Identity Construction and E-Learning: The Role of Virtual Teaching in EFL Learners' Identity

Azar Bagheri Masoudzade[1], Neda Fatehi Rad[*2]

[1]*Ph.D. in TEFL, Department of English Language, Qeshm Branch, Islamic Azad University, Qeshm, Iran*
[2]*Assistant Professor, Department of English Language, Kerman Branch, Islamic Azad University, Kerman, Iran*

Abstract

The present study considered the role of E-learning in EFL learners' identity construction. It specifically tried to highlight the extent that different aspects of students' identity were constructed in the virtual teaching context. It also identified the most/least dominant types of identity construed in the E-learning context and explored the possible difference between male and female learners as far as E-learning identity is concerned. To achieve the objectives, the researcher adopted survey research as a quantitative method with a sample of 80 newcomer students of both genders. The study centered on the Internet via Adobe Connect Application for virtual classes. It is worthy to mention that participants of the study experienced E-learning during a term in the case of virtual education imposed by COVID-19. The data were collected through Aspect Identity Questionnaire (AIQ) and moved to SPSS software to be analyzed and interpreted. Results indicated that a high extent of language learning identity was achieved among the participants, and relational and collective identity types were identified as the most and least dominant ones in them, respectively. Moreover, findings of overall language learning identity presented no difference in both genders (male & female EFL learners).

Keywords: EFL Learners; E-Learning Context; Gender; Identity; Virtual Teaching

1. Introduction

The English language is considered a global medium for communication, and it has been exacerbated by the advent of the internet and Information Communication Technology (ICT) (Xiaohong & Zeegers, 2010; Crystal, 2012; Alfarhan, 2017). In most recent decades,

---

* Corresponding Author's E-mail address: Nedafatehi@yahoo.com

English Language Teaching (ELT) dealt with the concept of learners' identity as one of the major topics of the field. The use and spread of ICTs have contributed to shaping and changing language and identity as well as learning and their relationship. Digital communication provides students with multiple semiotic resources for meaning-making, that account for the emergence of new genres and modes of social interaction (Jones & Hafner, 2012). As a consequence of the Information Technology (IT) use in the language teaching process, therefore, many researchers were interested in investigating teacher's identity in relation to E-learning (O'Dowd, 2003; Warner, 2004). Based on Arkorful and Abaidoo (2014), E-learning can be explained as the use of IT to get different materials related to the teaching and learning process. Moreover, it enhances students' learning by providing various resources and information at any place and time (Zhang et al., 2004). Despite the direct relationship between E-learning and students' identity, there are some factors that affect the identity by using technology in the teaching practices (Gilakjani, 2013).

Nowadays, technology rapidly develops and spreads, and focuses on the introduction of E-learning to improve the studying of English as EFL or ESL (Long & Chen, 2007; Allam & Elyas, 2016). The importance of technology advancement refers to the development of an E-learning environment that has transformative potential in terms of English language teaching and learning methodology (Hellebrandt, 2001). There are numerous pieces of evidence considering the relative potential advantages of this kind of technology. According to Smith (2000), E-learning provides the option to remove the spatial and temporal limitations which are in conventional teaching/learning settings. Also, some E-learning applications provide learners with language resources and enable them to communicate with native speakers directly. Besides, they can benefit from verbal and written communication skills in real contexts (Al-Qahtani, 2016; Al-Hassan & Shukri, 2017).

The concept of identity has undergone its evolutionary way with the evolution of humankind. Throughout human existence, changes in technology have strongly affected people's life. Modern identity has been significantly influenced and formed by new emerging technologies firmly entering the life of people in the global community (Shunina & Shunin, 2017). By changing language and its use in the electronic context, the individuals' identity has also transformed. It can afford students new ways to multiple identities which enable them to connect their learning

experiences across time and settings (Darvin & Norton, 2015). These affordances of technological communication have brought about new conceptualizations of learning which in turn influence students' construction of identities as well as their skills, literacies, cognitive, and learning processes. How digital context affects all the various aspects of learning, is an unresolved question that needs to be addressed (Thorne, 2015; Darvin, 2016). In traditional classes, a learner's identity is almost completely bound up kinesthetically, physically, and linguistically with their classmates. However, in online classes, students enter with only their words and maybe chose images and create identities from those. Students may not be conscious of the myriad choices available to them; thus, it is dependent on teachers to help students establish their identities. This is true for adult and higher education learners, and even more for younger learners, whose identities are much more fluid (Tomei et al., 2008).

