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Applying task supported language learning via instagram: the effects on EFL learners' self-esteem, academic buoyancy, academic engagement, and language achievement

Khaled Ahmed Abdel-Al Ibrahim^{1,2*} and Nirvana Basim³

*Correspondence:
kibrahim1985@gmail.com

¹ Educational Psychology,
College of Education, Prince
Sattam Bin Abdulaziz University,
Al-Kharj, Saudi Arabia

² Sohag University, Sohag, Egypt

³ Department of Literature
and Linguistics, Kandahar
University, Kandahar, Afghanistan

Abstract

Researchers have firm reason to unlock the potential of social networking technologies today because of the rapid development of these platforms, which may be used to enhance educational outcomes. Despite the widespread recognition of social media's influence on the second/foreign language learning process, few empirical research has attempted to find out how Instagram feed-based tasks impact learning and supported self-esteem, academic buoyancy (AB), academic engagement (AE), and language achievement (LA). In order to address this knowledge gap, the present study investigated how Instagram feed-based assignments may be used to improve self-esteem, AB, AE, and LA for EFL students. This was accomplished by randomly assigning participants into two groups (experimental and control) from a pool of 93 intermediate EFL students. Students in the control group (CG) participated in online webinars on a consistent basis. Students in the experimental group (EG) took part online webinars. Moreover, they were given assignments based on Instagram feeds. The Multivariate Analysis of Variance (MANOVA) of the data showed that the EG fared better than the CG. The findings underlined the substantial benefits of Instagram feed-based activities in promoting self-esteem, AB, AE, and LA. Possibilities for future use of Instagram task supported language learning and teaching may arise as a result of this study's implications for students, educators, and policymakers.

Keywords: Task supported language learning, Instagram, Self-esteem, Academic buoyancy, Academic engagement, Language achievement, EFL learners

Introduction

By immersing students in interesting content, social networking (SN) may help language teachers cater to their students' varied interests and learning styles. Facebook, Telegram, WhatsApp, Instagram, Twitter, Skype, Viber, YouTube, and Wikis are just a few examples of the SN platforms that are being used in second language classes, and they have already been shown to have a number of beneficial effects on students and teachers alike (Li & Hafner, 2022). Students' academic participation in L2 situations and their command of the English language are two additional areas that may benefit from the use of

SN. Some research has been done on the effects of SN like Facebook on students' linguistic abilities, specifically their writing, pronunciation, socio-pragmatic competence, and speaking skills (Erarslan, 2019; Poramathikul et al., 2020). In the words of Ritonga et al. (2023), the use of technology in the classroom led to a shift away from teacher-centered methods toward student-centered approaches when it came to the development of language skills. According to Riasati et al. (2012), instructors have the ability to act as facilitators of their students' language learning abilities when the classroom is conducted online. It has been shown via empirical research that the use of technology and SN may enhance a variety of abilities and sub-skills related to the English language.

According to Skinner and Pitzer (2012), the concept of academic engagement is a dynamic variable in language instruction that applies to the extent to which students participate in activities taking place in the classroom. It has been considered a sign of motivation which is highly correlated to a variety of personal and emotional factors, such as buoyancy, interpersonal communication skills, well-being, love, resilience, care, hope, and many others (Zhang, 2021). The identification of this construct's determinants and correlates has been the primary focus of research on language education; nevertheless, to this day, the facilitative role that technology and SM play in creating and sustaining EFL students' academic engagement has been largely disregarded. In the context of SN, academic engagement has also been investigated as a key psych emotional phenomenon (Jamali Kivi et al., 2021; Shakki, 2022).

SE is the positive or negative evaluations of the self, as in how individuals feel about it. Confidence in one's own worth or talents is what SE alludes to in the classroom. In other words, SE is a psychological concept that consists of people's assumptions about their own mental and emotional states (Al-Obaydi et al., 2023; Smith & Mackie, 2007). When students are encouraged to evaluate their own progress in class, they are more likely to engage in SE (Riswanto et al., 2022). Students who have a good sense of self-worth make an effort to find answers when problems emerge and adhere to commonly held norms of behavior. It's important to note that SE helps students become ready for real-world challenges (Namaziandost et al., 2023).

