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A COMPARATIVE STUDY ON THE POSSIBLE EFFECTS OF TECHNOLOGY ON STUDENTS' L2 READING MOTIVATION

Teknolojinin Yabancı Dilde Okuma Motivasyonuna Olası Etkileri Üzerine Karşılaştırmalı Bir Çalışma

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Abstract

The meaningful integration of a technological application into a subskill of language may need more consideration in Turkish context. Moving from that point, this study was conducted to explore the possible effects of a technological application (i.e. Edmodo) on students' L2 reading motivation. Dividing seventy- two non-native students of English in A2 proficiency level into experimental and control group, a quasi-experimental research design was pursued. In order to explore the participants' L2 reading motivation levels, and their extrinsic and intrinsic motivation levels; the Foreign Language Reading Attitudes and Motivation Scale (FLRAMS) developed by Erten et al. (2010) was conducted in the pre-and post-sessions. Data gathered from the pre-and post-tests were analyzed statistically, and it revealed experimental group outscore the control group in terms of L2 reading motivation. Also both extrinsic and intrinsic motivation levels were calculated to be higher in the results of the experimental group. Considering the findings, technology can be a practical means to foster L2 reading motivation through making the reading process more motivating for L2 language learners.

Keywords: Technological application; L2 reading motivation; extrinsic motivation; intrinsic motivation

Öz

Teknolojik bir uygulamanın herhangi bir dil öğretim becerilerine etkili entegrasyonunun, Türkiye bağlamında daha fazla önem gerektirdiği söylenebilir. Bu noktadan yola çıkarak, bu çalışma teknolojik bir uygulamanın (Edmodo) öğrencilerin yabancı dilde okuma motivasyonları üzerinde olası etkilerini açığa çıkarmayı hedeflemiştir. İngilizceyi yabancı dil olarak öğrenen ve mevcut dil yeterlilik seviyeleri A2 olan 72 öğrenci deney ve kontrol grubu olarak ikiye ayrılmış ve yarı-deneysel araştırma dizaynı yürütülmüştür. Öğrencilerin yabancı dilde okuma motivasyon seviyelerinin yanında içsel ve dışsal motivasyon seviyeleri de Erten ve diğerleri (2010) tarafından geliştirilmiş Yabancı Dil Okuma Tutumları ve Motivasyon Ölçeğinin (FLRAMS) ön-ardıl uygulaması yapılarak ölçülmüştür. İstatistiksel olarak analiz edilmiş veriler sonucunda, deney grubunundaki öğrencilerin control grubundakilerden daha yüksek yabancı dilde okuma motivasyon seviyelerine sahip oldukları belirlenmiştir. Ayrıca, içsel ve dışsal motivasyonların da deney grubunda daha yüksek seviyelerde olduğu ortaya koyulmuştur. Bu veriler ışığında, teknolojinin, okuma sürecini yabancı dil

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öğrencileri için daha eğlenceli hale getirerek onların yabancı dilde okuma motivasyonlarını artırmak için etkili bir araç olduğu söylenebilir.

Anahtar Kelimeler: teknolojik uygulama, yabancı dil okuma motivasyonu, dışsal motivasyon, içsel motivasyon.

Introduction

Today's students are called digital natives who are "fluent in the digital language of computers, video games, and the Internet" (Prensky, 2006; p. 9). The traditional way of learning through pen and paper may no longer be satisfactory for today's learners, which may result in making the integration of technology an inevitable part of today's classrooms. The last few decades have seen an exponential growth in the use of technology in education and many attempts have been made to integrate technology in the classroom. Krendl and Clark (1994) suggest that technology can help overcome the traditional boundaries between home, schools, formal and informal learning contexts.

The effects of technology can also be significant on reading which is defined as "a complex skill that connect writer's mind to the reader's mind by means of written texts" (Sarıgöz, 1986, p.11). Al Kawaldeh (2011) states that reading increases readers' general and specific knowledge, as well as enhancing vocabulary knowledge; thus, it helps readers to communicate with others. As reading provides interaction between the reader and the text, it plays a significant role both in L1 and L2.

