

Research Paper

High School Students' Perceptions of Learning English Online: Satisfaction, Perceived Learning, and Challenges

Haniye Seyri¹ , Roya Jafari², Ali Amjadi³ ¹ Ph.D. Candidate, Faculty of Foreign Languages and Literatures, University of Tehran, Iran² Ph.D. Candidate, Faculty of Foreign Languages and Literatures, University of Tehran, Iran³ Ph.D. Candidate, Department of English Language and Literature, Hakim Sabzevari University, Iran

10.22080/ISELT.2022.23662.1037

Received:

June 4, 2022

Accepted:

August 6, 2022

Available online:

September 15, 2022

Keywords:Online learning;
Satisfaction; Perceived
learning; Self-efficacy;
Interaction

Abstract

Given the significance of online learning, various factors influencing students' satisfaction and perceived learning have been explored by researchers. However, online learning for Iranian public high schools has never been held until recently due to the Coronavirus outbreak. Accordingly, the present study aims at investigating EFL learners' perceptions of English online learning classes using a semi-structured interview. The participants of this study were 15 female high school students, within the age range of 16-18, who had been recently taught Vision Series for their required English course online. In order to analyze the data, a hybrid process of inductive and deductive thematic analysis was conducted. In the deductive phase of analysis, a model of students' satisfaction and perceived learning was utilized, and new themes, in the inductive phase, emerged from the data. The analysis of the data revealed that the students were satisfied with online learning through exercising self-efficacy, learner-content interaction, and learner-instructor interaction. Moreover, the students believed that the course resulted in optimal learning of the materials presented to them; however, they confronted some challenges including Internet access, software requirements, and engagement problems. The findings of the present study will be of interest to teachers and those in charge of holding online classes to employ strategies to improve the effectiveness of online classes.

***Corresponding Author:** Haniye Seyri**Address:** Faculty of Foreign Languages and
Literatures, University of Tehran, 16th Azar St.,
Enghelab Sq., 1417935840, Tehran, Iran**Email:** haniye.seyri@ut.ac.ir**Tel:** +989128930218

1 INTRODUCTION

Due to the ever-growing tendency to use the Internet, online learning has gained a promising stance in educational uses of technology (Bates, 2019; Cigdem & Yildirim, 2014). As the demand for online courses in educational settings increases (Wei & Chou, 2020), so does the quest for investigating various factors such as distance learning interaction and online learning self-efficacy which play a determining role in online learning student satisfaction and overall perceived learning (Alqurashi, 2019). Satisfaction is viewed as how learners perceive their online learning experiences. The significance of students' satisfaction in determining learners' dropout rates, motivation and inspiration to complete an online course, and achieving success has been attested by many studies (Ali & Ahmad, 2011; Alqurashi, 2019; Yukselturk & Yildirim, 2008). In a similar vein, perceived learning is another core criterion for any online course evaluation which is defined as someone's judgment about how their knowledge and understanding are constructed (Rovai, 2002). Perceived learning also affects students' grades (Rockinson-Szapkiw et al., 2016) and students' active participation in online classes (Fredericksen et al., 2019), meaning that students who have mastered the learning material willingly participate more in online classes. Therefore, investigating the influential factors in perceived learning contributes to the improvement of online classes and the enhancement of students' learning outcomes (Alavi et al., 2002).

One factor influencing students' satisfaction and perceived learning in online settings is interaction (Alqurashi, 2019; Cho & Kim, 2013; Kuo et al., 2013) which is perceived to be a reciprocal event through which the learner and a part of the

learning environment exert a joint effort to approach an educational goal (Wagner, 1994). Drawing on Moore's (1989) tripartite conception of interaction in distance education, three different patterns of interaction namely, student-student interaction, student-instructor interaction, and student-content interaction are identified. According to Moore, student-student interaction revolves around interaction among individual students or students in small groups; student-instructor interaction is an attempt to foster the interaction between the instructor and learners; student-content interaction refers to the interaction of learners with the content which contributes to learners' comprehension of the material. Self-efficacy, another vital element in gauging students' satisfaction and perceived learning, plays a pivotal role in online instruction milieus (Alqurashi, 2019; Shen et al., 2013). Self-efficacy can be defined as a person's belief in their capabilities to take action and achieve the desired outcomes (Burger, 2019). According to Alqurashi (2019), self-efficacy helps learners confront challenging tasks easier and provides opportunities for enhancing their skills which will eventuate in achieving good results and, consequently, more satisfaction.

Given the significance of satisfaction and perceived learning in online classes, these concepts merit attention since investigating satisfaction and perceived learning provides opportunities for improvement and enhancement of online classes (Kuo et al., 2014). Additionally, despite the fact that online learning has gathered momentum in recent years, it has not officially obtained a firm position in Iranian high school contexts until recently due to the outbreak of Coronavirus which put the instructors in dire need of holding

online classes to compensate for the absence of face-to-face instruction. Accordingly, there have been few, if any, studies investigating perceptions of EFL learners towards high school online learning classes in the educational contexts of Iran. In order to fill this void, the present study aimed at gauging learners' perceptions of English online classes. In doing so, students' satisfaction and perceived learning are considered with regard to the role of online learning self-efficacy, student-instructor interaction, and student-content interaction based on the model proposed by Alqurashi (2019)—it should be noted that since student-student interaction is not a good predictor of student satisfaction and perceived learning (Alqurashi, 2019), the current paper eschewed student-student interaction.

2 LITERATURE REVIEW

The theoretical underpinning guiding the current study suggests that satisfaction and perceived learning within online learning environments can be predicted by students' interaction and self-efficacy (Alqurashi, 2019). The present study defines satisfaction within online learning environments as the extent to which students' experience of online learning is consistent with their learning values and needs (Jiang et al., 2021) and perceived learning as students' judgment about the changes in their knowledge and understanding after experiencing online learning (Alqurashi, 2019).