AB is the other student-related component that is taken into consideration in the present investigation. AB is analogous to a shield in that it deflects the worry and tension that learners experience on a day-to-day basis (Martin, 2014). Based on Alazemi et al. (2023), the AB paradigm alludes to the traits of learners that enable them to successfully deal with academic challenges and everyday problems. That is, sustainability, regularity adaptation, positive personal eligibility, and positive acceptance of academic life were shown to be beneficial variables that allow students to effectively deal with academic difficulty and setbacks in on-line teaching and evaluation (Nurjain et al., 2023; Rezaei & Namaziandost, 2022). In the same line of inquiry, Fu (2023) discovered that the influence of AB on learning burnout was contingent upon the class level of English proficiency. Specifically, it was observed that the detrimental effect of academic buoyancy on burnout was more pronounced in classes characterized by lower levels of English proficiency among students.

Learners in today's world, with all of its continual demands, need to be self-motivated and self-reliant in order to be successful. People's motivation may be boosted and they can go farther in their education if they participate in the program, which

can be considered as an incentive. To put it another way, academic engagement (AE) may be seen as a measure that indicates the breadth and depth of students' participation in all aspects of their educational experience. AE is a kind of afferent-motivational credit that places an emphasis on students' willingness to learn new things and their excitement about doing so (Shu, 2022). As stated by Shu (2022), students who are totally involved in their studies have a high level of devotion and excitement for their education. Moreover, Li (2023) discovered that cultivating favorable teacher-student connections and encouraging a development attitude may augment language learning, resulting in heightened levels of student engagement. The findings underscore the significance of taking into account the interpersonal dynamics existing between educators and learners, as well as the influence of mentality on the process of acquiring a foreign language.

Despite the significant contributions of self-esteem, AB, AE, and LA in task supported instruction through online platforms has not received substantial attention from researchers. Moreover, it is important to note that, based on our current knowledge, there has been no research conducted to investigate the impact of Task Supported Language Learning via Instagram on the development of self-esteem, AB, AE, and LA in task supported instruction in the EFL context. Additional research is required to demonstrate a strong correlation between the two variables, since the current data is limited. The results of this investigation possess the capacity to augment both the theoretical framework and practical application of interconnected disciplines. The findings of this study have the potential to enhance both the theory and practice of linked fields. This study aims to address a knowledge gap by investigating the following questions:

RQ1 Does task supported language learning influence the state of EFL students' self-esteem?

RQ2 Does task supported language learning influence the state of EFL students' AB?

RQ3 Does task supported language learning influence the state of EFL students' AE?

RQ4 Does task supported language learning influence the state of EFL students' LA?

In this regard, the following null hypotheses could be formulated:

H01 Task supported language learning does not influence the state of EFL students' self-esteem.

H02 Task supported language learning does not influence the state of EFL students' AB.

H03 Task supported language learning does not influence the state of EFL students' AE.

H04 Task supported language learning does not influence the state of EFL students' LA.

Literature review

Self-esteem

Self-esteem is a belief in individuals' worth and competence (Mackinnon, 2015). It stems from an individual's perception of their own competence, aptitude, and social connections (Wang & Ollendick, 2001). Self-esteem is a cognitive process that includes making judgments about one's own value and emotional experiences, as stated by Dörnyei and Ryan (2015). Individuals' SE and the processes by which they were formed are referred to as "self-concept" and "self-evaluation," respectively. Self-esteem, self-image, and the ideal self are all subsets of the broader notion of "self" that Lawrence (2006) defined. The development of one's sense of self and conscience has been linked to self-esteem.

Students' ability to study and perform well in school is impacted by self-esteem. This indicates that students with more self-esteem are better able to persevere in the face of adversity and set loftier personal objectives (Zhang, 2022). They improve their chances of success by being involved in their efforts. Individuals' emotional well-being and their ability to exercise self-control may both benefit with self-esteem (Azizi et al., 2022; Hosseinmardi et al., 2021). Reading comprehension may be improved with the use of SE because of its connection to student agency (Zhang et al., 2020). Researchers Faramarzadeh and Amini (2017) found that self-esteem influence the progress of learners' oral proficiency, particularly at the advanced and intermediate levels. Results showed that students with higher levels of self-esteem in both languages performed better in terms of total spoken words, total spoken turns, and interruptions in groups containing both languages.

Academic buoyancy (AB)

The term AB is used to describe a student's mental preparedness to deal with the typical obstacles they would face while they pursue their education (Yun et al., 2018). Xu and Wang (2022) trace the origins of AB to the field of positive psychology. According to the principles of positive psychology, the teaching and learning of languages might benefit from a greater emphasis on positive and self-helping characteristics (Burić et al., 2016). In this regard, Kim and Kim (2016) argues that the field of positive psychology provides context for and reinforcement of linguistics-related endeavors. New methods of testing students' AB proficiency were established. Jahedizadeh et al. (2019) recently made an effort to more thoroughly evaluate AB by designing and validating a context-specific instrument (i.e., EFL/ESL context). Sustainable language learning focuses on students' strengths and their capacity to overcome challenges. The ability of language students to establish priorities and modify those priorities in light of their own values is what is meant by "regularity adaptation." The second metric of this tool, "positive personal eligibility," takes into account students' optimistic outlooks. The last factor, optimistic acceptance of school, pertains to children' attitudes about school and how it influences their language-learning strategies.

Academic buoyancy is yet undiscovered and requires more study. Recent studies conducted concluded that AB had a considerable effect on students' ability to learn English and mathematics (e.g., Jahedizadeh et al., 2019; Ubaidillah et al., 2023; Yun et al., 2018). Malmberg found that AB is linked to problems with learning new material and

making assessments of one's own ability. Another study looked at how antecedents of AB affect an individuals' cognitive and emotional states (Phan & Ngu, 2014). Learning was sparked, as shown by their results, by the cognitive processes of routine activity and critical reflection. In a similar vein, Zhang (2021) discovered that students are more invested in their language classes when their lecturers exude enthusiasm. Therefore, it follows that buoyancy is beneficial for both educators and students, and that it is crucial to engage in effective techniques to boost AB in all classroom settings. Additionally, Yang et al. investigated the connection between AB and self-efficacy in Iranian and Chinese EFL students' tenacity in learning the target language. This research confirmed that students with high AB and self-efficacy are more likely to exhibit fruitful behaviors. Furthermore, Xu and Wang (2022) argue that buoyant learners might approach a four when they are enthusiastic and engaged in their studies. They also believe that instructors have a significant impact on their students' academic achievement. Moreover, Alazemi et al (2023) confirmed that future perspectives of learners were affected by the state of their AE, L2 grit, and emotional experiences.

Academic engagement (AE)

According to Fan and Wang (2022), engagement is best understood as an expression of students' motivation, which provides students with the energy and motivation necessary for academic pursuit and accomplishment. As Guilloteaux (2016) voiced, the notion of AE is believed to be fluid and ever-changing, and it is influenced by a number of elements that are either internal or external to the person. To be more specific, a wide variety of phenomenological, individual, and instructional aspects have been validated as crucial in influencing the degree to which EFL students are engaged in their academic work (Guilloteaux, 2016). According to this research, the introduction of new modes of delivery, such as technology and SM, may have an effect on the level of engagement that students have in L2 courses. Phenomenological and instructional aspects that impact academic engagement, but which have been mostly undiscovered to this point in EFL/ESL scholarly settings, might be included within their purview.

The idea of AE is a multidimensional construct that incorporates a wide range of distinct aspects and components. In an effort to provide a definition for "engagement," quite a few distinct models and hypotheses have been proposed throughout the years. The Fredricks et al. (2004) Model of Engagement and the Schaufeli et al. (2002) Model of Engagement are the two primary models of engagement that are now in use. Each of these models has shown to be reliable and has been used to a wide range of empirical studies. According to the Model of Engagement that was produced by Fredricks et al. (2004), engagement is a construct that is both fluid and flexible, and it contains psychological, intellectual, and emotional qualities. Furthermore, according to this Model of Engagement, engagement is a construct that includes psychological, intellectual, and emotional characteristics.

Throughout the years, AE and its connection to education have frequently been the focus of study, and a number of empirical studies have shown the benefits that AE has made to the overall wellbeing of students. For instance, Amerstorfer and Freiin von Munster-Kistner (2021) conducted study that was quite similar to this one on the factors that induce AE. They came to the conclusion that AE is impacted by a number of

different things, including the person, the classroom, the teacher, the curriculum, the students, and the environment as a whole. Moreover, Riswanto et al. (2022) concluded that learning-oriented assessment foster EFL students' AE, self-esteem, and thinking skills. Moreover, Aldosari et al. (2023) recently conducted an experiment and came to the conclusion that EFL learners who had higher levels of self-assessment and reflective abilities had an overall more pleasant experience and were able to immunize themselves more successfully.

Applying instagram in education

Instagram was first introduced in 2010 as a rudimentary application for sharing photographs, but it has since undergone significant expansion to include other features like as chat, video sharing, and the incorporation of stories (Chen, 2021). Instagram is a mobile application that enables individuals to communicate expedient visual content, such as photographs and videos, depicting their immediate environment and engagements, with their acquaintances and adherents. According to the study conducted by Min and Hashim (2022), Instagram may be seen as a kind of technological competence that has the potential to enhance classroom education. The potential of Instagram in language education and learning arises from its diverse range of visually contextualized material, interconnected network of learners, and interactive features such as commenting and tagging (Greenhow & Lewin, 2016; Soviyah & Etikaningsih, 2018).

The emerging learning theory known as connectivism posits that students need to effectively integrate concepts, theories, and general knowledge for practical purposes. The acknowledgement is made that technology plays a significant role in the process of learning and that learners' continuous connectivity offers them the ability to exercise agency in their learning endeavors. The concept of connectivism was first introduced by Siemens (2004), and it primarily focuses on the dispersed nature of learning. Siemens also emphasized the significance of digital communication in the context of educational courses. The notion of connectivism has significance in the context of self-organization, as it underscores the importance of learners' self-organizational abilities in the creation of expansive knowledge systems (Greenhow & Lewin, 2016).

According to Shazali et al. (2019), the use of suggested activities on Instagram has the potential to effectively prolong the duration of learning. The mobility and ease of Instagram contribute to the diverse language exposure necessary for successful language learning, as shown by studies conducted by Chen and Jia (2020), Rasyiid et al. (2021), as well as Zheng et al. Furthermore, the study conducted by Alfadda et al. (2022) provided evidence supporting the notion that engaging in Instagram feed-based activities might enhance grammar learning and elicit a favorable attitude towards language acquisition. Lee' findings (2023) enhance the comprehension of how online informal language acquisition is adjusting to technical advancements inside emerging image-based social media platforms. According to recent research (Manullang & Katemba, 2023), students might use Instagram as an alternative platform to practice their writing. Their findings show that being on Instagram encourages learners to write more effectively and productively. Students are in agreement that Instagram may assist them in expanding their vocabulary and provide them with great reasons to utilize the appropriate terminology.

Task supported language teaching

Researchers have come up with a variety of definitions for the term task. A task is an activity which is designed to help achieve a particular learning goal, as stated by Long (2015). According to Ellis (2009), a task is a piece of work undertaken for oneself or for others, freely or for some reward. That is to say, a task may be any number of things that individuals perform on a regular basis, and it is important that these 'real-world' activities seem to matter. Moreover, González-Lloret (2007) described a task as an activity which required learners to come up with an outcome from given information and uses the term to encompass a wide range of activities from straightforward drills to more involved, time-consuming endeavors like problem-solving.

Task-supported language teaching (TSLT) is an instructional approach that places tasks at the core of the session. TSLT is a prominent manifestation of the robust iteration of the communicative method, whereby language acquisition is facilitated via active use. In essence, students get the necessary language skills at the precise moment they need them in order to successfully complete the assigned activity. Upon completion of the work, the instructor directs the student's attention towards the application of language, therefore addressing any necessary modifications and corrections to enhance the learner's performance. According to Ellis (2003), TSLT confers a number of advantages onto learners, one of the most significant of which is an increase in motivation. After students have been inspired, they will be able to accomplish the intended objectives and the duties that have been assigned to them (Khezrlou, 2023).

To gauge the efficacy of TSLT with technology, Gasparini (2018) conducted a case study in which WhatsApp was used for technology-mediated activities. The findings of this research indicated that TSLT via WhatsApp boosted student enthusiasm and interest in learning Italian. Similarly, Reinhardt (2020) presented a series of new metaphors (such as Windows, Mirrors, Doorways, and Playgrounds) to define the potential of each to give a unique genuine learning opportunity. These metaphors were used to characterize the capacity of each to provide authentic learning chances. This is because the collaborative and participatory character of the majority of web2.0 technologies provide educators and students with many situations in which to communicate with one another.

Methodology

This research is quasi-experimental, consisting of a set of before and after tests. The following is a description of the procedures followed:

Participants

Participants in this research were 93 individuals who were attending the General English course at Kandahar University. The outcomes of the Oxford Quick Placement Test were used to select the students for this language learning program. The participation requirements for this study were set such that students who had reached an intermediate level of English proficiency may take part in the research. Therefore, at the start of this study, the English proficiency level of the learners was comparable (it was intermediate). During this time period, participants were not permitted to take any more English lessons. The learners ranged in age from 14 to 18 and were made up of 43 girls and

50 boys. In the EG, there were 47 students, 23 of whom were female and 24 of whom were male. In the control group, there were 46 participants, 20 of whom were female and 26 of whom were male. According to their plan, they were scheduled to complete and pass Top Notch 3 in a total of sixteen sessions. The involvement of these students in this research was entirely voluntary, and prior to their participation, they provided their informed permission to take part in this investigation.

Materials

The oxford quick placement test (OQPT)

It was determined by administering the OQPT to the students what their current level of English language competence was. Students are regarded to have an intermediate level of English language competence if their results on the OQPT fall between 0.4 and 0.6. The range of possible scores on this test is 0.1–0.9, with 0.1 being the lowest and 0.9 being the highest. In order to determine reliability of this test, the Cronbach's alpha test was carried out, and the findings showed that the reliability was satisfactory ($\alpha = 0.91$).

english pre-test and post-test

A researcher-made test was designed according to the subjects of Top Notch 2 and was given to the participants as a before and post-test in order to investigate the LA of the participants. This examination consisted of a total of 50 questions, each of which was designed to evaluate the following skills: speaking (10 questions), English grammar (10 questions), vocabulary Knowledge (10 questions), reading (10 questions), and writing (10 questions). Two psychometricians and four EFL teachers were asked to assess both the content and the face validity of the exam, and based on the helpful remarks that they provided, some adjustments were made to the exam. After that, this examination was given to a group of thirty-eight EFL students operating at an intermediate level of English proficiency for the purpose of evaluating the test–retest reliability. These group was given the same examination again after a period of two months to see whether or not the findings were stable over time. It was useful that the Pearson correlation coefficients were reported ($r = 0.895, p 0.05$).

The foreign language learning self-esteem scale (FLLSES)

FLLSE was used in order to investigate the levels of self-esteem held by university students studying EFL. Using a Likert scale with five points, this tool was designed by Rubio (2007). The scale ranges from 1 (strongly disagree) to 5 (strongly agree). The Foreign Language Attitude and conduct in the Classroom Evaluation consists of 25 different measures broken down into four categories: (1) language capacity, (2) actual in-class language use, (3) in-class correlations, and (4) attitude toward / conduct in the foreign language classroom. In this particular investigation, the dependability of this instrument was evaluated, and the result of the Cronbach alpha coefficient was found to be satisfactory ($\alpha = 0.877$).

The academic buoyancy scale (ABS)

ABS, created and verified by Jahedizadeh et al. (2019), was used to measure the students' academic buoyancy. This test included 27 questions to assess four elements of L2

buoyancy (sustainability, regularity adaption, positive personal eligibility, and positive acceptance of academic life that evolved). In addition, ABS is based on a Likert scale with five possible responses ranging from 1 (strongly disagree) to 5 (strongly agree). The Cronbach's alpha value measured for the ABS scale varied from 0.759 to 0.847, suggesting an acceptable level of internal consistency.

The SInAPSi academic engagement scale (SAES)

Freda et al. (2021) developed and validated the SInAPSi (Services for active participation and inclusion of university students) Academic Engagement Scale (SAES). The purpose of this tool is to evaluate AE among college students. This tool has six categories, each measured on a 5-point Likert scale: (1) the importance of and feeling at home at university (6 items), (2) confidence in one's ability to stick with one's college of choice (4 items), (3) the worth of one's coursework (7 items), (4) interaction with faculty members (4 items), (5) interaction with peers (5), and (6) connections to one's social network (3 items). Cronbach's alpha for this study was 0.847, which is an acceptable level of dependability.

Procedures

The students' current level of English was determined by giving them the OQPT as the first stage. It was decided that a score between 0.4 and 0.6 indicated an intermediate level of English ability. Those pupils whose results indicated a high level of language competence (between 0.7 and 0.9) and those whose scores indicated a poor level of language proficiency (between 0.1 and 0.4) were not included. The final number was 93 pupils, split evenly between CG (n=46) and EG (n=47). A quasi-experimental approach was used for this analysis. To guarantee the validity of the results, participants were instructed to refrain from taking any additional English lessons over the course of this study. A pre-test was performed before the therapy was really implemented. The participants' Self-esteem, AB, AE, and LA was be measured over five subtests. After this, both the test and the control groups began receiving their training. Top Notch 3 was taught to both EG and CG for 16 sessions (one semester) that year (2023).

