Why Women Leave Technical Work

What the Evidence Reveals About the Role of Everyday Harassment

aftermetoo

Purpose of this Document

This document synthesizes more than a decade of research into women's participation in technical work, with particular attention to harassment and harassment-adjacent behaviours that contribute to hostile or exclusionary environments. It aims to provide employers with a clear, evidence-based understanding of why women leave technical roles in the technology industry—not in theory, but in practice—and why the problem persists despite widespread awareness and efforts to create change.

Executive Summary

Across Canada and other advanced economies, women remain persistently underrepresented in technical roles in the technology industry, and leave those roles at much higher rates than their male peers. Their departures are not driven by lack of interest, lack of ability, or family-related choices. Instead, a large and consistent body of research shows that women enter technical work well-qualified and highly motivated, and decide to leave after concluding that their work is yielding less recognition, influence, and advancement than comparable work by their male peers.

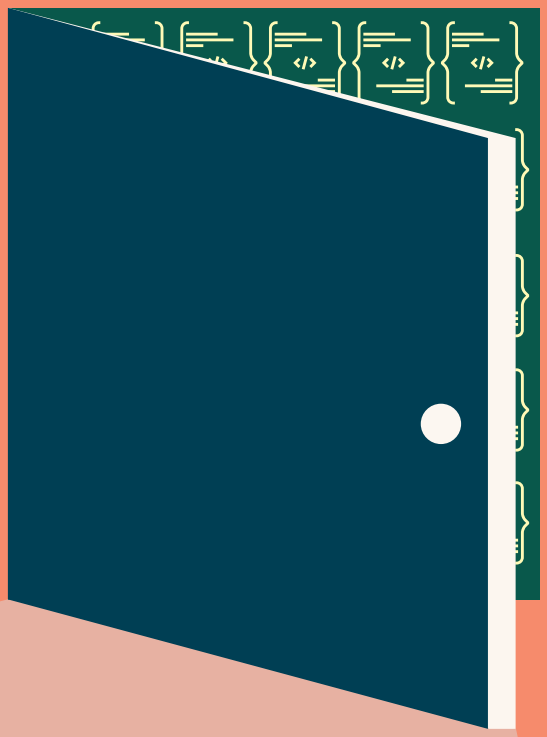
Attrition is most pronounced at mid-career, typically in women's early to mid-30s, and the experiences that drive it are rarely dramatic or singular. Instead, they have accumulated slowly through everyday peer interactions and informal workplace dynamics. Women consistently report having their technical competence questioned or repeatedly tested by colleagues; being interrupted or talked over in meetings; having their ideas ignored or attributed to other people; being excluded from informal networks where information, reputation, and opportunity circulate; being informally steered toward support or people-facing roles; and receiving slower or less substantive feedback from peers on their work. Many describe interactions with peers that are sexualized in ways they find juvenile and unappealing.

Crucially, very few of these experiences result in formal complaints. Individual incidents are typically judged by the women experiencing them as too minor or ambiguous to justify official action, and are therefore left unreported.

However research shows that, over time, these experiences accumulate to undermine women's authority, influence, reputation, and access to opportunity within their organizations. As their perceived competence and standing erode—often despite strong performance—their ability to succeed diminishes. Many report having received one or two early promotions, and then beginning to encounter stalled advancement. Under these conditions, leaving becomes a rational response to materially constrained prospects.

When they leave, these women do not generally exit the workforce or stop doing technical work. Instead, they leave the technology industry, often moving into technical roles in other sectors—frequently in more gender-balanced environments such as healthcare or education.

The women who leave, research has found, tend to be disproportionately highly educated, ambitious, and accomplished relative to their peers, suggesting that this attrition represents a regrettable loss of talent, rather than a natural sorting of weaker performers.



Introduction

Despite decades of attention to gender diversity in the technology industry, women remain significantly under-represented in technical roles and are far more likely than men to leave those roles midway through their careers. This pattern is well documented across a wide range of technical roles in the technology industry, particularly in work where advancement depends on informal collaboration, reputation, and peer evaluation. It appears across countries, organizational types, and economic cycles, including in labour markets where demand for technical talent is strong.

