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AN EXAMINATION OF SELF-EFFICACY IN DIGITAL READING AMONG STUDENT TEACHERS OF PRIMARY EDUCATION

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Abstract:
The research aims to examine self-efficacy in digital reading among student teachers of primary education focusing on certain variables. The model of the research is descriptive survey model. The data is collected during the 2020-2021 academic year via Google Form. The data is analysed through SPSS 22.0 programme. The analysis showed that the concerned student teachers' self-efficacy in digital reading is in 'good' standards. There is no significant difference in the self-efficacy in digital reading of the students teacher according to gender. However, depending on the grade level variable, the findings show that student teachers' self-efficacy in digital reading has changed significantly. In accordance with this difference, first grade students' mean of analysis scores in digital reading is lower than those in other grade levels. Finally, the analysis showed that there is no effect of daily internet use in the mean of scores of student teachers' self-efficacy in digital reading. As a result of the research, it is suggested that more research should be done on self-efficacy in digital reading for academic literature and focus on different education years and different undergraduate programmes.

Keywords: digital reading, self-efficacy, student teachers

1. Introduction

Societies are identified as information society, network society (Webster, 2004; Castells, 2004), and technology society in accordance with the current technological innovations. Internet technology and digital environments enable individuals to socialise through multinets, to personally select contents and services among many, and to frequently interact with other individuals through those means. In other words, the latest technological innovations have resulted in a quintessential and new "digital world". Societies' prompt adjustment to this 'new world' and their adoption of technology-based e-life forms show that technology is quite prevalent in the social sphere (Onursoy, 2018).

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According to the 2017 Research on Household Use of Information Technologies of the Turkish Statistical Institute, 66,8% of household individuals in Turkey use internet and 56,6% of household individuals use computers. The most common tendency in internet use with the highest percentage of 79,5% is to visit social media outlets. That is followed respectively with search for medical information with 75,1%, video calls with 63,2%, search for goods and services with 61,5%, and reading online newspapers and magazines with 61,4% (tuik.gov.tr/August 2017). That is, there is an increase in individuals' use of information technologies (TÜİK, 2017).

Digital technologies prevail in every part of the societal life in order to meet its requirements. The immediate adoption of digital technologies necessitates newer online platforms to emerge and replace conventional forms of services with them. Hence, digital services have become at the focal point of such sectors as health, trade, and bureaucratic administration to effectively operate. They have also been prominent for services in education sector. In fact, education sector at large utilises digital contents more predominantly.

In recent years, digital technology has had a particular impact on education system and its components. This results from newer trends in teaching as out-of-classroom education and the digitalisation of learning environment and materials. Yet, education systems that are restricted to common access and exclusively open to a particular group continue to be in effect even through flexible models with wider and more common access for all.

2. Digital Reading

Digital technologies are effective in teaching, collaborative work, and socialisation (Baker, 2000; Özbay and Özdemir, 2014). The use of digital technologies in teaching facilitates easy access to learning materials prepared nearly for each course-subject (Evering and Moorman, 2012).

Digital technology facilitates easy access to various information, which results in the concept of 'digital reading'. Digital reading comprises reading activities carried out through computers, TV, mobile phones, tablets, e-book devices, electronic signboards, information screens, and so forth. Yet, the definition of digital reading differs. Güneş (2016) describes reading within digital platforms as "screen reading" and suggests that it is "*readers' efforts to make new meanings from the information provided on screen and an active cognitive process to consolidate those meanings*". McKenna, Conradi, Lawrence, Jang and Meyer (2012), however, defines digital reading as the totality of reading activities carried out through all of the media outlets and for all digital texts.

According to Güneş (2016), there are certain characteristics of digital reading as follows:

- On screen, pages move upwardly and downwardly whereas readers' eyes move horizontally from left to right. Readers' effort to horizontally read the vertically-

moving screen obstructs some of the optic movements in the eye, reading techniques, and cognitive processes.

