The Effect of Emotion-Based Language Instruction on Improvement of the Four Main Skills in Second Language Education[1]

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Abstract

Despite the important role emotions play in affecting second/foreign language (L2) learners' cognition, such as their learning processes, few empirical studies have tried to find out how emotions affect the four main skills (i.e., listening, speaking, reading, and writing). In order to fill this gap, the present study aims to investigate the impact of Emotion-Based Language Instruction (EBLI) (Pishghadam et al., 2013) on the improvement of the four main skills in L2 education. The current quantitative study used a quasi-experimental design. A sample of 75 learners of English as a foreign language were divided into experimental and control groups. Regular instruction was administered to the students in the control group, and their books received no modification or supplementary parts. For the experimental group, in contrast, some modifications or supplementary sections were added to the books based on the underpinning theory of EBLI. T-test was used to find out whether the differences between the two groups were statistically significant. The data showed that EBLI had significant effect on the improvement of the four main skills of the learners. The results highlight the significance of EBLI in providing L2 learners with emotions which lead to L2 development of learners. Considering the results, it is suggested that L2 teachers should be equipped with knowledge about this influential factor (i.e., emotions) in pre- and in-service teacher education programs. In other words, L2 teachers should be trained in such a way so that they will be able to adopt a teaching methodology which, on the one hand, decreases the detrimental effects of negative emotions and, on the other hand, increases the beneficial effects of positive emotions.

Resumen

A pesar del importante papel que juegan las emociones al afectar la cognición de los aprendices de una segunda lengua/lengua extranjera (L2), como sus procesos de aprendizaje, pocos estudios empíricos han tratado de averiguar cómo las emociones afectan las cuatro habilidades principales (es decir, escuchar, hablar, leer y escribir). Para llenar este vacío, el presente estudio tiene como objetivo investigar el impacto de la instrucción del lenguaje basada en la emoción (EBLI) (Pishghadam et al., 2013) en la mejora de las cuatro habilidades principales en la educación L2. El presente estudio cuantitativo utilizó un diseño cuasi-experimental. Una muestra de 75 estudiantes de inglés como lengua extranjera se dividió en grupos experimentales y de control. Se administró instrucción regular a los estudiantes del grupo de control, y sus libros no recibieron modificaciones ni partes suplementarias. Para el grupo experimental, por el contrario, se agregaron algunas modificaciones o secciones complementarias a los libros basadas en la teoría subyacente de EBLI. Se utilizó la prueba T para averiguar si las diferencias entre los dos grupos eran estadísticamente significativas. Los datos mostraron que EBLI tuvo un efecto significativo en la mejora de las cuatro habilidades principales de los alumnos. Los resultados destacan la importancia de EBLI para proporcionar a los estudiantes de L2 emociones que conducen al desarrollo de L2 de los estudiantes. Teniendo en cuenta los resultados, se sugiere que los profesores de L2 deberían estar equipados con conocimientos sobre este factor influyente (es decir, las emociones) en los programas de formación docente previa al servicio y en servicio. En otras palabras, los profesores de L2 deben ser formados de tal manera que sean capaces de adoptar una metodología de enseñanza que, por un lado, disminuya los efectos perjudiciales de las emociones negativas y, por otro lado, aumente los efectos beneficiosos de las emociones positivas.

Introduction

Emotion plays an important role in all aspects of human life, including education, as it has a significant effect on cognition and the two concepts are mutually interdependent (Shen et al., 2009; Tyng et al, 2017; Um et al., 2012). However, emotion has traditionally received relatively little attention in the fields of applied linguistics and second/foreign language (L2) education so that it has almost been absent from research agenda (Dewaele, 2015; Dörnyei, 2009; Ross, 2015). This is surprising because as Oxford (1990) asserts, "the affective side of the learner is probably one of the very biggest influences on language learning success or failure" (p. 140). This lack of interest arises from this fact that the cognitive perspective has historically dominated these fields of study (Benesch, 2012; Swain, 2013). Describing the present situation in the field of L2 education, Swain (2013) points out that "emotions are the elephants in the room – poorly studied,

poorly understood, seen as inferior to rational thought" (p. 205). However, recently an affective turn has been underway in applied linguistics and L2 education literature (Agudo, 2018; Benesch, 2017; Dewaele, 2014, 2015; Dewaele & Li, 2018; Gregersen et al., 2014; Imai, 2010; Kantaridou & Psaltou-Joycey, 2021; Pavlenko, 2006, 2008, 2012; Plonsky et al., 2022; Ross, 2015; Shao et al., 2019).