The issue of identity construction in the educational environment has attracted much attention (Flowerdew & Wang, 2015), however, there is not much research on how identities are formed in the E-learning context. Some media have recently been created and they have been the focus of increasing interest as a place for the construction of scholarly identity. They show a new mode of discourse to share self-presentation content and thus construct their online identity. The application scholars develop their identity by placing a compilation of materials, which enables a continuing and interactive process and facilitates the blending of various facets of scholars' personal and professional identity. In Westbrook's (2006) view, incorporating E-learning into the EFL context is not delivering predictable findings. Also, it seems there is a requirement for learners to participate in E-learning education and adopt virtual teaching for their educational purposes. Therefore, this paper investigated the effectiveness of E-learning as a virtual one on EFL students' identity and attempted to indicate the extent of different aspects of students' identity constructed in the virtual teaching context. It also aimed at exploring the possible difference between male and female EFL learners as far as E-learning identity is concerned. In order to meet the presented objectives, the following questions have been designed:

1. *To what extent are the aspects of students' identity constructed in the virtual teaching context?*
2. *What type of identity construed in the E-learning context is more/less dominant among EFL learners?*

3. *Is there any significant difference between male and female EFL learners as far as E-learning identity is concerned?*

2. Literature Review

Jukuri (2013) carried out a study on identity construction using social media. The study was qualitative and interpretive. The data were collected through 8 semi-structured interviews and they were analyzed carefully. The results revealed that social media as digital sources enabled designers to speed up the exploration phase of design and helped them to find inspiration faster or even save it in the forms of texts and pictures on their social media profiles. In another study, Nach and Lejeune (2014) investigated the impact of information technology on students' identity. They investigated 25 Information Systems (IS) empirical papers which adopted an identity frame and were printed in 30 leading IS journals. According to their investigation, they asserted that IS researchers have still insufficiently searched the IT identity linkage.

Mutambik (2018) examined the teachers' and learners' viewpoints towards the role of E-learning in the EFL context of Saudi Arabia. Data were gathered through unstructured interviews with EFL teachers and learners to analyze their views towards the role of E-learning in the teaching/ learning process. The results indicated that E-learning improves learning skills, independent learning, and interactive learning. Moreover, García-Pastor (2018) explored students' identities in digital texts created by college students. Students made connections between their family and daily life spaces, school as well as the foreign language community, and form their identity construction. Students were empowered by identifying with an intercultural speaker, using authority claims, and enhancing their authoritativeness in their texts. The results underscore the potential of digital texts of identity to reinforce students' identities and provide more equitable learning spaces.

In a more recent study, Daher and Shahbari (2020) investigated students' identities in online classes. The students were interviewed before and after participating in online classes. The outcomes showed that the virtual identities of learners were influenced by three factors: the personal characteristics of the students, the teacher's interaction with the students, and the design of the online classes. The results also highlighted that students' identities, in terms of features and narratives, changed in the case of some students, but continued to be the same in the case of other students. The reasons for changing or the absence of it were the mentioned factors and their interaction. In the same year, Aboud (2020) studied the

impact of E-learning on EFL teachers' identity. Findings of the study revealed the effect of E-leaning on teachers' identity via internal factors such as attitudes, motivation, commitment, and autonomy as well as external factors such as educational environment and limited training programs. E-learning also changed the traditional role of the teachers and their professional identity to become facilitators of the learning process.

All in all, a few qualitative studies evaluated the effectiveness of social media or information technology on students' identity (Jukuri, 2013; Nach and Lejeune, 2014). Another qualitative research investigated students' identities in online classes through an interview (Daher & Shahbari, 2020). A study also investigated the effectiveness of E-learning from both teachers' and learners' viewpoints (Mutambik, 2018), and a recent one just considered the effect of E-leaning on teachers' identity (Aboud, 2020). However, none of the studies analyzed the extent of different aspects of students' identity constructed in the virtual academic context. In other words, there has been no quantitative work in analyzing the effectiveness of virtual teaching through a new application as Adobe Connect on newcomers' identity. This research may fill the gap in the literature by evaluating different aspects of students' identity (personal identity, relational identity, social identity, and collective identity) in an online context. After conducting this research, it is hoped that more researchers are interested in applying new forms of teaching and learning on different levels of students in different EFL contexts.

3. Method
3.1. Design of the Study

According to Munn and Drever (2000), survey research is a quantitative method for the collection of information from a pool of respondents by asking multiple survey questions and some sort of numerical analysis is carried out. The main objective of the present study is to explore identity construction in EFL learners via virtual teaching, thus the quantitative method as a suitable one was used as a design of this research to answer the research questions. It should be noted that the present work was designed to assess different aspects of identity construction as dependent variables, and E-learning (virtual teaching) as the independent one.

