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Digital Literacy Skills and Foreign Language Anxiety of Gen Z in Malang: How Does It Correlate?

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Abstract

Digital technology now plays an important part in everyday life, requiring digital literacy skills. It also has significant effects on supporting educational needs, including foreign language learning. Some studies have revealed that learners with a high level of DLS will feel less anxious about joining the foreign language learning process. By implementing the quantitative approach, this study investigated the Digital Literacy Skills (DLS) and Foreign Language Anxiety (FLA) level of Gen Z in Malang as well as the correlation between DLS and FLA. Generation Z was chosen because they are known as digital natives. There were two questionnaires disseminated and were filled out by 100 Gen Z learners in Malang. DLS and FLA level of Gen Z in Malang were determined by finding the mean score while Pearson Correlation test was applied to determine the correlation between DLS and FLA. The results of this study suggested that Gen Z had a high level of DLS and moderate level of FLA Besides, there is weak correlation between DLS and FLA (Sig.2-tailed=0.004, Pearson Correlation=-0.486). Gen Z proved that they had a high DLS yet still experienced the FLA. Gen Z required direct assistance from educators rather than doing independent foreign language learning by employing their high DLS. Thus, combining face-to-face foreign language learning with digital technologies could assist Gen Z in reducing their FLA.

Keyword: digital literacy skills; digital technology; foreign language anxiety; foreign language learning; generation Z

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Introduction

In modern times, digital technology possesses crucial roles in the learning process, daily life, and involvement throughout a person's life (Rasi et al., 2019). As a result, mastery of digital technology requires obtaining and implementing the relevant knowledge and skills, frequently called digital literacy skills (DLS) (Law et al., 2018; Park et al., 2020). Digital technologies have rapidly grown and become widely used since the 2000s up until this day as part of human life, especially for Generation Z (Gen Z) (Danuri, 2019). Gen Z goes by the title of digital natives, born from 1995 to 2009 (Pratikto & Kristanty, 2018), who have been extensively exposed to and are accustomed to the use of digital technologies. Thus, Gen Z is supposed to have high DLS and find it much easier to operate digital technologies.

Along with the rapid growth of digital technology and its widespread use, digital technology has a significant impact on supporting the educational needs of educators and students through the existence of online learning schemes (Anggrawan et al., 2019; Arafah & Hasyim, 2023). The National Institute of Multimedia Education in Japan discovered that increased student exposure to educational digital platforms has a significant impact on student achievement, particularly in terms of knowledge, comprehension, and practical skills in subject areas such as language learning (Eryansyah & Nurweni, 2019). A high DLS is therefore necessary to obtain good accomplishment, comprehension, and practical skills.

Contradictory, digital technology unquestionably played a factor in many different sorts of anxiety. One of them is foreign language anxiety (FLA), which is frequently perceived as a major barrier to overcome by educators and students when learning a foreign language. FLA may arise by the utilization of digital and online platforms to support the learning process (Alla et al., 2020). FLA is defined as a conceptually distinct variable in foreign language learning and is interpreted within the context of existing theoretical research on specific anxiety responses (Tuncel et al., 2020). FLA is recognized in foreign language acquisition studies as the cause of failure due to the low level of someone's self-esteem and confidence (Malik et al., 2020).

Yustika and Iswati (2020) indicated that digital technology and higher levels of DLS correlate with better learning outcomes for the learners, so they will not feel anxious about joining the learning process. In terms of foreign language learning, learners who have high DLS

will enjoy the learning process without worrying about the difficulties of digital technology. Fauzi et al. (2022) revealed the advantage of web-based foreign language learning and found that it is beneficial to overcome students' FLA. In addition, the advantage of using an online platform, which is a simulation game, is that it effectively connects foreign language vocabulary acquisition and the real world, which reduces students' FLA (Yang et al. 2022).

Upon a preliminary research on available literature, none has been done to analyze the correlation between the DLS and FLA of Gen Z as the digital natives, especially in Malang, one of the cities considered as the center of education, where many Gen Zs reside and study and one of the cities who claim aim for citizen's digital literacy. Therefore, to fill in the gap in the previous studies, the current study identifies the DLS and FLA levels of Gen Z in Malang and addresses the correlation between DLS and FLA. The goals of this study are to identify the DLS level of Gen Z in Malang as the digital natives, identify whether they experience FLA at that DLS level, as well as determine whether there is a correlation between DLS and FLA, particularly among Malang's Generation Z, who are considered as digital natives.

Literature Review

Theoretical Framework

Digital Literacy Skills

DLS is more than being able to operate an electronic device or a particular software package properly. It is about collaborating, being safe, communicating effectively, acquiring cultural and social understanding and awareness, and being creative (Hague & Payton, 2010; Yustika & Iswati, 2020). Hague and Payton (2010) elaborated that eight sub-dimensions of digital literacy skills must be mastered by people nowadays. Those eight sub-dimensions are functional skills and beyond, creativity, collaboration, effective communication, the ability to find and select information, critical thinking and evaluation, cultural and social understanding, and e-safety.

Functional skills and beyond are related to the ability to operate various digital technologies and are concerned with technological processes. The practical use of technology is also related to familiarity with technology, the affordability of technological devices, the use of technology, and data production (Hague & Payton, 2010; Nasionalita & Nugroho, 2020).

Besides, being digitally literate requires being creative or actively generating content, comprehending how content is constructed, and being able to collaborate with others. Inseparably, the ability to communicate effectively through digital media is important to master, along with the ability to search for information, critically thinking, and understand society and culture without lessening the significance of maintaining e-safety while exploring digital media (Hague & Payton, 2010; Nasionalita & Nugroho, 2020).

Foreign Language Anxiety

FLA has become an important concern in foreign language learning studies over the last three decades, and it has sparked significant discussion (Demir & Zaimoglu, 2021; Trang, 2012). FLA is a unique, complicated construct of one's views, opinions, emotions, and actions related to the process of learning languages caused by the distinctive nature of the language learning process, which covers three sub-dimensions of foreign language anxiety including communication apprehension, fear of negative evaluation, and test anxiety (Trang, 2012; Malik et al., 2020; Nasionalita & Nugroho, 2020). Communication apprehension is a type of anxiety caused by a fear of interacting with others. It may appear as a difficulty not only in speaking in pairs, groups, or in public but also in listening to or understanding oral messages. It is related to the beliefs about other people's negative evaluations or expectations. A person may be extremely sensitive to the opinions of others in the learning environment. Then, it leads to test anxiety that causes learners to be concerned about and stressed by foreign language assessments. Due to foreign language tests or quizzes that are frequently given to the learners, they will struggle to perform well (Trang, 2012; Malik et al., 2020; Nasionalita & Nugroho, 2020).

Previous Studies

Yustika and Iswati (2020) elaborated that a higher level of DLS positively influenced learners' learning outcomes. Besides, digital technologies in the foreign language learning process affect the learners' autonomy, enthusiasm, and performance (Azmi, 2017; Hussain, 2018; Eryansyah & Nurweni, 2019). The rationale stated above demonstrates that digital technologies in the foreign language learning process have had an advantageous effect on educators as well as learners. Educators will find it more effective in teaching a foreign language,

while learners will not feel anxious about joining the learning process if they have high DLS (Cetto, 2010; Yustika & Iswati, 2020). In other words, learners who have limited DLS are still potentially apprehensive because they do not comprehend how to operate the digital technology properly.

Most learners nowadays are Gen Z, which means they are regularly exposed to digital technologies. It is believed that many of them are digitally literate and have a high DLS (Eryansyah & Nurweni, 2019). They also mention that this circumstance presents an opportunity for Gen Z to study a foreign language. They can use cell phones, for example, to strengthen their language skills by adapting any authentic resources available on the appropriate digital technologies (Eryansyah & Nurweni, 2019). One of the features of digital technology that can be used to learn foreign languages is artificial intelligence (AI). El Sazly (2020) studied the influence of the use of AI on foreign language learners' anxiety, which is one of the inhibiting factors in language learning. Research suggests that DLS in using AI to learn foreign languages has a positive impact due to its flexibility, interactive nature, learner-centered approach, and reduced FLA levels (El Sazly, 2020).

Alla et al. (2020) discovered a general trend for FLA to increase due to the widespread usage of digital technologies. These changes represent an increase in learners' negative attitudes toward the foreign language learning process, a loss in motivation, and, broadly, avoidance (Alla et al., 2020). Gen Z exhibits distinct learning traits that differ from prior generations. As Gen Z learners have grown up immersed in digital technology, some academics discover they have a specific way of learning. One of the unique characteristics of Gen Z learners is their enthusiasm for and desire for the visual nature instead of reading texts.