Reading skill in second language learning has always been gripping for many scholars and teachers in the field. However, the main focus has primarily been on the cognitive aspects and cognitive properties of reading (Carrell & Eisterhold, 1983; Anderson, 1999; Alderson, 2000; Grabe & Stoller, 2002; Nassaji, 2002). Some affective factors having impact on reading such as interest, attitude and motivation seem to be overlooked. Erten et al. (2010) criticized this neglect, and, through a study, developed a scale to explore motivational constructs in foreign language reading. Utilizing this scale, this present study aims to focus on motivation, which is among the affective factors influencing L2 reading, and attempts to reveal the effects technology has on students' L2 reading motivation.

Motivation

Affective factors such as motivation and attitude have always been stressed as being important factors in language learning, and are often associated with language learning achievement (Dörnyei, 2005). Since 1950s, much attention has been given to revealing the importance of motivation in second/foreign language learning, and with this attention comes many scholarly definitions thereof. Williams and Burden (1997) define motivation as "a state of cognitive and emotional arousal which leads to a conscious decision to act, and which gives rise to a period of sustained intellectual and/or physical effort in order to attain a previously set goal (or goals)" (p.120). According to Harmer (2001) motivation is "some kind of internal drive which pushes someone to do things to achieve something" (p.51).

The development of L2 motivation has passed through three periods: the social psychological period (1959-1990) was characterized with the pioneering Canadian based work of Robert Gardner and his colleagues. Their studies were shaped by Canadian Anglophonic and Franco phonic communities, and sparked the idea that a foreign language is affected by socio psychological factors, rather than being socio-culturally neutral. Expanding upon that, Gardner and Lambert (1972) conceptually introduced two types of motivation: instrumental and integrative. Instrumental motivation refers to "the

practical value and advantages of learning a new language" (Lambert, 1973, p.239). On the other hand, integrative motivation is "the willingness to be like valued members of the language community" (Gardner &Lambert, 1959, p. 271). As a result of the impact of technological development on communication around the world, the attempt to integrate that impact into a language community as a member of that community was questioned, and that made Gardner and Lambert's (1972) model, to some extent, problematic because of the global position that English holds. The globality of English has overshadowed Gardner's Theory of L2 Motivation, resulting in the emergence of the Cognitive-Situated Period by Deci and Ryan (1985). They labelled two types of motivation: intrinsic motivation and extrinsic motivation. Intrinsic motivation refers to doing an activity for the sake of your own, rather than external pressure or reward. However, when the motivation to do a task is extrinsic, the reason is not the individual interest, but the promise of reward. It refers to doing an activity as a result of external pressure in order to obtain a reward for doing it. While the "intrinsic motivation stems from factors such as interest or curiosity" (Woolfolk-Hoy and Hoy, 2009), extrinsic motivation puts rewards or gain at the center. Even if it appears to be easy to make a clear distinction between these two types of motivation, Williams and Burden (1997) state that "...distinction between them is not watertight and many of our actions are probably promoted by a mixture of both extrinsic and intrinsic reasons. ... most teachers would agree that both have a part to play,and are in fact linked" (p.123).

In the 2000s, an interest in motivational change led to the dawn of the Process Oriented Period, in which the dynamic nature of L2 motivation was highlighted. Considering the changeability of motivation, Dörnyei and Otto (1998) developed a new L2 motivation model consisting of three stages: pre-actional, actional and post-actional. In the pre-actional stage individuals make their own choices, before they start an activity. The action stage refers to the application process of these choices. Lastly, the post activity stage acts like a restart cycle in which the individuals assess their performance of the activity for future reference.

