

**RESPONSE TO PROF. DR. RĂZVAN SĂFTOIU'S EVALUATION of ROBERT
ARNOLD-STEIN'S**

Doctoral (PhD) Dissertation

Faculty of Modern Philology and Social Sciences

Multilingualism Doctoral School University of Pannonia

Title: ***Videogames as a catalyst for intercultural and multilingual literacy advantage in
secondary school ESL students***

Supervisor: Dr. Ildikó Hortobágyi

Dear Prof. Dr. Răzvan Săftoiu,

Thank you very much for your evaluation of my PhD thesis entitled *Videogames as a catalyst for intercultural and multilingual literacy advantage in secondary school ESL students*. I appreciate your acknowledgment of the relevance of my thesis and for your detailed remarks, particularly in the context of admitting the under-recognized role of video games in foreign language education in secondary schools in Hungary. I highly appreciate your positive comments regarding the empirical studies supported by the theoretical framework to understand the cognitive, neuroscientific, sociolinguistic, and pedagogical aspects of video gaming in relation to bilingualism and language learning.

I am so grateful for your highlights in respect to the theoretical contribution of the research, like the introduction of the terms 'gamerlect' and 'gamer argot', which represents a specialized linguistic phenomenon within the gaming communities. Furthermore, I appreciated your comment on the substantial sample size, the large number of students, which provides a strong basis for conclusions about the educational benefits of video games.

In your detailed evaluation, you went into detail about the structure of the dissertation, in which you called attention to the content of each chapter with a brief description through highlighting important theories and listing essential and key references as well as shortcomings. For instance, you noted the clarification of the key operational definitions to enhance the replicability of the research. In particular, a more precise articulation of how video game-related vocabulary is defined and measured. Hence, allow me to answer hereby your questions to shed light on the little nuances that my research encountered.

1. Could you elaborate on the rationale behind the selection of the Vocabulary Levels Test, Stroop, and verbal fluency tests, and discuss any limitations these instruments might have in capturing the nuances of video game-influenced language learning?

This dissertation intends to examine whether an incidental EFL learning style group (i.e. video gamer) has a receptive vocabulary knowledge advantage over a normal EFL high school language learner group

(i.e. instructed) in high-frequency word families. Only the high-frequency word families can be a real basis of a research, because such words are usually learned in school classroom settings, of which all participants are part of. In the Vocabulary Levels Test (VLT) the words are grouped into frequency bands, such as first 1,000, second 1,000, etc. for linguistic research purposes, to provide a measurable scale of the size of a student's receptive vocabulary knowledge. The research favoured the VLT instrument form (Laufer & Nation, 2001) because it accurately measures the vocabulary levels, it can be administered to a large number of participants and due to the multiple-choice form, it can be processed online, and the results can be downloaded for statistical calculations to create charts and diagrams.

Regarding the Stroop (ST) and the Verbal fluency tests (VF), the possible cognitive advantages of the video gamers was facilitated by the extra motivating power of video game play, experienced by the video gamers according to the pre-questionnaire. The usage of Stroop and VFT tests is frequent in connection with video gaming and cognitive performance (Roselli et al. 2002, Banquied et al., 2014), The computer version of ST was chosen for two reasons. First, it is more precise to measure the milliseconds while the participant presses the key than to measure the time with a stopwatch. Furthermore, since the students use their phones or computers to meet all their needs and all their interests, employing a computerized task may provide a habitual environment for the tests. At the VF tests the students were asked to provide words started with letter 's', because there are many words in English that start with 's'.

Slight distinctions/differences were found in using VLT, ST and VF tests, such as: although the difference between the video gamer and the non-gamer groups was significant, the variance was just around 13%, which was expected to be higher. Considering the results of the entire research, it can be concluded that although the high-frequency word advantage of video gamers slightly exceeds that of non-gamers, this is likely due to their extra knowledge of low-frequency vocabulary. In the ST and VF cases, the tangible competition among the students was the most important nuance. Besides, in the ST effects the difference was measurable and significant only in the interlingual cases, although with regard to the reaction times the video gamers were faster in all cases. This may mean that their cognitive processing times are shorter when the tasks run on some sort of electronic device. At the VF tests the students were asked to provide words started with letter 's', and the video gamers pronounced video game related words with ease, while the non-gamer students struggled to provide even simple words.

2. Can you discuss how the quantitative results (e.g., differences in VLT scores) were triangulated with the qualitative findings from your interviews, and what challenges arose during this integration?

The research was designed to be comprehensive, and its major aim was to prove that there is an English language literacy advantage for the video gamers, which includes both, high-, and low-frequency words. The L2 (English) language level of the secondary school students is usually measured around B1 level,

which equals the knowledge of the 3,000 most frequent words. Accordingly, as in Hungary all secondary school students must eventually achieve at least a B1 FL level in their GCE exam (Szilágyi, 2020), all the participants of both groups that I investigated are preparing for this exam. The difference in the VLT scores of the video gamer and that of the non-gamer groups was significant. The video gamers use specialized low-frequency vocabulary while gaming, which I call ‘gamerlect’, and its spoken / verbal form ‘gamer argot’. The research aimed to demonstrate the presence and the usage of the low-frequency vocabulary; the level of the low-frequency word knowledge of the gamer / non-gamer groups has not been the scope of the research. The reason behind this is that the measurable dispersion of the low-frequency words is much bigger, i.e. 4,000-14,000, than the range of the high-frequency words. In addition, the comparison of the knowledge within the video gamer group is difficult, because of the various vocabularies of the different kinds of video games they are playing. Therefore, knowing that the advantage of knowing high-frequency words is constant in favor of the video gamers, their variety of low-frequency vocabulary knowledge depends on the type of game the person is playing. The research solved this challenge with the collection of the examples according to their used grammar features. Apparently, the non-gamers do not use game specific vocabulary and rarely use specialized words, for instance football fans may use sport specific vocabulary in certain contexts, like team names and game rules.