Additionally, they tend to multitask during learning (Alruthaya et al., 2021; Ashour, 2020). It is in line with Li and Fan's (2022) discovery that there are strong positive correlations between media multitasking, FLA, and depression. Media multitasking, FLA, and depression have a negative correlation with learners' focus.

Mudra (2020) demonstrated that DLS has both advantages and disadvantages for learners of a foreign language. DLS benefits learners by strengthening their writing, reading, listening, and speaking skills, introducing authentic resources, increasing digital technology use, and promoting online cooperation between educators and learners also between learners. However,

this study found that digital literacy has some negative consequences. Weak signals continue to be a concern, making internet access difficult. Also, online digital resources can be challenging for learners to understand and apply. These barriers may be influenced by additional issues, such as the complexity of digital technologies and learners' and educators' lack of DLS, which all contribute to an increase in FLA (Mudra, 2020). As a result, it is critical to understand the learning conditions, digital technologies utilized, and DLS level, which can all have an impact on the FLA level (Alla et al., 2020). This study pointed out the identification of DLS and FLA levels of Gen Z in Malang and also the correlation between DLS and FLA since the previous studies seem to contradict each other about the usage of digital technologies in foreign language learning process and DLS to the increase of FLA, according to the previous studies. The hypotheses formed are presented as follows.

H0: There is no correlation between DLS and FLA experienced by Gen Z in Malang.
H1: There is a correlation between DLS and FLA experienced by Gen Z in Malang.

Method

This section covers the elaboration of research approach, instruments used, data collection, sampling method, and data analysis.

Research Approach, Instruments and Data Collection

The current study employed a quantitative approach to measure the degree of correlation between DLS and FLA experienced by Gen Z in Malang. According to Creswell and Creswell (2018), the quantitative approach tests objective ideas by examining the relationship between variables. These variables can be measured using instruments and examined statistically.

The current study utilized two types of questionnaires: the DLS questionnaire and the FLA questionnaire. The DLS questionnaire has 20 questions covering eight subdimensions: functional skill, creativity, collaboration, communication, ability to find and select information, critical thinking, cultural and social understanding, and e-safety. The FLA questionnaire involves 13 questions under the subdimensions of communication apprehension and fear of negative evaluation. The detailed distribution of each item is presented in Table 1.

Table 1. Blueprint of questionnaire in data collection

Section	Aspect	Sub-dimension	Item Number
1	Personal Information	-Name -Age	
2	Digital Literacy Skills (Hague & Payton, 2010)	-Functional skills and beyond -Creativity -Collaboration -Effective Communication -Ability to find & select information -Critical thinking & evaluation -Cultural & social understanding -E-safety	1, 2 3, 4, 5 6, 7, 8 9, 10, 11 12, 13, 14, 15 16 17 18. 29, 20
3	Foreign Language Anxiety (Horwitz, 1986)	-Communication apprehension -Fear of negative evaluation	1, 3, 5, 8, 9, 10, 11 2, 4, 6, 7, 12, 13

Based on Pratikto and Kristanty (2018), Gen Z was born from 1995 to 2009. Thus, the questionnaires were distributed to Gen Z in Malang aged 15 to 29 years old. The questionnaires that were modified into Google Forms were shared through X and WhatsApp from December 2023 to March 2024.

Population, Sample, and Sampling Method

In 2023, 190.670 residents in Malang were classified as Gen Z, according to data from the Central Bureau of Statistics or Badan Pusat Statistik (BPS). The current study included 100 Gen Z participants. To collect the sample, the researcher adopted Slovin's formula.

Additionally, the researcher applied stratified random sampling, implementing the calculations shown in Table 2 to obtain a representative sample by addressing population heterogeneity.

Table 2. Stratified Random Sampling Calculations

Age	Population (N)	Stratified Sampling Formula	Sample (n)
15-19 YO	60.872	$\frac{N}{190.670} = \frac{n}{100}$	31,9=32
20-24 YO	64.130		33,6=34
25-29 YO	65.668		34,4=34
Total	**190.670**		**100**

The population was first classified into subgroups based on the data from the Central Bureau of Statistics on Malang's official website and were further classified by their age (15-19 years old, 20-24 years old, and 25-29 years old). The demographic information of the respondents is presented in Table 3.

Table 3. Demographic information of questionnaire respondents

Age	Number of Respondents	Total Based on Age Range
15	0	
16	0	
17	6	32
18	11	
19	15	
20	6	
21	5	
22	5	34
23	4	
24	14	
25	15	
26	9	
27	7	34
28	1	
29	2	
Total	**100**	

The respondents who filled out the questionnaire were in accordance with the number of calculations carried out using the Slovin formula, 32 Gen Z aged 15-19 years, 34 Gen Z aged 20-24 years, and 34 Gen Z aged 25-29 years.

Data Analysis

The obtained quantitative data was then analyzed by calculating the mean of Gen Z in Malang's DLS and FLA. Then, the correlation between the DLS and FLA was analyzed using

SPSS 23 to identify its descriptive statistics (mean and standard deviation) for both DLS and FLA to determine the level of those two variables. Pearson Correlation test was then conducted to calculate the correlation between digital literacy skills and Gen Z's foreign language anxiety in Malang. In detail, the correlation between DLS and FLA was also identified based on Gen Z's age range (15-19 years old, 20-24 years old, and 25-29 years old).

Since Hague and Payton (2010) and Horwitz et al. (1986) divided the level of DLS and FLA into three levels (low, moderate, and high), determination of the value at each level was done by dividing the scale point used by the number of existing levels. Each level is worth 1.7 points. Thus, the values for DLS and FLA are: < 1.7 = low; 1.8 - 3.3 = moderate; and > 3.4 = high.

Findings and Discussion

DLS Level of Gen Z in Malang

Table 4 illustrates that Gen Z in Malang has a high level of DLS across all subdimensions, including functional skills and beyond, creativity, collaboration, effective communication, ability to find and select information, critical thinking, cultural and social understanding, and e-safety as presented in Table 4 with all mean values of DLS subdimensions exceed 3.3

Table 4. DLS Level of All Respondents

No.	Subdimension	Mean	Level
1	Functional Skill and Beyond	3.9	High
2	Creativity	3.8	High
3	Collaboration	3.8	High
4	Effective Communication	3.9	High
5	Ability to find and select information	4	High
6	Critical Thinking	3.9	High
7	Cultural and Social Understanding	3.9	High
8	E-Safety	3.7	High

...

Table 4 highlights that Gen Z in Malang has the highest average DLS for finding and selecting information (M=4), followed by functional skills and beyond, effective communication, critical thinking, cultural and social understanding (M=3.9), creativity and collaboration (3.8), and e-safety (M=3.7). As a result, it demonstrates that Malang's Gen Z is knowledgeable in more

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than simply operating digital technologies. To obtain more precise results for Gen Z in the Malang's DLS level, a more detailed calculation has been done based on Gen Z's age, which is 15 to 19 years old, 20 to 24 years old, and 25 to 29 years old.

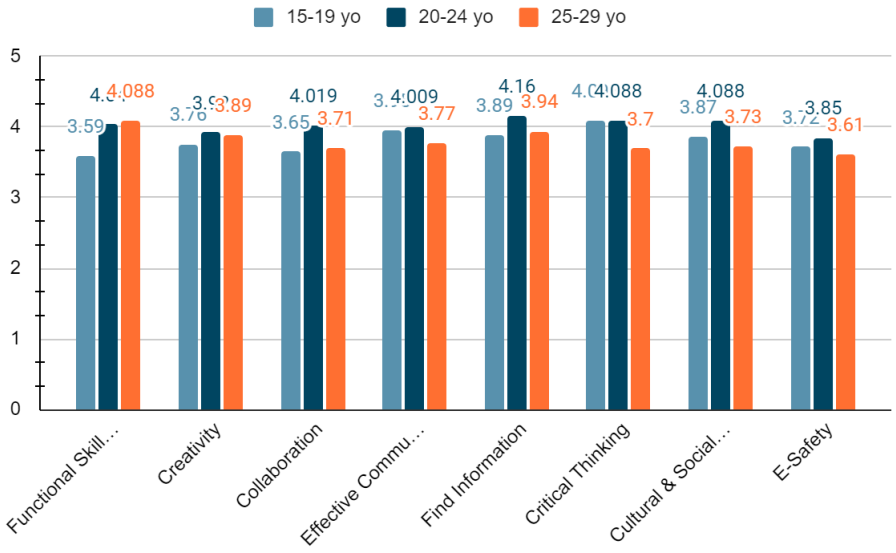

Figure 1. DLS Level of Gen Z in Malang (Based on Age Range)

The calculations in Diagram 1 above reveal that Gen Z in all age ranges had high DLS. However, these values differ on each subdimension across different age groups. Diagram 1 depicts how Gen Z aged 20 to 24 years old excels Gen Z aged 15 to 19 years old and Gen Z aged 24 to 29 years old across almost all subdimensions of DLS, except functional skills and beyond, which is slightly lower compared to Gen Z aged 25 to 29 years old.

FLA Level of Gen Z in Malang

Table 5 displays the results of the data collected through the FLA questionnaire. The descriptive statistics of the data demonstrate that both subdimensions (communication apprehension and fear of negative evaluation) are moderate due to the mean value of the subdimensions between 1.8 and 3.3.

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Table 5. FLA Level of All Respondents

No.	Subdimension	Mean	Level
1	Communication Apprehension	2.92	Moderate
2	Fear of Negative Evaluation	3.01	Moderate

Table 5 illustrates that the fear of negative evaluation subdimension (M=3.01) has a higher value than the communication apprehension subdimension (M=2.92). Similar to the calculation of Gen Z in Malang's DLS level, Their FLA level was also calculated based on their age range to obtain more detailed results. Diagram 2 below indicates the level of FLA among Malang's Gen Z based on their age range. The values in Diagram 2 show that the level of FLA among Gen Z in Malang is somewhat similar to the FLA level of all respondents' result (see Table 5). However, the value varies per age range.

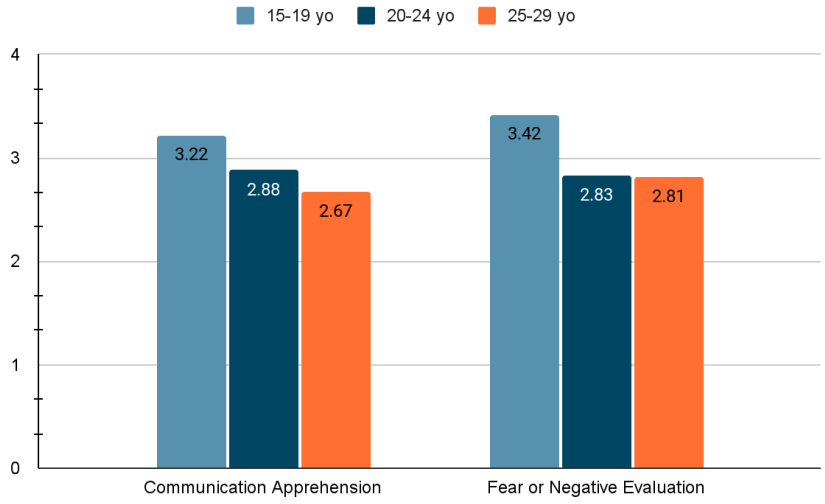

Figure 2. FLA Level of Gen Z in Malang (Based on Age Range)

The average values for each subdimension decrease as the age range increases. In the communication apprehension subdimension, Gen Z in Malang aged 15 to 19 (M=3.22) has a higher average value than Gen Z aged 20 to 24 (M=2.88). Then, Gen Z in Malang aged 25 to 29 years old (M=2.67) has a lower average value than Gen Z aged 20 to 24 years old.

The Correlation between DLS and FLA of Gen Z in Malang

The decision basis of Pearson Correlation analysis states that if the significance value (Sig.2-tailed) is less than 0.05, then there is a correlation between variables and if the Pearson Correlation is bigger than the r table, then there is a significant correlation between variables. The opposite, if the significance value (Sig.2-tailed) is more than 0.05, then there is no correlation between variables and if the Pearson Correlation is smaller than the r table, then there is an insignificant correlation between variables. The result presented in Table 6 is the calculation of Pearson Correlation results of all respondents.

