

# Investigating Learners' Experience of Autonomous Learning in E-learning Context

<https://doi.org/10.3991/ijet.v17i08.29885>

Raja Muhammad Ishtiaq Khan<sup>1</sup>(✉), Ashraf Ali<sup>2</sup>, Abdullah Alourani<sup>3</sup>

<sup>1</sup>Department of Common First Year, Majmaah University, Al Majmaah, Kingdom of Saudi Arabia

<sup>2</sup>Faculty of Computer Studies, Arab Open University, A'ali, Kingdom of Bahrain

<sup>3</sup>Department of Computer Science and Information, Majmaah University, Al Majmaah, Kingdom of Saudi Arabia  
r.khan@mu.edu.sa

**Abstract**—Autonomous learning has been identified as an effective mechanism for learning. Its importance in learning has mainly been studied by placing its diverse elements and functions in supporting and encouraging learner autonomy. The outbreak of COVID-19 has signified its significance in the learning process. This study aims to investigate the learners' potential ability of the practices of autonomous learning during the implementation of E-learning. The research was carried out using a quantitative technique and a questionnaire design. An online questionnaire was used to collect data. Data were analyzed using descriptive statistics. The results of the data analysis suggested that the learners who took part in the research appeared to have a clear viewpoint on the potential ability of autonomous learning.

**Keywords**—learners autonomy, e-learning, usefulness, experiences, COVID-19

## 1 Introduction

The emergence of the COVID-19 virus has caused significant disruptions around the world, affecting social contact and association in general, as well as the educational system in particular [1, 2]. As a consequence of COVID-19, education has altered substantially, with a noticeable increase in an enforced shift to e-learning, in which instruction is done online, remotely, and on digital channels. Due to the COVID-19 outbreak, the suspension of all academic facilities in Saudi Arabia has caused sudden growth from the classical 'traditional' instructional strategy [3] to a new technique, web-based learning. Without the pandemic outbreak, our institutions and colleges couldn't have implemented E-learning education on such a large scale. [4] The Saudi government has determined that all fields collaborate in a framework to limit the occurrence of COVID-19. Therefore, on the proposal of the Ministry of Health, the Education Ministry (MoE) decided to discontinue all face-to-face educational domains in Saudi Arabia [5]. The present academic transition has put the Education Ministry in a quandary. However,

they could keep things under control by establishing a new authorized method of learning and an innovative way of web-based learning [6]. The first move toward this substantial transformation was the development of a platform to enable education continuation.

Because of the rapid growth of the Internet and readily available digital gadgets, virtual education, or e-learning, seems to have become common and influential among educators in classroom instruction. The technology significantly enhanced many academic goals [7-10]. It would support educators in improving their pedagogical content knowledge. Students who took part in e-learning were more likely to outperform those who learned conventionally, primarily in language education. The prominence of technology acceptance in the education sector has grown, particularly since the advent of the World Wide Web [11-13]. Several e-learning tools enabled EFL learners to quickly access helpful language information and interact immediately with English people. It is necessary to keep in mind that while English is widely acknowledged and spoken by several users around the globe and is regarded as a global language [14, 15].

Even though many educators recognized the value of modern technology in teaching and learning activities, many did not wholly integrate it into their teaching approaches. This is the first phase in which instructors should make preparations for their classroom teaching method. Regarding language teaching, instructors must provide a supportive atmosphere where students can feel at ease if the language is studied using the communicative teaching technique [16]. Throughout this pandemic, learners had to learn English remotely and faced severe problems. Unfortunately, universities with little or no expertise with e-learning were destined to fail when it was implemented. In addition, instructors are having difficulty navigating online platforms [17, 18]. These difficulties include inadequate infrastructure, capabilities integrated ICT, a lack of concentration and training, and limited accessibility of the Internet, sources, and materials. During the Covid-19 period, there was a paucity of and inadequate education research, notably learner autonomy [19, 20]. As a result, additional research is required to uncover individuals' issues with incorporating technology into the teaching process, particularly in English language instruction. As a result, the purpose of this study was to explore the learners' autonomy while applying e-learning during COVID-19.

## **2 Literature review**

Many approaches describe autonomy, however, the core notion of autonomy is that learners must be liable for their learning achievement [21-25]. To different individuals, the word "autonomous learning" has been interpreted in a variety of ways. For the last 3 decades, as a student-centered classroom style has been advocated, this notion has now become a focal point of emphasis [26]. Autonomous learning is described as the ability of learners to direct their learning [27]. Whereas, Holec [28] characterized learner autonomy as the capacity to take self-directed learning, in which students should be able to identify their learning goals, describe the components and advancement, choose strategies and procedures, supervise the acquisition processes, and examine what they have learned. Smith [29] made a similar point, stating that being autonomous

involves knowing able to control their education for both theoretical and practical knowledge.

