

Gender stereotypes in technology startups

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Professors Tonoyan, Strohmeyer, and Jennings explore how gender stereotypes shape job application intentions in emerging technology startups

A compelling study, led by Dr. Vartuhi Tonoyan of the Craig School of Business at California State University (Fresno) and Dr. Robert Strohmeyer from the University of Mannheim in collaboration with Dr. Jennifer Jennings from the University of Alberta, examines how gender stereotypes impact job seekers' decisions to apply to technology startups. Titled "[Working for Jessica or Michael? Implications of Gender Stereotypes for Job Application Intentions at Technology Startups](#)", it has recently been accepted for publication in the Strategic Entrepreneurship Journal.

A contextualized approach to studying a technology startup founder's ability to attract job recruits

The study by Professors Tonoyan, Strohmeyer, and Jennings (2024) takes a contextualized approach to examine gender gaps in entrepreneurial performance, focusing on the ability of male versus female entrepreneurs to attract talent. While previous research has often attributed gender differences in startup success to women entrepreneurs' tendency to enter less glitzy and less high-growth industry sectors (such as retail and personal services), Tonoyan et al.'s (2024) study shifts attention to the high-impact technology sector.

By examining male and female entrepreneurs offering the same innovative product – a cybersecurity app – this research reveals gender dynamics in employee recruitment that go beyond simple industry choice. In essence, the study compares identical tech startups led by male and female founders, with the founder's gender as the only distinguishing factor, to explore how this demographic characteristic influences perceptions and recruitment outcomes in technology entrepreneurship.

Large-scale randomized online experiments with U.S. job seekers

To test their hypotheses, Professors Tonoyan, Strohmeyer, and Jennings conducted randomized online experiments with over 1,200 current, recent, or soon-to-be-active job seekers in the United States (777 participants in 2020/2021 in the initial study and 455 in early 2024 as part of a replication study). A key advantage of randomized experiments is their ability to establish causality between the manipulated and outcome variables of interest. This is because the treated and control groups differ only randomly on observed and unobserved covariates.

Descriptive and prescriptive gender stereotypes: The culprits in job seeker perceptions

The results from Tonoyan et al.'s (2024) experiment revealed that job seekers were less likely to apply to technology startups led by women than to identical startups led by men. Why? Because the job seekers perceived female tech entrepreneurs as less competent, agentic, and warm in comparison to the male tech entrepreneurs, which, in turn, affected the job seekers' perceptions of the ventures' relative growth potential and ability to empower employees. These biases make it harder for female-led technology startups to attract talent, which could limit the diversity and innovative potential within the technology sector.

Even though women in advanced societies like the U.S. are now generally perceived as equally competent to men and even warmer (often referred to as the 'women are wonderful' effect), female entrepreneurs in male-dominated fields like technology face a distinct disadvantage. These women tend to be penalized by evaluators and resource providers – in this study, job seekers – due to the perceived incongruity between stereotypical female attributes (such as warmth and an orientation towards others) and the agentic, aggressive qualities traditionally associated with success in male-dominated roles. As a result, the job seekers in Tonoyan et al.'s (2024) study perceived the female high-tech entrepreneurs as less competent and less agentic than their male counterparts, simply because the female entrepreneurs defied descriptive stereotypes of what women are like.

But even when women overcome these challenges by demonstrating performance equal to or surpassing that of men, they encounter prescriptive stereotypes dictating that women should remain warm, nurturing, and noncompetitive. Female "vanguards" who excel in male-dominated fields such as technology entrepreneurship defy traditional gender norms; as a result, they often experience backlash.

In Tonoyan et al.'s (2024) study, job seekers perceived female founders as less warm even though they exhibited the same level of competence, agency, and innovation as their male counterparts. The male founders did not face these repercussions in the traditionally masculine role of a technology entrepreneur, as their fitness for this job was arguably perceived to be consistent with gendered expectations.

Strategy to alleviate job seeker gender stereotypes

Fortunately, Tonoyan et al.'s (2024) study also highlights a strategy that female founders of tech startups can implement to counteract gender-stereotypical biases from job recruits. The researchers found that gender-balanced leadership teams mitigate these biases, making female-led tech startups more appealing to potential hires. Integrating men into senior roles on their leadership teams turns out to be a smart move for female technology founders to break through industry norms that favor male leadership, boosting their startup's credibility with job recruits.

A gender-balanced top team – for instance, a female CEO and CFO alongside a male CTO and COO – can help counter gender stereotypes that might otherwise work against female founders. This balance likely signals to potential employees that the team combines the competitive edge needed in the high-stakes tech environment with a people-focused approach to managing their venture’s workforce and stakeholders.

This finding underscores the value of gender diversity as a strategic tool for startups seeking to attract a broader, more talented workforce. Accordingly, Professors Tonoyan, Strohmeyer, and Jennings encourage tech-based startups to promote gender diversity and inclusivity within their leadership to dismantle stereotypes and enhance the appeal of female-led technology ventures to job seekers.

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