

## The Impact of Social Media as a Scaffolding in English Language Acquisition: A Case Study in Non-commissioned Officers in the Sri Lanka Army

A. Geeganage<sup>1</sup>, and R. Abeywickrama<sup>2</sup>

<sup>1</sup>Defence Services Command and Staff College Sri Lanka

<sup>2</sup>Department of Languages, Sabaragamuwa University of Sri Lanka

**ABSTRACT:** This study investigated the impact of social media usage on English language proficiency among Sri Lankan Armed Forces personnel, particularly non-commissioned officers, addressing a significant gap in the literature. Structural equation modeling (SEM) was employed to analyze data gathered from 234 military personnel. Social media use is measured across six dimensions: uploading content, sharing content, sending messages, receiving messages, downloading materials, and reading materials. Language proficiency is assessed in four domains: listening, speaking, reading, and writing. The results demonstrate a significant positive effect of social media engagement on overall English language proficiency, with writing skills showing the most substantial improvement, followed by enhanced listening and reading capabilities. The study concludes that strategic social media integration into formal language learning can significantly improve overall English proficiency. The study addresses the key issues and arguments highlighting the implications of social media on language learning. It contributes to the growing body of literature on the role of digital channels in education, showing that social media is an effective strategy for English language acquisition. The study recommends a blended curriculum integrating social media platforms with traditional language training, suggesting specific strategies such as utilizing diverse audio formats for listening skills, engaging with professional content for reading comprehension, and implementing interactive writing and speaking activities through various social platforms. These findings provide valuable insights for military training programs and policymakers in the public and private sectors seeking to enhance employees' English language acquisition through innovative, social media-backed language courses.

**KEYWORDS:** English language acquisition, language learning, Sri Lanka military personnel, social media

### I. INTRODUCTION

The emergence of social media has transformed communication and information dissemination worldwide, and it has significantly impacted various domains of every society, including education and language acquisition. Scholars believe that communication established with the emergence of animals in the history of the world (Morissan, 2023). There is evidence in the literature to validate that the development of humans greatly helped improve this communication process, and communication gradually enriched with the growth of humans (Kholod, 2024). In addition to the development of verbal communication, communication through symbols and the expansion of written media through the development of characters contributed to the development of the world. As Black, Andjelic, and Salcudean (2024) claim, providing the data generated in one place to another party through this communication directly affects a country's economic and social development.

With the emergence of electronic media, there was a huge revolution in communication, and electronic media brought information and knowledge to a large audience (Morissan, 2023). Radio, television, and the telephone are considered breakthrough inventions that changed the history of communication (Kholod, 2024). At present, the internet has become the medium that has a strong influence on the communication process and thus has managed to bring the entire world onto a phone screen (Salehan&Negahban, 2020). The world witnessed the emergence of social media in early 2000. The advent of social media endured a graphic Renaissance. The implication of images and videos became a primary means of expression. Notably, the rapid development of the internet and the growth of social networking (SN) have unprecedentedly changed how people communicate (Bennett, 2010). By now, social media has emerged as the most popular means of communication, connecting people around the globe.

Gaintman and Cortijo (2015) indicate that many people around the world have access to social networking sites (SNS), namely WhatsApp, Facebook, Snapchat, Twitter, YouTube, and Instagram. The integration of social media into daily life has resulted in connecting people into one network of global connectivity. This means that

social media forums have facilitated many online users to share their interests, ideologies, political views, or activities. Moreover, the emergence of innovative media forums helps motivate learners to be more enthusiastic in the process of language learning (Yanti, Amalia, & Nawawi, 2018). In the past decade, social network platforms have facilitated a modern approach for users to learn foreign languages, particularly English as a Foreign Language (EFL). For instance, as Yadav (2021) states, the process of texting, chatting, and socializing with friends, family, and global society on social media platforms can enhance learning English as a foreign language (EFL). Similarly, Lytle and Kuhl (2017), in their research, showed social networks' (SN) support to enhance students' grammar, language skills, vocabulary, pronunciation, spelling, motivation, and to think critically and create content

Today, people use their mobile phones as the fastest-adopted technology for many tasks ranging from calling and texting to playing games, navigation, and social networking (Salehan&Negahban, 2020). In particular, social media tools are largely used to fulfill diverse requirements. Consequently, EFL also embraced the digital and e-learning styles. Kaplan and Heinlein (2010) in their study underscore that it is easy to learn English online in self-paced programs and remarkably easy to immerse students in an English communication environment. According to Eid and Al-Jabri (2016), all social networking sites reflect unique characteristics. However, as a whole, they have one characteristic in common that helps improve communication. With the advent of popular social networks and their rapid development in society in the recent past, many people use smartphones primarily to gain connections with others. As a result, using smartphones has become a common practice in modern life. According to Zhang et al. (2023), five billion new users started to use the internet by 2022, and it is recorded that 60 percent will use smart mobile devices on the global internet. This trend will continue attracting most people while mobile technology is becoming more affordable and available than ever. It is important to note that social networks are popular among the officers and soldiers of the Sri Lankan Army (SLA) to keep in touch with their families. They also use social networks for their official tasks as a means of reliable and faster mode of forums. Officers and soldiers who serve in the Defense Services Command and Staff College (DSCSC) are expected to communicate in English. This is mainly because the college has to constantly correspond with foreign embassies and foreign defense forces.

As Dermott (2013) argues, soldiers, and officers regardless of job title have a significant role to play in the workplace, especially, soldiers employed in establishments like DSCSC, Ministry of Defense (MOD), and Institute of Peace Support Operations Training (IPSOT) should necessarily be conversant in the English language to a considerable extent. Notably, a military commander cannot become a leader without effective communication (Lewińska, 2016). Soldiers, on the other hand, belong to diverse socioeconomic and educational backgrounds, which may lead to variations in their comfort and fluency in the English language. However, soldiers use the English language comfortably in social media forums more or less in the same way officers do. They manage to chat, share their ideas, and handle common practices like downloading, uploading, reading, and sharing their ideas in English freely and enthusiastically. However, it is observed that even if soldiers are eager to use social media in English, they are hesitant and unwilling to work in English in the office in comparison to the officer cadre. Given this background, this study aims to examine the impact of social media on the English language acquisition of soldiers in the Sri Lankan armed forces.

## II. LITERATURE REVIEW

### 2.1 Theoretical Review

Theoretical analysis can build the theoretical foundation for the variables and dimensions of the research. Accordingly, the theoretical basis related to the two main variables of social media use and English language acquisition is established first, and then their dimensions and questions are identified using the previous literature followed by systematically establishing them. Accordingly, six dimensions identified related to social media use: uploading content, sharing content, sending messages, receiving messages, downloading materials, and reading materials, were derived and theoretically constructed. In relation to English language acquisition, four dimensions of the listening domain, speaking domain, reading domain, and writing domain were derived, and they were also theoretically established.

### 2.2 Social Media

Social media is a freely accessible platform that helps share information, including words and various visuals. The history of social media dates back to the 1990s with GeoCities, Classmates.com, and SixDegrees.com. Most people believe that SixDegrees.com was the first social media site with many basic features of the phenomenon known today as social media. A unique feature of social media is that it connects people with their friends and family members and enables them to share the details of their lives. Moreover, it is also an important feature that can easily identify new trends in one's profession and the activities of other professionals. According to the study conducted by Gaudeul and Peroni (2010), social media bridges the communication gap between people and provides opportunities to connect with their loved ones and convey their opinions freely on a stress-free platform. Additionally, the market built on social media and the related

trade can also be considered a special characteristic. In the meantime, business activities, fundraising, political campaigns, and activities of recreational groups are also carried out using social media.

Social media forums have experienced enormous growth, exceeding 4.7 billion users around the globe, accounting for roughly 60% of the world population. Chat and messaging applications have somewhat outperformed social networks in terms of usage, with 94.8% and 94.6% of users accessing them, respectively, in early 2023 (Suganya, 2023). According to Grahl (2013), social media can be categorized into six different but corresponding layers, which include: (1) social networks such as Facebook and LinkedIn; (2) bookmarking sites such as Delicious and StumbleUpon; (3) social news such as Digg and Reddit; (4) media sharing such as Instagram, YouTube, and Flickr; (5) microblogging such as Twitter; and (6) blogging, particularly comments and forums. Uploading/sending, downloading/reading, and basic administrative literacy are the mandatory basic requirements of social media users, without which social media is beyond reach for usage.

Many educators and scholars believe that social media is an effective teaching tool when implemented systemically. For instance, Ferdig (2007) in his study argued that correspondence is necessary and beneficial while someone is in the process of learning a language. Similarly, social media can bring favorable consequences as an efficient strategy for a good lesson (Liang, Akhter, & Kumar, 2022). There is strong evidence in the literature to validate that social media has a more positive effect on English language acquisition because it provides students an opportunity to practice their reading, writing, speaking, listening, and learning vocabulary.

### 2.3 Uploading Contents

Uploading content refers to transferring data or files from a computer or other digital device to the storage of another device, such as a larger system or remote server, typically through the internet (Zafar & Mobin, 2023). As Selwyn (2012) identifies, people are constantly uploading to the internet, making their personal information accessible to outsiders. According to Mahasne, Akhter, and Kumar (2024), uploading information to social media forums provides desirable outcomes for learners. The frequency of uploading enhances individuals' ability to circulate information and build up and strengthen bonds. When users constantly upload content, they can socialize on matters related to their lives and ideologies (Madoda, Chitondo & Chanda, 2024). The result is desirable, especially for those who feel intimidated and embarrassed to link with people face-to-face for many reasons. On the other hand, uploading content is done willingly by most social media users, making them more inclined to use social media (Grahl, 2013).