With E-learning, learners could indeed control and prompt themselves to study English without being compelled or guided by others, but they're still is directly embedded within the textbook, educational establishment learning goals, course materials, and many other guidebooks to accomplish language ability (Smith, 2008). Another aspect of learner autonomy or self-directed learning as proposed by [30], is generally associated with learning via technology, such as Computer Assisted Language Learning (CALL), remote learning, and personal privilege learning. Because not all learners are capable of working independently with technology, they must be provided with coaching and mentoring approaches to enable them to do so naturally [31]. Then it is the job of the instructor or lecturer to be the educator and advisor to enhance learners' autonomy.

Another feature that promotes autonomy in learning is "relatedness" [32]. The requirements include necessity assistance, interaction, and the desire to be part of that community or group. The relatedness notion focuses on the learners' need for autonomy and belonging to a group. In a classroom setting, the instructor or lecturer and the learners must be associated or have a connection [33]. Another essential focus for developing autonomy, according to Trebbi [34], is possessing personal freedom. In a traditional classroom, students do not rely solely on their ability to respond to the lecturer's contribution. According to Benson [26], three components must be regulated to develop autonomy. The first step is to take control of the learning management system. This indicates that learners understand when, where, and how to learn their language effectively [35]. Secondly, there should be managed over educational material. Every student has a choice for which resources are appropriate for specific learning goals. Learners could also look into alternate sources rather than depending solely on the content provided by the instructor. Finally, it is a cognitive process management for mental performance, implying that learners may control psychological aspects that determine learning success, including beliefs, attitudes, and motivation [26].

The incorporation of ICT within the frame of reference of Saudi ELT was viewed as having the potential to transform and strengthen its situation since teachers would have far more resources to perform a comprehensive range of learning activities, prepare the students to continue to be involved, and establish student-centered learning opportunities [36]. Furthermore, digital phones are especially effective in fostering learner autonomy. Students could be assigned to study independently when out of the classroom and away from the instructor.

The incorporation of media has indeed been recommended to foster learner autonomy in EFL classroom settings. Media may aid to improve learning not just in the classroom but also everywhere else through digital education. Baru, et al. [37] assert media can provide a lot of linguistics and non-linguistic content by taking a different approach to introducing other languages. It implies that technology, e-media, seemed to have an important part in improving language competence throughout this instance. Furthermore, it inspired those learners to be autonomous since they could utilize their computers and devices at home to study a language. It encouraged them because e-media offered convenience over face-to-face (FTF) learning. Liaw, et al. [38] conducted

a cross-cultural email experiment with multilingual or ESL pre-service instructors, utilizing the same way of learning via e-media that was email. When interacting with the US pre-service instructors via email, the Taiwanese students required less assistance from the instructor and received a variety of cultural information.

Teacher-based strategies shift the emphasis from student activities to teacher activities; these are related to instructors being educated and taught to comprehend student autonomy and design approaches to improve it. As a result, the emphasis, in this case, is on continuing education and enhancing teachers' skills and knowledge. Teachers should be able to change their conventional or fundamental beliefs about effective teaching in this manner. They will be aware of promoting activities that promote learner autonomy in the classroom [39]. This suggests that they should grasp the concept of teacher autonomy in addition to learner autonomy [26]. Learner autonomy can indeed be promoted in a variety of methods and to various extents "depending on the individual and learning " [40].

Autonomy-promoting instructional activities are primarily based on learner-centered techniques emphasizing collaboration, learners' engagement, and student engagement. However, Saudi education has frequently been criticized for its instructor method, which discourages team projects. Recent studies on this topic have indeed been made available due to multiple research performed by Saudi researchers ([41-44]. According to these investigations, the practice of instructors transferring knowledge is still prevalent in Saudi English language instruction. Now the enforced learning has changed the instruction of delivering contents and lecturers. In the last two years, learners have had to rely on their self-directed learning, promoting their autonomy.

Language instruction may comprise students of varying talents and abilities, and it is anticipated that not all students will develop learning at the same rate. Providing learners the option of working cooperatively with others or separately has been acknowledged as essential to increasing learner autonomy [45]. Teachers have sent and uploaded the material through various platforms during the suspension of the classes. Some of the media also offer discussion forums and a collaborative learning environment. According to Priyatno [46], another idea that supports the advantages of using e-media in mobile learning is that it is highly successful in enhancing autonomous learning in language acquisition. The rationale for this includes mobile learning allowing learners to show control of their learning by choosing the optimum time, location, and pace. It also improves student interaction and collaborative learning involving teachers and students, as well as between classmates.

Furthermore, Khoosf and Khosravani [47] claimed that learners' freedom is necessary for a practical language learner. Autonomy is derived from the individual's psychological processing, whereas competence is built in the social situation, and proficiency possesses both conditions. The concepts of learner autonomy and self-directed learning are occasionally intertwined and have become particularly prominent in language teaching [48].

Some instructors, however, were found to have a lack of awareness and misunderstandings about the notion, like considering it as an inborn ability or a potential to reduce teacher burden by allowing learners to study without the instructor [49]. Furthermore, several students were found to be overly reliant on their teachers. As a result,

they remained unfamiliar with the idea and were not prepared to operate as self-directed learners [50]. This necessitated awareness and varied perceptions of the notion of learner autonomy both among students and instructors involved in developing learner autonomy in the classrooms [51]. Moreover, complications and challenges in developing learner autonomy in English language learning have been identified as related to the rigid framework for learning. There is only a limited amount of time to complete the curriculum's academic achievement. Many instructional methods centered on preparing learners to take the national exam, including STEP and IELTS was considerably low. As a result, while learner autonomy was seen as a desirable notion, its implementation is questioned.

