

From Where I Stand:
An Analysis of Female Software Engineers
Struggling for Acceptance in I.T. Careers

by David McKoskey, Ed.D.
One-Page Summary

Since the late 1970's, women's participation in Information Technology (I.T.) careers has dropped from a high of 35% to a stubborn $20 \pm 5\%$ (NCWIT2016, 2016). This, despite rapid growth in software engineering and associated I.T. fields, and an overall deficiency of I.T. workers (TEKSystems, 2017; USBLS, 2015a, 2015b).

This research presents an analysis of ten interviews. All ten interviewees were women with I.T. careers of at least five years, though typically significantly longer. The analysis is presented through the lens of Max Weber's theory of Ständ, Class, and Party, (Weber, 2015), Pierre Bourdieu's theory of Symbolic / Social / Cultural capital (Bourdieu, 1984, 1985), Bourdieu's theory of Habitus (Bourdieu, Passeron, & Nice, 1990), Andrew Abbot's views on professional identity (Abbott, 1988), and Étienne Wenger's framework of Communities of Practice (Wenger, 1998). The goal is to understand better the norms which govern I.T. culture, show how these women have suffered under their imposition, yet thrived in their careers nonetheless.

Three major themes emerge from the interview analysis: early influences, loss, and recovery. Early influences explain how the interviewees chose I.T. as a career and illustrates some of the basic, personal motivation which still informs their decision to pursue it. This section also examines the role of friends and family, especially the influence of fathers. The section on loss carefully examines how the women internalized the male-dominant I.T. culture to their own detriment, how external factors reinforced this internalization and habitual repetition, and the grief which resulted. Finally, the essay examines the factors by which the interviewees recover from loss, including personal resilience, self-care practices, and the construction of women's support networks.

The essay concludes with some implications for leadership, especially in changing the I.T. culture to make it more welcoming and inclusive. Some ideas for further areas of research are also presented, including new structures for I.T. leadership and professional norms, and further research into young male "geek" video gaming culture as exemplified in the Gamergate case (Quinn, 2017).

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