on the findings outlined above, the study presents a series of recommendations for (1) EU level stakeholders, (2) national (or regional) policymakers and practitioners and (3) further research.

(1) Recommendations for EU level stakeholders

- Stakeholders at EU level have a key role to play in **raising awareness and building long-term political will and commitment** to tackle the underperformance of boys in education systems and its implications. This study can serve as an evidence base.
- Gender equality, including the underperformance of boys and the tackling of all gender stereotypes, should be a **transversal focus of all policies and programmes in the field of education** at EU level. Specific priorities could be set in funding programmes such as Erasmus+ or ESF+.
- **Mutual learning activities** between policymakers and practitioners could help to shine a spotlight on the challenges to boys' educational achievement and the ways

to tackle them. A **repository of promising policies and practices** could provide inspiration. The voices of young people and/or their representatives (e.g. OBESSU, European Student Union) should be included in such discussions.

- There should be more **active monitoring** at EU level of the disparities in achievements between boys and girls, and analysis of differences to understand the interplay between gender and other factors such as, for example, socio-economic status (SES) or migrant origin. Monitoring findings could potentially be used, among others, to **inform country-specific recommendations** as part of the European Semester to encourage countries to take action to tackle gender gaps in compulsory education.
- Finally, to assist policymakers and practitioners in addressing the issue, EU level actors could support further research on the variety and interplay of contributory factors (individual, family, school, society) which could support the **development of a theoretical framework** (such as that developed in this study).

(2) Recommendations for national (and regional) policymakers and practitioners

- From the highest political level to school leader, teacher and family level, there should be a **clear recognition and long-term commitment** to promoting gender equality and breaking down gender stereotypes in education.
- To address gender disparities, policymakers and practitioners can **put in place specific actions or policies**, reviewing existing policies or programmes in the field of education (including those to tackle underachievement more broadly) through a gender equality 'lens'. In doing so, it will be essential to take into account the range of factors which may contribute to the underachievement of boys, and also ensure that policies contribute to the educational success of girls.
- **School leaders and teachers** should be encouraged and supported, including through Initial teacher education (ITE) and continuing professional development (CPD), to promote a peer culture and whole school approaches to promote greater inclusion and the active engagement of all pupils, encourage a positive school climate, tackle violence/bullying and provide an openness to the wider community. A positive school culture should tackle the 'non-effort' culture which can be prevalent among boys.
- **Systematic monitoring of the performance of boys and girls** within the education system would allow policymakers to identify any disparities and take appropriate action to address the issues. Monitoring should also consider data on male emancipation (e.g. involvement of men in caring duties, enrolment in higher education, take-up of subjects where boys are traditionally under-represented, and attitudes of boys towards school) and intersectionality by looking at the performance of boys and girls from different groups (e.g. migrant background, urban/rural areas, pupils with special educational needs (SEN), etc.).

(3) Areas for further research

- Further research is needed to better understand **intersectionality in relation to**

gender issues (e.g. gender and migrant/minority background, gender and SEN, gender and low-income families, etc.). It is equally important to further study the performance differences *between* boys.

- Further research could provide a better understanding of the **contributory factors** to educational performance: impact of 'masculinity norms' and how to measure them, how specific features of education systems influence the performance of boys and girls, and the complex interaction between biological and social factors, are all areas which merit further research.
- Since language development, as well as other transversal skills for learning such as teamwork, self-regulation and critical thinking, are developed early on in life, more research on effective policies and practices to tackle **gender stereotyping in early childhood education and care (ECEC)** and to ensure that there is effective coordination between ECEC and primary school settings to manage boys' academic and emotional needs during this transition (moving towards the 'child ready' school).
- Future research could also focus more specifically on the **different solutions (policies, programmes, practices, tools)** being implemented to tackle boys' underperformance and explore their effectiveness.
- More research would also be needed to better understand the **link between boys' underperformance in education and the various societal implications**, especially around the link between masculinity, radicalisation and violent extremism, the differing and evolving impacts of the Covid-19 pandemic on boys' and girls' educational performance and the phenomenon of increased consumption of online pornography due to its link to various forms of toxic masculinity.



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