

## Chapter 7.20

# Gender Issues in HCI Design for Web Access

**Stefania Boiano**

*InvisibleStudio, Italy*

**Ann Borda**

*London South Bank University, UK*

**Jonathan P. Bowen**

*Museophile Limited, UK*

**Xristine Faulkner**

*London South Bank University, UK*

**Giuliano Gaia**

*InvisibleStudio, Italy*

**Sarah McDaid**

*London South Bank University, UK*

### ABSTRACT

We consider the design and provision of Web sites, with respect to gender issues, from various perspectives. A general view of the field is given, and educational issues are specifically considered in relation to gender differences in the use of IT as an effective educational aid, especially by children. Human-computer interaction (HCI) models

at different levels of abstraction are presented, together with how gender issues could impinge at each of these levels. A number of examples, both from the commercial and cultural fields, are discussed as design case studies of home pages for Web sites that exhibit gender-related orientation. Finally, looking to the future, online gaming is discussed in the context of usage. It is hoped that the guidance provided here will help

minimize any gender discrimination on Web sites with respect to their interfaces, increasing general accessibility in the process.

## **INTRODUCTION**

*Everyone has his style when designing a site. There is no such a thing as a 'feminine design' or a 'male design.' The most important thing here is to seek inspiration to create something different each time.* (Mark, male Web designer, <http://www.redpolka.org>)

Even if half the potential users of the Web are female, it is still a rather male-oriented environment. A study of UK university Web sites has shown 94% of them to have a masculine orientation, compared with only 2% having a female bias, with 74% of them designed by male-dominated teams and only 7% by female teams (Harden, 2005; Moss & Gunn, 2005; Tysome, 2005). This is despite the fact that there are more female than male students. It was found that men preferred regular, unfussy, formal content and layout in straight lines, whereas women preferred more colour and rounded forms with less conventional design, formality, and linearity. Both men and women seem to prefer Web sites produced by designers of the same sex. In general, the specific area of human-computer interaction (HCI) and gender issues is not well studied in the research literature. However, Balka (1996) briefly discusses HCI skills with respect to gender and Cassell (2002) discusses HCI for video games, commenting on how it is often gender biased.

In this chapter we first consider the background to Web interface design with respect to gender issues. In particular, we look at some educational differences. We then consider some HCI models at different levels of abstraction, and how consideration of gender preferences could impact on these. A number of Web sites, both commercial

and, by way of contrast, cultural as well (Baiget, Bernal, Black, Blinova, Boiano, Borda, et al., 2005; Gunn et al., 2006), are used to consider various design issues with respect to gender differences. Looking to the future as the Web becomes more interactive, we also consider the issues in online gaming design. In conclusion, we briefly summarize the current situation, and what could be done to help rectify it.

## **BACKGROUND**

*If you are design-minded you can really do whatever you want (masculine or feminine design).* (Makiko Itoh, <http://www.makikoitoh.com>)

The question over women and their attitude to technology continues to be an interesting one. On the one hand, they appear to be very enthusiastic users of mobile phones (especially text messaging) despite the problems there are in the use of these devices (Faulkner & Culwin, 2005), while on the other hand, their less enthusiastic take up of computers still continues to be a cause for concern. There have been several attempts to look at gender issues in relationship to design, with technologists attempting to create designs that will particularly appeal to women. This section looks at the major aspects of HCI that need to be considered on the Web, and how design might be slanted towards creating systems that will support and encourage women in their use of the Web.

Harding (1986) argues that “women have been more systematically excluded from doing serious science than from performing any other social activity, except, perhaps frontline warfare.” She says that a concentration on the hard sciences means that gender is thus viewed as a variable that affects individuals and their behaviour, rather than as an aspect of society and its structures. This inevitably affects the way in which technology is designed. As use of technology increases in the workplace and the home, so it becomes more

27 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: [www.igi-global.com/chapter/gender-issues-hci-design-web/19171](http://www.igi-global.com/chapter/gender-issues-hci-design-web/19171)

## Related Content

---

### American and Taiwanese Perceptions Concerning Privacy, Trust, and Behavioral Intentions in Electronic Commerce

Chang Liu, Jack T. Marchewka and Catherina Ku (2004). *Journal of Global Information Management* (pp. 18-40).

[www.irma-international.org/article/american-taiwanese-perceptions-concerning-privacy/3600](http://www.irma-international.org/article/american-taiwanese-perceptions-concerning-privacy/3600)

### Dancing with a Dragon: Snags in International Cooperation Between Two IT Companies

Yi Wei and Sirp J. De Boer (2002). *Cases on Global IT Applications and Management: Successes and Pitfalls* (pp. 104-125).

[www.irma-international.org/chapter/dancing-dragon-snags-international-cooperation/6268](http://www.irma-international.org/chapter/dancing-dragon-snags-international-cooperation/6268)

### Popularity Prediction for Consumers' Product Recommendation Articles

Tao Wang, Dongmei Han and Yonghui Dai (2022). *Journal of Global Information Management* (pp. 1-16).

[www.irma-international.org/article/popularity-prediction-for-consumers-product-recommendation-articles/300822](http://www.irma-international.org/article/popularity-prediction-for-consumers-product-recommendation-articles/300822)

### The Impact of Digitalization on Supply Chain Integration and Performance: A Comparison Between Large Enterprises and SMEs

Kam Pui Liu, Weisheng Chiu, Jie Chu and Leven J. Zheng (2022). *Journal of Global Information Management* (pp. 1-20).

[www.irma-international.org/article/the-impact-of-digitalization-on-supply-chain-integration-and-performance/311450](http://www.irma-international.org/article/the-impact-of-digitalization-on-supply-chain-integration-and-performance/311450)

### A Non-Economic Model of the Social Value of Network Policy

Dong-Hee Shin (2016). *Journal of Global Information Management* (pp. 1-17).

[www.irma-international.org/article/a-non-economic-model-of-the-social-value-of-network-policy/163085](http://www.irma-international.org/article/a-non-economic-model-of-the-social-value-of-network-policy/163085)