

Impact of Incidental Exposure to E-learning Platforms on Students' Interest in Online Extensive Reading during COVID-19 Pandemic¹

Amine Ounissi², Raihana Romly³, & Azza Jauhar Ahmad Tajuddin^{4, 5}, University Malaysia Terengganu, Kuala Terengganu, Malaysia

Md. Kamrul Hasan^{6,7}, United International University, Dhaka, Bangladesh

Abstract

The prevalence of COVID-19 worldwide and the length of the global lockdown period deeply affected students' academic study. This unexpected scenario posed a challenge to a considerable number of academic institutions around the world to formally adopt a new education system based on e-learning platforms. Therefore, this study aims to investigate whether Malaysian English as a Foreign Language (EFL) undergraduates' incidental exposure to online platforms during the pandemic might have helped to arouse their interest in reading extensively on the internet. To help explore the issue, a quantitative approach using a descriptive survey design was implemented. Data were collected through a structured online questionnaire administered to 255 undergraduate EFL students majoring in a range of academic disciplines at the University Malaysia Terengganu (UMT) to express their interest in the research topic. To analyze the data, a two-tailed Pearson Correlation coefficient was undertaken and the researchers administered the standard multiple regression analysis to test its impact using Statistical Package for the Social Sciences (SPSS) (Version 25). The obtained findings indicated that the relationship between incidental exposure to e-learning and students' interest in online extensive reading during the COVID-19 pandemic was found to be high, positive, and statistically significant. Therefore, EFL undergraduates who had incidental exposure to e-learning classes also developed a significant interest in extensive reading on the internet. Moreover, carrying out reading and writing assignments assigned by EFL university teachers was one of the central reasons behind the Malaysian undergraduates' engagement with online extensive reading during this period.

Resumen

La prevalencia de COVID-19 en todo el mundo y la duración del período de aislamiento global afectaron profundamente el estudio académico de los estudiantes. Este escenario inesperado planteó un desafío a un número considerable de instituciones académicas de todo el mundo para adoptar formalmente un nuevo sistema educativo basado en plataformas de aprendizaje electrónico. Por lo tanto, este estudio tiene como objetivo investigar si la exposición incidental de los estudiantes de licenciatura de inglés como lengua extranjera (EFL) de Malasia a las plataformas en línea durante la pandemia podría haber ayudado a despertar su interés en leer mucho en Internet. Para ayudar a explorar el problema, se implementó un enfoque cuantitativo utilizando un diseño de encuesta descriptivo. Los datos se recopilaron a través de un cuestionario en línea estructurado que se administró a 255 estudiantes de EFL de pregrado que se especializan en una variedad de disciplinas académicas en la Universidad de Malasia Terengganu (UMT) para expresar su interés en el tema de investigación. Para analizar los datos, se realizó un coeficiente de correlación de Pearson de dos colas y los investigadores administraron el análisis de regresión múltiple estándar para probar su impacto utilizando el paquete estadístico para las ciencias sociales (SPSS) (versión 25). Los hallazgos obtenidos indicaron que la relación entre la exposición incidental al e-learning y el interés de los estudiantes en la lectura extensiva en línea durante la pandemia de COVID-19 resultó ser alta, positiva y estadísticamente significativa. Por lo tanto, los estudiantes universitarios de EFL que tuvieron una exposición incidental a las clases de aprendizaje electrónico también desarrollaron un interés significativo en la lectura extensiva en Internet. Además, llevar a cabo las tareas de lectura y escritura asignadas por los profesores universitarios de EFL fue una de las razones centrales detrás del compromiso de los estudiantes universitarios de Malasia con la lectura extensiva en línea durante este período.

Introduction

The sudden and massive outbreak of Coronavirus (COVID-19) in the beginning of 2020 was a global issue of grave concern and deep reflection due to its severe consequences on the advancement of professional life and the future of the global educational system in particular. This was especially clear after the closure of a substantial number of educational institutions where billions of students around the world were eventually removed from pedagogical settings to stay at home (Hendal, 2020; Lowenhaupt & Hopkins,

¹ This is a refereed article. Received: 16 June 2021. Accepted: 29 April, 2022. Published: 26 April, 2023.

² amine.ounissi15@gmail.com, 0000-0002-7318-1880, Correspondent.

³ raihana.romly@umt.edu.my

⁴ Centre for Foundation and Continuing Education

⁵ azzajauhar@umt.edu.my

⁶ English Language Institute

⁷ mkamrulhasan77@gmail.com, 0000-0003-2353-4673

2020). During this crisis, Malaysian educational institutions as well as worldwide ones broadly oriented and relied on e-learning strategies as alternative methods of teaching and learning using several software programs and multimedia platforms to cope with the communication problems.

When it comes to reading extensively on the internet, the technological advances of e-learning provided the education society, whether inside or outside Malaysia, with ample opportunities to keep the reading process moving.

Despite the fact that there are a number of studies concerning extensive reading (ER) and reading habits in relation to the Malaysian context (Mohd Asraf & Ahmad, 2003; Romly et al., 2018; Samsuddin et al., 2019; Subramaniam & Zainal, 2016; Tan, 2016; Tan et al., 2018; Vun & Chu, 2017), and on online reading (Jafre Zainol Abidin et al., 2011; Jusoh & Abdullah, 2015; Mohamad et al., 2015; Noor et al., 2011; Rycker & Ponnudurai, 2011), very little has been undertaken on ER on the internet with reference to the Malaysian university education (Azmuhammad et al., 2017; Romly et al., 2014). According to Jafre Zainol Abidin et al. (2011), carrying out research related to reading online "is still new and progressing in the Malaysian context" (p. 3). Their research was conducted in rural Malaysian schools instead of universities. Jusoh and Abdullah (2015) stated that most studies in Malaysia "focused on traditional printed texts. There [was] not much research on online reading strategy usage, especially those investigating students in different academic fields" (p. 69). After thoroughly searching for previous Malaysian research studies and according to what has been mentioned earlier, there is no single and current study that has dealt yet with the impact of incidental exposure to online platform classes on EFL students' interests in online extensive reading (OER) in the Malaysian higher education context during the pandemic.

In the context of the post-pandemic era in Malaysia, it had been seen that those who lost their jobs during the pandemic could get opportunities to pursue their graduate or post-graduate studies via open or distance learning while working or raising their families. Accordingly, as long as Malaysian university students had been sitting at home and having a large amount of time during the global crisis, this experience could help them to gradually enhance their e-learning capacities and arouse their interest in OER not only during the pandemic, but also during the post-pandemic era. Consequently, Malaysian EFL students may become autonomous readers. Hence, raising the students' awareness of OER and e-learning platforms by exploiting the stressful situation of COVID-19, and turning it into beneficial knowledge and experience even after the pandemic might bridge the gap to produce positive results. Additionally, Malaysian students can become independent learners who regularly check and visit valuable ER websites that grant access to online resources, such as graded readers, useful articles, or free e-books.

Literature Review

E-learning during COVID-19

Electronic learning, also known as e-learning, is a technical term used to explain the process of gaining information through the use of computer and web-based networks (Al-Rahmi et al., 2015). Hawkins & Rudy (2007) illustrated that e-learning denotes "learning content or interaction that is facilitated electronically, such as the delivery of digital content or use of threaded online discussion" (p. 94). In the last two decades, e-learning has been an absolute necessity for a considerable number of international academic institutions because of its major benefits (Al-Rahmi et al., 2015). As outlined by Gilbert (2015), more precisely, in the area of flexibility and portability, "Online learning allows for students to work at a time and a place that is compatible with their learning needs" (p. 6). In a similar vein, You and Kang (2014) argued that e-learning classes are helpful and suitable for students who prefer self-directed learning. That is to say, self-regulated students are expected to use a variety of cognitive and metacognitive skills to achieve their academic goals (You & Kang, 2014). Therefore, students can gain a practical learning experience "that is not dependent on their physical or virtual co-location. The teaching content is delivered online and the instructors develop teaching modules that enhance learning and interactivity in the synchronous or asynchronous environment" (Singh & Thurman, 2019, p. 302).

The sharp rise of the contagious and deadly Coronavirus disease affected the whole world in several economic and educational fields. This unexpected situation has posed a threat to the global education system, pushing overnight educational institutions and academics to switch to a new system of instruction dependent on different online learning modes (Dhawan, 2020). It is stated that these e-learning/e-teaching modes are connected to a number of positive features, for instance, accessibility, usability, mobility, convenience, flexible teaching and learning pedagogy, and life-long learning (Dhawan, 2020).

Consequently, e-learning is a primary and strong reason that would be provided during extreme disease outbreaks -such as the COVID-19 pandemic- as it is considered "a panacea in times of crisis" (p. 6).

Extensive reading and technology

It has long been accepted by reading experts that good things regarding the enhancement of receptive and productive skills can take place when students read extensively and promote reading as a regular habit (Bamford & Day, 2004; Day & Bamford, 2002; Krashen, 2004; Renandya et al., 2018; Richards & Schmidt, 2002). ER is an effective means of enhancing the students' academic performance, reading instruction (Yamashita, 2008), and other linguistic and educational achievements, such as the enrichment of vocabulary acquisition and reading fluency for English as a foreign language (EFL) students (Horst, 2005; Nation, 2015; Nation & Wang, 1999; Pigada & Schmitt, 2006). A number of researchers, on the other hand, claimed that obtaining noticeable and rapid results for an ER program 'in the short term' is not an easy task. It requires continuous effort and time (Huang, 2015; Yamashita, 2008). Thus, ER is described as the "students' experiences of reading extended texts for extended periods of time" (Grabe & Stoller, 2001, p. 265).

In recent decades, the prevalent use of technology and direct access to the internet in particular have been paving the way for continuous innovations and marked improvements and creativity in education systems (Dwivedi et al., 2019; Gilbert, 2015; Kaufman & Gregoire, 2016; Sarker et al., 2019; Wagner & Compton, 2015). For instance, EFL online reading materials, such as stories, comics, encyclopaedias, dictionaries, magazines, or newspapers have become more comfortable, accessible, faster, and flexible. In this context, Rahimi and Yadollahi (2017) illustrated that "the pervasive influence of technology on all aspects of people's life has led to the emergence of a new generation of stories, i.e., digital storytelling. Digital storytelling is considered as the integration of computer-based technologies and the art of storytelling" (p. 2). Likewise, Frazel (2011) stated that digital storytelling can provide inspiration for an active educational process of language teaching and learning. It also "creates an atmosphere of excitement and fun; fosters appropriate use of technology within the curriculum; bridges school and community; weaves into all subject areas; [and is] effective for both visual and auditory learners" (p. 11).

Online extensive reading and e-books

"Online extensive reading" (OER) is a term associated with a number of voluntary reading activities that take place on the internet (Coiro, 2003, 2012) to have fun and make reading a regular habit. Coiro (2012) highlighted that readers can engage in a broader context environment where they can easily communicate and create direct links with a particular 'online reading environment'. The researcher also asserted that learners' "attitudes and self-efficacy relative to the internet appear to be important factors that affect motivation and reading performance" (p. 645). Moreover, the reduced price of online books (e-books), as well as the opportunity to share them through national and international online libraries that are open 24 hours a day, have encouraged institutions to reconsider the online reading investment and how it should be wisely implemented into the curriculum (Gerlich et al., 2011). Readers may adjust their reading experience through e-books by changing the font type, volume, screen light, and other design options. E-books can also provide readers with easy access to multimedia interface tools, such as hypertext or hyperlinks that are connected to encyclopaedias, thesauruses, online dictionaries, or links to a number of audiobooks. As a consequence, these multimedia interface options will possibly help learners to save time and energy (Huang, 2013; Lai & Chang, 2011). Nevertheless, engaging in reading a vast amount of materials on the internet from different resources—whether for having fun or enlarging the linguistic and knowledgeable input from different resources—might be a challenging task for a number of EFL students, especially for those who get discouraged from being engaged in OER because of the challenging reading process on the screen, i.e., they feel uncomfortable with a screen format on the internet (Myrberg & Wiberg, 2015). Furthermore, some students ignore how to use information technology (IT) wisely during the learning process and get distracted while reading due to spending excessive time on social media using mobile or computer gadgets (Aldunate et al., as cited in O'Byrne, 2018). Therefore, the process of online reading requires not only reading extensively for enjoyment or satisfaction, but also being up-to-date with recent IT and knowing how to effectively access ER materials on the internet. Johnson et al. (2016) illustrated that owing to the fact that "students today are raised in an environment saturated by computer technology" (p. 11), teachers are required to teach them some strategies to enhance their "computer literacy" performance towards the use of the internet, particularly for study purposes (Johnson et al., 2016). Likewise, Gilbert (2014) asserted that living in the current digital world demands that educators should teach students essential digital literacy skills to deal appropriately with online texts.

Reading interest

Interest in reading is defined as the efforts exerted by students outside the study settings (McKool, 2007). According to the publication *Helping your child become a reader* (2005), reading interests are described as whether learners have a passion for reading outside of their school/college hours, perhaps somewhere at home, visiting a library, or reading club. In addition, Khairuddin (2013) categorized interest in reading as “the number of books read in a month and the number of times students read in a week and the favorite genres and types of English reading materials” (p.162).

When it comes to the benefits of raising interest in reading, a number of reading experts, such as Eccles (as cited in Kikas et al., 2015) agreed that students' reading interest has a significant impact on their motivation and achievement, especially in the productive skills because it is a part of ‘subjective task value’. In fact, when students have a great interest in OER, this naturally reflects their passion for reading books and enjoying various reading activities, especially in their spare time, while the less interested students may only participate in the minimum number of reading activities given by their instructors (Schiefele et al., 2012). In practice, the intention to read and the extent of engagement with a particular English reading material are both influenced by interest (Fox & Alexander, 2003). A study conducted at a university in the United Arab Emirates revealed that choosing to read a variety of engaging topics developed students' interests and increased their motivation to continue reading academic articles despite facing some challenges in understanding vocabulary and semantic errors (Al Murshidi, 2014). Thus, it has been shown that a high level of reading interest can lead to academic achievement (Oakhill & Petrides, 2007).

Theoretical Framework

This study relates to a well-known theory, namely the engagement theory. The basic concept behind this theory is that students should participate and interact with each other importantly during the learning process (Farrell, 2004; Kearsley & Shneiderman, 1998; Pianta et al., 2012; Riviere, 2016). In addition, it has been shown that the role of technology related to engagement theory is crucial. This is due to a meaningful atmosphere of learning that aims to facilitate various aspects of interactions between the students themselves and/or with their teachers, to foster the communication and creativity between them will help students to become intrinsically motivated to make even more effort to learn or read (Kearsley & Shneiderman, 1998). In relation to the reading context, the engagement theory supports the thought that there are circumstances that make a number of students engaged readers or disengaged ones (Tracey & Morrow, 2006). Long and Szabo (2016) illustrated that students who are involved in reading a wide range of materials possessed intrinsic motivation that helped them to become good readers who tended to utilize metacognitive strategies to check their comprehension during the reading process.

The current digital era and the spread of technological tools worldwide go hand in hand with providing students with new teaching methods and various learning strategies (Abidin et al., 2011). For instance, e-learning or distance learning is a highly influential learning tool that makes students capable of constructing knowledge from various online sources. Based on this situation, students become up-to-date, autonomous and responsible for achieving different educational tasks on the internet. Therefore, engagement theory “is intended to be a conceptual framework for technology-based learning and teaching” (Tracey & Morrow, 2006, p. 20).

Objectives and research questions of the study

The main objective of this research is to determine if there is a correlation between the incidental exposure of Malaysian EFL undergraduates to online learning classes and their interest in reading widely on the internet. Furthermore, this study seeks to determine the impact of e-learning classes on students' OER at the University Malaysia Terengganu, particularly in conjunction with the evolution of COVID-19 in Malaysia at the beginning of March 2020. During this time, Malaysian University students from different research areas were given extended time to stay safely at home and connect with their teachers for educational purposes via an e-learning system. Consequently, they were incidentally exposed to e-learning classes during the global lockdown period.

Thus, this work intends to answer the following questions:

1. *How were incidental exposure and students' interest in OER related during the pandemic?*
2. *To what extent does incidental exposure to e-learning contribute to predicting students' interest in OER?*

3. To what level does incidental exposure to e-learning affect students' interest in OER?

Furthermore, the questions of the current study were related to the relationship, prediction, and effect of incidental exposure to e-learning platforms as an independent variable (IV) on Malaysian EFL students' interest in OER as a dependent variable (DV). Hence, the context or nature of the items was associated with a number of reading activities, reasons behind engaging in OER during COVID-19, time spent reading, or rating some preferable reading activities on the internet as demonstrated in Appendix 1.

Methodology

Research design and data-collection instrument

An online questionnaire was distributed to Malaysian EFL students majoring in a variety of undergraduate academic programs at University Malaysia Terengganu (refer to Table 1). The questionnaire was employed as a tool to gain insight into individual participants' experience with e-learning classes and their interest in reading widely on the internet during the pandemic. The survey was adapted from an online reading model developed and validated by Coiro and Dobler (2007). It has been cited by 1304 researchers and consists of a number of closed-ended questions, rating scale questions, and Likert scale questions. The researchers of the current work made a number of modifications that suited the target of the study during the pandemic. The changes were mainly done in two ways. First, the content of all questions was limited only to the pandemic experience and its close relationship to students' exposure to and interest in reading extensively on the internet. Second, a number of survey items (e.g., questions 9, 10, 11, and 12 as shown in Appendix 1) were revised to Likert scale questions instead of closed-ended questions in order to gain a satisfaction scale, i.e., to measure how much undergraduates agree or disagree with different statements about the research topic.

The online survey (Appendix 1) was piloted and validated by four academic staff researchers in the field of applied linguistics prior to its application. The process took place after conducting a pilot study for 33 Malaysian EFL undergraduates during the pandemic. Moreover, the web-based survey includes three sections: Section A relates to the Malaysian students' demographic profile, Section B and Section C were included an 18-item scale, including two constructs which are listed in Table 1 as follows:

	Research Variables	Items
Incidental Exposure to E-learning Classes	IV	04
Students' Interest in OER	DV	14

Table 1: Variables used in the current study

As seen in Table 1, number IV was comprised of four items measured utilizing a 5-point Likert scale to rate student engagement. The DV consists of 14 items taken from Coiro and Dobler (2007) and used a multiple-choice format. These fourteen items were measured by the SPSS software program to check their reliability. They exceeded the acceptable level of 0.700 for reliability recommended by George and Mallery (2016) as shown in Table 1.

As shown in Appendix 1, the four items related to the IV dealt only with the students' exposure to e-learning via online platforms, whereas the other fourteen items related to the DV described the activities arousing the interest of EFL university students towards OER during the pandemic. The Cronbach's Alpha reliability test for the two aforementioned variables was 0.790, i.e., the internal consistency of the IV and DV ranged between 0.735 and 0.780. These research measurements exceeded the acceptable level of 0.700 for reliability recommended by George and Mallery (2016). Therefore, this implied that the items elaborated were appropriate and reliable to gather data for the main research study.

Sampling and demographic profile

Creswell (2012) described a sample as "a subgroup of the target population that the researcher plans to study for generalizing about the target population" (p. 142). The participants of the present work were a sample of 255 Malaysian undergraduate EFL students who were studying in the public University Malaysia Terengganu. *Bahasa Melayu* was the participants' native language (L1) and English was their second language (L2). The majority of the respondents (68.2%) were female undergraduates and 31.7% male, majoring in various academic fields, and were under 30 years old (see Table 2). In addition, the Malaysian University English Test (MUET) was taken into consideration to discover the students' command of the English language. Therefore, the majority of the respondents (120) were modest users, who had band 3 in MUET with a percentage of 47.05%.

Due to the quantitative nature of the study and in order to collect information from the respondents who left the university because of the pandemic, a purposive sampling method (online survey) was employed based on the readiness and availability of the UMT undergraduate students who took part in the study via the internet services (Edgar & Manz, 2017; Taherdoost, 2016). Therefore, the researchers asked for assistance in collecting data from the Malaysian participants from two senior lecturers in the faculty who took part in the study, i.e., the deputy dean and the head of the English language-learning centre at University Malaysia Terengganu (UMT). This is because all the administrations and departments were closed due to the pandemic. Additionally, the majority of the students had left the university and gone home. However, the lecturers, including the ones who participated in the study still had mutual contact with a huge number of students from different faculties since they had taught them English for academic and specific purposes (EAP/ESP) using e-learning platforms. All participants were informed in advance of the objectives of the research and they were asked to provide their prior consent voluntarily before responding to the questionnaire. This was done by emailing the participants, sending them a Google form in which they indicated they had read the information and agreed to participate in the study. Finally, their data were collected and recorded on the Google Drive platform for analysis.

With regard to sample size, the current research followed the sampling table of (Bartlett et al., 2001) as a reference to deal with the study population. Furthermore, the population of the present study was 8,013 Malaysian undergraduate EFL students and their table determined that for a population of more than 8,000 people, a suitable sample is 209. Our sample for this present study was 255 Malaysian EFL undergraduates, and the sample size was adequate enough for conducting the current study. Table 2 shows the demographic profile of the students.

	Frequency (N=255)	Percentage (%)
Gender		
Male	81	31.76
Female	174	68.24
Total	255	100
Age		
30 years and below	255	100
Year of Study		
Year 1	134	52.54
Year 2	53	20.78
Year 3	65	25.49
Year 4	3	1.17
Study Programme		
Accounting	1	0.39
Business and Economics	62	24.31
Computer Science	1	0.39
Counseling	1	0.39
Fisheries and Food Sciences	48	18.82
Human Development	1	0.39
Humanities	1	0.39
Maritime Studies	38	14.90
Ocean Engineering Technology	34	13.33
Science and Marine Environment	67	26.27
Policy Management	1	0.39
MUET Band		
Band 1	4	1.56
Band 2	61	23.92
Band 3	120	47.05
Band 4	63	24.70
Band 5	6	2.35
Band 6	1	0.39

Table 2: Respondents' demographic profile (N= 255)

Data analysis

The analysis procedure of the data for this research work was conducted in two phases. The first analysis phase included a number of descriptive statistics collected from an online survey platform to determine informative feedback about certain levels of the factors which coincided with the pandemic, namely, the exposure to e-learning classes and students' interest in reading extensively on the internet. The second stage of statistical analysis utilized the Pearson coefficient correlation and ANOVA to explore the interrelationship and impact between the variables to test the research hypotheses. The data were collected and analysed via Statistical Package for the Social Sciences (SPSS) (Version 25).

Findings

In terms of the frequency of OER, Malaysian undergraduate students in this study were moderate readers. One hundred and twenty-four students (48.6%) tended to read between one and three hours per day, followed by 53 students (20.8%) who were engaged in OER over a period of time exceeding three hours. Another 78 students (30.6%) claimed that they spent less than one hour a day in reading extensively on the internet.

According to Table 3, the majority of the respondents expressed their agreement with all statements. One hundred and sixty-two students (64%) stated that they liked to read widely on the internet using various English reading resources during the pandemic, followed by 30% to 34% of the respondents who indicated that they rarely read on the internet. In contrast, between 2% to 6% of the participants claimed that they never actively engaged in OER during the pandemic. In terms of exchanging different OER materials, 54.5% of the respondents indicated that they sometimes shared what they read in English on the internet with their classmates, followed by 31% of those who rarely shared online reading materials with each other. However, 8.6% of the respondents claimed that they never engaged in the mentioned reading process. Furthermore, 50% of the undergraduate respondents (127) noted that they could understand and predict the content of various online reading resources. Thirty-three percent of the respondents (84) noted that they were sometimes able to comprehend the gist of an online text, whereas 1% of the students claimed that they are never good at understanding and predicting relevant reading content while reading on the internet.

