

# Saudi (EFL) Learners' Attitudes Toward Google Sites E-portfolio Systems in Relation to Their Language Learning Motivation

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Received: September 16, 2024

Accepted: October 15, 2024

Online Published: October 16, 2024

doi: 10.5539/elt.v17n11p11

URL: <https://doi.org/10.5539/elt.v17n11p11>

## Abstract

Electronic portfolios have emerged as an essential element of e-learning systems in the Saudi educational system, particularly in higher education. Google Sites e-portfolios enable prompt sharing of assignments and foster reflection and collaboration among students and instructors. The aim of this study is to investigate Saudi female EFL students' attitudes toward the Google Sites e-portfolio system in relation to language learning motivation. The sample comprised 138 EFL female Saudi students. The participants were enrolled in an English advanced course and were required to submit an e-portfolio as part of a course assessment. A quantitative research approach was employed. Data were collected through questionnaires. Descriptive statistics, means, standard deviation, and correlation were conducted. The study revealed that the learners showed positive attitudes toward the ease of use of Google's e-portfolio system. Furthermore, they perceived it as a valuable tool, recognizing its usefulness in facilitating timely submissions, effective feedback, and reflective learning. The study also found a positive correlation between learners' attitudes toward the system and their language learning motivation; a stronger correlation was observed for instrumental motivation. The study highlighted the significant educational value of Google e-portfolios and indicated possibilities for educators to enhance learners' experiences by tackling current obstacles and promoting motivation. Educators should encourage the use of the Google Sites e-portfolio system for reflective practices and highlight its useful features. They should also focus on students' language learning motivation, which affects attitudes toward technology implementation. Educational institutions should enhance students' comprehension of the system through focused instruction, workshops, and peer assistance.

**Keywords:** e-portfolio, EFL assessment, Google Sites, EFL learning, language learning motivation

## 1. Introduction

Various technologies have increasingly been used in English as a second and foreign language (EFL) education because of their benefits for teaching, learning, and assessing language outcomes. An electronic portfolio, or e-portfolio, is defined as a deliberate compilation of students' work that showcases their endeavors, advancement, and accomplishments in one or several areas of the curriculum (Hudori et al., 2020, p. 1). Recently, this tool has gained considerable popularity in EFL contexts for supporting and promoting teaching and learning processes and assessment (Hinojosa-Pareja et al., 2020; Oh et al., 2020). As well as being an effective tool for formative and summative assessments, e-portfolios offer many advantages in both formal and nonformal learning curricula (Luchoomun et al., 2010). They promote student-centered learning, reflective activities, and personalized learning experiences for students with different knowledge levels (Stefani et al., 2007; Yang et al., 2016a).

The Kingdom of Saudi Arabia recently embraced a new vision, known as the 2030 Saudi Arabian Vision, whose aim is to improve the country's economy and education by 2030. Saudi higher education institutions have therefore aimed to incorporate the fundamental objectives of research, entrepreneurship, technology, and innovation into their strategic plans (Alharbi, 2016). Higher education institutions in Saudi Arabia aim to improve and refine their technology infrastructure, consisting of their learning management system, instructional designs, educational tools, and other related components. E-portfolios have become a crucial component of e-learning systems in Saudi education, especially in higher education.

A variety of e-portfolio management systems are available. For example, students can use Google Sites in higher education. Any technology's effectiveness, however, depends on the learner's willingness to use it. In the department where a researcher works, some instructors require students in certain academic courses to create e-portfolios as part of their course assessment. Students must either create their e-portfolios using e-portfolio systems or simply document their work in PDFs and submit them electronically to their instructor for assessment. Even though the current generation is known as "digital natives" (Prensky, 2001), some students are unwilling to embrace e-portfolio systems and prefer to use the PDF option. Some students may perceive e-portfolios systems as useless or difficult to use and thus decline to use them. It is therefore important to understand the level of learners' acceptance of such technological tools by exploring their attitudes toward them.

In the literature, the technology acceptance model (TAM) is one of the most well-known frameworks for investigating technology acceptance, and it has been used extensively in educational settings (Davis, 1989; Venkatesh & Davis, 2000). Numerous studies have demonstrated TAM's effectiveness, and so it has developed into a common ground theory that explains user attitudes and intention toward adopting a technology (Ketmuni, 2021; Nasseif, 2018). Moreover, an important factor in EFL learning is motivation. Various studies have shown that student motivation can be significantly increased by implementing technology (Genc Ilter, 2009; Aysu, 2020; Tuksinvarajarn & Todd, 2009; Morbarhan et al., 2015). However, there is a dearth of studies examining the relationship between students' language learning motivation and their attitudes toward the implementation of e-portfolio systems as an assessment tool for language learning.

