Internet Use and Internet Addiction in the Context of Foreign Language Reading Comprehension

Anikó Ficzere, Eva Stranovská, and Zdenka Gadušová*
Constantine the Philosopher University, Nitra, Slovakia

Abstract
The variable Internet use belongs not only to the social phenomena of the present, which cause changes in reading comprehension in a foreign language, but also to the research problem of perception of literacy and foreign language text comprehension in the context of the variable Internet addiction and its consequences on students' thinking and skills. In our short review, we focus on the construct of Internet addiction from a pedagogical point of view and point out possible connections between the degree of Internet addiction and school performance, specifically in the field of foreign language reading comprehension. The paper is based on the theoretical concept of the causal hypothesis of George et al., extended by Coiro's and Dobler's definition of online reading comprehension. At the same time, we point to the results of our research into the relationship between reading comprehension in a foreign language (in English and German), Internet use (time spent on the Internet) and Internet addiction (positive correlation).

Keywords: Foreign language; Internet addiction; Internet use; Reading comprehension

Introduction
The introduction of electronic technologies is undoubtedly one of the factors that has had a far-reaching impact on the (not only) lifestyle of the young generation in recent decades [1,2]. The reality of everyday life for today’s students is complemented and expanded by online activities in the virtual space [3]. Along with the rapid expansion of ICT tools, a new form of non-substance addictions has emerged called Internet addiction. Children, adolescents and young adults are the most vulnerable age groups in terms of Internet addiction [4-6 and others]. The introduction of information technology has multiplied our understanding of literacy and reading comprehension. On the one hand, there are constant voices that the use of ICT tools from an early age distracts students from reading and causes a fundamental change in reading habits [7-9]. On the other hand, the online environment is largely based on the principles of reading and writing diverse (mostly foreign-language) texts, which underlines and expands the meaning, objectives and the very definition of reading comprehension [2,10-12].

Through the use of the Internet, the possibilities for establishing authentic contact with a foreign language have multiplied. There is a lack of clarification in the professional literature as to why the comprehension of the read foreign language texts is nevertheless low. The level of knowledge uptake in schools is increasing and, in addition, new forms of computer-based education and other ICT devices are constantly being added. In examining information behavior, we must also take into account the fact that students do not use ICT tools in their free time, primarily for educational purposes. In this context, we also take into account the phenomenon of Internet addiction and its impact on student understanding. In our paper, we focus on the construct of Internet addiction from a pedagogical point of view and point out at possible connections between the degree of Internet addiction and school performance, specifically in the field of foreign language reading comprehension.

Internet addiction in the age group of adolescents (teenagers)
There are several terms to name this state, of which the most commonly used names are problematic internet use [13], excessive internet use [14] and internet addiction [15]. These terms have many features in common, so we agree with Douglas et al., [16], who consider the concept of problematic internet use to be the same as the term internet addiction. Internet addiction criteria largely coincide with the general components of addiction: increasing need to perform the activity (tolerance), withdrawal symptoms, conflicts (intrapsychic or social conflicts) and relapses [14]. Although time spent online is an important indicator of Internet addiction, not everyone who uses the Internet on a daily basis is considered addicted. Shaw and Black [17], Király et al., [4] describe a key characteristic of Internet addiction as an intense emotional experience associated with computer and/or Internet use. An individual often engages in thoughts in online activities that bring him positive feelings and is unable to control himself despite the possible negative consequences of this behaviour. Internet addiction shows links to an individual’s personality. Young and Rogers [18] describe Internet addicts as those who are emotionally sensitive, abstract-minded and prefer independent activities.

Internet addiction is a broad-spectrum phenomenon that usually relates to the excessive use of certain types of applications in leisure time [15]. Currently, the intensively researched subcategory of Internet addiction is smartphone addiction. Smartphones are very popular due to their portability and diverse features, and are used by younger...
and younger generations of students. According to research, addiction to smartphones is manifested in the age group of adolescents (teenagers), or young adults and negatively affects students’ school performance [19-21 and others]. Addicts most often use their smartphones to monitor virtual communities, send messages using a messenger [19,22] and play games [23].

There is further evidence in the literature that poor school performance and Internet addiction are interlinked: addicted individuals tend to show worse grades and poor school performance is also a predictor of Internet addiction [24,25]. Lower school education also implies a higher likelihood of Internet addiction [6,26]. According to the causal hypothesis, online activities replace social or cognitive stimulating activities in direct interaction with peers, spontaneous and creative play in young users, and can thus block the natural development of personality [1]. Widyanto and Griffiths [27] suggest that problematic Internet use tends to reflect adolescents’ existing psychosocial problems. Students with insufficient social and communication skills prefer to play and communicate using a computer. This group of young people is unlikely to be able to establish quality and satisfying links with their real social environment, which is offset by entertainment in a virtual space.

There are currently professional discussions about the essential features of Internet addiction, as well as its inclusion in the list of mental disorders, and we do not have a uniform definition of this phenomenon yet. Internet use is often associated with mental health promotion activities, such as building and maintaining relationships using written (and read) texts [14].

**Internet use and foreign language reading comprehension**

Various aspects of Internet addiction are richly documented in the psychological and psychiatric literature, however, relatively little research is devoted to finding links between Internet use and the quality, or quantity of foreign language reading. Most studies point to a negative relationship between excessive Internet use and reading, while a smaller body of research has found no direct link between these phenomena. Levine, Waite, and Bowman [28] found a negative relationship between extensive messenger use and reading frequency, which was mediated by a greater degree of inconsistency in reading. According to the research of Bukhori et al., [7] addiction to the use of a smartphone negatively affects the intensity and willingness to read and also indirectly affects the school achievement of students. Çizmeci [8] argues that the intensive use of smartphones is an attractive alternative for young people to spend their free time, which is reflected in a change in reading habits and a smaller amount of time devoted to reading. Ficzere, Stranovská, and Gadušová [29] found a negative link between Internet use and reading in a second foreign language, while Internet addiction controversially correlated positively with reading in English. However, the links between the use of ICT tools and the change in reading habits have not been demonstrated in further research (cf. [30,31]) and there also is a lack of research examining the links between Internet use and the quality of reading comprehension.

**Conclusion and Further Research**

Learning and mastering new information in the digital age is significantly changing its character, so it is necessary to take this fact into account in pedagogical practice. Internet addiction is a complex construct, so we can observe its relevance for reading in a foreign language on several levels. On the one hand, individuals addicted to the Internet spend an excessive amount of time online, which can lead to neglecting study activities, lower willingness to read and a change in reading habits. On the other hand, the Internet brings the possibility of frequent contact, especially with foreign language content and texts, which the student chooses independently according to their preferences. This work with foreign language texts is rewarding and supporting autonomous and informal forms of learning for students. At the same time, more experienced and better readers are not limited by the language barrier, so they have wider opportunities to spend their free time meaningfully via the Internet.

From the pedagogical point of view, we can also interpret the scores on the Internet addiction scale as sensitivity and stronger self-reflection of respondents, which are reflected in higher scores on the Internet addiction scale, but also create good prerequisites for developing reading comprehension skills. We see this hypothesis as a perspective for further research into the use of the Internet.

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