I engage in the following OER activities using online platforms during COVID-19	Always		Sometimes		Rarely		Never	
	f	%	F	%	f	%	F	%
I like to read widely on the internet	162	64	0	0	87	34	6	2
I have read on the internet a number of English materials since the start of COVID-19	163	64	0	0	76	30	16	6
I share what I read in English on the internet with my friends	15	5.9	139	54.5	79	31	22	8.6
I am good at finding various online English reading materials	156	61	0	0	90	35	9	4
I am good at understanding and predicting the content of OER materials	127	50	84	33	42	16	2	1

Table 3: Frequency and percentage of OER activities during COVID-19

I tems	Mean	Std Dev.
To play online video games	3.89	2.56
To search and read certain English topics on the internet	2.91	1.840
To access social media such as Facebook and Twitter, etc.	2.60	1.917
To browse various English Web pages	2.76	1.808
To download music and films on the internet	2.58	1.886
To read English headlines and/or watch English news	3.18	1.904
To read English-graded readers	3.33	2.028

Table 4: Mean scores of frequency of using various internet activities during the pandemic

Table 4 indicates that spending time playing video games on the internet and reading a number of online English-graded readers was very high with a mean score of 3.89 and 3.33 respectively. Likewise, the respondents were interested in reading various news headlines written in English, engaging in reading some topics on the internet and browsing various web pages with medium mean scores of 3.18, 2.91, and 2.76 respectively. On the other hand, the respondents show less interest in some internet activities via social media networking websites, for instance, Facebook or Twitter (mean, 2.60). Similarly, downloading music or films from the internet recorded the lowest score item with a mean result of 2.58.

Items	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
	f	%	f	%	f	%	f	%	F	%
E-learning study sessions motivated me to read widely on the internet	54	21.2	109	42.7	74	29	10	4	8	3.1
It is essential to increase my exposure to OER for fun during COVID-19	46	18	123	48.2	71	27.8	9	3.5	6	2.5
The exposure to online classes gave me help to become an independent reader	21	8.2	103	40.4	114	44.7	10	3.9	7	2.8
If the reading content is interesting, I keep reading despite the language difficulty	53	20.8	128	50.2	57	22.4	8	3.1	9	3.5

Table 5: Incidental exposure to e-learning classes during the pandemic

According to Table 5, the majority of the respondents agreed with all statements given except for Item 3 where they presented their neutrality and approval in close proportions (44.7% and 40.4 respectively). Moreover, 42.7 % of the students agreed that online study sessions with their teachers had helped them to extend their reading on the internet. Likewise, the respondents agreed that it was necessary to increase their exposure to e-learning classes (40.4%) during the pandemic. They also agreed that they kept reading interesting materials in spite of the English words being difficult to comprehend (50.2%).

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
Having Time	32	12.5	12.5	12.5
Loving to read	22	8.6	8.6	21.2
Free resources	30	11.8	11.8	32.9
Assignments	171	67.1	67.1	100.0
Total	255	100.0	100.0	

Table 6: The main reason behind engaging in OER during the pandemic

As is shown in Table 6, the majority of the students (171) stated that doing the reading and written assignments were the main reasons for their engaging in OER during the pandemic with a percentage of 67.1%. The availability of having time and free reading resources recorded a low percentage (12.5% and 11.8% respectively). Likewise, the respondents showed very little love and interest in free voluntary reading (8.6%).

Correlation analysis

Research Question 1 is *How are incidental exposure and students' interest in OER related?* In order to answer the first research question, a two-tailed Pearson Correlation coefficient *r* was undertaken. As shown in Table 7, a significant, strong, positive correlation with two stars at the 0.01 level ($r = .660$; $p = .000$) was found between incidental exposure to e-learning sessions and students' interest in OER. Evans (1996) suggested that a correlation that is greater than 0.60 is classified as a strong one. Likewise, Cohen (1988) stated that, in behavioural sciences, a correlation *r* that is equal to 0.50 is commonly seen as representing a high 'correlational effect size' (p. 80). Therefore, the null hypothesis (H_0) could be rejected since the *p* value was statistically significant ($p = .000$) and less than .005; instead, the alternative hypotheses (H_a) were accepted. This suggests that those students who had incidental exposure to online sessions also developed an interest in ER through the internet.

		OER Interest
Exposure to online sessions	Pearson Correlation Sig. (2-tailed)	.660** .000

** . Correlation is significant at the 0.01 level (2-tailed).

Table 7: Correlation among the independent variable and students' interest in OER

Research Question 2 was: *To what extent does incidental exposure to e-learning contribute to predicting students' interest in OER?* and Research Question 3 was *To what level does incidental exposure to e-learning affect students' interest in OER?* For addressing these research questions, the researchers administered the standard multiple regression analysis, and to test its validity, the ANOVA value can be viewed in Table 8. The regression analysis and its findings appear in Tables 8 and 9.

R	R ²	Adjusted R ²	Std. Error of the Estimate	df	ANOVA		
					Mean Square (Regression)	F	p
.660	.436	.434	.28094	1	15.424	195.420	.000

Table 8: Prediction summary and ANOVA values of all students' responses (N=255)

Since the 'f' statistics of ANOVA analysis were found to be positive and statistically significant at the level of 0.001 ($R^2 = .436$), $F (195.420)$, $p = .000$, the model of run regression was deduced to be well-fitted for the research data with regard to Malaysian EFL undergraduate students. The values of R , multiple correlation coefficient, i.e., .660 and R -Square ($R^2 = .436$) expressed an accepted prediction level concerning this study, i.e., how much the independent variable (incidental exposure to e-learning classes) expounded the variance of the outcome variable (OER). Based on the above results, it can be said that the IV was found to have a logical and acceptable contribution towards the dependent variable. Therefore, it has a statistically significant and major effect on explaining the dependent variable, OER.

	Unstandardized Coefficients B Beta (β)	Std. Error	Standardized Coefficients Beta (β)	t	Sig.
(Constant) ^b	1.233	.082		15.082	.000
Exposure to online sessions	.497	.036	.660	13.979	.000

Dependent Variable: Interest b. Predictors: (Constant).

Table 9: Coefficients of the two variables regarding students' responses

As presented in Table 8, the value R , multiple correlation coefficient, .660 showed an acceptable degree of prediction for the study. It also demonstrated that incidental exposure to e-learning alone explained $(.660)^2 = 43.60\%$ of the variance in students' interest in OER. From the above discussion, we can conclude that the incidental exposure to e-learning explained the acceptable degree of unique prediction ($\approx 44\%$) in students' interest in OER. Research Question 3 was formulated to investigate the degree of the effect of incidental exposure to e-learning on students' interest in OER. As presented in Table 9, incidental exposure to e-learning had the Beta value ($\beta = .660$; $t = 13.979$, $p = .000$) (significant) ($p < .001$). This implied that the incidental exposure to e-learning affected to an acceptable extent in explaining the dependent variable, students' interest in OER.

Discussion

This research aimed at investigating the effect of incidental exposure to online platforms on Malaysian EFL undergraduates' interest in OER in conjunction with the COVID-19 pandemic. To this end, 255 university students participated in the study by completing an online survey designed to evaluate their interest in relation to the study. Concerning the discussion we have done so far, the points below come to the fore.

First, the findings of the present study primarily supported the important impact of e-learning platforms on promoting the participants' interest in reading extensively on the internet during the pandemic. Thus, the obtained result established that the global lockdown positively influenced the students' interest in OER using UMT undergraduates as an example. This result is consistent with the results of other previous studies in the literature supporting that the global lockdown had a positive influence on the students' reading habits (Adeyemi, 2021) and their reading behaviour (Reimer et al., 2021).