Table 6. The Correlation between DLS and FLA of All Respondents

		Digital Literacy Skills	Foreign Language Anxiety
Digital Literacy Skills	Pearson Correlation	1	-0.077
	Significance (2-tailed)		0.448
	N	100	100
Foreign Language Anxiety	Pearson Correlation	-0.077	1
	Significance (2-tailed)	0.448	
	N	100	100

Table 6 reveals that the Pearson Correlation value is -0.077, which is significantly lower than the r table's value of 0.195 for 100 respondents. Furthermore, the Pearson correlation score is not anywhere near 1 or -1, indicating that the correlation between DLS and FLA is potentially weak. Meanwhile, looking thoroughly at Table 6, the Significance (Sig-2 tailed) shows a value of 0.448, which is greater than 0.05, indicating that there is no correlation between DLS and FLA experienced by Gen Z in Malang.

Based on the finding presented, was no correlation between DLS and FLA. It means that even though they had high DLS and were accustomed to the use of digital technologies, they still potentially experienced FLA or they did not experience the FLA. To find deeper results, the correlation between DLS and FLA was also determined by segmenting the results by Gen Z's age range. The statistics presented below show a correlation between DLS and FLA among Malang's Generation Z aged 15 to 19 years old.

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Table 7. The Correlation between DLS and FLA of 15-to-19-year-old Gen Z in Malang

		Digital Literacy Skills Level (15-19 yo)	Foreign Language Anxiety Level (15-19 yo)
Digital Literacy Skills Level (15-19 yo)	Pearson Correlation	1	0.3
	Sig. (2-tailed)		0.873
	N	32	32
Foreign Language Anxiety Level (20-24 yo)	Pearson Correlation	0.3	1
	Sig. (2-tailed)	0.873	
	N	32	32

Table 7 indicates that the value of the Sig. (2-tailed) is 0.873, which is higher than 0.05, meaning that there is also no correlation between DLS and FLA of Gen Z in Malang aged 15 – 19 years old. Besides, the Pearson Correlation calculation results of Gen Z aged 20 to 24 years old is presented in the following table.

Table 8. The Correlation between DLS and FLA of 20-to-24-year-old Gen Z in Malang

		Digital Literacy Skills Level (20-24 yo)	Foreign Language Anxiety Level (20-24 yo)
Digital Literacy Skills Level (20-24 yo)	Pearson Correlation	1	0.175
	Sig. (2-tailed)		0.323
	N	34	34
Foreign Language Anxiety Level (20-24 yo)	Pearson Correlation	0.175	1
	Sig. (2-tailed)	0.323	
	N	34	34

The same holds when assessing the correlation between DLS and FLA among 20- to 24-year-old Gen Z in Malang, where the value of Sig. (2-tailed) is 0.323 (see Table 8). This suggests there was no correlation between DLS and FLA among Malang's Gen Z, specifically those aged 15 to 19 years old and 20 to 24 years old.

However, an opposing result appears in the correlation between DLS and FLA among Malang's 25-to-29-year-old Gen Z. The value of Sig. (2-tailed) is 0.004, which is smaller than 0.005, demonstrating the correlation. Furthermore, the Pearson correlation score of -0.0486 suggests that the connection is negative, meaning that the higher their DLS, the lower their FLA. However, this correlation is statistically insignificant because the Pearson Correlation value is less than 0.5 (see Table 9).

Table 9. The Correlation between DLS and FLA of 25-to-29-year-old Gen Z in Malang

		Digital Literacy Skills Level (25-29 yo)	Foreign Language Anxiety Level (25-29 yo)
Digital Literacy Skills Level (25-29 yo)	Pearson Correlation	1	-0.486**
	Sig. (2-tailed)		0.004
	N	34	34
Foreign Language Anxiety Level (25-29 yo)	Pearson Correlation	-0.486**	1
	Sig. (2-tailed)	0.004	
	N	34	34

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

The data obtained demonstrates that the Pearson Correlation measurement between DLS and FLA shows a correlation (Sig.2-tailed=0.004, <0.05) only on Gen Z aged 25 to 29 years old. However, the calculation presents an insignificant negative correlation. These Pearson Correlation results suggest that even though Gen Z in Malang has sufficient DLS, they still experience the FLA. The results are slightly different from what Yustika & Iswati (2020) elaborated that the limited skills of DLS affect the learning outcomes of the students and raise the feeling of anxiety. Considering the results of data calculations to determine the correlation between DLS and FLA experienced by Gen Z in Malang, the proposed hypothesis's results are presented below. The null hypothesis (H0) is rejected since the alternative hypothesis is accepted even only for the correlation between DLS and FLA of Gen Z aged 25 to 29 years old. The results above prove a weak correlation between DLS and FLA of Gen Z in Malang.