3.2. Participants

The population of this study consisted of 80 EFL students attending Azad University in Kerman. They were newcomers of both genders whose

ages ranged from 18 to 21. The participants were EFL learners who were selected based on convenience sampling. Convenience sampling involves using respondents who are "convenient" to the researcher. It is the most common form of non-probabilistic sampling and it is a method of collecting samples by taking samples that are conveniently located around a location or Internet service (Edgar & Manz, 2017). The participants were native speakers of Persian that participated in online classes through the Adobe Connect application. That is to say, they were exposed to virtual teaching. It should be noted that their participation in this study was completely voluntary.

3.3. Instrumentation

The questionnaire survey technique is a very effective quantitative technique that enables large-scale numerical data to be gathered in a limited time. Different aspects of the Identity Questionnaire (AIQ) adopted by Cheek, Smith, and Tropp (2002) were used and assessed identity orientations through 35 items. The items measured four identity orientations as 1) personal, 2) relational, 3) social, and 4) collective in an individual's self-concept. All the items presented in the form of a 5-point Likert scale as 1 (Not important to me), 2 (Slightly important to me) 3 (Somewhat important to me), 4 (Very important to me), and 5 (Extremely important to me). The aspects of identity were assessed through 10 items of "Personal identity", 10 items of "Relational identity", 7 items of "Social identity", 8 items of "Collective identity", and 10 items of "Specified items" not scored on scales. Therefore, the "Specified items" were ignored and 35 items (four types of identity) were considered for the study. That is to say, items 2, 5, 8, 11, 14, 18, 21, 25, 27, 32 are related to "Personal identity", items 22, 26, 28, 31, 34, 35, 37, 39, 41, 43 are related to "Relational identity", items 3, 6, 9, 12, 15, 17, 20 are related to "Social identity", items 4, 7, 10, 13, 24, 29, 38, 42 are related to "Collective identity". By utilizing the Likert Scale, the participants were encouraged to answer in a way that reflected their personal attitudes towards a different kind of learning as a virtual one which was experienced during a term.

3.4. Data Collection and Analysis Procedure

In the first place, 80 elementary EFL learners of both genders were chosen based on convenience sampling from the Azad University of Kerman. This study centered on the Internet via the Adobe Connect application which is created in 2020 for virtual classes. Adobe Connect is

software for remote training, presentation, desktop sharing, and web conferencing. In fact, it is an application where language students can participate in the class and express their ideas, raise questions, and discuss matters related to the course outside of class. It is also software where the lecturer shares documents such as handouts and PowerPoint slides. It is worth mentioning that participants of the study experienced E-learning during a term in the case of virtual education imposed by COVID-19. The questionnaire was published with the students after they participated in the online classroom. In fact, by answering the questionnaire, students described their designated identity during their learning in the virtual classroom. Before administering the questionnaire, all the students were given a brief overview of the questionnaire and the given time for answering the items. Also, they were told that their answers would remain anonymous. As mentioned earlier, the original English questionnaire was translated into Persian to be more understandable and to ensure that the participants easily followed the items. Finally, the completed questionnaires were sent to SPSS software for analyzing and interpreting data.

In the data collection stage, the scores of the questionnaire were taken for analysis. Descriptive and inferential statistics along with SPSS and Excel software were used. In the descriptive statistics section, the research variables were presented using frequency tables and figures. In the inferential statistics section, Chi-Square Test and Mann-Whitney U Test were done to answer the research questions.

Cheek et al. (2002) ran a factor analysis whose results revealed that personal, rational, social, and collective aspects of identity constituted four relatively distinct categories of identity attributes with adequate psychometric characteristics. The questionnaire was made valid and reliable by the researcher. To avoid any confusion and increase validity, the Persian version of the questionnaire was used and the back translation by two experts in the field, and it was confirmed the original concept of the translated questionnaire. Also, the length of the questionnaire and the difficulty of the questions were modified by referring to similar literature. In addition, the reliability of the questionnaire was analyzed through Cronbach's alpha test, and the reliability of each scale was high (Table 1).

Table 1. *Reliability Statistics of Questionnaire Scales*

4.

Questionnaire Scales	Number of Items	Cronbach's Alpha
Personal Identity	10	0.86
Relational identity	10	0.88
Social Identity	7	0.84
Collective Identity	8	0.81

Results and Discussion

The present study considers the role of E-learning on EFL learners' identity construction. Actually, it investigated the extent that different aspects of students' identity are constructed in the virtual teaching context. The study also explored the possible difference between male and female EFL learners' views as far as E-learning identity is concerned. As stated earlier, 80 newcomers of Azad University of both genders were chosen as the participants of the present work. The data were gathered from a survey; a Five-Likert questionnaire consists of 35 items which measured four identity orientations as personal, relational, social, and collective in individuals. The collected data were analyzed through SPSS software and interpreted by the researcher. That is to say, the respondents' scores were analyzed through inferential statistics and the results were interpreted to answer the research questions.