The covid-19 outbreak has brought up some unanticipated adjustments and new educational experiences for both instructors and learners. Learners who hardly utilize mobile technology to learn are now required to use their mobile to obtain learning material. Instructors who had never considered using an online resource to conduct a lesson, interact with, and communicate with learners are now being compelled to become familiar to integrate this technology. Independent learners should establish the tendency to participate with, engage with, and gain knowledge situations that an instructor does not explicitly administer. During the last two years, students were forced to study online, and in some cases, they were sent the material and assignments to accomplish the educational task. The present study is an attempt to determine the learners' autonomy perception during E-Learning. To this end study focuses on the following research questions:

- What activities and platforms are learners engaged in during E-learning implementation?
- What is the learners' perception of the potential learners' autonomy and its effectiveness?

### **3 Methodology**

The research was carried out using a quantitative technique and a survey questionnaire. A researcher uses questionnaires to collect quantitative data, then statistically analyze it to discover or evaluate individual ideas, beliefs, opinions, attitudes, or characteristics [52]. The study included 89 participants in total. They were common first-year students from various locations in Saudi Arabia. They all have high-speed internet access, ensuring their digital equity. Many of them (91.06 percent) also lived in areas with a fair to a good internet connection. The students were invited to participate in the study and filled out the online questionnaire via WhatsApp. The questionnaire was created using Google forms. The questionnaire was adapted from the research (Hidayati, & Husna) and tailored to the participants' context. The questionnaire was forwarded to four experts in the field to ensure its applicability.

They analyzed all the items and suggested modifications. Their recommendations were taken into consideration and then distributed to participants. The questionnaires were due back in 10 days; thus participants had ten days to complete them. It was first sent to 113 students, but only 89 responded. The learners' replies were computed in

Excel and then transformed into SPSS for analysis. Before data analysis, a reliability analysis was performed—the questionnaire's reliability was.81, which is regarded as reliable.

**Table 1.** Activities and platforms used during e-learning

No	Items	Platforms or App Used	
1	Online Learning Gadgets	Laptop/PC and smartphones interchangeably	33.1%
		Smartphone frequently	31.9%
		Only smartphones	32.9%
		PC or Laptop only	4.1%
2	Learning Platforms and applications	Blackboard	39.1%
		Teams	8.5 %
		Google Meet	19.1
		WhatsApp	28.9%
		Others (MOOC, Zoom, etc.)	6.5%
		Combination of WhatsApp and BB	25.1%
3	Learning Material	Combination of Teachers' online and recorded lessons	63.1%
		Books and notes suggested by the teacher	17.9%
		Material from various websites	12.9 %
		Learning App	6.1%
4	Learning Process	Video Lesson followed exercises	48.1%
		Teachers' led instruction for all exercises	33.8%
		Other Tasks	19.1%
5	Activities	Individual tasks on all four skills	26.2%
		An individual task only(Assignment/Home Work/short Quiz activities)	32.8%
		Use of Discussion boards on BB	32.8%
		Group activities	8.2%

Learners' experiences were evaluated using learning gadgets, learning platforms, learning material, learning process, and activities. The results revealed that most students tended to rely primarily on their smartphones (31.9 %) when participating in online instruction—however, a considerable number of the participants (33.1% their smartphones and laptops alternately. The learning media employed appeared to differ from one another. More than 50 % of students mentioned that their instructor only used WhatsApp (28, 9%) or BB (39.1%) to deliver the lecture. In contrast, nearly half of the other students remarked receiving English lessons through a combination of different applications.

Likewise, the way learners participated was also varied in the learning instruction. A considerable number of the learners (63.1%) received learning resources in varied ways, including educational applications, material for the web, teachers prepared material, and form textbooks. In the same way, learners (33.1%) relied on the video lesson either uploaded by the teacher or through online instruction during the scheduled time. This asserts that learners primarily relied on the teacher and did not rely on studying independently. However, considerable numbers (19.1%) of the learners looked at other

sources with individual tasks and assignments in the learning process. Most of the learners (32.8%) performed personal activities as homework and assignments regarding learning activities. A considerable number of the respondents (26.2%) had different activities for four language skills.

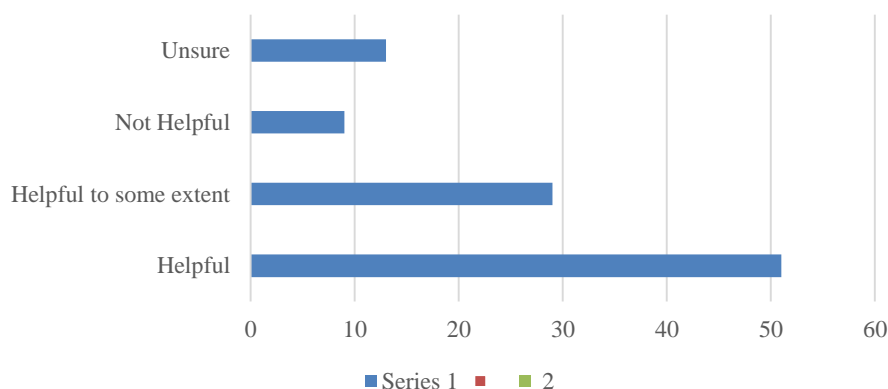
Similarly, a large number of the learners (32.8%) indicated that they had used discussion boards, which is an essential feature of the BB, allowing learners to discuss and interact with the teachers and learners and practice their own. The students generally remarked that they communicated with the instructor and their peers. It was most feasible via chat on the learning platform utilized (35,21 percent), but they also mentioned interacting with instructors via messaging on WhatsApp whenever they had problems. Table 2 present the learners' potential autonomy during online learning.

**Table 2.** Learners potential autonomy

	Items	M	SD
1	I would like to have a choice of learning options during online learning	3.92	0.76
2	I am capable to locate my weakness in EFL during online learning	2.93	0.67
3	I want to have a choice of selection of tasks and assignment	3.62	0.71
4	I would like to sort out other learning resources rather than suggested by the teacher during online learning	2.13	1.31
5	I enjoy being asked for my thoughts on the learning process during online learning	3.55	0.73
6	I want to take part in choosing learning process during online learning	3.99	0.71
7	I am capable to recognise my strength during online learning	3.61	0.73
8	I set targets in my learning during online learning	3.62	0.83
9	I can choose what to study next during online learning	3.59	0.79
10	I like to the part in decision making on learning targets during online learning	3.57	0.77
11	I am confident in planning my learning during online learning	3.48	0.82
12	I am capable of setting targets of my learning during online learning	3.51	0.74
13	I can propose tasks for classwork during online learning	3.71	0.76
14	I want to be a part of decision making on choosing learning activities	3.99	0.71
15	I am capable of evaluating my learning during online learning	3.33	0.98
16	I can complete the activities on my own without teacher instruction	2.71	1.08
18	I would like to learn independently after the online schedule of learning	3.29	0.90
19	I can prepare and access my task during online learning	2.12	0.99
20	I can study independently without much association with the teacher during online learning	3.01	1.11

Students' replies on the questionnaire portion evaluating their ability to learn independently revealed that the majority of students (61 %) had a high capability to learn autonomously. Seven of them (7.8%) indicated high capability to learn independently. There have been no learners who were determined to have no aptitude to be independent learner, although 15 students (16.8%) demonstrated a moderate potential towards autonomous learning. Among some of the components depicting autonomy in learning, aspects related to making a choice, recognizing a problem, having the freedom of choice, and being engaged in planning learning process had an average mean of more

than 3.7, which indicated that learners are on the point of agreement on the items presented to them to determine their potential learning autonomy. Learners were in more agreement on the element of choosing their learning process with a mean score of 3.99. However, learners indicated (M= 2.13 SD= 1.13) less potential to sort out other learning resources rather than suggested by the teacher during online learning. Likewise, their potential to evaluate their learning process emerged at a lower level. Figure 1 indicates the learner perceptions on the usefulness of being autonomous in the learning process.



**Fig. 1.** Perceived usefulness of learner autonomy

It is vital from the learners' response that more than half (n=52) regard learner autonomy as helpful in promoting their learning. Likewise, nearly one-third (n=29) of the learners regard it as helpful to some extent during online learning. However, some of the learners (n=9) marked it not helpful in learning and notable numbers (n=13) were unsure about the usefulness of the learner autonomy for fostering the learning process.

## 4 Discussion

Considering the results into consideration, the present study revealed a potential progression of the autonomy learner. Learner autonomy takes on a number of scenarios from the learners' viewpoint. In overall, most of the autonomy characteristics mentioned in the survey were ranked with an overall average of 3.7 signifies that the respondents tend to agree with statements given. Furthermore, themes associated to a desire for making a choice in learning and achieving tasks, autonomously, accessing educational material, and being a part in deciding the educational process were rated higher than other categories presented in the questionnaire. These characteristics are fundamental in learner autonomy and function as markers of autonomy [53]. The findings contradict previous research, which concluded that the large proportion of students had a significant reliance on the instructor and were not able to handle situations as self-directed learner. One reasonable explanation for this inconsistency is that the present



study involved fewer participants. Several learners seemed to identify autonomy with independence and freedom, rather than with the concept of learning freely; this was observed in Hamad [54] study of Kurdish learners, where respondents identified learner autonomy with freedom. Moreover, many students perceived learner autonomy as a form of freedom of choice.