In line with this new interest in emotions, Pishghadam et al. (2013) introduced Emotion-Based Language Instruction (EBLI) as a new perspective in L2 education, highlighting the crucial role of emotional involvement in forming individuals' cognition. Their model is inspired by Greenspan's (1992) Developmental, Individual differences, Relationship-based (DIR) model of first language acquisition, which, contrary to the traditional concept of development separating affect from cognition, gives a critical role to emotions in improving the cognitive functioning. That is to say, language acquisition is the result of affective transformations through communications and interactions (Greenspan & Lewis, 2005). The DIR model is a comprehensive human development model which aims to meet the processing and developmental needs of each child (Wieder & Greenspan, 2003). According to the DIR model, interactive relationships are building blocks of language development and other higher order cognitive abilities (Greenspan & Wieder, 1997). The purpose of the DIR model is to trigger these cognitive abilities and language capacities by emotional interactions (Greenspan, 2001). Language is thus a representation of the individual's cognitive and affective states, which is especially interesting in the case of applied linguistics and L2 education as the functioning of affect has only lately been acknowledged, and the research in this area is still limited.

Based on EBLI, each entity carries a degree of emotion for individuals, which is referred to as *emotioncy* (a term blended of the words *emotion* and *frequency* of the exposure to different senses). Pishghadam et al. (2013) consider that "the words with higher degree of emotion are learned faster and easier compared to the ones with a lower degree of emotion" (p. 10). In other words, if an emotional relationship with the L2 is not established on the part of the L2 learner, they are not able to reach a full understanding from a cognitive perspective. This proposition is in line with recent theoretical conceptions on inseparability of cognition and emotion in the field of L2 education which argue that both the cognitive and emotive aspects of L2 development should be taken into account as they exist in a dialectic relation to one another (e.g., Poehner & Swain, 2017; Swain, 2013).

Despite the important role emotions play in affecting L2 learners' cognition, such as their learning processes, only a few empirical studies have tried to find out how emotions affect one or two of the four main skills in L2 (i.e., listening, speaking, reading, and writing), and, to the best of our knowledge, no study has ever tried to investigate the effect of emotions on the four skills in L2 classroom contexts simultaneously. So, the present study aims to investigate the impact of EBLI on the improvement of these four skills in an English as a Foreign Language (EFL) context.

In order to achieve the aim of the present study, the following research question was formed:

Does EBLI have any significant effect on the improvement of the L2 four main skills (i.e., listening, speaking, reading, and writing) in an EFL context?

Literature Review

In recent years, researchers in the field of L2 education have tried to explore the relationship between emotions and the main skills of L2 learning. For example, Pishghadam et al. (2016b) developed and validated the EFL Skills Emotions Scale to measure the emotions EFL learners experience with regard to language skills. First, in order to construct the scale, 20 students were interviewed to find out about the emotions they experienced in their EFL classes. Then, in order to validate the scale, confirmatory factor analysis was run on 308 newly-designed questionnaires taken by students. Finally, the EFL learners' emotions generated by language skills were measured and compared using ANOVA. Their findings revealed that different skills engender different emotions in EFL learners. More specifically, it was found that the listening skill leads to anger, whereas the speaking skill results in enjoyment and pride. Meanwhile, shame was experienced during listening and speaking, and emotions such as hope, boredom, and hopelessness during writing and listening. Finally, it was found that anxiety was felt in all of the four language skills. Based on the findings of their study, they concluded that "it is essential to help students manage, regulate, and control their emotions and feelings in language classrooms" (p. 521).

Shahian et al. (2017) were interested in examining the relationship between emotioncy, flow, and reading comprehension among Iranian EFL learners. A total of 238 upper intermediate and advanced EFL learners

completed Emotioncy and Flow scales and took four tests of reading comprehension. In order to analyze the data, the researchers used Rasch analysis by using WINSTEPS software (Linacre, 2009), confirmatory factor analysis, and correlations. Their results showed that emotioncy had a significant relationship with flow and reading comprehension. Moreover, it was found that emotioncy and flow were predictors of reading comprehension. In the same vein, in order to find out about the relationship between reading emotions and reading comprehension of EFL learners, Hamedi et al. (2020) collected data from 220 Iranian EFL learners who were asked to complete two questionnaires of English Language Learners' Reading Emotions Scale and English Language Learner's Reading Engagement Inventory in addition to taking three tests of reading comprehension. The data revealed that reading emotions, along with reading engagement, was a strong predictor of reading comprehension. They then claimed that the findings of their study can have "pedagogical implications for the language teachers and material developers to account for the impact of emotions and engagement on one's reading achievement in language classes" (p. 20).

Borsipour et al. (2019) aimed to introduce sensory emotions as a new criterion to select reading texts in order to improve the EFL learners' reading skill. To fulfill this aim, they designed and validated a scale to evaluate EFL learners' emotioncy levels and their willingness to read. Their results showed a significant relationship between two levels of emotioncy, i.e., involvement (Inner and Arch) and exvolvement (Auditory, Visual, and Kinesthetic), and the learners' willingness to read. However, the other level of emotioncy, i.e., avolvement (Null), did not have any statistically significant relationship with willingness to read. As they point out, "this implies that topics with which learners have higher emotioncy, that is, inner and arch, can possibly lead to greater amount of motivation to read" (p. 184). The data of the follow-up semi-structured interview, which aimed to find out about the feelings of EFL learners toward their selected texts to be read, further revealed that almost all of the interviewees chose topics which were somehow related to their jobs or majors. It means that the learners chose topics in which they were involved as they had either experienced or done research on them.

Heydarnejad et al. (2019) tried to investigate the effect of EBLI on improving oral skills (i.e., speaking and listening) of EFL learners. Following a quasi-experimental study design, the 57 intermediate EFL learners were divided into two groups, namely experimental and control. The control group received regular instruction on their regular courses. However, the content of the courses of the experimental group was modified. That is the experimental group received vocabularies which were measured based on the amount of the emotioncy they conveyed. In order to observe the progress of the learners, IELTS was administered as a pre- and post-test. The results revealed improvements in both speaking and listening skills in the experimental group, though this improvement was only significant for the speaking skill. Considering their findings, they argued that if "emtioncy is taken more into consideration, the speed of learning increases" (p. 285).

As the literature review shows, different researchers have tried to investigate the effect of emotions on L2 learners' learning processes by focusing on one or two of the four main skills (e.g., Borsipour et al., 2019; Hamedi et al., 2020; Heydarnejad et al., 2019; Shahian et al., 2017). However, since apparently no previous study has tried to analyze the simultaneous effect of emotions on the four skills in L2 classroom contexts, the present study was conducted to investigate the effect of EBLI on all of the four main skills, perceptive and productive, in an EFL classroom context.

Methodology

The current study is quantitative in nature and uses a quasi-experimental design. During the experiment, which took one educational year, EBLI was used in the experimental group to teach the four main skills. In the parallel class (i.e., the control group), the learners received the usual instruction. That is, no modifications based on EBLI were administered to the control group to teach the four main skills during the experiment. As the pre-test, an IELTS Mock test was given to the learners to measure their level in four main skills. At the end of the experiment, the same IELTS Mock test was given to the learners as post-test to measure the effectiveness of EBLI instruction and the learners' progress.

