

Collaboration at Work and PIAAC Skills

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Research Questions

1. What is the relationship between cooperation/collaboration and information sharing and *literacy, numeracy, and PS-TRE skills* across industry sectors, controlling for gender and education?
2. How does the relationship between cooperation/collaboration and information sharing and *adults' use of specified skills* differ by industry, controlling for gender and education?

Findings and Discussion

Research Question 1:

- Negative correlation to all three PIAAC measures of competencies for those who cooperate all the time as compared to those who cooperate sometimes.
- Those that shared information once a week or more had a positive association with PIAAC competencies with varying degrees across industries and competencies when compared to those who shared information less frequently.
- The idea that one's literacy, numeracy and digital problem-solving skills are negatively related to frequent cooperation/collaboration conflicts with previous research showing a positive relationship.
- Across all industries (for all educational profiles), those who share work-related information once a week or more can expect to have higher literacy, numeracy, and PS-TRE scores and vice-versa

Research Question 2:

- Cooperation/collaboration at work and sharing work-related information were largely positively related to reading, writing, numeracy, and information and communication technology skills use, although the extent of the relationship varied by industry.
- Sharing work-related information was positively related to the use of the four skills across industries while collaborating at work was only related to skills use in four of eight industries – Construction, Education, Human health and social work, and Wholesale and retail trade including repair of motor vehicles and motorcycles.
- Education level was positively correlated to many of the measures of skills use.

Policy/Practice Implications

Workplace practice: Consider opportunities to encourage sharing work-related information as opposed to cooperation/collaboration, perhaps by giving job-holders information and having them perform tasks alone rather than creating highly cooperative environments.

Organizational policy: Consider the ways in which employees' PIAAC skills and corresponding ability to successfully complete work will support achieving an organization's goals. More skillful employees are more likely to be adaptable to changing work environments and organizational pressures, making them better contributors over time and supporting organizational survival in changing economic conditions. Designing tasks and responsibilities in which people share work-related information rather than collaborating may build stronger employee skills.

National policy: Design and delivery of workforce development and adult basic education programs should specifically aim to leverage individuals' knowledge sharing skills in addition to abilities to cooperate/collaborate effectively.

International Policy: Further research is needed on the links between soft skills and labor market outcomes, and their role in the formation and maintenance of the PIAAC cognitive competencies. OECD recognized the importance of these skills by including them in the PIAAC background questionnaire. A measure of soft skills to support their assessment in future cycles of PIAAC would enable researchers to conduct deeper analysis on the role of soft skills in adult workplace learning and labor market success (Martin, 2018).