

# Encyclopedia of Gender and Information Technology

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# Understanding the Mommy Tracks in the IT Workforce

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## INTRODUCTION

Despite the recent growth in the number of women in the American labor force, women are under represented in the IT workforce. Key among the factors that account for this under representation is balancing work-family issues. Some researchers have speculated that IT work is not an ideal fit for working mothers because of long work hours, increased conflicts with family responsibilities, and the difficulty of returning after maternity leave to an industry with ever evolving technologies (Kuosa, 2000; Webster, 1996). This article reports on an empirical study that explored the influence of work-family balance on American women's participation in the IT workforce by using the Individual Differences Theory of Gender and IT (Trauth, 2002; Trauth, Quesenberry, & Morgan, 2004; Trauth, Huang, Morgan, Quesenberry, & Yeo, 2006). In doing so, we summarize a work-family balance study presented in greater detail in Quesenberry, Morgan, and Trauth (2004) and Quesenberry, Trauth, and Morgan (2006) that articulates the ways in which individual and environmental factors influence female responses to issues of work-family balance.

## BACKGROUND

Studies of the IT workforce are mixed on the question of whether the IT workplace is a conducive or an unfriendly environment for working mothers. One stream of research points to the IT industry as having a pragmatic approach to working practices that can have a positive impact on working mothers. These practices include innovations in teleworking,

job-sharing and technical advances that allow more flexibility in work-family balance (Quesenberry & Trauth, 2005; Zimmerman, 2003). An alternative stream of research highlights several difficulties associated with work-family balance in the IT workforce. Trauth's studies in Ireland and Australia revealed that women found it difficult to manage work-family conflicts despite shifts in societal views about working mothers (Trauth, 2002; 2000; 1995; Trauth Nielsen, & von Hellens, 2003). Webster (2002) adds that this is "particularly hard to reconcile with the working rhythms of IT work" (p. 6) and may not be conducive for many women.

Researchers also highlight the consequences associated with work-family balance for women in the IT workforce. Mennino and Brayfield (2002) found that female employees in male-dominated occupations make more family trade-offs and fewer employment trade-offs than employees in other occupations. Ahuja (2002) reports that women may have to neglect certain family obligations to be eligible for promotional opportunities similar to those of men. Baroudi and Igbaria (1994) point to family-related responsibilities as partial explanation for the under representation of women in managerial positions. Likewise, Sumner, and Werner (2001) found the burden on family-career balance from overtime and administrative tasks to be a barrier to women in management.

## MAIN THRUST OF THE ARTICLE

This article reports on one aspect of a multi-year, multi-site qualitative field study of women working in IT whose goal is to investigate the female under representation in IT. Our objective is to contribute to

a deeper understanding of specific factors that influence American women in their working lives as IT professionals by examining the work-family balance issues facing women in the IT workforce and how they respond when making decisions about their personal and professional development.

Fifty-seven open-ended, in-depth, face-to-face interviews with female practitioners in the IT workforce were conducted between October 2002 and August 2004. The participants represent a range of geographical locations, ages, demographic backgrounds, educational backgrounds, levels of management and job classifications, relationship statuses and family compositions. The women work and live in three different geographical regions of the U.S.: the Northeast (Boston, Massachusetts), the Southeast (Research Triangle/Charlotte, North Carolina) and the Mid Atlantic (central Pennsylvania). The women range in age from 21 to 58 with the average age being 40.6 years. Furthermore, 35 of the women are married, 2 are in committed relationships, 14 are single and 6 are divorced/not remarried. Thirty-two of the women have one or more child and 26 of the women do not have children.

The guiding theory for this research is the Individual Differences Theory of Gender and IT proposed by Trauth (2002; Trauth, Huang, et al., 2006; Quesenberry, 2004) that focuses on differences among women in the ways they experience and respond to characteristics of IT work, the IT workplace and societal messages about women and IT. This theory focuses on women as individuals, having distinct personalities, experiencing a range of socio-cultural influences, and therefore exhibiting a range of responses to the social construction of IT. Thus, the theory elucidates the differences *within* rather than *between* the sexes and examines issues at an individual rather than a group level of analysis.

### **Analysis of Work-Family Balance in the IT Workforce**

What emerged from the analysis of life histories of women in IT are four categories of women in the IT workforce: the non-parent, the working parent, the “back-on-track” parent and the “off-the-track” parent. The categories are by no means static or limiting. Rather they are dynamic in nature, and were created to analyze data to support theory refinement.

### **The Non-Parent: Balancing Work-Family Issues without Children**

The *non-parent* category is comprised of women employed in the IT workforce who do not have children. The non-parent represents 26 women or 45.5% of the women interviewed. These women are single, married, partnered, and divorced and range in age from 21 to 53, with an average age of 37.8 years. The non-parents consist of two groups of women: women who have *not yet* had children and women who *are not* having children. This is important to note this distinction because not all non-parents are young, single women who have not yet reached a point to have children. Rather, many non-parents are women who have made conscious decisions not to have children.