Participants

From among 84 freshmen EFL learners studying at the University of Gonabad, in the northeast of Iran, a sample of 75 participants (50 females, 25 males) was chosen based on the results of the Oxford Quick Placement Test which showed that the participants were at the intermediate or lower level of English

language proficiency. Also, during the research project, they did not attend extra English classes. Therefore, the level of English language proficiency of the participants was similar at the beginning of the study. They were from diverse socio-economic backgrounds, with the age range from 18 to 22. There were 40 students (23 female and 17 male) in the experimental group, and 35 students (27 female and 8 male) in the control group. According to their syllabi, the students had to take conversation (speaking and listening), reading, and writing courses in the first semester of the academic year. The students were fully aware of the voluntary nature of the study and gave informed consent to participate in this research project.

Materials

The materials for practising the four main skills in the present study were developed with the focus on the concept of emotioncy. In so doing, the Metric for Measuring Emotioncy introduced by Pishghadam (2016) in Figure 1 was employed. This scale includes three sections, namely, the sense facet (consisted of null = 0 point, auditory = 1 point, visual = 2 points, kinesthetic = 3 points, inner = 4 points, and arch = 5 points), the emotion facet (in the form of a 5-point Likert scale, considering learners' feelings toward the hypothesized situation), and the frequency facet (to measure learners' amount of exposure to the situation). In other words, the materials for practicing speaking, listening, reading, and writing were modified based on the level of participants' familiarities with the topic (null, audio, visual, kinesthetic, inner, or arch), and their emotions toward it as well as the frequency of exposure. The following formula was employed to measure emotioncy: Emotioncy=sense (emotion+frequency).
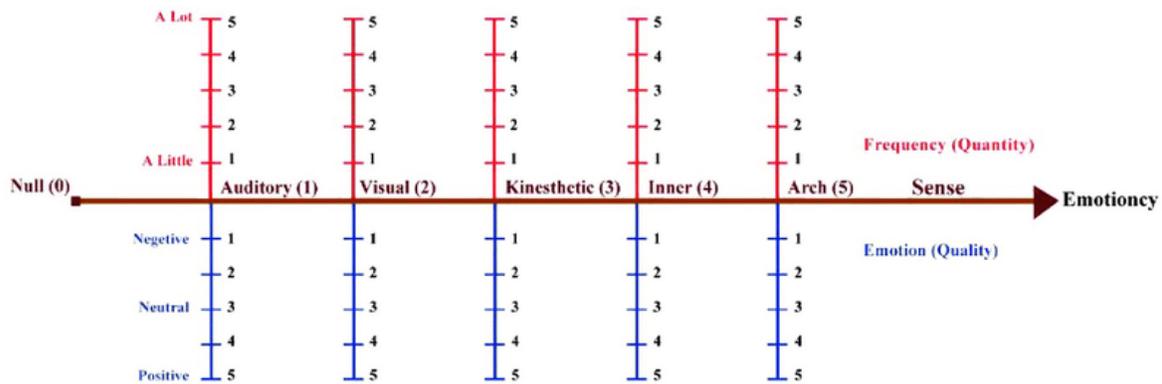

Figure 1: A metric for measuring emotioncy

Procedure

This study used a quasi-experimental design, and the participants were assigned to groups based on non-random criteria. In the beginning, the Oxford Quick Placement Test was used to determine the students' level of English language proficiency. Based on the results of the Oxford Quick Placement Test (score range 0 – 120) and considering the cut-off score (i.e., 80), 75 students were chosen for the present study. That is, the students who got the higher scores (between 80 to 120), showing high language proficiency were removed and the students with the intermediate (or lower) level of English language proficiency were asked to participate in this study. Furthermore, the selected participants were asked not to attend any extra English classes during this research project. Prior to administering the treatment, a pre-test was carried out using the IELTS Mock test (2020; https://www.english-exam.org › IELTS › mock-test). After the pre-test, instructions were given by one of the researchers who was the instructor of all of the courses in both the experimental and control groups. Regular instruction was administered to the students in the control group, no extra or supplementary material was used apart from the core coursebook. The experimental group, in contrast, had some modifications or supplementary sections added to the books based on the underpinning theory of EBLI. That means, for practicing the main skills (i.e., listening, speaking, reading, and writing), the students in the experimental group were exposed to supplementary materials which were designed to learn and practice the words with a higher degree of emotion. For instance, to practice reading skill, *Strategic Reading 2* (Richards & Eckstut-Didier, 2012) was utilized for both groups. For the experimental group, based on the topic of each unit in the book, vocabularies, expressions, collocations, and idioms on emotional experiences conveyed from the students' L1 were emphasized and practiced. For instance, the topic of Unit

