

Young people’s interest in STEM, the FOSTWOM survey

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In recent years, there has been a notable decline in scientific and technical (STEM) vocations among female students [1]. The lack of female students enrolled in scientific-technical university studies is due to the loss of interest in these subjects during secondary education [2]. Although the issue of female involvement in scientific and technical careers has been addressed in numerous papers, few have studied this issue in a quantitative, data-driven approach.

During the presentation we will show the results of a survey of male and female secondary school students on the subjects they are interested in. This survey was developed in the framework of the FostWom (Fostering Women to STEM MOOCs) Erasmus+ project [3].

Results show a greater predisposition of male students towards scientific-technical subjects. It also examines the relationship between students’ gender and their motivations for study, as well as certain personality traits and roles in relation to STEM subjects. These results may be of interest to teachers and people in positions of responsibility in the curricular design of secondary education studies. Besides, these results provide a new quantitative perspective to gender studies in the field of secondary education and adolescence.

References

- [1] J. S. Eccles, “Keynote-gender and stem: Opting in versus dropping out,” *International Journal of Gender, Science and Technology*, vol. 5, no. 3, pp. 184–186, 2013.
- [2] K. A. Blotnicky, T. Franz-Odenaal, F. French, and P. Joy, “A study of the correlation between stem career knowledge, mathematics self-efficacy, career interests, and career activities on the likelihood of pursuing a stem career among middle school students,” *International journal of STEM education*, vol. 5, no. 1, pp. 1–15, 2018.
- [3] P. Corti, V. Baudo, C. Turró, A. M. Santos, and C. Nilsson, “Fostering women to stem moocs,” *EMOOCs 2021*, p. 129, 2021.