The present study aims at closing this knowledge gap by examining quantitative data on Saudi female EFL students' attitudes toward the use of Google Sites e-portfolios and determining whether their language learning motivation correlate with their attitudes toward using them. More specifically, the study seeks to answer the following questions. Q1: How do Saudi female EFL students perceive the Google Sites e-portfolio system's ease of use? Q2: How do Saudi female EFL students perceive the Google Sites e-portfolio system's usefulness? Q3: Do Saudi female EFL students' attitudes toward the Google Sites e-portfolio system correlate with their language learning motivation?

## 2. Literature Review

### 2.1 The TAM Framework

One of the most widely acknowledged models to understand users' acceptance of a technology is TAM (Davis, 1989). TAM identifies critical factors (ease of use and usefulness) that influence users' attitudes toward the adoption of technology (Malhotra & Galletta, 1999). Although TAM is widely used to account for the adoption of technology within organizations, the model is intended to be universal. According to Marikyan and Papagiannidis (2023), TAM follows a three-step process in which external factors (system design features) stimulate cognitive responses (perceived ease of use [PEU] and perceived usefulness [PU]), which then shape an effective response [attitude toward using technology/intention] and affect user behavior. TAM displays behavior as predicted by PEU, PU, and intention (Figure 1).

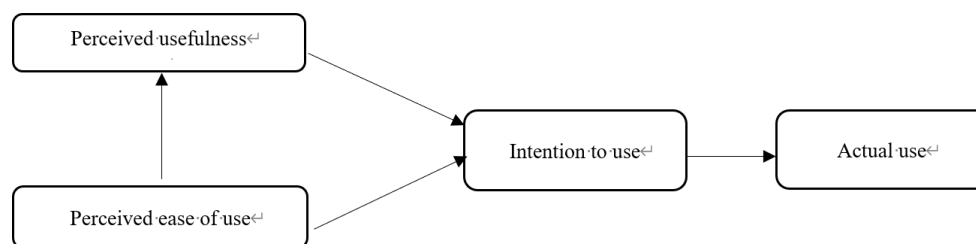


Figure 1. Technology Acceptance Model

PEU and PU reflect expectations of positive conduct and the perception that behavior would not be laborious (Davis, 1989). Follow-up research found that attitude toward behavior (Davis, 1993), an emotive appraisal of behavior's probable consequences, can replace behavioral intention (Ajzen, 2011). Behavior is more likely with stronger emotional responses. PU directly affects actual use, highlighting its relevance in forecasting behavior. PEU supports PU but does not directly affect use behavior (Davis, 1993). According to the TAM approach, an application that is easy to use is more likely to be valuable to the user and to promote technology adoption.

### 2.1.1 PU and PEU

The TAM framework connects characteristics including PEU, PU, attitude toward use, and behavioral intention. According to Davis (1989), PEU and PU are the most important subconstructs in this model because they affect the technology's user acceptance more than any other subconstruct (Abdullah et al., 2016; Chen et al., 2012). PEU is "the degree to which a person believes that using a particular system would be free of effort" (Davis, 1989, p. 320), and PU is "the degree to which a person believes that using a particular system would enhance his or her job performance" (Davis, 1989, p. 320). PEU and PU are extrinsic motivating beliefs that keep consumers using the technology or system.

### 2.1.2 Studies Using TAM

Much previous research has demonstrated that PEU significantly influences information technologies' user acceptance and adoption. For example, Ketmuni (2021) investigated undergraduate students' attitudes at a university in Thailand toward online English language learning support. The study used both quantitative and qualitative methods and TAM. The results showed that PEU played a role in whether students accepted or rejected online English learning. Students recommended that teachers adopt instructional strategies that would stimulate their interests and offer a range of activities.

Nasseif (2018) aimed to assess a local university's preparedness in Saudi Arabia to implement e-portfolio systems and the level of acceptance among the university's students and faculty members. It was a case study that gathered quantitative data by distributing questionnaires, based on TAM, to students and faculty members. Additionally, a focus group of 20 students specializing in management information systems was organized to introduce them to e-portfolios and guide them in the creation of their initial e-portfolios. Moreover, interviews were performed with the institution's top-level management to identify the factors necessary for e-portfolios' adoption. The findings emphasized the factors required for the acceptance of students and faculty members. These factors included technological proficiency and the recognition of e-portfolios' potential advantages, such as the ability to retain access to coursework and exhibit it. The report emphasized the role of university's senior administration in implementing e-portfolios. This mostly involved being aware of e-portfolios' benefits and drawbacks and offering appropriate training and support to the university's stakeholders.