1.2. Technology in Learning

Technology is a broad, complex term which is alive and expanding its borders day by day. Within the frame of education, technology can be narrowed down being as any tool developed with the necessary information and techniques to subvene and encourage learning. With the integration of the technology into the classroom, education has taken a completely new shape which places the communication and interaction at its center. This integration has gradually been applied with the adaptation of various tools. In 1972, the first handheld calculators were started to be used in the classrooms, allowing students to solve mathematical problems quickly. Soon after, Scantron machines were introduced to teachers as a mean to analyze test scores instantaneously. In the 1980s, technology in language classrooms included the use of film, radio, television, language labs with audio and video, computers, and interactive video (Cunningham, 1998). In 1981, the first personal computer became commercially available. However, without the Internet, it was used primarily for word processing to create, edit and print documents. With the birth of the World Wide Web, in 1990, the Internet provided people with easy access to a vast range of information as well as easier contact between people. In the 2000s, social media and smart phones surfaced as the leading communication mean as well as accelerating it. Hand in hand with easy accessibility and technological advancement, various programs have been developed and exploited to foster education. In the realm of language learning and teaching, technology has enabled the real-life atmospheres and authenticity crucial to learning a language.

When it comes to reading in a second or foreign language, it could be regarded as the most affected skill by means of technology. Crow (1986) describes reading in a second/foreign language (L2) as a "three to four-hour ordeal, mainly because of ... constant recourse to a dictionary" (p. 242). However, a rich source of information and speed provided by the technology has come up with effective solutions to this problem enabling a much quicker and easier reading in a foreign or second language.

Technology and Motivation

Today's generation, generation Z, has grown up with laptops, tablets, social networking sites, smart phones and etc. Prensky (2006) labels them as digital natives who are "fluent in the digital language of computers, video games, and the internet" (p.9). Their being comfortable with using technological tools makes the traditional way of learning through pencils/ pens, paper and books no longer satisfactory. Thus, the integration of technology can be regarded as an inseparable part of today's classrooms.

Several studies have been conducted so far to reveal the effects of technology on students' motivation. Godzicki et al. (2013) state that students' higher order thinking skills, active and self-regulated learning are enabled by technology supported learning environments. Grimshaw, Dungworth and McKnight (2007) used three types of media; CD-Rom, electronic text and traditional text to find out the effects technology has on reading comprehension, motivation and fluency. In their study, digital texts have been found to be more effective on comprehension and motivation when compared to traditional texts. Another work by Boon et al. (2006), students claimed to feel more motivated and be more active during lesson time when software was used since they kept students' attention on task during instruction. Ciampa, in his study in 2012 aimed at exploring the differences in reading motivation and comparing the use of traditional and nontraditional texts. E-books were utilized as nontraditional texts; 3D animation and word-by-word played a significant role in getting the attention of all participants. In his study, it is stated that e-books have positive contributions both to students' reading skills and their motivation to read digital texts. The use of e-books as a technological tool played part in another study done by Fox (2014). She stated that struggling readers and writers' motivation to read and write may be positively affected with the help of technology, which, in turn, increases their engagement with reading and writing processes.

The literature review giving prominence to technology use fostering motivation in language classes, particularly when teaching reading, paved the way for the current study. This research is designed for a different context to see whether a technology-supported teaching has any effect on reading motivation when preparatory class students in Turkey in question. This paper seeks ways to answer this question

L2 Reading

Reading is defined as "the process of interaction between a reader and a text" (Alderson, 2000, p.3). Different purposes lay behind reading such as scanning for information, gaining general comprehension, and pleasure (Celce- Murcia, 2001).

Reading is accepted as an active and receptive skill, as it is a cognitive process that fosters communication. As a skill, it intersects mostly with the sub-skills and components of language, thus making it one of the basic elements of language teaching and learning. Al-Kawaldeh (2011) states that reading increases reader's general and specific knowledge, as well as enhances vocabulary knowledge, in turn helping readers communicate with others, alongside simultaneously, improving other language skills. The

fact that reading presents the language in a meaningful and contextualized way makes that skill a corner stone in second language teaching and learning. Krashen and McQuillan (2008) highlight the importance of reading in L2 by stating that "the students who do L2 reading can read better, write better, spell better, have better grammatical competence, and have larger vocabulary in the target language" (p. 68).

Reading can be handled into two subcategories: intensive and extensive reading. Intensive reading is mostly classroom based and basically applied to practice specific reading strategies or skills. The text is analyzed in detail; linguistic and semantic details take center stage. Long and Richards (1987) say it is a "detailed in-class analysis, led by the teacher, of vocabulary and grammar points, in a short passage".