The CG (n=46) had their classes every week online using Adobe Connect webinars. Students in EG (n=47) had their usual classes via Adobe Connect webinars. Moreover, supportive tasks were posted for EG through a page in Instagram. English tasks were presented on this page, with reference to the course outline and textbook (Top Notch 3). This book's topics were presented through engaging postings that used visuals, audio, and video. Instagram allows for the sharing of visuals, sounds, and videos between educators and students. In addition, students may interact with one another through question-and-answer sessions, as well as receive helpful suggestions. Students were broken up into smaller groups where they may work with a partner or a group to hone their skills. Students may submit questions, get responses, and discuss course material on the go using their mobile devices. The primary focus of instruction in task-supported language learning is on the completion of meaningful tasks. It took 16 sessions (a full semester) to complete this task. A post-test (i.e., the test of Self-esteem, AB, AE, and LA) was given to both CG and EG after therapy had concluded in order to assess the

Table 1 Descriptive Statistics (Pretest of SE, AB, AE, and LA)

	Groups	Mean	Std. deviation	N
SE pretest	EG	73.3830	14.06901	47
	CG	72.5870	18.91922	46
	Total	72.9892	16.55918	93
AB pretest	EG	76.9149	14.99105	47
	CG	74.3913	22.09523	46
	Total	75.6667	18.78212	93
AE pretest	EG	76.7660	14.83271	47
	CG	78.8696	23.89571	46
	Total	77.8065	19.75901	93
LA pretest	EG	24.1915	6.94274	47
	CG	25.4783	10.46845	46
	Total	24.8280	8.83868	93

Table 2 Multivariate test for comparing the two groups' scores on pretests

Effect		Value	F	Hypothesis df	Error df	Sig
Groups	Pillai's Trace	0.025	0.567	4.000	88.000	0.687
	Wilks' Lambda	0.975	0.567	4.000	88.000	0.687
	Hotelling's Trace	0.026	0.567	4.000	88.000	0.687
	Roy's Largest Root	0.026	0.567	4.000	88.000	0.687

students' growth and the initiative's success. Six EFL university professors evaluated the examinations given before and after the course to ensure their validity.

Data analysis

The one-way MANOVA test was used to assess the efficacy of the task supported language learning via Instagram on Self-esteem, AB, AE, and LA. The primary objective of a one-way analysis of variance is to determine whether two or more groups substantially vary from one other in one or more attributes (Dörnyei, 2007). Before executing the MANOVA analysis, the underlying assumptions were verified, including those pertaining to normality, sample size, outliers, linearity, and homogeneity of regression.

Results

Table 1 demonstrates the performance of the two groups (i.e., EG & CG) on the pretests of SE, AB, AE, and LA. As can be seen, the mean of the two groups on all 4 variables are close to each other. It means that the two groups had equal performance on the pretests of academic engagement, academic buoyancy, self-esteem, and language achievement before the treatment. However, to make sure that if there is any significant difference between the two groups on the pretests, it is necessary to take a look at Table 2.

The Wilks' Lambda in Table 2 shows that no significant difference can be seen between the two groups on the pretests of the four dependent variables before the treatment ($p > 0.05$; Wilk's $\Lambda = 0.975$).

Table 3 Descriptive statistics (Posttest of SE, AB, AE, and LA)

	Groups	Mean	Std. deviation	N
SE posttest	EG	93.9149	15.52954	47
	CG	81.1522	19.32180	46
	Total	87.6022	18.55669	93
AB posttest	EG	99.1702	16.53365	47
	CG	84.0217	17.45533	46
	Total	91.6774	18.53913	93
AE posttest	EG	105.9362	18.44192	47
	CG	89.5870	15.57430	46
	Total	97.8495	18.87427	93
LA posttest	EG	32.5106	7.24980	47
	CG	31.7174	7.01003	46
	Total	32.1183	7.10458	93

Table 4 Multivariate test for comparing the two groups' scores on posttests

	Value	F	Hypothesis df	Error df	Sig	Partial Eta Squared
Pillai's trace	0.241	6.975	4.000	88.000	0.000	0.241
Wilks' lambda	0.759	6.975	4.000	88.000	0.000	0.241
Hotelling's trace	0.317	6.975	4.000	88.000	0.000	0.241
Roy's largest root	0.317	6.975	4.000	88.000	0.000	0.241

The descriptive statistics of the participants in both groups are illustrated in Table 3. A close look at the mean scores shows a difference between the groups on the four variables. To see whether this difference is significant or not, Table 4 must be checked.

Based on the data provided in Table 4, there is a statistically significant difference between the groups on the posttests ($F(4, 88) = 6.975, p < 0.05$; Wilk's $\Lambda = 0.759$, partial $\eta^2 = 0.24$). It can be concluded that applying task supported language learning via Instagram had significant effect on the AE, AB, SE, and LA of the experimental group.

