Instagram-Assisted Learning of Collocations and Colligations: The Case of EFL Learners

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Abstract
Instagram, as a popular social networking platform, allows users to share photos and videos with other users. This research investigated the effect of Instagram-assisted instruction on the learning of collocations and colligations[1] by Iranian EFL learners. Fifteen participants who were selected based on a language proficiency test took part in this research. The participants were first pre-tested on their collocational and colligational knowledge. The collocational and colligational items that were answered incorrectly by 50 percent or higher were selected for treatment. Afterwards, the researchers prepared nine videos, containing 41 collocational and colligational items, and posted them on Instagram during a five- week instruction period. The participants were asked to watch the videos, and carry out the related exercises in the caption section of the post, through the usage of the comments sections on Instagram. After posting all the videos, the pre-test was run again as a post-test. The results indicated a significant difference between the mean scores of the pre- and post-test, highlighting the fact that the treatment had been effective. In addition, semi-structured interviews were conducted with 10 participants in order to find out their attitudes towards language learning via Instagram. The learners indicated a positive attitude towards using Instagram for their language learning purposes. In conclusion, the research showed that Instagram-assisted instruction, when properly implemented and designed, can be beneficial to the development of second language learning.
Keywords: colligations, collocations, Instagram, social networking systems.

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[1] Colligations: items in the language which are conventionally found together. Colligation derives from the Latin colligare meaning tie together. It refers to items which form a set with syntactically identical properties. Such items are said to colligate.

Изучение коллигаций и коллокаций с помощью Instagram на примере учащихся английского языка как иностранного

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Аннотация
Популярная социальная сеть Instagram позволяет делиться фотографиями и видео с другими пользователями. Настоящая работа посвящено использованию Instagram для усвоения коллокаций и коллигаций студентами Ирана, изучающими английский язык как иностранный. В исследовании приняли участие 15 студентов, отобранных на основе теста на знание языка. Те коллокации и коллигации, на которые было получено неверных ответов от 50 и выше процентов, использовались в дальнейшей работе. Авторы подготовили девять видеороликов, содержавших 41 коллокацию и коллигацию, после чего на протяжении пяти недель публиковали их в сети Instagram. Участникам предлагалось посмотреть видео и выполнить сопутствующие упражнения, размещенные под постом, используя раздел комментариев в Instagram. После работы со всеми видеороликами было проведено повторное тестирование. Его результаты показали значительный рост средних баллов по сравнению с оценками, полученными на предварительном тестировании, что указывает на эффективность предлагаемой методики. Кроме того, с 10 участниками были проведены полуструктурированные интервью с целью определить их отношение к изучению языка посредством Instagram. Оценка учащихся была положительной. Таким образом, результаты исследования продемонстрировали, что обучение с помощью Instagram, при правильной реализации и методической разработке, может сделать изучение второго языка более эффективным.
Ключевые слова: коллигации, коллокации, Instagram, социальные сети.

Introduction

As an inherent part of modern life, the Internet has changed the way individuals gain knowledge and experience about the world around them. As stated by Vinci and Cucchi (2010), the current generation, who have been nurtured within an environment that relies highly on advanced technologies, cannot flourish within an outdated learning atmosphere. The new generations who have used high-tech applications since their childhood cannot be expected to learn solely through the old-fashioned and traditional educational tools and settings. Moreover, the Internet has enhanced the sense of autonomy and control amongst individuals, offering choices over the shape and form of what they learn, as well as where, when, and how this learning takes place (Gernsbacher, 2015). Budhwar (2017) adds that, when technology is implemented within the language-learning classroom, it allows the teacher to address the diversity that exists in the learning styles of learners.

Innovations in technology have also given rise to many social media which are defined as "a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of user-generated

content" (Kaplan & Haenlein, 2010, p. 61). Instagram, is a popular social networking platform (Al-Ali, 2014), that was initially launched to share photos and videos with other users. However, with the updates and evolution of both the application and world markets, it is now being used for a wide array of purposes including, but not limited to, marketing, advertising, and education. In light of the popularity and proliferation of Instagram, as well as the fact that the younger generation is leaving other Social Networking Services (SNSs) to immigrate to Instagram (Lomicka & Lord, 2016), new research studies need to be conducted to determine the pedagogical affordances that this application provides second language (L2) learners.

Over the years, studies on other SNSs have been conducted to demonstrate the affordances they offer L2 learners as well as to reveal the attitudes held by L2 learners about the integration of such platforms within the language-learning classroom. For example, there have been studies on WhatsApp (Ashiyan & Salehi, 2016), Telegram (Amiryousefi, 2017), Twitter (Alsharidi, 2018), and Facebook (Kabilan & Zahar, 2016; Khonamri & Kazemian, 2014; Monica-Ariana & Anamaria-Mirabela, 2014). However, research on the usage of Instagram as a language-learning tool is very limited, especially in the English as a foreign language (EFL) context of Iran. Furthermore, to the best of the researchers' knowledge, the scant literature available on Instagram has targeted features such as grammar acquisition, writing, and speaking enhancement (Simin & Yadegarfar, 2016). Few, if any, studies have investigated development in collocational and colligational knowledge via Instagram-supported instruction, an investigation that the present study undertakes.