The persistence of this pattern has generated a wide range of theories and hypotheses, including ones citing differences in educational pathways, early career entry patterns, personal preferences, and work–life balance considerations.

However, a large body of empirical research challenges these accounts. Women who enter technical work do so for the same reasons men do: interest in the work itself, enjoyment of problem-solving, and the opportunity to contribute to complex, high-impact projects. While they are underrepresented at every stage of the pipeline, their early career satisfaction is generally high. Over time, however, cumulative workplace experiences gradually erode that satisfaction, with many ultimately exiting at midcareer.

This document focuses on what happens to women after they enter technical work: how their experiences change over time, why attrition spikes at mid-career, and how everyday workplace conditions—particularly low-level harassment and harassment-like behaviour—shape these outcomes.

The Scale and Timing of Attrition

Multiple large-scale studies show that women leave technical roles in the technology industry at substantially higher rates than men, even when controlling for education, experience, and family status. Ten years after graduation, only a minority of women who originally trained in STEM fields remain in STEM roles, while men with comparable backgrounds are far more likely to persist.

Attrition is not evenly distributed across the career span. Instead, it spikes at mid-career, typically in women's early to mid-30s. At this stage, many women report having reached the beginning ranks of senior individual contributor or management roles, only to find that further progression has become markedly more difficult. Promotions slow or stop, access to high-visibility projects narrows, and professional isolation intensifies.

For many women, the cumulative effect is a growing sense that their contributions are not rewarded in proportion to their value. When a less experienced male colleague whom they hired or trained is promoted ahead of them, this often crystallizes a pattern that has been developing for years and becomes the breaking point that prompts their exit.

Early Career Motivation and Later Disillusionment

Research consistently finds that women enter technical fields with high levels of confidence, ambition, and intrinsic motivation. In early career surveys, women report strong satisfaction with the technical content of their work, and a desire to advance.

Over time, however, this motivation erodes. Studies show a sharp decline in self-reported ambition among women in technical roles as they age, a pattern that is significantly steeper than among men in the same fields and steeper than among women in non-technical professions.

This does not reflect diminished interest in technology or reduced capability. Rather, it tracks changes in how women experience their workplaces and how their efforts are rewarded.

Everyday Harassment and Hostile Work Environments

When workplace harassment is discussed, attention often focuses on severe or overt misconduct. Those incidents do occur and must be addressed. However research shows that women's day-to-day experiences are more commonly shaped by a different category of behaviour: persistent, low-level actions that signal exclusion, devaluation, or threat.

These behaviours include:

- comments about women's capabilities and suitability for technical work
- repeated interruptions or dismissal in meetings
- public or private questioning of their competence
- having their work vetted more thoroughly than that of male colleagues
- social exclusion from informal networks where information and opportunities circulate
- sexualized jokes, comments, or "pranks"
- being hit on by colleagues or subjected to unwanted personal attention
- disproportionate focus on their appearance, relationships, or family plans
- being steered toward people-facing or "soft" roles rather than technical work
- assignment of low-status, non-promotable office work (e.g., note-taking, event planning)
- being expected to provide ongoing emotional support for others' personal lives
- being labeled as "difficult," "abrasive," or otherwise penalized for assertive behaviour
- being mistaken for, or treated as, administrative or support staff

Individually, these behaviours are often dismissed as trivial. Collectively, they contribute to a hostile or distracting environment that imposes additional cognitive and emotional burdens on women.

Harassment, Power, and Punishment

Research on workplace harassment emphasizes that such behaviour is not primarily about sexual interest, but about power and norm enforcement. Women who violate gender expectations—by being assertive, ambitious, or authoritative—are more likely to be targeted for harassment or social punishment.

This dynamic helps explain why competent women are often described as abrasive or unlikeable in performance evaluations, and why identical behaviour is evaluated differently depending on the gender of the person exhibiting it.

Harassment thus operates not only as a source of immediate harm, but as a mechanism that constrains women's behaviour and career trajectories over time.

