



ELSEVIER

Available online at [www.sciencedirect.com](http://www.sciencedirect.com)

 ScienceDirect

Computers in Human Behavior 23 (2007) 1285–1299

---

---

Computers in  
Human Behavior

---

---

[www.elsevier.com/locate/comphumbeh](http://www.elsevier.com/locate/comphumbeh)

# Computer phobia and computer self-efficacy: their association with undergraduates' use of university computer facilities

David Mcilroy <sup>\*</sup>, Carol Sadler, Nadine Boojawon

*School of Psychology, Liverpool John Moores University, Henry Cotton Campus,  
15-21 Webster Street, Liverpool L3 2ET, England, UK*

Available online 12 January 2005

---

## Abstract

Extensive development in universities' provision of computer facilities may have negative consequences for students prone to computer avoidance. In the present study, undergraduates ( $N = 363$ ) completed self-report measures on computer phobia and self-efficacy. Results demonstrate that many students follow previous trends by continuing to report levels of computer phobia within the higher parameters of self-report measures. Students who reported either high computer phobia or low computer self-efficacy were less likely to maximise their use of university computer facilities. Moreover, a range of background measures – initial computer experience, regular home use, successful completion of a computer course and introductory tutor's characteristics – all impacted statistically on self-report responses. Results are discussed with reference to the increasing responsibility placed on students to acquire ICT skills.

© 2004 Elsevier Ltd. All rights reserved.

*Keywords:* Computer phobia; Computer anxiety; Computer self-efficacy

---

---

<sup>\*</sup> Corresponding author. Fax: +44 151 2314245.

*E-mail address:* [d.mcilroy@livjm.ac.uk](mailto:d.mcilroy@livjm.ac.uk) (D. Mcilroy).

## 1. Introduction

### 1.1. Prevalence of computing in higher education

Breen, Lindsay, Jenkins, and Smith (2001) have observed that as a result of employer demands, universities have been pressurised to compete with each other by providing greater access to ICT resources. Computer use at university may entail the basic use of the library catalogue, accessing electronic journals and conducting key word searches to avail of up-to-date research material, as noted by one university in their *Stepping Stones* (2001) document. However, it should not necessarily be concluded that all students who are dilatory in their approach to computers are computer phobic, for they may lack interest or motivation, or may not value computing to the same degree as other learning activities. Neither should it be assumed that all students who maximise computing opportunities also learn to co-ordinate and integrate this practice with other key skills.

### 1.2. Towards an operational definition

Computer phobia has been defined by Rosen and Weil (1992) as “anxiety about present or future interactions with computers . . . negative global attitudes about computers, their operation or societal impact . . . self-critical internal dialogues during actual computer interaction or when contemplating future computer interaction” (pp. 7–8). This condition as described should not be construed as merely academic for it has been associated with slower learning of tasks and more errors (Paxton & Turner, 1984). Avoidance of computing activity may be a particular application of the more general finding that people with high anxiety use avoidance as a coping strategy for anxiety-generating situations (Rachman, 1998). Furthermore, Kanfer and Heggstad (1997) concluded that the negative feeling linked with high anxiety was likely to detract cognitive resources from task performance. There has been a growing recognition over several decades that computer phobia is a widespread phenomenon in the student population (Selwyn, 2000).

In order to set the study in context the following four key questions are addressed in relation to previous research and with reference to the analyses that follow.

### 1.3. Do previous reports of computer phobia remain consistent in undergraduates?

The problem of computer phobia or techno phobia has been widely researched over the last few decades, and in spite of consistent findings, a series of myths have been perpetuated (Rosen & Macguire, 1990). For example, it was commonly and erroneously believed that women are more computer phobic than men (Levin & Gordon, 1989), that older people are more computer phobic than younger people (Laguna & Babcock, 1997) and that students are less computer phobic than non-students (Weil & Rosen, 1995). Many studies have shown that when previous experience is controlled for, the between group differences disappear (e.g., Brosnan, 1998; Dyck & Smither, 1994). Moreover, it has been found that the percentage of students

متن کامل مقاله

دریافت فوری ←

**ISI**Articles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات