

EXPLORING INFORMAL DIGITAL LANGUAGE LEARNING: HOW LEARNING FREQUENCY COUNTS

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| Article Info | Abstract |
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| Article History Received: April 2024 Revised: May 2024 Published: July 2024 | <i>Facing globalization era, students tend to learn English informally. However, among the enormous studies on the use of informal learning, it was still inconclusive whether the time spent students dealt with their gadget really connected to English proficiency. This paper examines informal learning frequency in the area of English as a Foreign Language (EFL), particularly its contribution to students' English proficiency. The study focuses on the discussions of time spent that students engage through English learning by the navigation of the digital application as part of informal learning. Correlation study was employed as the research design by collecting the data from 302 Indonesian university students through a survey. The findings showed positive yet low level of correlation, but reflect a description that students who preserve more time in the informal learning engagements made better improvement to English proficiency. The results of the study convinced that the frequent engagement with high agency of learning goal commitment is essential for achieving better English proficiency. Additionally, it adds an insight into how informal learning high frequency can make a unique contribution to EFL learners' overall English outcomes and determine how teachers can provide necessary support to acknowledge the emerging progress of technology in education and modify their classroom practice through technology-enhanced language teaching with the intention of encouraging students' autonomous learning with technology into language learning opportunities outside the classroom in order to enrich pedagogical insight of how informal digital learning can complement in-class and out-of-class learning.</i> |
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INTRODUCTION

The advancement of Information and Communication Technology (ICT) has been a driving force behind the globalization process. As means of communication, ICT tools such as email, video conferencing, and instant messaging have revolutionized communication (Ahmed et al., 2020; Cahyono, 2024; Voogt et al., 2018). In global connectivity, the internet has connected people across the globe, enabling instant access to information, cultures, and opportunities. Social media platforms further facilitate global networking and collaboration. The internet serves as a vast repository of knowledge accessible to anyone with an internet connection. ICT has democratized access to education, information, and expertise, empowering individuals and organizations worldwide (Tanak, 2020). Digital media platforms enable the exchange of ideas, art, and culture on a global scale. People can connect with others from

different backgrounds, fostering cross-cultural understanding and appreciation (Arvanitis, 2020).

By means of education in ICT development, language learning can now take place in an informal setting while students go about their daily lives, inadvertently providing them with that particular opportunity. Therefore, a wide definition of informal learning is anything that takes place outside the constraints and processes of formal education, with the individual choosing the subject matter and direction, either alone or in collaboration with others. Unlike the comparatively abstract and decontextualized knowledge imparted by formal education, informal learning is concrete, engaging, practice-driven, open-ended, and highly contextualized. Informal learning is defined as the everyday experiences through which students learn a great deal without ever being conscious of learning. It may not necessarily be planned; instead, it may be reactive, spontaneous, and incidental (Andina et al., 2020; Deng et al., 2020).

Undeniably, informal digital learning has significantly contributed to successful English language acquisition. Informal digital learning has revolutionized English language acquisition by offering accessible, engaging, flexible, and personalized learning experiences that empower learners to achieve success in their language learning journey. Informal digital learning makes English language resources accessible to learners worldwide (Pereira et al., 2019). With just an internet connection, learners can access a plethora of materials including videos, podcasts, interactive exercises, and language learning apps at their convenience. Digital platforms offer engaging and interactive content that captivates learners' attention. Gamified learning apps, social media communities, and online forums provide opportunities for active participation and practice, making the learning process enjoyable and motivating (Acquah & Katz, 2020; Barr, 2017; Chik, 2014; Olsson & Sylvén, 2015).

Informal digital learning allows learners to tailor their learning experience to their individual needs and preferences. They can choose the content, pace, and learning strategies that suit their learning style, fostering autonomy and self-directed learning (Andina et al., 2020; Lai & Zheng, 2018; Lee, 2019a). Digital resources provide exposure to authentic English language usage in real-life contexts. Through videos, podcasts, social media interactions, and online articles, learners encounter diverse accents, colloquial expressions, and cultural nuances, enhancing their language proficiency. Online communities and language exchange platforms enable learners to interact with peers and native speakers from around the world. Engaging in conversations, sharing experiences, and receiving feedback from others facilitate language acquisition and cultural exchange.

Informal digital learning promotes lifelong learning by offering continuous access to updated content and resources. Learners can stay updated with the latest trends, news, and developments in the English-speaking world, allowing for ongoing skill development. Digital platforms often employ adaptive learning technologies that personalize the learning experience based on learners' progress, strengths, and weaknesses. This targeted approach maximizes learning outcomes and minimizes frustration by providing tailored support and guidance. Many informal digital learning resources are available for free or at a low cost, making English language learning more accessible to individuals from diverse socio-economic backgrounds. This reduces barriers to entry and enables learners to pursue their language learning goals regardless of financial constraints (Cole & Vanderplank, 2016; Lai, 2019).

In informal learning, frequency of engagement takes crucial concern. In frequency of engagement, consistent engagement with English language materials is essential for skill development and retention. Informal learning often occurs in learners' free time, so maintaining a regular schedule of practice can be challenging. Without frequent exposure to the language, learners may struggle to make meaningful progress. Encouraging learners to integrate language practice into their daily routines, such as listening to podcasts during commutes or setting aside

time for language study each day, can help address this concern. Informal learning platforms may offer a wide range of resources, including videos, articles, social media posts, and interactive exercises. Encouraging learners to engage with variety and massive time of content types, topics, and genres can help them develop their language skills in different contexts. Additionally, exposure to accents, dialects, and cultural perspectives can enhance learners' language proficiency and cultural competence (Peters & Lueven, 2018).

Frequency of learning engagements is the amount of time in which the learners are engaged in learning activities. Studies have investigated the relationship between frequency of informal learning activities to learners' English proficiency. Research reveals that frequency correlates to both oral proficiency and written skill (Sundqvist & Wikström, 2015). However, there is still an ambiguity on research result of learners' frequency engagement to English ability in general and vocabulary mastery. In different research setting, studies find that frequency shows both significant contribution (Sundqvist & Sylvén, 2014; Sundqvist & Wikström, 2015) and negative correlation (Lai et al., 2015; Lee, 2019b) to learners' English ability and grades. In terms of vocabulary mastery, some researches expose that frequency contributes to learners' vocabulary outcomes (Jensen, 2017; Sundqvist & Wikström, 2015). Contrary to earlier finding, studies also find that frequency of informal learning was not related to vocabulary scores (Lee, 2019b; Olsson & Sylvén, 2015). These results show that the frequent practice of informal learning activities might not automatically guarantee successful second and foreign language vocabulary achievements and English proficiency.

Addressing these concerns requires a combination of learner motivation, effective resource selection, and supportive learning environments. Educators and language practitioners can play a role in guiding learners toward high-quality, diverse learning materials and encouraging them to maintain regular engagement with the language. Additionally, promoting learner autonomy and self-regulated learning strategies can empower learners to take ownership of their language learning process and overcome challenges related to frequency and diversity of engagement.

Self-Directed Informal Digital Learning of English as one of the practices of informal learning is defined as self-directed, informal English learning using a range of different digital devices (e.g., smartphones, desktop computers) and engaging with English learning resources (e.g., web apps, social media) independently of formal contexts. For instance, EFL students communicate casually with other game players in English on their own initiative or talk to other English users via social media, such as *Facebook* and *Instagram*. Frequency of SD-IDLE engagements which is concerned in this study is the number of years the participants spent learning English outside the classroom and on using technological resources to support their English language learning.

Research on Self-Directed Informal Digital Learning of English may also provide pedagogical insights into how Self-Directed Informal Digital Learning of English can complement in-class learning, enrich students' holistic English learning experiences, and contribute to curricular and pedagogical innovations in EFL classroom. With this research questions and pedagogical goals in mind, the study presented in this article investigated the consequences of Self-Directed Informal Digital Learning of English frequency for English learners' proficiency in Indonesian setting.

Aforesaid studies have generally indicated that the correlation between informal learning frequency and foreign language learners' English proficiency is still varied. Therefore, this study which is focused on the practice of Self-Directed Informal Digital Learning of English dimension aimed to answer the following research questions: "How does frequency level in Self-Directed Informal Digital Learning of English activities contribute to EFL students' English proficiency?"

LITERATURE REVIEW

Challenges of Informal Setting in English Learning

In international case study, informal learning has also been the solution of students' English learning problem in some countries. Lai et al. (2015) report on the ways that within the highly multilingual and multicultural context in Hong Kong, informal language learning has been embraced by both the government and students. J. S. Lee & Dressman (2018) also report on the English-learning strategies of South Korean university students which by history and culture, combined with a test-driven national curriculum, reduce students' interest in engaging with English informally on their own.

However, there is a challenge on the implementation of informal English learning. When students are excited in engaging with informal English learning through technology, teachers tend to hold different attitudes toward the use of technology and promote the students' informal learning with technology because they believe their young students are technology savvy (Lai, Yeung, & Hu, 2016) and most teachers, who actually display a high level of confidence in using ICTs in EFL instruction, are lack of administrative support and limited resources (e.g., computers or Internet) for the failure of their actual implementation (Cahyono et al., 2023; Çelik & Aytın, 2014).

In order to solve those different perceptions, education elements need to capture informal English learning and "institutionalize" it. School needs to be viewed not in opposition to youth culture but as an important part of a network of language learning contexts that optimally create a supportive ecosystem for engagement and learning for a diverse range of students (Rajala et al., 2016). Technology is central to this approach, facilitating greater opportunities for access to knowledge, information, and supportive communities, and the means to produce multimodal digital artifacts (Kumpulainen & Sefton-Green, 2014). English learning is not tied with school curriculum for students can be immersed in a stimulus rich atmosphere in many informal learning of activities, ranging from watching movies to even playing online games. Furthermore, contemporary school should be reshaped to connect between formal and informal learning sites for today's young learners (Black, Castro, and Lin, 2015). In the learning context, such educational features of Web 2.0 technologies (e.g., blogs, wikis, video sharing sites, web applications, and social networking sites) help bridge a gap between formal learning for understanding academic contents and informal learning for collaborating and creating contents (Song & Lee, 2014).

Frequency of Informal Learning

Research reveals that there is inconsistency of informal language learning frequency on students' English proficiency and vocabulary mastery. Some studies mention that informal language learning activities are positively correlated to students' English score in school grades (Sundqvist & Sylvén, 2014; Sundqvist & Wikström, 2015), but others show the opposite (Lai et al., 2015; Lee, 2019b). Some researches expose that frequency contributes to learners' vocabulary mastery (Jensen, 2017; Sundqvist & Wikström, 2015), but others reveal on the contrary (Lai et al., 2015; Lee, 2019a; Olsson & Sylvén, 2015).

Those studies indicate that spending many hours of informal language learning activities might result different contribution to students' English proficiency and vocabulary achievements for different students in different learning conditions. Some studies (Sung et al., 2015, 2016) have provided evidence that online learning that lasts less than one week does not usually have a significant effect on language skills. In contrast, reducing the students' interest in learning and concerning more on digital devices which they use for playing games and social media regularly make them complacent and lazy to learn. There is also evidence that digital technology can have a demotivating effect in formal learning settings because of

the authenticity gap between the school classroom and learners' private lives (Lamb & Arisandy, 2019).

Lai et al. (2015) use questionnaire, tests and focus group interviews to investigate the students' nature of out-of-class learning, learning outcomes, and affective variables on confidence and enjoyment of learning), and factors that affect students' choice of out-of-class English learning. Result shows that the average amount of time foreign language learners in Hong Kong reported investing in self-initiated, self-directed technology use for language study was 1-3 hours per week. However, the correlation analyses reveal that the frequency of learning activities correlates more on affective variables than cognitive learning outcomes. It indicates that the more time of out-of-class learning activities the students engaged in, the more they enjoyed learning English, and the greater the confidence they had in learning English as well, but it does not automatically guarantee that the students are better in their English grades (Lai et al., 2015).

Self-Directed Informal Digital Learning of English

Self-Directed Informal Digital Learning of English used in this study is defined as the implementation of network technology to enhance the students' self-reliance and engagement toward their own learning. Self-Directed Informal Digital Learning of English dimensions are based on Benson (2011), Schugurensky (2000), and Garrison (1997). Benson (2011) defines the framework of language teaching and learning – in this case is English teaching and learning – into four aspects, namely: formality, which includes formal, non-formal, and informal learning; location, includes in and out of classroom setting; pedagogy, includes instructed, uninstructed, and naturalistic; and locus of learning, includes other-directed and self-directed.