Uploading user-friendly content with enhanced visibility that everyone prefers to see on social media forums, can foster positive outcomes. According to the study by Liang, Akhter and Kumar (2022), uploading information on social media is a successful strategy for improving student engagement and learning outcomes. It mostly helps as a bridge for the passive students to interact with the others. The use of social media forums to upload any content can enhance the confidence of its second language users to a greater extent. As Mahasne et al. (2024) and Zhang et al. (2023) state, when studying the uploading contents of social media, three main elements—frequency and purpose, content type and language use, and impacts on acquisition—can be identified that must be paid specific attention to.

### 2.4 Sharing Contents

Sharing content is the process that involves distributing, posting, or reposting any content to one's own social media forum and other digital channels (Qayyum & Askary, 2014). Sharing content on social media platforms is an effective tool that helps improve social connectivity and brings positive change in society. As highlighted by Lytle and Kuhl (2017), people's ideas, ideologies, and suggestions are largely socialized through sharing content. Cohen et al. (2023) emphasize that sharing content on social media forums has a positive impact on mass connectivity, exchange of information, and social change for a connected society. They argue that the person who shares information is accountable for its content. It is important to note that the act of sharing content may encourage feelings such as anticipation, desire, or hopefulness and the utilization of sensory systems, such as pictures or videos can act as a force multiplier for passive users to engage with those around them (Urhan, et al., 2023).

Conversely, the open environment created by social media, combined with the attention of a large audience, has made it difficult to regulate the sharing of both truth and fiction (Lytle and Kuhl, 2017). The tendency to keep in touch with others is most likely to increase when the sharing content aligns with users of similar ideas. Age and sex differences, and even nationality do not make any difference as long as the users engage effectively in the process of communication. The more they engage in communication, the more positive outcomes in the lifestyle. As Cohen et al. (2023) and Urhan et al. (2023) remark, selection and motivation, engagement and feedback, and exposure and learning are noticeable areas that require more attention when discussing content sharing through social media.

## 2.5 Sending Messages

Sending messages on social media involves interacting with others in online communities by sharing information, ideas, and personal messages (Gaintman & Cortijo, 2015). Hidir et al. (2023) argue that people use their own language forms and styles when sending messages, but they generally adapt to an international medium of communication. Lew and Flanagan (2023) further unfold that sending messages is very popular in social media because it is a cost-effective method of communication that transcends borders. The social media platform provides a desirable and positive forum for language learners allowing them to improve their knowledge in a more stress-free environment. This happens when they avoid challenges or interruptions allowing them to use the language more confidently. Given that they tend to engage in the communication process actively, disregarding mistakes and freely obtaining feedback from those they interact. This helps them use the language comfortably to communicate with others with whom they once felt embarrassed.

In particular, sending messages on social media forums can significantly improve the language acquisition of those who receive them which at one point was difficult. Users, on the other hand, develop their grammar and other language skills by actively participating in written communication with others (Urhan et al., 2023). According to Zhang et al. (2023), the process spontaneously enhances one's critical thinking capacity, and the users can gain a considerable understanding of various cultures, practices, and diverse customs by communicating with people from different communities. Zhang et al. (2023) highlight that active engagement enhances their language skills, while interaction in communication by sending messages with native speakers facilitates the improvement of their language. Urhan et al. (2023) and Zhang et al. (2023), who researched this area, explore that frequency and purpose, communication style, and language use impact on acquisition. Hence, special attention should be given to these areas in studying the impacts of sending messages on social media.

## 2.6 Receiving Messages

Receiving messages is obtaining information, ideas, or personal messages distributed or shredded by another person or organization through social media to one's own social media account (Gaintman and Cortijo, 2015). As Mahasne et al. (2024) disclose, receiving messages is one of the main ways people receive information nowadays. The users mostly benefit by receiving messages on social media forums, and the act of interaction in communication either passively or actively exposes the language learners to an array of language patterns and grammatical constructions.

Regardless of the degree of language awareness, it seems that every user understands the main idea of these received messages (Lew and Flanagan, 2023). Most importantly, language learners and users of different backgrounds develop their comprehension during the process, and the messages received in different forms, such as videos and recordings in diverse disciplines, help them enhance not only their listening comprehension skills but also their awareness of understanding different accents and dialects. The act also support them to practice how to respond with confidence, as the process does not happen face-to-face. This is more favorable for those recognized as passive individuals in society. According to Cohen et al. (2023) and Mahasne et al. (2024) actively engaging in responding to receiving messages shared by others, develops responders' cultural awareness and specific language use for specific situations. Thus, they indicate that exposure, learning, and comprehension significantly enrich the effectiveness of learning and communication.

## 2.7 Downloading Materials

Downloading a document, image, or any other type of note that was uploaded by a person or organization and saved by another person on their phone, computer, or other device is defined as downloading (Zafar and Mobin, 2023). Zhang et al. (2023) reveal that downloading material is important when using social media to match content to an individual's interests, needs, and level of understanding. In particular, by downloading various materials that are freely available on social media, users can gain a unique experience that facilitates self-reliant learning. However, according to Urhan et al. (2023) and Zhang et al. (2023), frequency and purpose, sources and selection, and platform influence should be considered in downloading materials on social media. As researchers indicate, constant engagement in downloading materials, such as educational applications, helps build their word power and comprehension (Urhan et al., 2023), enhances their language competence (Smith & Lee, 2022), and improves their competency level while generating their interest in exposure to new knowledge (Ahmed, 2021). As discussed earlier, downloading materials on social media is a successful means to improve the language ability of its users as it exposes them to access a broad scope of texts, notices, and other resources.