Literature review

Internet-based Education

The most significant forms of Internet-based education are the informal instances (Selwyn, 2013) that now take place more frequently and commonly thanks to the introduction of Web 2.0 applications such as Instagram, Twitter, Facebook, YouTube, WhatsApp, and Telegram. These platforms provide users (who are not limited to language learners) to simply hang out with one another, which can in turn lead to the sharing of ideas, comments, and/or suggestions. These activities tend to be more interest-driven. All the aforementioned applications indicate ways in which the Internet and education have integrated with one another. Although nowadays individuals across all societies may possibly have access to a plethora of information across various disciplines, there is still a paucity of information indicating whether and how it can be implemented for language learning purposes (Shadiev & Yang, 2020; Zourou & Lamy, 2013).

As the process of learning an L2 is both highly time-consuming and dependent on large amounts of input and interaction (Blake, 2008), the incorporation of current and up to date digital technologies in language teaching and learning is crucial (Karsenti, et al., 2020; Nami, 2020). Technological innovations, when implemented properly, can provide affordances such as complementing learners' interests and motivation, aiding students' access to target language input, presenting them with more opportunities for interaction and feedback, and serving as an aid for instructors in the organization of course curriculum (Fathi & Nourzadeh, 2019; see also Golonka, et al., 2014 for a review). The following section will take a look at several studies that have investigated the implementation of Instagram as a Mobile-Assisted Language Learning (MALL) tool.

Instagram and EFL: Some Empirical Studies

One of the pioneering articles within the realm of Instagram and English language learning is by Al-Ali (2014) who explored the usage of Instagram as a language learning

tool. He integrated three activities targeting speaking, writing, grammar and vocabulary skills for 40 female students within their first semester of a bridge program offering intensive English courses, through the usage of Instagram. He found out that, through the use of Instagram, the participants were able to collect appropriate content for the task. Furthermore, as two of the tasks were production oriented, the students did not have any problems with generating their own thoughts and ideas as well as an enhanced sense of responsibility; all afforded to them through Instagram. In spite of these results, Al-Ali's study suffers a major shortcoming in the sense that it was not conducted empirically. This in turn could imply that there is no solid empirical data or evidence to back up the claims that have been made as well as to account for the positive attitudes that the researcher claims within his study.

Simin and Yadegarfar (2016) set out to examine the effects of Instagram on learning grammatical accuracy of word classes for Iranian undergraduate EFL students. Furthermore, they also wished to find out the same students' perceptions towards using Instagram for learning the grammatical accuracy of word classes. Their experimental study revealed that there was a significant difference between the group of students who were taught through Instagram and the group who were not. The researchers believed that possible reasons for this great difference is that Instagram was motivating, helped in enhancing the amount of student's input and decreased the anxiety which is common in a physical classroom environment. Furthermore, the questionnaire employed to study the experimental group's attitude towards also revealed that the experimental group had a positive attitude towards the integration of MALL. The researchers further implied that instructors should be aware that the instruction through handheld digital devices may serve as an efficacious teaching strategy.

Another study carried out by Shazali, et al. (2019) set out to study the use of Instagram in helping to develop students' English language writing ability and to discover the participants' attitudes towards Instagram as an interactive learning tool. They concluded that Instagram did help with the development of students' writing ability in terms of new vocabulary. Furthermore, the writing of captions helped to broaden their vocabulary range, and also allowed them to use various structures to express their opinions and feelings. Another important finding was that, teachers should monitor and supervise learning conducted through MALL in order to make sure that students do not wander off task and to ensure that learning objectives are achieved. Wulandra (2019) attempted to find out the impact of using Instagram on EFL learners' speaking. More specifically, she investigated whether an Instagram video log (Vlog) can contribute to the improvement of EFL learners' speaking ability. In addition, the researcher examined, via a questionnaire, the perceptions of the participants towards the integration of an Instagram Vlog within the speaking class. The study was conducted in Indonesia with 28 Indonesian-speaking first-year EFL learners. The results showed that the integration of Instagram Vlog within the speaking class had enhanced learners' speaking proficiency. Furthermore, analysis of the questionnaire revealed that the usage of Instagram had resulted in both a boost in self-confidence and motivation.

In another study Erarslan (2019) set out to study the opinion of university students' regarding Instagram as an educational platform for language learning purposes, as well as its effect on students' language learning process acting as an aid to conventional classroom environment. The results demonstrated that participants not only held positive attitudes but also favoured the use of Instagram as an engaging and authentic platform to practice language with other users, and did not fret over potential mistakes they may make. Gonulal (2019) investigated how English language learners (ELLs) from 42 different countries used Instagram for language learning purposes as well as

their attitudes and experiences towards Instagram as a MALL tool. A mixed-methods research design was employed to answer the research questions. Based on the results, the participants stated that they were actively using Instagram for language learning purposes and 'following' Instagram pages devoted to English language development. Moreover, overall attitudes displayed by the learners for the usage of Instagram for language learning purposes were positive. Instagram appeared to motivate ELLs to not only have access to authentic language but also be able to use it more. ELLs also agreed that Instagram is a readily accessible and feasible means of improving communication skills due to that fact that it fosters a sense of community where ELLs can interact with one another. As the review of the literature shows, there is a lack of studies on the application of Instagram for developing collocational and colligational knowledge of EFL learners and this study in an attempt to address that gap in the literature. In the next section we will take a look at what collocations and colligations are and why they are important within L2 learning.