Accumulated Disadvantage and Stalled Advancement

Beyond overt harassment, women in technical roles face a pattern of accumulated disadvantage that manifests in everyday work processes. Research documents that women are more likely than men to:

- receive slower or less detailed feedback
- be excluded from high-profile assignments
- be steered toward support, coordination, or people-facing roles
- have their contributions attributed to others
- be evaluated on the basis of personality traits rather than work quality

Small biases at each stage compound over time. Simulation studies show that even minimal bias in promotion decisions can produce extreme gender imbalance at senior levels after multiple promotion cycles.

Psychological Consequences and Identity Threat

The research literature describes several psychological mechanisms through which hostile or exclusionary environments affect performance and retention. One of the most studied is stereotype threat: the cognitive load imposed when people are aware that they may be judged through the lens of negative stereotypes about their group.

Women experiencing stereotype threat report heightened vigilance, rumination, and self-monitoring. While these responses may initially lead to increased effort, over time they reduce performance, satisfaction, and well-being. Chronic exposure is associated with burnout and withdrawal from the field.

Importantly, stereotype threat and related dynamics are largely invisible to those who do not experience them, contributing to misunderstanding and minimization within organizations.

Why Formal Systems Miss the Problem

Most organizations have sexual harassment and/or violence prevention policies that require complaints to be handled through formal investigative processes, even when the people involved might prefer a less formal approach. These investigations are typically led by Human Resources, sometimes with legal counsel involved, and may include the use of external investigators.

While appropriate for serious misconduct, these processes are widely felt to be disproportionate for everyday workplace issues, and they produce a range of unintended consequences. Employees and supervisors alike hesitate to discuss behavioural norms and expectations, for fear those conversations could be interpreted as complaints or give rise to them. People who experience or witness problematic behaviour hesitate to raise concerns unless they perceive the incident as especially severe. And supervisors, in turn, may minimize issues or discourage formal reports, to avoid needing to initiate a process that could be costly, disruptive, or misaligned with the scope and scale of the issue.

As a result, lower-level but persistent problems are not simply overlooked; organizational incentives actively discourage their identification and discussion. Because these issues therefore remain unaddressed, their cumulative effects progressively degrade working conditions and ultimately drive employee exit.

Agency, Choice, and Exit

Women's attrition from technical work is often described as women being "pushed out." The research supports a different interpretation.

Women who leave technical roles in the technical industry are disproportionately well educated, experienced, and highly employable, and they do not typically withdraw from paid work. Most transition into other industries, other business functions, academia, or government.

They choose to exit their workplaces because they judge—accurately—that their contributions are not being rewarded in proportion to their value. In the face of persistent undervaluation, stalled advancement, and routine low-level harassment, many conclude that other sectors, functions, or organizations will offer a better return on their talent.

From this perspective, attrition reflects agency rather than passivity. Women are not being defeated by technical work or even by harassment itself; they are simply choosing to invest elsewhere. The loss is borne primarily by the technology industry itself.

Understanding women's departure as a choice, rather than an expulsion, reframes the problem. The issue is not women's skills or resilience or commitment, but organizational failure to create environments in which elite technical talent sees continued participation as worthwhile.

Conclusion

The evidence is clear: women do not exit their technical workplaces because they lack interest or ability. They leave because everyday workplace conditions—shaped by low-level harassment, bias, and exclusion—no longer justify continued investment of their talent.

Understanding this pattern requires shifting attention away from rare, severe incidents of workplace harassment and violence, toward the cumulative impact of small everyday harassment-like behaviours. For employers seeking to retain technical talent, the challenge is not merely to prevent and punish the worst cases of misconduct, but to recognize and address the ordinary conditions that quietly drive away capable people.

Sources and Further Reading

The analysis in this document draws on a body of research examining women's experiences in technical roles in the technology industry, with particular attention to everyday harassment, peer dynamics, job quality, and mid-career attrition. Sources include more than 200 peer-reviewed journal articles, major industry studies, conference proceedings, and selected dissertations. Below is a partial list.

The bibliography is organized from core workplace-exit research outward to contextual and background sources.

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