SURVEY ON FACTORS INFLUENCING GEN Z'S INTEREST IN UTILIZING SOCIAL MEDIA AS A MEDIUM FOR DIGITAL LEARNING

A Thesis

Submitted as Partial Fulfilment of the Requirements

For Getting *Sarjana Pendidikan* Degree of English Language Education Study Program

By:

Ayu Nurul Azhar

21421001

English Language Education Study Program

Faculty of Teacher Training and Education

La Tansa Mashiro University

2025

APPROVAL SHEET

SURVEY ON FACTORS INFLUENCING GEN Z'S INTEREST IN UTILIZING SOCIAL MEDIA AS A MEDIUM FOR DIGITAL LEARNING

By

Ayu Nurul Azhar

21421001

Approved on 24th September 2025

By the Consultant Team

Primary Supervisor	Co-Supervisor
Hikmah Pravitasari, M.Pd.	Siti Hanna Sumedi, M.Pd.
NIDN. 0419119002	NIDN. 0406129503

RATIFICATION SHEET

SURVEY ON FACTORS INFLUENCING GEN Z'S INTEREST IN UTILIZING SOCIAL MEDIA AS A MEDIUM FOR DIGITAL LEARNING

By

Ayu Nurul Azhar

21421001

Defended before the board of examiners on 29th September 2025 and Declarated Acceptable

Board examiners

Primary Supervisor	:	Hikmah Pravitasari, M.Pd.	(.....)
Examiner 1	:	Fheby Indriyanti Nurpratiwi, M.Pd.	(.....)
Examiner 2	:	Yesi, M.Pd.	(.....)

Rangkasbitung, 2 October 2025

Faculty of Teacher Training and Education

La Tansa Mashiro University

جامعة لا تنس مصيرا

Head of Study Program,

Hikmah Pravitasari, M.Pd.

NIDN. 0419119002

STATEMENT OF WORK'S ORIGINALITY

I honestly declare that this thesis, which I have written, does not contain the work or parts of the work of other people, except those cited in the quotations and references, as a scientific paper should.

Rangkasbitung, 24th September 2025

The Writer,

Ayu Nurul Azhar

21421001

MOTTO

ۙاِنَّ مَعَ الْعُسْرِ يُسْرًا ۚ۝ وَاِلٰى رَبِّكَ فَارْغَبْ فَاِذَا فَرَغْتَ فَانْصَبْ

Surely with difficulty there is ease. So when you have finished (a task), keep working hard (for another task), and only to Allah do you hope.

(QS. Al-Insyirah Ayat 6-8)

“Even the hardest challenges become easier when we trust that Allah's plan is always the most beautiful.”

_Yuitsme

DEDICATION

With full gratitude and thanks, I dedicate this thesis to:

1. My eternal love, Allah SWT, who has given me the breath of life until now and always protects me with all His greatness.
2. My beloved parents, Father Hidayatullah and Mother Nurhasanah, thank you for your advice, love, prayers, support, and always encouraging me in completing my studies.
3. My beloved sister, Khoirunnisa Thiara for advice, affection, prayers, support, and always encouraging me in completing my studies.
4. My supervisor, Hikmah Pravitasari, who has provided support, input, advice, and helped me in completing this thesis. Thank you very much ma'am.
5. Finally, I dedicate it to the woman who wants to keep getting up and keep surviving. I know, it's not easy being you. But today, let me say thank you for all the wounds you didn't show, for all the prayers you prayed in silence, for all the nights you passed with a tight chest but still chose tomorrow. Thank you for not giving up, even though no one knows how many things there are to fight for. I'm proud of you, not because you're perfect, but because you persevered when there were so many reasons to give up. Keep going slowly, just don't stop.

ACKNOWLEDGEMENT

Alhamdulillahi Rabbil ‘Aalamiin, All praise be to Allah SWT the Almighty and the most Merciful, and peace be upon the beloved final prophet Muhammad SAW. In the first page of the paper, the researchers would love to give a great thanks to Allah SWT who has given health and the opportunity to design this paper. Besides, the researcher would like to say thank you to my lecturer Hikmah Pravitasari, M.Pd. who helped and guided the researcher in designing this research. Who not only guided, gave advice, supported, as well as criticized me in a very qualified manner, but also motivated me thoroughly with her leadership. I could learn much from her. This thesis is submitted to fulfill the final semester entitled “Survey on Factors Influencing Gen Z’s Interest in Utilizing Social Media as A Medium for Digital Learning.” Finally, I believe this thesis is far from perfect; however, it is hoped that it will be useful and contribute to the English teaching process, especially in teaching writing to University Students on Social Media students in this digital era. Therefore, I greatly appreciate any criticism, ideas, and suggestions for the improvement of this thesis.

Rangkasbitung, 24th September 2025

Ayu Nurul Azhar

TABLE OF CONTENT

LIST OF KEY TERMS & ABBREVIATIONS

EFL	:	English as a Foreign Language
Gen Z	:	Generation Z
ICT	:	Information and Communication Technology
MOOC	:	Massive Open Online Course
SEM	:	Structural Equation Modeling
PLS-SEM	:	Partial Least Squares - Structural Equation Modeling
SPSS	:	Statistical Package for Social Sciences
SI	:	Situational Interest
PI	:	Personal Interest
CD	:	Coefficient of Determination (Coefficient of Determination)

LIST OF FIGURES

LIST OF TABLES

LIST OF APPENDICES

SURVEY ON FACTORS INFLUENCING GEN Z'S INTEREST IN UTILIZING SOCIAL MEDIA AS A MEDIUM FOR DIGITAL LEARNING

By:
Ayu Nurul Azhar
21421001

ABSTRACT

This study aimed to identify the factors that influence Generation Z's interest in utilizing social media as a digital learning medium. As digital natives, Generation Z often uses platforms such as YouTube, TikTok, WhatsApp, Instagram, and Twitter (X) not only for entertainment but also to support their academic processes. This study used a quantitative approach with a survey method. Respondents consisted of 235 English education students from various public and private universities in Indonesia. The research instrument was an online questionnaire and was analyzed using Partial Least Squares-Structural Equation Modeling (PLS-SEM) with the help of SmartPLS 4. The findings showed that personal interest has a significant influence on Gen Z's interest in utilizing social media as a means of digital learning, with a path coefficient of 0.612, a t-statistic value of 28.318, and a p-value of 0.000. This indicated that the higher the personal interest of students, such as internal motivation, relevance to goals, and positive experiences, the greater their interest in using social media as a learning medium. In addition, situational interest was also proven to have a significant effect with a path coefficient of 0.449, a t-statistic value of 22.447, and a p-value of 0.000, which means that interesting, interactive, and relevant learning conditions on social media can increase students' interest in using it for learning. The R^2 value of 1.000 (100%) showed that the combination of personal interest and situational interest fully explains the variability of Gen Z's interest in using social media as a digital learning medium. Thus, it can be concluded that although both have a significant effect, personal interest has a more dominant influence than situational interest. These results confirmed that students' internal motivation is the main factor in driving interest in learning through social media, while situational factors remain important in supporting the creation of effective digital learning experiences.

Keywords : Digital Learning, Generation Z, Personal Interest, PLS-SEM Situational Interest, Social Media,

CHAPTER 1

INTRODUCTION

1.1 Background of the Study

The utilization of technology as a learning medium is inevitable and inseparable in the teaching and learning process. Given the new era that has sparked online learning, learning media is needed that does not make students feel difficult and familiar in using it. Learning media has the meaning of a learning resource that develops in accordance with the development of learning technology and its forms vary, ranging from visual to audio visual. According to Fitria (2022), media as a learning resource develops following the development of learning technology, both in the form of audio, visual and audio visual. Therefore, it is necessary to make changes to the objectives, structure, and content of the education program and learning media so that learning through the use of technology is more interesting, relevant and in accordance with the use of technology, so that the learning media used must be able to respond to the changing trends of today. Thus Ittefaq et al. (2022), examined social media is not just a fad (temporary), but a constituent factor in their social and academic lives, leading them to language learning and cultural exchange behavior. In addition, Mitrulescu (2024) stated that the use of social media supports the improvement of core skills while also increasing students' motivation in learning English as a foreign language. According to Abdalgane (2022), the use of social media in an educational context can support the learning process such as conducting discussions and exchanging academic content to improve students' education. Learning in this way provides convenience because it

combines various delivery methods, teaching models, and learning styles and introduces various learning media.

Educators both teachers and lecturers can utilize social media as learning media. Social media has become an integral part of everyday life including the world of education. For students learning English as a Foreign Language (EFL) platforms such as Instagram, Youtube, Facebook, Instagram, X, WhatsApp and TikTok provide easy access to authentic interactive content that can improve language skills. According to Agustina & Dharmawan (2024) students considered TikTok as an interesting and effective medium for learning English, even though there were still technical and privacy constraints. Social media as a learning medium reflects the principle of connectivism, where the learning process occurs through networking and digital information exchange. This strengthens the position of social media as a pedagogical tool that can bridge the learning needs of the digital native generation. By utilizing social media as a learning media, it is not only relevant to the development of technology, but also able to answer the needs of learning that is more interesting, interactive, transformative and in accordance with the characteristics of today's generation.

In the EFL context, the use of social media provides several opportunities to develop students' English language skills and offers several opportunities for students to improve their overall English proficiency. According to Ravindran et al. (2022), EFL learners' speaking proficiency is closely related to their exposure to the target language, making social media essential for creating an optimal learning environment. In addition, Mitu (2020), states that social media provides advanced

opportunities to improve speaking skills. Therefore, social media serves as a powerful tool to improve EFL learners' speaking proficiency. As noted by Shabbir et al. (2025), in their study showed that social media facilitates collaborative learning and knowledge sharing among students, improving communication and access to learning resources. It means that social media can enhance students' learning. According to Procell et al. (2024) the main characteristic of social media when used as a learning platform is the support for multimodal education. The social media approach differs from standard educational techniques because it supports various types of content through videos, podcasts, infographics, and interactive quizzes that adapt to a variety of substantial learning approaches. As explained by Adnyani and Dewi (2020) emphasized that learning by utilizing interesting media will encourage students to be able to follow the learning process well. The use of social media as a learning tool at the university level has become a significant phenomenon, especially among Generation Z students. This generation, who grew up with digital technology, tends to utilize platforms such as YouTube, Instagram, TikTok, X, WhatsApp, and Facebook to communicate, share materials, and collaborate in the learning process because social media can be accessed easily anywhere and anytime. There are some studies support these kinds of issues. Kahnova and Papula (2020), in their research discuss how the use of social media affects Generation Z's education process. Cilliers (2021) examines how social learning tools such as social media platforms can enhance the learning experience of Generation Z. As discussed by Fauziah et al. (2023), in their research in exploring the effectiveness of Instagram and TikTok in improving college

students' English vocabulary acquisition. This makes it easier for Generation Z students to learn English. Social media is often used especially by generation Z students because social media is a fun learning medium for them. A number of studies have shown that social media such as Instagram, YouTube, Facebook, WhatsApp, X, and TikTok can be utilized as learning tools that support the development of students' English skills.

Social media has been used at the University level in various countries such as Indonesia, Vietnam, Iran, South Africa, Malaysia and Pakistan, social media used such as TikTok, YouTube, Facebook, WhatsApp, Instagram, and Twitter. Arumugam et al. (2022), from Malaysia in their research analyzed the role of Twitter in English vocabulary development among EFL students in Malaysia. Thi and Nguyen (2023), from Vietnam in his research discusses the potential use of social media such as Facebook and Google Docs in English language teaching and learning and investigates the extent to which social media is used by lecturers and students for English language learning purposes. Alfitri (2024) from Indonesia discusses the utilization of TikTok application as an educational tool to improve English speaking skills, assesses how effective TikTok application is in improving vocabulary, pronunciation, and speaking fluency, and examines the effect of TikTok on students' motivation and self-confidence. Malik and Qureshi (2024), from Pakistan describe how social media affects English language learning in Pakistan, focusing on the benefits and challenges it poses. Mthembu & Khoza (2024), from South Africa discuss how students in various African countries use YouTube to improve their English speaking and listening skills. Zalani & Yousofi

(2024), from Iran in their research examined the effect of Instagram use on the critical thinking skills of EFL students in Language Institutions.

Social media such as TikTok, YouTube, Facebook, WhatsApp, Instagram and X have been widely used at the university level in various countries, including Indonesia, Vietnam, Iran, South Africa, Malaysia and Pakistan. Various studies have shown that these platforms are effectively used by EFL students in improving English language skills, such as vocabulary, pronunciation, speaking and listening skills. In addition, social media also encourages students' motivation, confidence and active participation in the learning process thanks to the presentation of interesting and accessible content. However, despite its significant benefits, there are a number of phenomena or problems related to Generation Z's interest in utilizing social media as an English learning medium. Some students still consider social media as a means of entertainment only, so the use for educational purposes is not optimal. In addition, the lack of guidance from educators in directing the effective use of social media, low digital literacy, and distractions due to non-academic content are inhibiting factors. Uneven internet access and limited technological devices can also reduce interest and equal learning opportunities for all students. Thus, although social media has great potential as a means of learning English for generation Z, it is necessary to support pedagogical strategies, adequate digital literacy, and strengthen the role of lecturers in guiding students so that this potential can be maximized.

From various phenomena of learning media that occur due to the lack of interest in learning through conventional methods and the lack of use of media for applying

English to daily life among students in various universities and countries, this study discusses the factors that influence generation Z's interest in utilizing social media as a medium for English learning. Based on the researcher's experience as a student at a private university in Indonesia, there are some difficulties applying English to real and everyday situations despite having acquired theoretical knowledge in class. In addition, another university students find it difficult to speak in English because they are afraid of making mistakes and feel insecure when they have to speak in front of the class. To overcome these problems, the use of social media such as TikTok and Youtube can be used as a means of interactive and contextual speaking practice. Another difficulty faced is that university student find it difficult to understand a reading text because of their limited vocabulary. To overcome these problems, social media such as Instagram and Twitter can be used as a means of training to increase understanding and vocabulary by writing short texts such as captions or short stories in English. Another difficulty is that students have difficulty listening in listening to English explanations directly. To overcome this problem, social media such as YouTube, TikTok, X, and Instagram can be used as a means to practice by listening to short conversations via YouTube, TikTok, X, or Instagram about lecture material then guessing the meaning of the words or phrases used in the video.Therefore, the university students feel enthusiasm and interest in learning using social media such as TikTok, YouTube, Instagram, and X. Thus, it can be concluded that this topic is worthy of further research. This research aimed to find out the factors that influence Gen Z's interest in utilizing social media as a medium for English learning in higher education context.

1.2 Identification of the Problem

From the research background above, four main problems that arise in the research background can be identified:

1. The university students face difficulties applying English to real and everyday situations
2. The university students encounter challenges to speak in English because they are afraid of making mistakes and feel insecure when they have to speak in front of the class
3. The university students overcome problems to understand a reading text because of their limited vocabulary.
4. The university student have difficulty listening because it is difficult to listen explanations in English directly.

1.3 Limitation of The Problem

From identifying the problems that arise, this study focused on the factors that influence Generation Z's interest in utilizing Social Media as a digital learning.

1.4 Formulation of The Problem

In the explanation of the identification and limitation of the problem above, the formulation that will be discussed in this study are:

a. What factors that influence situational and personal interest Gen Z interested in using Social Media as digital learning.

b. Is there any correlation between situational and personal factors to the Gen Z Interest in utilizing social media as a digital learning?

1.5 Objectives of the Study

Based on the formulation of the study above, the researcher aims to :

a. Investigate the factors that influence situational and personal Gen Z interest using Social Media as a digital learning.

b. Investigate the correlation between situational and personal factors to the Gen Z Interest in utilizing social media as a digital learning.

1.6 Significance of the Study

1. For English Educational Lectures

   English Educational lectures can use social media as a tool or media for teaching English. The English lecturers can use social media to modify the medium of learning English

2. For University Students

   Social media can be used as a tool or media for learning and improving English autonomously. Students may enjoy learning English using social media and will find it easier to understand the material while interacting with other people on the social media.

3. For The Further Researchers

   Since this study only examined the factors that interest students in using social media as a learning tool, future researchers can continue to examine the negative effects of social media as a learning medium. Additionally, future researches may employ research approaches and methods beyond surveys to enhance the depth of data and analysis of findings in their field.

CHAPTER II

LITERATURE REVIEW

2.1 Digital Learning in Higher Education

Digital learning is increasingly being used in higher education. Technology makes learning more flexible, interactive and accessible to all students. Universities are starting to utilize online platforms and digital media to improve the quality of learning. This section will discuss the definition, development of digital learning trends, and the benefits of digital learning in higher education.

2.1.1 Concept of Digital Learning

Digital learning is a teaching and learning activity that uses digital technology such as the internet, educational applications, and various other digital platforms as a means of delivering material and interaction between teachers and students. Walker (2024), emphasizes that digital education (digital learning) is any form of learning activity supported by technology. Technology is a tool that makes learning more interactive and flexible. According to Heick (2021), digital learning includes the use of technology and digital devices to support student learning and improve the quality of educational outcomes. The rapid advances in digital technology in recent years have fundamentally changed the delivery methods of learning and the educational experience. The rapid development of technology is driving the continuous transformation of digital education. Alruthaya et al. (2021) describe that advances in digital technologies such as social media, smartphones, cloud computing and the internet of things have revolutionized the way Generation Z goes about their

daily activities. Digital learning has now become an important component in the education landscape. Hemajothi and Jain (2022), state that digital learning, which involves the integration of information and communication technologies in the teaching process, is now a key element in the modern education system. The rapid advancement of technology has driven continuous change in the realm of digital education. According to Walker (2024), digital learning includes various forms, such as e-learning, virtual learning, online learning, and m-learning with the scope of digital learning including:

a. Conventional face-to-face learning enriched by the use of technology.
b. Learning process conducted through digital devices such as computers and mobile phones connected to the internet; generally conducted from different locations, thus included in distance learning.
c. Blended learning model, which is a combination of traditional and digital methods.
d. Mobile learning, where learning is done through smart phones.
e. Access and utilization of online information, including data searches through online databases and independent research results.

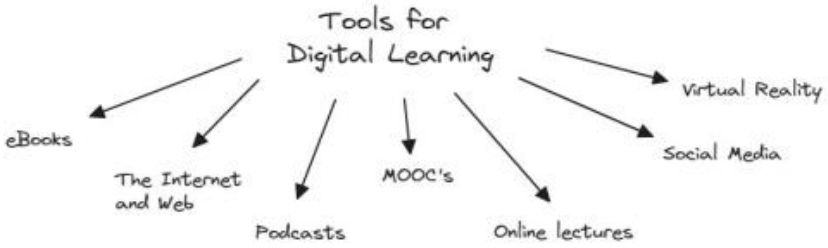

Figure 2.1 Tools for Digital Learning

Figure 2.1 shows a simple diagram illustrating the different types of tools used in digital learning. There are seven types of tools shown, namely eBooks, Internet and Web, Podcasts, MOOC (Massive Open Online Course), Online Lectures, Social Media, and Virtual Reality. This diagram shows that technological advances have provided a variety of learning media that are flexible, modern and interactive. Each tool has its own advantages and characteristics in supporting the learning process. For example, social media offers a more interactive and social learning method, while MOOCs provide access to certified courses from reputable educational institutions globally.

2.1.2 Digital Learning Developments and Trends

The evolution of digital learning can be traced back to the mid-20th century when computers first began to be used in educational settings. Initially, the use of technology in education was limited to basic computer-assisted learning (CAI), where computers were mainly used for drills and practice Faig (2023), says the use of technology in 21st century education is not just an option, but an important strategic step to prepare future generations for an era increasingly dominated by digitalization. According to Zou et al. (2025), digital learning has become an important foundation in modern education systems,

with a significant impact on accessibility, student engagement, and personalization of the learning process. Marougkas et al. (2023), explain that one of the most important trends transforming education today is the use of artificial intelligence, virtual reality, and various other new technologies. These innovations not only enrich the learning experience but also overhaul the conventional education system to become more interactive and flexible. Kumbo et al. (2023) and Zhao (2024) say technology integration supports innovative learning approaches, such as flipped classroom and blended learning, which are proven to improve student participation and learning outcomes. Guilin et al. (2024), stated that social media platforms such as WhatsApp, Instagram, and Telegram have been integrated into the daily lives of students and serve as a supporting tool in digital learning.

These social media platforms facilitate quick access to information, enable interaction across time and space, and contribute to increasing student motivation to learn. Maisuroh et al. (2024) argue that social media platforms can be used as educational tools that encourage the development of digital literacy among Generation Z, particularly through discussion, collaboration, and active engagement with diverse perspectives on information. Rapid technological advances and the increasingly strong integration of digital media in education have prompted digital learning to shift from being merely an additional option to becoming an essential element in contemporary learning systems.

The rapid development of social media has triggered major changes in the field of education, especially in creating a more adaptive, interactive, and digitally-based learning environment. This phenomenon shows a shift in learning approaches from traditional methods to the use of technology that is in line with the characteristics of the digital generation.

2.1.3 Benefits of Digital Learning in Higher Education

Digital learning contributes significantly to improving the quality of teaching and learning process in higher education. Through the utilization of technology, the learning process becomes more flexible, efficient and accessible. This section will outline the various benefits resulting from the implementation of digital learning. According to Vasylyshyna (2020), digital learning produces ten benefits, including:

1. Personalized Learning. A key benefit of digital learning is its ability to provide opportunities for each student to learn at the pace and path that suits them best. Recently, a diverse group of professionals, advocates, business leaders and trade union representatives came together to rethink the education system in light of the opportunities offered by digital learning. They highlighted that personalized, relevant and contextualized learning can now be better tailored to each student's interests, strengths, needs and family, cultural and community backgrounds.
2. Expanded learning opportunities. Digital learning opens up more learning opportunities across the globe. With the availability of full- and part-time online learning options, any student, regardless of country

policy, can access a wide range of international languages, college preparatory materials, and advanced courses. What's amazing is that thousands of courses from renowned professors can now be accessed for free by anyone with an internet connection.

3. Highly Engaged Learning. The transformation to digital learning has the potential to increase students' passion for learning. Anyone who has seen how game-based learning can capture students' attention can understand the huge potential in creating a learning experience that encourages their passion and perseverance.
4. Competency-based Learning. In this approach, students prove their understanding and progress according to the level of mastery they have achieved. While this method can be done traditionally using paper and pencil, its large-scale implementation is challenging due to the difficulty of effectively monitoring and managing each individual's progress.
5. Assessment as part of the learning process. Digital learning allows for continuous feedback through assessments integrated in materials, games, simulations and adaptive learning systems. When students can monitor their own progress, it increases motivation and ownership of their learning.
6. Collaborative Learning. Digital technology strengthens the spirit of cooperation in the learning process. Through social learning platforms like Edmodo, teachers can easily form and organize study groups. In addition, tools such as Google Docs allow students to work together to

draft documents or presentations simultaneously and in real-time, thus encouraging team engagement in completing shared tasks.

7. Quality Learning Products. Digital learning technologies give students the opportunity to create high-quality work that is worth sharing widely. Through achievements, publications and portfolios. The learning culture in the classroom shifts from a focus on submitting assignments to a process of producing tangible work for a wider audience.
8. Open learning resources expand access to education. Schools can save money while still ensuring equitable access for all students. Thanks to shared standards and collaborative platforms, millions of educators can now share learning resources and tools across regions and countries.
9. Relevant and up-to-date content. Students of all ages now have greater access to relevant and up-to-date learning materials. Modern teaching systems that incorporate digital print media and online adaptive learning features allow teachers and students to customize the learning process in a more engaging and flexible way. The ease of updating content ensures that materials are always fresh and up-to-date.
10. Future Learning for Educators. Integrated, personalized and competency-oriented learning models are not only applicable to students, but also to teachers. Training and professional development processes are increasingly based on competency maps, offering a variety of learning pathways to suit individual needs, and providing multiple opportunities to demonstrate learning outcomes.

From the ten benefits that have been described, it can be concluded that digital learning has a broad and profound impact on education, especially in higher education. Digital technologies not only enable a more personalized, flexible and adaptive learning process, but also expand access to quality educational resources, both locally and globally. In addition, digital learning encourages student engagement, enhances collaboration, and supports competency-based approaches and continuous assessment. It also creates great opportunities for teachers to continue to develop professionally through targeted and relevant training models. Thus, digital learning becomes an important cornerstone in building a future education system that is more inclusive, effective and oriented to the needs of each individual.

2.2 Social Media as Digital Learning Tools

The development of information technology has driven transformation in the world of education, including the utilization of social media as a means of digital learning. Social media is no longer just a communication and entertainment tool, but also acts as a platform that supports a more interactive, collaborative and accessible learning process. This section will discuss the definition of social media, and the types of social media

2.2.1 Concept of Social Media

Social media is a collection of software-based digital technologies usually presented as applications and websites that provide users with a digital environment where they can send and receive digital content or information through some type of online social network. Social media is an online platform

that allows users to create, share and exchange information in virtual communities Sidgi (2024) explored that social media provides a platform for language learners to develop their skills independently and at their own pace. The flexibility in learning allows them to listen, read and practice comfortably without pressure, making social media a significant learning tool. Social media is utilized as a communication tool to exchange ideas and share information. It also opens up opportunities for students to interact, develop themselves, and explore the possibilities they can achieve.

Social media is not only used as a mean to communicate socially, but also has other roles in education and learning, Aldahdouh et al. (2020) stated that the level of individual openness to innovation is a major determinant in the adoption and utilization of technology and social media as a mean of supporting academic activities in higher education. According to Ardiel (2024) indentified that the most widely used social media platforms are Facebook, Instagram, WhatsApp, YouTube, X, LINE, and Edmodo. Perez et al. (2023), discovered that the social media such as Facebook and X are often used by the students to learn in university. According to Lubis R & Siregar D (2025), Instagram is a medium for pronunciation and writing because of its visual and interactive features that suit their digital learning style. The presence of authentic, easily digestible, and attractively delivered content makes social media being effective alternative for learning. Thus, social media has evolved from a communicative function to a flexible, engaging and relevant digital

learning platform in accordance with the needs and characteristics of today's learners.

Social media shows strong potential as an alternative medium for learning at the tertiary level. Its diverse platforms and features allow for interactive, flexible and authentic delivery of materials, in line with the needs of today's digital students. The function of social media has evolved from a mere communication tool to a means of supporting the improvement of academic competence independently and tailored to each individual's learning style. Platforms such as YouTube, TikTok and Instagram provide easy access to learning materials anytime and anywhere, making social media an adaptive learning tool. Especially for Generation Z, which has a high ability to adapt to technology, social media opens up vast opportunities as a means of digital learning. If utilized through the right strategy, social media can play an optimal role in supporting the effectiveness of the teaching-learning process in today's digital era.

2.2.2 Types of Social Media

Social media is a digital platform designed to facilitate interaction, information sharing, and collaboration among users. In the context of higher education, social media plays a significant role as a supporting tool in the learning process, professional competency development, and academic networking. Various types of social media platforms are widely used in academic environments. Each platform has specific characteristics that contribute differently to supporting academic activities at universities. As

outlined in the book Social Media in Higher Education edited by Rowell (2019), the various types of social media include X, Facebook, Instagram & Pinterest, YouTube & Podcasting Platforms, Medium, WhatsApp & Snapchat.

1. **X**

   X is one of the most prominent social media platforms in the context of higher education, mainly due to its responsive, open, and user-friendly nature. These advantages make Twitter an effective tool for supporting professional communication through features such as hashtags, mentions, and discussion threads. Academics utilize this platform to expand their professional networks, disseminate research findings, and even host hashtag-based online conferences, such as #LTHEchat and #SocMedinHE. Additionally, Twitter contributes to faculty professional development, including through the “Ten Days of Twitter” training program, designed to introduce the educational use of the platform's available features.

2. **Facebook**

   Facebook is widely used in higher education to build learning communities and strengthen social relationships among the academic community. Through closed groups, lecturers and students can exchange information, discuss topics, and create an inclusive atmosphere. Features such as Facebook Live also enable institutions to effectively organize virtual campus tours for new students. Facebook is also used as an informal discussion platform, although there are still concerns about the boundaries between personal and professional spaces.

3. **Instagram & Pinterest**

   Visual-based social media platforms such as Instagram and Pinterest are very useful in fields of study that emphasize creative aspects, such as art and design. Students can use them to build digital portfolios, compile visual references, and present project ideas. This approach is in line with constructivist learning, where students actively create content as part of the learning process.

4. **YouTube & Podcast**

   Audio-visual sharing media such as YouTube and podcast platforms are widely used to support independent and flexible learning in higher education. Content in the form of lecture videos, interviews, and thematic podcasts serve as additional learning resources that can be accessed at any time. In addition, these media also function as tools for promoting universities and disseminating information to students.

5. **Medium**

   Medium is a modern blogging platform used in learning to encourage students to write reflectively, broaden their academic thinking, and practice digital communication skills. In practice, Medium serves as a medium for publishing course assignments with the aim of reaching a wide audience outside the classroom and supporting a culture of open knowledge sharing. This makes Medium a pedagogical tool that extends the boundaries of the physical classroom and encourages student engagement in the digital public sphere.

6. **WhatsApp & Snapchat**

   Messaging apps such as WhatsApp are often used by students in group learning activities because of their ease and speed of communication. Meanwhile, Snapchat is used more limitedly for informal purposes such as building social interactions among students. Neither platform is used formally in learning, but they contribute to creating a supportive communication ecosystem.

The six social media platforms, each with their unique characteristics, significantly contribute to shaping Generation Z's interest in digital-based learning. The selection of social media that is aligned with learning styles and individual preferences is a crucial element in optimizing the effectiveness of the learning process through digital media.

2.3 Factors of Gen Z's Interest in Social Media as Digital Learning

The development of digital technology has had a significant impact on how Generation Z acquires and manages information. As a generation born and raised in the digital age, they show a preference for interactive, flexible, and technology-based learning models. As explained by Alruthaya (2021), Generation Z tends to multitask and prefers fast, instant, visual, and interactive learning. They are accustomed to online platforms as a source of learning. Therefore, identifying the various factors that influence their interest in digital learning is essential. This section will examine several key factors that contribute to learning interest, particularly situational interest and personal interest. A deep understanding of these two types of interest can serve as a foundation for designing learning strategies that

are more contextual, relevant, and adaptive to the needs of learners. In the field of education, learning interest is a crucial element that determines students' participation levels and academic success. McNulty (2019, p.7) classifies interest into two main categories: situational interest and personal interest, each with distinct characteristics and impacts on the learning process. The explanation are:

1. Situational interest refers to temporary interest that arises in response to certain conditions or stimuli in the learning environment. This interest is usually not permanent and can be influenced by external elements that attract attention or arouse curiosity in students. The factors that influence situational interest are:
    a. Surprise or the unexpected. Situational interest generally arises in response to surprising or unusual stimuli, such as information that contradicts students' initial understanding or unexpected experimental findings. Such events can arouse curiosity and direct students' attention to the learning material.
    b. Connection to personal experiences. Educators can connect learning content to students' personal experiences or daily lives outside of school, for example by linking students' favorite music genres to concepts in physics or events in history. This strategy increases the relevance of the material, thereby stimulating students' interest and engagement more effectively.
    c. Visual or audio media or stimuli. Presenting visual or auditory stimuli, such as images, sounds, or interesting activities, can spark students'

situational interest in topics that were previously perceived as ordinary or uninteresting. Such stimuli play a role in increasing students' initial attention and encouraging engagement in the learning process.

d. Social interaction in learning. Learning activities that involve social interaction, such as group work or discussions, can increase students' cognitive and affective engagement. Through active participation in group dynamics, situational interest in the learning topic tends to increase due to intellectual stimulation and a sense of ownership of the learning process.

e. Active student participation. Active involvement of students in learning activities, such as discussions, expressing opinions in writing, or completing projects, can facilitate the emergence of situational interest. This direct participation fosters a sense of personal involvement with the material, thereby increasing attention and interest in the learning process.

2. Personal interest. Personal interest is a deeper, longer-lasting interest that arises from within the student. This interest develops due to several factors, including:

   a. Past successful experiences. Successful experiences in understanding a topic or completing a task effectively can enhance students' perception of their own competence. This positive perception encourages further exploration of the material, as students feel capable and confident in their learning abilities.

b. Relevance to personal goals or identity. Interest tends to develop more deeply when students can connect the learning material to their personal goals, future aspirations, self-identity, or existing interests and hobbies. When learning is perceived as relevant to students' lives and personal values, their cognitive and affective engagement with the topic significantly increases.
c. Opportunity to choose. Giving students the freedom to determine the topics, types of assignments, or learning methods they use can increase their sense of autonomy in learning. When students are given the opportunity to make choices based on personal preferences, they tend to be more interested and emotionally involved, because these decisions reflect their individual interests and preferences.
d. Social support (teachers and peers). Support provided by teachers, peers, and a conducive social environment plays an important role in strengthening students' personal interests. For example, the enthusiasm shown by educators towards a topic can act as a catalyst that stimulates students' interest, through a social-emotional process that allows these interests to form and develop more deeply.
e. Development from situational interest. Personal interests can grow from situational interests that are consistently managed and maintained in the context of learning. If students are continuously exposed to learning experiences that are interesting, meaningful, and relevant to their lives,

then interests that were initially temporary have the potential to develop into stable and long-term interests in a particular field or topic.

Based on this description, it can be concluded that students' learning interests, both situational and personal, are influenced by various interrelated factors. Situational interest typically arises in response to external stimuli that directly capture attention, such as intellectual surprises, connections to personal experiences, the use of visual and auditory media, social interactions in learning, and active student involvement. Conversely, personal interest stems from the individual's experience of success, the connection of the material to life goals or self-identity, freedom of choice, and constructive social support. Furthermore, well-managed situational interest can develop into a more enduring personal interest. Therefore, understanding these factors provides an important basis for educators in designing learning strategies that can foster and maintain students' learning interests.

2.4 Review of Relevant Studies

In the midst of the rapid development of the digital era, various studies have been conducted to explore the use of technology, particularly social media, as an effective learning tool. A number of studies provide a strong and relevant theoretical basis for the topic “Factors Influencing Generation Z's Interest in Using Social Media as a Digital Learning Medium.” Here are some research findings relevant to this issue:

The first study by Zainal et al. (2020) entitled *“Social Media and Its Influence on Vocabulary and Language Learning: A Case Study”* discussed the influence of

social media on vocabulary improvement and English language learning among students in Malaysia. This study aims to explore the learning strategies adopted by students in utilizing social media, as well as to identify learning styles influenced by the intensity of its use. The research subjects consisted of students from semesters 1 to 8 of the Faculty of Education, Universiti Teknologi MARA, Malaysia, selected through simple random sampling. Using a quantitative survey method, data was collected through an online questionnaire using Google Forms. Data analysis was conducted using the Statistical Package for the Social Sciences (SPSS) version 23, with a descriptive statistical approach focusing on presenting data in the form of frequencies and percentages. This study indicates that social media can enrich vocabulary and enhance interest in learning English through easily accessible interactions. However, the use of slang and abbreviations has the potential to lower the quality of formal writing, so guidance is needed to ensure that its benefits continue to support academic language standards.

The second study by Ansari & Khan (2020) is titled *"Exploring the Role of Social Media in Collaborative Learning: The New Domain of Learning"* aimed to investigate the application and benefits of social media and mobile devices in supporting collaborative learning in higher education, particularly in relation to their impact on student interactions with lecturers and peers, online knowledge sharing behavior, student engagement, and academic achievement. This study involved 360 students from a public university in Eastern India. The approach used was quantitative with a survey design. Data collection was conducted through a Likert-scale questionnaire distributed both offline and online. The collected data

were analyzed using variance-based Structural Equation Modeling (SEM) to test the relationships between variables and ensure the validity of the instruments. The findings indicate that the use of social media for collaborative learning has a significant positive impact on interactions with faculty and fellow students, which in turn encourages online knowledge-sharing behavior, enhances student engagement, and has a direct positive impact on academic performance. In conclusion, social media has the potential to be an effective tool for facilitating collaborative learning, fostering creativity, and supporting academic achievement in higher education settings.

The third study by Chatzoglou et al. (2020) titled *"The Role of Social Media in Higher Education: A PLS-SEM Approach,"* aimed to explore the impact of social media use on students' academic achievement by examining the mediating role of self-regulation and engagement in the learning process. The study involved 409 undergraduate students from a university in Greece. A quantitative approach with a survey design was used. Data were collected through a Likert-scale questionnaire and analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) to test the relationships between variables in the conceptual model. The findings indicate that social media can positively contribute to academic performance if its use is accompanied by good self-regulation and active engagement in learning. Therefore, this study highlights the importance of utilizing social media in a targeted and productive manner as a supportive tool for learning in higher education.

The fourth study by Smith & Storrs (2023) in their research entitled *"Digital literacies, social media, and undergraduate learning: what do students think they need to know?"* surveyed undergraduate students at Western Canada University to find out what digital literacies students from various disciplines consider important when using social media for learning. Using a quantitative survey-based research design, data was collected through questionnaires and analyzed using descriptive and inferential statistics. The findings revealed that students valued the use of social media most for information retrieval, collaboration, information sharing, and discussion. These results indicate that digital literacy related to the use of social media plays a crucial role in supporting students' learning processes, particularly in terms of information access, interaction, and digital knowledge exchange.

The fifth study by Sivakumar et al. (2023) entitled *"Social Media Influence on Students' Knowledge Sharing and Learning: An Empirical Study,"* aimed to explore the impact of social media use on knowledge sharing activities and learning processes among students at private universities in South India. This study employs a quantitative approach using a survey technique with a Likert scale questionnaire. A total of 407 students participated as respondents, selected through snowball sampling. Data were analyzed using Structural Equation Modeling (SEM). The findings revealed that all variables positively contributed to knowledge-sharing behavior. Overall, this study reinforces the view that social media has significant potential not only as a communication tool but also as a means to enhance motivation, increase engagement, and enrich students' learning experiences.

The sixth study by Galindo-Domínguez et al. (2025) titled *"Relationship between social media use and critical thinking in university students,"* used quantitative research with a survey design to examine the relationship between social media use and critical thinking skills in university students. The study involved 301 students from various programs at the University of the Basque Country (public university) and the University of Deusto (private university). Data were collected through an online questionnaire using Google Forms and analyzed using SPSS Statistics 27. The results showed that certain functions of social media use, such as the ability to evaluate information sources and using social media to solve academic problems, had a positive relationship with critical thinking. However, after incorporating learning to learn competencies into the model, the direct influence of social media usage functions on critical thinking was no longer significant, and learning to learn competencies became the primary predictor. These findings suggest that the use of social media to develop critical thinking will be more optimal when accompanied by high levels of self-directed learning skills.

This study shares similarities with several previous studies, particularly regarding the topic of social media use as a digital learning medium for university students. The majority of studies involved students as the main participants. The methodology of nearly all studies employs surveys and questionnaires as the primary data collection techniques and emphasizes the relationship between social media use and learning aspects such as learning interest, student engagement, knowledge sharing, and academic achievement. However, this study is different because it specifically discusses the factors that influence Gen Z's interest in using

social media as a digital learning medium. There are two main novelties in this recent study. First, it combines situational interest and personal interest as direct predictors of Gen Z's interest in using social media for digital learning, a topic rarely explored in Indonesia. Second, it provides empirical evidence of Gen Z's learning behavior in Indonesia and offers actionable recommendations for digital learning strategies tailored to the characteristics of digital native generations.

2.5 Theoretical Framework

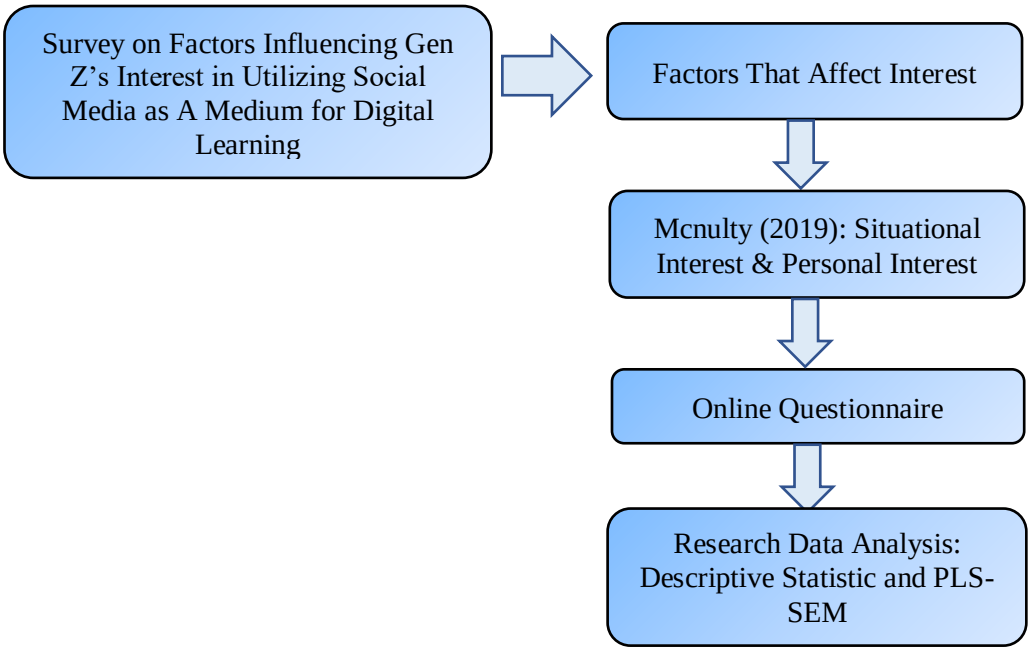

Figure 2.2 Theoretical Framework

Based on Figure 2.2, this study aims to investigate the factors that make Gen Z interested in using social media as a digital learning medium. Understanding this interest refers to McNulty (2019) model, which distinguishes between situational interest and personal interest. To identify the factors influencing this interest, an online questionnaire is distributed to respondents. The data from the questionnaire responses are analyzed using descriptive statistics to present the respondents'

profiles and response trends, and PLS-SEM to assess both the measurement and structural models. This approach integrates the concept of interest, its driving factors, and data collection and analysis methods, thereby forming a strong conceptual foundation for understanding Generation Z's behavior in using social media as a digital learning medium.

2.6 Hypothesis

A research hypothesis is a tentative assumption based on theoretical analysis and previous research results. In the context of quantitative research, a hypothesis is a tentative statement that predicts a relationship between two or more variables, the truth of which is tested through the process of collecting and analyzing numerical data. Hypotheses in quantitative research are formulated clearly, measurably, and specifically so that they can be empirically proven using statistical methods. According to Creswell and Creswell (2018, p.240) quantitative hypotheses are predictive statements proposed by researchers regarding the relationships that are expected to emerge between variables in a study. In this study, the hypothesis was formulated to test whether there is an influence between situational interest and personal interest on Generation Z's interest in using social media as a digital learning tool.

H_0: There is no significant influence between situational interest and personal interest on Generation Z's interest in utilizing social media as a digital learning medium.

H_1: There is a significant influence between situational interest and personal interest on Generation Z's interest in utilizing social media as a digital learning medium.

H_2: Situational Interest (SI) positively influences Personal Interest (PI) of Gen Z's interest in using social media as a digital learning medium

CHAPTER III

RESEARCH METHODOLOGY

3.1 Research Design

This study used a quantitative design with a survey method to identify the factors that influence Generation Z's interest in using social media as a means of digital learning. In the study, quantitative approach was chosen. According to Creswell and Creswell (2023, p. 192) quantitative research focuses on objectively testing theories through analyzing relationships between variables or comparing groups. These variables ware measured using specialized instruments, resulting in numerical data that was subsequently analyzed using statistical techniques.

In developing a research analytical framework, it is very important to identify the types of variables used in McNulty, especially since this study applies Structural Equation Modeling with Partial Least Squares (SEM-PLS). SEM-PLS is a statistical technique that allows researchers to analyze complex relationships between latent constructs and is very useful for predictive and exploratory research. According to Wong (2019, p. 6) in SEM, variables are generally categorized as exogenous and endogenous. Exogenous variables function as independent predictors; they influence other constructs but are not influenced by other variables in the model. According to Hair et al. (2019, p.63) exogenous variables are variables that trigger causal paths without being explained by other constructs. Meanwhile, endogenous variables are elements that are influenced by other variables and act as outcomes in structural models. As explained by Kline (2016, p. 119), endogenous variables are dependent elements in the model, which are estimated by previous

constructs, and are important for testing influence paths within the theoretical framework. This classification allows researchers to monitor how one construct influences another, thus providing a clear framework for hypothesis development.

In this study, interest factors ware classified as exogenous variables because they trigger their influence on Generation Z's interest. The construction of Generation Z's interest was treated as an endogenous variable because it is influenced by initial inputs and forms a structured causal chain. More specifically, Situational Interest and Personal Interest are considered exogenous in McNulty's structure, while Generation Z's interest is endogenous because it reflects students' evolving responses. This distinction clarifies how students' initial evaluation of social media shapes their interest in higher education.

3.2 Population and Sample

In this study, the population refers to all students from public and private universities in Indonesia. Creswell and Creswell (2018, p. 247) explain that the population is a group of individuals or objects that have certain characteristics and are the main target of the study. Because surveying the entire population is often impractical, sampling is used to select a representative and manageable subset. Meanwhile, Sugiyono (2024, p. 128) defines the population as a generalizable domain consisting of objects or subjects with a certain number and characteristics determined by the researcher for further analysis and conclusion drawing. This study used random sampling, a type of probability method, in which each member of the population has an equal chance of being selected, namely students with a background in English education who are experienced in using social media.

A total of 235 English Education students aged 18 to 24 years, from various academic semesters at public and private universities in Indonesia, were selected as respondents. This selection aimed to maintain sample diversity while remaining relevant to the research focus. Participation was voluntary, with a guarantee of confidentiality of personal data, which would only be used for academic purposes. The sample size was determined based on PLS-SEM guidelines. According to Hair et al. (2019, p. 20), a sample size of 100–200 is sufficient for SEM involving many constructs and indicators, thus providing sufficient statistical power for model testing.

3.3 Data Collection Techniques

Data collection techniques play a role in obtaining valid and accurate research results. The collected data forms the basis for drawing research conclusions. The more accurate the data, the better the quality of the research results. On the other hand, if the data is inaccurate, the research results may be less reliable. In this study, data was collected through online questionnaires distributed via Google Forms. This study used a quantitative design.

3.3.1 Instrument

In this study, the researcher used an online questionnaire. The online questionnaire was designed in a closed-ended format and distributed to respondents via the Google Forms platform Creswell and Creswell (2018, p. 249) explain that in quantitative survey-based research, research instruments typically take the form of standardized questionnaires or surveys to collect data from respondents. These instruments were designed to measure research

variables consistently, enabling statistical analysis to answer research questions or test hypotheses. The main data collection instrument was a structured questionnaire based on a theoretical framework. The online questionnaire in this study consists of two parts:

1. Demographic information (age, gender, institution, Semester, Social media platform most frequently used for learning).
2. Measurement items for independent (situational interest and personal interest) and dependent variables (Generation Z's interest in utilizing social media as a learning medium).

Using Google Forms offers flexibility in designing questionnaires, such as the availability of Likert scale options, multiple choice questions, and checkboxes, as well as the ability to set required responses for specific questions. These features help ensure that all important questions are answered by respondents. Furthermore, distributing questionnaires online via links makes the process faster and more efficient, whether through email, WhatsApp, social media, or other digital platforms. In this study, the questionnaire was designed using a Likert scale, which is commonly used to measure attitudes, perceptions, and opinions by asking respondents to indicate their level of agreement with various statements.

Through this scale, respondents were asked to provide answers by selecting numbers from 1 (Strongly Disagree) to 5 (Strongly Agree), which indicate the extent to which they agree or disagree with the given statements. After the questionnaire was completed, the next step was the assessment

process, in which each number selected was given a weighted value based on the Likert scale used.

Tabel 3.1 Likert Scale

Interpretation	Scale
Strongly Agree	5
Agree	4
Undecided	3
Disagree	2
Strongly Disagree	1

3.4 Data Analysis Technique

To analyze the data, this research used the partial least squares structural equation modeling (PLS-SEM) method. According to Wong (2019, p. 6) as a modern multivariate analysis technique, PLS-SEM is ideal for analyzing complex models that include several variables and the relationship between these variables. This method is very useful in exploratory research that focuses on predicting an outcome, especially when the data does not meet certain requirements, such as large sample size or normal distribution.

PLS-SEM can be applied to reflective and formative measurement models. In this study, all variables from McNulty including Situational Interest (SI) and Personal Interest (PI) were measured reflectively. This method allows researchers to simultaneously analyze the measurement model (to assess the accuracy and consistency of indicators) and the structural model (to test the relationship between variables). The analysis was conducted using SmartPLS version 4, a software specifically designed to manage small to medium sample sizes and non-normally distributed data. Taking into account that this study involved 235 university

students from various regions in Indonesia, PLS-SEM was deemed appropriate to handle and analyze the data.

The analysis process consisted of three important steps: evaluating the measurement model (outer model), checking the reliability and validity of the variables, and assessing the structural model (inner model) to test the research hypotheses.

3.4.1 Convergent Validity

Convergent validity indicated how consistent the indicators are within a construct and their ability to explain similar concepts. Hair et al., p. (2019, p. 134) define it as the degree of positive correlation of a construct with related indicators, which indicates high internal consistency. In the framework of the reflective PLS-SEM model, this validity is crucial to ensure that each indicator contributes significantly to the measured construct. Convergent validity is generally evaluated through external loadings, Average Variance Extracted (AVE), and communality. An indicator is considered to meet the established criteria if its external loading exceeds 0.50 and the AVE is greater than 0.50, indicating that the construct explains more than half of the variance in the observed indicators.

In this study, convergent validity was used to ensure that each main construct in McNulty, namely SI and PI, had a strong relationship with its indicators. Emphasis on this validity is very important because the reflective measurement model requires each indicator to accurately reflect the latent variable it represents. According to the results of Hair & Alamer (2022)

research, convergent validity ensures that indicators in a construct are not only theoretically relevant but also support each other statistically.

A high AVE value demonstrates that the indicators are closely connected, representing a unified construct. As highlighted by Wong (2019, p.7) convergent validity serves as an important foundation for evaluating the precision of instruments within PLS-based models, including applications in educational technology as used in this research. Therefore, convergent validity should not be seen solely as a technical procedure, but also as a key element in ensuring both the reliability and accuracy of the overall research model.

a. Outer Loading

External loading shows how strong the relationship is between each observed variable and its latent construct. A value of 0.70 or higher is often considered acceptable, indicating a strong relationship. However, indicators with values between 0.50 and 0.70 can still be retained if removing them does not significantly improve the reliability of the construct. As described by Wong (2019, p. 6), external loading values are the starting point for identifying valid indicators, especially in the process of developing reflective measurement models.

b. *Average Variance Extracted* (AVE)

The Average Variance Extracted (AVE) is employed to evaluate convergent validity within reflective measurement models. It represents the mean variance a construct captures from its indicators relative to the variance attributed to measurement error. According to Hair et al.. (2019,

p. 137), an AVE score of 0.50 or above demonstrates adequate convergent validity, indicating that the construct accounts for more than half of the variance in its indicators. This threshold confirms that the indicators share a substantial portion of variance and collectively represent the underlying latent construct.

The formula for AVE is:

$AVE = \Sigma(\lambda^2) / n$

Where:

λ = standardized loading of each indicator

n = number of indicators

In this study, AVE will be used to evaluate the extent to which each construct accurately reflects its indicators in the context of factors influencing Gen Z's interest in using digital learning.

c. *Discriminant Validity*

Discriminant validity reflects the degree to which a construct is truly distinct from other constructs within a model. According Hair et al. (2019, p. 138) It emphasizes the need to ensure that the indicators of one construct are not overly correlated with those of another, thereby preserving each construct's conceptual distinctiveness. In the context of PLS-SEM, establishing discriminant validity is essential for differentiating between related concepts. Failure to meet this requirement may lead to biased measurements and incorrect interpretations of the model's relationships.

Several approaches can be employed to test discriminant validity. As explained Hair et al. (2019, p. 140) The first is cross-loading analysis, which expects each indicator to load more strongly on its associated construct than on any other construct. The second, the Fornell-Larcker criterion, compares the square root of the Average Variance Extracted (AVE) of a construct with its correlations to other constructs; discriminant validity is confirmed when the square root of the AVE is greater than these correlations. Additionally, the latent variable correlation matrix offers supporting evidence by demonstrating that constructs do not exhibit excessively high correlations, which would otherwise indicate insufficient discriminant validity.

In this study, discriminant validity was examined using three approaches: cross-loading, Fornell-Larcker criteria, and latent variable correlation for two McNulty constructs, namely situational interest and personal interest.

3.4.2 Outer Model

In Partial Least Squares Structural Equation Modeling (PLS-SEM), the external model refers to the relationship between latent constructs and their observed indicators. For reflective measurement models, evaluating the external model is essential to ensure that the indicators accurately represent the constructs. According Hair et al. (2019, p. 133) a thorough assessment typically examines three key aspects: indicator reliability, internal consistency reliability, and convergent validity. This section will specifically address

internal consistency reliability, which is commonly assessed using Composite Reliability (CR) and Cronbach's Alpha (α).

Both CR and Cronbach's Alpha measure the degree to which items within a construct consistently capture the same underlying concept. In PLS-SEM, composite Reliability is generally preffered over Cronbach's Alpha because it accounts for varying indicator weights, offering a more precise estimation of construct reliability. According to Hair et al. (2019, p.137) a construct demonstrates sufficient internal consistency when its CR and Alpha value are ≥ 0.70, though values between 0.60 and 0.70 may still be acceptable in exploratory studies.

To reinforce the theoretical basis, the following formulas describe the calculations for both measures:

Composite Reliability (CR):

$$CR = (\Sigma\lambda)^2 / [(\Sigma\lambda)^2 + \Sigma (1 - \lambda^2)]$$

Cronbach's Alpha (α):

$$\alpha = [k / (k - 1)] \times [1 - (\Sigma\sigma^2_i / \sigma^2_t)]$$

Where:

λ = standardized loading of each indicator

k = number of indicators

This formula determines the internal consistency of the indicator by comparing the total sum of squares of the factor with the sum of squares of the measurement error. A higher CR value indicates that most of the variation in

the observed variable is captured by the latent construct, reflecting high reliability.

σ^2_i = variance of each item

σ^2_t = total variance of the sum of all items

Cronbach's Alpha assesses reliability by calculating the average correlation between items. This method assumes that all items contribute equally to the construct and is often used as a conservative measure of internal consistency.

3.4.3 Inner Model: R-Squared (R^2)

Internal models, also known as structural models in PLS-SEM, assess the relationships between endogenous (dependent) and exogenous (independent) latent constructs, showing the hypothesized paths between constructs based on theoretical frameworks such as McNulty's. According to Hair et al. (2019, p. 140) one criterion often used to evaluate accuracy and predictive relevance is R-Squared (R^2), which serves as a coefficient of determination that describes the proportion of variation in endogenous constructs explained by one or more exogenous constructs. These values provide an understanding of the explanatory power of the model and its overall suitability.

Values of 0.75, 0.50, and 0.25 typically reflect strong, moderate, and low levels of explanatory power, respectively, according to the guidelines described in the same reference. However, these thresholds are not absolute and may vary depending on the complexity of the model and the research context. In exploratory research, a lower R^2 value can still provide meaningful insights,

especially when the goal is to identify initial patterns or emerging relationships between constructs.

The general formula for R-Squared is:

$$\mathbf{R^2 = 1 - (SSres / SStot)}$$

Where:

- SSres = Sum of squares of residuals
- SStot = Total sum of squares.

In this study, the R-squared coefficient was used to evaluate how well the situational interest (SI) and personal interest (PI) constructs influence Gen Z's interest in utilizing social media as a digital learning medium. This assessment helps confirm whether the structural model provides adequate explanatory power in the context of students' interest in utilizing social media in education.

3.4.4 Effect Size (f^2)

The effect size (f^2) in PLS-SEM is used to measure the contribution of each exogenous (independent) construct to the R-Squared value of the endogenous (dependent) construct. This effect size measures how significant the contribution of the predictor variable is in explaining the variation of the dependent variable when that variable is added or removed from the model. Hair et al. (2019, p. 147) state that f^2 values of 0.02, 0.15, and 0.35 represent small, moderate, and large effects, respectively.

The formula for f^2 is:

$$\mathbf{f^2 = (R^2 \text{ included} - R^2 \text{ excluded}) / (1 - R^2 \text{ included})}$$

Where:

- R^2 included = R-Squared value when the predictor is included

- R^2 excluded = R-Squared value when the predictor is excluded.

In this study, f^2 was used to assess how strongly each of McNulty's constructs, situational interest and personal interest, contributed to explaining Actual Social Media Use in Learning. This analysis helped identify which constructs had the most significant influence on students' interest in using social media as a medium for digital learning.

CHAPTER IV

RESEARCH FINDINGS AND DISCUSSION

4.1 Research Findings

This section presents the results of data analysis based on responses from 235 students from various public and private universities in Indonesia. Data collection was designed to determine the influence of Gen Z's interest in using social media. The analysis was conducted using Partial Least Squares-Structural Equation Modeling (PLS-SEM) with the help of SmartPLS version 4. In line with the established analysis procedures, a two-stage approach was applied: evaluation of the measurement model (outer model) to assess the reliability and validity of the constructs, and evaluation of the structural model (inner model) to test the hypothesized relationships and the predictive power of the model.

The constructs examined in this study were based on McNulty's framework, namely SI and PI. Through this analysis process, this study aims to ensure that the measurement instruments are accurate and consistent and that the structural relationships between variables meaningfully reflect McNulty's theoretical foundation.

4.1.1 Respondent Demographic Information

This section provides an overview of the respondent profiles that form the basis of this study. A total of 235 students from various public and private universities in Indonesia participated in this survey, representing a diverse range of backgrounds and academic experiences. Data collection aimed to determine the influence of social media use on Gen Z interests.

The demographic information collected includes key attributes such as gender, type of institution, age, and semester. Presenting this profile is important for understanding the composition of the sample, as it provides context for interpreting the findings later on. The following subsections provide detailed information on each demographic aspect, allowing for a clearer picture of the participants involved in the study.

1. Characteristics of Respondents Based on Gender

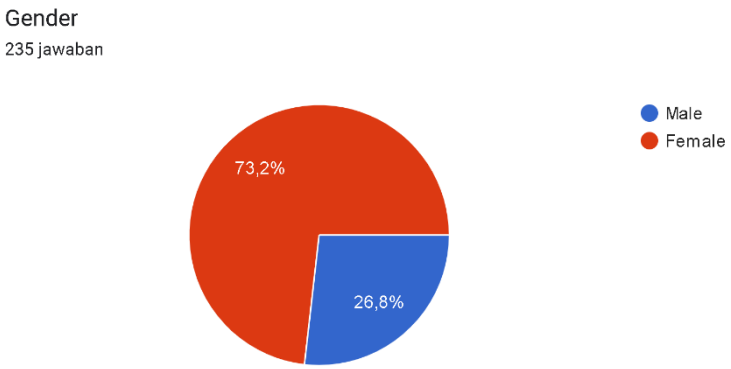

Figure 4.1 Respondent Based on Gender

Data processing results showed that this study involved 235 respondents, consisting of 172 women (73.2%) and 63 men (26.8%). These data indicate that the level of female participation in this study was higher than that of men.