Collocations and Colligations

Various scholars have presented different definitions regarding collocation and colligation. Firth (1957) believed that the word collocation is used to indicate other terms which are associated with one another in the same context, such that when an individual comes across a word one predicts the presence of other similar terms. Furthermore, he adds that the collocations of any particular word are statements of the habitual or customary places of that word order. Other scholars such as Lewis (1997) have defined collocations as "the readily observable phenomenon whereby certain words co-occur in natural text with greater than random frequency" (p.8). McEnery et al, (2005) and Hardi (2008) define collocations as words that co-occur together in a text. As it can be seen in these definitions of collocations, the common characteristic is that they mention co-occurrence. The definition for collocations adopted by the researchers within the study is that by Firth (1957).

Collocations can be divided into two categories: lexical and grammatical. Marco (1999) believes that lexical and grammatical collocations can be referred to as "collocations" and "colligations". Benson, et al. (1997) define colligations as phrases containing a dominant word category and a preposition or grammatical structure. When compared, collocations do not contain grammatical structures or prepositions. For instance, Sinclair (1998, p. 15) states that the English phrase naked eye is often preceded by a preposition and a definite article (e.g., to the naked eye, for the naked eye). The categorization employed within the study in distinguishing collocations from colligations is that of Benson, et al. (1997).

The importance of both collocations and colligations has been emphasized by a number of researchers. Pawley and Syder (1983) explain that collocational knowledge is an integral foundation of language knowledge, making it a pivotal block for language learners to produce fluent and accurate language. For example, EFL learners need to learn that the verb *make* often collocates with something that has an outcome (make a list, mistake, request,) and the verb *do* often collocates with general activities and physical tasks (do business, exercises, the laundry). Nation and Shin (2008) go on to explain that one of the reasons as to why both teachers and learners should be taught collocations is that they provide the opportunity to strengthen their language knowledge. In addition, Skrzypek (2009) laments the importance of collocational knowledge by stating that one of the key criteria for distinguishing a word is by recognizing the words it also surrounds. On the other hand, colligational knowledge is needed by L2 learners so that they are able to correctly utilize the type of prepositions that can occur with specific words leading to

more fluent and accurate production. For instance, English language should be made aware that verbs of perception such as *hear, feel, see, listen, watch* tend to be followed by an object plus an infinitive verb without *to* or an object plus *-ing form* (e.g., I feel something is burning). Therefore, if learners are taught vocabulary without attention to collocations, they would end up with an incomplete picture of how the language works.

The problems faced by L2 learners pertaining to both collocations and colligations are that they are unaware of the fact that not all words go together and also that words that do go together do so based on the rules of a language. According to Martynska (2004) learners lack collocational competence, which leads to them being unable to produce texts that are both lexically and grammatically correct. In turn, collocational knowledge allows learners to produce language at a quicker rate, without a sacrifice in either accuracy or fluency. Learning collocations helps the learners generate language at a much quicker rate. Furthermore, acquiring collocations is required by fluent and proper language and allows for more efficient language processing to take place, both for language reception and production. The same arguments can be made about colligational knowledge. Pawley and Syder (1983) maintain hat: "Memorized clauses and clause-sequences form a high proportion of the fluent stretches of speech heard in everyday conversation. Speakers indicate a high rate of fluency while explaining familiar backgrounds or actions in recognized phrases… The normal building blocks of fluent spoken discourse include memorized sentences and phrases." (p. 208)

Ashiyan and Salehi (2016) set out to investigate whether vocabulary knowledge in particular collocations can show significant improvements when delivered through WhatsApp amongst Iranian EFL learners. Their results displayed that the experimental group who had used WhatsApp significantly outperformed the control group. Furthermore, the researchers went on to implicate and conclude that awareness of MALL should be raised and that EFL learners can apply their mobile phones as tools for L2 learning. Reviewing the literature available on the application of Instagram for L2 learning purposes, the researchers found out the app has been used to teach features and skills such as grammar (Simin & Yadegarfar, 2016), speaking (Wulandra, 2019) and writing (Shazali, et al., 2019) but few, if any, studies have investigated development in collocational and colligational knowledge via Instagram.