Furthermore, due to the pandemic, all learners had some knowledge and exposure of and appeared to already have adequate access to information and knowledge. It was demonstrated by data analysis, which revealed that learners' interactive learning experiences influence overall self-rated capability to study autonomously to a certain level. As a consequence, this conclusion could not be taken into account. Gharti [30] characterized an independent learner as being self - determined, willing to take responsibility of their learning, establishing learning goals, contributing to in setting learning directions, identifying individual strengths and weaknesses, understanding when, why, and how learning specific knowledge and also what learning materials could be used, able to adapt to a study environment, using relevant interventions, monitoring their learning development, working collaboratively, and seeking assistance when necessary. Many of these characteristics could not be recognized in the current study since participants have only been prompted to response to a statement on the questionnaire. They were also not properly assessed based on the actual application of these characteristics. As a result, while an evidence of autonomy was identified among the learners, it is likely more acceptable to characterize it as a reactive autonomy rather than proactive autonomy [23].

Another aspect of this autonomous development that needed to be considered seriously, was the situations of no alternative of the education as a result of the pandemic. Therefore, the learners established the practice of discovering new alternatives for autonomous learning in order to complete all of the work allocated despite the absence of an instructor. Consequently, this approach will become more challenging than frustrating for learners have become used to having their instructor there - a specific concern raised by children attending in the current study concerning their online learning exposure. In this aspect, learners should be equipped with autonomous motivation, such as responding to their thoughts and recommendations, permitting them to assert an input, recognizing their viewpoints, identifying their learning speed, and actively interacting with individuals, in order to ensure autonomy development. Learners' discomfort can be reduced, engagement can be enhanced, and a sense of independence in learning might emerge with autonomous motivation [36]. According to Althaqafi [55], the notion of learner autonomy is fairly recent to Saudi instructors and learners, in which the dominant pedagogical approach is for learners to observe rather than interact with other students. Put into the context of cultural progress, conventional instructional practices can be viewed as causing some misunderstanding among learners; their ambitions may be considered high in regard of element of choice. Learning autonomously may not be suitable for every student, so it is probably to be reliant on the amount of support obtained through others, such as the classmates and teachers.

## **5 Conclusion**

The results of the present study suggest that there were significant indicators of autonomous activities during distant learning. Generally, the findings demonstrate when inquired about the effectiveness of learner autonomy in the present scenario of an online environment, students marked it as a useful strategy to enhancing their learning progress. Participants indicated a great enthusiasm and desire to develop learner autonomy and want to participate in preparing classroom activities and tasks. Considering learners' requirements and preferences for activities and pedagogies is essential to increasing students' autonomy and engagement. Learners realized that they would not be able to participate in the online learning process until they had sufficient opportunity to improve the language and enhance overall communication in developing language abilities. Students indicated that collaboration, as well as online activities and discussion, were useful elements that they intend to practice in their learning process.

Some researchers have argued that the covid-19 epidemic could help in paving the way for implementing and reforming E-learning. This situation has also enabled students to demonstrate their learning independence [19, 56-58]. The findings of this study have also validated this viewpoint. Despite the limitations of online, E-learning, or remote learning due to a lack of human interaction, both instructors and learners are increasingly responding to this education paradigm. Instructors' educational approach is becoming more varied, and learners are considering studying through technological applications increasingly engaging.

The findings, however, require careful consideration. It's indeed important to note that the participants who took part in this study were forced to opt for the online learning option. Nevertheless, one encouraging aspect would be that the majority of participants have a high ability to be self-directed learners. Despite all of the existing problems and difficulties associated with online learning, the present investigation findings shed light on the possibility of recognizing, interacting with online learning and encouraging autonomy within the context of Saudi EFL in particular, and online instruction in all domains of Saudi education in general. However, this investigation had a small sample size and did not entirely quantify learners' autonomy level. Further research with a larger number of participants is essential to explicitly investigate learners' autonomous activity and perspectives regarding E-learning and Learners' autonomy. This research concentrates on learner autonomy from the perspective of Saudi male learners. More research on learner autonomy in Saudi female contexts could be performed to expand the finding of the present attempt. Another study is operative to compare the gender differences in learners' autonomy during E-learning and collaborative learning environments.

## **6 Acknowledgment**

The authors would like to thank the Deanship of Scientific Research at Majmaah University for supporting this work under project No: R-2022-64.