Despite the range of explanations regarding motherhood, one common theme arose regarding work-family balance: the non-parents acknowledged their ability to more easily balance work-family issues in the IT workforce than their co-workers with children. The non-parents felt that they were more able to adjust to the temporal aspects of IT work, including longer work days and late hours. In addition, many non-parents felt more able to participate in after-hour networking events than co-workers with children. Further, several participants also commented on the freedom they enjoyed by not having to make work-child trade-offs. Although non-parents have chosen to not have children and tend to acknowledge the increased ability to balance work and life, it does not mean that they are all workaholics who are focused exclusively on themselves or their careers. Many of the non-parents talked about their values regarding personal life and time spent away from the office. They spoke of elder care, responsibility for nieces and nephews, other family commitments and pets.

Another theme raised by the non-parents is coping with the societal message they sometimes received about motherhood. This was explored through discussion of regional cultural attitudes towards women and women working. Many non-parents spoke about a cultural message that women’s family obligations should take precedence over professional obligations. Thus, they should assume domestic child-care roles and men should assume professional income-earning roles. According to this view,

the only acceptable jobs are domestic or traditional female occupations. Francie, a 26 year-old software engineer, summarized this message by explaining:

*Typically, the family obligations take precedence over the professional obligation. ... I think typically [the societal view] is, that, when the woman has a child that she should stay home and take care of them. The male would be the financial supporter [Francie].*

From a personal development perspective, the non-parents spoke about the difficulties reconciling their own identities with what they perceive to be a societal stereotype of women. For instance, Nancy, a 48 year-old Web consultant, spoke about the pressures she felt to have children despite the fact that it conflicted with her own personal desires. The women also spoke about the difficulties reconciling their professional development with views of women working. The non-parents also spoke of the difficulties reconciling their professional development, particularly in job attainment, with a socially constructed view of women as primarily mothers. Many non-parents discussed the difficulty they faced in obtaining IT jobs because of attitudes towards women working in IT.

### **The Working Parent: Balancing Work-Family Issues Concurrently**

The *working parent* category is comprised of women who have both children and a career in IT. The working parent represents 26 women or 45.5% of those interviewed for this paper. Working parents are women who do not fit the working parent dichotomy found in the literature because they place a value on both family and career. Working parents represent a range of ages and relationship statuses including single, partnered, married, and divorced. Furthermore, the working parents represent a range of motherhood scenarios including raising one or more child (biological, adopted, and foster), and vary in age from 27 to 57 years old.

The working parents are typically motivated by both financial and personal desires to simultaneously work and raise their children. Although, these women acknowledge the financial benefit of working in IT,

an overwhelming sentiment is that they seek employment because of the personal value they place on being active and continuing to grow as a professional. Donna, a 39 year-old quality assurance analyst, was asked how important work was in her life:

*I think [having a career] is very important for me... It's important to keep my mind active to keep challenged and to like what I do. When I stop having fun at this job that's probably when I'll decide it's time to move on. I think it's very important to stay active [Donna].*

Although, many working parents value a professional career, they also acknowledged the difficulties associated with having one. The women frequently spoke about the work-family balance issues that arise, particularly those with regard to the temporal arrangements of IT work such as a 24/7 work day where employees are always accessible. Candace, a 41 year-old systems developer, felt that there is a growing tendency in the last few years for employees to work extra hours and to be "constantly available by computer or phone."

A recurring theme raised by the working parents related to the importance of work flexibility. The women spoke about the benefits of work programs such as job sharing, part-time work and manageable commutes. For instance, Kimberly, a 38 year-old project manager, has the ability to telecommute and was one of the first women at her IT consulting firm to be promoted to manager while on maternity leave. Another prevalent theme expressed by working parents is the importance of supportive partners and spouses. Many working parents spoke about how their partners and spouses share an active role in child rearing, domestic responsibilities, and community volunteer activities.

Several working parents spoke about the societal pressures and mixed messages they receive about raising children and working outside of the home. The participants highlighted the societal messages that women should be stay-at-home mothers. Rose, a 47 year-old director of IT who is Japanese American, explained that her culture puts "a lot of emphasis on the Japanese woman staying home and taking care of the children" and taking on

duties such as finances and keeping certain traditions alive. The working parents spoke of the difficulties of reconciling their professional development particularly in getting a job with societal images of women working in IT. They noted the negative stereotypes associated with being a working parent and the influence it had on their careers. To overcome these societal views of women, the working parents shared accounts of having to work harder and longer hours than coworkers, in order to dispel the negative stereotypes of working mothers.