In an educational context, online interaction is a meaningful relationship that students develop and maintain online to build up their knowledge (Diep et al., 2017; Meredith, 2019). This relationship manifests itself as the interaction with course contents and instructors. The review of the literature demonstrates that

only a few studies have been conducted on the role of interaction in students' satisfaction and perceived learning in online learning environments (Cho & Kim, 2013; Kuo et al., 2013; Mahle, 2011; Park & Choi, 2009). For example, Chen and Chen (2007) investigated the significance of interaction in learners' satisfaction and found that there was a positive relationship between interaction and learners' satisfaction. In another study, Dennen et al. (2007) examined the influence of instructor actions on the success of online courses. Their results indicated that learners' satisfaction relied on their feelings toward the interaction they had with instructors. Similarly, Sher (2009) focused on students' satisfaction with web-based online learning programs at a university in Washington. His results showed that instructor-learner interaction was a significant predictor of students' satisfaction. Examining 147 learners taking online courses, Park and Choi (2009) also suggested that interaction can play a significant role in determining students' satisfaction and motivation. On a similar note, Sebastianelli et al. (2015) investigated various variables contributing to perceived learning, satisfaction, and course quality; the results revealed that course content can affect perceived learning. In a more recent study, Parahoo et al. (2016) used focused grouped interviews to explore students' satisfaction. The results showed that students' interactions with staff, instructors, and classmates had a major role in students' satisfaction. In the same vein, Landrum et al. (2020) explored how students evaluated their satisfaction with online courses via adopting focused group interviews. The results indicated that their satisfaction was relevant to their concerns including time, space of online learning, motivation, and role of interaction with instructors. Thus, interaction, specifically learner-instructor interaction

and learner-content interaction, can play a part in identifying students' satisfaction and perceived learning within online learning environments.

Self-efficacy, another component in students' learning, is directly interrelated with the level of performance and rate of satisfaction. In the present study, it refers to a student's belief in their capabilities to take action and achieve the desired outcomes (Burger, 2019). Different aspects of self-efficacy including Internet self-efficacy (Tang & Tseng, 2013), computer self-efficacy (Jan, 2015; Wu et al., 2010), and online self-efficacy for learning (Artino, 2007) have received attention in recent years. However, among various types of self-efficacy, the focus of the present study is on online learning self-efficacy which has not received the proper attention from scholars. The emphasis on the relationship between self-efficacy and satisfaction within online learning environments (Artino, 2007) has been a springboard for a few further studies. For example, Shen et al. (2013) who examined different dimensions of self-efficacy and its effects on students' satisfaction revealed that online learning self-efficacy can have a pivotal role in determining students' satisfaction with online learning. Alqurashi (2019) also investigated the interaction between different variables, including online learning self-efficacy, learner-learner interaction, learner-instructor interaction, learner-content interaction, and students' satisfaction. The results showed that learner-content interaction is the most significant variable for students' satisfaction, and online learning self-efficacy is the strongest predictor of perceived learning. In examining the effect of online learning readiness and online learning perceptions on the performance and satisfaction of learners, Wei and Chou

(2020) found that self-efficacy for online learning readiness can influence online learning perceptions, satisfaction, and performance of learners. In another recent study, Hamdan et al. (2021) examined the interaction, self-efficacy, self-regulation, and satisfaction of university students during Covid-19 online education. The results revealed that students' satisfaction was low, and learner-instructor interaction had the highest mean score. Moreover, students' satisfaction was predicted by their self-regulation, self-efficacy, and their interactions with peers and content. It can be concluded that, besides interaction, online self-efficacy can contribute to students' satisfaction and perceived learning within online learning environments.

Despite the many advantages of online learning, there are also a number of challenges for both instructors and learners. For example, in a large-scale study, Muilenburg and Berge (2005) investigated the factors hindering online learning. They enumerated eight main factors, namely administrative issues, social interaction, academic skills, technical skills, learner motivation, time and support for studies, cost and access to the Internet, and technical problems. In another study, Liang and Chen (2012) lamented that physical and financial problems may deprive learners of successful online learning. Difficulties in learning strategies and in interaction and collaboration can be other challenges that learners may experience related to their perception of online learning (Sun, 2014) since many learners may suffer from the inability to use different applications necessary for online classes (Gillett-Swan, 2017). Therefore, it appears to be crucial that exploring the challenges of online learning in terms of students' satisfaction

and perceived learning should be taken into account as well.

Thus far, EFL high school students' perceptions of online learning environments have not been explored sufficiently through qualitative measures in terms of students' self-efficacy and interaction. Therefore, to fill this gap, this study investigated how a group of Iranian high school learners perceived and experienced online learning classes in terms of their self-efficacy and their interaction with instructors and contents. The present study explored the following research questions:

1. What is the students' perception of online English learning in terms of their satisfaction and perceived learning?
2. What are the challenges of online English learning in terms of students' satisfaction and perceived learning?

3 METHOD

3.1 Participants

Being a teacher-researcher, one of the researchers selected a total of 15 Iranian female senior high school students by means of convenience sampling, a common sampling method in qualitative research. These volunteers had no prior experience of attending online classes for school subjects until the Coronavirus outbreak. They were within the age range of 16-18 and studied Vision Series for their required English course in their face-to-face classes at school. However, due to the outbreak of the Coronavirus, their classes were held through an online learning platform. After being briefed on the aim and scope of the research, the participants were voluntarily solicited to undertake a semi-structured interview in order to unfold their

perceptions of their English online learning experience.

