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Understanding the Rationales of Online Reading in Low-Achieving EFL University Students across Socioeconomic Status

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Abstract

This mixed method study explores the rationales that motivate low-achieving EFL (English as a foreign language) readers to read online and distinguishes their reading habits and preferences across socioeconomic status (SES). Participants included 322 university students enrolled in remedial reading classes at an Indonesian public university. There were three categories of SES, i.e., low SES (students whose parents graduated from elementary school to junior high school), middle SES (students whose parents graduated from senior high school), and high SES (students whose parents graduated from university). An online reading survey, semistructured interviews, and field notes were utilized in this study to gather the data. The survey data were interpreted descriptively and inferentially using descriptive statistics and the Chi-square test. The results indicated that there were positive and negative attitudes toward online reading. This study also confirmed that low-achieving EFL readers did not significantly differ in reading habits and preferences across their SES. Therefore, low-achieving EFL readers are required to engage more frequently in online reading interventions either in a classroom or outside the classroom. By getting exposed to this activity, they are expected to understand online reading texts better.

Keywords: EFL low-achieving reader, online reading literacy, reading habits, reading preferences, socioeconomic status

Introduction

The transition from offline to online reading is driven by the accessibility of digital content and the convenience of digital devices, making reading more flexible and interactive (Delgado and Salmerón, 2021). The dynamic and social aspects of online reading, including real-time updates and collaboration, further contribute to this shift (Caccia et al., 2019; Valenzuela & Castillo, 2023). Information Communication Technology (ICT) also allows readers to expand their text types for reading. There are many rationales for readers to leave printed books and shift to online resources, such as the accessibility of technological tools (e.g., various types of gadgets), availability of online materials (e.g., websites, graded books, and e-books), innovative ways of information exchange (e.g., social media and hypertext links), as well as evolving publishing and marketing practices (Johnston & Salaz, 2019; Lee & Wu, 2013). Moreover, students are obliged to master reading literacy in academic settings without

receiving any explicit teaching. This ability aids them in comprehending the lectures better since digital sources are now more demanding to access than printed items (Çınar et al., 2019).

Understanding the effects of reading online in this digital era is the commencement of discovering the demands of the *millennials* – people who have been raised and educated in the ICT world (e.g., 1981 to 1996). Caverly et al. (2019) noticed that *millennials* who were currently enrolled in universities have a preference for reading their academic materials digitally. All countries experience similar circumstances with regard to this issue (OECD, 2019). This occurrence can also influence the reason for students to be engaged with some instructional materials for reading online. Thus, activities in reading online have rigorously been discovered by a considerable number of studies. Previous research on how students read online information has been undertaken in various countries such as Pakistan (Soroya & Ameen, 2020), Scandinavian countries, i.e., Denmark, Norway, and Sweden (Gabrielsen & Sabatini, 2020), and Turkey (Çınar et al., 2019). Nevertheless, a few studies discovered this issue in an Asian context, especially in Indonesia. As provoked by Jayadeva et al. (2021), the characteristics of the countries are different. It is due to the facility they possess, and it would affect the students' abilities.

Some researchers recognize that numerous variables influence students' rationales, and one of them is socioeconomic status (Eutsler & Trotter, 2020; Gabrielsen & Sabatini, 2018; Kanniainen et al., 2019; Kucirkova, 2019; Linnakylä et al., 2004; Lishaugen, 2014; Loh et al., 2020). Romeo et al. (2022) and Yeung et al. (2022) further argued that inequalities in reading development are highly predicted by someone's socioeconomic status (SES). Likewise, Notten and Becker (2017) found that the parental socioeconomic status, the level of education, and the profession significantly affect their children's academic reading achievement. Fedora (2016) found that students from socioeconomically deprived backgrounds are likelier to have a low degree of literacy in reading online than students from an educated environment. On the other hand, Eutsler and Trotter (2020) exposed that students whose parents were educated experience failure in reading online. However, the outcomes of this issue remain indecisive. This issue signals that there should be further analysis in revisiting the results.

