

Assessment Of Obstacles To Girls' Success In Technical Sectors In The Republic Of Guinea

Mamadou Mouctar DIALLO¹, Djiba KOUROUMA², Binko Mamady TOURE³,
Ibrahima TOURE⁴ and Yacouba CAMARA^{5*}

¹Université Gamal Abdel Nasser de Conakry, Département Télécommunication, Conakry, Guinée

²Université Gamal Abdel Nasser de Conakry, Institut Polytechnique, Département Génie Informatique, Conakry, Guinée

³Université Gamal Abdel Nasser de Conakry, Centre Informatique, Conakry, Guinée

⁴Institut Supérieur de Technologie de Mamou, Département Génie Informatique, Mamou, Guinée

^{5*}Institut Supérieur de Technologie de Mamou, Département Energétique, Mamou, Guinée

*Corresponding author : cyacouba90@gmail.com

Abstract:

The participation of girls in technical fields in the Republic of Guinea remains well below that of boys, despite efforts to promote gender equality in education. This study focuses on identifying obstacles to the success of girls in technical fields in the Republic of Guinea. Through semi-structured interviews, questionnaires and documentary analyses, we examine the socio-cultural, family and institutional factors that influence girls' choice to opt for technical fields, as well as the challenges encountered throughout their journey. The findings reveal a complex combination of gender norms, social stereotypes, lack of female role models in technical fields, discrimination and lack of institutional support. By understanding these obstacles, we can formulate policy and practical recommendations aimed at creating a more inclusive environment conducive to the success of girls in technical fields in the Republic of Guinea.

Keywords: Girls, Education, Discrimination, obstacles, gender stereotypes, female role models, infrastructure, Guinea.

Date of Submission: 15-04-2024

Date of acceptance: 27-04-2024

I. Introduction :

In the Republic of Guinea, despite the progress made in the field of education, gender disparities persist, particularly in the field of technical education.

According to ProDEG "2020 – 2029" Version of October 3, 2019, girls represent in 2016, 30% of the total number of students, their proportion in the different training sectors varies greatly. To this end, ProDEG gave some statistics: "girls enrolled in economics and management sciences (43% of those enrolled), and in medicine – pharmacy – odontostomatology (35%), and in geology (18% of those enrolled), mathematics physics (19%), educational sciences or even technical engineering and computer sciences (22%).

These statistics confirm the low representation of girls in technical fields, despite the fact that these fields offer crucial opportunities for the acquisition of professional skills and participation in the labor market.

This study aims to explore in depth the obstacles that hinder the success of girls in technical fields in the Republic of Guinea. Despite efforts to promote gender equality in education, it remains critical to understand the sociocultural and institutional factors that continue to limit girls' participation and success in these specific areas.

By understanding the unique challenges girls face in their educational and professional journeys, we will be able to better inform policies and practices aimed at promoting gender equality and ensuring that all girls in the Republic of Guinea have access to opportunities. equitable educational and professional opportunities.

To achieve this objective, we intend to explore the various obstacles that hinder the success of girls in these areas, in particular gender stereotypes, the lack of female role models and mentors, the lack of adequate educational infrastructure, as well as the discrimination and harassment. By identifying these obstacles, it will be easy to raise awareness of the specific challenges faced by girls in technical fields and inform all stakeholders to enable them to make interventions aimed at promoting gender equality and supporting the success of girls in these fields in Guinea.

II. Methodology

This study is based on a mixed approach, combining qualitative and quantitative methods to obtain an in-depth understanding of the obstacles to girls' success in technical fields in the Republic of Guinea.

1. Recherche framework:

The theoretical framework of this study draws on feminist and sociological perspectives, emphasizing the analysis of sociocultural and institutional factors that influence girls' educational choices.

2. Study population:

The sample for this study includes:

- High school students (11th, 12th, Terminal);
- Students from higher education institutions in the Republic of Guinea;
- Teachers, supervisors and parents.

3. Data collection methods :

- Semi-structured interviews: Interviews are conducted with female students in technical fields, teachers and educational managers. The interviews allow for an in-depth exploration of the experiences, perceptions and challenges faced by girls in their educational journey.
- Questionnaires: Electronic questionnaires were developed using the Google form tool and distributed to all stakeholders in order to collect quantitative data on educational background, professional aspirations, gender stereotypes, socio-economic situation. parents' economic situation, the obstacles encountered by female students in technical fields, to name just a few.
- Documentary analysis: An analysis of official documents relating to educational policies, reports published by the National Institute of Statistics which are provided by the ministries in charge of education in Guinea, was carried out to understand the institutional and political context of technical education in Guinea.

