

# Students' attitudes and use of Information and Communication Technology in three contexts (work, study and leisure): a paper review

Ivan Fortunato <sup>(1)</sup>

<sup>(1)</sup> Pedagogo e Doutor em Geografia; líder do Núcleo de Estudos Transdisciplinares em Ensino, Ciência, Cultura e Ambiente (NuTECCA); editor da revista Hipótese e coeditor da Revista Brasileira de Iniciação Científica. Professor do Instituto Federal de Educação, Ciência e Tecnologia de São Paulo, *campus* Itapetininga; e-mail: [ivanfrt@yahoo.com.br](mailto:ivanfrt@yahoo.com.br)

Recebido em: 20 jun. 2015 ▪ Aceito em: 05 set. 2015 ▪ Publicado em: 01 nov. 2015

**ABSTRACT.** The present manuscript is a paper review. We bring the collaborative work of Robert Edmunds, Mary Thorpe and Grainne Conole about higher education students' attitudes and use on Information and Communication Technology (ICT) in three different contexts: work, study and leisure. Their paper started off from the Technology Acceptance Model (TAM) designed in 1989 by F. D. Davis. The authors adapted the original questionnaire and applied a survey to 400 students of six different online courses in order to assess the "ease of use" and the "perceived usefulness" about ICT in the three contexts concluding that it is perceived most positively within the work dimension. As far as this review concerns, we understand that ICT is a solid possibility for leisure as the user can decide upon its use. **Keywords:** Attitudes; ICT; leisure; review.

## 1 INTRODUCTION, OR MEMOIRS FROM A SEMINAR

The idea for this paper originated during a graduate seminar held at the University of the State of São Paulo in a campus located in the city of Rio Claro by Doctor Gisele Schwartz (who coordinates the Laboratory of Leisure Studies) regarding the impacts of the Information and Communication Technology (ICT) on the matters of leisure and adventure activities. Throughout the seminar, the discussions took the group of nine students to very interesting "places" starting with debates on the concepts of leisure, entertainment and amusement, to deep dialogues about risk/danger, adventure, nature, ecology, values and how ICT is involved with all that... words that bear multiple meanings, as we evidenced during our arguments. Nevertheless, we did agree with Bryce (2001, p. 7): "changes in the organization and experience of leisure activities and periods of leisure history have frequently been driven by technological developments".

This statement took us to a more qualified conversation about ICT in a broad approach involving its purposes and uses for work, study, leisure, entertainment, relationship, friendship, research, shopping and so on. We also did agree that the technology itself cannot be simply ranked as neutral, good or bad for it is (almost) always up to the user to define and to qualify its very use. Just like Bryce (2001, p. 8) stated: "its consequences depending on the uses to which it is put". This means that one can actually work or study better with the use of ICT as well as enjoy oneself during one's spare time.

Then, we were prompted by the professor to go online in a sort of fishing expedition browsing for a scientific paper concerning any of the subjects that emerged in the seminar. The task was to find a relevant paper and present a critical analysis. This is how I came across the collaborative work of Robert Edmunds, Mary Thorpe and Grainne Conole published in 2012 by the British Journal of Educational Technology. Their paper is about higher education students' attitudes and use on Information and Communication Technology (ICT) in three different contexts: work, study and leisure.

## 2 THE ELECTED PAPER REVIEW

The increasing use of information and communication technology (ICT) in higher education has been explored largely in relation to student experience of coursework and university life. Students' lives and experience beyond the university have been largely unexplored (EDMUNDS; THORPE & CONOLE, 2012, p. 71).

This paper started with information from 1997, whereas the personal computers and the internet were no longer crawling but taking short leaps in terms of popularity. At that time it seems that the British government was targeting for more usage of the ICT in studies experience at the university. Few years later, ICT did become more popular off the development of more powerful and effective search tools and the social networking. According to the authors, there have been two phases of study: first the concerns were only work and study, and then the leisure context was added. This paper is situated in the second phase.

