

A phenomenological study of Irish and Portuguese women's experiences of receiving family support when studying STEM subjects at technical institutes

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ABSTRACT

This paper discusses women's experiences of receiving family support when studying STEM subjects at technical institutes in Ireland and Portugal. We report phenomenological analysis of 19 interviews conducted with female students in engineering and technology. We identify forms of positive support received from family as well as problematic family dynamics and concerns. Parents, uncles, and aunts provide many positive forces, as do surrogates (i.e., adopted family and close mentors). Cousins and brothers also provide role models and information. For our participants, meeting family obligations and being first-generation college students presents some challenges and stress. Results suggest that social interaction as well as emotional and physical forms of support are very important to these women. Examples of positive family support included the provision of: housing and domestic support (cooking, cleaning, housekeeping); physical and financial resources; fun and interesting social environments; ideas about what engineers do; images of success; opportunity to build and tinker; discussion, interest, and some assistance with homework; identification of what the interviewees enjoy and excel at; conceptualizations of careers and possibilities for the future; advice and guidance on life and assignments; and professional connections including access to internships. Not all family interactions provided helpful support, however. Some challenged the participants' goals or visions for themselves. Subtle yet powerful barriers emerged in

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some of the stories. Most were isolated occurrences, described by just one or two interviewees (e.g., failing to provide diverse toys, provide a quiet enough home environment for study, suggest engineering, note that family members were involved in engineering, or support the notion of engineering as an appropriate career choice for a female). Others were more widespread, such as providing housing at a very far distance from the girls' place of study or relying on the student for care of siblings. Our data confirm previous international studies indicating family interactions play an important part in influencing young women's decisions to choose STEM courses and in the subsequent retention of these women.