## 7 References

- [1] M. Alawamleh, L. M. Al-Twait, and G. R. Al-Saht, "The effect of online learning on communication between instructors and students during Covid-19 pandemic," *Asian Education and Development Studies*, 2020. <https://doi.org/10.1108/AEDS-06-2020-0131>
- [2] J. Thongbunma, P. Nuangchalerm, and S. Supakam, "Secondary teachers and students' perspectives towards online learning amid the COVID-19 outbreak," *Gagasan Pendidikan Indonesia*, vol. 2, pp. 1-9, 2021. <https://doi.org/10.30870/gpi.v2i1.10524>
- [3] A. AlKhunzain and R. Khan, "The Use of M-Learning: A Perspective of Learners' Perceptions on M-Blackboard Learn," 2021. <https://doi.org/10.3991/ijim.v15i02.17003>
- [4] B. M. Amarnah, M. T. Alshurideh, B. H. Al Kurdi, and Z. Obeidat, "The Impact of COVID-19 on E-learning: Advantages and Challenges," in *The International Conference on Artificial Intelligence and Computer Vision*, 2021, pp. 75-89. [https://doi.org/10.1007/978-3-030-76346-6\\_8](https://doi.org/10.1007/978-3-030-76346-6_8)
- [5] M. Hassounah, H. Raheel, and M. Alhefzi, "Digital response during the COVID-19 pandemic in Saudi Arabia," *Journal of Medical Internet Research*, vol. 22, p. e19338, 2020. <https://doi.org/10.2196/19338>
- [6] R. A. Moawad, "Online learning during the COVID-19 pandemic and academic stress in university students," *Revista Românească pentru Educație Multidimensională*, vol. 12, pp. 100-107, 2020. <https://doi.org/10.18662/rrem/12.1sup2/252>
- [7] M. Shahbaz and R. M. I. Khan, "Use of mobile immersion in foreign language teaching to enhance target language vocabulary learning," *MIER Journal of Educational Studies Trends & Practices*, pp. 66-82, 2017.
- [8] R. M. I. Khan, N. Radzuan, S. Farooqi, M. Shahbaz, and M. Khan, "Learners' Perceptions on WhatsApp Integration as a Learning Tool to Develop EFL Spoken Vocabulary," *International Journal of Language Education*, vol. 5, pp. 1-14, 2021. <https://doi.org/10.26858/ijole.v5i2.15787>
- [9] R. M. I. Khan, T. Kumar, T. Supriyatno, and V. Nukapangu, "The Phenomenon of Arabic-English Translation of Foreign Language Classes During The Pandemic," *Ijaz Arabi Journal of Arabic Learning*, vol. 4, 2021. <https://doi.org/10.18860/ijazarabi.v4i3.13597>
- [10] N. T. H. Giang, "Evaluating Feasibility and Effectiveness of Digital Game-Based Instructional Technology," *International Journal of Emerging Technologies in Learning*, vol. 16, 2021. <https://doi.org/10.3991/ijet.v16i16.23829>
- [11] M. Levy, "Technology in the classroom," *The Cambridge guide to pedagogy and practice in second language teaching*, pp. 279-286, 2012. <https://doi.org/10.1017/9781009024778.035>
- [12] R. Farwati, K. Metafisika, I. Sari, D. S. Sitinjak, D. F. Solikha, and S. Solfarina, "STEM education implementation in Indonesia: a scoping review," *International Journal of STEM Education for Sustainability*, vol. 1, pp. 11-32, 2021. <https://doi.org/10.53889/ijses.v1i1.2>
- [13] M. Kurni and K. Saritha, "Applying Collaborative Learning for Enhancing the Teaching-Learning Process in Online Learning through Social Media," *International Journal of Emerging Technologies in Learning*, p. 251, 2021. <https://doi.org/10.3991/ijet.v16i16.23207>
- [14] D. Northrup, *How English became the global language*: Springer, 2013. <https://doi.org/10.1057/9781137303073>
- [15] R. M. I. Khan, N. R. M. Radzuan, M. Shahbaz, and A. H. Ibrahim, "EFL Instructors' Perceptions on the Integration and Implementation of MALL in EFL Classes," *International Journal of Language Education and Applied Linguistics*, pp. 39-50, 2018.