3.2 Data Collection

The present study adopted a semi-structured interview to gather data on EFL students' perceptions of English online learning in terms of satisfaction, perceived learning, and challenges. By consulting with a university professor in Applied Linguistics, the researchers convened to compose the concepts and develop the interview questions. The theoretical underpinning that directed the development of the items included online self-efficacy, online learner-instructor interaction, and online learner-content interaction since, as discussed earlier, they are the main factors predicting students' satisfaction and perceived learning. Consequently, nine questions were created that asked participants about their self-efficacy, learner-instructor interaction, learner-content interaction, and challenges in relation to their satisfaction and perceived learning (Appendix). Online English teaching has been enacted officially in public schools by educational policymakers after the Coronavirus outbreak. Consequently, the Ministry of Education of Iran developed its exclusive educational software, called ShAD. The participants were interviewed after taking online English classes through this newly developed software for one semester. Due to the spread of the Coronavirus and researchers' inability in conducting face-to-face interviews, data were collected through the Telegram messaging application which allows the use of voice and text messaging. Moreover, in comparison to face-to-face data collection procedures, online interviewing decreases the amount of pressure on participants (Poynter, 2010).

In order to collect the data, a Telegram group was created. One of the researchers who was also the students' teacher explained the aim of the study to all students, briefed them on the purpose of the research, and ensured them that the interviews would only serve the purpose of research and would not be related to their course grades so that they could answer the interview questions freely. Moreover, the interviews were done one-on-one in a way that the teacher-researcher could ask follow-up questions whenever needed. Since this researcher was also the English teacher of the students (i.e., a member of the class culture), an emic perspective was also obtained to ensure the understanding of the categories that learners referred to (Mackey & Gass, 2016). The teacher-researcher acted as a facilitator, and the interviewees were helped to remember their experiences with the online classes. Each interview lasted around 15 to 20 minutes and was conducted in the students' mother tongue, Persian, to ensure their understanding.

3.3 Data Analysis

In order to analyze the data, a hybrid process of deductive and inductive thematic analysis was conducted. First, the interviews were transcribed. In the deductive phase of analysis, the researchers relied on Alqurashi's (2019) model of students' satisfaction and perceived learning, meaning that the recurrent themes were extracted considering online learning self-efficacy, learner-instructor interaction, and learner-content interaction. In the inductive phase of the analysis, the researchers looked for new themes which emerged from the data. Having this in mind, they coded the transcribed data to find the new subthemes. In order to attain credibility and truthfulness of data, by

consulting with a university professor in Applied Linguistics, they first coded the data individually and, then, compared their coding to draw out the differences and recognize the similar themes from the interviews. Accordingly, the data was analyzed through induction (Goetz & LeCompte, 1984) and constant comparison (Miles & Huberman, 1994).

4 RESULTS

Considering Alqurashi's (2019) model of students' satisfaction and perceived learning, three main themes were analyzed in the deductive phase of data analysis, namely online learning self-efficacy, learner-instructor interaction, and learner-content interaction. Through inductive analysis, four subthemes have also been extracted related to students' satisfaction and perceived learning, namely preparing for online classes, following a planned schedule, adapting to the online classes, and completing the assignments. Additionally, some challenges related to the students' perceptions of online learning have been identified. In what follows, the themes and their related subthemes are provided along with some extracts.

4.1 Deductive Phase

4.1.1 Online Learning Self-Efficacy

Regarding the interconnection between students' satisfaction and their self-efficacy in terms of online learning, the participants referred to some measures taken to make their online learning successful. In addition to the factors under study, students' attitudes towards the outcomes of the classes were also investigated. Despite the challenges, learners found the course useful and believed that they have obtained the desired outcomes. The examples from the interviews include:

P1: *The online classes were fruitful for us. We learned the lesson very well because it was as if we are having face-to-face classes since the teacher taught like she used to do at school. My educational needs were met, and I learned all the parts. We learned the lessons, but there were some problems too. Because of time limitations, we only could learn the lessons and couldn't practice much, so I think online classes need more self-study than before.*

P7: *It is definitely different from face-to-face classes, but it satisfied our needs to a great extent. The fact that the teacher was with us was awesome. We could ask them so many questions, and they answered all of them patiently. In online classes, we ought to try harder and study more. I mean the challenges are more. But, I think it was a good experience, and we can cope with it little by little.*

P3: *It was good in some aspects because we were alone at home, and there were no other students around to distract me. It was good because it helped us not to fall behind schedule. Moreover, online classes are much better than reading from a pamphlet on our own. Online classes became so spiritual for me. Hearing the voice of the teacher gave me energy and hope to go on. You feel like the teacher is beside you and is helping you. Moreover, some lessons like English cannot be self-studied because we need someone to teach the grammar to us.*

Despite the fact that most of the learners preferred face-to-face classes, they were satisfied with the outcomes since they all believed the course had enhanced their learning effectively. However, they believed that online classes required more effort on the part of learners and they had more responsibilities for their own learning, which suggests the importance of learner autonomy in online classes. Considering

the significant role of teachers, it can be inferred that students were inspired by having the teachers beside them.

4.1.2 Learner-Instructor Interaction

The participants of the present study considered interaction as an important element of effective online learning. The majority of them put emphasis on how they communicated with their teachers. Examples include:

P10: *Despite the fact that the classes were held early in the morning, I got up and attended them. I was active during the class by asking questions that popped into my head and also answering the questions that the teacher asked. The process of asking and answering questions was through typing in the chat section. The instructor answered all of our questions. She constantly asked questions to communicate with learners. The English class was the most interactive class we had because the instructor not only taught but also engaged the students by asking various questions.*

P3: *The teacher communicated with us all the time; for instance, the topic was about traveling; she asked each one of us "where are you going to travel?" and forced all of us to answer by calling out our names. After answering, she gave feedback and said, "wow! France is really beautiful, or we can go together to...". In this way, she created interactive classes.*

P4: *I could ask my questions privately too. The teachers provided the space needed for interaction and answered our questions in both online classes and ShAD messaging group.*

P15: *The teacher was asking constant questions, so we had to be active and pay attention. When I didn't understand the content, I would tell the teacher to ask my*

question. We normally typed our questions there, and the teacher read all of our messages and provided us with feedback.