In term of formality, language learnings are provided in various settings. Formal education program is presented in a highly institutionalized studies regulated by government which implements a prescribed curriculum with explicit goals and evaluation through hierarchical system and grants a diploma or certificate at the end of each level. Non-formal education is contributed to organized educational programs that takes place outside the formal school system. Informal learning as the learning beyond the classroom, then, takes place outside the curricula provided by formal and non-formal education institutions. Furthermore, informal learnings can occur independently with intended goals of the learners (Schugurensky, 2000). Finally, the third learning dimension used by Self-Directed Informal Digital Learning of English is from Garrison (1997) concept of self-directed learning which includes three comprehensive models, namely self-management (task control), self-monitoring (cognitive responsibility), and self-motivation (entering and task). As a result, the Self-Directed Informal Digital Learning of English dimensions refer to informal, uninstructed, and self-directed learning activities outside of the classroom.

RESEARCH METHOD

Research Design

A quantitative study was conducted with the primary aim of exploring the correlation between Self-Directed Informal Digital Learning of English (SDIDLE) and the English proficiency of EFL students. The research focused on quantifying the relationship between the frequency of SDIDLE activities and the participants' English language skills. By adopting a quantitative approach, the study sought to provide statistically significant insights into how informal digital learning practices influence language proficiency. The purpose of this study was to investigate the contribution of the frequency of SDIDLE to the English proficiency levels of EFL students. Specifically, the research aimed to determine whether increased engagement in informal digital learning activities positively impacted the students' language skills. By analyzing the frequency of these activities and their correlation with proficiency

scores, the study intended to offer concrete evidence on the effectiveness of SDIDLE in enhancing language learning.

To gather the necessary data, an online survey was employed as the primary data collection method. This survey was designed to capture detailed information about the participants' engagement with SDIDLE activities and their English proficiency scores. The online format of the survey facilitated broad participation, allowing students to complete it at their convenience and ensuring a diverse and comprehensive dataset. The quantitative research approach was deemed appropriate for addressing the research issues due to its ability to provide measurable and objective data. By utilizing statistical analysis, the study aimed to identify significant patterns and relationships between the variables. This approach allowed for the testing of hypotheses and the drawing of generalizable conclusions about the impact of SDIDLE on English proficiency.

Research Participants

The participants of this study were a total of 302 English as a Foreign Language (EFL) students from three universities located in a medium-sized town in East Java, Indonesia. These institutions included two public universities and one private university. The participants were carefully selected to represent a diverse cohort of students, ensuring a comprehensive understanding of the research subject. The cohort was composed of students at various stages of their academic journey. Specifically, 121 participants (41.3%) were freshmen, just beginning their university education. The sophomore group comprised 58 students (20.2%), while the juniors and seniors were represented by 54 students (19.5%) and 46 students (16.6%) respectively. Additionally, 23 graduates (2.4%) who had recently completed their studies also participated in the study. This distribution ensured a balanced representation of perspectives from students at different academic levels. These students resided in various regions across Indonesia, adding to the diversity of the sample. They were enrolled in different majors, which provided a broad spectrum of academic backgrounds and experiences. A common thread among all participants was their informal engagement with digital learning. This factor was crucial in examining the informal digital learning behaviors and attitudes among EFL students in the Indonesian context. The inclusion of students from diverse academic levels and majors, as well as from different regions, allowed for a more holistic understanding of the informal digital learning landscape among EFL students in East Java. The research was conducted with the appropriate permissions, ensuring that all ethical considerations were adhered to in the study.

Research Instruments

For data collection, this study employed a demographic survey designed to capture detailed information about the participants' engagement with Self-Directed Informal Digital Learning of English (SDIDLE) activities and their English proficiency scores. The demographic survey served as a comprehensive tool to gather essential data on the frequency and duration of the participants' involvement in SDIDLE activities. This included how often and for how long the students engaged in such learning practices outside formal educational settings. Additionally, the survey collected data on the English proficiency scores of the participants. These scores were used to gauge the participants' levels of English language competency, providing a quantitative measure to correlate with their engagement in SDIDLE activities. The use of proficiency scores helped to establish a link between the frequency of informal digital learning activities and the actual language skills of the participants.

Participants were invited to voluntarily complete and submit an online questionnaire. This questionnaire was designed to be user-friendly and accessible, ensuring ease of participation and accuracy in data collection. The online format allowed participants to complete the survey at their convenience, leading to higher response rates and more reliable data. To ensure the validity and reliability of the research instruments, rigorous testing and

validation processes were conducted. The demographic survey was carefully reviewed and pilot-tested with a smaller sample to refine the questions and format. Feedback from the pilot test was used to make necessary adjustments, ensuring that the final survey was both valid and reliable. By utilizing these validated and reliable research instruments, the study aimed to gather accurate and comprehensive data on the participants' engagement in SDIDLE activities and their English proficiency levels. This approach provided a robust foundation for analyzing the relationship between informal digital learning practices and language proficiency among EFL students.

Data Analysis

To analyze the research data and capture the research findings, a Pearson Correlation analysis was conducted using SPSS Statistics and JASP 13. This statistical method was chosen to examine the relationship between the frequency of Self-Directed Informal Digital Learning of English (SDIDLE) and the English proficiency scores of the participants. The Pearson Correlation analysis is well-suited for identifying the strength and direction of linear relationships between two continuous variables, making it an appropriate choice for this study. The first step in the data analysis involved calculating the correlation coefficient between the frequency of SDIDLE activities and the English proficiency scores. This provided a numerical value indicating how closely related these two variables were. A positive correlation would suggest that higher engagement in SDIDLE activities is associated with higher English proficiency scores, while a negative correlation would indicate the opposite.

To further investigate the contribution of SDIDLE frequency to English proficiency scores, the participants were classified into distinct groups based on their engagement levels. These groups were defined as follows: Low-frequency engagement (less than 1 year), Mid-frequency engagement (1-2 years and 2-3 years), and High-frequency engagement (3 years and more, and 5 years and more). This classification allowed for a more nuanced analysis of how varying degrees of SDIDLE engagement impacted English proficiency. By comparing the English proficiency scores across these different groups, the study aimed to identify any significant differences that could be attributed to the frequency of SDIDLE activities. This step was crucial in understanding whether more extended engagement in informal digital learning practices led to higher proficiency levels. The use of SPSS Statistics and JASP 13 ensured that the data analysis was conducted rigorously and accurately. These software tools provided advanced statistical capabilities and facilitated the handling of large datasets, ensuring the reliability of the findings. The results from the Pearson Correlation analysis and the group comparisons were then interpreted to draw meaningful conclusions about the impact of SDIDLE on English language proficiency.

RESEARCH FINDINGS AND DISCUSSION

Research Findings

As regards of 302 students' frequency in engaging with Self-Directed Informal Digital Learning of English activities, the mean was 1.8 among the range of choices of 1 (< 1 year), 2 (1-3 years), 3 (3-5 years), 4 (> 5 years), and 5 (> 10 years) with SD 1.05 (see Table 1). It means that on the average students' engaging frequency were between number 1 (less than a year) to 2 (one until three years). However, the mode number was 1 (less than 1 year), which means that most students were only engaging with informal learning activities in less than a year. It is probably because most of the respondents (41.3%) were from freshmen.

Table 1
Descriptive Data of English Proficiency and Students' Frequency of Self
Directed Informal Digital Learning of English Activities

| | Frequency | English Proficiency |
|----------------|-----------|---------------------|
| Valid | 302 | 302 |
| Mean | 1.815 | 430.971 |
| Median | 1.000 | 433.000 |
| Mode | 1.000 | 400.000 |
| Std. Deviation | 1.050 | 62.470 |
| Minimum | 1.000 | 310.000 |
| Maximum | 5.000 | 570.000 |

As to the frequency of Self-Directed Informal Digital Learning of English activities, 53% ($N = 161$) of the participants reported spending less than one year engaging in informal learning activities when this study was conducted, followed by 22% ($N = 65$) who reported between one and three years, 18% ($N = 54$) who reported between three and five years, 5% ($N = 15$) who reported more than 5 years, and 2% ($N = 7$) who reported more than 10 years engaged in informal learning activities (see Table 2). It shows that a majority of the participants ($N = 161$ or 53%) were low frequency learners of informal learning engagement. The EFL students' English Proficiency was also in low level for limited user with the mode score of 400 and the mean score of English Proficiency was 430.971 (see Table 1).