The researchers of this study wish to add to the scant body of literature that has been conducted on the effect of Instagram on second/foreign language learning, minimizing the gaps that have been presented within the above-mentioned studies. More specifically, the present study sets out to empirically investigate the efficacy of Instagram as a MALL tool, providing instruction pertaining to collocational and colligational knowledge. Moreover, the researchers wished to study the attitudes held by the participants of the study contingent to the usage of Instagram for language learning. In order to reach the aforesaid objectives, the following research questions were put forth:

1. Does teaching collocations and colligations to Iranian EFL learners via Instagram videos significantly impact their collocational and colligational learning?

2. What attitudes do Iranian EFL learners hold towards learning collocations and colligations through Instagram?

Method

Participants

The participants of this study were 15 native Persian-speaking EFL learners (nine males and six females) who were purposively selected out a pool of 36 learners based on their IELTS scores. The participants were determined as either C1 or C2 based on the CEFR (equivalent to a 7.0 – 9.0 on the IELTS exam), which would qualify them as either

advanced or proficient users of the English language. They had a mean age of 23 and their educational background ranged from final year of high school, undergraduate, to graduate students. Prior to the study, all the participants were asked when selected how long they have had Instagram accounts for. All responded they had used Instagram for more than three years; hence, were familiar with the functions and features of this application that were employed for the purposes of this study. It is worth noting that the researchers wished to employ a larger sample size and are aware of the consequences that the small number of participants might pose for the validity of the research; however, due to the constraints of the COVID-19 pandemic, the researchers had to suffice with 15 learners.

Research Design

The current research employed a mixed methods research design. In the quantitative phase, the learners were given one pre-test which contained items measuring both their collocational and colligational knowledge. After the instruction period, in which all of the videos were presented, learners were asked to take part in a post-test in order to observe any gains in both collocational and colligational knowledge. In the qualitative phase, a semi-structured interview was employed to study learners' attitudes towards the language learning of particular collocations and colligations via Instagram.

Instruments

A series of instruments were used for the instruction of the target items as well as collection of data within the study. Each instrument will be elaborated below.

Collocation & colligation videos

Videos that were delivered through Instagram were first recorded using a camera. After the video was recorded, it was then uploaded onto KineMaster© to be edited. The editing process on the aforementioned application included raising the salience of the words through color-coding, font enhancement, and audio effects. In addition, a criterion worded as *imageability* (i.e., the capability to be presented in a Graphic Interchange Format or GIF) was also considered by the researchers. Here, an image was added that would possibly assist the participants in better understanding the meaning of the intended collocation or colligation. For the imageability aspect, the researchers added GIFs to the video depending on the collocation and/or colligation. Furthermore, contextual clips from TV show, movies, and documentaries were also added to show the usage of the target collocations and colligations in situational instances. Once the videos were edited, they were then transferred onto the second researchers' Instagram account where they would be posted. A total of nine videos were shown for the study (see Figure 1). The videos had a cover which indicated the theme of each video. The participants were asked to carry out an activity on Instagram after they watched the video. The activity was written in the caption section of the post and their answers were posted as comments. Activities ranged from transformation, fill in the blank, and error correction exercises. In order to create the highest quality learning experience possible, each of the videos was designed based on five (out of twelve) relevant instructional design principles for multimedia learning proposed by Mayer (2008, 2009). The first principle is concerned with coherence, in particular reducing extraneous material within the video itself. The second principle focuses on signalling, stating that information that is important within the multimedia instruction must be highlighted. Third, the creator of the multimedia content must be sure to not fall into the trap of redundancy by adding on-screen text to the

narrated animation. Fourth, spatial continuity must be followed by placing words within the multimedia content next to the corresponding graphics whether that may be photos or videos. Finally, temporal continuity states that both the corresponding narration and animation must co-occur together. Several educational content creators then reviewed the videos before the researchers posted them onto Instagram, in order to see if these principles had been conveyed clearly.

Figure 1. The nine videos created and employed in the treatment phase

Instagram

Instagram was used as the platform for the delivery of both the collocational and colligational video instruction for the participants. The 'caption' of the post was used to present the participants with a follow-up activity that they would conduct after watching the video.

Collocation & *colligation pre/post-test*

The selection of both collocations and colligations was done through multistage sampling. Firstly, the textbook *English Collocations in Use Advanced* (O'Dell & McCarthy, 2017) was selected as the source of collocations and colligations. The collocations and colligations in the book were selected from CANCODE corpus of spoken English (developed by University of Nottingham in association with Cambridge University Press and the Cambridge International Corpus of English). Furthermore, the authors of this book also made an extensive use of the Cambridge Learner Corpus, which showed the kind of collocations with which learners tend to make the most errors. Although the authors mentioned that idioms can be categorized as a branch of collocations, they have not directly focused on them within the book. The book consists of 60 two-page units ranging from themes that touch on collocation learning in general, containing a wide array of topics and functions. Each lesson starts by presenting the collocations in focus for that particular unit in the typical context, as well as offering further explanations regarding their meaning and usage. Each lesson provides learners with the opportunity to check whether they have understood the instruction that has been presented to them through a series of exercises.