Most of the learners referred to the interaction which was created between teachers and students. Interactions were constructed by the questions that the students posed and answers that the teacher provided or vice versa. Engaging the students in the classes contributes to the quality of online classes since the higher rate of interaction increases students' engagement and understanding. Furthermore, providing feedback was considered one way of constructing rapport which contributes directly to learning the information shared in the online learning environment.

4.1.3 Learner-Content Interaction

In terms of content, learners' preferences leaned toward the textbooks which were covered in face-to-face classes since, from their point of view, the textbooks were more effective and prevented confusion. Some of the participants asserted that:

P4: *In face-to-face classes, we normally used our books, so I think to resemble our physical classes, it's better to use books. The book is more useful because this is what students mainly follow at home.*

P2: *The book helps us a lot; the students and teachers would go forward together. We would look at the books and take notes wherever necessary. When we use the book as a source, we can follow it line by line and take notes or highlight the important points. Sometimes, we can take screenshots to write the new points in our book later.*

P8: *Showing the book pages on the screen helps us more. We can see the book and also hear the voice of the teacher explaining things. I think the book is better because we can follow it like in school classes. I mean it*

helps me learn better, and by using books, I remember school days and our face-to-face classes.

It can be inferred that the participants preferred using their own textbooks as the source material for a number of reasons. The most significant one was the fact that using the books was a reminiscence of their school days, and it made their interaction with the class and connection to their experience at school easier. Besides, they felt the convenience to follow the sequential presentation of material in a stress-free atmosphere.

4.2 Inductive Phase

Considering students' satisfaction and perceived learning, a number of subthemes including, preparing for online classes, following a planned schedule, adapting to the online classes, and completing the assignments were extracted. Each of the subthemes is reported and discussed.

4.2.1 Preparing for Online Classes

Most of the participants believed that preparing before the classes and taking certain steps were the requirements of attendance in online classes. Examples include:

P1: *I followed the principal's instructions. She gave us some guidelines, and I tried to follow them. For instance, when attending online classes, I closed all messaging applications such as WhatsApp and Telegram. I also checked my Internet connection. We had wireless data, but the speed was limited. So, I used cellular data. In sum, online classes were useful, and I could understand many concepts which were difficult to self-study.*

P4: *I tried to be connected to a high-speed Internet since the application is sensitive, and you may lose pictures and voices if you don't have good Internet access. Before*

attending the class, I prepared the books and pamphlets required around me to make the atmosphere more class-like. Sometimes, ShAD lags, and the process of entering the application can be time-consuming, so I tried to start five minutes earlier in order to be on time. For the current circumstances, it is good because the teaching and learning process is constant, and it is better than being forced to self-study. The online classes made us feel near the school, and we have moved forward. It helped us learn something, and I think students gained the energy needed to study.

P11: *At first, I had so many problems with online classes, but I talked to one of my teachers, and she helped me out. I did a number of things. I changed my cellphone and my location to have access to a better Internet connection. I took pictures of the screen to be able to review them and learn better. I was also sitting in a quiet environment.*

From the excerpts, it can be implied that preparing contextual factors before the classes contribute to the effectiveness of online classes. This can overcome the possible challenges since the students mentioned that, after preparing the required conditions or facilities, they were able to utilize the class content better. Accordingly, the students have presented their self-efficacy through taking action and organizing various factors in order to attend the classes. This implies that learners have represented the skills for attending the classes and were ready to take responsibility for their own learning through taking simple steps and managing the online learning environment.

4.2.2 Following a Planned Schedule

Many of the participants in this study were satisfied with online classes because they

believed attending the classes made their planning more organized and forced them to take over studying and learning. They explained that:

P8: *Online classes were useful from the perspective that we were forced to attend them at a particular time, and we couldn't postpone learning and practicing because the teachers would call our names to check whether we are present. In other words, we were dragged to the books.*

P3: *I'm kind of a lazy student who won't study if I'm left alone to myself. So, attending online classes made me organized since I had to prepare before the class and take part in the class at a fixed time and then do the assigned homework after the class.*

These examples indicate that the overall satisfaction of students is interconnected to the fact that online classes served as an impetus for planning and managing their time. This underlines that students were satisfied with the classes since they were able to manage their time effectively and be self-efficacious in learning new materials. Hence, time management can indicate how students represented their self-efficacy in online classes and how they planned to enhance their learning and reduce their stress at the same time by following a disciplined procedure for achieving the desired outcomes.

4.2.3 Adapting to the Online Classes

As mentioned earlier, in the Iranian educational system, online classes are not common in public high schools, and the students are accustomed to attending face-to-face classes. Hence, online classes were considered a huge shift in their everyday learning routine. Accordingly, they needed to make changes in their learning style. Some participants said that:

P2: I tried to change my method of learning to be adapted to online courses. At first, I found it so difficult to attend the classes since I was used to seeing the teacher and my classmates; however, after some sessions, I tried to give myself energy and found my own style of learning. For example, in online classes, I tried taking pictures and recording the session so that I could watch it later. If the systems cooperate, it is definitely useful.

P6: There has been a huge shift in learning classes, so I had to adapt myself to the changes. One thing I did was highlighting the important points that the teacher referred to, and immediately after the class, I would review and study them to instantiate the new points easier. The fact that we can interact and communicate with the teacher directly is so helpful. We can ask questions, and the teacher can answer them immediately.

