# Chapter 10 How Exclusive Work Climates Create Barriers for Women in IS&T

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# ABSTRACT

Exclusive climates are associated with negative outcomes such as feelings of anxiety. Furthermore, barriers may arise for women when they experience exclusive climates in the IS&T workplace. This chapter examines several barriers women may encounter, including stereotypes, stereotype threat, the motherhood penalty, work-family conflict, and mentoring. As women are underrepresented in IS&T, recommendations for future research include building more inclusive climates in IS&T workplaces for women and mitigating the obstacles women may face while working in the field.

# INTRODUCTION

Organizational climate consists of employees' shared perceptions of rewarded, supported and expected behaviors as well as perceptions of organizational events, practices, policies, and procedures (Schneider, Wheeler, & Cox, 1992). Climate can have significant effects on employee job satisfaction, performance, work attitudes, and motivation (Parker et al., 2003). When an organization's climate is *inclusive*, organizational members feel equally welcomed, respected and valued. Moreover, employees may experience increases in job satisfaction and organizational and career commitment (Major & Morganson, 2009). *Exclusive climates* are linked with turnover, reduced organizational commitment, decreased job satisfaction (Major, Davis, Sanchez-Hucles, Germano, & Mann, 2006) and feelings of anxiety and emotional stress (Brimhall, Lizano, & Barak, 2014).

Unfortunately, women in information sciences and technology (IS&T) frequently experience exclusive work climates (Walton, Logel, Peach, Spencer, & Zanna, 2015). This is due, in part, to the underrepresentation of women in the field. Relative to men, fewer women enter higher education with

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a science, technology, engineering, or mathematics (STEM) major, while even fewer pursue STEM careers (Hughes, 2014). Currently, women comprise 26 percent of those employed in computer and mathematical occupations and only 27 percent of those employed as computer and information systems managers (United States Department of Labor, 2014). This article details some of the barriers women encounter in an exclusive IS&T work climate, including stereotypes, stereotype threat, the motherhood penalty, work-family conflict, and lack of mentoring.

# BACKGROUND

While women's participation rates in male dominated fields, such as medicine, law, or accounting, are increasing, women remain underrepresented in IS&T (Diekman, Clark, Johnston, Brown, & Steinberg, 2011; Walton et al., 2015). This shortage of women is not unique to the United States; in fact, many countries around the world encounter a similar dearth (Jackson, Hillard, & Schneider, 2014). Furthermore, women tend to leave STEM fields for other professions at high rates (Glass, Sassler, Levitte, & Michelmore, 2013).

Women are significantly underrepresented in higher-level managerial roles in the industry (Servon & Visser, 2011; Wentling & Thomas, 2009), stemming from a 'glass ceiling,' which women encounter when they have greater difficulty climbing the corporate ladder due to subtle barriers that are not as prevalent for men (Adya, 2008; Major & Morganson, 2009). Other barriers women may experience arise from the nature of IS&T work (i.e., long hours, travel, on-call status; Ahuja, 2002; Armstrong, Riemenschneider, Allen, & Reid, 2007) and the IST&T work climate (i.e., male dominated, exclusive; Wentling & Thomas, 2009). The IS&T climate can be "chilly" for women as they can feel out of place and less compatible with the stereotypically masculine environment of the field (Blickenstaff, 2005). As part of the male dominated climate in IS&T, women may experience exclusion from informal networks within the field, which negatively affects work opportunities, such as job placement and advancement (Adya, 2008) and self-confidence (Wentling & Thomas, 2009).

### **STEREOTYPES**

Gender stereotypes are characterized as either descriptive (i.e., beliefs about characteristics men and women *do* hold) or prescriptive (i.e., beliefs about characteristics men and women *should* hold; Heilman, 2012; Koch, D'Mello, & Schneider, 2014). Both types can incite discrimination against women in IS&T, although in different ways. *Descriptive gender stereotypes* may lead to discrimination against women in IS&T fields because of a perceived lack of fit between typically feminine characteristics that women do hold and the characteristics of a stereotypically masculine field. *Prescriptive gender stereotypes* may lead to discrimination against women in IS&T because working in a traditionally male field violates traditional feminine gender norms. Because of a perceived lack of fit, due in part to prescriptive gender stereotypes, women may be viewed as less competent than men in male dominated fields (Amanatullah & Tinsley, 2013; Ceci & Williams, 2007). When women assert their competence by exhibiting agentic characteristics, however, this may result in *backlash*, negative reactions elicited when gender norms are perceived to be violated (Amanatullah & Tinsley, 2013). If competency is explicitly established, women may still be seen as less likeable and more hostile than their male counterparts (Amanatullah & Tinsley, 2013).

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