## 2.8 Social Media and English Language Acquisition

Lytle and Kuhl (2017) defined language acquisition as the process through which individuals learn and develop proficiency in understanding, speaking, reading, and writing the English language. People in general learn their mother tongue from the environment and just from people around them, primarily from family members (Vygotsky, 1934). Later in life, with the experience gathered, mastering the individual capability to



differentiate and grasp the exact meaning is widely recognized as language acquisition. It also helps comprehend the language and be able to respond to them meaningfully and produce and use words and sentences in the process of communication.

As researchers underscore, social media forums have a desirable influence on English language learning as they provide a diverse scope of resources and possibilities for English language acquisition. For instance, social media provides its users with many opportunities for a range of language modes, pronunciations, and cultural diversities (Urhan et al., 2023). As such, learners, who engage in social media content, as Yadev (2020) argues, are self-motivated to use social media tools to learn English language skills. Social media can also offer its users possibilities for individualized language learning (Yang & Tsai, 2022). This personalized approach enhances the acquisition of English awareness and makes it more engaging. As indicated, social media platforms are not mere entertainment, especially for younger generations (Kaplan, 2015), thus it is important to investigate how social media impacts on English language acquisition of the soldiers in the Sri Lankan armed forces.

### 2.9 Theoretical Gap

There is strong evidence in the literature to validate that social media can assist its users to improve the English language to a greater extent. Today, social media plays a key role in shaping the language competency of ESL students irrespective of age and gender, and this trend has been reassured by many scholars in the world who have conducted similar research based on diverse theoretical perspectives. Blyth (2008) identifies four exclusive categories of language learning research: technological, psycho-linguistic, sociocultural, and ecological. The Cognitive Load Theory by Sweller (2010), on the other hand, proposes that learning resources cause cognitive load on working memory, directly influencing several factors that captivate attention. While exploring the impact of social media on English language acquisition across diverse learner populations, the study highlights the theoretical gap and its influence on soldiers' English language acquisition in the Sri Lankan armed forces. The study has also affirmed that this gap not only affects language learning but also provides practical insights for uplifting English proficiency among soldiers. The researcher has underscored the different theoretical frameworks developed to cater to the respective issues, such as Blyth's classifications and Sweller's Cognitive Load Theory, emphasizing the vital demand for specific investigation on Non-commissioned Officers (NCO) and how basic social media usage impacts on the four core language competencies—listening, speaking, reading, and writing.

## III. RESEARCH METHODOLOGY

The Defence Services Command and Staff College, the premier institution for military training of middle-grade officers across the tri-service, is the best location where all tri-servicemen serve together. Hence, the research sample was selected from those NCOs serving in the DSCSC. Out of the total 622 NCOs serving at the DSCSC, a sample of 234 NCOs was selected for the study according to the Krejcie and Morgan (1970) table representing each service. The largest number of NCOs serving at the DSCSC represents the Sri Lankan army, followed by the Sri Lankan Navy and Air Force. Accordingly, they were proportionately selected to the ratio 2:1:1, as mentioned in Table 1.

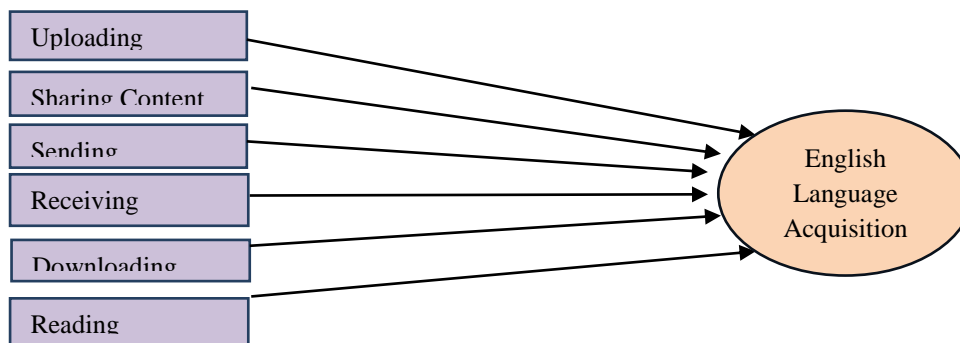
**Table 1 - Sample for Questionnaire**

No	Service/Force	Rank/Status	Respondents	Total
1	Sri Lanka Army	Privet	59	117
		Seargeant	29	
		Warrant Officers	29	
2	Sri Lanka Navy	Privet	29	59
		Seargeant	15	
		Warrant Officers	15	
3	Sri Lanka Air Force	Privet	29	58
		Seargeant	15	
		Warrant Officers	14	
Total Sample				234

As indicated in the literature, data collection through questionnaires is an effective method as it facilitates the collection of data required for a thorough analysis (Abeywickrama, 2019; Samarakoon & Abeywickrama, 2021; Abeywickrama & Dissanayake, 2022; Abeywickrama, 2023; Bracke, 2024). Commenting on explanatory

research in particular, Mbanaso et al. (2024) state that the questionnaire is the most appropriate method to obtain quantitative data for measuring the relationship between variables. As the current research also measures the relationship between two variables the use of questionnaire is appropriate for data gathering. Accordingly, data was collected from 234 NCOs through a questionnaire and served as the basis of the analysis.

