

Research Article

An Account of University Professors' Perceptions of Educational Knowledge and Pedagogical Skills in an Individual and Online Learning Education System: A Comparative Study

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The emergence of the COVID-19 pandemic in 2020 led to many changes in people's lifestyles and governments' policies worldwide. In the education area, there has been an increase in the use of online learning due to the necessity of social distancing and an interruption in the transmission of information. The present study aimed to determine differences between online and in-person education systems regarding teachers' perceptions of educational knowledge and pedagogical skills during the COVID-19 pandemic. In total, 1,500 teachers were selected from universities with in-person classes and 1,400 instructors were chosen from online universities in the cities of Tehran, Shiraz, Isfahan, Yazd, Tabriz, Ahvaz, Zanjan, and Arak, Iran, in 2022. Notably, the teachers were active in the fields of general and business English. Overall, a questionnaire including 30 items was applied, and each item scored teachers' educational knowledge and pedagogical skills based on their perceptions using a 5-point Likert scale. Data analysis was performed using MANOVA. According to the results, there was a significant difference between online and in-person education systems regarding general English teachers' perceptions of their educational knowledge and pedagogical skills. Similar results were obtained for business English teachers. In fact, general and business English teachers of in-person universities had a higher perception of their educational knowledge and pedagogical skills compared with teachers of online universities.

1. Introduction

The world has been in a pandemic mode for 2 years. Even though the COVID-19 pandemic has had a devastating effect on people, these impacts have not only been health-related but have also been tangible in other areas, including economics, society, and psychology. In fact, the COVID-19 pandemic has affected education systems, causing school and university closures worldwide. Education is one of the most basic human rights, and the education system's failure

will disrupt peace, welfare, and production [1]. Meanwhile, e-learning is one of the latest education methods based on information and communication technology. Similar to other countries, the most important policy of the Iranian government to respond to the COVID-19 pandemic has been the implementation of social distancing measures. These policies have led to different social consequences in various groups of people, such that the teachers' perception of their educational knowledge and pedagogical skills in comparison with in-person education has become an important subject for

investigation [2]. In a study, Ribeiro [3] considered people's perception as a growth process that has a perceptual dimension. According to this scholar, people can give meaning to their personal experiences by shaping their perceptions. Various factors affect people's perceptions of their environment, including past and present experiences, the person's attitude at a particular moment, the physical condition of sensory organs, interests, and level of attention and interpretation of one's perceptions. In this respect, teachers' perceptions and attitudes are of paramount importance since they deal with a group of people who are on the verge of experiencing and learning. In education science theories, teachers' perception has always been a factor that is constantly subject to change and development [4]. Nonetheless, the fact that changes in teachers' thinking styles are associated with changes in education behaviors, understanding of students and the learning process and acquaintance with the education environment, as well as the perception of oneself and one's teaching profession, is a common principle [5]. In a study, Fuller and Case [6] identified seven types of teachers' concerns using a questionnaire and summarized them into three stages: self, activity, and impact. Kagan [7] believed that in the pre-service stage, teachers training students consider themselves to be students rather than teachers or instructors. In the second stage, concerns are mostly related to job-retention issues, such as classroom management, mastering the content knowledge, and teacher efficacy. In the third stage, however, concerns are mostly related to executive affairs of teaching, limitations, and disappointing issues. Taking such changes as teachers' and instructors' concerns and ways of thinking into account, Fuller and Bown [8] proposed a three-stage model for teacher training programs and the professional development of instructors. In this model, it is assumed that students and instructors deal with the mentioned concerns throughout the teacher training and career preparation programs, respectively, similar to their training programs. This progression is theorized in the form of a set of concerns occurring in three stages consecutively: (1) concerns about self, (2) concerns about tasks, and (3) concerns about students. Even though previous studies have pointed out some defects in the sequence, the present study attempts to evaluate and compare a group of teachers in various academic systems regarding their perceptions. Given the high correlation between teachers' perceptions and pedagogical quality and quantity [9], and concerning changes in these individuals' perceptions throughout the professional development process or "transition from concern stages," it is clear that the academic system and type of course impact teachers' progression in the path of transition from the self-oriented perception to the student-oriented perception.