### The “Back-on-Track” Parent: Balancing Work-Family Issues Sequentially

The *back-on-track parent* refers to women who, for a variety of reasons, took time away from work to raise children and then later returned to the IT workforce. The back-on-track parents represent 9% or five women interviewed for this paper. The back-on-track parents are older in age, ranging from 44 to 58 with an average age of 50.2 years. All of these back-on-track parents were in committed relationships during their employment break so that the main source of income came from their partners or spouses.

A common theme arising from the back-on-track parent interviews was the idea that women should take time away from work to stay home because it was the right thing to do. This idea seems to stem from societal messages that the women received during their childhood and adult lives. These messages appear to vary by geographical regions included in the study, and the associated cultural influences. Although, Sue, a 53 year-old IT coordinator, from central Pennsylvania eventually returned to work she felt that she was “supposed” to follow the path in life of going to school, getting married and then staying home with kids:

*I wound up going to a two year college because I really didn't think that getting into sports was something I was supposed to do. I felt more pressure to go into business and get married and become a secretary or something like that. ... So I went to a two year associate [degree at a] Catholic college and took business, so I got an associate degree in business and then got married, had kids, the whole [thing] [Sue].*

Although, societal pressures about motherhood and careers affect women in non-technical and technical careers alike, there is a common shared experience of the back-on-track parents that relates specifically to the IT workforce. This theme relates to the amount of skill preparation required for reentry into the IT workforce. This difficulty of returning to IT work has caused the back-on-track parents to develop plans of action to ease the transition. For instance, Elsie, a 47 year-old website manager, spoke specifically about the amount of “intense” work that was required to reenter the IT workforce. Consequently, she developed a success strategy that involved diligently working to prove herself as a viable employee despite the fact she is ten years older than her cohort.

The stories of back-on-track parents demonstrate that balancing work-family issues in IT work is a constant challenge that pulls women in several directions at once. Societal messages complicate the pressures women feel in decisions about their professional and personal lives. Likewise, long, irregular work hours associated with IT careers makes it difficult to balance work-family issues. Thus, taking time away from the IT workforce is a temporal solution to these conflicts. Leaving the workforce for an extended period of time allows women to balance family responsibilities during the early years of their children's lives and return to their careers at a point in time when their children are more self-sufficient.

### The “Off-the-Track” Parent: Balancing Work-Family Issues by Egression

The fourth type of parent is the *off-the-track parent* comprised of employees who permanently leave the IT workforce upon having children. We have not captured data regarding the off-the-track parent because our participants are drawn from women currently employed in the IT workforce. However, for purposes of conceptual completeness we include this category in our discussion.

## CONCLUSION

With regard to theory, our research shows that work-family tradeoff considerations are much more



nuanced than what is commonly depicted in the literature. Women experience a range of work-family situations that present varying issues and concerns. The remarks illustrate an identifiable theme that crosses geographical regions and timeframes: *societal messages are complex and difficult to digest, and are processed in different ways by different women, yet they contribute to the decisions women make about their professional and personal lives.* More specifically, this research is an example of the application of the Individual Differences Theory of Gender and IT to go beyond the identification of societal messages that operate at the group level to also understand the response variations among women when examining the topic of work-family balance.

Of utmost importance to practice is the realization that not all women, indeed not all employees, have the same work-family balance issues and therefore, do not have the same needs or concerns with regard to their careers. Likewise, we do not advocate special considerations given to any group of individuals as it is highly likely that such a plan of action would weaken these groups in the labor force. Rather, our findings suggest that a more robust and flexible conceptualization of career tracks with multiple avenues would benefit a wider range of IT workers, both men and women, as the traditional view of a career is one that no longer reflects the needs and concerns of workers.

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## KEY TERMS

**Individual Difference Theory of Gender and IT:** a social theory developed by Trauth (Trauth, 2002; Trauth, Quesenberry et al., 2004) that focuses on within-group rather than between-group differences to explain differences in male and female relationships with information technology and IT careers. This theory posits that the under representation of women in IT can best be explained by considering individual characteristics and individual influences that result in individual and varied responses to generalized environmental influences on women.

**Interpretive Research:** Research directed at understanding the deeper structure of a phenomenon within its cultural context by exploring the subjective and intersubjective meanings that people create as they interact with the world around them (Orlikowski & Baroudi, 1991, p. 5).

**Qualitative Research:** A term used to describe forms of social inquiry that aim at understanding the meaning of human action and that rely primarily on qualitative data (i.e., data in the form of words), including ethnography, case study research, naturalistic inquiry, ethno-methodology, life-history methodology and narrative inquiry (Schwandt, 2001, p. 213).

**Work-Family Balance:** the act of balancing inter-role pressures between the work and family domains, which are generally mutually incompatible.

**Work-Family Balance Categories:** a description of decisions about work-family balance of women in the IT workforce, which is comprised of four types: the non-parent, the working parent, the "back-on-track" parent and the "off-the-track" parent.

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