4.1. Descriptive Analysis of Four Types of Identity

The present study analyzed language learning identity orientation consisting of four types labeled as personal, rational, social, and collective. Table 2 reported the mean scores of the four types of identity orientation as 3.62, 3.75, 3.32, and 3.15 along with the standard deviation which are 0.64, 0.67, 0.73, and 0.69, respectively. In the five-point Likert questionnaire, number 3 is considered as the middle scale. In such descriptive statistics, the ascendant process is proved if the mean score is more than 3 (M>3), but the descending process is proved if it is less than 3 (M<3). As the following table shows, all of the mean scores reported more than 3, so language learning identity was formed increasingly among the EFL learners. Also, the highest mean was descriptively assigned to "Relational identity" (M = 3.71, SD = 0.64) and the lowest mean was assigned to "collective identity" (M = 3.27, SD = 0.62).

Table 2. *Descriptive statistics of Different Types of language Learning Identity*

	Variables	N	Minimum	Maximum	Mean	Std. Deviation
	Personal Identity	80	1.75	4.81	3.62	0.64
Types of Identity	Relational Identity	80	1.95	4.89	3.75	0.67
	Social Identity	80	1.65	4.35	3.32	0.73
	Collective Identity	80	1.23	4.23	3.15	0.69
Total Score	Language Learning Identity	80	1.53	4.61	3.46	0.58

4.2. Inferential Statistics of Identity Construction in EFL Learners

The following parts interpreted identity construction through the Chi-Square Fit Goodness Test which analyzed different levels of English language learning identity among EFL learners of Azad University. For analyzing the level of personal identity as a dependent variable, at first, it was divided into three categories, low, medium, and high. After that, the Chi-Square Fit Goodness Test was used to analyze personal identity among EFL learners. Table 3 reported the value of this test which is equal to 69.25 ($\chi^2 = 69.25$, DF= 3). Considering the significance level which is less than 0.01 (*p*-Value = 0.000), with more than 99% of certainty, it can be stated that there was a significant difference between Fo and Fe. Therefore, personal identity in most of the EFL learners was high (41 Students = 51.25%).

Table 3. *Frequency Distribution and Chi-Square Statistics of Personal Identity*

Personal Identity Level	Fo (%)	Fe	Chi-Square	DF	*p*-Value
Low	12 (15.00%)	73.2			
Medium	27 (33.75%)	73.2	69.25	3	0.000
High	41 (51.25%)	73.2			
Total	80 (100%)				

*Note. "Fo" is observed frequency and "Fe" is expected frequency.
The significance level of the p-value is at 0.01.

To describe the level of personal identity as a dependent variable, at first, it was classified into three levels, low, medium, and high for ease of access. In the second step, the Chi-Square Fit Goodness Test was considered to analyze the relational identity of the participants. As table 4 indicated the value of this test is equal to 72.45 ($\chi^2 = 72.45$, df = 3).

Regarding the significance level which is less than 0.01 (p-Value = 0.000), it can be noted with more than 99% confidence that there was a significant difference between Fo and Fe. Thus, relational identity in most of the participants of this study was high (48 Students = 60%).

Table 4. *Frequency Distribution and Chi-Square Statistics of Relational Identity*

Relational Identity Level	Fo (%)	Fe	Chi-Square	DF	*p*-Value
Low	10 (12.50%)	73.2			
Medium	22 (27.50%)	73.2	72.45	3	0.000
High	48 (60.00%)	73.2			
Total	80 (100%)				

Note. "Fo" is observed frequency and "Fe" is expected frequency.
The significance level of the p-value is at 0.01.

To analyze the level of social identity as one of the identity types, it was divided into three levels low, medium, and high. Then, the Chi-Square Fit Goodness Test was considered for examining social identity in the subjects of this work. As table 5 highlighted the value of this test is equal to 75.53 (χ^2 = 75.53, DF = 3). Regarding the significance level which is less than 0.01 (p-Value = 0.000), it can be said with more than 99% confidence that there was a significant difference between Fo and Fe. So, the value of social identity in most of the students was obtained high (37 Students = 46.25%).

Table 5. *Frequency Distribution and Chi-Square Statistics of Social Identity*

Social Identity Level	Fo (%)	Fe	Chi-Square	DF	*p*-Value
Low	14 (17.50%)	73.2			
Medium	29 (36.25%)	73.2	75.53	3	0.000
High	37 (46.25%)	73.2			
Total	80 (100%)				

Note. "Fo" is observed frequency and "Fe" is expected frequency.
The significance level of the p-value is at 0.01.