- Pages on many screens follow a consecutive order and constantly flip, and certain parts of a digital page become invisible whilst some other parts are being read. Screen window displays the text restrictively, which is the equivalent of nearly half of a printed page. This hinders readers' ability to follow headings, sub-headings, and side-headings of the text and to explore and recognise the layout of the text.
- Fragmentary display of digital texts makes it harder for readers to merge the information provided in texts and to comprehend them. Readers need to spend more cognitive efforts to consolidate and comprehend information on visible and invisible parts of texts. In doing so, readers need advanced skills for attention, comprehension, and recollection.
- Digital devices provide rich information with various types of texts namely hyper texts, pictures, sounds, animations, other visual and aural items, etc. These texts require readers to have flexible and advanced cognitive skills to receive them at a certain pace.
- Whilst it is less troublesome to read short, informative texts on digital devices, it is particularly challenging to read long texts such as long stories and novels (Quéré et al, 1997; cited in Güneş, 2016). Additionally, it is troublesome to read long tables and poems and to compare texts.

Digital reading results in certain transformations not only in types of texts but also in other areas such as readers' skills and reading environments. Particularly, digital reading alters the concept of reading, aims of teaching how to read, reading skills, reading processes, reading culture and practices, and textual display and environment (Çıvğın, 2020).

Cohen (2006) argues that digital reading is more efficient as it provides readers with ways in which they better comprehend what they read and engage with the information presented. Similarly, the brevity of online texts plays a role in readers' preferences to read online (Mizrachi, 2014; Vernon, 2006). Millar and Schrier (2015) evidently suggest that university students who prefer to use electronic textbooks prefer them because students' digital archives easily contain all e-books that they need to read and reading e-books facilitates the reading process better than reading the printed books. Moreover, they prefer digital reading because it is more cost-effective, easily accessible and prevents excessive paper consumption.

On the other hand, digital reading has some adverse effects on readers' health. Those include optic problems, cancer, and orthopaedic disorders (Duran and Ertuğrul, 2012; Maden, 2012). In addition to such health issues, digital reading reduces readers' pace of reading. Güneş (2010) predicates it to the use of scroll bar for moving between pages on screen. That movement hides some parts of the text during reading, which complicates reading process for readers as they experience a difficulty to make a

relationship between visible and invisible parts. That damages optic movements of readers' eyes.

Digital reading becomes more popular among young people whilst further research on the subject proceeds and evaluates different aspects of it. Not only young people but also adults tend to prefer to use digital reading materials instead of conventional reading materials. This specific transition has accelerated since late 2019 when the Covid-19 pandemic has first outbroken. The pandemic has transformed many aspects of the social life, such as health, education, and economy, and stimulated the further use of digital technology. Following the progress of the pandemic, countries around the globe have taken measures for education and gradually adjusted their education systems turning from face-to-face teaching to distance learning. Although distance learning is not a new approach in education, it has evoked debates on how it will have affected the quality of education in the long haul as it has been expanding to every level of education.

Nevertheless, readers' self-efficacy in digital reading is of particular importance to explore whether or not it has positive impact on students' educational attainment depending on their digital reading skills. Teachers working in early years of education need to develop the necessary skills for online teaching so that they can act as role models to their pupils, given that those pupils have been introduced with this education model at such an early age of years and immediately need to develop skills to effectively use the required materials.

The identification of the level of teachers' self-efficacy in digital reading remains particularly important for further examination as teachers are a crucial component of online teaching for close monitoring of this co-dependent developmental process and for necessary adjustments to make. This requires to centre further research around student teachers' views on self-efficacy in digital reading. This research, therefore, aims to examine the self-efficacy of student teachers of primary education in digital reading depending on different variables.

3. Material and Methods

3.1. Research Questions

This research aims to examine the self-efficacy of student teachers of primary education in digital reading depending on several variables. Following the main aim, the research asks the below sub-questions:

1) For student teachers of primary education, what is the level of their self-efficacy in digital reading?
2) Do the student teachers' self-efficacy in digital reading differ according to gender gender?
3) Do the student teachers' self-efficacy in digital reading differ according to the grade level variable?

4) Do the student teachers' self-efficacy in digital reading differ according to the time spent on daily internet use?

3.2. Method

The research aims to examine the self-efficacy in digital reading among student teachers of primary education, focusing on certain variables. The model of the research is descriptive survey model. Descriptive surveys are studies conducted on large groups, in which the opinions and attitudes of the individuals in the group about a phenomenon and an event are taken, and the facts and events are tried to be described (Karakaya, 2012). This research method is used to describe the structure of objects, societies, institutions and the functioning of events (Cohen, Manion and Morrison, 2007).