As Clark (2005) mentions, the research design can explain the structure of research and the relationship between variables and dimensions. Similarly, a successful research model can govern the researcher to achieve the overarching aim of the study (Edith Cowan University, 2024). Figure 1 clearly demonstrates the relationship between the variables in this research.



**Figure 1- Research Model**

As indicated earlier, operationalization is an important aspect of research as it openly shows the variables, dimensions, and sources of them in the research (Edith Cowan University, n.d.) In addition, a well-designed operationalization can manage the research toward the achievement of the objectives (University of Southern California, 2024). In this study, the independent variable, the use of social media, is measured by six dimensions such as uploading content, sharing content, sending messages, receiving messages, downloading materials, and reading materials, with at least 2 items for each dimension, and for the dependent variable, four dimensions are used as listening, speaking, reading, and writing.

The data analysis of this study was carried out in two ways, descriptive and inferential. In the descriptive analysis, the mean and standard deviation of each indicator are studied using SPSS. Partial Least Square Structural Equation Modeling (PLS-SEM) was used to evaluate the variable measurements and conduct hypothesis testing. To evaluate PLS-SEM, the primary software Smart PLS version 4 was used. The first- and second-order analyses were assessed independently, and the variables were measured. First-order analysis was used to evaluate the validity and reliability of the current study, utilizing the variables and questions in the questionnaire. Internal consistency reliability and convergent and discriminant validity indicator reliability were employed to assess the notions' validity. Fitting the second-order analysis, or final model, is considered appropriate if there is satisfactory validity and reliability. Additionally, the multicollinearity, significance of path coefficients, coefficients of determination, R square, effect size, and predictive relevance were assessed by the hypothesis testing, or the inner model.

## IV. RESULTS AND DISCUSSION

### 4.1 Respondents Demography

A group of 234 soldiers was used as the sample for this study. The sample consists of five age groups of which 48% were between 25 and 34 years of age, 21% were between 18 and 24 years of age, 18% were between 35 and 44 years of age, and 10% were between 44 and 54 years of age. About 74% of the sample were male, and the rest were female. Among them, 31% had studied advanced level, and 62% had studied general level as the highest level of education. Most participants' in the sample spoke Sinhala as their mother tongue, which was 93%, and the rest were Tamil. The sample comprises 55% Facebook users, 33% WhatsApp users, and 6% YouTube users. Other apps like Twitter and LinkedIn were considerably less used within the sample. More than half of the sample, 57%, have between 6 and 10 years of experience using social media, and 33% have more than 10 years of experience, and the sample shows that the rest have less than 5 years of experience. The above numerical values confirm that the population of the study is well-defined by the obtained sample.

### 4.2 Structural Equation Model Analysis

Structural Equation Modeling (SEM) is a statistical method used to test hypotheses about relations between observed and latent variables. Smart PLS software was employed to prepare the data collected through questionnaires. The data from the measurement model and the structural model directly contributed to the

quantitative analysis. The study examined ten latent variable constructs. The indicator reliability of all indicators was determined by using their loading and T-statistics. According to Table 2, all Cronbach’s alpha and composite reliability are above 0.7. Also, t-statistics are greater than 1.96, which proves that all the constructs have internal consistency reliability. The Average Variance Extracted (AVE) was used to test the Convergent Validity. The AVE of all constructs was higher than 0.5, confirming the convergent validity of all constructs.