The paper elected for the review started out from the Technology Acceptance Model (TAM) designed in 1989 by F. D. Davis. This model was developed over 20 years ago in order to investigate possible resistance towards ICT regarding two factors: ease of use and perceived usefulness. For Edmunds and others (2012, p. 72), "the TAM takes forward the idea that an individual's actions can be predicted from a number of known variables". The authors define the perceived ease of use as "the degree to which an individual believes that a particular system would be free of effort" and the ease of use as "the degree to which an individual believes that a particular system will enhance job performance". The authors adapted the original TAM questionnaire and applied a survey to over 400 students of six different online courses in order to assess the "ease of use" and the "perceived usefulness" about ICT in the three different contexts: study, work and leisure. This assessment was statistically applied.

Then, the authors took a few paragraphs to present literature that would indorse the TAM as a valid research method even if it has not been broadly tested for social and/or leisure use. So to the original two TAM dimensions, the authors added the "motivational" aspect of ICT in the questionnaire.

They administered the survey to students both male and female, from 19 to 59 years old, residents in the United Kingdom. These students were enrolled in six different courses, as follows: 1. Cisco networking; 2. Software requirements for business systems; 3. Team Engineering; 4. Foundations for social work practice; 5. Applied social work practice; 6. Business organizations and their environments. The questionnaire was divided into three parts, being part A related to study, part B to work and part C to leisure. Each part contained around 20 statements that students were asked to respond on a scale from 1 (agree strongly) to 5 (disagree strongly). A frequency of use scale was summed up to all parts. The student's answers were then analyzed throughout static methods which I will not approach except for their results and conclusions.

For part A, the study activities scale, ICT was considered both "useful" and "ease of use" while the motivation was simply interpreted as part of the useful dimension. For part B, ICT and Work, Edmunds and others (2012, p. 79) identified that "students perceive technology in their work context very positively in relation to both usefulness and ease of use", as for the motivation it was understood as a third factor in the perceived experience of ICT and work, "in relation to increased sense of control of work activities, increased personalization and enjoyment". As for part C, ICT and leisure social activities, the authors (p. 79) concluded that "students on the different courses surveyed, perceived ICT during leisure or social activities as both useful and easy to use at similar levels". The frequency of use scale was quite high in all three parts.

At the end, these numbers drove the authors to the conclusion that ICT is perceived as both more useful and easier to use in the work context, where the motivational aspect can be also perceived in the ICT experience.

### 3 WRAPPING IT UP

These technologies become ever more integrated in daily lives during work, study and leisure, so understanding user perceptions of ICT should provide improved performance and acceptance of currently developing technologies (EDMUNDS; THORPE & CONOLE, 2012, p. 83).

The statements reproduced at the epigraph are the final words of the paper reviewed. Somehow, the authors managed to conclude the obvious, i. e., their paper gave too much focus on statistics behavioral modeling making no room for any quality analyses. Also, I have a sense that Edmunds and

others (2012, p. 72) should have concluded their paper with these thoughts: "the interaction between technology and its acceptance for use is multifaceted and so the TAM with just its two constructs of ease of use and usefulness may not capture all the components necessary to predict user acceptance"... but they were just mingled between sections so the reader would not pay all the attention to them.

By reducing the interaction with ICT to a scale evaluation, the authors managed to make it flat. There was no attention given to the quality of the relationship established among user-technology-purpose, so we cannot tell what kind of work is improved by the use of ICT or how it is improved. The same goes to the study and leisure dimensions. At the end, I do believe that there is much more to investigate in terms of ICT use and perception especially when it comes to leisure. This is because the state of art of virtual technology has a lot to do with our contemporary society. This means that ICT takes an important chunk on the way people spend their spare time... and most likely it will take more and more of our leisure time.

#### 4 REFERÊNCIAS

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#### Como citar esta revisão

FORTUNATO, I. Students' attitudes and use of Information and Communication Technology in three contexts (work, study and leisure): a paper review. **Scientia Vitae**, v. 3, n. 10, ano 3, out.-nov. 2015, p. 9-11. Disponível em: <[http://www.revistaifpsr.com/v3n10ano3\\_2015.htm](http://www.revistaifpsr.com/v3n10ano3_2015.htm)>; acesso em: \_\_/\_\_/\_\_.