Clearly, the online classes required a change in students' learning styles. Even though disconnection from the physical classrooms had made learning difficult, the participants believed that, in order to maximize their learning, they had to employ certain extra activities that they did not normally do in face-to-face classes. In other words, they exerted self-efficacy by adopting various dynamic changes in their learning style to adapt to the rapid changes by developing new learning strategies to achieve success, by being engaged in the learning process, and by preventing passive learning conditions since students' success in learning might be guaranteed with their own efforts to grasp every opportunity to learn.

4.2.4 Completing the Assignments

The students in this study were satisfied with the assignments given to them. They deemed homework as one way of achieving

the desired outcomes in online learning classes. The following examples have been extracted from the interviews:

P9: Assignments helped us. It felt so real since the teachers asked questions and assigned homework. It was effective because we were following the school schedule, so we were not falling behind the schedule. It had some challenges because students had to work with computers and cellphones in order to hand in the homework.

P10: When the teacher assigned various homework to do, I was forced to study. When I studied, I could find the problems, so I could ask the teacher to explain them or ask for help from my classmates. So, I guess doing homework makes online classes more useful for us. I tried to do all online assignments on time to learn better.

P14: The teacher held an online exam session through ShAD. It was a challenge because we were forced to study what has been taught before. At first, it was so difficult for me, but I know that if she didn't give the exam, none of us would have studied.

In short, assigning homework was effective for achieving desired outcomes in the classes and keeping up with learning. It can be underscored that online classes yield better results when they pose extra-class activities for students to be engaged since the students are not used to self-study. Moreover, it is implied that students' self-efficacy in doing tasks can be reinforced by completing the assignments and can consequently bring about a sense of satisfaction.

4.3 Challenges Confronted

Despite the many advantages of online learning classes, the students suffered from a number of issues that made online learning a cumbersome process for them. The challenges were divided into three

separate categories including, Internet access, software requirements, and engagement problems.

4.3.1 Internet Access

Regarding Internet access, many students had problems with the speed limit of the Internet which caused a breakdown in the communication. The participants explained that:

P10: *I couldn't understand what was happening since the internet would disconnect constantly. We would miss the teacher's voice and waste a lot of time because of the low speed of the Internet.*

P2: *Due to Internet connection problems for both instructors and students, we had difficulties. If we solve these problems, we can have effective classes. We were disconnected constantly, I guess the application had some problems.*

P6: *Due to Internet connection problems, we missed the teacher's voice a lot. The teacher was teaching, but we could not follow her because, sometimes, we missed her voice. If we put Internet problems aside, it was a good opportunity to learn.*

4.3.2 Software Requirements

The other challenge was preparing the software required for attending the classes. Most of the participants believed that they could not install the required application and enter it properly. The examples of the interviews include:

P5: *The major problem we had was the use of the online platform system. I had to prepare the computer or my cellphone. Sometimes, I couldn't enter the class, or when I entered, the software would kick me out. The teacher spends time, but it is a waste of time because many of us cannot concentrate. I personally lost the picture for half an hour.*

P7: *This software has so many shortcomings. Disconnections occur frequently and the speed of teaching is slow because the teacher has to constantly check whether everyone is listening and whether they have the pictures and sound. I think these challenges have decreased learning.*

4.3.3 Engagement Problems

Another hurdle the students came across was a matter of distraction due to many contextual problems such as being at home with other family members which resulted in the loss of concentration. The examples include:

P6: *At home, we usually have many sources of distraction. There were some problems that distracted me. I couldn't participate because of the distraction. It made me nervous. For example, there were a lot of background noises like TV and radio. In addition, I couldn't directly interact with my peers.*

P9: *When I was attending the classes, my family was present, and they would talk to each other, so I was distracted. But, I had to focus on the content and what the teacher was saying. The online classes were useful; however, face-to-face classes are better since when we are connected to the Internet, the cellphone itself may distract us.*

From the excerpts, it can be inferred that online learners have by and large faced some challenges in learning which might have been the source of distraction and demotivation for them. What deteriorates the situation is that classes are in cyberspace, and there are no face-to-face interactions with teachers. Moreover, the feeling of disconnection from the school community might inhibit students' desire to attend classes and break their concentration.

5 DISCUSSION

This study was an attempt to examine students' perceptions of online learning by considering how online learning self-efficacy, learner-instructor interaction, and learner-content interaction would influence high school students' satisfaction and perceived learning. Related to the first research question, the findings indicated that in order to achieve a sense of satisfaction and embody higher rates of confidence in their performance, the students deemed online learning self-efficacy as an important criterion which is in line with the theoretical underpinning of the current study based on Alqurashi (2019) suggesting that self-efficacy is a critical factor in students' satisfaction and perceived learning during online courses. The participants exercised self-efficacy in terms of preparing for the online classes, following a planned schedule, striving to adapt to the class environment, and completing the given assignments. This shred of evidence is compatible with the findings of Wei and Chou (2020) who found that online learning self-efficacy and students' readiness exerted a positive influence on their overall level of performance. The findings are also in line with other studies done by Alqurashi (2019), Artino (2007), Gunawardena et al. (2010), and Shen et al. (2013).

In this study, learners were cognizant of their own role and willingly strived to improve the quality of their learning by deploying some facilitative actions like taking responsibility for learning, adapting to the system by changing their learning styles, and planning not to lag behind the schedule by completing the assignments. In the case of responsibility, the participants of this study exercised autonomy by attending the classes on time and striving

to prepare for the requirements which are consistent with Eneau and Develotte (2012) who contend that in the online learning environment, learners are capable of controlling their learning process and becoming autonomous accordingly. Some of the learners reported that they followed the instructions provided by both the teacher and the principal. Hence, the construction of autonomy was facilitated by the help of other individuals as well, which is attested by Eneau and Develotte (2012) claiming that constructing autonomy is dependent on both self-regulated and other-regulated procedures in online settings.