Second, the relationship between incidental exposure to e-learning and students' interest in OER was found to be high, positive and statistically significant ($r = .660$; $p = .000$) at the 0.01 level. As presented in Table 3, a large number of undergraduates (162) reported that they liked to read a wide variety of English materials on the internet with a percentage of 64%. This result is dissimilar to one of the research findings revealed by (Jafre Zainol Abidin et al., 2011) which stated that Malaysian students were rarely engaged in online reading materials (such as e-books, stories or novels, comic strips, online news, or online magazines) with a mean percentage score of 32.9%. In this regard, the researchers of the current work have not found a single study in the Malaysian context after 2011 that discusses student engagement in OER since the area of the topic may still be new in the Malaysian context. However, we conducted this study to make a comparison with two well-known studies Jafre Zainol Abidin et al. (2011) and Pandian (2000). The world has witnessed a rapid technological evolution, but we believe there are still some possible negative outcomes of this technology, such as playing online video games and using social media, which could negatively affect the students' interest in OER. (Vázquez-Cano et al., 2020).

In a similar vein, the latter finding (Jafre Zainol Abidin et al., 2011) supports Pandian's (2000) study which concluded that "Malaysian students were reluctant to read for information or pleasure" (p. 3). Third,

the incidental exposure to e-learning sessions accounted for the unique, significant, and acceptable prediction of students' interest in OER. Based on Table 8, the data values of R [.660] and R^2 (.436), 43.60% of the variance in students' interest in OER] were found to be positive and statistically significant at the level of 0.001 ($p = .000$). Therefore, the mentioned value ($R^2 = .436$) expressed an acceptable degree of unique prediction ($\approx 44\%$) of EFL Malaysian students' interest to read extensively on the internet based on their incidental exposure to e-learning sessions during the pandemic. In this regard, Palmer and O'Connell (2009) insisted that "the higher the value is for R^2 , the less error or unexplained variance and, therefore, the better prediction. R^2 is dependent on the multiple correlation coefficient (R), which describes the relationship between the observed and predicted criterion scores" (p. 23). Likewise, Table 9 indicates that the students' incidental exposure to e-learning sessions had the Beta value ($\beta = .660$; $t = 13.979$, $p = .000$) which is also significant ($p < .001$).

In terms of the time spent on ER on the internet, Table 2 illustrates that 30.6 % of UMT students tended to read less than one hour a day, whereas 48.6% used to read between one to three hours, and 20.8% of the respondents spent more than 3 hours in OER. Therefore, UMT undergraduates are regarded as moderate readers during the pandemic. This is partly in line with previous Malaysian research findings (Jafre Zainol Abidin et al., 2011; Saaid & Wahab, 2014) that are roughly similar to this study regarding the number of hours students spent per day on online reading. In contrast, the results we obtained differ significantly from the research findings of Khairuddin (2013) which were conducted on 83 Malaysian students. Those findings showed that only three students out of the total number liked to read various reading materials in English on a daily basis.

The next point is that students who had incidental exposure to e-learning during COVID-19 also developed an interest in OER. This point focused on whether there was an improvement in students' interest in reading extensively on the internet while they were exposed to e-learning sessions during the pandemic. The majority of undergraduates (171, 67%) at the University Malaysia Terengganu (UMT) stated that doing reading and writing assignments given by their teachers were the main reasons that motivated them to engage in OER and extend their English reading interest during the pandemic. This is not in agreement with the findings of Saaid and Wahab (2014) which mainly supported the claim that the primary reason for stimulating Malaysian undergraduates to read more is because of leisure or fun which had the highest percentage of 69.5%. Likewise, Tyagi et al. (2020) stated that the majority of Indian undergraduates read to entertain themselves and get 'peace of mind' during the global lockdown. Moreover, ERI-Lectura (2020) mentioned that most Spanish students did a lot of reading during home confinement to be more aware of the disease and during leisure time. Saaid and Wahab (2014) reported that conducting academic research and study purposes recorded the lowest rate of interest for Malaysian students (18.1% and 12.7% respectively). There are also a number of studies that have, to some extent, similarities with our findings. Adeyemi (2021) stated that a considerable number of Nigerian students, during the lockdown, was widely engaged in reading using various technological devices. This was to prevent boredom, pursue academic studies, and prepare for examinations. In a similar way, other researchers (Issa et al., 2012; Owusu-Acheaw, 2014) noted that university students had an interest to read more to do well in examinations. Finally, Pandian (2000) also explained that a large number of Malaysian students were reluctant to read extensively for knowledge or fun since their main reason for reading was to pass exams.

The last point is that the incidental exposure to e-learning sessions affected the acceptable level (the value of r is more than .50) of explaining students' interest in OER. Therefore, this point is not mainly related to prediction as a statistical term or improvement in the students' interest in OER, but it has mainly the connection with the term "effect" that refers to intervention, experimental study, or Beta value under multiple regression based on the obtained data value. Moreover, the respondents expressed their engagement to read English-graded readers on the internet which aroused their interest with a high mean score of 3.33. This is partly in line with the finding of Milliner and Cote (2015) who stated that 80% of the respondents agreed and strongly agreed that graded reader materials motivated them to extend their reading in English. Furthermore, a considerable number of UMT students (181, 71%) agreed that they kept reading diverse English materials in spite of the English language being sometimes difficult for them. This result is consistent with the research conducted by a number of researchers (Bahmani & Farvardin, 2017; Niazifar & Shakibaei, 2019) who noticed that their students were strongly encouraged to read and guess the meaning of some challenging English texts, such as reading very difficult graded readers books. However, their students seemed inquisitive about learning and figuring out the contextual meaning of unknown English words. In contrast, the latter finding is not in line with other previous research works

highlighted in the literature (Annamalai & Muniandy, 2013; Huang, 2001; Saito et al., 1999; Sellers, 2000) which claimed that the higher the difficulty level of reading materials, the higher stress the students were found to experience during the reading process.

Conclusion

According to a number of previous and current studies conducted in the field of ER, there is no doubt at all that reading for pleasure has a great importance that cannot be overlooked on a linguistic, educational and cultural side, especially when it comes to off-campus learning. Based on the obtained findings of this study, there was a close connection between the incidental exposure to e-learning courses and OER during the lockdown caused by the pandemic. Therefore, UMT undergraduate students were positively influenced in reading widely on the internet. Moreover, engagement in reading a variety of academic English materials on the internet during the pandemic motivated a large number of students (162, 64%) to frequently read on the internet, and therefore, to acquire a new reading habit. It was established in the study that a high percentage of undergraduates (67%) at University Malaysia Terengganu (UMT) insisted that carrying out reading and writing assignments given by their teachers was one of the major motivational reasons that stimulated them to engage in reading widely on the internet. Likewise, UMT undergraduates also showed special interest in reading both online English-graded readers and news headlines during the lockdown. Therefore, the independent variable, the incidental exposure to online classes during the pandemic, not only made the strongest unique significant contribution to explaining the dependent variable, i.e., students' interest in OER, but it also had the largest positive impact in explaining the aforementioned outcome variable.

Overall, studies of OER in the Malaysian context and its relation to students' interest and engagement during the pandemic are still somewhat limited and further research is needed. This study has several limitations. First, the obtained findings were only based on a quantitative design that led to exploring a number of detailed information about online reading frequency, the number of hours spent on OER, or reading activities on the internet in conjunction with e-learning classes. Thus, triangulation of the current quantitative findings with a quasi-experiment and qualitative study is highly needed and recommended. This may help to understand some personal opinions or relevant practical experiences about the exposure to e-learning platforms on students' interest in OER. Therefore, the last part of the found results might further aid instructors or decision-makers to choose appropriate teaching materials which may, to some extent, help Malaysian students to extend their OER in parallel with the e-learning systems. Second, since the study sample (255) was comprised of both undergraduate male and female students from different academic disciplines, future studies could focus on a comparative study between both genders in relation to the topic. Third, further research could achieve different results if other types of students (postgraduates or secondary school learners) participated with a larger sample. Consequently, this could help to get more reliable findings related to e-learning platforms and OER. One of the limitations is that the data were self-reported, and the researchers solely depended on the responses obtained from the respondents. Last but not least, this study focused on the potential impact of incidental exposure to e-learning platforms on OER and its relationship to undergraduate students' interests. Future studies will examine other mediating factors related to OER, including autonomy, motivation, anxiety, or attitudes.