In the Iranian academic system, teachers of English language courses are usually graduates of the humanities and have an MSc or PhD in the fields of linguistics, applied linguistics, second language teaching, or translation. Therefore, most English language teachers lack sufficient knowledge and skills to properly explain specialized issues outside their area of the profession [10]. This becomes more important when no in-service English training courses are held in universities. Because of neglect in this area, novice English teachers start

their careers by passing only a few semesters that focus on the general English language. Meanwhile, reading skills, as well as lexical and grammatical knowledge, are considered in general language courses. In fact, students gain general English proficiency to communicate in everyday application areas. However, students will fail to communicate about specialized and technical matters and situations that are not common for all English speakers [11]. This change of focus of lessons from general to business English proficiency in learners requires business English teacher training programs that specially focus on the promotion of specialized information of teachers as one of the main components of business English teachers' knowledge.

In this study, general and business English teachers shared their perceptions of their level of educational knowledge and pedagogical skills in areas such as classroom management, how to treat students, preparation of course content, and compliance of teaching sessions with students' needs by participating in a voluntary survey. These professors spent their early years teaching in various Iranian university systems. Therefore, the results of the survey can be used to design and improve English teacher training courses proportional to various education systems in Iran. We have witnessed a constant change of paradigm along with rapid changes in technology, education, communication, and the field of teacher training [12]. In the past, teaching was considered a "technique" and teachers were motivated to learn and employ certain skills. After a while, however, it has become a "perceptual process" that focuses on teachers' analysis of mental processes. Recently, more attention has been paid to "Critical Teacher Training Programs," in which teachers are regarded as "a factor of change" and can shape the right attitudes and mentalities to not only contemplate what they know (i.e., their knowledge) but also who they are (i.e., their identity) [13]. Despite this change of paradigm, which has brought teachers into a sensitive age of change, there are irregularities in certain textures, such as business English texture, due to a lack of coordination between English teachers and instructors of main courses on one hand and between what happens in mind (type of perception) and what happens in practice (teaching). Owing to these irregularities, this study aims to examine the perceptions and attitudes of general and business English teachers from two perspectives of educational knowledge and pedagogical skills.

In addition, attempts were made to determine whether there is a difference between general and business English teachers' perceptions of their educational knowledge and pedagogical skills in in-person and online learning education systems. Our findings could be used in the English-teacher-training area. Any difference in the results obtained from various courses and programs showed that teacher training programs should be different in terms of the type and quality of training programs for teachers of different systems.

To achieve this goal, the following questions were asked:

- (1) Is there a significant difference between general English teachers' perceptions of their educational knowledge and pedagogical skills in in-person and online-learning universities?

- (2) Is there a significant difference between business English teachers' perceptions of their pedagogical knowledge and skills in in-person and online-learning universities?

2. Research Background

Successful teachers and instructors are those who can provide a clear and accurate description of education events and results, can define these consequences in practice, and can guide students toward achieving favorable results [14]. Today, teachers will never be able to perform their duty properly without knowledge of psychology, philosophy, and principles of learning and teaching methods and techniques. In other words, teachers without knowledge of the principles and goals of education, characteristics of students and their needs, pedagogical methods and techniques, and other educational skills will fail to lay the foundation for the flourishing of students' talents [15]. Successful pedagogical principles are based on research conducted on successful classroom practices. Richards [16] listed several features for successful teaching, including providing transparent and focused training, controlling student progress, using class time optimally, having positive communication skills, and using rewards to encourage students. According to Walshaw [17], teachers' educational knowledge base is one of the most important components of teaching. On the other hand, Shulman [18] defined a knowledge base as a set of principles and strategies for classroom management and organization, which are separate from specialized issues related to the field and subject matter. In fact, this type of knowledge includes information about learners and the learning process, assessment, and education contexts and goals. Grossman and Richert [19] considered teachers' knowledge base as information obtained by teachers about learning theories, pedagogical principles and philosophies, classroom management, and inclusive techniques. According to Tandler and Dalbert [20], teachers' perception is one of the human growth processes that has a perceptual dimension. These scholars believe that people can make sense of their personal experiences by shaping their perceptions. Various factors affect people's perceptions of the environment, including past and present experiences, the person's attitude at a particular moment, the physical condition of sensory organs, interests, and the level of attention and interpretation of one's perceptions. Given the high sensitivity of classroom events and the role of emotional and (metacognitive) social factors in successful teaching and learning, the subject of teachers' perceptions has been repeatedly assessed by researchers. Various patterns exist for the professional development of teachers in the existing research literature, some of which have focused on teacher promotion from the perspective of the application of research results [21] while others have studied perceptions of the surrounding environment [22, 23]. On the other hand, Day et al. [24] emphasized the effect of external factors on teachers' professional self-concept. Self-reflection of teachers was also mentioned as the basis of some professional promotion models [25, 26]. In the Iranian academic system, teachers of English