The selection of themes was carried out through the categorization that had been used within the textbook. The head themes that were selected for the purpose of this study were

"Work & Study", "Leisure and Lifestyle" "The Modern World" and "People". Then, from each of the head themes, two, two, three, and two chapters (sub-themes) were selected respectively. The second researcher of this study then selected a total of 41 items to be included in his study, 26 of which were collocations and 15 of which were colligations. From the selected 26 collocations, 12 had a verb + noun structure, 12 had an adjective + noun structure, one had an adverb + noun structure and one had a verb + adverb structure. The colligations on the other hand, all consisted of a verb + noun structure. It should be noted that the distractor items which were used for the pilot test were chosen from *English Collocations in Use, Intermediate edition* (McCarthy & O'Dell), from the same themes (if applicable) as the intended collocation and colligations studied within the research, resulting in a total of 59 questions for the pilot test. When the collocations and colligations had been selected, the researchers designed a multiple-choice pre-test consisting of the selected items. Prior to the delivery of the pre-test, the collocation and colligation test was pilot-tested amongst seven participants with similar characteristics to the study group in order to determine the reliability, which turned out to be 0.92. Once the pre-test had been conducted, the researcher selected collocations and colligations that had been answered correctly by less than 50 percent of the participants to be included in the treatment phase of the study. Prior to the administration of the post-test, participants were instructed to re-watch all the videos in order to minimalize the effect that the recent uploaded videos would be 'fresher' in their minds. The same test as the pre-test was used for the post-test; however, the questions were shuffled into a different order. Cronbach Alpha was employed to calculate the reliability of both the pre-test and post-test. The estimated reliability indexes of the pre- and post-test were 0.82 and 0.81 respectively, which indicated that the tests enjoyed a relatively high degree of reliability.

Semi-structured interview

In order to obtain the participants' attitudes towards Instagram as a language-learning tool, seven semi-structured questions were adapted from Alsharidi's (2018) Twitter use for language learning questionnaire. Items in that questionnaire were revised and transformed into Instagram use items. The researchers adhered to the suggestions proposed by McNamara (2009) when developing practical and useful questions for the interview process. The recommendations put forth by McNamara (2009) firstly state that, participants should be able to use terminology they feel comfortable with when responding to the questions, secondly, questions should not induce a particular response, maintaining a neutral wording, thirdly, questions should be presented separately to the participants, fourthly, questions should take into consideration and terms that must be known by both the interview and interviewer, and finally, caution should be taken when asking 'why' questions.

In addition, the framework for the development of a qualitative semi-structured proposed by Kallio, et al. (2016) was also consulted to ensure an overall coherent process in both the development and implementation of the qualitative research questions. The framework proposed by the aforementioned researchers consists of a five-step procedure. First, the researchers should identify the prerequisites for the usage of a semi-structured interview. Next, once the prerequisites have been established the researchers should retrieve and utilize the previous knowledge. Then a preliminary interview guide should be formulated. Once the preliminary guide has been formulated, the researchers should pilot test it. Fifth and finally, the finalized interview guide should be presented. After the interview questions were constructed, they were verified according to Radhakrishna (2007) by two TEFL experts with a specialization in Computer- Assisted Language

Learning (CALL). The validation was concerned with asking questions such as, whether the questions measure what they intend to measure, is it appropriate for the population, is it comprehensive enough to collect all the information in order to address the purpose of the study? Once the validity of the questions had been ensured, the second researcher interviewed 10 out of the 15 participants through a 15-minute video call. The researcher then gathered all of the data and interpreted the different responses and organized them based on recurrent themes.

Data Collection Procedure

Firstly, 15 participants were selected based on the above-mentioned criteria. The participants that had been selected for the study were given a brief description of the research project. Prior to the delivery of any video instruction on Instagram, participants were asked to take part in a pre-test consisting of 41 multiple-choice collocational and colligational items. In order to minimize the test effect, the videos began to be uploaded after a period of seven days onto Instagram. After the aforementioned week, two videos would be uploaded on Instagram on a weekly basis, for five weeks in which participants were asked to watch the videos. The caption section underneath the video would also be used to provide a follow-up activity to be completed after the video had been watched. The post video activities were of three kinds: transformation, fill in the blank, and error correction exercises.

The participants were then asked to comment on their answers; feedback was then provided to them if needed. Participants used their personal Instagram accounts to share their comments. A total of nine videos were created. After a period of five weeks in which all nine videos had been uploaded, an immediate post-test was conducted to measure the gains in both collocational and colligational knowledge. Afterwards, a semi-structured interview was conducted in order to obtain information regarding the attitudes of the participants towards language learning through Instagram.

Results

Since the number of the participants was fewer than 50, the researchers decided to run the Shapiro-Wilk test to check normality of the data distribution. As shown in Table 1, the value of the Shapiro-Wilk test for both pre- and post-tests is greater than 0.05, indicating the data enjoys normal distribution.

Table 1. Shapiro-Wilk Test of Normality

	Shapiro-Wilk		
	Statistic	*df*	*Sig.*
Post-test	.805	15	.054
Pre-test	.939	15	.375

Research Question One

Paired sample t-tests were calculated for all of the items, that is, collocations and colligations, in both pre- and post-test. Table 2 displays the univariate descriptive statistics (mean, sample size, standard deviation, and standard error) for each item, while Table 3 shows the possibility of significant difference between the mean of the pre-test and that of the post-test.