References

- Adeyemi, I. O. (2021). Influence of Covid-19 lockdown on reading habit of Nigerians: A case study of Lagos State inhabitants. *Reading and Writing Quarterly*, 37(2), 157–168. <https://doi.org/10.1080/10573569.2020.1857891>
- Al Murshidi, G. (2014). UAE university male students' interests impact on reading and writing performance and improvement. *English Language Teaching*, 7(9), 57–63. <https://doi.org/10.5539/elt.v7n9p57>
- Al-Rahmi, W. M., Othman, M. S., & Yusuf, L. M. (2015). The effectiveness of using e-learning in Malaysian higher education: A case study Universiti Teknologi Malaysia. *Mediterranean Journal of Social Sciences*, 6(5S2), 625–637. <https://doi.org/10.5901/mjss.2015.v6n5s2p625>
- Annamalai, S., & Muniandy, B. (2013). Reading habit and attitude among Malaysian polytechnic students. *International Online Journal of Educational Sciences*, 5(1), 32–41. https://iojes.net/?mod=tammetin&makaleadi=&makaleurl=IOJES_946.pdf&key=41147
- Azmuddin, R. A., Nor, F. M. N., & Hamat, A. (2017). Metacognitive online reading and navigational strategies by science and technology university students. *GEMA Online Journal of Language Studies*, 17(3), 18–36. <http://ejournal.ukm.my/gema/issue/view/999>
- Bahmani, R., & Farvardin, M. T. (2017). Effects of different text difficulty levels on EFL learners' foreign language reading anxiety and reading comprehension. *Reading in a Foreign Language*, 29(2), 185–202. <https://files.eric.ed.gov/fulltext/EJ1157550.pdf>
- Bamford, J., & Day, R. R. (2004). *Extensive reading activities for teaching language*. Cambridge University Press.
- Bartlett, J. E., Kotrlik, J. W., & Higgins, C. C. (2001). Organizational research: Determining appropriate sample size in survey research. *Information Technology, Learning, and Performance Journal*, 19(1), 43–50.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Routledge.

- Coiro, J. (2003). Exploring literacy on the internet comprehension to encompass new literacies. *The Reading Teacher*, 56(5), 458–464. <https://www.jstor.org/stable/20205224>
- Coiro, J. (2012). Understanding dispositions toward reading on the internet. *Journal of Adolescent & Adult Literacy*, 55(7), 645–648. <https://doi.org/10.1002/JAAL.00077>
- Coiro, J., & Dobler, E. (2007). Exploring the online reading comprehension strategies used by sixth-grade skilled readers to search for and locate information on the internet. *Reading Research Quarterly*, 42(2), 214–257. <https://doi.org/10.1598/rrq.42.2.2>
- Creswell, J. W. (2012). *Educational research: Planning, conducting, evaluating, quantitative and qualitative research* (4th ed.). Pearson.
- Day, R. & Bamford, J. (2002). Top ten principles for teaching extensive reading. *Reading in a Foreign Language*, 14(2), 136–141. https://scholarspace.manoa.hawaii.edu/bitstream/10125/66761/1/14_2_10125_66761_day.pdf
- Dhawan, S. (2020). Online learning: A panacea in the time of COVID-19 crisis. *Journal of Educational Technology Systems*, 49(1), 5–22. <https://doi.org/10.1177/0047239520934018>
- Dwivedi, A., Dwivedi, P., Bobek, S., & Sternad Zabukovšek, S. S. (2019). Factors affecting students' engagement with online content in blended learning. *Kybernetes*, 48(7), 1500–1515. <https://doi.org/10.1108/K-10-2018-0559>
- Eccles, J. S. (2005). Subjective task value and the Eccles et al. Model of Achievement-Related choices. In A. J. Elliot & C. S. Dweck (Eds.), *Handbook of competence and motivation* (pp. 105–121). Guilford.
- Edgar, T. W., & Manz, D. O. (2017). *Research methods for cyber security*. Syngress.
- ERI-Lectura. (2020). *Habitos lectores durante el confinamiento por la COVID-19*. RODERIC (Universitat de Valencia). <http://roderic.uv.es/handle/10550/74797>
- Evans, J. D. (1996). *Straightforward statistics for the behavioral sciences*: Thomson Brooks/ Cole.
- Farrell, P. (2004). School psychologists: Making inclusion a reality for all. *School Psychology International*, 25(1), 5–19. <https://doi.org/10.1177/0143034304041500>
- Fox, E., & Alexander, P. A. (2003). *Reading, interest, and the model of domain learning: A developmental model of interest, knowledge, and strategy use in text comprehension* [Conference presentation]. American Educational Research Association, San Diego, CA.
- Frazel, M. (2011). *Digital storytelling guide for educators*. International Society for Technology in Education.
- George, D., & Mallery, P. (2016). *IBM SPSS statistics 23 step by step: A simple guide and reference* (13th ed.). Routledge.
- Gerlich, R. N., Browning, L., & Westermann, L. (2011). E-readers on campus: Overcoming product adoption issues with a Tech-Savvy demographic. *Journal of Higher Education Theory and Practice*, 11(4), 41–52. <http://www.na-businesspress.com/JHETP/GerlichWeb11-4.pdf>
- Gilbert, B. (2015). *Online learning revealing the benefits and challenges* (No. 303) [Master's thesis, St. John Fisher College]. https://fisherpub.sjfc.edu/education_ETD_masters/303
- Gilbert, J. (2014). *Exploring ESL students' perceptions of their digital reading skills*. [Unpublished doctoral dissertation], University of Nottingham. http://eprints.nottingham.ac.uk/14080/1/Gilbert_Re-formated_Thesis_Draft.pdf
- Grabe, W., & Stoller, F. L. (2011). *Teaching and researching reading* (2nd ed.). Routledge.
- Hawkins, B. L., & Rudy, J. A. (2007). Educause core data service: Fiscal year 2007 summary (Report No. 111). http://media.clemson.edu/ccit/assessment/Core_Data_Survey_Summary_Report_2007.pdf
- Helping your child become a reader. (2005). United States Department of Education <https://www2.ed.gov/parents/academic/help/reader/reader.pdf>
- Hendal, B. A. (2020). Kuwait University faculty's use of electronic resources during the COVID-19 pandemic. *Digital Library Perspectives*, 36(4), 429–439. <https://doi.org/10.1108/DLP-04-2020-0023>
- Horst, M. (2005). Learning L2 vocabulary through extensive reading: A measurement study. *Canadian Modern Language Review*, 61(3), 355–382. <https://doi.org/10.3138/cmlr.61.3.355>
- Huang, H.-C. (2001). *Chinese university foreign language students' anxiety about reading in English* (Publication No. 3051922) [Doctoral dissertation, Washington State University]. ProQuest Dissertations & Theses Global.
- Huang, H.-C. (2013). E-reading and e-discussion: EFL learners' perceptions of an e-book reading program. *Computer Assisted Language Learning*, 26(3), 258–281. <https://doi.org/10.1080/09588221.2012.656313>
- Huang, Y.-C. (2015). Why don't they do it? A study on the implementation of extensive reading in Taiwan. *Cogent Education*, 2(1). <https://doi.org/10.1080/2331186X.2015.1099187>
- Issa, A. O., Aliyu, M. B., Akangbe, R. B., & Adedeji, A. F. (2012). Reading interests and habits of the Federal Polytechnic, OFFA, students. *International Journal of Learning and Development*, 2(1), 470–486. <https://doi.org/10.5296/ijld.v2i1.1470>
- Jafre Zainol Abidin, M., Pour-Mohammadi, M., & Jesmin, A. (2011). A survey of online reading habits of rural secondary school students in Malaysia. *International Journal of Linguistics*, 3(1). <https://doi.org/10.5296/IJL.V3I1.1045>
- Johnson, A. M., Jacovina, M. E., Russell, D. G., & Soto, C. M. (2016). Challenges and solutions when using technologies in the classroom. In S. A. Crossley & D. S. McNamara (Eds.) *Adaptive educational technologies for literacy instruction* (pp.13-29). Routledge.
- Jusoh, Z., & Abdullah, L. (2015). Online survey of reading strategies (OSORS): Students' online reading in academic context. *Malaysian Journal of Distance Education*, 17(2), 67–81. http://mjde.usm.my/vol17_2_2015/MJDE%201725.pdf
- Kaufman, S.B. and Gregoire, C. (2016). *Wired to create: Unraveling the mysteries of the creative mind*. TarcherPerigee.
- Kearsley, G., & Schneiderman, B. (1998). Engagement theory: A framework for technology-based teaching and learning. *Educational Technology*, 38(5), 20–23. <http://www.jstor.org/stable/44428478>
- Khairuddin, Z. (2013). A study of students' reading interests in a second language. *International Education Studies*, 6(11), 160–170. <https://doi.org/10.5539/ies.v6n11p160>
- Kikas, E., Silinskas, G., & Soodla, P. (2015). The effects of children's reading skills and interest on teacher perceptions of children's skills and individualized support. *International Journal of Behavioral Development*, 39(5), 402–412. <https://doi.org/10.1177/0165025415573641>
- Krashen, S. (2004). *The power of reading*. Heinemann.
- Lai, J.-Y., & Chang, C.-Y. (2011). User attitudes toward dedicated e-book readers for reading. *Online Information Review*, 35(4), 558–580. <https://doi.org/10.1108/14684521111161936>
- Long, D., & Szabo, S. (2016). E-readers and the effects on students' reading motivation, attitude and comprehension during guided reading. *Cogent Education*, 3(1). <https://doi.org/10.1080/2331186X.2016.1197818>