Table 2
EFL Students' English Frequency of Self-Directed Informal Digital Learning of English Activities

| | Scale | Level | Total ($N = 302$) | |
|--|---------------|--------|---------------------|----|
| | | | N | % |
| Length of Engaging in SD-IDLE Activities | 1= < 1 year | (Low) | 161 | 53 |
| | 2= 1-3 years | (Mid) | 65 | 22 |
| | 3= 3-5 years | (Mid) | 54 | 18 |
| | 4= > 5 years | (High) | 15 | 5 |
| | 5= > 10 years | (High) | 7 | 2 |

Relationship between Frequency of Self-Directed Informal Digital Learning of English Activities and English Proficiency

Table 3 presents the results of the correlation coefficient analysis between the frequency of Self-Directed Informal Digital Learning of English (SDIDLE) activities and the English proficiency scores of EFL students. This analysis aimed to determine whether there was a statistically significant relationship between how often students engaged in SDIDLE activities and their proficiency in English. The correlation coefficient, represented by Pearson's r , was found to be 0.196 with a p -value of less than .001. This indicates that there is a positive correlation between the frequency of SDIDLE activities and English proficiency scores. In other words, as the frequency of engagement in SDIDLE activities increases, so do the English proficiency scores of the students.

However, it is important to note that while the correlation is positive, it is relatively weak. A Pearson's r value of 0.196 suggests that the relationship between these two variables is not particularly strong. Although the correlation is statistically significant, indicating that the findings are unlikely to be due to chance, the effect size is small. This implies that other factors besides SDIDLE frequency may also play significant roles in determining English proficiency. The results from Table 3 suggest that while there is a positive association between the frequency of SDIDLE activities and English proficiency scores, the strength of this relationship is limited. This finding underscores the complexity of language learning and suggests that a multifaceted approach, considering various influencing factors, is necessary to fully understand and enhance English proficiency among EFL students.

Table 3

Pearson's Correlations between EFL Students' Frequency with English Proficiency of Self-Directed Informal Digital Learning of English Activities

| Variable | Frequency |
|---------------------|----------------------|
| English Proficiency | Pearson's r 0.196 |
| | p-value < .001 |

Discussion

The research question explored Indonesian university EFL learners' informal learning engagement, examining whether there was any correlation between frequency of Self-Directed Informal Digital Learning of English activities and their English proficiency. The result shows that Self-Directed Informal Digital Learning of English activities and English proficiency was significantly correlated. It is in line with previous research (Jensen, 2017; Sundqvist & Sylvén, 2014; Sundqvist & Wikström, 2015), which revealed that frequent engagement in informal learning was associated with English proficiency. However, the recent study showed weak correlation since majority of the participants admitted to have low frequency of Self-Directed Informal Digital Learning of English engagement for most of them were first year (freshmen) students with low level on limited user of English Proficiency score.

Furthermore, this suggests that with the amount of time students spend on informal learning activities, they will find a benefit on their English proficiency score. On these grounds, it seems plausible to suggest that students who engage more time in the informal learning activities may perform better with regard to English proficiency. With self-directed goal and regular interaction with English through informal sources, university-level adult learners will improve their English achievement (Lyriqkou, 2019; Metaria & Cahyono, 2024).

Some advantages of informal learning activities in technology engagement are freedom of learning, independence with no boundaries, informal, and beyond the classroom settings. However, in some condition the result of informal learning activities is not as expected. Some suggestions are given for teachers to increase the contribution of informal English learning frequency to EFL students' English proficiency, as follows.

Learning Support

It cannot be denied that motivation, both of intrinsic and extrinsic motivation are important aspects for students' learning development. Engaged students become intrinsically motivated by curiosity, interest enjoyment, and a desire to achieve personal goals. However, having learning support as extrinsic motivation is sometimes hard to get. Learning support is any kinds of assistant which is given by anyone from the stakeholders (teachers, parents, friends, others) for the students to help them in learning beyond the formal setting.

Extrinsic motivation is very important for EFL students, since they need partners to talk to, discuss, and gain English atmosphere because they do not live in English speaking country. Learning a language is a habit and should be practiced regularly, so it won't get fossilized. While, family and friends are giving extrinsic motivation atmosphere by having relax and anxiety free conversation, teachers can frequently use extrinsic motivation by giving rewards, praise, free time, food, rules and routines, and even punishment to encourage and stimulate their students towards learning (Cahyono et al., 2016).

