

**“WHY DO GIRLS SHOOT HIGHER THAN BOYS?”: LINKING  
STRUCTURAL OPPORTUNITIES AND GENDER IDEOLOGY  
IN THE REVERSED GENDER GAP OF EDUCATIONAL  
EXPECTATIONS**

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**Abstract.** Cross-national studies have shown consistently that girls have higher educational expectations than boys. The literature has provided macro and micro level explanations for this phenomenon. Country-level indicators such as gender inequality and the rate of female enrollment in tertiary education have been significant predictors of higher educational expectations for girls than boys. On the other hand, psychosocial studies have found a significant mediation of gender attitudes on the formation of educational expectations for girls. However, the interaction of structural opportunities and individual gender ideology has not been addressed. By using data from the second wave of the International Civic and Citizenship Study 2016 (N = 86,803) of eighth and ninth graders from 22 countries, this study aims to understand why girls have higher expectations for completing college than boys, considering the interplay of micro and macro-level predictors. Overall, the results indicate that girls are more likely than boys to hold expectations for completing tertiary education (OR = 1.72). Mediation analysis suggests that an important proportion of this effect is mediated by individual gender attitudes (69%). Contrary to the literature, gender equality at country-level reduces the pro-girls gender gap. Moreover, the interaction between individual gender attitudes and structural conditions suggests that, even for highly equalitarian countries, individual attitudes against gender equity offset the effect of macro-level conditions. Additionally, this analysis addresses issues of small sample of countries in multilevel modeling overlooked by previous studies. The study of the reversed gender gap in educational expectations will shed lights on fields where pro-male differences remain.

**Keywords:** gender, inequality, educational expectations, gender ideology

### **Introduction**

Even though the remarkable progress throughout the past decades, women are still left behind in different areas. In the labor market, there are gaps in earnings and employment levels, as well as in the types of activities that women and men perform (Barth, Kerr, & Olivetti, 2017). In health, women

report significantly poorer health than men (Boerma, Hosseinpoor, Verdes, & Chatterji, 2016). In politics, women are still far from men in political knowledge and political participation favoring men (Sartori, Tuorto, & Ghigi, 2017). In contrast, although gaps remain for some countries, “*the world has achieved the target of gender parity at all levels except tertiary education*” (UNESCO, 2017, p. 184). In some cases, such as educational expectations, girls superpose boys in most of the countries with available data with exceptions, such as Japan (Lauglo & Liu, 2018; McDaniel, 2010). This study aims to understand why girls have higher expectations for completing college than boys. The study of the reversed gender gap in educational expectations will shed lights on fields where pro-male differences remain.

Explanations for the global pro-female educational gap have been provided based on macrosocietal indicators. In a recent study, Lauglo and Liu (2018) indicates that the gender disparity in educational expectations of higher education is moderated by gender disparities in years of schooling for children of school-entry age, but neither by UNDP’s Human Development Index nor schooling in the adult population. Their interpretation of this differential moderation is that formal education is more relevant than the labor market of family life in mediating gender equity. Likewise, McDaniel (2010) showed that national gender-attitudes shapes educational expectations for completing college of girls and boys differently. In more egalitarian countries, girls increase their expectations and boys decreases them slightly. However, these studies have not considered how macrolevel indicators interact with individual gender attitudes. I argue that individual gender attitudes intersect with structural conditions in determining pro-girls gender gaps in educational expectations for completing college.

At the individual level, ideologies are a pivotal psychosocial factor shaping strategies of action seen as possible (Swidler, 1986), and educational expectations are constrained aspirations. Moreover, individual gender ideology may moderate the relationship between gender and educational expectations as suggested by Davis and Pearce (2007). Therefore, ideological dispositions regarding gender roles may make sense of structural opportunities for women for explaining educational expectations: The positive effect of country-level equity may be reduced by less egalitarian individual attitudes.

### **Objectives / Purpose of the study**

This study aims to understand why girls have higher expectations for completing college than boys. The study of the reversed gender gap in educational expectations will shed lights on fields where pro-male differences remain.

The following theoretical model is hypothesized.

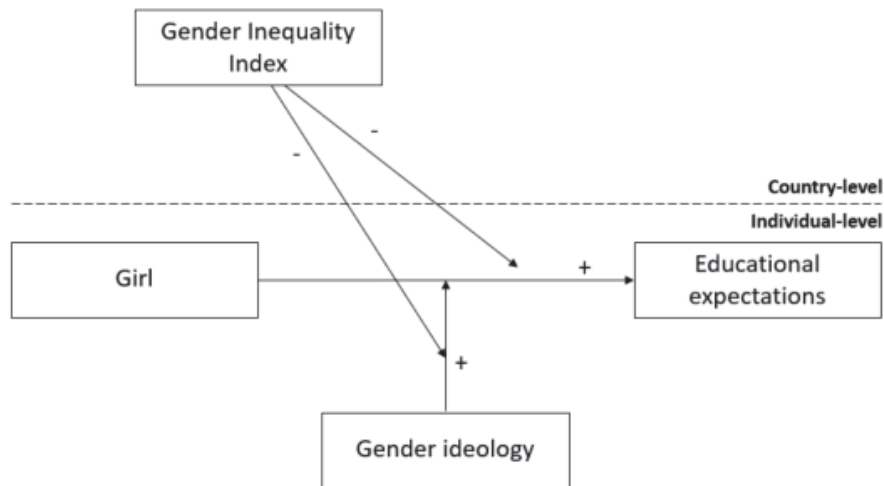


Figure 1 - Hypotheses at individual and country level

## Methodology

### *Data & Sample*

In this analysis, I use data from the 2016 International Civic and Citizenship Educational Study (ICCS), a comparative research program that investigate the ways in which students are prepared to become citizens (Schulz, Carstens, Losito, & Fraillon, 2018). To my knowledge, ICCS is the only datasets providing simultaneously measurements of educational expectations and gender attitudes for a broad array of developed and developing countries. All the samples are probabilistic and representative of all students in Grade 8 for each country. If the average age of students in Grade 8 was below 13.8 year in a given country, Grade 9 became the target population. ICCS include 24 countries. After deleting cases with missing data on key variables, the analytic sample is 79,906 students from 22 countries suitable for analysis.