With respect to adaptation to online learning, the participants utilized a number of strategies. The results of this portion of the study consolidate the fact that exerting self-efficacy results in applying multiple learning strategies that determines the performance of individuals (Diseth, 2011). Therefore, participants who can employ various strategies reflect higher rates of self-efficacy which is conducive to a successful online learning experience. Furthermore, this finding corroborates Eneau and Develotte's (2012) beliefs indicating that the process of online learning requires a change in the learning habits of learners, which requires more time allocation and dedication on the part of learners. In addition, the students in this study considered doing homework as a way of achieving success in online learning classes, and this aspect is directly linked to students' task self-efficacy which is defined as "the perceptions that one can succeed at a specific task" (Wilson & Narayan, 2016, p. 237), implying that through completing the assigned homework, students are able to achieve self-efficacy and satisfaction with the online learning outcomes. Believing that they can do the required tasks and

achieve certain outcomes represents their self-efficacy which is in line with Burger's (2019) definition of self-efficacy .

Online interaction contributes to students' establishing rapport in online classes in order to develop their proficiency and knowledge (Diept et al., 2017; Meredith, 2019). In the present study, the interaction was manifested in students' interactions with the course content and the course instructor. As for learner-content interaction and its effect on learner satisfaction, the interpretation of the results verifies that learners prefer to establish their comfort zone by relying on the textbooks presented to them in their face-to-face classes. A multitude of reasons is set out on the side of learners for this tendency such as considering ease of access to the materials, creating a familiar scenario of learning, favoring sequential presentation of lessons, and sticking to more convenient and stress-free learning material presentations. Such findings corroborate Chen et al. (2013) and Zimmerman (2012) who demonstrated that the relationship between quantity and quality of interaction is of paramount importance and that there exists a positive correlation between access rates to the content and the final grades. In a similar vein, Hung et al. (2010) contend that orientation to courses should pave the way for a more productive learning experience and reduce the technical problems during the study. Furthermore, according to Alqurashi (2019), online learners exert a lot of effort into processing and digesting the content and learning from the computer screen. Hence, the two-dimensional process of rethinking and learning from content put learners' interaction with content at a critical point in terms of overall learning and satisfaction. Due to such evidence, learners consider familiarity with

the course content an important element since, according to Sebastianelli et al. (2015), course content can affect perceived learning to a considerable amount.

Interaction, be it synchronous or asynchronous, increases learners' satisfaction with the learning environment (Gosmire et al., 2009). Additionally, Alqurashi (2019) considers high-quality interactions with the instructor a possibility for having higher learner satisfaction and perceived learning. In accordance with such notes, the findings of the study depicted that learners declared their consent and satisfaction with their interaction with the instructor through their engagement via asking and answering questions, gaining sufficient feedback, etc. The findings of this study also resonate well with Espasa and Mense (2010) who found a significant relationship between instructor feedback and learning outcomes measured in terms of satisfaction and final grades. Therefore, it can be inferred that considering learner-instructor interaction as a criterion in learner satisfaction can be significant since learners deemed that being able to interact with the instructor and the quality of the feedback could be indispensable factors for any effective online learning experience.

Alongside satisfaction, perceived learning as another determining criterion was analyzed in order to gain more insights into learners' perceptions of online learning. Perceived learning was theoretically defined as students' judgment about their knowledge and the changes they undergo after taking part in online courses. Therefore, the students were asked to report their overall perceptions of their learning experience. The results illustrated that despite the challenges faced, the students assumed that the course was productive, and they had

obtained the desired outcomes through enumerating benefits like meeting their specific educational needs, enjoying the unbounded company of the teacher throughout the course, video recording to review the sessions, and taking responsibility for their own learning. Teachers' contributing presence affects learners' perceived learning which is in tandem with Akyol and Garrison (2014) who claimed that teachers' facilitative role affects perceived learning, and instructors' decisions can positively influence learners' performance. On a similar note, learner-instructor interaction is one of the most significant predictors of perceived learning in an online course (Fredericksen et al., 2019; Jiang & Ting, 2000; Ozturk & Ozcinar, 2013).

Related to the second research question, although learners were satisfied with the classes held online, they mentioned some challenges of online learning that would hamper their motivation and willingness to experience online education in the long run. These challenges revolved around issues including, Internet access, software requirements, and engagement problems. Many learners suffered from Internet speed limits which consequently led to a breakdown in communication in terms of receiving the content and the teacher's voice. Cost and access to the Internet have been listed by Muilenburg and Berge (2005) as one of the students' barriers to online learning. Besides Internet access, some learners complained about the software required for attending the class in a way that they found the application not user-friendly. According to Kirkwood and Price (2014), such technical problems would make adapting to the online environment difficult and create challenges for both instructors and students. Engagement problems such as failing to build a class-like

atmosphere at home, getting distracted by various sources, and constant loss of concentration due to some personal factors were deemed as some other hurdles in the learners' learning process which is corroborated by Stoessel et al. (2015) who noted that personal factors have the potential to affect students' access and participation in the online learning environment.

6 CONCLUSION

The results of this study provide practitioners and those in the policy-making process with information regarding the experiences and perceptions of learners. Moreover, understanding what affects perceived learning can pave the way for instructors to enrich the online courses in terms of their design, delivery, and evaluation with the ultimate aim of improving the student learning experience (Alavi et al., 2002). Therefore, those schools which are currently involved in holding online learning classes might be interested in using this information either to improve the conditions for students or to increase their motivations. Since the participants referred to many challenges, it is vitally important that before starting the classes, principals or teachers allocate some sessions for informing the students about the procedure of online classes and learning platforms. Moreover, the problems with the platform require more attention to providing or developing more user-friendly platforms for students. The authorities should aim at eradicating the problems which prohibit students' participation and learning process in the classes. Besides, it is recommended that teachers cultivate the participation of all attendees and encourage them to engage more extensively in online classes.