**Table 2- Reliability and Validity of First Order Model**

		Indicator Reliability		Internal Consistency Reliability		Convergent validity
		Loading	t-statistics	Composite Reliability	Cronbach's $\alpha$	AVE
1.1	Frequency and Purpose			0.945	0.913	0.852
	1.1.1	0.913	72.850			
	1.1.2	0.939	135.314			
	1.1.3	0.917	99.431			
1.2	Content Type and Language Use			0.966	0.953	0.878
	1.2.1	0.916	89.395			
	1.2.2	0.949	122.347			
	1.2.3	0.941	133.097			
1.3	Impacts on Acquisition			0.964	0.944	0.899
	1.3.1	0.943	112.237			
	1.3.2	0.961	182.748			
	1.3.3	0.941	133.800			
2.1	Selection and Motivation			0.963	0.943	0.898
	2.1.1	0.928	111.019			
	2.1.2	0.964	200.755			
	2.1.3	0.950	146.315			
2.2	Engagement and Feedback			0.964	0.944	0.900
	2.2.1	0.945	126.702			
	2.2.2	0.950	152.230			
	2.2.3	0.950	171.530			
2.3	Exposure and Learning			0.968	0.955	0.882
	2.3.1	0.941	122.652			
	2.3.2	0.929	106.896			
	2.3.3	0.949	138.828			
3.1	Frequency and Purpose			0.959	0.935	0.885
	3.1.1	0.925	110.169			
	3.1.2	0.968	231.168			
	3.1.3	0.930	118.197			
3.2	Communication Style and Language Use			0.950	0.920	0.863
	3.2.1	0.927	94.876			
	3.2.2	0.933	93.300			
	3.2.3	0.926	97.378			
3.3	Impacts on Acquisition			0.959	0.937	0.888
	3.3.1	0.925	73.112			
	3.3.2	0.952	151.923			
	3.3.3	0.949	110.464			
		Indicator Reliability		Internal Consistency Reliability		Convergent validity
		Loading	t-statistics	Composite Reliability	Cronbach's $\alpha$	AVE
4.1	Exposure and Learning			0.957	0.931	0.881
	4.1.1	0.927	96.271			
	4.1.2	0.952	132.608			
	4.1.3	0.936	135.310			
4.2	Comprehension and Response			0.957	0.933	0.882
	4.2.1	0.932	107.747			
	4.2.2	0.951	166.309			
	4.2.3	0.934	128.035			
5.1	Frequency and Purpose			0.959	0.936	0.887
	5.1.1	0.939	79.794			
	5.1.2	0.951	156.166			
	5.1.3	0.935	112.528			
5.2	Sources and Selection			0.972	0.957	0.920
	5.2.1	0.950	149.785			
	5.2.2	0.962	194.488			
	5.2.3	0.965	216.586			
5.3	Platform Influence			0.963	0.942	0.896

	5.3.1	0.945	108.494			
	5.3.2	0.958	150.922			
	5.3.3	0.937	118.464			
6.1	Frequency and Engagement			0.969	0.952	0.912
	6.1.1	0.949	114.154			
	6.1.2	0.973	208.223			
	6.1.3	0.942	80.482			
6.2	Comprehension and Learning			0.966	0.947	0.904
	6.2.1	0.946	76.764			
	6.2.2	0.969	199.327			
	6.2.3	0.936	70.670			
6.3	Motivation and Impact			0.969	0.952	0.913
	6.3.1	0.945	115.662			
	6.3.2	0.970	267.441			
	6.3.3	0.951	170.976			
7.1	Listening Comprehension Proficiency			0.971	0.956	0.919
	7.1.1	0.942	112.385			
	7.1.2	0.974	296.028			
	7.1.3	0.959	153.282			
7.2	Understanding Different Accents			0.960	0.938	0.889
	7.2.1	0.940	100.258			
	7.2.2	0.962	155.078			
	7.2.3	0.926	67.203			
7.3	Following Oral Instructions			0.968	0.950	0.909
	7.3.1	0.948	114.198			
	7.3.2	0.969	178.584			
	7.3.3	0.944	94.521			
8.1	Expressing Opinions and Ideas			0.933	0.969	0.942
	8.1.1	0.967	182.652			
	8.1.2	0.974	223.084			
	8.1.3	0.970	227.782			
				<b>Indicator Reliability</b>	<b>Internal Consistency Reliability</b>	<b>Convergent validity</b>
				<i>Loading</i>	<i>t-statistics</i>	
				<b>Composite Reliability</b>	<b>Cronbach's <math>\alpha</math></b>	<b>AVE</b>
8.2	Participating in Group Discussions			0.987	0.980	0.962
	8.2.1	0.982	275.019			
	8.2.2	0.984	383.325			
	8.2.3	0.977	292.685			
8.3	Vocabulary Use in Speech			0.965	0.927	0.932
	8.3.1	0.966	133.722			
	8.3.2	0.965	115.113			
9.1	Understanding Context in Reading			0.964	0.944	0.899
	9.1.1	0.951	118.791			
	9.1.2	0.948	106.840			
	9.1.3	0.945	63.675			
9.2	Reading Comprehension Proficiency			0.967	0.949	0.908
	9.2.1	0.948	94.600			
	9.2.2	0.967	137.445			
	9.2.3	0.943	78.476			
9.3	Identifying Main Ideas and Details			0.977	0.965	0.934
	9.3.1	0.969	106.881			
	9.3.2	0.971	194.067			
	9.3.3	0.959	147.496			
10.1	Pre-Writing Strategies			0.972	0.957	0.921
	10.1.1	0.955	187.944			
	10.1.2	0.963	230.409			
	10.1.3	0.962	222.145			
10.2	Drafting Process			0.987	0.981	0.963
	10.2.1	0.982	287.985			
	10.2.2	0.985	354.825			
	10.2.3	0.977	293.515			
10.3	Attention to Audience and Purpose			0.976	0.963	0.931
	10.3.1	0.963	218.315			
	10.3.2	0.979	307.890			
	10.3.3	0.952	92.721			