Furthermore, TAM has been used to study students' intention to use an e-portfolio system in the classroom. In a study by Shroff, Deneen, and Ng (2011), 72 participants answered questions about the system's PU, PEU, attitudes toward usage, and behavioral intention to use. The findings showed that students' PEU significantly influenced their attitude toward use, and PEU had the strongest influence on PU. Personal traits and technology advancements may also influence teachers' decisions to include e-portfolios in their classes. The findings suggest that TAM is a solid theoretical model suitable for e-portfolios, indicating its applicability in the online learning context.

## 2.2 *E-Portfolios*

In the literature, three main types of e-portfolios have been identified. Maher and Gerbic (2009) suggested that portfolios can be classified into three types: learning portfolios, showcase portfolios, and assessment portfolios. Showcase e-portfolios highlight achievements, learning e-portfolios demonstrate the learning process with a focus on feedback, and assessment e-portfolios are used to evaluate students' levels of proficiency in specific standards or subjects. Unlike traditional exams, e-portfolios enable a comprehensive evaluation of students and offer them the opportunity to elaborate on their language learning experience.

### 2.2.1 The Google Sites E-Portfolio System

The Google Sites e-portfolio system is a free online tool for making portfolio web pages where students can work alone or in collaboration to construct their own e-portfolios and write content for individual pages. Students are also free to choose who owns the website and how much information they want to share. Additionally, they can grant guests access for only viewing purposes, which provides them with more protection. The system enables teachers to provide feedback, giving students the chance to practice and apply this feedback.

A recent research study on Google Sites e-portfolios focused on its effectiveness in improving students' writing skills (Sastromiharjo et al. 2024). The study examined Google Sites' integration into language teaching strategies, specifically web-based instructional resources' design and execution in Google Sites and how it inspires students to improve their writing skills. Thirty-one second-semester language students participated in this study. The sample comprised 19 women and 12 men. The results revealed that the use of Google Sites improved students' writing skills. This suggested that Google Sites is a successful media blog. It is also successful in teaching

English to students using varied text materials and categories in both face-to-face and non-face-to-face learning contexts. The researchers concluded that Google Sites has great potential for teaching English.

### 2.2.2 Advantages of Using E-Portfolios in Language Learning

Reflection is essential in language learning because it can promote critical and analytical thinking and ease the incorporation of these skills into the learning process (Rhodes, 2011). E-portfolios enable learners to engage in self-reflection, facilitate students' documentation of their experiences (Reese & Levy, 2009), and help them engage in reflection. As students reflect on their learning experiences, they start to analyze their perspectives on learning in a more detailed and sophisticated way (Lin, 2008). During the reflective process, students gain a greater sense of purpose and focus as they evaluate their own work in comparison to a standard (Lin, 2008). By doing so, students can decide whether their work meets the required standard. If it does not, they can work on a plan to meet it (Lin, 2008). E-portfolios assist in providing feedback on students' learning experiences, strengths and weakness, and achievements (Goldsmith, 2007). This promotes the improvement of students' learning through self-examination and constructive criticism.

Moreover, e-portfolios have demonstrated their value in promoting communication and collaboration in the learning environment. Bolliger and Shepherd (2010) integrated e-portfolios into an online course with the aim of examining its impact on students' learning. Important factors considered by the researchers included students' motivation, communication, and perceptions. The researchers observed an increase in communication among instructors and students. The results also showed that students were motivated to learn through the incorporation of online courses (Bolliger & Shepherd, 2010). Further, Lin (2008) investigated e-portfolios' impact on preservice teachers' communication and collaboration. According to the findings, e-portfolios can enhance peer-to-peer collaboration, interaction, and communication. Students improved and completed their e-portfolios in response to peer feedback (Lin, 2008). This eventually fostered a culture of collaboration (Kocoglu, 2008).

Furthermore, e-portfolios foster students' learning process and autonomy. Students learn to be autonomous when they engage in creating content for an objective, assessing their own work and reflecting on the findings in relation to their learning process, experiences, and skills (Goldsmith, 2007). Thus, e-portfolios aid students in taking control of their own learning, which motivates them to engage in studying (Akçıl & Arap, 2009). Students also gain autonomy throughout this process, as e-portfolios empower them to take charge of their own learning and raise their awareness of critical learning factors, procedures, and attitudes (Gonzalez, 2009).