As Table 5 shows, there was a significant difference among the two groups' performance in the posttests of all variables ($p < 0.05$) except for the LA ($p = 0.593$).

Discussion

The purpose of this research was to illustrate the effectiveness of task supportive language learning via SN technologies (the Instagram platform in this research), with a particular emphasis on self-esteem, AB, and AE. The results of this investigation shed light on the role that Instagram feed-based activities play in facilitating language learning, self-esteem, AB, and AE. It's important to note that learning activities based on Instagram feeds increase students' interest, inventiveness, and motivation. In particular, all the postings on this page were created so that students could follow them in order and have all the information they needed to go on to the next stage. The probability of long-term memory of intended materials and a successful repetition of the rules is boosted by this chance. As the findings by Cheng and Chen (2022)

Table 5 Tests of between-subjects effects comparing the two groups on posttests

Source	Dependent variable	Type III sum of squares	df	Mean square	F	Sig	Partial Eta squared
Corrected model	SE posttest	3786.685	1	3786.685	12.354	0.001	0.120
	AB post	5334.706	1	5334.706	18.469	0.000	0.169
	AE post	6213.932	1	6213.932	21.290	0.000	0.190
	LA posttest	14.628	1	14.628	0.288	0.593	0.003
Intercept	SE posttest	712,494.728	1	712,494.728	2324.441	0.000	0.962
	AB post	780,163.308	1	780,163.308	2700.901	0.000	0.967
	AE post	888,728.297	1	888,728.297	3044.970	0.000	0.971
	LA posttest	95,900.736	1	95,900.736	1885.252	0.000	0.954
Groups	SE posttest	3786.685	1	3786.685	12.354	0.001	0.120
	AB post	5334.706	1	5334.706	18.469	0.000	0.169
	AE post	6213.932	1	6213.932	21.290	0.000	0.190
	LA posttest	14.628	1	14.628	0.288	0.593	0.003
Error	SE posttest	27,893.594	91	306.523			
	AB post	26,285.617	91	288.853			
	AE post	26,559.961	91	291.868			
	LA posttest	4629.071	91	50.869			
Total	SE posttest	745,375.000	93				
	AB post	813,262.000	93				
	AE post	923,204.000	93				
	LA posttest	100,581.000	93				
Corrected Total	SE posttest	31,680.280	92				
	AB post	31,620.323	92				
	AE post	32,773.892	92				
	LA posttest	4643.699	92				

evinced that SN provide helpful contextualized language learning. Lei et al. came to a similar conclusion, noting that SN ensures learners' involvement, leading to better self-regulation, more meaningful learning, and deeper comprehension. Li and Hafner (2022) reached similar conclusions on the efficacy of SN in fostering language acquisition and student engagement. Mortazavi et al. (2021) provided more evidence that SN techniques boosted both speakers' and listeners' ability to understand and use language.

Students are more engaged in the learning activities (presentation and practice phases) as a result of diversity and novelty in the types of assignments that are presented on Instagram. This factor may be responsible for the improvement in the EG in comparison to the CG in this study. Instagram's potential as a MALL tool to improve students' motivation, engagement, and outlook on learning has been suggested by a number of research (e.g., Alfadda et al., 2022; Klimova & Polakova, 2020). In a similar vein, Chen Hsieh et al. (2017) demonstrate LINE's usefulness in maintaining an interesting and motivating setting for language study. Wrigglesworth (2019) argued that students may use their phones to continue conversations outside of the EFL classroom. In a similar spirit, Wardak emphasized the importance of SM in fostering self-awareness and self-evaluation among language learners.

Taking into account the first study question (Does Task supported language learning have an effect on EFL students' self-esteem?), the findings suggested that task involvement in language learning affected students' self-esteem. This implies that when EFL students participate in meaningful activities, their self-esteem and self-respect increase. That is, the frequency with which EFL students participate in fruitful and helpful activities directly correlates with their ability to successfully alter their perspective. The self-perceptions of learners are shaped by their attitudes on the significance of engaging in self-assessment and self-monitoring. To be more explicit, the engagement in meaningful activities had an impact on several dimensions of self-esteem, including language proficiency, active participation in the classroom, social connections within the class, and attitudes towards behavior in the foreign language learning environment. This suggests that developing proficiency in practical activities, particularly those that use higher-order cognitive abilities, may result in a more profound understanding of one's own identity. This finding is consistent with the findings of Xiyun et al. (2022) as well as Heron and Palfreyman (2021). They showed a connection between the ability to engage in higher-order thinking, self-regulation, social competence, and confidence in one's own abilities.