Therefore, to correspond to these indecisive observable facts from the previous studies, it is necessary to have a deep understanding of the low-achieving EFL readers' motivation and study the effect of their SES on their reading habits and preferences that motivate them to read online. Thus, the following research questions guided the study.

(1) What are the rationales for low-achieving EFL readers at an Indonesian university level for reading online?
(2) Do low-achieving EFL readers' reading habits and preferences significantly differ across their socioeconomic status?

Literature Review

In recent years, there has been increasing attention to how EFL students use the internet and other technological innovations in their daily activities and how their practices can optimize formal and informal educational experiences (Anggraini, Anugerahwati et al., 2022; Caccia et al., 2019). In light of this, there is a need to consider the dynamic variables that define the educational environment's complexity and implications (Caverly et al., 2019; Gromada, 2022). This is one of the challenges for researchers, policymakers, and teachers to allow more efficient use of emerging technology for professional experience and create more focused programs that better empower young people to use the internet and other ICT tools (Leu et al., 2015). The emergence and availability of online resources and digital libraries have altered and broadened the concept of literacy beyond its initial request to the medium of reading. Digital literacy is continuously changing because new ICT tools and Internet applications frequently emerge and require new social literacy practices. Some researchers refer to the term *digital literacy* as the insights, abilities, and attitudes to interpret and assess content on the internet as media and information literacy (Drotner & Kobbernagel, 2014; Lilian, 2022). On the other hand, others consider it *modern reading* or *online reading literacy (*Anggraini, Cahyono, et al., 2022; Lee & Wu, 2013) that involves the position of relevant tools, the assessment and synthesis of information, and the transmission of information.

Many similarities between offline and online reading literacy have been demonstrated by some studies (Delgado et al., 2018; Hou et al., 2022; Johnston & Salaz, 2019; Sage et al., 2020; Singer & Alexander, 2017), and findings generally suggest that students' offline reading ability was favorably correlated with their online digital reading practices (Coiro, 2011; Gill et al., 2013; Mizrachi et al. 2018). However, online reading has additional functionality relative to offline reading, such as exploring the search engine's details, recognizing wiki entries, and critically appraising the source of knowledge on the Internet (Leu et al., 2015). The results of previous research indicated that reading online texts in an online setting can be more challenging (Anggraini, Cahyono, et al., 2022; Wu & Peng, 2016) and may enable readers to have good attitudes, courage, determination, creativity, problem-solving skills, and confidence to access and evaluate the content available online (Coiro, 2012; Hahnel et al., 2023). The informational online reading habit involves the combination of modern online reading abilities with traditional offline reading abilities (Gabrielsen & Sabatini, 2018). Therefore, it can be concluded that to search, comprehend, and learn from Internet content, offline reading ability is urgently demanded to support the success of online reading.

The digital era additionally contributes to the advancement of online reading. It has shifted the reading habits of society (Chalari & Vryonides, 2022; Putro & Lee, 2017). For example, messages on online media communications, particularly social media, have their characteristics, i.e., anyone can deliver information; the message is conveyed briefly; the exchange of information is extraordinarily rapid, and at the same time, there is also an interaction between individuals, both real-time and non-real-time (Kanniainen et al., 2019). In terms of technology, reading habits are associated with reading preferences. Smartphones are the most popular reading platform, possibly due to many students' enjoyment of their cell phones (Anggraini, Anugerahwati et al., 2022; Kuzmicova et al., 2018). Using the data from the OECD PISA survey in 2009, Notten and Becker (2017) found that there were no significant differences in reading habits and

preferences among 13 countries (i.e., Chile, Croatia, Denmark, Germany, Hong Kong-China, Hungary, Italy, Korea, Lithuania, Macao-China, New Zealand, Panama, and Portugal). Results of other studies showed that online reading habits and preferences remain relatively steady across countries with various development rates (non-significant cross-level interactions (Chen, 2017; Mc.Geown et al., 2020).