### 2.2.3 Students' Attitudes Toward the Use of E-Portfolios

Students' perceptions of the implementation of e-portfolio platforms have attracted attention in the educational technology field. Most previous studies investigating EFL students' attitudes toward e-portfolios have focused on comparing them with attitudes toward traditional paper-based portfolios or general attitudes toward using e-portfolios as a learning and assessment tool (Wang & Jeffrey, 2017; Dahmash, 2023). For instance, Wang and Jeffrey (2017) focused on college students' perspectives on the use of e-portfolios for English assessment and learning. Most of the participants exhibited a preference for the e-portfolio assessment platform over traditional paper-based tests.

Moreover, Dahmash (2023) used a 5-point Likert scale to investigate the perspectives of 181 female English students at selected Saudi universities regarding the use of e-portfolios as a learning and assessment tool. Most students held positive attitudes toward e-portfolios. Some students, however, were neutral about difficulties, errors, group work, and time use regarding e-portfolios. Overall, there was no significant difference in attitudes across universities or academic levels. The researcher suggested that e-portfolios could be an effective element of EFL learning and encouraged their implementation in English major programs.

Although the aforementioned studies have reported general positive attitudes toward the implementation of e-portfolios as a learning and assessment tool, important psychological factors such as language learning motivation have not been considered.

## 2.3 Motivation in Language Learning

In language learning, motivation is a multifaceted and complex concept. The dynamic and significant role that second language motivation plays in all of second-language learning's psychological aspects—such as age, sex, ability, and anxiety—shows how complex L2 motivation is. Thus, among second-language acquisition's psychological aspects, motivation has been the most studied in psycholinguistics. El Hadeif (2021) argued that motivation is correlated with a range of emotional and psychological characteristics. Over the past 50 years, there has been a diverse range of ideas and models in language motivation research because of the explosion of

studies on motivation theory in second-language acquisition. These diverse theories and models of language motivation have presented various theoretical frameworks of L2 motivation (Anjomshoa & Sadighi, 2015).

From all these theories and models of motivation, the current study makes use of Gardner's theory (1985). Gardner (1985) focused on the primary driving forces behind learners and placed special emphasis on integrative and instrumental orientations. In their 10-year research program, Gardner, Clement, and Glikzman (1976) asserted that, in addition to aptitude for learning a second language, the learner's affective emotions toward the target linguistic-cultural group were a necessary condition for success in language achievement. Therefore, learners can be categorized into two types according to their goals for learning a second language: those who learn English for integrative goals, such as becoming a member of that society, and those who learn English for instrumental goals, such as obtaining employment or advancing their careers.

Some students learn a language for practical purposes, that is, "instrumental motivation, which means learning the language for an ulterior motive unrelated to its use by native speakers—to pass an examination, to get a certain kind of job, and so on" (Cook, 1991, p. 97). Other students may have a strong interest in foreign language culture, tradition, and people: "The integrative motivation reflects whether the student identifies with the target culture and people in some sense, or rejects them" (Cook, 1991, p. 97). According to Gardner and Lambert (1972, p. 150), "instrumental orientation is defined as the aspiration to acquire economic advantages or social recognition by acquiring proficiency in a foreign language." Moreover, instrumental and integrative motivations and positive attitudes toward the learning environment influence students' language learning (Gardner, 2001).

### 2.3.1 Technology and Language Learning Motivation

Technology use appears to be one of the factors contributing to EFL learners' motivation. This topic has been the subject of numerous investigations in recent years (Deeler & Grey, 2000). According to Rost (2002, p. 1), technology use in language classrooms is crucial: "Technology provides students with genuine opportunities to learn more effectively, enhances the enjoyment of language learning, enhances students' capacity to become better language learners and enhances the enjoyment and satisfaction of our own teaching." The use of technology that provides opportunities for students to learn and converse in the language with native speakers through authentic materials is extremely valuable in countries where the language is taught in the classroom. Linse (2005, p. 199) underscores this point, stating that the abundance of resources they can access through the internet are likely to delight students.

Previous investigations have comprehensively explored language learning motivation's significance in the digital learning context, revealing educational technology's impact in nurturing learners' motivation. Aysu (2020) discovered that learners exhibited a higher level of integrative motivation than instrumental motivation in technology-based contexts. He also argued that motivated learners in online contexts have certain qualities such as "being goal-directed, expending effort, being persistent, being attentive, having desires (wants), exhibiting positive effect, being aroused, having expectancies, demonstrating self-confidence (self-efficacy), and having reasons (motives)" (p. 2).

