Selected papers presented at the 5th Network Gender & STEM Conference, 29–30 July 2021, in Sydney, Australia In association with



Keynote Summary: So what have we learned!

Jacquelynne S. Eccles University of California – Irvine, USA

ABSTRACT

In her Keynote address, Network Patron Distinguished Professor Jacquelynne Eccles recapped the highlights of what she and her colleagues have learned about both the Eccles et al. expectancy-value theory of achievement-related choices, and engagement and gendered STEM educational and occupational choices, over the last 40 years.

KEYWORDS

Gender & STEM; Situated Expectancy-Value Theory; longitudinal



SO WHAT HAVE WE LEARNED! ECCLES KEYNOTE SUMMARY

Jacquelynne S. Eccles is Distinguished Professor of Education at UC-Irvine and formerly the McKeachie / Pintrich Distinguished University Professor of Psychology and Education at the University of Michigan, and Senior Research Scientist and Director of the Gender and Achievement Research Program at the Institute for Social Research at the University of Michigan. Over the past 30 years, Professor Eccles has conducted research on topics including gender-role socialisation, teacher expectancies, classroom influences on student motivation, and social development in the family and school context. One of the leading developmental scientists of her generation, she has made seminal contributions to the study of achievement-related decisions and development. Most notably, her expectancy-value theory of motivation and her concept of stageenvironment have served as perhaps the most dominant models of achievement during the school years, contributing to extensive research and reform efforts to improve the nature of secondary school transitions. Professor Eccles also has been a major figure in the study of after-school activities, authoring a seminal National Research Council report that outlined the most effective ways for such activities to meet the developmental needs of adolescents.

In her Keynote address, Network Patron Distinguished Professor Jacquelynne Eccles recapped the highlights of what she and her colleagues have learned about both the Eccles et al. expectancy-value theory of achievement-related choices, and engagement and gendered STEM educational and occupational choices, over the last 40 years.

This address:

- 1. critiqued the continuing stereotypical research narratives about female versus male participation in "STEM", including what should be included in the category of STEM and the extent to which that very definition of STEM shapes the stereotypes we hold about how gendered STEM professions are;
- 2. provided an overview of the shift from EEVT to SEVT (the Eccles et al. Expectancy-Value Theory, to the Situated Expectancy-Value Theory) as it relates to STEM in particular; and
- 3. suggested important next steps for both research and policymaking related to gender and STEM.

This Keynote address was presented at the Network Gender & STEM biennial conference, 29-30 July 2021, The University of Sydney, Australia [online]. Both the recorded Keynote and live discussion are accessible here, with permission: https://youtu.be/puxVuEZ0a7U