INTRODUCTION

Information technology has become increasingly pervasive in the products and services of organizations. Similarly, IT has become increasingly essential in supporting work at all organizational levels. These forces have increased the demand for the work that IT professionals perform. At the same time, managerial initiatives for increased efficiencies have led to increases in outsourcing and downsizing. As a result, the IT human-resource (HR) strategies that organizations employ vary (Agarwal & Ferratt, 1999).

Different IT HR strategies are implemented through differences in HR practices, such as differences in employment guarantees, career development, and the flexibility allowed in scheduling one's work. These differences in IT HR practices result in different employment arrangements for IT professionals. According to fit theory and research (Kristof, 1996; Kristof-Brown, Zimmerman, & Johnson, 2005), the fit between what the organization supplies and what the IT professional needs influences attitudinal and behavioral outcomes, such as satisfaction, turnover, performance, and helping behavior. If an organization has a common set of IT HR practices for all IT professionals, greater fit and the organizationally desired outcomes associated with greater fit will most likely occur if all IT professionals have a common set of needs.

A question that arises is whether all IT professionals do have a common set of needs. If subgroups of IT professionals have different needs but an organization has a common set of IT HR practices for all IT professionals, that organization may not appeal to a valuable pool of potential employees. Recent analysis of the composition of the U.S. workforce shows that women are underrepresented in IT (Information Technology Association of America [ITAA], 2003, 2005a, 2005b). The percentage of women in the professional and management ranks of the IT workforce was 24.9% in 2004; the percentage in all IT workforce positions, including lower level administrative job categories, was 32.4%. In comparison, the percentage of women in the overall workforce was 46.5%. One potential explanation for this underrepresentation could be that organizations do not provide employment arrangements that address the needs of women as well as they do the needs of men and, thus, are unable to attract and retain IT professionals equally from these gender subgroups.

Research Hypothesis

Given the underrepresentation of women in IT and the potential explanation above, this research is guided by the following research question: Are women and men IT professionals homogeneous with respect to the needs they seek to satisfy in their employment arrangements? If organizations provide all their IT professionals, regardless of gender, with the same employment arrangement, and the answer to the research question is negative, that would suggest that organizations should design employment arrangements to be more inclusive of women’s
needs. Thus, rejecting the following null hypothesis would provide evidence that begins to build support for the explanation and potential solutions.

**H₀:** Women and men IT professionals have no differences in the needs they seek to satisfy in their employment arrangements.

**BACKGROUND**

A number of characteristics have been identified as being especially relevant for differentiating between employment arrangements (Ang & Slaughter, 2000; Kraut, Steinfield, Chan, Butler, & Hoag, 1999; Rousseau, 1995). Eleven characteristics, listed below, are included in this study. The importance of each of those characteristics is used to identify need profiles that describe different types of IT professionals based on the types presented in Enns, Ferratt, and Prasad (in press). These types are based on three broad need categories that employment arrangements may satisfy. Specifically, these need categories consist of security, achievement, and flexibility. The employment-arrangement characteristics that may satisfy a specific need category are the following:

- **Security:** (a) Job security, (b) pay, and (c) benefits
- **Achievement:** (a) Career-development opportunities, (b) the specificity of performance requirements, (c) discretion in choosing what work one does (work-choice discretion), (d) recognition, and (e) social interaction and support
- **Flexibility:** (a) Discretion in choosing when to work (schedule discretion), (b) discretion in choosing where to work (location discretion), and (c) travel discretion

Prasad, Ferratt, and Enns (2005) developed and validated a categorization procedure that places most IT professionals (i.e., approximately 80%) into one of three need profiles: high maintenance, lifestyle, and committed. The high-maintenance profile is characterized by greater needs for security and flexibility and a lower need for achievement. The committed profile is characterized by greater needs for security and achievement and a lower need for flexibility.

Rather than using need profiles, we could just compare women to men on each specific need. The latter analysis would assume that the mean value for a specific need within a gender group would represent all members of that group equally well, whereas the former analysis would allow for the potential that differences in a specific need exist within each gender group.

Prior research by Igbaria, Greenhaus, and Parasuraman (1991) suggests that the analysis of need profiles is a more appropriate approach for testing the research hypothesis. Although they did not measure needs associated with employment arrangements, they found significant differences in the distribution of women and men across eight career orientations (e.g., DeLong, 1982; Schein, 1987). They found that career orientations within gender groups were distributed across these eight career orientations; that is, women were not all the same in career orientation, nor were men. The percentage of women across the eight career orientations ranged from 4% (for the career orientation of entrepreneurship) to 22% (for the managerial career orientation), whereas the percentage of men ranged from 5% (entrepreneurship) to 27% (managerial). The percentages of women and men within a given career orientation were typically 20% and 80%. Of specific note were their findings for one of the career orientations, namely, lifestyle integration: a desire to develop a lifestyle that integrates family concerns, career concerns, and concerns for self-development. A greater percentage of women and a lower percentage of men than typical had this career orientation (39% vs. 20% for women; 61% vs. 80% for men). Similarly, the percentage of women with this career orientation (21%) was much higher than the percentage of men (8%). Others have noted that balancing work-family issues is a key factor contributing to the underrepresentation of women in the IT workforce (e.g., see Quesenberry, Trauth, & Morgan, in press).

Given the results of Igbaria et al. (1991), we expect that differences in needs related to employment arrangements exist among women and among