Motivation is a fundamental factor in language learning and is necessary for even efficient individuals to achieve long-term goals regardless of the curriculum or teacher involved. Researchers have generally recognized that motivation plays a determining factor in shaping learners' views about the use of e-portfolios. Previous research has suggested that e-portfolio projects implemented in educational institutions boost students' motivation and improve their learning outcomes. For example, Tuksinvarajarn and Todd (2009) implemented an e-portfolio initiative to address the issue of scientific and engineering undergraduate students perceiving their English classes as insignificant. Their study's objective was to provide a detailed description and assessment of the e-portfolio project, focusing primarily on the "e-pet" feature (an interactive toy that reacts to its owner's actions). This was accomplished by analyzing diary entries produced by the teacher following each lesson. The e-pet proved to be a successful method for both sparking and sustaining students' attention and motivation.

Either intrinsic or extrinsic factors might motivate the use of e-portfolios. Morbarhan et al. (2015) proposed that two factors influence intrinsic motivation: the e-portfolio system's characteristics and the student's competency and previous digital experience. Additionally, they found that receiving positive feedback regarding the use and ownership of the work created enhanced motivation. During the initial stages of using e-portfolios, students may need additional assistance until they develop the internal drive to engage with the e-portfolio. This motivation arises when they understand and appreciate the conceptual and practical benefits of using an e-portfolio (Slade, 2015). In Taiwan, a study revealed that students were more willing to use and regularly update their e-portfolios when lecturers and administrators explicitly recognized their significance (Hsieh et al., 2015). Similarly, Tosh et al. (2005) found that students' motivation, commitment, and use of technology increased when they were

provided with a concise explanation of the benefits of using e-portfolios. According to Endacott et al. (2004), e-portfolios can enhance the qualities of adults' learning if they are created in a supportive and facilitative setting, even though not all students recognize their significance.

### 3. Methodology

#### 3.1 Participants

The sample consisted of 138 Saudi female EFL university students. These students had previously created an e-portfolio for their assessment in an academic core course in a department of English language and literature at a Saudi university. Their ages ranged from 18 to 24 years. They completed two web-based questionnaires. The study took place in the third semester of the 2023–2024 academic year.

#### 3.2 Instruments

Data collection involved the use of two questionnaires to obtain the data needed to answer the research questions. There were 32 questions in total, divided into four categories. The first questionnaire was adopted from Moonma (2021). It was used to explore students' feelings toward Google Classroom. It had previously been adapted from Davis's (1989) and Weng, Yang, and Su's (1989) frameworks. The questionnaire focused on the research model's aforementioned constructs. The pertinent items from TAM were adapted and modified to accommodate the local context and assess learners' PU of the e-portfolio (Davis, 1989). With a few modifications, the questionnaire comprised 12 items. The items were divided into two parts. The first part assessed participants' attitudes toward the usefulness of Google Sites e-portfolios. The second part assessed participants' attitudes toward the ease of use of Google Sites e-portfolios.

The second questionnaire was by Gardner (1985) and was about motivation. It was used to measure participants' language learning motivation. The motivation questionnaire comprised 20 items, with 10 items assessing integrative orientation and 10 items assessing instrumental orientation. The two questionnaires were constructed using a 5-point Likert scale, with responses ranging from strongly agree to strongly disagree. The instructions were concise and unambiguous. Both questionnaires were intended to elicit quick and effortless responses from participants.

#### 3.3 Data Validity and Reliability

Three professors of applied linguistics at a Saudi university confirmed the study's content validity. The professors reviewed the instruments and provided feedback to the researcher.

The language motivation questionnaire's reliability was assessed in a previous study by calculating the consistency measure, which yielded a value of 0.89 (Gokce, 2008). This value indicated that the questionnaire had a satisfactory level of reliability. The researcher conducted another reliability analysis, which indicated strong internal consistency for both questionnaires. The questionnaire measuring attitudes toward Google e-portfolios consisted of 12 items and yielded a Cronbach's alpha of .918, indicating high reliability and suggesting that the items effectively measured a unified construct. Similarly, the motivation questionnaire, comprising 20 items, had a Cronbach's alpha of .881, indicating good reliability (Table 1). These findings implied that both scales were reliable tools for assessing participants' attitudes and motivation.

Table 1. Data Reliability

Questionnaire	Items	Cronbach's alpha
Attitudes toward Google E-Portfolio	12	.918
Motivation	20	.881

#### 3.4 Data Analysis and Procedure

The Google Sites e-portfolio system is a comprehensive platform that combines the functionalities of an e-portfolio, weblog, resume generator, and social networking system. As part of the assessment of their syntax course (13 weeks) in the third semester of the 2024 academic year, students were directed either to submit an e-portfolio as a PDF or to upload all their course assignments and projects to a secure online repository such as the Google Sites e-portfolio system. A total of 138 students completed the questionnaires about their perceptions of the Google Sites e-portfolio system and their language learning motivation. The questionnaires were then encoded and entered into Statistical Package for the Social Sciences (SPSS version 25).