3.3. Participants

The research universe is university students, studying undergraduate programmes for primary-school teaching at various universities in Turkey. In the appropriate sampling method, which is based on accessibility and availability, the researcher collects data from the most easily and accessible subjects until they reach the sample size they need (Gürbüz and Şahin, 2015). The sampling group of this research consists of 468 student teachers, who have actively been pursuing their undergraduate programme in primary-school teaching during the 2020-2021 academic year. Participants have given consent prior to the study. Table 1 below presents the research sampling.

Table 1: Descriptive Data on Study Group

Gender	**F**	**%**
Female	364	77.7
Male	104	22.2
Grade		
1th Grade	48	10.2
2th Grade	156	33.3
3th Grade	188	40.1
4th Grade	76	16.2
Daily Internet Use		
Less than 3 hours	48	10.2
Between 3 and 5 hours	244	52.1
More than 5 hours	176	37.6
Total	**468**	**100**

As seen in Table 1, there are 364 (77,7%) female and 104 (22,2%) male student teachers that have participated into the research. 48 (10,2%) of research participants are first grade university students, 156 (33,3%) of them are second grade university students, 188 (40,1%) third grade students, and 76 (16,2%) fourth grade students. Looking at the data on daily internet use, 48 (10,2%) of student teachers use internet less than 3 hours on a daily basis, 244 (52,1%) between 3 and 5 hours, and 176 (37,6%) more than 5 hours.

3.4. Data Collection Tools

3.4.1 Personal Information Form

The information sheet involves profile questions such as student teachers' gender, year-level, and daily internet use. It is annexed to the scales applied in this research.

3.4.2 Digital Self-Efficacy Scale

The research uses the scale for self-efficacy in digital reading developed by Akkaya and Çıvğın (2020). They apply Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) for construct validity in the design of the scale. Upon the iterative factor analysis, some items are removed from the scale and the scale is finalised with 18 items and 4 dimensions. The scale is designed as a 5-point likert scale with the sub-dimensions of use (5 items), access (4 items), adversity (4 items), and expediency (5 items) (Akkaya and Çıvğın, 2020). Reliability co-efficiency is tested before applying the scale, and the Cronbach Alpha co-efficiency of the scale is found .78 at the end of the analysis. Following the result of this analysis, the concerned scale is applied in the research.

3.5. Data Collection

Upon the permission from the scholars for the application of the scale, data is collected in the digital platform during the 2020-2021 academic year via Google Form. Research participants are primarily informed about the aim of the data collection and reassured that their personal information would not be shared with third parties. Participants are selected on voluntary basis.

3.6. Data Analysis

Statistical data is analysed via SPSS 22.0. Scores gathered from student teachers' self-efficacy in digital reading with the gender variable are analysed through t test for independent samples. Scores for the variables of year-level and daily internet use are analysed through one-way analysis of variance (ANOVA). Prior to conducting parametric tests, it is examined whether or not the sampling group has normal distribution (i.e. skewness and kurtosis values). The findings demonstrate that values are as follows: skewness = ,113; kurtosis = ,225. This proves that values are between the -1 and +1 threshold. It means that the sampling group is within normal distribution. Levene's test is conducted to test homogeneity, which is another hypothesis of parametric tests. Consequently, it is found that p values are above .05 for the examination of variables of student teachers' gender, location of their university, and their year-level. Following these findings, it is concluded that parametric tests are convenient for this research to apply.

4. Findings

4.1. Findings of the digital reading self-efficacy levels of student teachers

Table 2 presents the findings of descriptive analysis regarding the self-efficacy in digital reading among student teachers of primary education.

Table 2: Statistical Findings of Descriptive Analysis regarding the Self-efficacy in Digital Reading among Student Teachers of Primary Education

Dimensions	N	$\bar{X}$	Ss
Use	468	11.02	3.97
Access	468	14.64	3.19
Adversity	468	10.62	3.50
Expediency	468	13.45	3.91
Total	**468**	**49.73**	**7.33**

Table 2 showed that the arithmetic mean of student teachers' self-efficacy in digital reading is 11.02 for the sub-dimension of 'use', and its standard deviation is 3.97. The arithmetic mean for the sub-dimension of 'access' is 14.64 and its standard deviation is 3.19. The arithmetic mean for the sub-dimension of 'adversity' is 10.62 and its standard deviation is 3.50. Lastly, the arithmetic mean for the sub-dimension of 'expediency' is 13.45 and its standard deviation is 3.91. The total mean for student teachers in the scale is 49.73 and the total standard deviation is 7.33.