- Lowenhaupt, R., & Hopkins, M. (2020). Considerations for school leaders serving US immigrant communities in the global pandemic. *Journal of Professional Capital and Community*, 5(3/4), 375-380. <https://doi.org/10.1108/JPC-05-2020-0023>
- McKool, S. S. (2007). Factors that influence the decision to read: An investigation of fifth grade students' out-of-school reading habits. *Reading Improvement*, 44(3), 111-132. link.gale.com/apps/doc/A170278589/AONE?u=googlescholar&sid=bookmark-AONE&xid=658b5df8
- Milliner, B., & Cote, T. (2015). Mobile-based extensive reading: An investigation into reluctant readers. *International Journal of Computer-Assisted Language Learning and Teaching*, 5(4). <https://doi.org/10.4018/ijcallt.2015100101>
- Mohamad, M., Shaharuddin, S., Khalid, F., & Hamdan, N. A. (2015). Hypermedia reading strategies of TESL undergraduate students in Malaysia. *The Turkish Online Journal of Educational Technology*, (Special Issue 1), 301-310.
- Mohd Asraf, R., & Ahmad, I. S. (2003). Promoting English language development and the reading habit among students in rural schools through the Guided Extensive Reading program. *Reading in a Foreign Language*, 15(2), 83-102. <https://doi.org/10.125/66772>
- Myrberg, C., & Wiberg, N. (2015). Screen vs. paper: What is the difference for reading and learning? *UKSG Insights*, 28(2), 49-54. <https://doi.org/10.1629/uksq.236>
- Nation, P. (2015). Principles guiding vocabulary learning through extensive reading. *Reading in a Foreign Language*, 27(1), 136-145. <https://nflrc.hawaii.edu/rfl/item/320>
- Nation, P., & Wang, K. M. (1999). Graded readers and vocabulary. *Reading in a Foreign Language*, 12, 355-380. <https://doi.org/10.26686/wgtn.12560366.v1>
- Niazifar, A., & Shakibaei, G. (2019). Effects of different text difficulty levels on Iranian EFL learners' foreign language reading motivation and reading comprehension. *Asian-Pacific Journal of Second and Foreign Language Education*, 4(1), 1-18. <https://doi.org/10.1186/s40862-019-0070-x>
- Mohd Noor, N., Azman, H., Mohd Nor, N. F., Hamat, A., & Bakar, N. A. (2011). Development and evaluation of the interactive English Language Literacy System (i-ELLS) for online reading comprehension. *The Southeast Asian Journal of English Language Studies*, 17, 19-30. <http://ejournals.ukm.my/3l/article/view/985/899>
- O'Byrne, W. I. (2018). Empowering students as critical readers and writers in online spaces. In E. Ortlieb, E. H. Cheek Jr., & P. Semington (Eds.), *Best practices in teaching digital literacies* (pp. 233-250). Emerald. <https://doi.org/10.1108/S2048-045820180000009018>
- Oakhill, J. V., & Petrides, A. (2007). Sex differences in the effects of interest on boys' and girls' reading comprehension. *British Journal of Psychology*, 98(2), 223-235. <https://doi.org/10.1348/000712606X117649>
- Owusu-Acheaw, M. (2014). Reading habits among students and its effect on academic performance: A study of students of Koforidua Polytechnic. *Library Philosophy and Practice*, 1-22. <https://digitalcommons.unl.edu/libphilprac/1130>
- Palmer, P. B., & O'Connell, D. G. (2009). Regression analysis for prediction: Understanding the process. *Cardiopulmonary Physical Therapy Journal*, 20(3), 23-26.
- Pandian, Ambigapathy. (2000). *A study on readership behaviour among multi-ethnic, multi-lingual Malaysian students* [Conference presentation]. 7th International Literacy and Education Research Network (LERN) Conference on Learning, RMIT University, Melbourne.
- Pianta, R. C., Hamre, B. K., & Allen, J. P. (2012). Teacher-student relationships and engagement: Conceptualizing, measuring, and improving the capacity of classroom interactions. In S. L. Christenson, A. L. Reschly, & C. Wylie (Eds.), *Handbook of research on student engagement* (pp. 365-386). Springer.
- Pigada, M., & Schmitt, N. (2006). Vocabulary acquisition from extensive reading: A case study. *Reading in a Foreign Language*, 18(1), 1-28. <https://nflrc.hawaii.edu/rfl/item/114>
- Rahimi, M., & Yadollahi, S. (2017). Effects of offline vs. online digital storytelling on the development of EFL learners' literacy skills. *Cogent Education*, 4(1), 1285531. <https://doi.org/10.1080/2331186X.2017.1285531>
- Reimer, D., Smith, E., Andersen, I. G., & Sortkær, B. (2021). What happens when schools shut down? Investigating inequality in students' reading behavior during Covid-19 in Denmark. *Research in Social Stratification and Mobility*, 71. <https://doi.org/10.1016/j.rssm.2020.100568>
- Renandya, W. A., Krashen, S., & Jacobs, G. M. (2018). The potential of series books: How narrow reading leads to advanced L2 proficiency. *Language Education and Acquisition Research Network Journal*, 11(2), 148-154.
- Richards, J.C., & Schmidt, R. (2002). *Longman dictionary of language teaching and applied linguistics* (3rd ed.). Pearson.
- Riviere, H. (2016). Using student engagement theory to explore inclusion for pupils with SEN in mainstream schools in England. In B. Morris, T. Perry, & M. Hand (Eds.), *Papers from the Education Doctoral Research Conference*, Saturday, 28 November 2016 University of Birmingham, (pp. 115-121). <http://epapers.bham.ac.uk/2150/1/Riviere.pdf>
- Romly, R., Maarof, N., & Badusah, J. (2014). Extensive reading on the internet among Malaysian ESL students. *International Journal of Education and Research*, 2(5), 123-134. <https://www.ijern.com/journal/May-2014/12.pdf>
- Romly, R., Rahman, S. A., Supie, H. S. M., & Nasharudin, S. N. S. (2018). Difficulties encountered by low proficiency ESL students in reading online academic texts. *International Journal of Academic Research in Business and Social Sciences*, 8(2), 490-501. <http://dx.doi.org/10.6007/IJARBS/v8-i2/3897>
- De Rycker, A., & Ponnudurai, P. (2011). The effect of online reading on argumentative essay writing quality. *GEMA Online Journal of Language Studies*, 11(3), 147-162. <https://ejournal.ukm.my/gema/article/view/47/41>
- Saaid, S. A., & Wahab, Z. A. (2014). The impact of digital-based materials on undergraduate reading habit. *International Journal of Social Science and Humanity*, 4(3), 249-253. <https://doi.org/10.7763/IJSSH.2014.V4.357>
- Saito, Y., Garza, T. J., & Horwitz, E. K. (1999). Foreign language reading anxiety. *The Modern Language Journal*, 83(2), 202-218. <https://doi.org/10.1111/0026-7902.00016>
- Samsuddin, S. F., Mohamed Shaffril, H. A., Bolong, J., & Mohamed, N. A. (2019). Understanding the reading habit and attitudes among the rural community in low literacy rate areas in Malaysia: Rural library perspectives. *Library Management*, 41(1), 39-52. <https://doi.org/10.1108/LM-06-2019-0037>
- Sarker, M. F. H., Al Mahmud, R., Islam, M. S., & Islam, M. K. (2019). Use of e-learning at higher educational institutions in Bangladesh: Opportunities and challenges. *Journal of Applied Research in Higher Education*, 11(2), 210-223. <https://doi.org/10.1108/JARHE-06-2018-0099>
- Schiefele, U., Schaffner, E., Möller, J., Wigfield, A. (2012). Dimensions of reading motivation and their relation to reading behavior and competence. *Reading Research Quarterly*, 47(4), 427-463. <https://doi.org/10.1002/RRQ.030>