The researcher analyzed the data collected by running version 25. Descriptive statistics, such as means and standard deviations, were used to provide an overview of learners' attitudes toward Google Sites e-portfolios.

Furthermore, Pearson correlation analysis was conducted to examine the existence of a correlation between the variables in question.

#### 4. Results

##### 4.1 Learners' Attitudes Toward E-Portfolio Ease of Use

Descriptive statistics (Table 2) revealed that learners generally held a positive attitude toward the ease of use of Google Sites for e-portfolios, with the highest agreement observed in the ease of signing in ( $M = 4.28$ ) and navigating the platform ( $M = 4.11$ ). While creating an e-portfolio ( $M = 3.96$ ) and learning how the platform works ( $M = 3.89$ ) had slightly lower mean scores, they exhibited greater variability in responses, suggesting that some learners encountered challenges in these two aspects. Overall, the total mean score of 4.07 reflected a favorable view but highlighted the need for enhanced instructional support in areas where learners experienced difficulties.

Table 2. Descriptive Statistics of Learners' Attitudes Toward E-Portfolio Ease of Use

Item	N	Min	Max	M	SD
1. It is easy for me to sign on to Google Sites.	138	2	5	4.28	0.863
2. It is easy for me to create an e-portfolio in Google Sites.	138	2	5	3.96	0.943
3. It is easy for me to share assignments with the teacher and students in Google Sites.	138	1	5	4.10	1.013
4. It is easy for me to submit assignments in Google Sites.	138	1	5	4.12	1.004
5. It is easy for me to learn how Google Sites works as an e-portfolio.	138	1	5	3.89	1.058
6. It is easy for me to navigate around in Google Sites.	138	1	5	4.11	0.979
Overall attitude toward e-portfolio ease of use	138	2.17	5	4.07	0.778

##### 4.2 Learners' Attitudes Toward E-Portfolio Usefulness

The descriptive statistics indicated that EFL learners generally perceived Google Sites as a valuable tool for e-portfolios, as evidenced by the total mean score of 3.98. This score reflected positive attitudes toward Google Sites' usefulness. Specifically, participants reported that Google Sites enabled timely assignment submissions ( $M = 4.00$ ) and made it comfortable to share work with instructors ( $M = 4.07$ ). Furthermore, the process of creating an e-portfolio was considered enjoyable and interesting ( $M = 4.09$ ). Learners recognized that the platform effectively facilitated the identification of strengths and weaknesses, reflected in a mean score of 3.80, and supported reflective learning, with a mean score of 3.95—both indicating moderate levels of engagement in these areas (Table 3). In contrast, the higher mean score of 4.02 for effective feedback suggested a significantly stronger affirmation of this feature, highlighting its importance in the learning process. Overall, the findings underscored the platform's PU.

Table 3. Descriptive Statistics of Learners' Attitudes Toward E-Portfolio Usefulness

Item	N	Min	Max	M	SD
1. Google Sites allows me to submit my assignments quickly and on time.	138	2	5	4.00	0.996
2. I feel comfortable sharing my work with the teacher in Google Sites.	138	1	5	4.07	1.012
3. Creating an e-portfolio through Google Sites is fun and interesting.	138	1	5	4.09	0.875
4. Google Sites makes me aware of my strengths and weaknesses.	138	1	5	3.80	0.988
5. Google Sites allows me to receive effective feedback on my work from the teacher and students.	138	1	5	4.02	0.916
6. Creating an e-portfolio on Google Sites helps me reflect on my learning.	138	1	5	3.95	1.013
Overall attitude toward e-portfolio usefulness	138	2	5	3.98	0.733

#### 4.3 Relationship Between Learners' Attitudes Toward E-Portfolios and Level of Motivation

The descriptive statistics for learners' motivation revealed distinct patterns in both integrative and instrumental motivation. Integrative motivation was high, with a mean score of 4.33 and a low standard deviation of 0.625 (Table 4). This suggests that learners firmly identified with and participated in the learning process, resulting in consistent responses among participants. In contrast, instrumental motivation had a mean score of 3.82 and a slightly higher standard deviation of 0.661, indicating that learners were aware of the practical advantages of their education, but there was greater variability in the way they experienced this form of motivation. Overall, the total motivation score of 4.07 indicated a positive motivational level, emphasizing both integrative and instrumental factors' importance in the learners' educational experiences, with integrative motivation being particularly apparent.

