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Exploring the influence of gender on the selection of STEM qualifications at private higher education institution

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ABSTRACT

The South African government has reasonably made significant strides in their quest to encourage students in Higher Education institutions to pursue careers in STEM (Science, Technology, Engineering, and Mathematics). Research has since grown within the STEM field, however, sadly women are consistently underrepresented in STEM fields in higher education; seemingly due to gender disparities that still plague the South African landscape (Mkhize, 2022). The gender gap in STEM is a concern globally as it shows that the male still dominates the careers in STEM (World Economic Forum Report, 2024). This study explored the influence of gender on the selection of STEM qualifications at a Private Higher Education (PHEI) institution in South Africa. Employing a qualitative research approach within the critical theory paradigm, a Case Study Research Design was best suited in understanding this phenomenon within the PHEI. Furthermore, twenty purposefully sampled PHEI students participated in this study where they responded to semi structured interview questions. The study utilised the Critical Theory lens to analyse the push and pull factors in the collected data. Although gender played some role in the choice of STEM qualifications by students; findings in this study mostly showed that 'lack of necessary resources and support, together with 'influence from teachers in high school,' played bigger roles in the students' decision to choose or not to choose STEM qualifications. The study expanded on the necessity to provide equitable distribution of resources to support students into STEM career pathways

Keywords: Student support, diversity, inclusion, gender, STEM education, higher education, qualifications