For examining the last type of identity as collective, the variable was considered as three levels of low, medium, and high. Next, to measure this identity in the participants, Chi-Square Fit Goodness Test was applied and the results are shown in the following table. As Table 6 displayed, the value of this test is 78.22 (χ^2 = 78.22, DF = 3). Focusing on the significance level which is less than 0.01 (p-Value = 0.000), it can be declared that there was a significant difference between Fo and Fe.

Hence, the value of collective identity in most of the subjects was high (33 Students = 41.25%).

Table 6. *Frequency Distribution and Chi-Square Statistics of Collective Identity*

Collective Identity Level	Fo (%)	Fe	Chi-Square	DF	*p*-Value
Low	21 (26.25%)	73.2			
Medium	26 (32.50%)	73.2	78.22	3	0.000
High	33 (41.25%)	73.2			
Total	80 (100%)				

Note. "Fo" is observed frequency and "Fe" is expected frequency.
The significance level of the p-value is at 0.01.

Finally, to describe the overall identity construction, the total score of the identity questionnaire was divided into 3 categories as low, medium, and high. To analyze the overall identity construction among the EFL learners, Chi-Square Fit Goodness Test was used. According to the result of table 6, the value of the test is 76.32 (χ^2 = 76.32, DF = 3). Considering the significance level which is less than 0.01 (*p*-Value = 0.000), with more than 99% of certainty, it can be said that there was a remarkable difference between Fo and Fe. Accordingly, language learning identity construction in most of the EFL learners was high (52 Students = 65.00%).

Table 7. *Frequency Distribution and Chi-Square Statistics (Overall Identity)*

Identity Construction Level	Fo (%)	Fe	Chi-Square	DF	*p*-Value
Low	7 (8.75%)	73.2			
Medium	21 (26.25%)	73.2	76.32	3	0.000
High	52 (65.00%)	73.2			
Total	80				

Note. "Fo" is observed frequency and "Fe" is expected frequency.
The significance level of the p-value is at 0.01.

4.3. Analyzing Different Types of Identity Construction

In the following parts, four types of identity as personal, relational, social, and collective are analyzed and interpreted individually in male and female students. To explore the most and least dominant types of identity construction in male EFL learners, the Friedman test was done and the results are presented in Table 8. Considering the significance level which is less than 0.01, with is less than 99% certainty, it can be stated that four types of identity as personal, relational, social, and collective in male students had different ranks (χ^2 =38.65, DF=3). Based on the result

of the table, relational identity received the highest rank (Mean Rank = 2.29), and collective identity was placed in the lowest rank (Mean Rank = 1.14). Therefore, "Relational Identity" was labeled as the most dominant identity, and "Collective Identity" was identified as the least dominant one among the male EFL learners of Azad University.

Table 8. *Ranking Different Types of Identity in Male Students*

Identity Types	Mean Rank	Priority	Chi-Square	N	DF	*p*-Value
Relational Identity	2.29	First				
Personal Identity	1.86	Second	38.65	25	3	0.000
Social Identity	1.48	Third				
Collective Identity	1.14	Fourth				

***Note. The significance level of the p-value is at 0.01.**

Once again, to explore the most and less dominant types of identity construction in female EFL students, the Friedman test was used and the results are shown in the following table. Regarding the significance level which is less than 0.01, with is less than 99% of certainty, it can be noted that four types of mentioned identities were in different ranks ($\chi^2 = 46.25$, DF=3). According to data in Table 9, relational identity received the highest rank (Mean Rank = 2.40), and collective identity was placed in the lowest rank (Mean Rank = 1.17). Accordingly, "Relational Identity" was known as the most dominant identity, and "Collective Identity" was highlighted as the least dominant one among the female EFL learners of Azad University.

Table 9. *Ranking Different Types of Identity in Female Students*

Identity Types	Mean Rank	Priority	Chi-Square	N	DF	*p*-Value
Relational Identity	2.40	First				
Personal Identity	1.91	Second	46.25	55	3	0.000
Social Identity	1.52	Third				
Collective Identity	1.17	Fourth				

***Note. The significance level of the p-value is at 0.01.**

4.4. Identity Construction in Both Genders (Male & Female Students)
The following part clarifies overall language learning identity in both genders, male and female students of Azad University. To investigate it, Mann-Whitney U Test was done and the results are presented in Table 10.

Considering the significance level which is 0.05 (non-significance), it can be stated that there is no difference between the language learning identity construction in different genders (p=0.5).