Table 4. Descriptive Statistics of Learners' Integrative, Instrumental, and Overall Motivation

Motivation Type	N	Min	Max	M	SD
Integrative	138	1.80	5	4.33	0.625
Instrumental	138	2.00	5	3.82	0.661
Overall	138	2.60	5	4.07	0.547

The correlation analysis of learners' PEU and PU with their integrative, instrumental, and overall motivation revealed significant positive relationships. Specifically, PEU showed moderate correlations with integrative motivation ( $r = .285$ ), instrumental motivation ( $r = .321$ ), and overall motivation ( $r = .357$ )—all statistically significant at  $p < .001$ . In contrast, PU demonstrated stronger correlations with integrative motivation ( $r = .383$ ), instrumental motivation ( $r = .418$ ), and overall motivation ( $r = .471$ )—also significant at  $p < .001$  (Table 5). These findings suggest that both PEU and PU are important factors influencing various dimensions of learners' motivation, with PU having a more substantial impact across all motivation types.

Table 5. Correlation Between PEU and PU of E-Portfolios and Integrative, Instrumental, and Overall Motivation

Attitude construct		Integrative motivation	Instrumental motivation	Overall motivation
PEU	Pearson correlation	.285**	.321**	.357**
	Sig. (2-tailed)	< .001	< .001	< .001
	N	138	138	138
PU	Pearson correlation	.383**	.418**	.471**
	Sig. (2-tailed)	< .001	< .001	< .001
	N	138	138	138

Note. PEU = perceived ease of use; PU = perceived usefulness.

## 5. Discussion

The present study investigated Saudi female EFL learners' attitudes toward the Google Sites e-portfolio system and aimed to determine their primary motivational orientation. The purpose was to help EFL instructors enhance their students' language achievement by understanding their attitudes toward e-portfolios and their language learning motivation orientations. The quantitative results revealed that the students generally showed positive attitudes toward the Google Sites e-portfolio system's ease of use and usefulness. The average mean score of students' attitudes toward ease of use was 4.07, which indicated that students mainly perceived the Google Sites e-portfolios system as easy to use. However, some system features were perceived as easier to use than others: signing in, sharing assignments with instructors, and navigating through the website. Furthermore, students revealed that they had some issues related to some of the system features, such as the ease of creating the e-portfolio itself and learning how the system works as an e-portfolio. These findings suggest the need for instructional support from instructors and the need for training from institutions in these areas to allow students to embrace the technology and enhance their language learning. These findings are also consistent with Nasseif's (2018) study, which highlighted the elements needed for professors and students to embrace the e-portfolio system. These elements included computer literacy and an awareness of e-portfolios' potential benefits. In the current study, students were not aware of Google Sites e-portfolios' usefulness for their reflective practices. This requires educating them about its advantages. This finding was in alignment with Nasseif's (2018) study, which



suggested senior administration's participation at institutions in e-portfolio implementation. This included educating the university's stakeholders about e-portfolios' advantages and disadvantages and providing them with the necessary training and assistance.

Moreover, the current study found that students generally perceived Google Sites as a valuable tool for e-portfolios, with a mean score of 3.98. In particular, students recognized the system's usefulness in areas such as sharing work with instructors, receiving feedback from them and from peers, and quickly delivering assignments. They enjoyed creating e-portfolios. However, some issues were apparent with their perceptions of the Google Sites e-portfolio system's usefulness. The issues were related to one of the main features of the system: reflection. Students had difficulty realizing the system's usefulness in helping them become aware of their weaknesses and strengths. This finding showed that the PEU of the Google Sites system was the main factor affecting students' attitudes toward and intention to adopt or reject the Google Sites e-portfolio system. It confirmed Davis's (1993) idea that even though PEU has no direct effect on use, it contributes to PU (Davis, 1993). In other words, a system or application that is simple to use has a higher chance of being useful to the user and, consequently, of being used and adopted. One of the main features of e-portfolios is helping students reflect on their own learning. Thus, if a student does not perceive a tool to be easy to use, they will not perceive it useful for their learning. In this study, students had difficulty understanding how the Google Sites e-portfolio system worked, so they did not perceive its usefulness for their reflection and learning. This finding was also consistent with that of Shroff, Deneen, and Ng (2011), which revealed that students' PEU significantly influenced their attitude toward use. It also showed that PEU had the strongest influence on the PU of e-portfolios.