Table 2. Paired Samples Statistics

Structures Tests		Mean	N	Std. Deviation	Std. Error Mean
verb + noun colligations	Post	83.33	15	24.39	6.29
	Pre	31.67	15	31.99	8.26
imageable verb + noun collocations	Post	92.00	15	10.14	2.61
	Pre	37.33	15	19.80	5.11
imageable verb + noun colligations	Post	91.67	15	12.19	3.15
	Pre	47.50	15	22.75	5.87
imageable verb + preposition colligations	Post	93.33	15	25.82	6.66
	Pre	33.33	15	48.79	12.59
adjective + noun collocations	Post	95.00	15	14.01	3.619
	Pre	33.33	15	26.16	6.755
imageable adjective + noun	Post	93.33	15	13.25	3.42
	Pre	32.50	15	18.78	4.84
verb + noun collocations	Post	86.67	15	13.73	3.54
	Pre	35.24	15	22.82	5.89
verb + preposition colligations	Post	66.67	15	48.79	12.59
	Pre	33.33	15	48.79	12.59
imageable verb + adverb collocations	Post	100	15	0.00	0.00
	Pre	53.33	15	51.64	13.33
imageable adverb + verb collocations	Post	93.33	15	25.82	6.66
	Pre	33.33	15	48.79	12.59
imageable adverb + adjective collocations	Post	100	15	0.00	0.00
	Pre	6.67	15	25.82	6.66

Table 3. Paired Samples t-Tests

Structures Tests		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Devia-tion	Std. Error Mean	95% Confidence interval of the Difference				
					Lower	Upper			
verb + noun colligations	post – pre	51.66	33.36	8.61	33.19	70.14	5.99	14	.000
imageable verb + noun collocations	post – pre	54.66	19.22	4.96	44.02	65.31	11.01	14	.000
imageable verb + noun colligations	post – pre	44.16	23.56	6.08	31.12	57.21	7.26	14	.000
imageable verb + preposition colliga-tions	post – pre	60.00	50.70	13.09	31.91	88.08	4.58	14	.000
adjective + noun collocations	post – pre	61.66	28.13	7.26	46.08	77.24	8.48	14	.000
imageable adjective + noun	post – pre	60.83	16.27	4.20	51.82	69.84	14.47	14	.000
verb + noun collo-cations	post – pre	51.42	22.78	5.88	38.81	64.04	8.74	14	.000

Structures Tests		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Devia-tion	Std. Error Mean	95% Confidence interval of the Difference				
					Lower	Upper			
verb + preposition colligations	post – pre	33.33	48.79	12.59	6.31	60.35	2.64	14	.019
imageable verb + adverb collocations	post – pre	46.66	51.640	13.33	18.07	75.26	3.50	14	.004
imageable adverb + verb collocations	post – pre	60.00	50.70	13.09	31.91	88.08	4.58	14	.000
imageable adverb + adjective collocations	post – pre	93.33	25.82	6.66	79.03	107.63	14.00	14	.000

The first research question was concerned with whether teaching collocations and colligations via Instagram would significantly impact participants' collocational and colligational knowledge. As the results in Tables 3 demonstrate, there was an increase in the mean scores of all the collocational and colligational items on the post-test, indicating that the treatment via Instagram was effective. Furthermore, paired t-tests were also run for the different collocational and colligational structures presented in the study. The results also revealed that the difference between the results of the pre-test and post-test across all the various collocational and colligational structures was significant.

Research Question Two

Before presenting the analysis of the interview with the participants, it is noteworthy that ten participants from the original sample size of 15 were interviewed. The researchers applied the thematic analysis method proposed by Braun and Clarke (2006) to analyse the data collected through the interviews. The analysis procedure commenced with the familiarization of the data and then the researchers transcribed each interview in all of its details. Next, the data were analysed meticulously to propose the initial codes. This process consisted of searching for key words, phrases, and sentences that portrayed a clear understanding of the attitudes held by the participants regarding language learning on Instagram. Key words, phrases and sentences were cross-referenced across all of the interviews and finally eight themes were developed. In general, the participants who were interviewed had an overall positive attitude towards language learning through Instagram.

Theme 1: Accommodation of different learning styles and learners

Seven out of the ten participants that were interviewed commented on how different features and aspects of the video had tended to their preferred way of learning. One of the participants commented:

Actually, seeing for me is very helpful because personally I'm not a person who can concentrate so if I only listen to something it might be very distracting for me but when I see I can learn better and more.

Another participant emphasized the visual aspect by stating that:

I think so because personally when I'm watching something it will go straight to my brain so at that point, I know how to spell that expression and when I see it somewhere else it's going to be much more helpful for me because it's going to look familiar for me.

Another one of the interviewees reiterated that:

They (on screen written explanations) were helpful because when you hear something and again when you see that on the screen, your brain starts making sense of what you hear and what you see.