1. Data analysis procedures:

- Qualitative data from the interviews is analyzed using thematic analysis, identifying key emerging themes related to barriers to girls' success.
- Quantitative data from the questionnaires are analyzed using descriptive statistical techniques to identify trends and correlations between the variables studied.

2. Ethical considerations:

- All research procedures were conducted in accordance with ethical standards, ensuring confidentiality and informed consent of participants.

III. Results

1. Presentation of the results

The results obtained during this study are presented as follows:

Table 1: Evolution of the technical education and vocational training workforce from 2012 to 2020

Year	Overall workforce			1st year staff		
	Total	Girl	Girl rate	Total	Girl	Girl rate
2012/2013	30 556	11 635	38,08%	13 150	4 833	36,75%
2013/2014	30 279	12 296	40,61%	12 026	4 894	40,70%
2014/2015	28 292	12 757	45,09%	11 081	5 007	45,19%
2015/2016	28 225	13 514	47,88%	11 295	5 416	47,95%
2016/2017	32 143	16 015	49,82%	14 361	7 091	49,38%
2017/2018	37 791	19 537	51,70%	18 293	8 954	48,95%
2018/2019	44 807	23 546	52,55%	18 985	9 537	50,23%
2019/2020	49 829	17 725	35,57%	25 992	9 299	35,78%

Table 1 shows that despite the gap between girls and boys, girls are interested in vocational training. But it is noted that most of these girls are oriented towards so-called "feminine" professions such as: secretarial work, sewing, health, etc.

Table 2: Number of Bachelor 1 students by field of study from 2017 to 2021

	2017	2018	2019	2020	2021
01 Éducation		320	145	531	1 037
02 Letters and arts		1 172	689	568	718
03 Social sciences, journalism and information		2 320	1 050	1 143	2 285
04 Commerce, administration and law		945	2 239	2 737	3 233
05 Natural sciences, mathematics and statistics		776	739	1 033	2 016
06 Information and communication technologies				265	90
07 Engineering, processing industries and construction	1272	169	447	67	140
08 Agriculture, forestry, fisheries and veterinary sciences		124	169	188	402
09 Health and social protection		39	309	268	294
10 Services		48	-	115	6
Total Student in L1	10962	5 913	5 787	6 915	10 221
Presence rate of girls in technical fields	11,60%	2,86%	7,72%	0,97%	1,37%

This table shows that there are very few female students in technical fields compared to fields such as legal sciences, literature and social sciences.

By focusing on the cause of this low presence of girls in technical fields in Guinea, our investigation revealed the following:

According to Figure 1, we see that 71% of respondents find technical fields interesting, despite the presence of some difficulties in the Republic of Guinea.

Que pensez vous des filières techniques ?
35 réponses

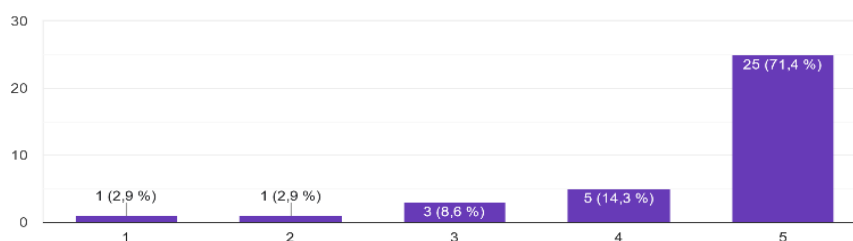


Figure 1 : Perception of technical sectors

According to the surveys, 83% of respondents found that girls can access all technical fields. The 17% believe that certain engineering sectors which require the use of physical strength are not within the reach of girls.