Besides that, as noticed by Daley et al. (2020) and Loh et al. (2020), reading preferences are influenced by individuals' reading habits. Students who have an affinity for reading tend to engage in reading and technology use more often compared to their peers who do not find reading enjoyable. (Chen, 2017; Long & Szabo, 2016; Putro & Lee, 2017). Paul et al. (2017) discovered that students' multiple individual variables also encourage them to read online resources. Along with current research that indicates the enjoyment and amount of reading, the results of numerous studies also reinforce Paul et al.'s (2017) research outcomes. The variables that other studies have discovered comprised gender (Lishaugen, 2014; Loh et al., 2020), proficiency levels (Anggraini, Cahyono, et al., 2022; Kanniainen et al., 2019), self-regulation and awareness (Chen, 2017), self-esteem (Linnakylä et al., 2004), and socioeconomic status (Eutsler & Trotter, 2020; Kucirkova, 2019). Although surveys involving readers' demographic variables provide insight into current trends through a wide variety of data analyses, Loh et al. (2020) suggest that qualitative studies are required to deepen their understanding of why and how adolescents read. Predicated on those studies, as mentioned earlier, Chen et al. (2019) and McGeown et al. (2020) also agreed that other variables (e.g., gender) provide a more negligible effect in determining students' online reading habits and skills in a digital reading activity than socioeconomic status.

Analysis of the digital divide reveals a strong correlation between readers' socioeconomic status (SES) and their Internet habits and digital abilities. Schutte and Malouff (2004) confirmed that reading ability correlated significantly with SES. In addition, Chen (2017) reviewed that the family environment and parental education directly affect students' academic achievements. The parents' metacognitive understanding has been expected to enhance their relationships with their children (Romeo et al., 2022; Thomas & Anderson, 2013). This indicates that students' accomplishments are derived from their family environment. Results unveiled by Fedora (2016) and Forzani (2018) demonstrated that students who live in a rural setting and have low SES experience failure in online reading performance. This phenomenon occurred due to education quality (e.g., teachers' lower levels of education), sophisticated digital devices, and accessibility to home Wi-Fi that are less likely to be owned by low SES students (Çınar et al., 2019; Jaeger, 2019). Furthermore, Notten and Becker (2017) scrutinized that once low SES students gain access to the internet, they prefer to retrieve its entertainment functions, not educational content. Therefore, social differences in informational online reading activities will likely encourage social disparities.

Despite earlier research suggesting a strong link between students' SES and academic performance (Malouff, 2004; Romeo et al., 2022), Lim and Jung (2019) revealed that when accounting for factors like gender, cognitive abilities, and ICT-related variables, SES did not have a significant impact at the individual student level. Instead, variations in digital reading habits appeared to be more closely associated with individual differences in cognitive skills and attitudes toward technology. However, they also uncovered notable differences in the influence of SES at the school and country levels,

highlighting the need for a more in-depth examination of how SES affects students in diverse educational settings, particularly in light of global disparities in learning opportunities.

The ambiguity of previous studies (Malouff, 2004; Romeo et al., 2022; Lim & Jung, 2019) leads to uncertain discoveries about the socioeconomic issues that motivate low-achieving EFL readers to read online. The present study's authors did not find any research about this analysis in the Indonesian context. Therefore, the current study will examine the inconclusive findings of previous research. The authors focused on undergraduate students in Indonesia, which became the gap of previous studies.

Methods

This study employed a mixed-method analysis involving 322 university students categorized as low-achieving EFL readers. As this current study involved quantitative and qualitative data, an explanatory sequential design was adopted to encompass the data. This research design, as proposed by Creswell and Poth (2018), allowed the present study's authors to incorporate both quantitative and qualitative data. Specifically, the quantitative data collected through online surveys preceded the collection of qualitative data. In addition, the authors used purposive sampling to define low-achieving EFL readers in the role of students who participated in remedial classes of reading courses. They were third-year undergraduate students majoring in the English Department at a public university in Indonesia. Eighty-four out of 322 students (26.09%) are male, and 73.91% are female. To allow for triangulation, the authors collected the data from a variety of sources, including (a) an online survey, (b) a semistructured interview, and (c) a direct observation of the classroom activity.