Table 10. *Mann-Whitney U Test for Overall Identity in Both Genders*

Gender	N	Mean Rank	Mann-Whitney U	P-Value
Male	25	91.14	472	0.5
Female	55	98.35		

*Note. The significance level of the p-value is at 0.01.

To evaluate the first research question, at first, the total score of the questionnaire was divided into 3 categories as low (1-20%), medium (20-50%), and high (more than 50%). Then, analyzing the first type of identity which was personal was done through Chi-Square Fit Goodness Test. The related table (Table 3) reported the value of this test as 69.25. Considering the significance level which is 0.000 and a significant difference between Fo and Fe, personal identity in most of the EFL learners was high (51.52%). After that, relational identity was assessed among EFL learners, and based on the received data, this type of identity in most EFL students was high too (60%). Then, social identity was examined in the EFL learners of the university, and based on the related table (Table 9), social identity in most EFL students was moderate (46.25%). Finally, collective identity was examined among the participants of the study and the result (Table 6) indicated that the amount of this type of identity was moderate too (78.22). More importantly, Chi-Square Test was done for examining the overall language learning identity orientation among all the EFL learners. The result of the related table (Table 7) showed the value of this test which is equal to 76.32. Accordingly, English language learning identity in most EFL learners was so high (65%).

Moreover, three types of identity were checked individually through the Friedman Test in male and female EFL learners. Considering the significance level which is less than 0.01, the level of three types of identity had different ranks (χ^2 =43.77, df=2). That is to say, in male learners, relational identity is reported as the highest rank (2.29), and collective identity was labeled as the lowest one (1.14). The same analysis was done for female students and the same result was achieved, as relational identity indicated the highest rank (2.40), but collective identity received the lowest rank (1.17). Once again, due to the careful analysis, no difference was observed between the three types of identity in male

and female EFL learners. The last part analyzed overall language learning identity in both genders, male and female students of Azad University. To investigate the overall English language learning identity in both genders, the Mann-Whitney U test was used and the significance level was reported as 0.05. Therefore, no difference was found between overall English language learning identity in male and female EFL learners (U = 472).

The relational self focuses on the self-based with remarkable members, interpersonal roles, the quality of relationships, and traits which a person divides with others. That is to say, it emphasizes intimacy and interdependence, interpersonal relatedness, and usually is connected with a psychological orientation to belong. However, collective self refers to self-definitions developed from being a member of groups or social categories. Such a view of the self goes hand-in-hand with the tendency to focus on group association, in-group norms, status, and roles as defined by collectives (Rashidi & Mansourian, 2015). The mentioned discussion supports the idea that the Iranian educational setting is an individualistic rather than a collectivist one. As Brown (2007) noted, in a collectivist society education is a way of getting prestige in one's social environment while in an individualistic society, education is a way of increasing one's self-respect and economic worth considering competence and ability. Another reason for the low collective identity among the Iranian EFL student was that, innovative methods like collaborative learning, cooperative learning, communicative language teaching/ learning, participatory learning, flip learning were ignored to a great extent in the Iranian educational context (Larsen-Freeman, 2000; Razmjoo & Rizai, 2006).

It is worthy to note that the findings of this work are in accordance with what Aboud (2020) achieved by examining the effect of E-learning on EFL teachers' identity after being exposed to online learning. The results showed the effect of E-learning on EFL teachers' identity by internal and external factors. Furthermore, the outcomes of this study are in accordance with a study by Shunina and Shunin (2017). They studied the effect of technology on developing virtual identity. The findings indicated that the Tree-model of identity development suggests a methodology for identity construction by examining virtual reality as the potential for improvement of a creative personality. Also, the other related work was done by Jukuri (2013) on identity construction using social media, and the results revealed the role of social media and other digitals in speeding up the exploration phase of design. Moreover, a qualitative study by Goode

(2010) on the concept of technology identity demonstrated how powerful sociocultural influences, such as family practices and access to quality K-12 education, contribute to the development of a technology identity. The study highlighted that technology identity had an impact on the academic and social life of EFL learners.

In contrast, the findings of this research are not supported by the results of a more recent study by Iqbal et al. (2019), who analyzed the behavior of Instagram's users and communication identity. Four layers of communication identity as personal, enactment, relational and communal layers were shown by the students as not separated. The students also indicated that the communication identities they received from their surroundings cannot be separated from their online behavior on social media.