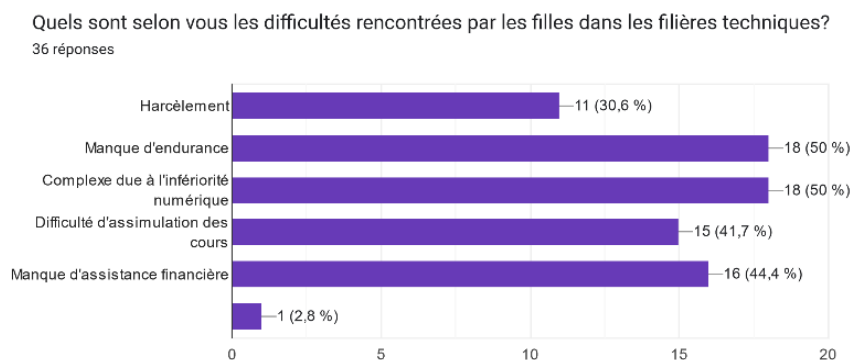


Figure 2 : Difficulties encountered by girls in technical fields

Conclusion and recommendation

Our study reveals that gender stereotypes persist in technical fields in the Republic of Guinea, which can discourage girls from engaging in these fields. Other factors such as: lack of female role models, inadequate educational infrastructure, discrimination and harassment also influence the access and retention of girls in technical fields. Economic and social obstacles must not be overlooked either.

To remedy this situation, it is essential to raise awareness among communities, families and educators about the importance of gender equality in technical and vocational education. Educational programs and awareness campaigns could help change attitudes and perceptions.

Governments, educational institutions, NGOs and other stakeholders must work together to create an inclusive environment that promotes girls' success in technical fields. This could include specific policies, mentoring programs and capacity building initiatives. Investment in programs that encourage the enrollment of girls and their retention in school. Measures such as providing scholarships, building separate toilets for girls, developing child protection policies and sensitizing communities on the importance of girls' education including their guidance in technical fields can help reduce gender disparities in technical education.

Finally, it is important to conduct further research to fully understand other specific barriers that girls face in technical fields in the Republic of Guinea, and to assess the effectiveness of interventions aimed at promoting their success.

REFERENCES

- [1]. Cereq, La faible orientation des filles vers les carrières scientifiques, <https://www.cereq.fr/la-faible-orientation-des-filles-vers-les-carrieres-scientifiques>, 2013
- [2]. Augustin Mariro, l'accès des filles et des femmes à l'enseignement scientifique, technique et professionnel en Afrique, publié par le Bureau régional de l'UNESCO à DAKAR (BREDA), https://unesdoc.unesco.org/ark:/48223/pf0000119059_fre, 1999
- [3]. Community Participation for Equity & Quality in Basic Education in Guinea PACEEQ USAID COOPERATIVE AGREEMENT N° 675-A-00-01-00163-EVALUATION DE L'APPROCHE GENRE DANS LE PACEEQ», Odile AKPAKA, Consultante en éducation, 2006
- [4]. République de Guinée, secteur de l'éducation et de la formation, Programme Décennal de l'Education en Guinée, ProDEG « 2020 – 2029 », Version du 03 Octobre 2019
- [5]. Dominique Epiphane, in *L'insertion professionnelle des femmes : entre contraintes et stratégies d'adaptation* / Erika Flahault. Presses Universitaires de Rennes, 2006
- [6]. Raynaud, D., Chapitre 1. Science, technique, technologie. Dans : *Qu'est-ce que la technologie* (pp. 21-55). Paris: Éditions Matériologiques, 2016
- [7]. Pourquoi il est urgent que les filles investissent les formations et métiers scientifiques <https://www.letudiant.fr/jobsstages/les-filles-bloquees-dans-les-formations-et-emplois.html>
- [8]. Insertion professionnelle des femmes à la sortie de l'école : exemple de la France Employability of Women out of School Example of France, <https://www.erudit.org/fr/revues/rf/2009-v22-n2-rf3635/039214ar/>
- [9]. <https://fondationppl.ca/projets/le-projet-de-formation-professionnelle-ffd-en-guinee/>
- [10]. <https://press.un.org/fr/2023/fem2226.doc.htm>
- [11]. <https://www.inegalites.fr/Les-filles-stagnent-dans-les-filieres-scientifiques-de-l-enseignement-superieur>
- [12]. Daréoux, É., Des stéréotypes de genre omniprésents dans l'éducation des enfants. *Empan*, 65, 89-95. <https://doi.org/10.3917/empa.065.0089>, 2007
- [13]. Gilbert, A., Formations techniques et scientifiques : de la promotion des femmes à une politique institutionnelle de l'égalité ?. *Nouvelles Questions Féministes*, 24, 106-113, 2005
- [14]. Perception des filles sur le choix de l'option scientifique au secondaire, BUKASA TSHITALA, 2021