4.2. Findings of the digital reading self-efficacy levels of student teachers in terms of gender variable

Table 3 presents the results obtained by applying t-test for independent groups in the analysis of student teachers' self-efficacy in digital reading according to the gender variable.

Table 3: Findings of Gender-Dependent Analysis of the Self-efficacy of in Digital Reading among Student Teachers of Primary Education

Dimensions	Gender	N	$\bar{X}$	Ss	t	p
Use	Female	364	11.10	4.03	.832	.406
	Male	104	10.73	3.76		
Access	Female	364	14.57	2.97	-.764	.446
	Male	104	14.88	3.86		
Adversity	Female	364	11.00	3.65	5.561	**.00***
	Male	104	9.27	2.50		
Expediency	Female	364	12.96	3.81	-5.287	**.00***
	Male	104	15.19	3.77		
Total	Female	364	49.63	7.37	.832	.406
	Male	104	50.08	7.22		

*p<.05

Table 3 showed that there is no significant difference between the levels of student teachers' self-efficacy in digital learning (p>.05) considering the total scale. There is no significant difference between those levels for the sub-dimensions of 'use' and 'access' (p>.05). Yet, there is difference between the levels of student teachers' self-efficacy in digital learning for the sub-dimensions of 'adversity' and 'expediency', which is in favour of females (p<.05).

4.3. Findings of the digital reading self-efficacy levels of student teachers in terms of grade level variable

Table 4 presents the results of one-way analysis of variance (ANOVA) applied in the analysis of student teachers' self-efficacy in digital reading according to the grade level variable.

Table 4: Findings of Grade Level Dependent Analysis of the Self-efficacy in Digital Reading among Student Teachers of Primary Education

Dependent Variable	The Sources of Variance	Sum of Squares	S.D.	Mean of Squares	F	p
Grade level	Within Groups	1298.166	3	432.722		
	Among Groups	23850.825	464	51.403	8.418	**.000***
	Total	25148.991	467			

*p<.05

Table 4 shows that there is significant difference between the analysis scores of student teachers' self-efficacy in digital reading within the variable of grade level (F=8,418, p=.000<.05). In order to explore the source of this difference, Tukey's HSD test is applied, the findings of which are presented in the Table 5 below.

Table 5: Tukey's HSD Test Results on Student Teachers' Self-efficacy in Digital Reading

	Grade Level		Difference in Mean Scores	Standard Deviation	p
Total	1th Grade	2th Grade	-4.692	1.183	**.000***
		3th Grade	-5.787	1.159	**.000***
		4th Grade	-5.158	1.322	**.001***

*p<0.5

As shown in the Tukey's HSD findings on year-level differences, there is significant difference of .05 between the mean of scores of first grade students and of second, third, and fourth grade students. It means that first grade students' total self-efficacy scores in digital reading are lower than the total scores of student teachers at other grade levels.
In order to examine the difference depending on the sub-dimensions of the scale, one-way analysis of variance (ANOVA) is applied and the findings are presented in the Table 6 below.

Table 6: Findings of Grade Level Dependent Analysis of the Self-efficacy in Digital Reading among Student Teachers of Primary Education based on Sub-dimensions

Dimension	Level of Year	N	$\bar{X}$	Ss	KO	F	p	Tukey's HSD
Use	1th Grade	48	9.08	1.82				
	2th Grade	156	11.18	4.20	119.910	7.912	**.000***	1th Grade < 2th Grade 3th Grade
	3th Grade	188	11.77	3.88	15.155			
	4th Grade	76	10.05	4.18				

Access	1th Grade	48	13.50	3.77	35.355 10.021	3.528	**.015***	2th Grade > 1th Grade
	2th Grade	156	15.00	3.46				
	3th Grade	188	14.45	2.90				
	4th Grade	76	15.11	2.67				
Adversity	1th Grade	48	8.92	2.23	297.834 10.434	28.545	**.000***	1th Grade 3th Grade >2th Grade 4th Grade
	2th Grade	156	9.97	3.44				
	3th Grade	188	12.23	3.41				
	4th Grade	76	9.00	2.79				
Expediency	1th Grade	48	13.50	4.19	242.328 13.838	17.511	**.000***	1th Grade 4th Grade > 2th Grade 3th Grade 2th Grade > 3th Grade
	2th Grade	156	13.54	3.78				
	3th Grade	188	12.34	3.64				
	4th Grade	76	16.00	3.42				