An online reading survey from the OECD PISA (2018) was distributed to gather the data using Google Forms. The survey contained 20 questions and took approximately 10–15 minutes to finish. It included four sections: (1) demographic information, such as the participants' region and parents' education level; (2) rationales for reading online; (3) reading habits (i.e., reading duration and reading frequency); and (4) reading preferences (preferred reading materials, preferred genres for fiction and non-fiction books, preferred reading devices, online reading of e-books, newspapers articles, and digital access). A semistructured interview was correspondingly conducted to deeply understand the students' rationales for reading online. The authors chose six students using a convenience sampling technique to consolidate the data taken from the survey. Those students were the ones who were easily reached and willing to participate in the interview section. Another instrument used to collect the data was a field note during observation. Sixteen meetings of the remedial reading classes were conducted online using WhatsApp Groups. To scrutinize the readers' rationales for reading online, the classroom activities in the group and the readers' engagement in online reading were observed.

There were three classifications of SES based on their parents' educational levels, i.e., low SES, middle SES, and high SES. Low SES students were those whose parents graduated from elementary to junior high school. Additionally, the authors defined middle SES students as those whose parents graduated from senior high school. If the student's parents graduated from higher education, they were categorized as high SES

students in the present study. The classification was defined as accomplishing the suggestion assigned by a previous study (Kiili et al., 2018).

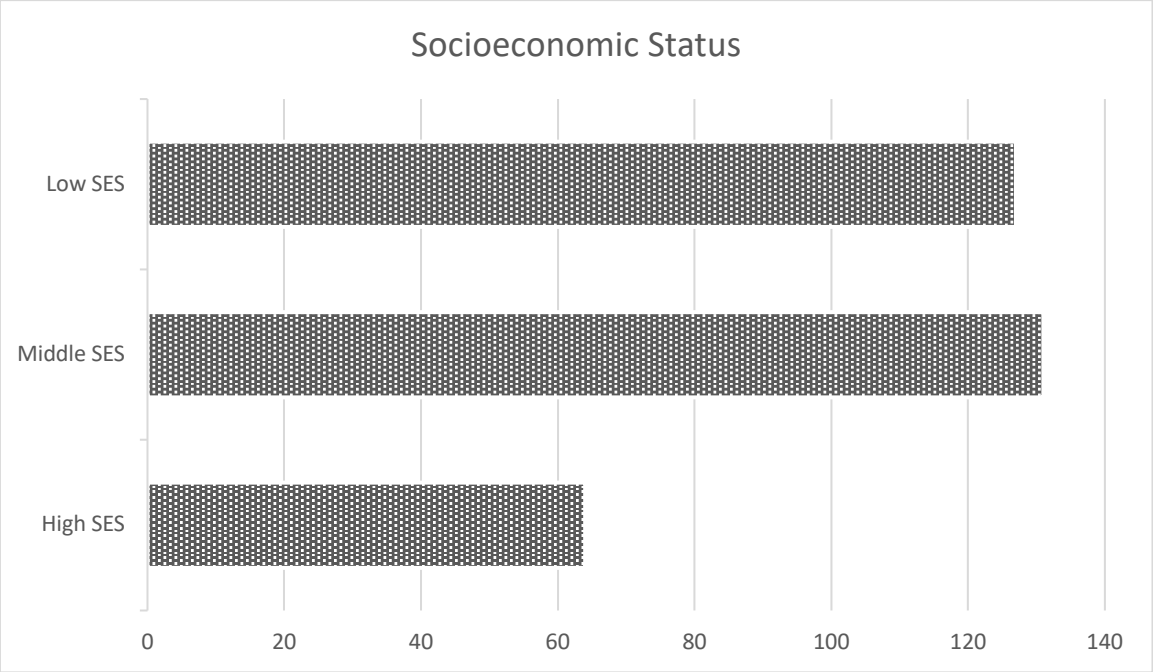
The questionnaire, interview, and direct observation data were interpreted and described qualitatively to examine the readers' rationales for reading online based on content analysis. Content analysis serves as a systematic method with the principal objective of uncovering recurring patterns, themes, and valuable insights within a given dataset (Giannantonio, 2010). In this context, this analysis was explicitly utilized to examine data collected from the instruments meticulously. The aim was to comprehensively understand the factors that drive students to favor online reading over other modes. Furthermore, to manage the quantitative results (e.g., online reading duration), descriptive statistics and the Chi-square test were utilized to investigate the differences in readers' reading habits and preferences across SES. It was employed using a statistical analysis application, namely SPSS version 26. The data enabled the authors to reveal additional points for addressing the research questions.