A clear understanding of the composition of respondents is essential for accurately interpreting the survey findings. The proportions shown in the demographic diagram reflect actual participation during data collection, ensuring that the data set is an authentic representation of the surveyed population. This demographic information also increases transparency in the

research process, as it helps contextualize further analysis of the influence of social media use by Generation Z.

2. Characteristics of Respondents Based on Institution

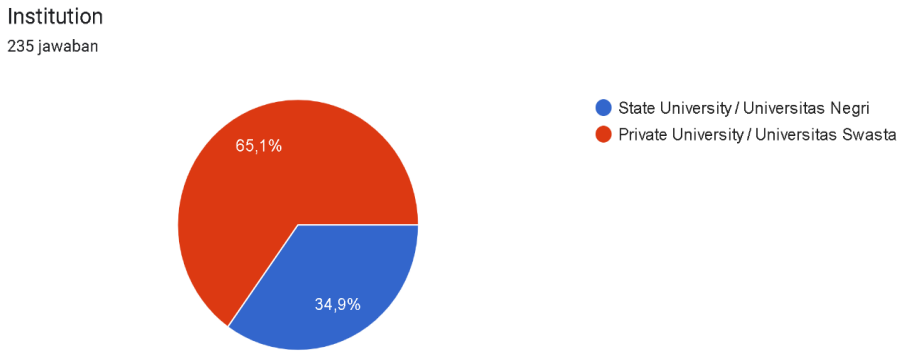

Figure 4.2 Respondent Based on Institution

Based on the results of data processing from 235 respondents in English Education Departement, it is known that 65.1% came from 3 private universities with a total of around 153 people, while the other 34.9% came from 1 public university with a total of around 82 people in Indonesia. This data showed that respondents from private universities were more dominant than respondents from public universities. This finding also showed that the participation of students from private universities in this study was almost twice as high as that of students from public universities.

The participation from both types of universities ensures that the findings reflect a broader academic environment. Differences in institutional resources, academic policies, and technology integration strategies between public and private universities may influence how students view and adopt social media in education. By including both groups in the sample, this study

gained a more comprehensive understanding of trends in social media use in various educational contexts.

3. Characteristics of Respondent Based on Age

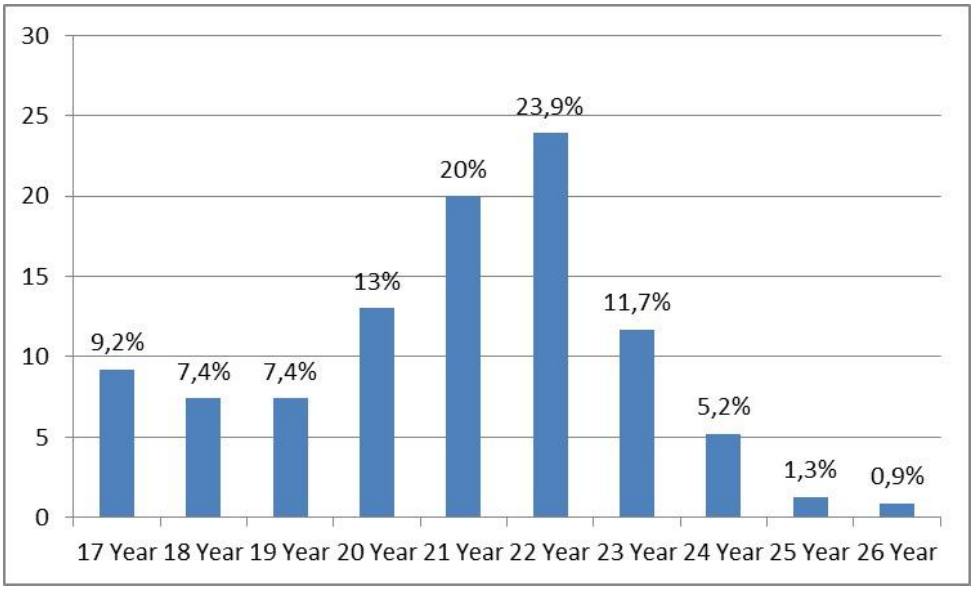

Figure 4.3 Respondent Based on Age

Based on the results of data processing from 235 respondents, the age distribution showed that most are in the productive age range as students. The largest number of respondents are 22 years old, accounting for 23.9% (55 people), followed by 21 years old, accounting for 20% (46 people), and 20 years old, accounting for 13% (30 people). Furthermore, there were respondents aged 23 years old, accounting for 11.7% (27 people), and 18 years old, accounting for 7.4% (17 people). Respondents aged 19 years old accounted for 7.4% (17 people), while those aged 24 years old accounted for 5.2% (12 people). A smaller number of respondents were aged 25 (3 people or 1.3%) and 26 (2 people or 0.9%).

This data shows that the majority of respondents were between 20 and 23 years old, which is the typical age group for active undergraduate students in Indonesia. This condition is in line with the characteristics of Generation Z, which is the focus of this study, namely a group of students who were born and raised in the digital era and are accustomed to using social media as a means of learning and academic interaction.

4. Characteristics of Respondent Based on Semester

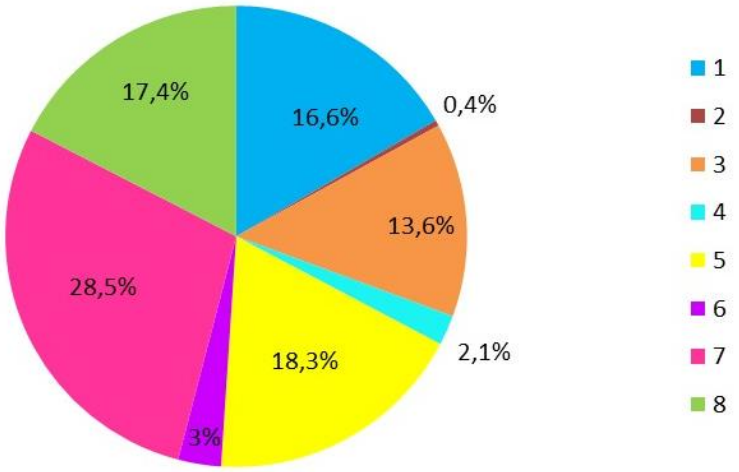

Figure 4.4 Respondent of Based on Semester

Based on the results of data processing from 235 respondents, the distribution of students by semester showed that most of them are in semester 7 with a percentage of 28.5% (67 people), followed by semester 5 with 18.3% (43 people), semester 8 with 17.4% (41 people), and semester 1 with 16.6% (39 people). Respondents from semester 3 accounted for 13.6% (32 people), while those from semester 6 accounted for only 3.0% (7 people), semester 4 accounted for 2.1% (5 people), and the smallest number came from semester 2, accounting for 0.4% (1 person).

This data shows that the majority of respondents were students in the middle to final semesters, who generally use social media more actively as a means of supporting digital learning compared to students in the early semesters.

5. Characteristics of Respondent Based on Social Media Platform Most Frequently Used for Learning.

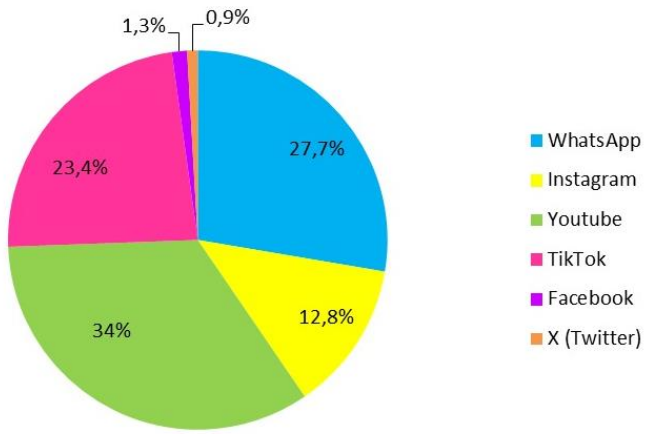

Figure 4.5 Respondent Based on Social Media Platform Most Frequently Used for Learning

Based on the results of data processing from 235 respondents, it is known that the social media platform most frequently used by students for learning is YouTube with a percentage of 34% (80 people). Next, WhatsApp is also a top choice with a percentage of 27.7% (65 people), followed by TikTok with 23.4% (55 people). Instagram is used by 12.8% of respondents (30 people), while the used of Facebook and X (Twitter) is very small, at only 1.3% (3 people) and 0.9% (2 people), respectively.

These findings indicate that Generation Z students prefer audio-visual and interactive platforms such as YouTube, which provides learning content in

the form of short and long videos, and WhatsApp, which facilitates direct communication with lecturers and peers, followed by TikTok, which provides a wide variety of educational videos. Meanwhile, the low usage of Facebook and X (Twitter) indicates that these two platforms are no longer the main media for students in supporting digital learning activities.

4.1.2 Measurement Model

In testing research models, there are two main stages, namely the measurement model (outer model) and the structural model (inner model). The measurement model focuses on evaluating the validity and reliability of indicators used to represent latent variables. According to Hair et al. (2019), the tests conducted include convergent validity, discriminant validity, and construct reliability. Meanwhile, the structural model is used to analyze the relationships between latent variables and assess the strength and significance of these relationships, which are usually measured through R^2 values, path coefficients, and path significance tests.

1. Outer Model

External models focus on the relationship between latent variables and indicators. External model testing aims to ensure that the instruments used to measure latent variables have good validity and reliability. There are three main types of testing in external models, namely convergent validity, discriminant validity, and construct reliability.

a.) Convergent Validity

Convergent validity has two criteria that can be evaluated, namely using the loading factor value or the average variance extracted (AVE) value.

1) Loading factor

The output of the outer loading estimation is measured from the correlation between the indicator score (instrument) and the construct (latent variable). An indicator is considered valid if it has a correlation value above 0.70, or 0.50 is considered sufficient. As stated by Hair et al. (2019, p. 674), the standard indicator loading must be at least 0.5 and ideally 0.7 or higher.

Table 4.1 Loading Factor Results

Indicator	GEN Z's Interest	PI	SI	Information
PI1	0.812			Valid
PI1		0.808		Valid
PI2	0.750			Valid
PI2		0.797		Valid
PI3	0.803			Valid
PI3		0.845		Valid
PI4		0.814		Valid
PI4	0.757			Valid
PI5	0.765			Valid
PI5		0.796		Valid
SI1			0.714	Valid
SI1	0.644			Valid
SI2	0.695			Valid
SI2			0.766	Valid
SI3			0.772	Valid
SI3	0.728			Valid
SI4			0.684	Valid
SI4	0.646			Valid
SI5			0.599	Valid
SI5	0.538			Valid

Based on the outer loading analysis results shown in the table, most indicators have loading values above 0.70, such as PI1 (0.808), PI3 (0.845), PI4 (0.814), and SI3 (0.772). This indicates that these indicators have met the ideal criteria recommended by Hair et al. (2019), namely an outer loading value ≥ 0.70, so it can be said that they are able to represent the construct well.

However, there are several indicators that have outer loading values below 0.70, such as SI1 (0.644), SI2 (0.695), SI4 (0.646), and SI5 (0.599). According to Hair et al. (2019, p.674), indicators with values between 0.40 until 0.70 can still be retained if the construct as a whole still meets the criteria for convergent validity (AVE ≥ 0.50) and construct reliability (CR ≥ 0.70). Therefore, indicators with values between 0.5 and 0.7 were retained in this study.

Overall, these results indicated that the majority of indicators have met the convergent validity criteria, and several indicators with loading values between 0.50 and 0.70 are still acceptable because the overall construct is considered valid and reliable. This shows that the instruments used in this study have generally been able to reflect the constructs being measured.

2) Averange variance extracted (AVE)

Convergent validity aims to determine the extent to which the indicators used are truly capable of reflecting the construct being measured. According to Hair et al. (2019), convergent validity can be seen from the Average Variance Extracted (AVE) value. A construct is said to meet convergent validity if it has an AVE value ≥ 0.50.

Table 4.2 Averange Variance Extracted

Variable	Average Variance Extracted (AVE)	Information
GEN Z's Interest	0.516	Valid
PI	0.660	Valid
SI	0.503	Valid

The analysis results show that the AVE value for the Personal Interest (PI) construct is 0.660, the Situational Interest (SI) construct is 0.503, and the Gen Z's Interest (GENZ) construct is 0.516. All AVE values are ≥ 0.50, so it can be concluded that each construct in this study meets the convergent validity requirements. Thus, the indicators used can be said to be capable of reflecting the constructs being measured.

b.) Discriminant Validity

Discriminant validity is used to ensure that constructs or variables in the measurement model actually measure different things and do not overlap with one another. In other words, discriminant validity measures the extent to which different constructs in the measurement model can be distinguished from one another. Discriminant validity can be measured using one of the

criteria. The values to be evaluated are cross loading, Fornell-Larcker, and latent variable correlation.

1) *Cross Loading*

An indicator or statement is considered valid if its correlation with the construct or variable (cross-loading value) is higher than its correlation with other constructs. The following are the results of data analysis generated using SmartPLS version 4, with cross-loading values as shown in Table 4.3 below.

Table 4. 3 Cross Loading Results

Indicator	GEN Z's Interest	PI	SI	Information
PI1	0.812	0.808	0.705	Valid
PI2	0.750	0.797	0.583	Valid
PI3	0.803	0.845	0.637	Valid
PI4	0.757	0.814	0.577	Valid
PI5	0.766	0.796	0.619	Valid
SI1	0.641	0.526	0.711	Valid
SI2	0.695	0.573	0.766	Valid
SI3	0.728	0.623	0.773	Valid
SI4	0.646	0.552	0.684	Valid
SI5	0.537	0.438	0.598	Valid

Based on Table 4.3 regarding cross loading results, it can be seen that most indicators meet the discriminant validity criteria as suggested by Hair et al. (2019), namely that the indicator loading value on the original construct is higher than the loading on other constructs. Indicators PI1 to PI5 have relatively high main loading values (≥0.70) on the PI construct, such as PI2 (0.797) and PI3 (0.845), so they can be concluded to be valid.

This shows that these indicators are able to represent the PI construct well.

For the SI construct, indicators SI1, SI2, and SI3 show fairly high loading values, at 0.711, 0.766, and 0.773, respectively. All three are greater than the loadings on other constructs, so they are declared valid. The SI4 and SI5 indicators have loading values of 0.684 and 0.598, which are still below the ideal limit of 0.70, but can still be maintained because they are above 0.50 and higher than the loadings to other constructs.

Overall, these cross-loading results show that the majority of indicators meet the discriminant validity criteria based on cross loading.

2) Laten Variables

Correlation analysis between latent variables is used to examine the strength of relationships between constructs in the research model. High correlation values indicate a strong relationship, but values that are too high can also be an indication of potential multicollinearity problems (Hair et al., 2019). The estimation results are presented in Table 4.4 as follows:

Table 4.4 Laten Variable Results

Variable	GEN Z	PI	SI	Information
GEN Z's Interest	1.000	0.958	0.920	very strong
PI	0.958	1.000	0.770	very strong
SI	0.920	0.770	1.000	very strong

Based on Table 4.4, it can be seen that the relationship between GEN Z's Interest and PI is 0.958 and between GEN Z's Interest and SI is 0.920,

which is classified as very strong (above 0.90). This indicates that personal interest and situational interest are closely related to Gen Z's interests. Meanwhile, the relationship between PI and SI is 0.770, which is classified as strong, indicating a correlation between the two exogenous constructs, although not as strong as the relationship with GEN Z's Interest.

Thus, the results of this analysis reinforce the assumption in the research model that the Personal Interest and Situational Interest constructs have a significant contribution in shaping Gen Z's Interest, thereby supporting the feasibility of the structural model for further testing.

3) Fornell Larcker

The Fornell-Larcker method is used to test discriminant validity by comparing the square root of AVE (Average Variance Extracted) with the correlation between latent constructs. A construct is said to have good discriminant validity if the square root of AVE is greater than the correlation between other constructs.

Table 4.5 Fornell Larcker Results

	GEN Z's Interest	**PI**	**SI**	**√AVE**	**Information**
GEN Z's Interest	0.718			0.718	Valid
PI	0.958	0.812		0.812	Invalid
SI	0.920	0.770	0.709	0.709	Invalid

Based on Table 4.5, the AVE square root values for the GENZ (0.718), PI (0.812), and SI (0.709) constructs are all lower than some of the inter-construct correlation values. This indicates that the Fornell-Larcker criteria have not been fully met. In other words, the constructs in this study are still closely related, making it difficult to separate them discriminately based on the Fornell-Larcker criteria. The Fornell-Larcker results show that PI and SI do not meet discriminant validity because the √AVE values are lower than the inter-construct correlations. This indicates a high degree of similarity between the constructs. Nevertheless, the discriminant validity in this study is still acceptable because the cross-loading test results show that each indicator has a higher loading value in its own construct than in other constructs. As stated by Hair et al. (2019), the Fornell-Larcker criteria are calculated using the square root of the AVE of each construct, and the value must be greater than the correlation with other constructs in the model. Thus, the results of this analysis show that despite limitations in the Fornell-Larcker criteria, additional testing through cross-loading still supports discriminant validity, so the constructs in this study are still suitable for further analysis.

Based on the results of the discriminant validity test conducted through three approaches, namely cross loading, Fornell-Larcker criterion, and latent variable correlation, it can be concluded that the research model has met the overall discriminant validity requirements.

The cross loading results show that each indicator has a higher loading value on its own construct compared to other constructs, so it can be declared valid. Although there are several indicators in the Situational Interest (SI) construct that have loading values below 0.70, and the PI construct with √AVE 0.812 is smaller than the correlation with Gen Z (0.958), these indicators are still retained because the AVE values of the SI and PI constructs still meet the convergent validity criteria (>0.50)

c.) Construct Reliability

Construct reliability can be analyzed using one of two methods, namely by analyzing Cronbach's Alpha and composite reliability values. Both methods are used to test the reliability values of indicators in a variable.

1) Cronbach's Alpha

Cronbach's Alpha is an important indicator in testing the reliability of variables in the PLS-SEM model. A high Cronbach's Alpha value indicates that the construct/variable is well measured and consistent for measurement validity in PLS analysis. Conversely, if the Cronbach's Alpha value is low, this may indicate that the indicators used are not sufficiently reliable and need to be improved or replaced.

Table 4.6 Cronbach's Alpha Results

Variable	Cronbach's Alpha	Information
GEN Z's Interest	0.893	Reliable
PI	0.871	Reliable
SI	0.750	Reliable

The results of the analysis in Table 4.6 show that Cronbach's Alpha values for the variables Gen Z's Interest (GEN Z) are 0.893, Personal

Interest (PI) are 0.871, and Situational Interest (SI) are 0.750. All Cronbach's Alpha values are ≥ 0.70, so it can be concluded that all constructs have good reliability

2) Composite reliability

Composite reliability is used to ensure the internal consistency of the indicators that make up the latent variables. In smart PLS, composite reliability is the main tool for measuring reliability, and a composite reliability value of ≥ 0.7 is considered to meet the standards for research

Table 4.7 Composite Reliability Results

Variable	Composite Reliability (Rho_C)	Information
Gen Z's Interest	0.913	Reliable
PI	0.906	Reliable
SI	0.834	Reliable

The results of the analysis in Table 4.7 show that the Composite Reliability values for the variables Gen Z's Interest (GENZ) are 0.913, Personal Interest (PI) are 0.906, and Situational Interest (SI) are 0.834. All Composite Reliability values are ≥ 0.70, so it can be concluded that all constructs have good reliability. Thus, the indicators in each construct are able to consistently reflect the latent variables being measured.

2. Inner Model

The internal model in PLS-SEM describes the relationship between latent variables and is evaluated to determine the strength and significance of these relationships. The evaluation covers three main aspects: R-square, relationship significance (hypothesis testing), and effect size.

1. R Square (R^2)

In PLS-SEM, R Square measures the extent to which the latent independent variables in the model can explain the variability of the latent dependent variables. The R^2 value reflects the overall predictive power of the model, ranging from 0 to 1, with higher values indicating the model's greater ability to explain variance. According to Chin (1998), R^2 values can be categorized into three criteria, namely 0.67 (strong), 0.33 (moderate), and 0.19 (weak). The R^2 test results for this model are presented in Table 4.8.

Table 4.8 R-Square Result

	R-Square	R-Square Adjusted	Information
GEN Z's Interest	1.000	1.000	Very Strong
PI	0.595	0.593	Moderate

The results of the analysis in Table 4.8 show that the R-Square value for the Gen Z's Interest (GENZ) construct is 1.000, with the same Adjusted R-Square value of 1.000. This means that the Personal Interest (PI) and Situational Interest (SI) variables are able to explain the variation of the GENZ construct fully or by 100%. Meanwhile, the PI (Personal Interest) variable has an R^2 value of 0.595 (adjusted 0.593). According to Hair et al. (2019), R^2 values can be categorized as high (0.75), moderate (0.50), and low (0.25). Thus, the value of 0.595 falls into the moderate category, which means that 59.5% of the variation in PI can be explained by the constructs in the model, while the remaining 40.5% is influenced by factors outside the scope of this study. Thus, it can be concluded that the model used in this study is capable of explaining the relationship between variables well and is suitable for use in further analysis.

2. Significance (Hypothesis Testing)

Significance testing of relationships in PLS-SEM is conducted to determine whether the relationships between latent variables in the model can be considered statistically significant. This process typically uses the bootstrapping technique, in which data is resampled to calculate path coefficient values and their standard errors. The results are reported in the form of t-statistic or p-value values. A relationship is considered significant if the p-value is smaller than the predetermined significance level (in this study, a significance level of 0.05 was used). A significant path coefficient indicates that the relationship between the independent and dependent latent variables has strong statistical support, so that the proposed hypothesis can be accepted. The following are the bootstrapping results of the direct effect research model.

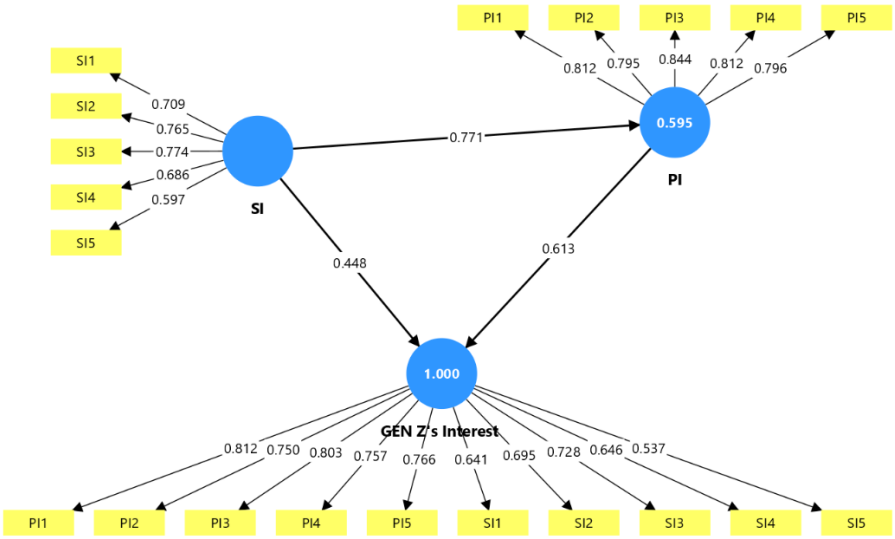

Figure 4.6 Bootstrapping Results Diagram

1. Bootstrapping Results for Direct Effects

Bootstrapping results for direct effects can be seen in 4.9 as follows:

Table 4.9 Results of Bootstrapping Direct Effect

Path Coefficient	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics	P values	Remark
PI -> GEN Z's Interest	0.613	0.613	0.022	28.478	0.000	Supported
SI -> GEN Z's Interest	0.448	0.447	0.020	22.713	0.000	Supported
SI -> PI	0.771	0.774	0.034	22.697	0.000	Supported

Based on the results presented in Table 4.9, according to Hair et al. (2019), the path coefficient is considered statistically significant if the T-statistic value is > 1.96 at a 95% confidence level. Values below this threshold indicate an insignificant relationship. Therefore, this criterion is used to decide whether the proposed hypothesis can be accepted or rejected. The relationship between latent variables can be explained as follows:

a. H1: Personal Influence (PI) → Gen Z's Interest (GENZ)

The analysis results show a path coefficient value of 0.613, with a T-statistic = 28.478 (> 1.96) and a p-value = 0.000 (< 0.05). Thus, H1 is accepted, which means that Personal Influence has a positive and significant effect on Gen Z's Interest in utilizing social media as a means of digital learning.

b. H2: Social Influence (SI) → Gen Z's Interest (GENZ)

The analysis results show a path coefficient value of 0.448, with a T-statistic = 22.713 (> 1.96) and a p-value = 0.000 (< 0.05). Thus, H2 is accepted, which means that Social Influence has a positive and significant effect on Gen Z's Interest in utilizing social media as a means of digital learning.

c. H3: Social Influence (SI) → Personal Influence (PI)

The analysis results show a path coefficient value of 0.771, with a T-statistic = 22.697 (> 1.96) and a p-value = 0.000 (< 0.05). Thus, H3 is accepted, which means that Social Influence has a positive and significant effect on Personal Influence on Gen Z in the context of using social media for digital learning.

2. Effect Size

In addition to examining the significance of the relationship between latent variables, effect size analysis (f^2) was conducted to determine the magnitude of each independent variable's contribution to the dependent variable. The f^2 value indicates whether a variable has a strong, moderate, or very small effect on other variables in the model. The following are the results of the f^2 value calculations for each relationship between variables:

Table 4.10 Result Effect Size

Variable	f^2	Information
PI -> GEN Z's Interest	10604.300	Very Strong
SI -> GEN Z's Interest	5650.242	Very Strong
SI -> PI	1.469	Strong

The results of the analysis in Table 4.10 show the PI (Personal Influence) construct gives an f^2 value of 10,604.300 for the endogenous variable Gen Z's Interest, while the SI (Social Influence) construct gives an f^2 value of 5,650.242. These values far exceed the criteria set by Hair et al. (2019), which states the criteria for f^2 are categorized as small at 0.02, medium at 0.15, and large at 0.35. Thus, it can be concluded that both PI and SI have a very strong influence on Gen Z's interest in using social media as a digital learning medium.

Furthermore, the f^2 result in the SI → PI relationship produced a value of 1.469, which also exceeded the "strong" category limit. This confirms that the relationship between constructs in this research model has a significant and substantial influence.

4.2 Discussion

The results of the PLS-SEM analysis show that Personal Interest (PI) and Situational Interest (SI) have a positive and significant effect on Gen Z's interest in using social media as a means of digital learning. These findings reinforce previous research that emphasizes the important role of social media in supporting the learning process, especially for Generation Z, who are very familiar with technology.

Personal Interest (PI) made the largest contribution with a path coefficient value of 0.00 ($p < 0.05$). This shows that Gen Z's personal interest in technology and digital learning encourages their involvement in using social media for learning. These results are in line with Zainal et al. (2020), who proved the effectiveness of social media in increasing students' vocabulary through interactions that are relevant to individual needs. Similarly, Febriani and Afriani (2025) emphasize that the digital literacy of Generation Z in the Society 5.0 era further strengthens the relationship between personal goals and the use of digital platforms. In other words, personal orientation not only fosters learning motivation but also maintains long-term engagement in digital learning.

On the other hand, SI also has a significant effect with a path coefficient of 0.00 ($p < 0.05$). This indicates that external factors, such as visual content,

interactive features, and enjoyable learning experiences, can stimulate Gen Z's interest in using social media as a learning medium. These findings support Ansari & Khan (2020), who emphasize the role of social media in increasing student collaboration and participation. Furthermore, Guo & Fryer (2024) identify novelty, usefulness, and interactivity as the main triggers of SI that foster curiosity.

Similarly, SI also has a significant effect on PI with a path coefficient of 0.771 ($p < 0.05$). This finding indicates that external influences, such as peer encouragement, community support, and the prevailing social environment, are able to strengthen individuals' internal motivation and personal drive in utilizing social media for learning purposes. These results align with Vrontis et al. (2021), who highlight that social dynamics and peer interactions can shape personal attitudes toward technology adoption.

Furthermore, an R^2 value of 1.000 indicates that PI and SI together fully explain the Gen Z interest variable. This condition reinforces empirical evidence that effective digital learning needs to combine personal orientation with situationally engaging learning experiences. Cilliers (2021) supports this by emphasizing that the integration of social media in learning is in line with the characteristics of Gen Z and can increase their engagement. Recent research is also consistent. For example, Lubis and Siregar (2025) found that Gen Z tends to choose visual, interactive, and flexible platforms such as Instagram for language learning, while Ginting (2025) emphasizes the importance of information literacy so that Gen Z can avoid distractions and use social media productively.

Overall, this research confirms that internal and external factors must be relating together in building Gen Z's interest in learning through social media. PI plays a role in maintaining intrinsic motivation and long-term engagement, while SI provides external stimuli that are interesting, enjoyable, and arouse curiosity. Therefore, educators and educational institutions need to design digital learning strategies that can strengthen students' intrinsic motivation while creating rich situatiional leraning experiences.

CHAPTER V

CONCLUSION AND RECOMMENDATION

5.1 Conclusion

This study examined the factors that influence Gen Z's interest in using social media for digital learning, focusing on Personal Interest (PI) and Situational Interest (SI). The results of the analysis using SEM-PLS show that both proposed relationships, namely PI → GENZ and SI → GENZ, are statistically significant. These findings confirm that Personal Interest (PI) plays the most dominant role, whereby students who have a strong personal interest in technology and digital learning are more motivated to use social media as a learning tool. Meanwhile, Situational Interest (SI) also contributes significantly, showing that external factors such as interactive content, attractive visual displays, and collaborative features are able to stimulate and maintain Gen Z's motivation to learn.

In terms of predictive power, this research model has a very high and strength with an R^2 value of 1.000. This means that PI and SI together are fully capable of explaining Gen Z's interest in using social media for digital learning. This condition showed that a balanced approach combining intrinsic interest with externally attractive learning environment support is very important to maximize the digital engagement of this generation. The results of this study are in line with previous findings, such as Zainal et al. (2020), who proved that social media effectively increases students' vocabulary when tailored to personal needs, Ansari and Khan (2020), who emphasized that social media encourages collaboration and increases engagement in learning, and Cilliers (2021), who emphasized the importance of

digital learning strategies that suit the characteristics of Gen Z as a digital native generation.

Overall, this study concluded that Gen Z's use of social media in digital learning is driven by the synergy between personal relevance and situational stimulation. Personal Interest provides a stable foundation for long-term learning engagement, while Situational Interest acts as a trigger that enriches and strengthens the learning experience. To ensure the sustainable integration of social media in digital education, educators and institutions need to design learning strategies that not only cater to students' personal interests but also provide a dynamic, interactive, and relevant learning context. This dual approach will help optimize digital learning outcomes, foster sustained academic motivation, and prepare Gen Z to engage critically and productively in the educational landscape of the digital age.

5.2 Recommendation

Based on the findings and discussion of this study, several recommendations can be made to support the more effective use of social media in digital learning. The following recommendations are addressed to various related parties so that challenges can be overcome, opportunities can be optimized, and the use of social media can truly contribute meaningfully to the learning process of Generation Z.

3. For Higher Education Institutions
    a. Provide official access to educational social media or integrated e-learning platforms so that students can use them without financial barriers.

b. Conduct regular training on the use of social media as a learning medium so that lecturers and students become more skilled and adaptive to developments in digital technology.
c. Integrate social media-based learning activities into the curriculum, with the aim of making their use more focused and supportive of learning outcomes.

4. For Lecturers and Educators
   a. Provide real examples of social media use in learning, such as using YouTube, TikTok, or Instagram to present material in a creative and interesting way.
   b. Encourage students to use social media critically, not just for entertainment, but also as a means of acquiring knowledge and building academic skills.
   c. Share best practices or experiences in using social media in learning activities to build trust and positive perceptions of digital learning.
5. For Students/Generation Z
   a. Use social media strategically to support learning activities, such as following educational accounts or creating interactive learning content.
   b. Get into the habit of verifying information obtained from social media to ensure its accuracy, credibility, and relevance to academic needs.
   c. Collaborate with peers through digital communities or study groups to exchange learning resources and positive experiences in using social media.

6. For Further Research
    a. Add other variables such as learning motivation, self-regulated learning, or digital environment support factors to broaden the understanding of factors that influence Gen Z's interests.
    b. Conduct longitudinal research to observe the development of Gen Z's interest in the use of social media in digital learning over time.
    c. Explore demographic factors such as gender, study program, or education level to design more targeted and specific social media utilization strategies.

REFERENCE

Abdalgane, M. (2022). The EFL Learning Process: An Examination of the Potential of Social Media. *World Journal of English Language*, *12*(7), 69–75. https://doi.org/10.5430/wjel.v12n7p69

Aldahdouh, T. Z., Nokelainen, P., & Korhonen, V. (2020). Technology and Social Media Usage in Higher Education: The Influence of Individual Innovativeness. *SAGE Open*, *10*(1). https://doi.org/10.1177/2158244019899441

Adnyani N W, & Dewi A. (2020). *Teaching English Vocabulary using Song. Journal of English Language Education* 3(1). https://doi.org/10.25078/yb.v1i1.1381

Alfitri, B. (2024). The Impact Of Short-Form Content TIKTOK On English Language Learning Development Among Generation Z : A Case Study Of Studentt At Institut Elkatarie. *Majapahit Journal of English Studies*, *1*(2). https://doi.org/10.69965/mjes.v1i2.103

Alruthaya, A., Nguyen, T. T., & Lokuge, S. (2021). The Application of Digital Technology and the Learning Characteristics of Generation Z in Higher Education. *Australasian Conference on Information Systems*. https://doi.org/10.48550/arXiv.2111.05991

Ansari, J. A. N., & Khan, N. A. (2020). Exploring the role of social media in collaborative learning the new domain of learning. *Smart Learning Environments*, *7*(1). https://doi.org/10.1186/s40561-020-00118-7

Ardiel. (2024). The Effectiveness of Social Media in Learning English: A Systematic Review. *Vivid: Journal of Language and Literature*, *13*(2). https://doi.org/10.25077/vj.13.2.135-150.2024

Arumugam, N., Shafiqah, N. S., Shanthi, A., Idham, M., & Purwarno (2022). The Use of Twitter in Learning English Vocabulary: EFL Learners. *International Journal of Academic Research in Business and Social Sciences*, *12*(6). https://doi.org/10.6007/ijarbss/v12-i6/14163

Chatzoglou, P., Chatzoudes, D., Ioakeimidou, D., & Tokoutsi, A. (2020, October 29). Generation Z: Factors affecting the use of Social Networking Sites (SNSs). *SMAP 2020 - 15th International Workshop on Semantic and Social Media Adaptation and Personalization*. https://doi.org/10.1109/SMAP49528.2020.9248473

Cilliers, E. J. (2021). Reflecting on Social Learning Tools to Enhance the Teaching-Learning Experience of Generation Z Learners. *Frontiers in Education*, *5*. https://doi.org/10.3389/feduc.2020.606533

Creswell & Creswell. (2018). *Qualitative, Quantitative, and Mixed Methods Approaches. In (Fifth).* In SAGE Publications.

Creswell & Creswell. (2023). *Qualitative, Quantitative, and Mixed Methods Approaches (Sixth)*. In SAGE Publications.

Faig. (2023). The Exploring the Role of Technology Integration in Twenty-First Century Education. *International Journal of Innovative Technologies in Social Science*, *4(40)*. https://doi.org/10.31435/rsglobal_ijitss/30122023/8089

Fauziah, N., Pebriano, A., & Murtiningsih, T. (2023). Analysis of Vocabulary Learning Process from Instagram and TikTok. *Jurnal Penelitian Ilmu-Ilmu Sosial, 4(1)*. https://doi.org/https://journals2.ums.ac.id/index.php/sosial

Febriani, H., & Afriani, Z. L. (2025). Digital literacy for Generation Z in the era of Society 5.0. *ELTIN Journal: Journal of English Language Teaching in Indonesia*, *13*(1), 1–15.

Fitria, T. N. (2022). Microlearning in Teaching and Learning Process: A Review. *CENDEKIA: Jurnal Ilmu Sosial, Bahasa Dan Pendidikan*, *2*(4). https://doi.org/https://doi.org/10.55606/cendikia.v2i4.473

Galindo-Domínguez, H., Bezanilla, M. J., & Campo, L. (2025). Relationship between social media use and critical thinking in university students. *Education and Information Technologies*, *30*(5), p.6641–6665. https://doi.org/10.1007/s10639-024-12953-z

Ginting, L. S. D. Br. (2025). Information literacy and Gen Z oversharing on Instagram. *Indonesian Research Journal in Education (IRJE)*, 9(2), p.694–707. https://doi.org/10.22437/irje.v9i02.43239

Guilin, X., Xu, S., Xavier, M., & Elliot, M. (2024). The Impact of Using Social Media in the Learning Process on Student Social Interaction. *Journal Emerging Technologies in Education*, *2*(2), 190–201. https://doi.org/10.70177/jete.v2i2.1064

Guo, L., & Fryer, L. K. (2024). Exploring the mechanisms of AI feedback on higher education students' learning: A self-determination theory perspective. *International Journal of Educational Technology in Higher Education*, 21(1), p.1–25. https://doi.org/10.1186/s41239-024-00432-9

Hair, J., & Alamer, A. (2022). Partial Least Squares Structural Equation Modeling (PLS-SEM) in second language and education research: Guidelines using an applied example. *Research Methods in Applied Linguistics*, *1*(3). https://doi.org/10.1016/j.rmal.2022.100027

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariete Data Analysis*. Cengage Learning EMEA.

Hemajothi & Jain. (2022). Challenges of E-Learning during the Pandemic and Its Implications in Education. *Technoarete Transactions on Applications of*

Information and Communication Technology (ICT) in Education, *1*(4). https://doi.org/10.5281/zenodo.6389334

Ittefaq, M., Seo, H., Abwao, M., & Baines, A. (2022). Social media use for health, cultural characteristics, and demographics: A survey of Pakistani millennials. *Digital Health*, *8*. https://doi.org/10.1177/20552076221089454

Kahnova and Papula. (2020). *Generation Z: social media as a tool for education*. Academic Conferences and Publishing International Limited (ACPI). https://doi.org/10.1177/1075547018763970

Kline, & Rex B. (2016). *Principles and Practice of Structural Equation Modeling*. THE GUILFORD PRESS.

Lubis R, & Siregar D. (2025). Exploring Gen Z's Perspectives on English Learning in the Digital Era. *Journal of Language Teaching and Learning, Linguistics and Literature*, *13*(1), p.663–674. https://doi.org/10.24256/ideas

Malik, A., & Qureshi, F. (2024). Exploring the Impact of Social Media on English Language Learning: Opportunities and Challenges. *Research Studies in English Language Teaching and Learning*, *2*(3), p.176–186. https://doi.org/10.62583/rseltl.v2i3.50

Marougkas, A., Troussas, C., Krouska, A., & Sgouropoulou, C. (2023). Virtual Reality in Education: A Review of Learning Theories, Approaches and Methodologies for the Last Decade. In *Electronics (Switzerland) 12*(13) Electronics. https://doi.org/10.3390/electronics12132832

Maya Agustina, R., & Yanuarius Yanu Dharmawan. (2024). Exploring Students' Perception on the Benefits of TikTok Content for English Language Learning. *Jurnal Multidisiplin Indonesia*, *2*(4). https://doi.org/10.62007/joumi.v2i4.376

McNulty, W.L. (2019). *Motivation and the Learning Environment Contents*. University of Hong kong Press.

Mitrulescu, C. M. (2024). The Impact of Social Media on EFL Learning and Student Motivation: A Literature Review. *Scientific Bulletin*, *29*(1), p.61–67. https://doi.org/10.2478/bsaft-2024-0007

Mitu, R. K. (2020). Using Social Media to Promote EFL Learners' Speaking Skill: Perceptions from both Teachers and Learners. In *International Journal of Advanced Research in Education and Society* 2(1) http://myjms.moe.gov.my/index.php/ijares74

Mthembu, B., & Khoza, S. B. (2024). Youtube Video Approach To The Rescue Of Learning English Language In Higher Education In Selected African Countries. *South African Journal of Higher Education*, *38*(29). https://doi.org/10.20853/38-3-6365

Nguyen L. (2023). Social media's untapped potential in English language teaching and learning at a Vietnamese university. FPT University Vietnam. In *Issues in Educational Research*, 33(3), http://www.iier.org.au/iier33/nguyen-l.pdf

Perez, E., Manca, S., Fernández-Pascual, R., & Mc Guckin, C. (2023). A systematic review of social media as a teaching and learning tool in higher education: A theoretical grounding perspective. *Education and Information Technologies*, *28*(9), p.11921–11950. https://doi.org/10.1007/s10639-023-11647-2

Procell, O.J.G., Freire Medina, M. L., Sotomayor Sánchez, D. J., & Poma Tacuri, M. A. (2024). Using Technology in English Teaching. Ciencia Latina Internasional. In *Using Technology in English Teaching*. CID - Centro de Investigación y Desarrollo. https://doi.org/10.37811/cli_w1048

Ravindran, L., Ridzuan, I., & Wong, B. E. (2022). *The Impact of Social Media on the Teaching and Learning of EFL Speaking Skills during the COVID-19 Pandemic. Proceeding Paper*. 38. https://doi.org/10.3390/proceedings2022082038

Rowell, C. (2019). Social Media in Higher Education: Case Studies, Reflections and Analysis. In *Social Media in Higher Education: Case Studies, Reflections and Analysis*. Open Book Publishers. https://doi.org/10.11647/obp.0162

Shabbir, T., Manan, S., & Ayaz, H. (2025). Social Media as a Learning Tool: Impacts on Collaborative Learning and Knowledge Sharing. *Journal of Social Sciences Review*, *5*(1), p.229–240. https://doi.org/10.54183/jssr.v5i1.485

Sidgi, Dr. L. F. S. (2024). The Impact of social media on Learning English Vocabularies. *Journal of Humanities and Education Development*, *3*(4), 90–96. https://doi.org/10.22161/jhed.3.4.13

Sivakumar, A., Jayasingh, S., & Shaik, S. (2023). Social Media Influence on Students' Knowledge Sharing and Learning: An Empirical Study. *Education Sciences*, *13*(7). https://doi.org/10.3390/educsci13070745

Smith, E. E., & Storrs, H. (2023). Digital literacies, social media, and undergraduate learning: what do students think they need to know? *International Journal of Educational Technology in Higher Education*, *20*(1). https://doi.org/10.1186/s41239-023-00398-2

Vasylyshyna, N. M. (2020). Benefit of Digital Learning Application At Universities. *Zhytomyr Ivan Franko State University Journal. Pedagogical Sciences*, 4(103), 61–68. https://doi.org/10.35433/pedagogy.4(103).2020.61-68

Walker, M. D. (2024). *Digital Learning : Tools, Strategies, And Practices.* Sicklebrook Publishing.

Wong, K. K.-K. (2019). *Mastering Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS in 38 Hours.* Universe rev.

Zainal, Z., Rahmat, H., & Pengajian Bahasa, A. (2020). Social Media And Its Influence On Vocabulary And Language Learning: A Case Study. *European Journal of Education Studies*, *7*(11). https://doi.org/10.46827/ejes.v7i11.3259

Zalani, M., & Yousofi, N. (2024). The influence of using instagram on EFL learners' critical thinking in language institutes. *Smart Learning Environments*, *11*(1). https://doi.org/10.1186/s40561-024-00320-x

Zou, Y., Kuek, F., Feng, W., & Cheng, X. (2025). Digital learning in the 21st century: trends, challenges, and innovations in technology integration. In *Frontiers in Education 10*. Frontiers Media SA. https://doi.org/10.3389/feduc.2025.1562391

APPENDICES

Appendix 1: Online Questionnaire Blueprint

Online Questionnaire Blueprint

Title : Survey of Factors Affecting Generation Z's Interest in Using Social Media as a Medium for Digital Learning

Objective : To identify the factors that affect Generation Z's interest in using social media as a Medium for digital learning

Theory	Aspect	Indicator	Question Number
McNulty (2019)	Situational Interest (SI)	Surprise or the unexpected situation	1
		Connection to personal experiences	2
		Visual or audio media or stimuli	3
		Social interaction in learning	4
		Active student participation	5
	Personal Interest (PI)	Past successful experiences	6
		Relevance to personal goals or identity	7
		Opportunity to choose	8
		Social support (teachers and peers)	9
		Development from situational interest	10
TOTAL			**10**

Appendix 2: Questionnaire

RESEARCH QUESTIONNAIRE

Research Title: Factors Influencing Generation Z's Interest in Utilizing Social Media as a Medium for Digital Learning

Instructions for Completion:

Read each statement carefully, then check (✔) the answer that corresponds to your opinion.