	1.	0.958	219.484			
	2.	0.944	122.405			
	3.	0.951	89.946			
	4.	0.963	267.704			
	5.	0.962	232.002			
	6.	0.949	153.407			
7	Listening			0.968	0.950	0.909
	7.1	0.962	104.502			
	7.2	0.948	67.560			
	7.3	0.950	96.861			
8	Speaking			0.981	0.970	0.944
	8.1	0.962	163.058			
	8.2	0.977	196.801			
	8.3	0.975	269.989			
9	Reading			0.977	0.964	0.933
	9.1	0.957	109.695			
	9.2	0.976	265.805			
	9.3	0.964	142.711			
10	Writing			0.982	0.972	0.947
	10.1	0.981	381.764			
	10.2	0.974	200.502			
	10.3	0.964	168.805			

**Table 5- Discriminant Validity**

	Listening	Reading	Social Media Use	Speaking	Writing
Listening	0.953				
Reading	0.909	0.966			
Social Media Use	0.88	0.885	0.954		
Speaking	0.934	0.867	0.828	0.971	
Writing	0.819	0.898	0.92	0.764	0.973

The structural model analysis estimated the hypothesized causal relationship among the exogenous (independent) and endogenous (dependent) latent variables. Collinearity indicates that two constructs are measuring the same variable, and occurs when correlations among constructs are high (Hair et al., 2012). Since multicollinearity misrepresents the indicator weights, it becomes a problem for formative measures. The VIF value was used to examine the multi-collinearity issues. All VIF values are less than 5 confirming that no multi-collinearity problem exists in the inner model.

The significance of the hypothesized relationships was examined using the path coefficients of each relation which were confirmed by the corresponding t-statistics. For a two-tailed test, the critical t-value was identified as 1.96 at a significance level of 0.05 (Hair et al., 2012). Table 6 presents the path coefficient values along with their t-statistics. Based on the values in the table, all relationships were verified as statistically significant.

**Table 6- Path Coefficients and t- Statistics of the Structural Model**

Hypothesis and Relation	$\beta$	T statistics	P value	Decision
H1: Social Media Use -> Listening	0.88	46.926	0.000	Accepted
H2: Social Media Use -> Reading	0.885	58.859	0.000	Accepted
H3: Social Media Use -> Speaking	0.828	32.716	0.000	Accepted
H4: Social Media Use -> Writing	0.92	102.681	0.000	Accepted

R-Square = 0.74

#### 4.3 DISCUSSION

A descriptive analysis of the data from the present study demonstrates that social media can be utilized effectively for the development of the English language among soldiers across various domains. Social media use was measured by six dimensions such as uploading content, content sharing, sending messages, receiving messages, downloading materials, and reading materials and all six dimensions clearly showed that the use of social media brings about positive outcomes. Furthermore, opinions on integrating media into language learning indicate positive implications for writing, reading, speaking, and listening skills. The research revealed that social media platforms, especially Facebook, WhatsApp, and YouTube, have played an important role in uplifting the English language competency of the non-commissioned officers in the Sri Lankan Armed Forces. The opportunities that these social media platforms offer for language learning are immense.

The outcomes of smart PLS, hypothesize a positive and significant  $\beta$  value of 0.88, suggesting that there is a strong positive relationship between social media use and listening skills. The T statistic (46.926) provides additional support in terms of the strength of this relationship. Moreover, the model accounts for 77.4% (R-square) of the variation in listening scores. This is a strong relation, but the unexplained variance of 22.6% indicates that some other factors are not explained by the model that account for the listening skill. As such, it is evident that social media has a positive impact on the English listening skills of Sri Lankan armed forces carders. This outcome strongly aligns with the findings of Crawford's (2009) study. The study also confirms that social media has a positive impact on the speaking skills of the Sri Lankan Army soldiers. The results indicate a  $\beta$  coefficient of 0.828, reflecting a positive but slightly weaker correlation compared to listening, reading, and writing. The model reports 68.6% of the variance in speaking scores ( $R^2 = 0.686$ ), with 31.4% of the variation remaining unexplained. The t-statistic of 32.716 confirms that the relationship is statistically significant. As indicated by previous studies, social media applications and tools such as videos, video calls, chat boxes, voice messages, and voicemails help increase users' discourse competence (Hamdi, 2023; Kuning, 2020; Poramathikul et al., 2020).

According to the results of the study, the  $\beta$  coefficient of 0.885 indicates a strong positive effect of social media on reading ability. The t-statistic of 58.859 supports this, indicating that the relationship is highly significant. Furthermore, with an R-squared value of 0.783, approximately 78.3% of the variance in reading supports this finding. Like listening, this shows that the model performs well but leaves about 21.7% of the variance remains unexplained. Through social media, soldiers have access to a variety of written information, such as announcements, stories, and comments that can improve their reading comprehension and fluency. As Moyo (2013) states, social media creates a positive environment for users to select and interact with reading materials, providing opportunities for growth and development through the use of their reading activities. The strongest relationship was found between social media use and writing ability, with a  $\beta$  coefficient of 0.92 and an exceptionally high t-statistic of 102.681. The highest R-square value of 0.846 demonstrates that 84.6% of the variance in writing scores can be explained by this relationship. This phenomenon shows that the model is very effective in predicting writing outcomes, leaving only 15.4% unexplained. These findings suggest that social media has a significant positive effect on the writing skills of the Sri Lankan Army soldiers. Platforms such as Facebook, Twitter, and Instagram, where users frequently compose posts, comments, and messages, can be regarded as informal ways to enhance written English. In addition, all R-squared values except for speaking are slightly higher, indicating that the model is more effective in explaining the variations in these areas.