Extensive reading consists reading of large quantities. Its main purpose is generally related to pleasure and general understanding. Richards and Rodgers (2003) define extensive reading as the continuous reading activity where the reader's attention should be on the meaning, not the language of the text. According to Nuttall's ranking (1982) among the ways of improving the knowledge of a foreign language, the first is to live with the native speakers, the second is to read extensively.

Motivation and L2 Reading

Promoting students' motivation to read can enhance readers' reading competency (Morgan& Sideridis,2006; Sideridis & Scallon, 2006; Stommen & Mates,2004). Motivation leads students to read more, have larger vocabularies, use more complex cognitive strategies, thus become better readers (Krashen, 2009; Krashen & McQuillan, 2007). Increasing reading competence motivates students, and motivated students become more engaged in reading (Guthie & Wigfield, 2000). Grabe (2009) points out the relationship between reading motivation and reading achievement, stating that "students with high interest are more engaged in reading tasks" (2009, p.181). Similarly, Wigfield and Guthrie (1997) emphasize the great contribution of motivation to the amount and breadth of reading as being important factors effecting reading achievement and performance.

However, reading motivation has often been considered in terms of L1. Studies focusing on L2 reading motivation draw mainly on L1 reading research. Thus, research into L2 and foreign language reading motivation is "a relatively new era" (Erten et al, 2010, p187). Drawing largely upon Wigfield and Guthie's (1995, 1997) work, Mori (2002) developed a new instrument to explore what constitutes foreign language reading motivation, and pointed out that reading motivation is multidimensional. She derived four meaningful factors including: intrinsic value of reading, extrinsic value of reading, importance of reading and reading efficacy. Kondo- Brown (2006) also established four additional factors, this time within the context of Japanese: lack of motivation, intrinsic orientation, extrinsic orientation, and self- perception.

Criticizing some of the studies as being small in sample/ item size and having a very narrow cultural point of reference referring to the studies by Mori (2002), Yamashita (2004) and of Kondo-Brown (2006), Erten et al. (2010) conducted a study to understand what constitutes students' attitudes and motivation in Foreign Language reading. They developed a scale to explore motivational and attitudinal constructs in L2 reading by following a different route from the studies that drew upon current theories of motivation. Considering that, this study set out to tackle the relationship between technology and L2 reading motivation in Turkish context.

The aim of the study

This study attempts to explore the effect of technology on students' L2 reading motivation. Accordingly, this paper addresses the following four research questions:

1. Does technology have any effect on students' L2 reading motivation?

2. Does technology have any effect on students' intrinsic motivation in L2 reading?

3. Does technology have any effect on students' extrinsic motivation in L2 reading?

Method

Setting and participants

The study was conducted at Giresun University, School of Foreign Languages. The School of Foreign Languages currently offers a one-year preparatory program for those majoring in English at the undergraduate level. Students who fail to pass the English language proficiency test at the beginning of the first academic year have to take a one- year preparatory program.

The participants of this study were chosen through convenience sampling. The intended participants from Giresun University School of Foreign Languages consisted of 91 adult learners of English as a foreign language. However, 19 students dropped out and were excluded from the study. The final number of the participants included 72 adult students. Participants are A2 level preparatory students who are expected to finish the term at a B1 level according to the Common European Framework of Reference (CEFR). All participants are from the Department of Applied English and Translation/Interpretation. 34 of the participants are from day classes, 38 are from night classes. Although they are in an English-based department, they are not accepted into university via an exam testing their knowledge of English. All of the participants have similar backgrounds in terms of English language instruction, following the curriculum of Ministry of Education's primary, secondary and high school curricula. The number of female students (39) is slightly higher than male (33) at this school the study was conducted.