Theme 2: Video playback

Three out of the ten participants commented on the importance of being able to re-watch the videos for different reasons, as this playback feature is one that is instilled within Instagram. One of the interviewees stated that:

I saw your videos two or three times to learn well and when I see it for the second or third time, I read it and it's very helpful for me.

Theme 3: Imageability

Imageability, or in other words, the ability to present a Graphic Interchange Format (GIF) was employed for some of the expressions. This feature produced mixed results amongst learners, in which some believed the images were not helpful to them learning the expression and others stating otherwise. The group of interviewees who believed the images were not helpful had this to say:

I cannot remember. Please give me one second to check. Oh, I didn't notice them (images), sorry. I can't remember them (images) maybe because the reason is because they were small or maybe also because of the fact that I was also doing a test (exam period).

On the other hand, some of the participants highly regarded the images by stating that:

Yes, definitely, they (images) were helpful because some learners are visual learners because by looking at those photos, they can make a connection between what they hear and what they see, and yes I think they could be helpful" while another had this to say *"I think that the videos are more helpful; but in some cases like when the words are very new, I don't have any idea about them, then the picture is useful".*

Theme 4: Instagram part of "our" lives

Five of the interviewees also commented on the fact that Instagram is inseparable and has become a part of their lives and an everyday routine.

One of the participants commented that that:

I guess the fun part is you don't like need to like take time, like another time to sit and study; you're just scrolling on your Instagram and you like to see a couple of videos, and it's like very easy to access. Instagram is our hobby or like it's a habit.

In addition, another participant had this to say about Instagram:

I think these days many people use Instagram as a daily hobby and if you use a hobby as learning it could be very helpful.

Theme 5: Authentic and contextualized environment

Seven out of the ten participants commented on the various authentic and contextualized material both within the videos, as well as the practices within the caption section. Five out of the seven participants believed that the short video clips in which the expressions were re-uttered were helpful in terms of understanding, watching, seeing, and hearing the real-life applicability of these phrases and expressions. One of the participants said:

Yes, they (short video clips) were actually, that part is one of my favourite parts. Because firstly you see the phrases that you're learning natives use them in everyday language. When you study books, you never like actually seeing they use it. Especially when you use videos from very familiar movies or TV series for example.

Two out of the seven participants stated that either the material taught in the videos or the exercises within the caption sections provided a sense of relevance and applicability in terms of standardized English exams.

Theme 6: Paraphrased definitions

The video presenter would also provide a paraphrased and summarized definition of the phrase or expression to the viewer. Eight of the ten interviewees commented on the importance and effectiveness of such. One of them stated that:

Yes, they [explanation given by presenter] for example, if I didn't know a phrase or expression the things that you said were going to help me understand that, so that was what I think it the most helpful thing.

An interviewee had this to say about the paraphrased definitions:

It [explanation given by the presenter] really was, because you were essentially paraphrasing the expression itself and putting it into simpler words that were more likely to be understood.

Furthermore, another participant added that:

Yes, obviously because like when you just give a definition that can be found anywhere, you can just Google it. But, when you explain it to someone I like, I don't know easier words, it's always easier to teach or learn something when someone explains it to you patiently.

A different interviewee had this to say about the paraphrased definitions:

It's the explanation that makes it right and makes the people know what it is, when to use it and how to use it. So, it's the most helpful part of your work.

Theme 7: Necessity/Opportunity for/to practice

After participants had watched the videos, they were asked to carry out a series of exercises in the caption section of the post on Instagram. Eight out of the ten participants commented on the importance and need for practice when it comes to learning. One of the participants stated that:

I think watching the video is good but it's not enough, you need to use the vocabulary that you just learn from video and you need to use it in the exercises and practices that you've prepared.

Whereas another had this to say about the exercises:

They're indeed helpful but it is one thing to remember the expression right after the content has been uploaded but it's another thing to remember them later on.

One participant added:

Yes, I really like them [exercises in the caption section] because they remind me of some of those standardized tests like FCE and CAE because we have the exact question types in those tests; when you have to decided what is the correct form of the word in order to fill in the blanks.

Different pieces of literature have also reiterated the importance of practice as well as the affordances offered by SNS to do so. Erarslan (2019) states that Instagram can be used to support students' language learning as it presents them with affordances to use and practice the language with both peers and people from across the globe. Shazali, et al. (2019) also reiterated that Instagram present language-learners with opportunities to develop their writing ability and boosting their motivation along the way as well.

Theme 8: Video improvements

The interviewees also provided suggestions as to how the video instruction could have improved. One of the participants stated that, "Maybe you could do something about the background, use a green background to put visuals. Be a little but professional about the editing of the video". Whereas, another had this to say "In some videos you had two phrases in the first part of the video and like three phrases in the second part. I can suggest that you have every phrase as a part of the video".