language courses are usually graduates of the humanities and have an MSc or PhD in the fields of linguistics, applied linguistics, second language teaching, or translation. In other words, there is almost no instructor who specializes in English for special purposes. Therefore, most business English teachers lack sufficient knowledge to focus on specialized matters of fields outside their field of study. The importance of this issue increases when there are no in-service preparation courses for business English training in universities. This leads to passing only some general English training courses by novice business English teachers. Meanwhile, Mallikarjun [27] expressed that all language skills are considered in general English courses, and there is a general ability in the learner to be able to communicate only in everyday areas. However, students will not be able to communicate on technical and specialized matters and subjects that are not common among all English speakers. This type of shift of focus from general English proficiency to business English proficiency by students requires business English teachers' planning with a special emphasis on strengthening the specialized pedagogical knowledge of instructors as one of the main components in this regard.

Moreover, students expect any education environment to have a clear classroom organization and planning. In addition, their responsibilities must be determined from the beginning of the course. Therefore, teachers are responsible for classroom scheduling, grouping students for tasks, and determining classroom assignments [28, 29]. In addition, Wubbels et al. [30] developed a set of education principles to engage students in high-level learning experiences, which included communication with students, cooperation among the students, active learning experiences, immediate feedback, high expectations, and respecting students' differences. Nevertheless, teachers deal with other issues in online learning as well, which complicates their position as first-rate teachers.

3. Individual versus Online Learning

Numerous scholars may feel that because of modifications in how children are educated, one medium of instruction is superior to another. As technology advanced, scholars were able to communicate with individuals all around the world using programs such as WhatsApp, FaceTime, Zoom, and WeChat. Education, of course, has developed to connect students and teachers in virtual classrooms. Online learning is exactly what it sounds like: online classes and topic resources. The conventional method of learning is in-person learning, in which students attend face-to-face sessions at set times. Learners benefit greatly from virtual courses. Numerous individuals who do not have the mechanism to participate in in-person classes or who want to return to school but have other obligations can benefit from online classes. Single parents, military personnel, and full-time employees can all benefit from online education. Online courses enable a greater amount of people to obtain a formal education. Finally, when the obstacles of an in-person classroom are eliminated, all learners can benefit from the liberty to do their classwork

on an online platform whenever they want. Furthermore, online classes provide self-paced learning and scheduling flexibility. Online learning is an excellent option for individuals who dislike the structure of in-person classroom sessions. Learners participate and learn at various rates, and online programs allow students to choose their own timetables. With schedule flexibility, learners may shape the classroom to their preferred learning environment and lesson plan. Furthermore, online learning can be less expensive than in-person learning. Traditional schooling is typically more expensive than online learning due to the expenditures of the in-person experience. This covers extracurricular activities, doing, eating facilities, and so on. These are all advantages that participants are usually willing to pay for, but the reality of the epidemic has led many learners to recognize that their desire for that experience is less important. Potential students are currently enrolling in online classes to obtain the accessibility of formal training while also increasing comfort and lowering costs. Despite the benefits of the virtual class environment, there are some things that in-person classrooms have that virtual classrooms do not. It is crucial to recognize that regular online classes have distinct drawbacks from online classes that had to switch quickly due to the global epidemic. Definite subject matters were more challenging to adjust to the online environment. Even though, here are some of the disadvantages of online education. There may be a low level of participation in virtual classrooms in online learning. This is mostly because virtual teacher/student or student/student connections are difficult to establish or, at the very least, we have less expertise in this new learning environment. It is difficult to know someone through video conferences, and without a tangible relationship, learners lose attention in online classes since it does not important. Learners are often hesitant to learn when taking online classes since they know they would only have to watch and recall (i.e., passive learning). When participants were given an attempt to create relationships, they are frequently met with technological challenges such as sporadic Wi-Fi, scratchy mic noises, or uncomfortable delays. Furthermore, particular topics are difficult to adapt online in online learning. Topics such as chemistry, nursing, and culinary arts are difficult to adapt to an online teaching technique since they are hands-on and necessitate a real classroom. Because these teachers were unprepared for the pandemic's dramatic changes, it was challenging for them to devise strategies to educate their pupils through a screen. Learners, too, were probably having difficulty learning due to a shortage of supplies at home.