Results

The results of the analysis showed that the distribution of low-achieving EFL readers across SES is shown in Figure 1.

Figure 1

Distribution of low-achieving EFL readers across socioeconomic status



As displayed in Figure 1, the total number of low-achieving EFL readers involved in this research is 322 participants, with an approximately akin distribution. It consisted of 127 students with low SES (39.44%), 131 students with middle SES (40.68%), and 64 students with high SES (19.88%).

RQ1: The Rationales of Low-achieving EFL Readers for Reading Online across SES

There were three main questions to reveal the rationales of low-achieving EFL readers for reading online across their socioeconomic status. First, students were asked about the rationale for reading online and the obstacles to accessing online reading sources.

Table 1

Rationales for Reading Online

The Rationales	Responses			
	All participants	Low SES	Middle SES	High SES
Class assignment	195 (34.21%)	83	75	37
Friends' recommendation for reading.	70 (12.28%)	24	35	11
Information need	231 (40.53%)	96	93	42
Coercion from parents	3 (0.53%)	2	1	-
Hobby	71 (12.45%)	34	23	14

N = 322; respondents could check all choices that applied.

The students were given five choices for motivating them to read online sources, i.e., class assignments, friends' recommendations for reading, information needs, coercion from parents, and hobbies. They then identified the rationales for online reading for which they independently accessed. Large percentages of low-achieving EFL readers conveyed retrieving online sources for getting the information needed (40.53%), followed by other points, i.e., class assignment (34.21%), reading for pleasure or hobby (12.45%), and friends' recommendation (12.28%). Only three participants chose coercion from parents as the rationale for reading online.

Furthermore, in the qualitative data, when students were asked if they would prefer to read electronically, they also acknowledged the advantages of online reading over offline reading, such as the convenience of looking for digital materials and modifying sections or full text of notes and organization. The following statements provide illustrations of why students assume that online reading is more convenient and accessible.

> *'It is more practical to comprehend the text and more interactive.'*
>
> *'Much comfortable to read wherever and whenever. For example, I can read online text in my room by lying down in bed and while having snacks.'*
>
> *'In my opinion, online reading is more fun than offline reading because we can search for unknown words easily on the Internet instead of opening an offline dictionary.'*

Besides the samples of positive comments on online reading above, the students categorized as low-achieving EFL readers also highlighted that online reading has some disadvantages, e.g., harming their vision, being time-consuming, and decreasing critical thinking. The following excerpts present arguments for why students figured out online reading is less effective than offline reading.

'The radiation and pixel adjustment could harm my vision and give me get a headache if I read through my smartphones for a long time. It hinders me from highlighting or outlining the texts, so I cannot make any marks on them. '

'It is too time-consuming. Moreover, if the text is long, I need to read the text to get the main idea repeatedly.'

'It is less effective. When I read online text on my phone or laptop, sometimes the Internet advertisement or application notifications pop up; consequently, I cannot focus on what I read.'

The participants narrated unfavorable remarks associated with the obstacles they experienced online reading. They were likewise invited to respond to the challenges they underwent. The following table presents the percentage of obstacles.

