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Contributed talk: The relationship between a sense of belonging and well-being in male and female undergraduate physics students

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Coined 'the social cure', a strong sense of social support has been associated with greater health and wellbeing (Jetten, Haslam, & Alexander, 2012). However, recent research has suggested that women in physics undergraduate degrees report a lesser sense of belonging on their course, com- pared to men (Seyranian et al., 2018). Consequentially, we hypothesised that, as they are an under-represented group, women in university physics classes may report a lower sense of belonging and well-being, in comparison to men. Similarly, we posited that the link between belonging as part of the physics community and well-being would be weaker for women than it would be for men. We conducted a survey of 310 physics students (105 women, 205 men) from across all undergrad- uate levels at a small research-intensive university. This survey measured students' identification with physics as a discipline, their sense of belonging, their self-efficacy (the beliefs in their ability to complete physics tasks), and their sense of well-being. Our results revealed that women reported a similar level of belonging and well-being compared to men, but men reported signifi- cantly greater physics identity and self-efficacy than women. Despite this, belonging significantly predicted levels of well-being for men, but this association was not found for women. Therefore, it seems men could be benefitting from the social cure to a greater extent than women in physics. This raises a number of questions for future research: what contexts result in belonging relating to well-being, and is the lack of an association between belonging and well-being prevalent in other under-represented groups in education?

References

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