4 is *Families*. In this case, relevant expressions such as 'Home is where the heart is' and relevant idioms such as 'Men make houses, women make homes' 'Follow in somebody's footsteps', and 'Your (own) flesh and blood' are introduced. Their homework was also designed in a way that the intended vocabularies, expressions, collocations, and idioms were practiced in modified tasks. In contrast, no extra modification was applied to the intended book for the control group. As another example, for developing writing skill, *Writing in Paragraphs* (Zemach & Islam, 2006) was used for both groups. To deal with each unit, vocabulary, expressions, collocations, and idioms on emotional experiences conveyed from the students' L1 were highlighted and practiced for experimental group. In this way, the writing tasks were modified on the basis of EBLI for the experimental group, but the same tasks were left untouched for students in the control group. At the end of the semester, after the instruction was completed, the Mock IELTS test was conducted as a post-test to inspect the learners' achievements in both the control and experimental groups and investigate the effectiveness of the program.

Results

The Statistical Package for Social Sciences (IBM SPSS, version 24) was employed to analyze the relevant data. Table 1 presents descriptive statistics for pre-test and post-test of the control and experimental groups, respectively. Based on Table 1, applying EBLI enhanced L2 learners' learning in terms of their four main skills in the experimental group.

Pre-test Groups		Speaking	Listening	Reading	Writing
Control	N	35	35	35	35
	Mean	3.938	3.842	3.838	3.742
	Std. Deviation	.292	.163	.285	.170
	Variance	.085	.026	.081	.029
	Minimum	3.050	3.600	2.950	3.500
	Maximum	4.300	4.130	4.200	4.130
Experimental	N	40	40	40	40
	Mean	3.963	3.930	3.763	3.764
	Std. Deviation	.303	.230	.296	.225
	Variance	.092	.053	.088	.051
	Minimum	3.050	3.500	2.850	3.450
	Maximum	4.300	4.400	4.100	4.250

Post-test Groups		Speaking	Listening	Reading	writing
Control	N	35	35	35	35
	Mean	3.888	3.953	3.788	3.853
	Std. Deviation	.290	.177	.294	.174
	Variance	.084	.031	.086	.030
	Minimum	3.000	3.700	2.900	3.600
	Maximum	4.250	4.300	4.250	4.200
Experimental	N	40	40	40	40
	Mean	4.664	4.510	4.463	4.310
	Std. Deviation	.302	.229	.289	.227
	Variance	.091	.052	.083	.051
	Minimum	3.750	4.150	3.650	4.000
	Maximum	5.000	5.000	4.800	4.800

Table 1: Descriptive statistics for pre-test and post-test of the control and experimental groups

The results of the Kolmogorov-Smirnov test indicated that the distribution of scores was normal (see Table 2).

