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Beyond The STEM gender paradox – Taping into motivational drivers for wider participation

A key assumption in many discussions and interventions around gender participation in Science, Technology, Engineering and Mathematics (STEM) is that the creating of a more equalised and supportive environment through various encouragement and positive action schemes would results in a greater female participation in STEM [1].

However, a recent large study [2] looking at correlation between parity in STEM graduation rates vs social environment in various countries shows that a higher Global Gender Gap Index (GGGI) not only does not correlate positively with female STEM participation but seems to correlate negatively as more gender egalitarian societies exhibit smaller female STEM graduation rates.

We argue in this presentation that policy cannot be thought without consideration of psychological and neurological literature around gender. In particular understanding motivational drivers for different genders [3].

There is well established consensus in the psychology field that male and female exhibit robust differences [4, 5] such as interest “things vs people” along Prediger’s model [6] which may affect occupational interests. Furthermore, there is a growing understanding that these are possibly prenatal [7] and hence independent of societal influence.

This presentation will review the literature and propose recommendations on how to tap into inherent gender motivational differences to encourage more female participation in STEM.

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