Labor/Workforce Issues

Gender and Numeracy Skill Use: Cross-National Revelations from PIAAC

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- While previous research has focused on the underrepresentation of women in Science, Technology, Engineering, and Math (STEM), data from PIAAC allow us, for the first time, to look at gender gaps in the level of numeracy *skill use* at work.

- Male workers, overall, are more likely than female workers to be performing numerical tasks associated with STEM occupations. However, these mean differences in numeracy skill use are not statistically significant within every OECD country or every sub-population of workers.

- When women *do* use numeracy skills at work, in what jobs do they do it? Narrowing the data to look at workers in the United States reveals that men and women who engage in large amounts of numeracy skill use in their jobs are employed in many of the same job categories.

- However, numeracy skill use at work is also stratified in ways that align with historical patterns of occupational gender segregation in the United States.

    - For example, female workers who engage in large amounts of numeracy skill use cluster within careers such as nursing and early childhood education, while men who use large amounts of numeracy in their job are more likely to be working in historically-"male" careers (*e.g.* mining, manufacturing, engineering).

    - While these findings are in accordance with previous scholarship about gender and work, in another sense they problematize previous research by revealing the large amounts of numeracy involved in some historically-"female" occupations.

    - Further, they point to the idea that thinking about "STEM" in terms of high-level occupations such as physicist or engineer, rather than in terms of discrete tasks that can be basic or advanced, eclipses the numeracy skill usage that takes place across a spectrum of occupational categories, both blue-collar and white-collar.

- Finally, women who perform large amounts of quantitative tasks at work tend to have studied in different fields from their male counterparts. In addition, even among men and women who study the same areas, female respondents are less likely than males to indicate that they engage in large amounts of numeracy skill use in their current occupations.

- These findings point to myriad ways in which PIAAC data might be used in the future to respond to research questions about gender and work.