Instrumentation

In this study 11 short stories were chosen to give the students each week keeping their proficiency levels in mind, and four instructors who are lecturing courses in other English language skills were consulted in order to determine the stories. The stories given below are simplified versions of their originals by Oxford University Publishing (OUP) and Pearson for the needs of English language learners apart from the one being adapted from a website. Each story was accompanied by worksheets with reading comprehension and vocabulary exercises relating to the stories.

Christmas present (Oxford Bookworms)

Soapy's choice (Oxford Bookworms)

Lost love by (Pearson Penguin Readers)

The doll (Pearson Penguin Readers)

The charm (Pearson Penguin Readers)

Doctor Jekyll and Mr Hyde (Pearson Penguin Readers)

The waxwork (Oxford Bookworms)

Sredni Vastar (Oxford Bookworms)

The journey's End (Pearson Penguin Readers)

King Arthur and The Knights of the Round Table (Pearson Penguin Readers)

American Pepper (The website of University of Victoria English Language Center)

"Edmodo"

It is an online platform that allows users to send posts, make comments on the posts sent and upload assignments and videos. It provides an online platform whereby students can discuss the stories and direct any questions to the researcher. As it can be downloaded on their smart phones, the accessibility of the reading texts increased. Students had the chance to receive help from the researcher when they faced any problems. The platform also provides a repository for students to keep their stories and worksheets.

The Foreign Language Reading Attitudes and Motivation Scale (FLRAMS)

The data was obtained through the Foreign Language Reading Attitudes and Motivation Scale (FLRAMS) developed by Erten et al. (2010) to explore motivational constructs in foreign language reading. The FLRAMS is a four-factor scale involving a total of 31 items. These factors are the intrinsic value of reading (16 items), reading efficacy (6 items), the extrinsic utility value of reading (5 items), and foreign language linguistic utility (4 items). The scale has a 5-point Likert scale ranging from "strongly agree" to "strongly disagree". During the development of the scale, all of the essential validity and reliability procedures were followed. For the reliability of the scale, Cronbach's alpha coefficients were calculated as 0.94 for the first subscale (intrinsic value of reading); 0.87 for the second subscale (reading efficacy); 0.84 for the third (extrinsic utility value of reading); and 0.73 for the fourth (foreign language linguistic utility). These values indicate a satisfactory level of reliability. Cronbach's Alpha coefficients values for per subscale are shown in Table 1.

Table 1: Results of the Reliability Analysis

Factors	Alpha
Factor 1 Intrinsic Value of Reading (N=398)	.9408
Factor 2 Reading Efficacy (N=423)	.8702
Factor 3 Extrinsic Value of Reading (N=435)	.8389
Factor 4 Foreign Language Linguistic Utility (N=437)	.7343

Data collection and analysis

Data spanned over three-month-time was gathered from preparatory class ELT students in 2015-2016 academic years at Giresun University's School of Foreign Languages. Initially, the FLRAMS was administered at the beginning of the term as a pre-test. The researcher was available during the administration to provide explanation when necessary. Participants were divided into experimental and control groups considering the balanced distribution of night and days classes. At the end of the study, the FLRAMS was administered as the post test.

Descriptive statistics were used to describe the basic features of the data, and it demonstrated a parametric design. As the data has a normal distribution, a paired sample T- test was used to analyze the differences between pre-and post-test scores

within each group. An independent sample T-test was performed to compare the scores of pre- and post- tests between groups.

Procedure

The study spanned over three months and was conducted during the spring term of 2015-2016 academic years at Giresun University School of Foreign Languages. Before the application process, the short stories listed above were determined by consulting five instructors – two with MA degrees, two with PhD degrees in EFL, and one native English speaker with a linguistics background. All of these instructors worked at the same institution and are familiar with the students' proficiency levels. At the beginning of the study, the experimental and control groups were defined considering the balanced distribution of participants attending day and night classes and the FLRAMS was subsequently applied as a pre-test. Students were assigned to read one of the stories each consecutive week, and they were informed that the worksheets of the stories given would be assessed out of 50.

The participants in the experimental group were instructed on how to use Edmodo within classroom hours. While the experimental group completed the whole process via the online platform including being assigned, turning in the worksheets, getting feedback, and being involved in the discussions, the control group was provided with the hard copies to read. For the control group, the feedback was given on their papers and the discussion was made within the classroom hours. At the end of the study, the FLRAMS was applied as a post-test.