Teachers may constantly monitor what is going on in the classroom during individual learning, from conversations to tests to student interactions. Many of these issues are eliminated with online learning. For starters, attending a lecture in person makes it easier for professors to lead conversations. Learners, for instance, benefit from live case study discussions and live role-playing sessions, which may be quite beneficial. When teachers involve learners in dialog and realize that other students share their excitement, they are automatically drawn into the conversation to learn as well. Effective leadership is vital for learning achievement. Some teachers

may favor in-person lectures since they can more completely manage the discussion in the classroom than in online classes. Second, there should be more possibilities for community and relationship building. Establishing friendships online without the correct tools is generally less effective than building them in person. Connections may be valuable resources or references, and with in-person lessons, kids would not feel trapped in unpleasant solitude. In-person sessions allow for before-and after-class talk, catching up on weekends and working through difficult problems with classmates. That banter is what allows learners to feel at ease, even if the material is difficult for them. Mental health is an important part of schooling that is sometimes disregarded, and in-person friendships and social contacts may significantly lower stress and anxiety levels. Third, the classroom has fewer distractions. When attending lessons online from home, students are often side-tracked. Daily internet disruptions or typical interruptions at home might cause students and teachers to lose attention often, contributing to a failure to engage. When participants are in a class context with their classmates and are unable to switch their cameras off to do something else, they have a greater chance to participate in the lesson since there is nothing else they can do in a more organized learning environment.

People may find it difficult to access conventional in-person learning, which is one of the most significant drawbacks associated with this kind of education. This is particularly true for establishments that provide higher education. To begin, when it comes to studying in person, it is possible that some students would not be able to enroll in the subject of study they want at their local institution. Even for those who are certain that they learn best in face-to-face settings, it is possible that attending a college located far away is financially impossible for them. Because of this, education becomes inaccessible and inefficient. The cost of attending a traditional college is high, and the cost of attending a college located outside of one's state is considerably more; as a result, many individuals choose not to enroll in either kind of institution. Classes taken online provide students with the opportunity to pick a curriculum that meets their needs at a more affordable cost. Attending classes in person may also be a time-consuming endeavor, which is another disadvantage of this kind of education. When going to school in a typical classroom environment, you need to factor in the amount of time spent commuting as well as the amount of time spent in class. Many students will have a class schedule that includes three to four classes each day that is each at least an hour long. In addition to the time spent in class, you need to factor in the time it takes to walk, bike, take the bus, or drive to those classes, which can quickly eat up several hours of the day. Many students who pay for the college experience but have a little time to enjoy might get frustrated since in-person sessions do not provide the same level of flexibility as online ones. Students-teachers, for instance, are required to stay up with the rest of their class even though their lectures may not be recorded so that they may absorb the information even when they miss them rather often owing to competitions in which they participate. In addition, the learning styles of

certain students do not mesh well with physically being in the same room as the instructor while they are studying in person. As a result of the prevalence of social anxiety among today's younger generations, classrooms with larger enrollments often include more than one section. Students who are more reserved and timider have a tendency to sit toward the back of the classroom, which might decrease their involvement if they are unable to hear the lecturer or see the board. Students may have feelings of intimidation during large group talks, which prevents them from engaging to their best potential in the activity. Students may avoid the social anxiety that comes with being in a traditional classroom setting by taking advantage of the opportunity provided by online communities, which provide them the time and room to put their ideas together. It is important to provide students who may be learning English as a second language an equal chance to engage in class discussions, and one way to do this is by holding such discussions on an online forum rather than in a traditional classroom setting. Students who, under normal circumstances, would keep their mouths shut during live sessions are given the chance to flourish in a social setting that is less stressful thanks to the online discussion model.