*p<.05

Table 6 showed that there is significant difference between first, second, and third grade students for the sub-dimension of 'use' (F=7,912, p=.001<.05). The mean of first grade students' scores is lower in the said dimension than of second and third grade students' scores. There is difference between first and second grade students for the dimension of 'access' (F=3,528, p=.015<.05). The mean of first grade students' scores is lower than of second grade students' scores. There is also significant difference between third grade students and first, second, and fourth grade students for the dimension of 'adversity' (F=28,545, p=.000<.05). The mean of third grade students' scores is higher in the adversity dimension than of those in other grade levels. Finally, there is significant difference between fourth grade students and first, second, and third grade students, and between second grade students and third grade students for the dimension of 'expediency' (F= 17.511, p=.000<.05).

4.4. Findings of the digital reading self-efficacy levels of student teachers in terms of daily internet use variable

Table 7 presents the results of one-way analysis of variance (ANOVA) applied in the analysis of student teachers' self-efficacy in digital reading according to the daily internet use.

Table 7: Findings of Internet-Use-Dependent Analysis of the Self-efficacy in Digital Reading among Student Teachers of Primary Education

Dependent Variable	The Sources of Variance	Sum of Squares	S.D.	Mean of Squares	F	p
Daily Internet Use	Within Groups	38.405	2	19.203	.356	.701
	Among Groups	25110.586	465	54.001		
	Total	25148.991	467			

*p<.05

Table 7 showed that there is no significant difference between the analysis scores of student teachers' self-efficacy in digital reading within the variable of daily internet use (F=,356, p=.701>.05). In order to explore the said difference depending on the sub-

dimensions of the scale, one-way analysis of variance (ANOVA) is applied and the findings are presented in the Table 8 below.

Table 8: Findings of Internet-Use-Dependent Analysis of the Self-efficacy in Digital Reading among Student Teachers of Primary Education based on Sub-dimensions

Dimension	Hours for Daily Internet Use	N	$\bar{X}$	Ss	KO	F	p	Tukey's HSD
Use	Less than 3	48	10.58	4.25				
	Between 3 and 5	244	10.92	3.98	11.463	.723	.486	
	More than 5	176	11.27	3.89				-
Access	Less than 3	48	14.58	4.15	.580			
	Between 3 and 5	244	14.61	2.77		.057	.945	
	More than 5	176	14.70	3.44	10.225			-
Adversity	Less than 3	48	9.25	2.58	80.974			
	Between 3 and 5	244	11.10	3.31		6.757	**.001***	
	More than 5	176	10.32	3.85	11.985			Group 2>Group 1
Expediency	Less than 3	48	14.67	4.00	39.654			
	Between 3 and 5	244	13.34	3.86		2.609	.075	
	More than 5	176	13.27	3.91	15.201			-

*p<.05

Table 8 showed that there is no significant difference between different sampling groups in the analysis of student teachers' self-efficacy in digital learning on the sub-dimensions of 'use', 'access', and 'expediency' in correspondence to the totality of the scale. Yet, the analysis on the sub-dimension of 'adversity' shows that there is significant difference between student teachers using internet less than 3 hours per day and those using internet between 3 and 5 hours per day (F=6,757, p=.001<.05).

5. Discussion

The research aims to examine the self-efficacy in digital reading among student teachers of primary education within certain variables. The study group of this research consists of 468 student teachers, 364 of whom are female and 104 of whom are male. The research uses the scale for self-efficacy in digital reading developed by Akkaya and Çıvğın (2020). The data is collected from research participants, who actively pursue their undergraduate education in primary-school teaching in different universities across Turkey, during the 2020-2021 academic year via Google Form. The data is analysed through SPSS 22.0 programme.

