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ICTs and teenage students. Problematic usage or dependence

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Abstract

The objective of this work is to determine the use of Information and Communications Technologies (ICTs) and the reasons for their use among young people aged between 12 and 21, as well as the perception of dependency. An initial study was conducted based on a questionnaire prepared for that purpose. It was administered to a stratified cluster sample of 2,063 students aged between 12 and 21 years old, attending 27 centers of education in Burgos (Spain), and had a confidence level of over 95.5% and an error margin of ± 2.11%. Two longitudinal random follow up questionnaires were administered to samples of 96 and 88 students, respectively. The results, of a descriptive nature, allow us to observe a high degree of penetration and use of ICTs. Although the majority of users have a balanced relation with ICTs, the lengthy periods of time that some users spend on them may be highlighted. The average age for the first mobile phone is at 11 years old and between 80%-100% of adolescents have one between 11 and 16 years of age. Differences were detected in the use and the perception of abuse according to gender. Although the results show no evidence of alarming attitudes, ICTs are a valuable resource, although not free from risk. The need is noted to encourage protective measures, which favor the self-development of individuals, orientated toward healthy lifestyles, which in turn act as moderators of risk factors; as well as normalizing the use of such devices.

1. Introduction

The importance of use and abuse of technologies and their consequences for children and young people is a topic that occupies a large number of studies and research projects in the scientific community. In this field, some

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investigations have pointed out that their use is more problematic in adolescence and as adolescents advance in age their use is more prevalent in working environments, and less so in leisure time (Beranuy, Chamarro, Graner and Carbonell, 2009). There are numerous works that reflect the interest that this topic has aroused, relating to the use of Internet and attitudes towards it, principally in the adolescent population and children (Aslanidou and Menexes, 2008; Graner, Beranuy, Sánchez, Chamarro and Castellana, 2007; Ruiz-Olivares et al., 2010). Some authors (Rial, Gómez Braña and Varela, 2014) pointed out that one of the problems of these studies resides in the limitations associated with the sample. Another set of investigations has approached the difficulties of defining the boundaries between normal use, abuse and non-healthy use. In this regard there is an immense variety of terminology with terms that range from *addiction*, *unhealthy* or *sick use, compulsive use, pathological use, non-regulated use,* and *dependency,* among others (Chou and Hsiao, 2000; Caplan, 2002; Chen, Tarn and Han, 2004; Davis, 2001; Goldberg, 1996; Hansen, 2002; Morahan-Martin and Schumacher, 2000; Shapira et al., 2003; Young, 1998). There is however little or no consensus over this question today. Despite the controversy over its conceptualization, a third set of investigations has centered on the development of measurement and diagnostic tools (Rial, Gómez Braña y Varela, 2014), as well as studies that gauge relations between excessive use with other variables such as wellbeing, academic performance, parental control, personal characteristics, etc (Oliva et al., 2012; Subrahmanyam and Lin, 2007), and the consequences and effects of possible addiction (Weiser, 2001).

Misuse of Information and Communications Technologies (ICTs) is a risk factor that increases the probability of problematic consumption. The risk is present not so much because of its addictive potential nor because of the vulnerability of the individual, but because of abusive and continual interaction. Investigations in this field report different effects. On this point, Santiesteban (2006), in an investigation of a sample of 2,322 children and adolescents noted average scores for aggressiveness that increased in the groups that spent more time watching TV and videogames, with higher scores if the contents were more aggressive. Vázquez (2006), in a study on the use of Internet and the detection of problematic behaviors and at-risk populations, covering a sample of 800 people, concluded that 6% used Internet in problematic ways, had no control over the time that they spent in front of the screen, experienced a reduction in academic performance and expressed anxiety and irritability when they could not connect (Váquez 2006). In their work, Pérez and Martin (2007) noted contradictions in the results regarding the consequences of using Internet. Likewise, Kaunt (1998) affirmed in his study that the Internet generated depression, weakened social relations and affected psychological wellbeing. On the contrary, Wellman and Gulia (1999) maintained that social networks were necessary for true social inclusion.

The problem is compounded because of a profound unawareness among the parents, who do not know how to act and are at times unaware of how to identify the early signs of abuse, school failure, isolation, and aggressiveness, the real consequences of which they ignore.

2. Objectives

The overall objective was to determine the habitual use of New Technologies (NT) among young people aged between 12 and 21 years old and their perceptions towards ICTS. We consider this age group to be at higher risk, in view of the opportunities for access and the interests that the new technologies awaken in these age groups. The aim is to gain greater awareness of the reality that we are studying through the information that is collected, so as to propose preventive strategies at the centers.

3. Method

Three longitudinal studies with different sample sizes were conducted. A first study (2010) was through a questionnaire to a sample of 2,063 students -between 12 and 21 years old- attending 27 schools and colleges in Burgos (Spain), using stratified cluster sampling, with a confidence level of over 95.5% and an error margin of $\pm$ 2.11%. Two randomized longitudinal follow-ups, at 2 and at 5 years after the first study (2012 and 2015), were administered to selective convenience samples, at five public education centers; they consisted of 88 students, 49 young men and 39 young women (M=14.05 SD=1.764), and, 96 students, 53 young men and 43 young women (M=14.15 ST=1.711), respectively. Data collection at the centers was through a questionnaire specifically prepared for the study. Statistical analyses were performed with the SPSSS-19 software package.