5. Conclusion and Implications

Considering the above findings, technologies can become an identity referent, a feature or set of features perceived by various members. They can only become identity referents once they are socially acknowledged by external audiences. In Ravasi and Canato's (2010) views, technological tools can influence identity construction. Not only do they change work patterns, but they also influence how individuals think about the patterns, and how others perceive these patterns. This, in turn, affects how individuals understand themselves to be professionals. As Klimanova and Dembovskaya (2013) mentioned, online activities provide students with opportunities for identity construction through interaction with L2 native speakers and non-native speakers. Today, most of the students are interacting in a new setting with the facilitation of ICT. They may go beyond their physical community and interface and form virtual identities by means of interactions with various behaviors and beliefs. It is important to note that no one can deny the rapid improvements in technology accelerate dissemination of information, beliefs, values, and culture which have far-reaching impacts on the improvement of positive and negative identities. It should be stated that the educational setting needs to improve a balanced way of technology diffusion in which students can completely fit their own way of life, customs, and culture. At the same time, they can adapt themselves to the difficulties and challenges of this era to find their own place in the real world of globalization. More importantly, working outside the class motivates language learners to study independently using E-learning interactive activities. Therefore, a variety of resources and

activities on E-learning needs to be activated to increase the time that learners interact with the language and encourage them to work independently. As Zhou (2018) noted, by doing technological learning activities, students' different identities, interests as well as discourses have been identified, and more opportunities will be provided for students' engagement and learning.

Taking the results of the present study into account, a number of implications seem to be possible. In the first step, teachers should be aware of how identity and language learning are connected. Language teachers should be provided with adequate knowledge about identity and language learning. Specifically, they need to know what aspects of identity affect the students' motivation in learning a foreign language positively or negatively. The study achievements may recommend the use of online techniques and procedures as a remedy that may be employed to compensate for the possible deficiencies in the current teaching methods. Results of the study focus on the important use of learners' involvement and their effective contribution to the online teaching context.

It is suggested that the issue of identity should be considered as part of the whole language teaching curriculum. Language teaching curriculum should be sensitive to identity issues, particularly in a technological language learning context. Additionally, it would be beneficial for the educational community to search for the effectiveness of implementing technology in the classroom. Finally, the research outcomes establish the importance of an E-learning setting to meet learners' expectations and to enhance language learning in an academic context. Such an educational system is required to facilitate independent learning and improve language learning skills in fixable and interactive ways. In a nutshell, exploring students' attitudes towards technology illuminates our understandings of the situational relevance of the digital divide. Therefore, collecting more narratives and expanding the technology identity categorization, would be a useful matter across a variety of social and educational contexts.

References

Aboud, F. (2020). The Effect of E: Learning on EFL Teacher Identity. *International Journal of English Research, 6*(2), pp. 22-27.

Alfarhan, I. (2017). English as a Global Language and the Effects on Culture and Identity. *American Research Journal of English and Literature, 1*(6), pp.69-78.

Al-Hassan, S., & Shukri, N. (2017). The Effect of Blended Learning in Enhancing Female Students' Satisfaction in the Saudi Context. *English Language Teaching, 10*(6), 190.

Allam, M., & Elyas, T. (2016). Perceptions of Using social media as an ELT Tool among EFL Teachers Within the Saudi Context. *English Language Teaching, 9*(7), 1.

Al-Qahtani, A. A. (2016). Do Saudi EFL Teachers Promote Creativity in Their Classrooms? *English Language Teaching, 9*(4), 11.

Arkorful V, Abaidoo N. (2014). The Role of E-learning, the Advantages, and Disadvantages of its Adoption in Higher Education. *International Journal of Education and Research, 2*(11), 397-410.

Brown, H. D. (2007). *Principles of language learning and teaching (5th ed.).* White Plains, NY: Pearson Education.

Cheek, J. M., Smith, S. M. and Tropp, L. R. (2002). *Relational Identity Orientation: A Fourth Scale for the AIQ.* Paper presented at the meeting of the Society for Personality and Social Psychology, Savannah, GA.

Crystal, D. (2012). *English as a Global Language*. Cambridge University Press.

Daher, W., & Shahbari, J.A. (2020). Secondary Students' Identities in the Virtual Classroom. *Sustainability,10*,3390/su12114407.

Darvin, R. (2016). *Language and Identity in the Digital Age*. In S. Preece (Ed.), The Routledge handbook of language and identity (pp. 523-539). London: Routledge.

Darvin, R., & Norton, B. (2015). Identity and a Model of Investment in Applied Linguistics. *Annual Review of Applied Linguistics, 35*, 36-56.

Edgar, T., & Manz, D. (2017). *Explanatory Study: Research Method for Cyber Security.* Macmillan: London, UK.

Flowerdew, J. and Wang, S. H. (2015). Identity in Academic Discourse. *Annual Review of Applied Linguistics, 35*, 81–99.

García-Pastor, M. (2018). Learner identity in EFL: An analysis of Digital texts of Identity in Higher Education. *Digital Education Review, 2*(3), June 2018.