Rating scale:

1 = Strongly Disagree (SD)
2 = Disagree (D)
3 = Neutral (N)
4 = Agree (A)
5 = Strongly Agree (SA)

Respondent Data

1. Name: _____
2. Age: _____
3. Gender: M / F
4. Institution: State University / Universitas Negri
   Private University / Universitas Swasta
5. Semester: _____
6. Social media platform most frequently used for learning:
   - ☐ WhatsApp
   - ☐ Instagram
   - ☐ YouTube
   - ☐ TikTok
   - ☐ Facebook
   - ☐ Others: _____

No	Statements	SD	D	N	A	SA
A. Situational Interest						
1	I am more interested in learning when there is surprising or unexpected new information on social media, because it makes learning more enjoyable and less monotonous.					
2	Content related to personal experiences motivates me more, especially when learned through social media.					
3	The attractive visual and audio content on social media helps me focus more on the learning material.					
4	Interactive features (such as polls, quizzes, comments) on social media make me more interested in learning.					
5	I feel more motivated to study when there are group discussions on social media.					
B. Personal Interest						
6	My previous successful learning experience made me interested in learning again through social media.					
7	Social media content that is relevant to my goals or aspirations motivates me. For example, YouTube has many short educational videos and tutorials that support college material, as well as inspiring stories of successful figures.					
8	The opportunity to choose my own topics or learning social media platforms increases my interest in learning.					
9	When friends or lecturers provide engaging references of learning resources from social media, I become more eager to learn.					
10	I am interested in using social media as a digital learning medium because it suits my personal learning style, which prefers flexible and visual learning.					

Appendix 3: Responses of Online Surveys in Indonesia Universities

No	Situational Interest					Personal Interest				
	SI1	SI2	SI3	SI4	SI5	PI1	PI2	PI3	PI4	PI5
1	5	4	5	4	4	4	4	4	4	5
2	4	3	5	4	2	4	4	3	5	4
3	5	4	5	4	5	4	5	4	5	4
4	4	4	4	3	2	3	4	3	3	5
5	4	4	4	4	4	4	4	4	4	4
6	3	3	2	3	4	4	5	4	4	3
7	4	4	5	5	3	2	4	4	3	3
8	4	3	4	3	2	3	4	3	5	3
9	4	4	5	4	5	4	4	5	4	4
10	5	5	5	4	3	4	4	5	5	4
11	4	4	4	4	3	4	4	4	4	4
12	4	5	5	4	3	5	5	4	5	5
13	4	2	4	5	3	4	4	3	4	3
14	4	3	5	5	5	4	3	2	3	5
15	4	4	5	5	4	4	5	4	4	5
16	4	4	4	5	2	3	4	4	3	4
17	4	5	5	3	5	5	5	4	3	3
18	4	4	5	3	3	3	5	4	3	4
19	4	4	5	5	3	4	5	5	4	4
20	5	5	3	3	4	4	5	3	4	3
21	5	5	5	5	4	5	5	5	5	5
22	3	3	3	2	2	2	4	4	4	4
23	4	5	5	5	3	5	5	4	4	5
24	5	5	5	5	5	5	5	5	4	4
25	4	4	5	3	2	4	5	4	4	5
26	4	4	3	5	4	4	4	3	4	4
27	4	4	3	4	3	3	4	4	4	4
28	4	4	4	2	4	4	4	4	4	4
29	3	4	5	4	3	4	4	4	4	4
30	5	5	5	5	3	5	5	5	5	5
31	3	4	4	3	3	4	5	3	4	4
32	4	4	4	4	4	3	3	4	4	4
33	3	3	2	2	2	2	5	3	2	2
34	2	4	4	3	3	3	3	3	3	3
35	4	4	4	4	3	4	4	4	4	3
36	5	4	5	5	4	4	5	3	4	4

37	5	5	4	4	3	4	3	4	4	4
38	5	5	5	5	5	5	5	5	5	5
39	3	5	4	3	4	4	2	3	4	4
40	5	5	4	3	3	3	5	4	4	5
41	2	1	3	4	5	1	2	3	4	5
42	4	4	4	3	3	3	5	3	3	2
43	4	4	4	3	3	3	4	4	3	4
44	4	3	3	3	2	3	5	4	4	4
45	3	4	4	4	3	4	5	4	4	4
46	3	4	5	4	4	3	4	4	5	5
47	5	5	3	3	3	4	5	4	4	3
48	4	4	4	4	4	4	4	4	4	4
49	3	4	3	3	4	3	3	3	3	4
50	4	4	4	4	3	3	3	3	4	3
51	4	4	4	4	3	4	5	4	4	4
52	4	5	5	4	4	5	5	4	5	5
53	1	1	1	1	1	1	1	1	1	1
54	5	4	4	4	5	5	4	4	5	4
55	2	3	4	4	3	3	3	4	3	3
56	5	5	5	5	5	4	5	5	5	5
57	5	3	4	3	3	4	4	4	3	5
58	3	5	5	5	2	4	5	5	4	5
59	3	4	4	4	3	3	4	4	4	4
60	3	4	5	4	3	2	3	3	3	3
61	3	4	4	3	4	4	4	4	4	4
62	3	5	3	3	2	4	5	5	5	5
63	4	4	5	4	3	3	4	4	4	3
64	1	1	3	1	1	1	1	1	1	1
65	3	3	3	4	2	3	5	3	3	2
66	4	4	4	4	1	3	4	4	4	3
67	4	3	3	4	4	4	4	4	4	4
68	3	3	3	3	3	3	3	3	3	3
69	3	3	3	3	3	3	3	3	3	3
70	4	5	5	5	5	4	4	4	4	5
71	4	5	4	3	3	4	5	4	4	4
72	4	4	4	4	3	4	4	4	4	4
73	4	5	5	5	5	3	5	3	3	5
74	3	5	5	5	2	3	4	5	5	5
75	4	5	4	3	2	4	4	3	3	4

76	4	5	5	4	3	4	4	3	3	3
77	4	3	5	3	3	4	4	5	5	4
78	3	4	4	3	4	3	4	4	4	3
79	3	4	4	4	5	3	4	4	4	5
80	3	3	3	3	3	3	3	3	3	3
81	3	3	4	4	5	3	3	4	4	5
82	4	4	3	4	4	4	4	3	4	4
83	4	4	4	4	4	4	4	4	4	4
84	4	5	5	3	5	4	5	5	3	5
85	4	5	5	5	5	4	5	5	5	5
86	3	5	4	4	4	3	5	4	4	4
87	4	4	4	4	4	4	4	4	4	4
88	5	4	3	4	4	5	4	3	4	4
89	4	4	4	4	4	4	4	4	4	4
90	3	4	5	4	5	3	4	5	4	5
91	4	4	4	4	4	4	4	4	4	4
92	4	4	4	3	3	4	4	4	4	4
93	4	5	3	3	3	3	4	3	3	4
94	3	4	4	5	4	3	4	4	4	4
95	4	4	4	3	3	4	4	3	3	4
96	4	4	4	5	3	4	4	4	4	5
97	3	4	3	3	3	3	4	3	3	3
98	4	4	5	4	5	5	4	5	5	5
99	4	3	3	4	2	3	4	4	3	4
100	3	4	5	4	3	3	5	5	5	5
101	4	3	4	4	3	3	4	3	4	3
102	3	4	5	4	4	3	4	2	5	5
103	5	5	4	4	2	4	4	5	4	4
104	5	4	3	3	2	3	4	4	4	3
105	4	4	4	4	4	4	4	4	4	4
106	3	4	3	4	2	4	5	4	4	5
107	4	4	4	4	4	4	4	4	4	4
108	3	4	4	4	3	4	5	4	4	4
109	4	3	4	5	5	5	5	5	4	5
110	5	5	5	5	5	5	5	5	5	5
111	4	3	4	3	3	3	4	4	4	4
112	1	4	1	3	4	1	1	1	1	1
113	4	4	4	4	4	4	3	3	4	4
114	5	5	4	4	2	5	5	5	5	5

115	2	2	4	4	2	2	5	4	4	5
116	4	3	4	3	4	3	5	4	4	4
117	4	3	4	4	4	3	4	4	4	4
118	3	5	5	4	3	4	5	5	5	5
119	5	5	5	4	4	4	5	5	5	5
120	5	5	4	4	5	4	5	5	4	5
121	4	4	5	2	1	3	3	5	3	5
122	5	4	4	5	4	4	5	4	3	4
123	3	1	2	4	2	1	2	3	1	4
124	5	5	5	5	5	5	5	5	5	5
125	5	5	4	3	3	4	4	4	3	3
126	4	5	3	3	4	4	4	4	4	4
127	5	5	4	5	4	5	5	5	5	5
128	4	4	3	5	5	4	4	5	4	4
129	4	4	4	3	5	3	3	4	3	5
130	3	3	1	4	5	2	2	2	3	3
131	3	4	3	2	2	1	2	2	4	2
132	4	4	4	4	4	4	4	4	4	4
133	4	4	5	4	2	4	5	5	3	3
134	3	4	4	3	4	4	5	3	3	4
135	3	4	2	4	5	4	5	5	3	5
136	4	3	3	3	3	3	3	3	3	3
137	4	4	4	3	3	3	3	3	3	3
138	3	4	5	4	4	4	5	5	5	4
139	1	1	1	3	1	1	2	3	4	5
140	4	4	4	4	4	4	4	4	4	4
141	4	3	3	4	3	3	4	4	4	4
142	5	5	5	4	5	4	4	5	3	5
143	5	5	5	5	5	4	4	5	3	5
144	4	5	5	3	5	3	5	5	5	5
145	5	5	5	5	5	5	5	5	5	4
146	4	4	4	4	4	4	4	4	4	4
147	3	5	4	5	4	4	4	4	3	3
148	5	3	1	2	2	1	2	3	3	1
149	4	3	5	3	3	4	4	3	4	5
150	4	4	4	4	4	4	4	4	4	4
151	3	4	3	3	3	3	5	4	5	4
152	4	4	4	4	5	5	5	4	4	5
153	4	3	4	3	3	3	4	3	4	4

154	3	4	4	3	4	4	3	4	3	3
155	4	5	4	5	3	3	4	3	4	5
156	5	4	3	4	3	4	4	4	4	5
157	5	5	5	5	4	4	5	5	5	5
158	3	3	3	3	3	3	3	3	3	3
159	3	3	3	3	3	3	3	3	3	3
160	4	4	3	4	4	4	5	4	4	4
161	3	3	3	3	3	3	3	3	3	3
162	3	3	3	3	3	3	3	3	3	3
163	4	3	5	4	4	3	3	4	4	3
164	4	4	3	2	3	4	5	4	3	4
165	4	4	4	4	4	4	4	3	4	4
166	2	2	2	2	3	2	2	2	3	2
167	4	4	3	3	3	3	3	3	3	3
168	4	4	4	3	3	4	4	4	4	4
169	4	5	4	4	4	4	4	4	4	4
170	3	2	1	5	2	4	2	3	3	3
171	3	3	3	2	5	3	4	2	4	5
172	4	4	4	3	4	4	4	4	4	4
173	4	5	5	3	3	2	4	5	3	5
174	4	4	4	4	4	4	4	4	4	4
175	4	5	5	4	5	5	4	5	5	5
176	2	3	1	1	1	1	1	1	1	1
177	4	4	5	4	3	4	4	4	5	5
178	4	4	4	4	4	4	4	4	4	4
179	3	3	3	3	3	3	3	3	3	3
180	4	4	5	4	3	4	4	5	4	4
181	4	4	5	4	3	4	5	5	4	4
182	3	5	1	4	3	4	3	4	4	2
183	3	3	3	3	3	3	3	3	3	3
184	4	4	3	5	4	4	4	4	3	4
185	4	3	5	5	5	4	5	5	5	5
186	3	3	4	4	2	4	5	4	5	4
187	4	4	4	4	4	4	4	4	4	4
188	3	4	5	2	3	3	4	3	4	3
189	4	4	4	4	5	4	4	4	4	5
190	2	2	2	3	3	3	3	3	3	3
191	4	4	4	4	3	4	4	4	4	4
192	4	4	5	5	3	5	5	5	4	5

193	3	5	4	5	4	4	5	5	5	5
194	1	2	3	4	5	4	5	4	5	4
195	3	3	3	3	3	2	2	2	2	2
196	3	3	3	3	3	3	3	3	3	3
197	3	4	5	3	5	5	5	5	5	5
198	5	4	4	4	4	4	5	4	4	4
199	4	4	4	4	4	4	4	4	4	4
200	4	4	4	4	5	4	4	4	4	4
201	4	4	3	3	4	3	4	3	4	4
202	3	4	4	3	3	3	4	4	4	4
203	4	4	4	4	4	4	4	4	5	5
204	1	4	5	5	5	5	1	5	3	5
205	3	3	3	4	5	4	4	4	4	4
206	3	3	3	3	3	3	3	3	3	3
207	5	5	5	5	5	4	5	5	5	5
208	4	4	4	4	4	4	4	4	4	4
209	3	4	4	5	3	3	5	5	3	4
210	4	3	3	4	3	4	3	4	3	4
211	3	3	3	3	2	3	3	3	3	2
212	4	4	4	5	3	4	5	4	5	5
213	3	2	1	3	2	3	2	1	2	3
214	3	5	4	4	2	4	3	3	3	4
215	3	4	4	3	3	4	3	3	4	5
216	4	4	4	5	2	3	4	3	3	3
217	3	4	4	4	4	3	4	3	3	3
218	4	5	5	4	4	5	5	5	5	5
219	3	3	3	3	3	3	3	3	4	3
220	3	1	5	2	4	1	4	1	3	1
221	3	4	4	4	2	3	4	3	3	2
222	4	1	2	5	5	5	5	5	5	3
223	4	5	5	5	5	5	5	5	5	5
224	4	4	5	4	4	4	4	4	4	4
225	3	3	3	3	3	3	3	3	3	3
226	4	5	5	3	4	5	4	4	5	5
227	3	5	5	2	3	4	5	5	5	5
228	5	4	5	5	3	4	4	4	3	5
229	3	1	3	3	1	2	5	5	2	2
230	2	3	4	5	4	4	4	4	3	3
231	5	4	4	4	4	4	4	4	4	4

232	5	5	5	5	5	5	4	4	4	4
233	3	3	3	5	3	4	5	5	3	5
234	5	3	3	3	4	4	4	4	4	4
235	4	4	4	4	4	4	4	4	4	4