### *Dependent variable*

Students are asked, “*What is the highest level of education you expect to complete?*” and presented with options adapted to each country and later standardized following the International Standard Classification of Education (ISCE). For this analysis, the variable is recoded into a binary variable (1 “College or above” and 0 “Lower than college”), which represent the expectation for completing college.

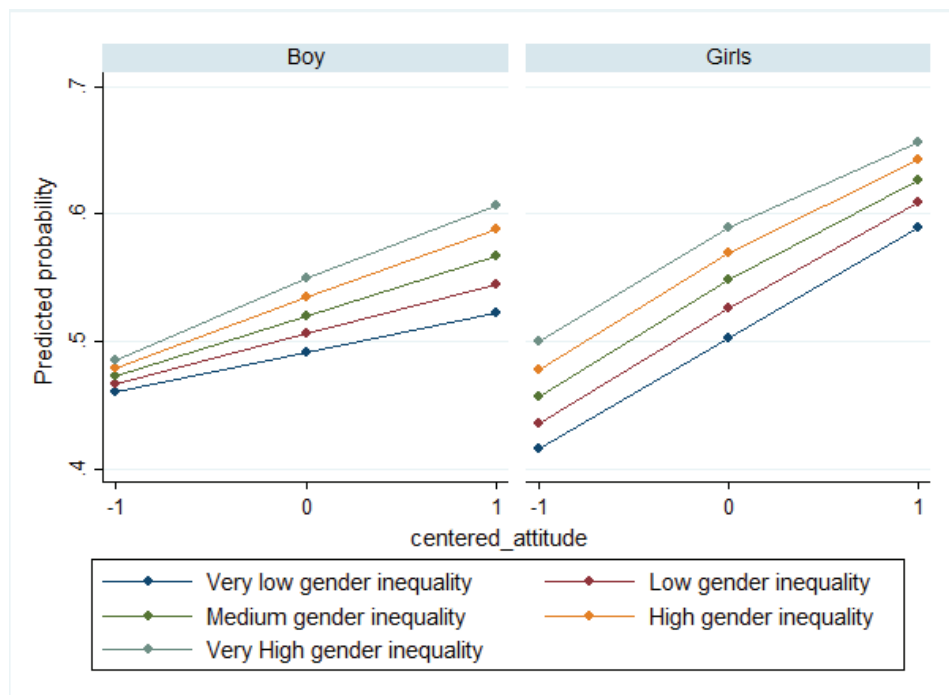
### *Independent variables*

Students' gender is measured in a binary variable (1 "girls" and 0 "boys"). Gender ideology is constructed by 6 items that reflect a student's endorsement of gender equality (see Schulz, Carstens, Losito, & Fraillon, 2018).

Respondents were asked to indicate their agreement by using a scale of 1 to 4, where 1 signifies "Strongly agree" and 4 "Strongly disagree". The 6 items were averaged to generate a combined scale (Cronbach's alpha = 0.80). Items were accurately reversed, and the final scale ranges from 1 to 4, where 4 represents "Egalitarian ideology" and 1 "Less egalitarian ideology". Inequality at country level is measured by means of the 2016 Gender Inequality Index provided by United Nations. It measures gender inequalities in three aspects of human development: reproductive health, empowerment, and economic status (UNDP, 2018). Additional control variables have been included: family background, migrant status, school environment, political knowledge as part of a larger measurement of cognitive skills, age and religion. These variables are significant predictors of educational expectations according to the literature. Individual gender ideology and Gender Inequality Index have been grand mean centered.

### **Results / Findings**

The results suggest that girls have higher expectations for completing college than boys. On average, girls have 30% of probabilities of expecting to complete college than boys. Regarding individual gender ideology, more egalitarian gender values boost the pro-female gap. These effects are robust against observed and unobserved country-level confounders by using country-fixed effects, as well as control variables at the individual level. Additionally, the role of structural inequality is tested by means of multilevel logistic models, with students nested within countries. Contrary as expected, more egalitarian countries have a reduced gender gap, tending toward similar levels of expectations for boys and girls. Moreover, the effect of individual gender ideology shifts the gender gap in more egalitarian countries: less egalitarian girls have lower expectations than boys, while more egalitarian girls surpass boys. In countries with higher gender inequality, girls have higher expectations than boys irrespectively of individual gender attitudes.



Note: Predicted probabilities drawn from multilevel logistic model. All the covariates are considered in their mean value.

Figure 2 - Predicted probability of expecting to complete college by students' gender and gender inequality at country-level

### Discussion

These findings suggest that the initial boost of pro-girls disparity on educational expectations supported by the literature (Lauglo & Liu, 2018; McDaniel, 2010) is not shared by all the societies. Rather, in our sample, more egalitarian countries tend to equalize the expectations of boys and girls. In addition, the role of students' gender ideology highlights the role of culture on educational choices. Gender norms and values are lenses through which girls interpret structural opportunities. In egalitarian societies, more egalitarian girls will process structural equity as their likelihood of success, which explains why they surpass boys. However, girls with a less egalitarian ideology are surpassed by boys because of their ideological barriers for embedding structural opportunities.

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