- [16] D. Chun, R. Kern, and B. Smith, "Technology in language use, language teaching, and language learning," *The Modern Language Journal*, vol. 100, pp. 64-80, 2016. <https://doi.org/10.1111/modl.12302>
- [17] H. Rana and M. Lal, "E-learning: Issues and challenges," *International Journal of Computer Applications*, vol. 97, 2014. <https://doi.org/10.5120/17004-7154>
- [18] R. M. I. Khan, M. S. Khan, I. Khan, and M. M. A. Al-Fadl, "TEACHERS' PERCEPTION ON E-LEARNING IMPLEMENTATION: A PERSPECTIVE OF PAKISTANI TEACHERS," *Journal of ISOSS*, vol. 7, pp. 67-78, 2021.
- [19] F. A. Ghazali, "Challenges and Opportunities of Fostering Learner Autonomy and Self-Access Learning During the COVID-19 Pandemic," *Studies in Self-Access Learning Journal*, vol. 11, 2020. <https://doi.org/10.37237/110302>
- [20] Y. Zhao and Y. Luo, "Autonomous learning mode based on a four-element teaching design for visual communication course," *International Journal of Emerging Technologies in Learning (IJET)*, vol. 15, pp. 66-82, 2020. <https://doi.org/10.3991/ijet.v15i19.17399>
- [21] S. S. Najeeb, "Learner autonomy in language learning," *Procedia-Social and Behavioral Sciences*, vol. 70, pp. 1238-1242, 2013. <https://doi.org/10.1016/j.sbspro.2013.01.183>
- [22] P. Benson, "Concepts of autonomy in language learning," *R. Pemberton, E. Li, W. Or, & H. Pierson. Taking control. Autonomy in language learning*, pp. 27-34, 1996.
- [23] C. Balcikanli, "Learner autonomy in language learning: Student teachers' beliefs," *Australian Journal of Teacher Education (Online)*, vol. 35, pp. 90-103, 2010. <https://doi.org/10.14221/ajte.2010v35n1.8>
- [24] O. Yagcioglu, "New approaches on learner autonomy in language learning," *Procedia-Social and Behavioral Sciences*, vol. 199, pp. 428-435, 2015. <https://doi.org/10.1016/j.sbspro.2015.07.529>
- [25] N. T. Nguyen, "Learner autonomy in language learning: Teachers' beliefs," Queensland University of Technology, 2014.
- [26] P. Benson, "Learner autonomy," *TESOL quarterly*, vol. 47, pp. 839-843, 2013. <https://doi.org/10.1002/tesq.134>
- [27] L. Lee, "Autonomous learning through task-based instruction in fully online language courses," *Language Learning & Technology*, vol. 20, pp. 81-97, 2016.
- [28] H. Holec, *Autonomy and foreign language learning*: ERIC, 1979.
- [29] R. Smith, "Learner autonomy," *ELT journal*, vol. 62, pp. 395-397, 2008. <https://doi.org/10.1093/elt/ccn038>
- [30] L. Gharti, "Self-Directed Learning for Learner Autonomy: Teachers' and Students' Perceptions," *Journal of NELTA Gandaki*, vol. 1, pp. 62-73, 2019. <https://doi.org/10.3126/jong.v1i0.24461>
- [31] V. Balakrishnan and C. L. Gan, "Students' learning styles and their effects on the use of social media technology for learning," *Telematics and Informatics*, vol. 33, pp. 808-821, 2016. <https://doi.org/10.1016/j.tele.2015.12.004>
- [32] M. K. Hartnett, "Influences that undermine learners' perceptions of autonomy, competence and relatedness in an online context," *Australasian Journal of Educational Technology*, vol. 31, 2015. <https://doi.org/10.14742/ajet.1526>
- [33] G. Hagenauer and S. E. Volet, "Teacher-student relationship at university: an important yet under-researched field," *Oxford review of education*, vol. 40, pp. 370-388, 2014. <https://doi.org/10.1080/03054985.2014.921613>
- [34] T. Trebbi, "Freedom—a prerequisite for learner autonomy? Classroom innovation and language teacher education," *Learner and teacher autonomy: Concepts, realities, and responses*, pp. 33-46, 2008. <https://doi.org/10.1075/aals.1.06tre>

- [35] J. P. Huang and P. Benson, "Autonomy, agency and identity in foreign and second language education," *Chinese Journal of Applied Linguistics*, vol. 36, pp. 7-28, 2013. <https://doi.org/10.1515/cjal-2013-0002>
- [36] T. Hidayati and F. Husna, "Learning English from Home during the COVID-19: Investigating Learners' Experience for Online and Autonomous Learning," *Langkawi: Journal of The Association for Arabic and English*, vol. 6, pp. 202-217, 2020. <https://doi.org/10.31332/lkw.v0i0.2223>
- [37] M. Baru, W. N. Tenggara, and M. Mataram, "Promoting Students' Autonomy through Online Learning Media in EFL Class," *International Journal of Higher Education*, vol. 9, pp. 320-331, 2020. <https://doi.org/10.5430/ijhe.v9n4p320>
- [38] S.-S. Liaw, M. Hatala, and H.-M. Huang, "Investigating acceptance toward mobile learning to assist individual knowledge management: Based on activity theory approach," *Computers & Education*, vol. 54, pp. 446-454, 2010. <https://doi.org/10.1016/j.compedu.2009.08.029>
- [39] L. T. C. Nguyen and Y. Gu, "Strategy-based instruction: A learner-focused approach to developing learner autonomy," *Language Teaching Research*, vol. 17, pp. 9-30, 2013. <https://doi.org/10.1177/1362168812457528>
- [40] M.-K. Lee, "To be autonomous or not to be: Issues of subsuming self-determination theory into research on language learner autonomy," *tesol QUARTERLY*, vol. 51, pp. 220-228, 2017. <https://doi.org/10.1002/tesq.343>
- [41] S. M. Alonazi, "The Role of Teachers in Promoting Learner Autonomy in Secondary Schools in Saudi Arabia," *English Language Teaching*, vol. 10, pp. 183-202, 2017. <https://doi.org/10.5539/elt.v10n7p183>
- [42] F. Alrabai, "Saudi EFL Teachers' Perspectives on Learner Autonomy," *International Journal of Linguistics*, vol. 9, pp. 211-231, 2017. <https://doi.org/10.5296/ijl.v9i5.11918>
- [43] N. Almusharraf, "Perceptions and Application of Learner Autonomy for Vocabulary Development in Saudi EFL Classrooms," *International Journal of Education and Practice*, vol. 9, pp. 13-36, 2021. <https://doi.org/10.18488/journal.61.2021.91.13.36>
- [44] A. A. F. Alzubi, "The Role of Mobile Technologies in Impacting Learner Autonomy in an EFL Context: A Systematic Review," *International Journal of Computer-Assisted Language Learning and Teaching (IJCALLT)*, vol. 11, pp. 56-73, 2021. <https://doi.org/10.4018/IJCALLT.2021070104>
- [45] T. Lewis, "Learner autonomy and the theory of sociality," in *Social dimensions of autonomy in language learning*, ed: Springer, 2014, pp. 37-59. [https://doi.org/10.1057/9781137290243\\_3](https://doi.org/10.1057/9781137290243_3)
- [46] A. Priyatno, "Promoting learner autonomy through Schoology m-learning platform in an EAP class at an Indonesian university," *Teaching English with Technology*, vol. 17, pp. 55-76, 2017.
- [47] S. G. Khoosf and M. Khosravani, "Introducing email portfolio as a means of developing EFL learner's autonomy," *Procedia-Social and Behavioral Sciences*, vol. 98, pp. 504-512, 2014. <https://doi.org/10.1016/j.sbspro.2014.03.446>
- [48] A. S. Fatimah, "Portraying Learner's Autonomy in Extensive Reading Classroom," *OKARA: Jurnal Bahasa dan Sastra*, vol. 13, pp. 35-46, 2019. <https://doi.org/10.19105/ojbs.v13i1.2228>
- [49] D. Agustina, "Teachers' understanding of learner autonomy in Indonesian contexts: Findings from high schools and their implications," *LLT Journal: A Journal on Language and Language Teaching*, vol. 20, pp. 127-132, 2017. <https://doi.org/10.24071/llt.2017.200206>
- [50] C. Fauzi, M. Basikin, D. Sh, and G. Kassymova, "Exploring efl student teachers readiness and gender differences of learner autonomy," *Научный журнал «Вестник НАН РК»*, pp. 288-299, 2020. <https://doi.org/10.32014/2020.2518-1467.34>