Table 2

Obstacles in Reading Online

Obstacles	**Responses**			
	All Participants	**Low SES**	**Mid SES**	**High SES**
Digital access	244 (75.78%)	101	96	47
Screen display	22 (6.83%)	7	9	6
Poor comprehension	41 (12.73%)	14	18	9
Others	15 (4.66%)	5	8	2

The students described some obstacles that they experienced in online reading. Digital access is the most frequently encountered obstacle in online reading, followed by poor comprehension, screen display, and others. Two hundred and forty-four students (75.78%) perceived that digital access contributed significantly to their online reading performances. The issues were related to internet availability, such as network signals and data plans. Based on the observation of group activities, most of the students experienced this barrier. The authors noted that network signals' stability was the main reason hindering the students from accessing online reading sources. Their internet literacy was also found unsatisfactory. Some students reported that they could not even understand how to access the sources.

Another obstacle faced by the students was poor comprehension (12.73%), e.g., they did not have adequate English vocabulary. Since English is the principal language used on the internet, the students supposed that it had become one of the obstacles. Six point eight three percent (N = 22 students) chose screen display adjustment. The screen display adjustment includes the website design for online reading that did not support students' performances. As the students used different device types (e.g., laptops, tablets, and smartphones) to access the sources, they described that the screen display could lose their focus on what they read. They emphasized that reading online can distract their concentration; thus, they must spend much time rereading the online text. Meanwhile, 15 students specified other obstacles, such as the full version websites they could not access for free.

RQ 2: The Difference in EFL Low-achieving Students' Reading Habits and Preferences for Reading Online across SES

In this section, there were two findings related to the research question. Those are the results of low-achieving EFL readers' reading habits and preferences. A Chi-square test was applied to distinguish their reading habits and preferences in online reading across socioeconomic statuses.

Reading habits for reading online across SES

To investigate students' reading habits, the students were asked about reading duration and frequency. Eight survey items targeted the reading habits of low-achieving EFL readers for reading online across SES. This survey was adapted from OECD PISA (2018). The survey questions sought data about the duration of reading online, such as emails and online news, and the frequency of reading.

Table 3

Online Reading Duration

	All participants		Low SES		Middle SES		High SES		Asymp. Sig.
	M	**SD**	**M**	**SD**	**M**	**SD**	**M**	**SD**	
Reading email	3.57	.834	3.47	.805	3.65	.885	3.58	.773	.120
Reading online news	3.83	.877	3.76	.906	3.87	.854	3.91	.368	.745
Using an online dictionary or encyclopedia (e.g., Wikipedia)	3.68	.967	3.69	.947	3.64	1.008	3.73	.930	.864
Accessing web pages to learn specific information	3.90	.997	3.84	1.011	3.97	1.007	3.88	.951	.616
Involving in group discussions or online forums	3.93	.985	3.82	.963	4.04	.988	3.92	1.013	.290
Looking for information such as recipes, tips and tricks, etc.	3.61	1.060	3.55	1.037	3.66	1.050	3.59	1.137	.736

Table 3 portrays the time consumption that low-achieving EFL readers across SES spent in reading email, reading online news, using an online dictionary or encyclopedia, accessing web pages to learn specific information, being involved in a group discussion or online forums, and looking for information on the internet. The students were asked to choose the option that best described the duration of online reading on a scale of 1 to 5, with 1- being *"I don't know what it is"* and 5- being *"every day."* Based on the scale criteria, there were no significant differences across socioeconomic status (p-value > 0.05). However, those items' means (M) denoted that low-achieving EFL readers devoted their time to reading online sources at least sometimes a week; the means were higher than 3.00. It is inferred that students across SES occasionally read English online texts, starting from academic to personal purposes.

Table 4

Reading Frequency

	All participants		Low SES		Middle SES		High SES		Asym p. Sig.
	M	SD	M	SD	M	SD	M	SD	
Reading using offline media (printed books, newspapers, magazines, etc.)	2.13	.729	2.09	.728	2.23	.780	2.00	.591	.366
Reading using online media (e-books, online news, instant messaging, etc.)	2.57	.895	2.50	.872	2.60	.866	2.64	.998	.485

Next, for reading frequency, students responded to how frequently they accessed printed and digital texts daily (i.e., never, less than 2 hours, 3–5 hours, 6–8 hours, and more than 8 hours). None of the data showed significant differences (p-value > .05). Table 4 further shows that low-achieving EFL readers across SES had less reading frequency in reading through offline and online media. The means (M) of all participants specified were less than 3.00. The mean score interpreted that the frequency of the students is low (less than two hours a day). It yields that they need to be encouraged to read English online sources.