- Sellers, V. D. (2000). Anxiety and reading comprehension in Spanish as a foreign language. *Foreign Language Annals*, 33(5), 512–520. <https://doi.org/10.1111/j.1944-9720.2000.tb01995.x>
- Singh, V., & Thurman, A. (2019). How many ways can we define online learning? A systematic literature review of definitions of online learning (1988-2018). *American Journal of Distance Education*, 33(4), 289-306. <https://doi.org/10.1080/08923647.2019.1663082>
- Subramaniam, S., & Zainal, Z. (2016). The effect of extensive reading on vocabulary acquisition. *LSP International Journal*, 3(1), 63–82. <https://doi.org/10.11113/lspi.v3n1.35>
- Taherdoost, H. (2016). Sampling methods in research methodology: How to choose a sampling technique for research. *International Journal of Academic Research in Management (IJARM)*, 5(2), 18–27. <http://elvedit.com/journals/IJARM/wp-content/uploads/Sampling-Method-in-Research-Methodology-How-to-Choose-a-Sampling-Technique-for-Research.pdf>
- Tan, D. A. L. (2016). *Investigating guided extensive reading and vocabulary knowledge performance among remedial ESL learners in a public university in Malaysia* [Unpublished doctoral dissertation]. Universiti Sains Malaysia.
- Tan, D. A. L., Ambigapathy, P., & Paramaswari, J. (2018). READ+ vs. READ: Investigating extensive reading and vocabulary knowledge development among Malaysian remedial ESL learners. *The Journal of Asia TEFL*, 15(2), 349–364. <https://doi.org/10.18823/asiatefl.2018.15.2.6.349>
- Tracey, D., & Morrow, L. (2006). *Lenses on reading: An introduction to theories and models*. Guilford.
- Tyagi, K., Gaur, G., & Sharma, M. (2020). Readership among college students during COVID-19 lockdown: A cross-sectional survey in a northern city of India. *Indian Journal of Preventive and Social Medicine*, 51(2), 72–76.
- Vázquez-Cano, E., Gómez-Galán, J., Infante-Moro, A., & López-Meneses, E. (2020). Incidence of a Non-Sustainability Use of Technology on Students' Reading Performance in Pisa. *Sustainability (Switzerland)*, 12(2), 1–15. <https://doi.org/10.3390/su12020749>
- Vun, J. L. Y., & Chu, A. W. S. (2017). The relationship between leisure reading habits, vocabulary and writing of English language learners (ELLs). *Language Education in Asia*, 8(2), 157–175. http://dx.doi.org/10.5746/LEiA/17/V8/I2/A03/Lee_Wong
- Wagner, T., & Compton, R.A. (2015). *Creating innovators: The making of young people who will change the world*. Scribner.
- Yamashita, J. (2008). Extensive reading and development of different aspects of L2 proficiency. *System*, 36(4), 661–672. <https://doi.org/10.1016/j.system.2008.04.003>
- You, J. W., & Kang, M. (2014). The role of academic emotions in the relationship between perceived academic control and self-regulated learning in online learning. *Computers and Education*, 77, 125–133. <https://doi.org/10.1016/j.compedu.2014.04.018>

Appendix 1

Student Questionnaire about Reading on the Internet during COVID-19

Dear respected respondents,

As part of our research work on online extensive reading and its long-term benefits in arousing undergraduate students' interest in learning and reading academic articles on the internet, particularly in conjunction with their exposure to e-learning platforms during the COVID-19 pandemic, we would like to uncover your views and experiences on this topic. Please relax and take your time to complete this questionnaire.

Your participation, time, effort, and support in this study are highly appreciated.

Thank you in advance,

The researchers

Section A: The Students' Demographic Profile

Section B: Students' Interest in Online Extensive Reading

1. Do you like to read widely on the internet?

- Yes
- No
- Not much

2. Have you read on the internet a number of articles, stories, novels, or books from the start of the lockdown until now?

- Yes
- No
- Not much

3. How much time do you usually spend on reading on the internet during the Movement Control Order (MCO)?

- Less than 1 hour
- Between 1 and 3 hours
- More than 3 hours

4. Please, give the main reason behind engaging (involving) in online extensive reading during COVID-19.

- Having plenty of time
- Loving to read extensively on the internet (habit)
- Availability of free resources for online extensive reading
- Doing reading and writing assignments

5. I talk to my friends and share with them what I have read in English on the internet.

- Always
- Sometimes
- Rarely
- Never

6. Please rank the following seven activities in order of use from 1–7. Write a "1" beside the internet activity you do the MOST, a "2" beside the activity you do second most, and so on, ending by writing a "7" beside the internet activity you do the LEAST.

- ___ Playing games on the English internet during MCO
- ___ Searching for and reading certain English Web sites to learn more about a topic
- ___ Using email, Instant Messenger, chat rooms, or Facebook in English
- ___ Browsing or exploring different English Web pages
- ___ Downloading English music, films, or games
- ___ Reading English news and/or watching English news reports
- ___ Reading English graded reader books (stories)/or reading other books.

7. You are good at figuring out where to go on the internet to find what you want to read in English during the global lockdown.

- Yes
- No
- Not much

8. You are good at understanding English on the internet and predicting the content of what you intend to read while having access to the internet.

- Yes
- No
- Maybe
- Not much

Section C: Incidental Exposure to Online Classes via E-learning Platforms

9. Online study sessions with my teachers have helped me to look for and read a number of English materials on the internet to learn about something new and interesting to know.

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

10. It is essential to increase my exposure to reading widely on the internet for enjoyment during COVID-19 through online study sessions.
- Strongly disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly Agree
11. The contextual exposure to online classes during the Movement Control Order (MCO) has given me assistance to start to become an independent reader.
- Strongly disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly Agree
12. If the reading content looks enjoyable while exposed to online classes, I keep reading even though the language (English) is difficult.
- Strongly disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly Agree