Furthermore, the study revealed that learners were generally motivated for English language learning. Integrative motivation was the more evident of the two motivation orientations, with a mean of 4.33, whereas instrumental motivation had a mean of 3.82. This finding was consistent with previous research by Aysu (2020), which found that learners exhibited a higher level of integrative motivation than instrumental motivation in technology-based contexts. However, the correlation analysis revealed a moderate association between the attitude construct PEU and the two motivation orientations: integrative motivation ( $r = .285$ ) and instrumental motivation ( $r = .321$ ). A stronger correlation was found between the attitude construct PU and the two motivation orientations ( $r = .383$  and  $r = .418$ , respectively). These correlations showed that students' language learning motivation might have played a role in how they perceived the Google Sites e-portfolio system and what their attitudes toward using it as an assessment tool were.

Moreover, students' instrumental motivation was a driving factor in their attitudes toward the usefulness of the Google Sites e-portfolio system. As Gardner (1985) stated, instrumental reasons are those that emphasize the practical features of learning a second language without any special desire to interact with the second language community. This finding aligned with previous research studies by Bolliger and Shepherd (2010) and Lin (2008), which demonstrated e-portfolios' effectiveness in fostering students' collaboration and interaction. The current study found that students' perceptions of the usefulness of the system were higher in items related to submitting assignments quickly and on time and receiving effective feedback. These were the reasons the EFL students perceived Google Sites e-portfolios as being useful. This finding corroborated Cook's (1991) notion that instrumental motivation "means learning the language for an ulterior motive unrelated to its use by native speakers—to pass an examination, to get a certain kind of job, and so on."

In the current study, EFL students were not interested in the system's features that allowed them to collaborate or communicate with other students. They instead appreciated features that assisted them in delivering an assignment to obtain a grade. This finding also aligned with previous research by Morbarhan et al. (2015), which showed that two factors affect intrinsic motivation to use technology: the characteristics of the e-portfolio system and the student's competency and previous digital experience. In the current study, the system's features influenced students' attitudes toward Google Sites e-portfolios, which was reflected in the finding that instrumental motivation was highly correlated with the PU of the system. Thus, the current study supports Morbarhan et al. (2015), which suggested that during the initial stages of using e-portfolios, students need additional assistance until they develop the internal drive and motivation to engage with the system. This motivation arises when they understand and appreciate the conceptual and practical benefits of using an e-portfolio (Slade, 2015).

### 5.1 Pedagogical Implications

The results have several pedagogical implications. Educational institutions should provide focused instruction to enhance students' comprehension of Google Sites, particularly while constructing e-portfolios, by using workshops and peer assistance to address current obstacles. Teachers can encourage students to periodically assess their strengths and weaknesses by including reflective practices in the e-portfolio process. Furthermore, integrative and instrumental motivation can both be increased by highlighting Google Sites' useful features and by encouraging community building through collaborative initiatives. Instructors must recognize the role of students' language learning motivation in shaping learners' attitudes toward the implementation of different technologies. Moreover, to promote adults' learning that can be achieved through the implementation of e-portfolios, policymakers and stakeholders should create supportive and facilitative settings (Endacott et al., 2004). Additionally, students' awareness of e-portfolios' significance for language learning and assessment should be raised.

### 6. Conclusion and Limitations

The current study investigated Saudi female EFL learners' attitudes toward the implementation of the Google Sites e-portfolios system in relation to their language learning motivation. The study found that EFL students generally held positive attitudes toward the system. Furthermore, the findings suggested that students' language learning motivation influenced their attitudes toward the e-portfolio system. The study concludes by highlighting the positive perspectives of Saudi EFL learners regarding Google Sites e-portfolios' usefulness and ease of use. It specifically emphasizes the platform's benefits in enabling user-friendly navigation, prompt uploads, constructive feedback, and reflective learning. Moreover, the strong correlation between learners' attitudes and their motivation, particularly in terms of instrumental motivation, highlighted the need to include practical benefits in the learning process. These results showed the significant educational value of Google Sites e-portfolios and indicated possibilities for educators to enhance learners' experiences by tackling current obstacles and promoting motivation.

The current study was limited to Saudi female EFL students in a Saudi university. Future studies should consider the perceptions of all genders and explore the differences in their perceptions of e-portfolio systems. Further, the study focused only on students' perceptions. Future research should include instructors' and policymakers' attitudes toward the implementation of the e-portfolio system. Hsieh et al. (2015) argued that students are more willing to use and regularly update their e-portfolios when lecturers and administrators explicitly recognize their significance. The study explored only students' attitudes toward the implementation of the Google Sites e-portfolio system. However, only a few previous studies were pertinent to this topic. Thus, further experimental investigations should focus on the effects of the e-portfolio system on students' language learning achievement as well as their language learning motivation.

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