Results

The results of the data gathered were analyzed by using SPSS. The findings will be discussed through the frame of each research questions.

Does technology have any effects on students' L2 reading motivation?

In order to uncover the effects of technology on students L2 motivational reading, pre- and post-tests' scores were analyzed using an independent sample T-test and the results shown in Table 2 and Table 3.

Table 2: Group Statistics

	groups	N	Mean	Std. Deviation	Std. Error Mean
Pre-test	1	37	3,4019	,32770	,05387
	2	35	3,4765	,64079	,10831

Table 3: Independent Samples Test

		F	Sig.	t	df	Sig(2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Pre test	Equal variances assumed	10,378	,002	-,627	70	,533	-,07458	,11899	-,31190	,16274

In order to compare the L2 reading motivation pre-test scores for the experimental (group 2) and control groups (group 1) an independent-samples T-test procedure was pursued. The data in Table 2 demonstrate that there is no significant difference in scores for the control group (M =3,40, SD = ,32) and the experimental group (M = 3,47, SD = ,64; t(70) =

-,627, p = . 533, (two-tailed) in terms of students L2 reading motivation. (Mean difference=.07, 95% CI: -, 31 to,16). The insignificance of pre-test scores between groups indicates that both have close L2 reading motivation levels.

Post test scores were also compared using an independent sample T-test and the results shown in Table 4.

Table 4: group statistics

	groups	N	Mean	Std. Deviation	Std. Error Mean
posttest	1	37	3,7463	,67289	,11062
	2	35	4,3235	,29879	,05050

Table 5: Independent Samples Test

		F	Sig.	t	df	Sig(2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Pre test	Equal variances assumed	13,109	,001	-4,658	70	,000	-,57721	,12392	-,82437	-,33005

As the Table 5 illustrates, there is a statistically significant difference between the control group (group 1) (M =3,74, SD = ,67) and the experimental group (group 2) (M =4,32, SD = ,29) in terms of L2 reading motivation. Participants in experimental group scored significantly higher than the control group which revealing the effect of technology on students' L2 reading motivation.

Does technology have any effect on students' intrinsic motivation in L2 reading?

In order to reveal the effect technology has on students' intrinsic motivation in L2 reading, data collected from pre-and post-tests of experimental and the control groups were statistically analyzed by using an independent sample T-test procedure. Table 6 and Table 7 show the results of independent sample T-test.

Tablo 6: Group Statistics

	groups	N	Mean	Std. Deviation	Std. Error Mean
Pre-intrinsic	1	37	3,3378	,32558	,05353
	2	35	3,4232	,73328	,12395
Post-intrinsic	1	37	3,6875	,79876	,13132
	2	35	4,3429	,43338	,07325

An examination of the table above shows that there was no significant difference between the pre-test scores (p<, 521 two-tailed). The minimal mean difference between the two groups was -,085. This minimal mean difference indicates that both groups were close to each other in terms of intrinsic motivation level at the beginning of the study. However, it is clear on the table that the experimental group outscored the control group according to the post-tests scores. Table 11 illustrates that there was a statistically significant difference between the control group (group I) (*M* =3,33, *SD* = ,32); and the experimental group (group II) (*M* =3,42, *SD* = ,73) in terms of the intrinsic motivation. (p=,000; two tailed).

 Does technology have any effect on students' extrinsic motivation in L2 reading?

Table 8: Group Statistics

	groups	N	Mean	Std. Deviation	Std. Error Mean
posttest	1	37	3,9946	,56468	,09283
	2	35	4,0343	,78138	,13208

Table 9: Independent Samples Test

		F	Sig.	t	df	Sig(2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Pre test	Equal variances assumed	1,542	,218	-,248	70	,805	-,03969	,16002	-,35883	,27945

The analysis above revealed that, the mean difference between the two groups was minimal (-,039). No significant difference between the extrinsic motivation scores of the pre-tests (p<,805 two-tailed) was observed as was the case for the intrinsic motivation scores. On the other hand, the analysis of the extrinsic motivation post-test scores indicated a statistically significant difference between the groups in favour of experimental group (p= ,003 two-tailed).