Like any other research project, this study was faced with a number of limitations consideration of which may open new avenues of research for further investigations. First, the findings of the present study should not be overgeneralized to all online learning environments since only a small number of participants who were studying at a public high school were included. In addition, to have more generalizability, it is best to use data triangulation and collect data from

other sources such as questionnaires to verify the qualitative data. Second, the students' perceived learning was estimated based on their self-reports. Thus, other ways of analyzing perceived learning such as examinations should be utilized to find more credible findings. Finally, the current paper focused only on female high school learners. Moreover, for further research, other students' personal characteristics such as age or gender can be taken into account.

REFERENCES

- Akyol, Z., & Garrison, D. R. (2014). The development of a community of inquiry over time in an online course: Understanding the progression and integration of social, cognitive and teaching presence. *Journal of Asynchronous Learning Networks*, 12(3-4), 3-22.
- Alavi, M., Markas, G. M., & Yoo, Y. (2002). A comparative study of distributed learning environments on learning outcomes. *Information Systems Research*, 13(4), 404-415.
- Ali, A., & Ahmad, I. (2011). Key factors for determining students' satisfaction in distance learning courses: A study of Allama Iqbal Open University. *Contemporary Educational Technology*, 2(2), 118-134.
- Alqurashi, E. (2019). Predicting student satisfaction and perceived learning within online learning environments. *Distance Education*, 40(1), 133-148.
- Artino, A. R. (2007). Motivational beliefs and perceptions of instructional quality: Predicting satisfaction with online training. *Journal of Computer Assisted Learning*, 24(3), 260-270.
- Bates, A. W. (2019). *Teaching in a digital age: Guidelines for designing teaching and learning* (2nd ed.). Tony Bates Associates Ltd.
- Burger, J. M. (2019). *Personality* (10th ed.). Cengage.
- Chen, L., Zhang, R., & Liu, C. (2013). Listening strategy use and the influential factors in web-based computer assisted language learning. *Journal of Computer Assisted Learning*, 30, 207-219.
- Chen, Y. J., & Chen, P. C. (2007). Effects of online interaction on adult students' satisfaction and learning. *The Journal of Human Resource and Adult Learning*, 3(2), 78-89.
- Cho, M. H., & Kim, B. J. (2013). Students' self-regulation for interaction with others in online learning environments. *The Internet and Higher Education*, 17, 69-75.

- Cigdem, H., & Yildirim, O. (2014). Effects of students' characteristics on online learning readiness: A vocational college example. *Turkish Online Journal of Distance Education*, 15(3), 80-93.
- Dennen, V. P., Darabi, A., & Smith, L. J. (2007). Instructor-learner interaction in online courses: The relative perceived importance of particular instructor actions on performance and satisfaction. *Distance Education*, 28(1), 65-79.
- Diep, N. A., Cocquyt, C., Zhu, C., & Vanwing, T. (2017). Online interaction quality among adult learners: The role of sense of belonging and perceived learning benefits. *Turkish Online Journal of Educational Technology*, 16(2), 71-78.
- Diseth, A. (2011). Self-efficacy, goal orientations and learning strategies as mediators between preceding and subsequent academic achievement. *Learning and Individual Differences*, 21, 191-195.
- Eneau, J., & Develotte, C. (2012). Working together online to enhance learner autonomy: Analysis of learners' perceptions of their online learning experience. *ReCALL*, 24(1), 3-19.
- Espasa, A., & Meneses, J. (2010). Analyzing feedback processes in an online teaching and learning environment: An exploratory study. *Higher Education*, 59(3), 277-292.
- Fredericksen, E., Pickett, A., Shea, P., Pelz, W., & Swan, K. (2019). Student satisfaction and perceived learning with on-line courses: Principles and examples from the SUNY learning network. *Online Learning*, 4(2).
- Gillett-Swan, J. (2017). The challenges of online learning: Supporting and engaging the isolated learner. *Journal of Learning Design*, 10(1), 20-30.
- Goetz, J. P., & LeCompte, M. D. (1984). *Ethnography and qualitative design in educational research*. Academic Press.
- Gosmire, D., Morrison, M., & Osodel, J. V. (2009). Perceptions of interactions in online courses. *MERLOT Journal of Online Learning and Teaching*, 5(4), 609-617.
- Gunawardena, C. N., Linder-VanBerschoot, J. A., LaPointe, D. K., & Rao, L. (2010). Predictors of learner satisfaction and transfer of learning in a corporate online education program. *American Journal of Distance Education*, 24(4), 207-226.
- Hamdan, K. M., Al-Bashaireh, A. M., Zahran, Z., Al-Daghestani, A., AL-Habashneh, S. & Shaheen, A. M. (2021). University students' interaction, Internet self-efficacy, self-regulation and satisfaction with online education during pandemic crises of COVID-19 (SARS-CoV-2). *International Journal of Educational Management*, 35(3), 713-725.
- Hung, M. L., Chou, C., Chen, C. H., & Own, Z. Y. (2010). Learner readiness for online learning: Scale development and student perceptions. *Computers & Education*, 55(3), 1080-1090.
- Jan, S. K. (2015). The relationships between academic self-efficacy, computer self-efficacy, prior experience, and satisfaction with online learning. *American Journal of Distance Education*, 29(1), 30-40.
- Jiang, H., Islam, A. Y. M. A., Gu, X., & Spector, J. M. (2021). Online learning satisfaction in higher education