The analysis supports the acceptance of all hypotheses, indicating a positive impact of social media on English language acquisition. The R-square values for listening, reading, and writing are relatively high, suggesting a strong model fit, whereas the R-square value for speaking is slightly lower. This indicates that while social media can contribute to improvements in speaking skills, other factors may also play a significant role.

#### V. CONCLUSION

The current study was conducted to investigate the impact of social media on the English language acquisition of soldiers in the Sri Lankan armed forces. Structural equation modeling (SEM) was used to test hypotheses regarding the relationship between observed and latent variables. The analysis was conducted using Smart PLS4 software, which tested the reliability and validity of the indicators, followed by an evaluation of the structural model. The consistent significance of the path coefficients and the t-statistics show not only a favorable impact of social media on language skills but also its effectiveness across all areas. Most importantly, writing was reported as the most appealing skill out of the four skills that benefited the soldiers most. In addition, listening and reading skills have notably enhanced. While speaking skills demonstrated only moderate improvement, it suggests that further development in this area may require more face-to-face interaction to reinforce oral proficiency. All the hypotheses of the study explained statistically significant positive effects of

social media use on English language acquisition, especially in listening, reading, and writing, except for speaking skills.

The relationship between social media use and listening has shown a positive impact and is statistically significant ( $\beta = 0.88$ ,  $T = 46.926$ ,  $P = 0.000$ ). A higher beta value reflects a stronger association, indicating that individuals who engage more in social media are more likely to improve their listening abilities. The effect of social media use on reading has reported a significantly positive influence ( $\beta = 0.885$ ,  $T = 58.859$ ,  $P = 0.000$ ). Strong beta coefficients suggest that social media use significantly improves reading skills. The t-statistic and p-value confirm the reliability of this finding, making it clear that social media contributes positively to reading. Social media also has a positive effect on speaking skills as well ( $\beta = 0.828$ ,  $T = 32.716$ ,  $P = 0.000$ ). Although slightly lower than other language skills, the beta value is still high, indicating that increased interaction on social media may contribute to speaking ability, and the importance of the results confirms the complexity of the relationship. The strongest relationship is found between social media use and writing skills ( $\beta = 0.92$ ,  $T = 102.681$ ,  $P = 0.000$ ). A high beta coefficient indicates that the use of social media significantly improves writing skills, and a very high t-statistic indicates a highly significant relationship. This illustrates that individuals who use social media significantly improve their writing competence. In addition, the R-squared values in the model were distributed for listening (0.774), reading (0.783), speaking (0.686), and writing (0.846). Accordingly, the study found how well the regression model explains variation in each of these skills. In addition, all R-square values except speaking are slightly higher, indicating that the model is very effective at explaining differences in listening, reading, and writing. It was also found that the independent variables used in these skills are positive indicators of performance.

The study contributes to the growing body of literature on the role of digital channels in education, showing that social media is an effective strategy for English language acquisition. It highlights that social media platforms, often used for passive communication, are also important learning spaces, especially for the Sri Lankan Armed Forces. This knowledge contributes to understanding how digital activities specifically support language skills. The study provides practical implications for language acquisition in military contexts, particularly among soldiers of the Sri Lankan Army. It shows that social media can be an important addition to traditional language courses, providing flexible, portable language courses that can match the demands of military operations. Research shows that language teachers and policymakers incorporate social media into formal language learning strategies, especially in contexts such as military training, where informal and convenient learning is essential. It emphasizes the power of purposeful use of social media as part of a language curriculum, with a focus on its widespread impact on language skills.

It is essential to explain the limitations of the study which may limit the generalizability of the findings to other populations or contexts. This study focused only on tri-service noncommissioned officers serving at the DSCSC in the Sri Lankan Armed Forces, The unique characteristics of this group, such as discipline, training environment, and certain exposures, may not apply to the public or other occupational groups. This study has specific implications for military policymakers, encouraging them to integrate the suggested recommendations in the respective basic language improvement courses that would bring about desirable changes in the military personnel. The current research has great value for soldiers who are aspiring to enhance their language proficiency which would contribute to their professional and personal development. The findings of study are also beneficial for public and private establishments to achieve institutional goals by enhancing the communication skills of their employees. Furthermore, it appears that other government agencies, such as tourism, and police departments can gain many useful information from this study. Finally, the role of these emerging tools can be insightful in how digital environments develop as a language learning process.

Future research could examine how language learning is affected by the increasing integration of AI and machine learning tools with social media. Conducting similar studies for officers, including soldiers can be identified as future research.

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