Discussion

This study was an attempt to study the efficacy of Instagram as a MALL tool for the teaching of collocational and colligation items to Iranian EFL learners. The first research question dealt with whether collocations and colligations taught through Instagram would significantly impact learners' collocational and colligational knowledge. The results demonstrated that there was a significant difference between the mean (overall) scores on the pre- and post-test. Furthermore, participants also exhibited gains across the different collocational and colligational structures. The findings of this study are in line with several studies that have empirically demonstrated the efficacy of Instagram as a MALL tool, across domains such as speaking, writing, and grammar acquisition respectively (Wulandari, 2019; Shazali, et al., 2019; Simin and Yadegarfar, 2016). Moreover, the findings demonstrated here also add to the broader literature concerned with the efficacy of SNS for language learning purposes, such as Ashiyan and Salehi's (2016) study, demonstrating that WhatsApp can be effective in assisting L2 learners with acquiring new collocations, as well as Monica-Ariana and Anamaria-Mirabela (2014), and Taskiran, et al., (2018) studies, revealing that SNSs such as Twitter and Facebook can be effective and lead to positive gains in terms of learners' vocabulary knowledge.

Several reasons can account for the significant gains demonstrated in the post-test of this present study. Firstly, Instagram provides an around-the-clock access anytime and anywhere, provided stable Internet access, this in turn allows participants to pace their own learning as they have access to the material, removing the limitations of fixed pace learning (Alghamdi & Alnowaiser, 2017). Furthermore, Instagram provides a fun and meaningful environment, leading to a reduction in anxiety, making it extremely friendly for learning (Gonulal, 2019). It is worth noting that the researchers are in no way advocating or suggesting that SNSs such as Instagram can be the main form or replacement for classroom instruction. Rather, what we wish to convey is that such platforms can serve as effective supplementary aids for language learning, especially during times in which in-person classes are not an option such as the COVID-19 pandemic.

Pertaining to the second research question, a majority of the students displayed a positive attitude towards the usage of Instagram for language learning purposes. The interviewees believed that the videos had a wide array of contextual clues in different formats that tended to and helped participants better understand and learn the usage of the new colligations and colligations. The responses provided by the participants can be corroborated with the Bonwell and Fleming's (2001) VARK, which consists of visual (V), aural (A), read/write (R), and kinesthetic (K) respectively. Their proposed framework took into account the different ways in which learners take in and produce information, accommodating their preferred learning styles. Bonwell and Fleming go on to state that videos, movies and animations are a combination of modes (multimodal). Therefore, their framework can be seen in the Instagram videos as well, accounting for their multimodality and tending to a wide array of learning styles, giving way to participants' positive responses. Jahiel (2008) also states that individuals do not solely rely on one of their learning styles, rather some of them have one primary learning style, this can be observed yet again in the importance or unimportance of the different features presented within the videos and participants responses.

These findings are also demonstrated within other studies such as that by Gonulal (2019), stating that the contextualized text in the format of visual data is one of the reasons that learners hold a positive attitude towards Instagram. The fact that Instagram was a part of the students' lives was also one of the other themes mentioned by the interviewees, which is also supported by other researchers (e.g., Boateng & Amankwaa, 2016; Erarslan,

2019; Nicolai et al. 2017), showing that social media platforms such as Instagram are an integral part of student's everyday practices.

Since a limited number of studies had been conducted to demonstrate the efficacy of Instagram as a tool for language learning, this study was carried out to portray the potential of Instagram for these purposes. As both the quantitative and qualitative findings show, Instagram can very well indeed be integrated and used appropriately within the language-learning classroom.

Conclusions and implications

Although the popularity of Instagram as a social media platform has been rising over the past few years, there is only a scant amount of literature shedding light on the efficacy of this platform for language learning purposes. This study was conducted in order to determine whether learning collocations and colligations taught through Instagram would impact learners' collocational and colligational knowledge. It also investigated attitudes held by those learners towards the use of Instagram for language learning purposes.

The results of the study revealed that there was a significant positive association of Instagram as a MALL tool in the teaching of collocational and colligational items. Moreover, interview responses also clearly showed that participants had an overall positive attitude towards Instagram as a MALL tool for language instruction. The study may be helpful for both EFL teachers and students that wish to employ technology within their language learning. Furthermore, it sheds reasoning for curriculum designers to consider and evaluate the effectiveness of MALL tools such as Instagram in the process of language learning. The current study does however suffer from a number of limitations that need to be acknowledged. Firstly, the sample size of this study was small, although the researcher had initially planned to employ a quasi-experimental design, the constraints laid out by the COVID-19 pandemic caused the researcher to re-evaluate his research design. Secondly, a control group would have helped the researcher gain a better insight of the treatment. Thirdly, the participants of this study were either advanced or proficient learners; therefore, future research should consider varying and different sample populations across the CEFR spectrum. Fourthly, the collocations and colligations that were selected for the purpose of the study were limited in number, so future research should consider a greater quantity of such items. The limitations acknowledged for this study may affect the generalizability of the findings. It is suggested that further research explore different aspects of not only vocabulary knowledge such as intentional/incidental vocabulary learning but also other skills such as listening, and pronunciation.

Conflicts of interest

The authors have no conflicts of interest to declare.

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