Based on the findings presented above, Gen Z in Malang agree that they are anxious when they communicate with others using a foreign language, and are afraid of other people's

evaluation of them even if they have adequate skills in terms of operating, interacting, and finding information through digital media. Some reasons support the Pearson Correlation results such as contents and platforms accessed, the language used during the involvement in the digital media, and preference method in learning foreign languages. However, further research is needed on this matter to identify the causes or factors that bridge this correlation between DLS and FLA of Gen Z in Malang.

In this case, Gen Z in Malang adheres to the idea that they are digital natives with extensive exposure to digital technology and a high DLS (Pratikto & Kristanty, 2018). Interestingly, the findings of this study are different from Yustika and Iswati (2020), who stated that higher levels of DLS promote learning outcomes and prevent learners from feeling anxious about participating in the learning process. According to Alla et al. (2020), FLA can occur as a result of the widespread utilization of digital technology. It could happen to Gen Z in Malang, as well as their learning characteristics, which include the tendency to multitask when learning, which leads to elevated FLA and depression. Media multitasking, FLA, and depression all have a negative effect on learners' focus (Alruthaya et al., 2021; Ashour, 2020; Li and Fan, 2022).

Hurd and Hauck discovered that FLA can be caused by factors such as distance mode and lack of prompt feedback when learning foreign languages using digital technology, despite learners' high DLS (as cited in Alla et al., 2020). It can also happen to Malang's Generation Z, who, despite having a high level of DLS, require direct assistance from educators in order to receive direct feedback on their foreign language learning. Kock (2004) also found that using digital technology in the learning process could raise cognitive strain, communication uncertainty, and decreased physical arousal, all of which have a negative impact on students' affective domains and potentially lead to FLA.

In this regard, Alruthaya et al. (2021) explains that there are three levels of digital technology used in education methods; low level (digital platform for learning and face-to-face educators), medium level (integrating mobile devices, social, media, and facet-to-face educators), and high level (digital platform and social media associated with mobile devices used in virtual learning environments). However, looking at the results obtained, the appropriate level to be applied in the foreign language learning process for Gen Z in Malang is level 2 - Medium, where Gen Z's digital literacy skills can be utilized optimally while still assisting them directly in the face-

to-face sessions to avoid the negative effects or disadvantages of DLS in the foreign language learning process.

Thus, having an offline class that is integrated into the use of digital technology, direct assistance from the educator, and the main reference used will be beneficial and effective for Gen Z in Malang. Fauzi et al. (2022) and Yang et al. (2022), who integrated foreign language learning with digital platforms that effectively reduce the anxiety level of foreign language learners, can be some of the references for foreign language learning methods.

Conclusion and Implication

The current study aims to determine the DLS and FLA levels of Gen Z in Malang, as well as the relationship between DLS and FLA. The findings reveal that Gen Z in Malang has a high level of DLS, which is consistent with the notion that Gen Z are digital natives. However, Gen Z in Malang continues to face FLA when learning foreign languages. Pearson correlation calculation shows that there is a weak negative correlation between DLS and FLA in Gen Z aged 25 to 29 years. This result implies that higher DLS may lessen learners' FLA over participating in the learning process.

The findings suggest that high DLS may have an indirect correlation with FLA due to a variety of factors, including the widespread use of digital technology, which has the potential to increase feelings of anxiety, Gen Z's learning characteristics, specifically multitasking, which can disrupt a person's focus in the learning process, and Gen Z's desire to receive direct assistance and feedback during the learning process. As a result, their high DLS skills are not optimally utilized for foreign language learning.

This study implies that Gen Z in Malang do not fully take advantage of their high DLS to learn foreign languages, so they still require direct aid from educators. Thus, incorporating DLS into foreign language classes is critical for Gen Z in Malang. Prompt feedback and direct interaction between Gen Z in Malang and their foreign language teachers are also essential. Due to its limitations in analyzing the DLS and FLA levels of Gen Z in Malang, as well as the correlation between DLS and FLA, future researchers are encouraged to investigate the factors mentioned that may cause an indirect correlation between DLS and FLA.

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