- [51] W. Shi and L. Han, "Promoting Learner Autonomy through Cooperative Learning," *English Language Teaching*, vol. 12, pp. 30-36, 2019. <https://doi.org/10.5539/elt.v12n8p30>
- [52] H. Chih-Pei and Y.-Y. Chang, "John W. Creswell, research design: Qualitative, quantitative, and mixed methods approaches," *Journal of Social and Administrative Sciences*, vol. 4, pp. 205-207, 2017.
- [53] S. Bliidi, *Collaborative learner autonomy*: Springer, 2017. <https://doi.org/10.1007/978-981-10-2048-3>
- [54] K. A. Hamad, "Understanding the Situation of Learner Autonomy within the Context of Higher Education in Kurdistan-Iraq," 2018.
- [55] A. S. Althaqafi, "Culture and Learner Autonomy: An Overview from a Saudi Perspective," *International Journal of Educational Investigations (IJEI)*, vol. 4, pp. 39-48, 2017.
- [56] S. Borg and Y. Alshumaimeri, "Language learner autonomy in a tertiary context: Teachers' beliefs and practices," *Language Teaching Research*, vol. 23, pp. 9-38, 2019. <https://doi.org/10.1177/1362168817725759>
- [57] C. Lai, "Technology and learner autonomy: An argument in favor of the nexus of formal and informal language learning," *Annual Review of Applied Linguistics*, vol. 39, pp. 52-58, 2019. <https://doi.org/10.1017/S0267190519000035>
- [58] Y. B. Rajabalee and M. I. Santally, "Learner satisfaction, engagement and performances in an online module: Implications for institutional e-learning policy," *Education and Information Technologies*, vol. 26, pp. 2623-2656, 2021. <https://doi.org/10.1007/s10639-020-10375-1>

## 8 Authors

**Raja Muhammad Ishtiaq Khan** is an English Lecturer at Majmaah University, KSA. He has a Cambridge CELTA certification in teaching and has 10+ years of experience in ESL and EFL. He holds PhD degree in Applied Linguistics. His research includes Applied Linguistics, MALL, L2 Vocabulary Learning and Teaching, Second Language Acquisition, and EFL teaching. He has published the number of papers in various reputed journals (email: r.khan@mu.edu.sa).

**Ashraf Ali** is an Assistant Professor at the Faculty of Computer Studies, Arab Open University, Kingdom of Bahrain. He holds Ph.D. degree Computer Science and Engineering. He has 13+ years of experience in teaching at the various universities around the world including Saudi Arabia, Yemen, Oman, and Bahrain. His research interest includes Cloud Computing, Web Mining, Web Information Retrieval, Semantic Web, Semantic Similarity, and Artificial Intelligence. He has published number of articles in the various journal of repute (email: ashraf.ali@aou.org.bh).

**Abdullah Alourani** is an assistant professor at the department of computer science and information of Majmaah University in Saudi Arabia. He received his Ph.D. in Computer Science from the University of Illinois at Chicago, his Master's degree in Computer Science from DePaul University in Chicago. His current research interests are in the areas of Cloud Computing, Distributed Systems, and Software Engineering. He is a member of ACM and IEEE (email: a.alourani@mu.edu.sa).

Article submitted 2022-02-01. Resubmitted 2022-03-03. Final acceptance 2022-03-03. Final version published as submitted by the authors.