Family Background, Non-Cognitive Skills and Gender Gaps in Education

Shelly Lundberg
University of California Santa Barbara, University of Bergen, and IZA

Around the world, with the exception of parts of South Asia and Sub-Saharan Africa, the educational attainment of young women now exceeds that of young men. The fraction of women who have attained tertiary education is substantially higher than that of men in almost all OECD countries, and women now account for about 60% of four-year college graduates in the United States. A number of researchers, including Autor and Wasserman (2014) and Bertrand and Pan (2013) have suggested that the increase in single-parent households may be contributing to the growing gender gap in education, as boys are likely to be more vulnerable to the negative effects of father absence than girls, either because the influence of a same-sex parent is crucial or because boys are more susceptible to environmental adversity.

Using data on young cohorts of men and women from the National Longitudinal Study of Adolescent to Adult Health (Add Health) and the National Longitudinal Survey of Youth, 1997, I investigate the association between college graduation and father (and step-father) presence earlier in life, as well as mother-fixed-effect models with opposite-sex siblings to control for unobserved parental and household characteristics. I find some evidence in fixed-effects models that living with a step-father as a young adolescent is associated with lower educational attainment for girls, but no evidence that father absence is associated with negative educational outcomes for boys.

Earlier work that finds excess male vulnerability is usually based on intermediate outcomes rather than final educational attainment—externalizing behavior in preschool, school suspensions, etc. I suggest that many of these behaviors/outcomes are strongly gendered and so do not provide a useful mechanism for comparing the “non-cognitive skill” development of girls and boys. Finally, I use the rich Add Health data to investigate some mechanisms that may link family structure with gender differences in various outcomes linked to educational attainment—school problems, non-cognitive skill development, and educational aspirations. I find, as expected, that girls appear more vulnerable to father absence when we examine outcomes such as depression and health, while boys appear more vulnerable when the outcomes are school problems, suspensions, and stated desire to attend college. These differences in intermediate outcomes/behaviors, however, do not result in differential college graduation rates. The pattern of results is similar when boy/girl vulnerability to poor school quality, instead of father absence, is examined.