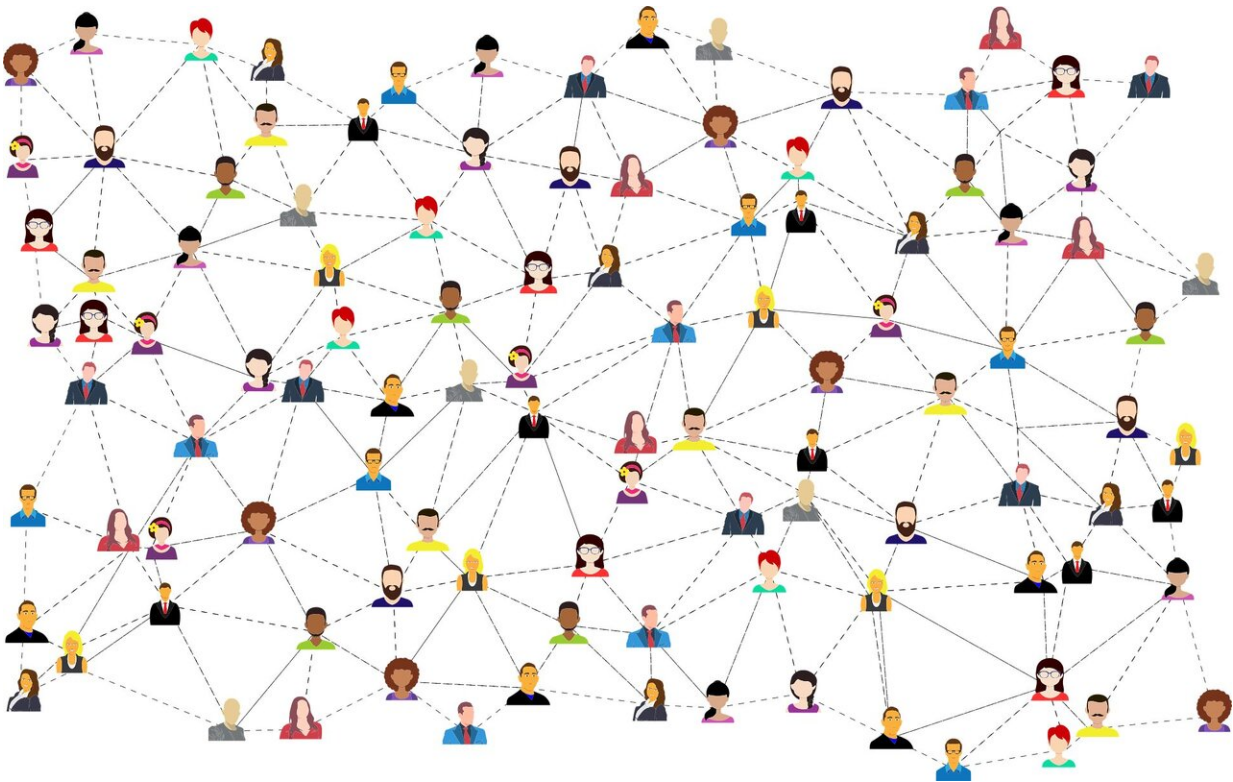


# IT companies should recruit more women for better team performance

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Mixed-gender software development teams perform better than male-only teams, with female developers helping offset psychopathic traits of some male developers, according to researchers at Lero, the Science Foundation Ireland Research Centre for Software.

The researchers, who surveyed 483 [software engineers](#) pre-screened for competency, also found [women](#) improved team performance and reduced workplace delinquency, such as absenteeism and alcohol abuse, in their study "Gender Differences in Personality Traits of Software Engineers." This is the first scholarly research that investigates objective reasons for a better gender balance in the IT world.

Lero's Dr. Klaas-Jan Stol, a lecturer at University College Cork and Dr. Daniel Russo, now with the University of Aalborg in Denmark, said their research suggests that women score significantly higher in openness to experience, honesty-humility, and emotionality than men, while men show higher psychopathic traits than women.

"Companies should recruit more women to their development teams not only for obvious ethical reasons but because this will improve performance. Indeed, women software engineers significantly differ from men in terms of personality traits, which are related to higher job performance, ethics, and creativity. Men, despite having lower scores on emotionality, exhibit higher scores on the psychopathy trait, which may lead to a reduced level of team performance," the researchers argue.

Dr. Russo and Dr. Stol said it is clear from these studies that gender plays a critical role in effective software development in corporate teams and open source communities. They point out that women are remarkably underrepresented in STEM jobs.

"Therefore, developing an understanding of personality traits and gender-based differences among can greatly help software teams and managers to build diverse and effective teams," they add.

The researchers used their findings to develop a number of proposals that can enable software teams to perform better and aid future research. "Including women in software teams increases team performance and

decreases workplace delinquency such as absenteeism and alcohol abuse. As both men and women exhibit negative and positive traits linked to teaming, mixed-gender teams will perform better than non-mixed teams," they explain.

Dr. Russo said that if top-management wants to address a long-term and organization-wide transformation, psychopaths will likely oppose it. "Extrovert employees are best suited to drive long-term, organization-wide transformation processes," he adds.

In their paper, published in *IEEE Transactions on Software Engineering*, Dr. Russo and Dr. Stol state that only developers with an "honest-humility personality trait" are likely to attend training modules, leaving others with their development tasks.

"Software professionals who score high on the honest-humility personality trait are best suited to conduct pilot evaluations of new practices and tools," adds Dr. Russo. According to Dr. Russo their study suggests that women display a higher personality complexity. "Women software engineers can deal better with complex social tasks, especially in relation to people," he concludes.

**More information:** Daniel Russo et al. Gender Differences in Personality Traits of Software Engineers, *IEEE Transactions on Software Engineering* (2020). [DOI: 10.1109/TSE.2020.3003413](https://doi.org/10.1109/TSE.2020.3003413)

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