3. In what ways does the concept of „gamerlect” expand or challenge traditional models of bilingualism in your study?

In ‘gamerlect’ the word formation processes are the most interesting part, the video game related low-frequency words are modified by the users to create novel words regardless grammatical or orthographical rules (Fazakas, 2015). Analysing expressions grammatically requires placing them into a certain organization of discourse, namely analysing which foreign expressions play pragmatical roles within a clause. Also, it is necessary to know the size of the domain coverage (i.e., game type) and the similarity between the mental functioning of the interlocutor and of the receiver (i.e., non-, casual, or hard-core gamer), which can be inferred from the similarity and seriality of their speech patterns (Kugler, 2015). Normally, the patterns are bond in the in-the-game conversations that the dissertation calls ‘gamerlect’, which is filled with English loans that are being reused for social conversation purposes. In contrast, non-gamer social media and mobile community users employ a moderate number of English expressions, emojis and abbreviations jointly, as described by the linguistic branch ‘digilect’ by Veszelszki (Veszelszki, 2010, 2012, 2013, 2016 (a), 2016 (b)). After all, ‘gamerlect’ is a type of translanguaging practiced by video gamers, which can be considered a type of bilingual language production as the most efficient communication channel for the speaker/receiver and therefore, it encompasses the thought processes related to video games that underlie language use. This corresponds to Grosjean’s ‘complementary principle’ (Grosjean, 1997) which means that bilinguals usually acquire and use their languages for different purposes, in different domains of life, with different people, because

different aspects of life require different languages. The complementary principle is corresponding to the video gamer's English language application because their English knowledge has evolved and is utilized complementarily by playing on various game instruments.

Furthermore, there are views of bilingualism that have been shaped into models eventually, such as monolingual model, bilingual model, multilingual model, more recently the transitional model, maintenance model, enrichment model, the more recent ones seem to be the most applicable to answer the question.

The Enrichment Model is also known as the two-way or dual language model. It is designed for both native speakers of the dominant language and speakers of other languages. The goal is to promote bilingualism, biliteracy, and cultural competence among all students. 'Gamerlect' in the bilingual enrichment program aims to promote a second or a foreign language and, depending on the context, working competence in the foreign language.

4. In light of your findings, what practical implications can be drawn for the incorporation of video gaming in ESL curricula? How might educators effectively implement your findings in classroom settings?

Everyday language use is impacted by different influencing communication channels, such as social media sites, television, and video gaming, in which the language use has been changing rapidly. Thus, language teachers must follow the linguistic changes to maintain their knowledge and be updated on the actual changes of the virtual world. In addition, the recent tendency of the modification in education and recreation following the worldwide experienced pandemic lockdowns, which led to unfamiliar communicational necessities, also puts teachers to the test in communicating without personal interaction.

According to findings of the research the video gamers outnumbered the non-gamers, which is assumed to be a nationwide phenomenon. Doing homework in maths or history is important because it gives opportunity to the students to use their own initiatives to solve the issues. On the other hand, there has been a paradigm shift in language teaching, especially in English teaching, as the Internet is a Cornucopia of English phrases, texts, papers, games, etc. Turning the student's attention to the best ways of knowledge seeking would be the real task of a teacher, as well as making the English class a joyful event, without the pressure of testing, rather motivating the students to feel an inner need to learn to express themselves in a foreign language.

For instance, the future implication of ST and VF testing instruments in any classroom environment is advised due to their entertaining nature, because during the experiment the tangible spirit of competition was experienced. In addition, such testing should be conducted at the start of the school year to form groups or to break the ice after a long vacation. The students enjoyed the exercises, especially those who

play video games, as this type of activity resembles their real-life relaxed environment of gaming. This spirit of competition can spread rapidly. The TMT or BNT tests should also be performed frequently for entertainment ends to make the evaluations more enjoyable, thus less stressful. During assessing, the more sensitive students can also get a chance to show their latent potential and really appreciate how entertaining a test can be. This research showed that the students are happy to present their relevant knowledge in a stress-free testing environment, which should always be provided. Also, video gaming must be considered an effective extracurricular activity which may contribute as “edutainer” occasions for low SES families in the future, thus it may be noteworthy to investigate the connection between SES and other facilitating factors more thoroughly. It is hoped that the findings direct the focus onto the utilized languages of the virtual world, with special regard to English.

I am also very grateful for your crediting my intention to present video gaming as having practical implications such as promoting autonomous study habits and inspiring parents, principally those with low SES, to allow video gaming as a literacy-rich language learning environment for their children. Your valuable remarks strengthen my further willingness to continue my academic investigations with a deeper qualitative study, through annual student follow-up interviews, to understand long-term processes and changes.

In conclusion, it was an honour to read your evaluation, all of your comments have helped me to review the structure and functioning of my thesis.

Veszprém, 2025.04.10.



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Robert Arnold-Stein

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