Research findings are discussed in relation to a restricted number of studies as there are not many studies focusing on this subject in the existing literature. The results showed that student teachers' self-efficacy in digital reading is in 'good' standards given the examination of sub-dimensions. Following the current developments in digital technologies, reading culture and patterns have changed and that have increased the tendency for digital reading (Chauhan and Lal, 2012; Güneş, 2010; 2013; Halme, 2011; Liu

2005). There are some studies examining teachers' and student teachers' views on digital technologies (Hutchison and Reinking, 2011; Hutchison, 2012; Hutchison and Colwell, 2016; Pang, Reinking, Hutchison, and Ramey, 2015; Pierczynski, 2015), and they have shown that student teachers have a positive approach towards the use of digital technologies (Pierczynski, 2015). In fact, Dobler (2015) argues that student teachers have increasingly been prone to select and read online texts in recent years.

When it was examined student teachers' self-efficacy in digital reading depending on the gender variable, this research concludes that there is no significant difference between female and male student teachers. This finding supports some of the studies in the existing literature. For instance, Kazancı (2015) argues that gender of university students does not significantly affect their views on digital and printed texts. Similarly, Shabani, Naderikharaji, and Abedi (2011) argue that gender is not an effective factor for Iranian university students' reading patterns. Other studies investigate digital reading patterns among different age groups and have similar findings on the impact of gender factor (Erten; 2019, Gökçearslan and Bayı; 2011, Kazu and Erten, 2014; Keiko, Ishita, Miyata, and Minami; 2017, Yıldız and Keskin; 2016). Recent developments in technological innovations in the digital world have brought various transformations to the social life. Particularly, the reading has since been digitalised (Karim and Hasan, 2007). Henceforth, it is possible to suggest that digital reading is in higher demand among readers irrespective to their gender.

In another sub-problem of the study, the digital reading self-efficacy of the student teachers was examined according to the grade level. According to the results digital reading self-efficacy scores differ significantly depending on the grade level of the participants. First grade students have a lower mean of scores for self-efficacy in digital reading than second, third, and fourth grade students do. This may be resulted from that first grade students use digital technology in their learning less than other students in upper year-levels do. Therefore, it can be argued that their self-efficacy is less developed than others. There are similar findings in some other studies. Çıvğın (2020) argues in his study, investigating the self-efficacy in digital reading among teacher education students, that there is significant difference between the score means of research participants from different grade levels. Şahenk, Balaban and Tezcan (2015) have found significant difference in digital reading patterns of student teachers from different grade levels as well. Unlike these findings, Ulu and Zelzele (2018) have not found any significant difference in digital reading patterns of student teachers from different grade levels though.

In the fourth sub-problem of the study, digital reading self-efficacy of student teachers was examined according to their daily internet use. According to the results, there is no significant difference between scores of participants in relation to the said variable and its sub-dimensions, apart from the sub-dimension of 'adversity'. In the adversity sub-dimension, there is significant difference for the means of scores between research participants who use internet less than 3 hours per day and those who use internet between 3 and 5 hours per day. The difference is in favour of the latter group.

Nevertheless, there is no relationship between daily internet use and self-efficacy in digital reading given the total scale. This may result from student teachers' preference in using internet for merely leisure activities and entertainment. Consistent with these findings, Macit and Demir (2016) have found in their study, looking at digital reading skills of Year 4 pupils in primary education, that daily internet use does not affect pupils' digital reading skills. However, Sarıkaya (2019) does not support this finding in a similar study. He has examined digital literacy of teachers of Turkish language based on several variables and found that teachers' daily internet use has an effect in their digital reading. Similarly, Ulu and Zelzele (2018) and Çıvğın (2020) have found that daily internet use affects self-efficacy in digital reading.

6. Recommendations for further research

Recommendations for further research regarding self-efficacy in digital reading are as follows:

1. It is found that the number of studies in the existing literature is not sufficient. Further research on self-efficacy in digital learning needs to be undertaken with a specific focus on different teacher education programmes and different grade levels of study. This may facilitate the long-due relationship between digital technologies and education to be established.
2. Education system has been under transformation in recent years due to numerous reasons and online education has started to carry weight. Therefore, the institutional infrastructure for digital technologies needs to be enhanced so that students will better utilise digital technologies and their digital reading efficacy will be improved.

6.1. Limitations

We limited our inquiry to bachelor degrees and 5 state-run universities in Turkey.

Conflict of Interest Statement

The author declares no conflicts of interests.

About the Author

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