Reading preferences for reading online across SES

Survey results provide insights into low-achieving EFL readers' reading behaviors concerning text medium preferences. Participants across socioeconomic status showed a preference for reading using online and offline media (see Table 5).

Table 5

Media Preferences

Reading Type	Responses			
	All participants	Low SES	Middle SES	High SES
Offline reading	172 (53.42%)	77	64	31
Online reading	150 (46.58%)	33	67	33

As depicted in Table 5, the inclination between offline and online reading media is slightly comparable, respectively 172 (53.42%) and 150 (46.58%) students. The Chi-square test result for examining the data among the levels also demonstrated no significant difference. The p-value is less than the Asymptotic Significance (.05 < .111).

Table 6

Language Preferences

	Responses			
	All participants	Low SES	Middle SES	High SES
English	38 (28.81%)	13	17	8
Indonesian	284 (71.19%)	114	114	56

Similar to the media preferences findings, students also answered a survey item centered on their reading preferences regarding text language (English or Indonesian).

Survey items sought data about the language of online texts read by them. Concerning the language of online texts read for different purposes (Table 6), 38 students reported reading Indonesian digital sources, and the rest (284 students) conveyed reading online using English (28.81% and 71.19%, respectively). In addition, asymptotic significance did not show any significant difference in language preferences for reading online across SES (.778 > .05). Even though low-achieving EFL readers across SES have a roughly similar distribution. The data demonstrated that they tend to use Indonesian over English in an online reading environment.

Another reading preference compared in this study was low-achieving EFL readers' preference for online reading materials. The students were asked to indicate their preferred types of online sources, and the results are presented in Table 7.

Table 7

Preferences for Types of Reading Materials

	Responses			
	All participants	**Low SES**	**Middle SES**	**High SES**
Fictions	236 (66.10%)	91	95	50
Non-fictions	86 (33.90%)	36	36	14

Linked to other previously disclosed findings, types of preference did not confirm any significant difference across SES (.613 > .05). Low-achieving EFL readers prefer fiction reading materials in online reading (66.10%) to non-fiction. These kinds of items consist of novels, narratives, and stories. They also read non-fiction in an online environment (33.90%). These materials include related sources, e.g., politics, biography, and history.

Discussion

The data were collected on rationales for reading online and socioeconomic status. Those rationales for reading online include class assignments, friends' recommendations for reading, information needs, parents' coercion, and reading for pleasure. However, none of the participants affirmed coercion from parents as their rationale for reading online. These distinct perspectives are consistent with motivational reading studies, contrasting the intrinsic and extrinsic reading motivations (Long & Szabo, 2016; McGeown et al., 2020). These studies predominantly center on examining motivational aspects within the realm of reading, with a particular emphasis on distinguishing between intrinsic and extrinsic motivations. The research is inclined to explore the impact of these distinct motivational categories on individuals' reading behaviors and choices. Surprisingly, the students who participated in the current study were categorized as online reading preferers informed that they like online reading due to its convenience and accessibility. This rationale contradicts the previous research by Mizrachi et al. (2018). Their research findings indicated that these favorable comments were related to traditional offline reading rather than other forms of reading.

Besides positive attitudes towards online reading, the participants also mentioned that many obstacles influenced online reading. The most challenging issue they experienced was digital access. The outcomes of the current study confirm other studies

with similar analysis to this result (Kiili & Leu, 2019; Stoller & Nguyen, 2020). It is believed that this issue is crucial since the availability of the internet is the primary key to accessing online sources (Hong et al., 2021). Low-achieving EFL readers faced other obstacles when reading online, i.e., screen display, poor comprehension, and less concentration. Those barriers became their rationales for avoiding online reading. They claimed that online reading negatively impacted their health, e.g., eye strain and headaches (Johnston & Salaz, 2019). Moreover, while reading digital texts, the participants argued that their retention and memory were distracted due to font size, screen size, and on-screen displays. In line with the findings, Delgado and Salmerón (2021) disclosed that on-screen reading contributes to inattentive reading, particularly when the demands of tasks increase on-the-spot concentration for efficient information processing.