4. Prior Studies

Upton and Adams [31] wanted to determine whether or not any factors may accurately predict success and participation in an online course. Before beginning an online health psychology course that was tailored specifically for students, a representative group of psychology students filled out a set of surveys. The questionnaires included a scale to measure academic confidence, a scale to measure computer self-efficacy, and a questionnaire to assess learning styles. There were few reports of significant changes in how students performed on the module, how engaged they were with it, or how they evaluated it concerning these criteria. On the other hand, there was a correlation between in-depth learning and a preference for online learning over conventional lectures, and there was a correlation between strategic learning style and module design that pointed in the other direction. Overall, it seems as though most people can access online learning, and there are no indicators that any one group of students is doing inequitably better or worse than the others when it comes to online learning.

In addition, Ozkara and Cakir [32] considered the principles that are formed by using the community of inquiry framework. This study, which took place during the Spring Semester of 2014–2015 and used 30 students from a vocational college located in the Turkish Mediterranean Region who were enrolled in the “Graphic Animation” course, was conducted. In this research, a pretest and posttest design with a control group were employed. The students in the control group worked on online problems using individual approaches, whereas the students in the experimental group worked on online problems using collaborative learning methods. The control group served as the comparison group. The levels of academic achievement, levels of motivation, and levels of happiness were compared between the groups. It was shown

that the experimental group had a much greater level of motivation, although the control group and the experimental group did not vary significantly in terms of their levels of accomplishment or satisfaction.

In another research, Vaillancourt et al. [33] assessed students' views of mattering during the pandemic concerning in-person vs. online learning in a sample of 6,578 Canadian students in grades 4–12. The sample was comprised of students from grades 4 to 12. We discovered that kids in elementary school who went to traditional classrooms reported caring the most, followed by students in secondary school who attended traditional classrooms on a part-time basis and learnt the rest of the time online (blended-learning group). During the epidemic, students who participated in full-time online education had the perception that they were less important than other pupils (elementary and secondary students). Our experimental design showed that students' perceptions of mattering did not differ by current learning modality when they were asked to reflect on their experiences before the pandemic. This was the case even though some of the students were also learning online full-time at the time they responded to our questions. These results were not driven by a selection effect for school choice during the pandemic. There was no discernible difference between the sexes. As a means of determining whether or not our findings are legitimate, we investigated whether or not there was a correlation between mattering and the atmosphere of the school. In both iterations of the trial, a finding that showed a weak correlation between mattering and a pleasant school atmosphere was discovered, and the results were comparable. The findings of this preliminary research indicate that students are more likely to feel that they matter when they participate in face-to-face instruction. This is vital information to have since children who believe they matter have a greater sense of feeling safe, resilient, and interested in their education. As a consequence of this, significance is an essential educational metric that has to be taken into account while evaluating the benefits of distance education.

Reviewing the literature so far, inadequate research checked the comparison of individual versus online learning. Thus, this study aimed to investigate university professors' perceptions of educational knowledge and pedagogical skills in an individual- and online-learning education system through a comparative study.

5. Research Method

This survey research was conducted to determine whether there is a difference between general and business English teachers in in-person- and online-learning education systems in terms of their perceptions of educational knowledge and pedagogical skills or not. This section describes the participants, the questionnaire, and the research stages. Data were collected in two academic semesters of the year 2020. First, the research objectives and nature of the questionnaire's items were explained to the participants. Notably, participation in the study was voluntary, and those willing to participate in the study received the questionnaire in

TABLE 1: Characteristics of the statistical population.

	Number of teachers in an in-person education system					Number of teachers in an online-learning education system (online)				
	<i>N</i>	Male	Female	Married	Single	<i>N</i>	Male	Female	Married	Single
General English	850	62%	38%	69%	31%	724	66%	34%	61%	39%
Business English	637	64%	36%	66%	34%	646	63%	37%	69%	31%
Total	<i>n</i> = 1487					<i>n</i> = 1370				

TABLE 2: Mean data of research.

