

Abstracts of presentations:

Gendered pathways to STEM. Katariina Salmela-Aro (University of Helsinki, Finland).

Women and men are differentially represented across the various science, technology, engineering and math (STEM) fields. Women are underrepresented in math-intensive fields of STEM education, such as mathematics, physical science, engineering, and computer science (hereafter math-intensive) but overrepresented in health, biological, and medical sciences (hereafter life science, OECD, 2016). Further, on average across OECD countries, 15-year old girls are almost three times more likely as boys to aspire a career in a life science field, with the reverse being true regarding gender differences in career aspirations in math-intensive fields (OECD, 2016). Drawing on Eccles' expectancy-task value model of achievement-related choices, we examined how work values predict individual and gender differences in STEM participation in early adulthood (ages 25-27) controlling for subjective task-values in late adolescence, age 18 in second year of high school). The study examined 1,259 Finnish participants taking a person-oriented approach. Results showed that we could identify four profiles based on work values: money, career prospects, family and society focused young people, work-value profiles predicted young adults actual STEM participation in two fields: math-intensive fields and life science occupations, work-value profiles differentiate between those who entered support vs. professional level STEM jobs, and gender differences in work value profiles partially explained the differential representation of women across STEM sub-disciplines and the overall underrepresentation of women in STEM fields.

Gender differences in coping with sexist beliefs. Milagros Sáinz (Universitat Oberta de Catalunya, Spain).

The prevalence of academic sexist beliefs in our society (mainly in the family and school settings) has important theoretical and practical implications. Provided that many young people make academic and occupational decisions accordingly to these sexist beliefs, they do not develop their own talents in areas where they would be susceptible of having a high academic and professional achievement. In fact, many secondary students abandon the idea of developing academically and professionally in these non-traditional fields (Sáinz & Meneses, 2018). This is the case of girls in some STEM subjects like science and technology and, conversely, of boys in education and other fields related to humanities and health.

Facing sexist contexts involves stressful situations that may have a negative impact on several academic indicators, such as for instance, the reduction of satisfaction in academic pursuits (Steele, James, & Barnett, 2002) or the lowering of academic confidence (Leaper & Brown, 2014; Brown & Leaper, 2010). But how young people learn to implement a positive adaptive approach to face sexism? To what extent is confronting sexism in the academic setting a topic of interest for educators, students, parents, academic advisors, and anyone interested in reducing sexism (Boysen, 2013). The present research aims therefore at looking at the existence of gender differences in the coping responses deployed by a group of Spanish secondary students when experiencing academic sexism. It also examines the influence of some relevant moderators (e.g., parental educational level or immigration origins) shaping these gender inequalities in students' coping

responses to academic sexism. The results demonstrate that boys were more likely to use a maladaptive coping strategy against academic sexism (avoidance), whereas girls were more likely to deploy more positive coping strategies (confronting and help seeking) in the face of academic sexism. Likewise, girls and students whose parents had attained a higher educational level and who did not hold sexist attitudes about women's higher competences in biology and language were more likely to develop a confronting coping strategy against sexism. Similarly, girls and students who did not embrace the stereotype either that boys are better at STEM subjects or that girls are better at biology and languages were more likely to seek help. Furthermore, boys and students who believed that girls are better at biology and languages were more likely to develop an avoidance coping strategy. Interaction effects between gender and parental educational level suggested that among boys, those whose parents had attained secondary or university studies were more likely to deploy an avoidance strategy.