Another research question of this study aimed to distinguish low-achieving EFL readers' reading habits and preferences across SES. The online reading survey of reading habits was employed to explore the students' reading duration and frequency. Based on the analysis, there were no significant differences in time consumption and reading frequency. The current findings aligned with an in-depth analysis conducted by Notten and Becker (2017). They validated that no countries had shown significant differences in reading habits. This finding also contributed to the body of knowledge that showed Indonesian students had no significant difference in their reading performance across their SES. Early home literacy environment and reading proficiency might play roles in influencing students' reading habits. The low-achieving EFL readers from low, middle, and high SES had relatively similar online reading intervals. This discovery contrasts with earlier findings that some researchers have investigated (Romeo et al., 2018; Romeo et al., 2022; Yeung et al., 2022). The socioeconomic characteristics of students might be the reason for this dispute.

In addition, the outcomes of the present study also uncovered that the participants categorized as millennials read online sources at least sometimes a week for approximately less than 2 hours a day. Additionally, they did not occupy the reading duration for full reading academic resources. Caverly et al. (2019) further fostered this equivalent phenomenon in their study. It is revealed that this fact is customary for millennials. Nevertheless, they live in a digital era that makes them comfortable with technology for social interactions; they are still learning to integrate ICT into their academic lives. Therefore, teachers must encourage students, especially low-achieving readers, to use ICT integration to promote their learning performance. Students with academic failure should regularly be exposed to the online reading intervention as they might have little knowledge compared to high achievers (Anggraini & Cahyono, 2020; Lv et al., 2022; Toroujeni, 2022).

Furthermore, there is an interesting finding of the present research. Participants had no prior preference for reading online. Unlike previous studies that discovered students' tendency to opt for preferred reading formats (Delgado et al., 2018; Sage et al., 2020; Soroya & Ameen, 2020), the present study did not notice any affinity toward both reading media. Significant differences were not also detected in reading media preferences, language preferences, and types of reading materials across students with different SES.

The participants in the current research analogously exhibited equal preferences in online reading. This finding reinforces the previous research that has unearthed whether students from well-educated and less-educated families have equal chances of encountering online reading failures (Eutsler & Trotter, 2020; Kiili et al., 2018). Therefore, socioeconomic status seen by parents' education level could not be the only parameter influencing students' reading performance. Many other variables of socioeconomic status may be connected to the classifications, such as living environment (Fedora, 2016; Forzani, 2018), family income (Jaeger, 2019), and education quality (Çınar et al., 2019).

Conclusion

Digital reading devices are expected to increase significantly in prominence in the coming decades. Following this phenomenon among university students, especially millennials, the studies on digital reading platforms' usage derive multiple interpretations. The primary objectives of the present study were to gain insights into low-achieving EFL readers' rationales for reading online across their socioeconomic status and to identify their reading habits and preferences. Based on the study results, the participants have positive and negative attitudes toward online reading. In addition, there were no significant differences in their reading habits and preferences across socioeconomic status. These findings confirm the unresolved analysis of previous studies.

The limitation of this study is that the study essentially examined participants with low reading proficiency in a public university. Future studies can explore the effect of SES in private universities. This contemplation has substantial additional consequences for analysis. Having scrutinized the survey and follow-up interviews of six students in this exploratory study, it is acknowledged that future research entails iterations of a larger sample to validate whether the results in the current study are indicative of a larger sample of adolescents (sampling various institutions, enrollment processes, and geographic environments) engaged in reading activities. In this way, teachers can deeply understand how to enhance their students with low reading performance in an online environment across their SES. Besides that, as students nowadays are provoked by internet-based reading materials, other stakeholders (e.g., syllabus designers and website developers) are required to support students in creating comprehensive reading websites and designing syllabi based on students' needs.

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