	In-person teaching		Online teaching	
	Business English	General English	Business English	General English
Perception of educational knowledge	4.12	4.23	3.83	3.89
Perception of pedagogical skills	4.30	4.22	3.75	3.80

person or via email. It should be noted that to meet the ethical requirements, the researchers earned the participants' consent. For this purpose, before running the main study, the participants who were willing to participate in the study signed written consent electronically and submitted it to the researchers.

The statistical population included English teachers in the universities of Tehran, Shiraz, Isfahan, Yazd, Tabriz, Ahvaz, Zanjan, and Arak, Iran, in 2022. In total, 1,500 teachers from universities with an in-person education system and 1,400 teachers from universities with online learning techniques were selected randomly. It is worth noting that only instructors with less than 5 years of work experience were included in the present study. Following an in-person interview and distribution of the instruments among respondents, some of the questionnaires were eliminated due to being incomplete and the rest were analyzed. Table 1 shows the demographic characteristics of the participants. It should be noted that to meet the ethical requirements, the researchers earned the participants' consent. For this purpose, before running the main study, the participants who were willing to participate in the study signed written consent and submitted it to the researchers.

The main instrument employed in the present study included 30 items from a survey developed by Choy et al. [34] to assess the opinions of teachers. Each item is scored based on a 5-score Likert scale assessing the educational knowledge and pedagogical skills of instructors. The items of the questionnaire are scored based on a 5-point Likert scale (1 = I have no information, 2 = I do not have much information, 3 = I am not sure, 4 = I know, and 5 = I have complete information). Moreover, the participants were required to show their perceptions of their teaching skills in the areas specified in the questions. In this scale, number 1 shows that the teacher "has no confidence in their skills," whereas numbers 2–5 show that the teacher "is not that confident in their skills," "doubts their skills," "is confident in their skills," and "is completely confident in their skills," respectively. Reliability was confirmed at a Cronbach's alpha of 0.82. In addition, the validity of the questionnaire was approved using content validity. In this respect, the instruments were provided to 10 faculty members who had conducted

considerable research in the area of English courses. In the end, the subjects confirmed the validity of the questionnaire. Furthermore, data analysis was performed in SPSS.

6. Results

Data distribution was assessed using the Kolmogorov–Smirnov test, which was obtained at 0.783 at a significance level of 0.253. Since the level of significance was above 0.05, it could be concluded that the data obtained from the questionnaire had normal distribution at a 95% confidence interval. The mean score of teachers' perceptions of their educational knowledge and pedagogical skills was assessed in the next stage (Table 2).

As observed, there were differences between general and business English teachers regarding their perceptions of educational knowledge. In general English courses, teachers of online programs ($M = 3.89$) had a lower perception of their knowledge compared with instructors of in-person education systems ($M = 4.23$). Similarly, teachers of online programs ($M = 3.83$) had a lower perception of their knowledge compared with instructors of in-person education systems ($M = 4.12$). Similar results were obtained regarding teachers' perceptions of their pedagogical skills. In general English courses, teachers of online programs ($M = 3.80$) had a lower perception of their skills compared with instructors of in-person education systems ($M = 4.22$). In business English courses, teachers of online programs ($M = 3.75$) had a lower perception of their skills compared with instructors of in-person education systems ($M = 4.30$). To answer the first question (is there a significant difference between in-person and online education systems regarding general teachers' perceptions of their educational knowledge and pedagogical skills?), MANOVA was applied in SPSS to compare the mean scores of general English teachers' perceptions of their educational knowledge and pedagogical skills in two in-person and online universities. First, the test for equality of variances was carried out, and the results were indicative of no difference between universities with online and in-person education systems ($F = 0.74$, $p = 0.68$). Therefore, MANOVA was considered suitable for data analysis by considering teachers' perceptions of educational knowledge and pedagogical skills as the

dependent variable and online- and in-person education systems as the independent variable. According to the results, there was a significant difference between online- and in-person universities regarding teachers' perceptions of their general English knowledge:

$$\text{Wilk's } \lambda = 0.650, p = 0.03. \quad (1)$$

Similar results were obtained regarding teachers' perceptions of their general English pedagogical skills in online- and in-person education systems:

$$\text{Wilk's } \lambda = 0.650, p = 0.02. \quad (2)$$

To answer the second question (is there a significant difference between online- and in-person education systems in terms of business English teachers' perceptions of their educational knowledge and pedagogical skills?), MANOVA was reused in SPSS to compare the mean scores obtained from the two universities in this regard. In the end, the results demonstrated a significant difference between in-person and online learning methods regarding teachers' perceptions of their education business English knowledge:

$$\text{Wilk's } \lambda = 0.83, p = 0.001. \quad (3)$$

Moreover, a significant difference was found between the two education systems in terms of business English teachers' perceptions of their pedagogical skills:

$$\text{Wilk's } \lambda = 0.84, p = 0.002. \quad (4)$$

These significant differences are shown in Table 2, according to which general and business English teachers of in-person universities obtained a higher mean score of educational knowledge and pedagogical skills compared with the instructors of online universities.

7. Discussion

One of the most important factors affecting the success of education is to use of the correct method of education. A suitable method must be used at any time following the existing conditions in a way that while being useful and effective, it can be used for different segments of society. Online learning has taken a significant part of education due to the current situation in the world, and many people, including students, teachers, and organizations, use this type of education due to the safety of this education and the possibility of using it in any place and time. On the other hand, despite the benefits and advantages of online learning, many obstacles and limitations of this type of education have caused challenges to the provision of effective and useful education. In this regard, an important issue is to compare teachers' perceptions of their knowledge and pedagogical skills in online education systems with those in in-person

universities. Therefore, the difference observed between general and business English teachers in two online- and in-person education systems in this study could be explained based on the model developed by Fuller and Brown [35] for teachers' concerns during their professional development. According to this model, novice teachers and instructors are concerned about "themselves" or "their pedagogical skills and becoming a part of the education environment." After this stage, teachers enter the "task-oriented" stage, where they "express their concerns about the education tasks and activities by developing proper education content." In the final teaching stage, when concerns about self and tasks are eliminated, teachers mostly focus on the effect of their training on students, which requires more important and broader education decisions and considerations about the impact of current practices and issues on classroom students.

The findings of this research emphasize the perspectives of university professors, which demonstrated that online learning is a flexible and beneficial source of learning throughout the crisis despite certain limits. Online education is said to be a more laid-back and fruitful method of acquiring information, according to university lecturers. The majority of respondents said that students benefit from online learning because it allows them to access learning materials asynchronously at any time throughout the day. This conclusion is consistent with the assertion [36, 37] that learners who participate in online education have the opportunity to access online resources at any time of the day or night. In addition to this, it promoted independent student study, in which the student is an active participant in the educational process. Because students may study from the comfort of their own homes and avoid the costs of transportation and other incidentals, online education makes it possible to lower the overall cost of a student's education. Students gained vital life skills including time management and self-discipline as a direct result of their participation in educational programs.

The subjects of this study obtained both good and bad experiences as a result of obtaining their education online; however, on average, the individuals' experiences were favorable. The participants' positive experiences were contributed to by factors including the adaptability of the class participation time and the ability to study at one's own pace, the low cost of the online class, the availability of electronic research, a well-designed course layout, an easy connection to the Internet, an easily navigable online class interface, and the participants' familiarity with the instructor. The following were contributors to the negative experiences that students had delayed feedback from the instructor, the instructor not being available to provide technical support, a lack of self-regulation and self-motivation, a sense of solitude; monotonous instructional methods and content, and poorly designed course material. The vast majority of the previous research literature, which was analyzed as part of this study, provided support for these results. Several scholars have cited ease, adaptability, and the opportunity for reflection as three of the advantages of receiving one's education online [38–41]. Some of the elements that contributed to the unpleasant

experiences the participants had may also be discovered in other research that is comparable to the ones identified in the literature. According to Howland and Moore [42], the amount and quality of communication among students as well as communication between students and the teacher was an important concern. Petride [41] found that the speed with which replies were given altered the experiences of the learners. Both Vonderwell [40] and Song et al. [43] indicated that students' experiences with online learning lacked a feeling of community in the classroom setting. According to the findings of this research, another factor that affected students' educational experiences was how well they knew their teacher. If the online student already knows the online teacher, then he or she will likely feel more at ease when attending the online class that the instructor teaches. Given the results of this investigation, one may wonder whether or not first-year faculty members should be the ones to instruct students in online classes. It is possible to do more studies to investigate the efficacy of first-year faculty members and senior faculty members' use of online teaching.