- during the COVID-19 pandemic: A regional comparison between Eastern and Western Chinese universities. *Education & Information Technologies*, 26(6), 6747-6769.
- Jiang, M., & Ting, E. (2000). A study of factors influencing students' perceived learning in a web-based course environment. *International Journal of Educational Telecommunications*, 6(4), 317-338.
- Kirkwood, A., & Price, L. (2014). Technology-enhanced learning and teaching in higher education: What is 'enhanced' and how do we know? A critical literature review. *Learning, Media and Technology*, 39(1), 6-36.
- Kuo, Y.-C., Walker, A. E., Belland, B. R., & Schroder, K. E. (2013). A predictive study of student satisfaction in online education programs. *The International Review of Research in Open and Distributed Learning*, 14(1), 16-39.
- Kuo, Y.-C., Walker, A. E., Schroder, K. E. E., & Belland, B. R. (2014). Interaction, Internet self-efficacy, and self-regulated learning as predictors of student satisfaction in online education courses. *The Internet and Higher Education*, 20, 35-50.
- Landrum, B., Bannister, J., Garza, G., & Rhame, S. (2021). A class of one: Students' satisfaction with online learning. *Journal of Education for Business*, 96(2), 82-88.
- Liang, R., & Chen, D. T. V. (2012). Online learning: Trends, potential and challenges. *Creative Education*, 3(8), 1332-1335.
- Mackey, A., & Gass S. M. (2016). *Second language research methodology and design*. Routledge.
- Mahle, M. (2011). Effects of interactivity on student achievement and motivation in distance education. *Quarterly Review of Distance Education*, 12(3), 207-215.
- Meredith, J. (2019). Conversation analysis and online interaction. *Research on Language and Social Interaction*, 52(3), 241-256.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*. (2nd ed.). Sage.
- Moore, M. G. (1989). Editorial: Three types of interaction. *American Journal of Distance Education*, 3(2), 1-7.
- Muilenburg, L. Y., & Berge, Z. L. (2005). Student barriers to online learning: A factor analytic study. *Distance Education*, 26(1), 29-48.
- Ozturk, H. T., & Ozcinar, H. (2013). Learning in multiple communities from the perspective of knowledge capital. *International Review of Research in Open and Distance Learning*, 14(1), 204-221.
- Parahoo, S. K., Santally, M. I., Rajabalee, Y., & Harvey, H. L. (2016). Designing a predictive model of student satisfaction in online learning. *Journal of Marketing for Higher Education*, 26(1), 1-19.
- Park, J. H., & Choi, H. J. (2009). Factors influencing adult learners' decision to drop out or persist in online learning. *Educational Technology & Society*, 12(4), 207-217.
- Poynter, R. (2010). *The handbook of online and social media research*. Willey.

- Rockinson-Szapkiw, A., Wendt, J., Whighting, M., & Nisbet, D. (2016). The predictive relationship among the community of inquiry framework, perceived learning and online, and graduate students' course grades in online synchronous and asynchronous courses. *International Review of Research in Open and Distributed Learning*, 17(3), 18-35
- Rovai, A. P. (2002). Sense of community, perceived cognitive learning, and persistence in asynchronous learning networks. *Internet and Higher Education*, 5, 319-332.
- Sebastianelli, R., Swift, C., & Tamimi, N. (2015). Factors affecting perceived learning, satisfaction, and quality in the online MBA: A structural equation modeling approach. *Journal of Education for Business*, 90(6), 296-305.
- Shen, D., Cho, M. H., Tsai, C. L., & Marra, R. (2013). Unpacking online learning experiences: Online learning self-efficacy and learning satisfaction. *The Internet and Higher Education*, 19, 10-17.
- Sher, A. (2009). Assessing the relationship of student-instructor and student-student interaction to student learning and satisfaction in web-based online learning environment. *Journal of Interactive Online Learning*, 8(2), 102-120.
- Stoessel, K., Ihme, T. A., Barbarino, M-L., Fisseler, B., & Sturmer, S. (2015). Sociodemographic diversity and distance education: Who drops out from academic programs and why? *Research in Higher Education*, 56, 228-246.
- Sun, S. Y. (2014). Learner perspectives on fully online language learning. *Distance Education*, 35(1), 18-42.
- Tang, Y., & Tseng, H. W. (2013). Distance learners' self-efficacy and information literacy skills. *The Journal of Academic Librarianship*, 39(6), 517-521.
- Wagner, E. D. (1994). In support of a functional definition of interaction. *The American Journal of Distance Education*, 8(2), 6-26.
- Wei, H. C., & Chou, C. (2020). Online learning performance and satisfaction: Do perceptions and readiness matter? *Distance Education*, 41(1), 48-69.
- Wilson, K., & Narayan, A. (2016). Relationships among individual task self-efficacy, self-regulated learning strategy use and academic performance in a computer-supported collaborative learning environment. *Educational Psychology*, 36(2), 236-253.
- Wu, J. H., Tennyson, R. D., & Hsia, T. L. (2010). A study of student satisfaction in a blended e-learning system environment. *Computers & Education*, 55(1), 155-164.
- Yukselturk, E., & Yildirim, Z. (2008). Investigation of interaction, online support, course structure and flexibility as the contributing factors to students' satisfaction in an online certificate program. *Educational Technology & Society*, 11(4), 51-65.
- Zimmerman, T. D. (2012). Exploring learner to content interaction as a success factor in online courses. *International Review of Research in Open and Distance Learning*, 13(4), 151-165.

APPENDIX

Interview Questions

- What measures did you take to experience a productive online class?
- Was this online program effective for you? In what ways?
- Which content presentation material was more conducive to your learning? (PowerPoint, board, book, etc.)
- Could you interact with the content presented to you online?
- Could you take an active role during the program? How did you ask your questions?
- Did the instructor lay the sufficient ground for interacting with you? How?
- Did you grasp what was taught to you online?
- Overall, how do you evaluate this program? Were your educational needs met?
- What challenges did you face throughout your online learning experience?