Regarding the primary study issue, the outcomes suggest that enhancing learning via supportive tasks can be a robust indicator of AB among EFL learners. Positive psychology's underlying fields and specializations lend credence to this finding. This finding suggests that the benefits of AB among EFL students are maximized via the use of Instagram Apps. That means, the more actively students participate in task supportive language learning, the more beneficial changes in academic perseverance, regularity of adaptability, personal eligibility, and acceptance of academic life will emerge. According to this line of thinking, confident students should have the cognitive and metacognitive skills necessary to persevere through any learning situation and take an active role in their own education.

EFL students may have a propensity to encounter feelings of apprehension and tension due to the challenges they may encounter in the process of acquiring a new language. In such circumstances, the use of AB may significantly aid individuals in achieving a state of balance and making thoughtful decisions. Esmailzade Ashini et al. (2020) emphasized the interdependent connection among AB, student engagement, and academic self-assurance. As previously mentioned, self-efficacy plays a vital role in the context of AB. Consequently, it may be said that those with an optimistic outlook are more likely to achieve success in professional settings. Furthermore, Middleton (2020) posited that the provision of valuable assessment remarks to students may contribute to the enhancement of their academic performance.

Findings pertinent to the third study issue indicated that supportive tasks had a statistically significant influence in fostering AE among EFL learners. What this implies is that participation in class activities and learning-focused evaluation pique the interest of college students. A beneficial effect of meaningful tasks on AE's constituent parts was predicted by the study findings. Higher-order thinkers in higher education had more success with tasks like assessing, keeping tabs on, and reflecting on their own learning (Heron & Palfreyman, 2021). In the same vein, Ritonga et al.

(2023) found that students' self-efficacy and motivation improved once they began regularly evaluating their own progress in on line-instruction.

Conclusion

In summary, the purpose of this research was to add to the insufficient information on the effectiveness of supported tasks via Instagram for enhancing language learning among EFL students. The results of this research support the idea that Instagram-feed based assignments might be useful for fostering self-esteem, AB, and AE in L2 settings. This research paves the way for a fresh approach to pedagogical grammatical instruction and highlights the importance of activities based on Instagram feeds for second language acquisition. Some pedagogical ramifications of this study's results are suggested for students, instructors, and the larger educational system. It's worth noting that when MALL is included into lesson plans, students have far better access to course materials and have more chances to engage with them even when class isn't in session. In addition, it was agreed that MALL provides an affordance for learning and practicing language since it encourages students to create or consume material using a device of their choosing.

Instagram feed-based assignments in second/ foreign language classes may provide a particular challenge for instructors, and this is an aspect that has to be highlighted. Because of the importance of SM, it is recommended that pre- and in-service teacher education programs include instruction on digital literacy for language instructors. That is to say, second-language educators should get training that equips them to make effective use of SM. Policymakers, curriculum developers, and teacher educators should thus think about providing programs like these for K-12 teachers and college faculty. This will allow for more effective teaching to take place in the classroom.

It is important to keep certain factors in mind while analyzing the results of this research, including the following: To begin, the demographic information of the students, such as their age, and gender was not taken into consideration. Therefore, it is strongly suggested that similar study that will be conducted in the future take these issues into consideration. In addition, the link between the various sociocultural contexts of EFL students and the Instagram feed-based activities that they are expected to complete might be further investigated in further research. It is also recommended that more study be conducted on the impact of Instagram feed-based activities on other student related constructs such as motivation, self-efficacy, creativity, and autonomy. These findings have limited use because of the quasi-experimental character of the subjects chosen. There needs to be longitudinal research on the effects of task supported language learning through Instagram and its consequences on learners' self-esteem, AB, AE, and LA.

Abbreviations

TSLT	Task-supported language teaching
SN	Social Network
EFL	English as a foreign language
AB	Academic buoyancy
AE	Academic engagement
LA	Language achievement
OQPT	The oxford quick placement test
FLLSES	The Foreign Language Learning Self-esteem Scale
ABS	The academic buoyancy scale
The SInAPSi	Services for Active Participation and Inclusion of University Students

SAES	The SinAPSi academic engagement scale
EG	Experimental group
CG	Control group
MANOVA	The multivariate analysis of variance

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Availability of data and materials

The data that support the findings of this study are available from the corresponding author upon reasonable request.

Declarations

Competing interests

The authors declare that they have no conflict of interest.

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