Gilakjani A. (2013). Factors Contributing to Teachers' Use of Computer Technology in the Classroom. *Universal Journal of Educational Research, 1*(3):262-267.

Goode, J. (2010). The Digital Identity Divides: How Technology Knowledge Impacts College Students. *New Media & Society 12* (3) 497–513.

Hellebrandt, J. (2001). Virtual Collaborations in The Spanish Class: From E-Mail to Web Design and Cd-Rom Development. *Journal of Educational Computing Research, 20* (1), 59-70.

Iqbal, F., Utari, P., Karsidi, R., & Hastjarjo, S. (2019). *Instagram's Users Behavior and Communication Identity.* Advances in Social Science, Education and Humanities Research, volume 339, 1st Annual International Conference on Social Sciences and Humanities (AICOSH 2019).

Jones, R. H., & Hafner, C. A. (2012). *Understanding Digital Literacies: A Practical Introduction.* London: Routledge.

Jukuri, K. (2013). *Identity Projects of Design Professionals - Identity Construction Using Social Media.* Department of Marketing Aalto University School of Business, Master's Thesis Kimmo Jukuri.

Klimanova, L., & Dembovskaya, S. (2013). L2 Identity, Discourse, and Social Networking in Russian. *Language Learning & Technology, 17*(1), 69–88.

Larsen-Freeman, D. (2002). Making sense of frequency. *Studies in Second Language Acquisition, 24*(2), 275–285.

Long, J & Chen, G. (2007). The Impact of Internet Usage on Adolescent Self-Identity Development. *China Media Research, 3*(1), 2007.

Munn, P., & Drever, E. (2000). *Using Questionnaires in Small-Scale Research*. A Teacher's Guide. Edinburgh: The Scottish Council for Research in Education.

Mutambik, I. (2018). The Role of E-learning in Studying English as a Foreign Language in Saudi Arabia: Students' and Teachers' Perspectives. *English Language Teaching, 11*, 5; 2018.

Nach, H. & Lejeune, A. (2014). *The Impact of Information Technology on Identity: Framing the Research Agenda.* Electronic copy available at: http://ssrn.com/abstract=1713332.

O'Dowd. R. (2003). Understanding the ''other side'': Intercultural learning in a Spanish-English E-mail Exchange. *Language Learning & Technology, 7*(2),118-144.

Rashidi, N., & Mansourian, M. (2015). The Impact of Identity Aspects on EFL Learners' Achievement in Iranian Academic Context. *Teaching English Language 9* (2), pp. 75-96.

Ravasi, D., & Canato, A. (2010). We are what we do (and how we do it): Organizational Technologies and the Construction of Organizational Identity. *Research in the Sociology of Organizations, 29*, 49–79.

Razmjoo, S. A. and Riazi, A. M. (2006). Do High Schools or Private Institutes Practice Communicative Language Teaching? A Case Study of Shiraz Teachers in High Schools and Institutes. *The Reading Matrix: An International Online Journal, 6* (3) 342-363.

Shunina, T., & Shunin, Y. (2017). Technology Impact on Developing Virtual Identity. *Research Gate, 4* (2), 22-254.

Silverman, S., Manson, M. (2003). Research on Teaching in Physical Education Doctoral Dissertations: A Detailed Investigation of Focus, Method, and Analysis. *Journal of Teaching in Physical Education, 22* (3), 280-297.

Smith, D. (2000). *E-Learning in the 21st Century.* New York: Routledge. http://doi.org/10.4324/9780203838761.

Thorne, S. L. (2015). Technologies, Identities, and Expressive Activity. *Annual Review of Applied Linguistics, 35*, 215-233.

Tomei, J., Beaufait, P., Lavin, R., & Anderson, T. (2008). Identity in Online Education. *Identity in Online Education,* 6, 461-474.

Warner. C. (2004). It's just a game, right? Types of Play in Foreign Language CMC. *Language Learning & Technology, 8* (2), 69-87.

Westbrook, M. (2006). Teacher Readiness for Online Learning: Scale Development and Teacher Perceptions. *Journal of Educational Computing Research, 20* (1), 59-70.

Xiaohong, Z., & Zeegers, M. (2010). Redefining the Role of English as a Foreign Language in the Curriculum in the Global Context. *Changing English, 17*(2), 177–187. doi:10.1080/1358684 1003787324.

Zhang D, Zhao J, Zhou L, Nunamaker J. (2004). Can E-learning Replace Classroom Learning? *Communications of the ACM,45*(5):75-79.

Zhou, Y. (2018). Recent Developments in Technology and Language Learning: A Literature Review and Metanalysis. *CALICO Journal, 21*(1), 7-27.