The perspective of the university professors becomes one that is based on a demographic gap, in which the university professors are unable to profit from the e-learning resources that are accessible to them, and hence the perception becomes one that is based on a demographic gap [44]. When it comes to helping with e-learning and bridging the demographic gap at the same time, making greater levels of performance and knowledge of the advantages and ideas from multimedia teaching becomes an essential element of the process. According to the findings of the study conducted by Govindasamy [45], there are demographic gaps that have been created as a result of this perception. These demographic gaps have led to obstacles in the application of the available e-learning tools, and specific groups of faculty members have prevented faculty members from maintaining a positive attitude toward e-learning. In the current education system, the distinctive feature of which is teacher–student interaction in the classroom, it is reasonable for teachers to reach the final stage (i.e., effect) quicker compared with teachers of online universities, which is mainly due to the limited interactions between students and teachers in online education systems. On the other hand, although in general English courses the needs of students are not as important as in business English courses, teachers' perception of their level of educational knowledge and pedagogical skills in the in-person education system seems to be more conscious than the online system.

8. Conclusion

According to the results of the present study, general and business English teachers' educational knowledge and pedagogical skills in both in-person and online education systems distinguish their perceptions. Based on the responses obtained for the last eight items of the instrument, most general and business English teachers of in-person universities claimed full knowledge and adequate skills regarding areas such as meeting students' needs, controlling students with behavioral problems or learning disorders, focusing on the improvement of all

students, managing student learning groups, managing learning in all students, using proper strategies to control students, controlling students' learning and performance during sessions, and managing student discipline. Meanwhile, teachers of online universities were not that confident in their pedagogical skills and knowledge. Therefore, regardless of the type of education system, the focus should be on the formation of accountability systems that make teachers and teacher training centers responsible for raising the level of educational knowledge and teaching skills. This is mainly because those who spend time improving their skills and knowledge will increase students' learning as capable people. In addition, they can increase students' motivation by providing more facilities and content. These instructors can also nurture students thinking abilities and facilitate their growth.

This study offers a wide variety of advantages. Learning on the internet provides instructors with a time-saving method to instruct their pupils. Teachers can incorporate a variety of online learning resources, including videos, PDFs, and podcasts, into their lesson plans. Online learning provides a variety of resources. Instructors can become more effective educators by expanding the scope of the lesson plan to incorporate information found online in addition to conventional textbooks. Students can participate in their courses from any place of their choosing, which is another benefit of receiving an education online. In addition to this, it enables educational institutions to connect with a wider pool of prospective pupils as opposed to being constrained by geographical borders. In addition, online lectures may be recorded, saved, and distributed for use as references at a later time. Students are thus able to access the curricular information whenever it is most convenient for them. Therefore, students have more flexibility in terms of when and where they may do their schoolwork while using online learning. The lower overall cost of online education is another benefit of this kind of instruction. Learning anything in a virtual environment is far more cost-effective than learning in the real world. This is because participating in online education removes the need for students to pay for things like transportation, meals, and most importantly, real estate. In addition, all of the class or study materials can be accessed online, making it possible to create a paperless learning environment. This results in an educational setting that is not only more cost-effective but also better for the environment. Because students can participate in online classes from the comfort of their own homes or any other location of their choosing, there is a decreased likelihood of students missing out on lessons. Every single student will go through their educational experience differently and will do it in a manner that is unique to them. Some students are auditory learners, while others are visual learners who find pictures easier to understand. In a similar vein, some students do exceptionally well in school, whereas others are more independent learners who are easily distracted by large groups. Personalization is possible in a variety of different ways through the use of the online learning platform, which offers a wide variety of options and resources. It is the most effective method for

producing an ideal educational setting that caters to the requirements of each student.

Data Availability

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

Ethical Approval

This study was approved by the Ethical Committee of Iranian universities (no. 8446981-315479-011).

Conflicts of Interest

The authors declare that they have no conflicts of interest.

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