

# For engineers, asking for help at work is influenced by gender

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In a study published in the *Journal of Management in Engineering*, [we analyzed whether knowledge accessibility](#)—defined as the time and effort that individuals spend seeking knowledge from their

colleagues—is influenced by gender.

Whether solving a technical problem or seeking [career advice](#), employees benefit from knowing who can answer their questions. However, employees may find it difficult to ask certain colleagues for help and may avoid approaching them. In the male-dominated engineering industry, where women represent only about 11% of the workforce, gender influences whom individuals turn to for answers to their questions.

Based on data from 530 interactions in which employees sought [knowledge](#) from their peers in a large U.S.-based engineering company, female engineers were likelier than men to feel that knowledge was easy to access. Women were also more likely to ask questions of other female colleagues than of male colleagues. When male engineers did seek knowledge from colleagues, they were more likely to request help from other men.

[In our study](#), knowledge accessibility was measured by social effort, or comfort approaching the other person, and cognitive effort, or how easy the information was to understand. We also measured physical effort—how much time it took to access the new information. Gender still had an effect on employees' perceptions of how easy it was to acquire knowledge from colleagues, even when considering age, race, expertise, seniority and how often the colleagues spoke to each other.

These findings have important implications. For example, they suggest men are less likely to reach out to others for knowledge or expertise. This serves as a disadvantage to men, as they will potentially make less informed or less knowledgeable decisions.

Further, women's knowledge and skills may be sought less by men. This would make women's knowledge less known and shared across a

company, which may disadvantage female engineers' career progression in an industry where many leaders are men.

When employees in an organization are more willing and able to share their knowledge, whether it is technical expertise or problem-solving skills, everyone is better off. Knowledge sharing, which can be boosted by a [collaborative organizational culture](#), has been [shown to improve the productivity](#) of employees.

Promoting the knowledge and skills of women in engineering can help increase the visibility of those employees while amplifying their knowledge throughout the organization. For instance, rather than implementing a traditional mentorship program, in which the mentor provides advice to a mentee, a mentor can provide introductions to those in powerful positions to ensure the mentee's expertise is shared more widely with others. This could help make the mentee's knowledge and skills more sought after.

Future research may examine the specific reasons that female engineers tend to reach out to their female colleagues while male engineers are less likely to seek out knowledge from their female co-workers. It could also be helpful to investigate the specific ways organizations promote [knowledge sharing](#) across genders.

**More information:** Cristina Poleacovschi et al, Gendered Knowledge Accessibility: Evaluating the Role of Gender in Knowledge Seeking among Engineers in the US, *Journal of Management in Engineering* (2020). [DOI: 10.1061/\(ASCE\)ME.1943-5479.0000865](https://doi.org/10.1061/(ASCE)ME.1943-5479.0000865)

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