This study also found that a familiar relationship with interlocutors and communities influenced students' conversation both oral and written in the informal learning context, regardless of their confidence and proficiency level. In particular, a close proximity of students' interlocutors (e.g., intimate parents/siblings, teachers and friends both offline and online) was found to play a facilitative role on oral and written conversation. Interestingly, the level of familiarity with online communities also had a positive influence on subjects' tendency to produce L2 communication throughout a range of synchronous and asynchronous informal

learning contexts, such as online games and social media. Previous studies reported that L2 learners engaged in various informal online English learning communities such as fandom and fan practices (Sauro & Sundmark, 2019), social networking sites (Sockett & Toffoli, 2012), and a writing discussion forum (Sun et al., 2017).

However, back to the basic theory that familiarity with virtual communities and digital learning applications can be beneficial for enhancing English skills if it is supported by students' own needs and interests as intrinsic motivation. The EFL students are responsible for informal learning activities while interacting with other community members (or other English users) in a digital affinity space. Considering that Indonesian students tend to have limited learner autonomy, intrinsic motivation, and self-confidence in oral communication, the use of Self-Directed Informal Digital Learning of English activities may offer valuable insights into how to overcome Indonesian EFL students' high level of social anxiety in communication.

Teachers' Role

In informal learning activities, students can take advantage of digital technologies. However, it is important to note that, as discussed in this study, not every engagement with technology outside the classroom has an equal impact. In this regard, teachers play a significant role in influencing students' use of technology outside the classroom. Informed by other research (Lai et al., 2016), it is important for teachers to understand how frequency of language learning activities could serve as a key for the quality of students' informal learning experiences. Thus, Lai et al. (2015) have stressed the importance of the teacher's role in integrating technology-mediated, diverse language learning activities into their lesson plans, which can maximize English input through different modalities of English (e.g., audio, video, images, etc.), enrich English learning outside of the classroom and positively affect students' cognitive and affective aspects.

Limitations of the Study

The recent study shows positive yet weak correlation between students' Self-Directed Informal Digital Learning of English frequency engagement and English proficiency. However, interpretation cannot be generalized to other population in different places, time and conditions. Nevertheless, this study hopefully enriches the comprehension of informal learning beyond the classroom setting.

Participants' characteristics which might influence the correlation between Self-Directed Informal Digital Learning of English engagements and English proficiency, includes students' age might be the main limitation of this study. In the present study, there was a discussion which stated that age or level of study might influence the result of findings since the freshmen had not yet enough time engagement compare to older students. Suggestion for future research to concern more of this condition.

Other limitation is qualitative investigation. In-dept qualitative investigation to capture the portrait of the various practice of Self-Directed Informal Digital Learning of English engagements (e.g., social networking sites, websites and applications) had not been conducted in this study due to limited time and opportunity of online meeting. Future research should explore more findings on what is actually happening in the digital encounter using their gadget and provide more qualitative aspects of Self-Directed Informal Digital Learning of English engagements used by EFL students, whether they use their gadget more for entertainment or learning, so it could identify the exact problem on the process of language engagement.

Hopefully, by overcoming those limitations, there will be better research and more insightful theories concerning about how informal language learning should be implemented by students and encouraged by teachers.

CONCLUSION

The results of the study convinced that the frequency of Self-Directed Informal Digital Learning of English engagements had statically positive correlation to English proficiency. Furthermore, from the finding it was also revealed that the age of the students had highly correlation to students' English proficiency. So, it was concluded that students who engage more time in the Self-Directed Informal Digital Learning of English engagements made better improvement to English proficiency. As the frequency of informal learning experiences have a profound impact on an individual's language skills, some contributions of informal learning frequency to English proficiency found in this study. The frequency of informal learning experiences significantly contributes to English proficiency by providing increased exposure, opportunities for practice, contextualized learning, exposure to language diversity, motivation, engagement, and the development of autonomous learning skills. Integrating informal learning activities into one's daily routine can complement formal language instruction and accelerate language acquisition, ultimately leading to greater fluency and proficiency in English.

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