Discussion

Creating a motivating atmosphere within the classrooms is a challenging task for teachers especially in language classes which necessitate real life environments and authenticity. Integrating technology into language learning may be a beneficial motivator for students especially for those known as digital natives who respond well to technology-infused activities due to their familiarity with technology (Prensky, 2001). Moving from that point, this study was conducted to explore the effects of technology on students' L2 reading motivation. With this aim, L2 reading motivation level was analyzed considering intrinsic and extrinsic motivation. To reveal the effect of technology on L2 reading motivation, all of the participants were assumed homogenous due to their similar educational backgrounds. Participants were divided into two groups and labeled randomly as either part of experimental or control group. Each group of students read the same stories, and passed through the same stages during the study with the exception that experimental group used technology as a mean. FLRAMS developed by Erten et al. (2010) was used as both pre- and post- tests. The data demonstrated that participants in the experimental group had a higher motivation level when compared to the control group, which supports the positive effect of technology on students' L2 reading motivation. That is highly possible because participants are digital natives and the online platform provided the accessibility of the teacher out of the classroom as well as changing the way in which reading is encountered.

When it comes to intrinsic motivation, participants in the experimental group scored significantly higher than the control group, which can also be interpreted as the positive effect of technology on L2 reading motivation. Students' interest on Edmodo, which enables to take reading out of the classroom, may be regarded as the main reason for this. Students declared that they found it quite similar to the popular social media platforms they use in their daily lives. The length of time they spent on the platform, although it was not compulsory, can be interpreted as their interest and eagerness to take part in it. At the beginning the teachers were the initiators of the online discussions, however within time students started to undertake that role and they also initiated and even moderated the discussions. This was possible because they may have felt safer, when compared to face to face classroom discussions, as they had more chance to think and map out before they write.

In terms of extrinsic motivation, the experimental group again outscored the control group. The badges on the platform that the teachers give to the students according to their success or their taking part in discussions can be interpreted as one of the reasons for this. During the process, students were quite eager to get those badges. Edmodo also provides a ranking system within groups according to the students' worksheet results. This can also be regarded as another reason of being extrinsically motivated as it brought competition into the classroom.

Conclusion

To conclude, this study aimed to shed light on the effects of technology on students' L2 reading motivation. The findings of the study have revealed that use of technology has positive effect on L2 reading motivation as well as leading to an increase in both extrinsic and intrinsic motivation.

Implication and Limitations

Many scholars have studied the effects of technology integration into overall teaching processes. Yet, the meaningful integration should always be kept in mind in order to obtain desired results.

The general findings can be practical for language teachers in terms of heightening their awareness of the positive effects of technology on fostering L2 reading motivation in order to make the reading process more motivating for their students. Benefiting from technology helps teachers increase their students' possibilities to read in the target language much, compared with the traditional way. That is because; technology helps transforming reading into the digital platform which makes the reading a part of their lives rather than the task need to be done with a pen and paper. Nevertheless, to obtain more satisfying results, more teacher training may be needed in terms of technology integration and all the possibilities in relation to the learning environment need to be considered as much as possible.

However, Krendl and Clark (1994) discuss that the novelty of the computer application can cause uncontrolled novelty effects. In other words, as novelty of the activities gradually wear down, motivation and attention can decrease as students get accustomed to that novelty. This kind of effect has been ignored in research focusing on the effects of computer-based learning because of the preference for short-term, small-scale experimental applications of technology (Krendl & Lieberman, 1988; Krendl & Clark, 1994). Additionally, during the implementation of this study, some participants had difficulties in using the online platform, causing a delay in turning the assignments in. The process was also a bit demanding as the preparation and feedback processes were expensive in terms of time. All these limitations should be taken into account, and future researches may be needed in order to disclose the possible effects of technology on learners' motivation as familiarity increases and the new developments occur**.**

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