Groups		Speaking pre	Speaking post	Reading pre	Reading post	Listening pre	Listening post	Writing pre	Writing post
Control	Kolmogorov-Smirnov Z	.144	.144	.145	.115	.136	.140	.146	.132
	Asymp. Sig. (2-tailed)	.065	.064	.061	.200	.097	.081	.057	.130
Experimental	Kolmogorov-Smirnov Z	.134	.134	.128	.134	.104	.135	.139	.135
	Asymp. Sig. (2-tailed)	.069	.070	.099	.067	.200	.065	.050	.063

Table 2: The Kolmogorov-Smirnov test for checking the normality of scores

So, the parametric test of t-test was used to find out whether the differences between the two groups were statistically significant (see Table 3). Based on the findings in Table 3, the variance of the experimental and control group for pre-test of speaking was equal (.775, p>.05). The level of significance for the means of the two groups in pre-test of speaking was .715 (p>.05). Therefore, the difference between control and experimental group was not significant in pre-test of speaking. Considering post-test of speaking, the level of significance for variance of the two groups was .811 (p>.05) and equal. In post-test of speaking, the level of significance for the means of experimental and control groups was significant (p < .001). Therefore, a significant difference between pre-test and post-test of speaking in control and experimental groups is found.

Concerning the variance of control and experimental groups in pre-test of reading, the level of significance was equal (.794, p>.05). Also, no significant difference between control and experimental group in pre-test of reading was indicated. The level of significance for variance of the two groups in post-test of reading was equal. The level of significance for the means of the two groups in post-test of reading was significant (p < .001).

The level of significance for variance of the control and experimental groups in pre-test of listening was .06 (p>.05), therefore the variance of the two groups was equal. Regarding the means of the two groups in pre-test of listening, no significant difference between control and experimental group was indicated. For post-test of listening, the variance of the two groups was equal (.11, p>.05). Moreover, a significant difference between control and experimental groups was obtained in post-test of listening as the level of significance for the means of the two groups was significant (p < .001).

Furthermore, the level of variance of the two groups in pre-test and post-test of writing was equal. The means of the two groups in pre-test of listening is not statistically significant between the two groups (p>.05). In contrast, the level of significance for the means of the two groups in post-test of writing is statistically significant (p < .001).

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	95% Confidence Interval of the Difference	
							Lower	Upper
Speaking. pre	Equal variances assumed	.083	.775	-.366	73	.715	-.163	.112
	Equal variances not assumed			-.367	72.31	.715	-.162	.112
Speaking. post	Equal variances assumed	.058	.811	-11.294	73	.000	-.912	-.639
	Equal variances not assumed			-11.323	72.34	.000	-.912	-.639
Reading.pre	Equal variances assumed	.069	.794	1.110	73	.271	-.059	.209
	Equal variances not assumed			1.113	72.30	.270	-.059	.209
Reading.post	Equal variances assumed	.008	.930	-10.025	73	.000	-.809	-.541
	Equal variances not assumed			-10.014	71.34	.000	-.810	-.541
Listening.pre	Equal variances assumed	3.594	.062	-1.885	73	.063	-.181	.005
	Equal variances not assumed			-1.928	70.003	.058	-.179	.003
Listening.post	Equal variances assumed	2.604	.111	-11.647	73	.000	-.652	-.461
	Equal variances not assumed			-11.847	71.96	.000	-650	-.463
writing.pre	Equal variances assumed	3.065	.084	-.466	73	.642	-.115	.071
	Equal variances not assumed			-.475	71.57	.636	-.113	.070
writing.post	Equal variances assumed	3.454	.067	-9.670	73	.000	-.551	-.362
	Equal variances not assumed			-9.839	71.88	.000	-.549	-.364

Table 3: T-test for the four main skills in pre- and post-tests

Discussion

So, due to the fact that emotions and feelings affect every aspect of L2 learning process, their significant role in L2 classroom contexts should be acknowledged and valued by all of the stakeholders in the field, including policy makers, teachers, and students. As the data show, EBLI had significant effect on the improvement of the four main skills (i.e., listening, speaking, reading, and writing) in the EFL learners. The students in the experimental group outperformed their peers in the control group. The results suggest the significance of EBLI in providing L2 learners with emotions which lead to L2 development of learners. As Jajarmi and Pishghadam (2019) point out, "by using the emotioncy-based language instruction, we can highlight the significance of the utilization of senses for language learners. In other words, drawing on their sense-induced emotions, we can assist learners in improving their learning..." (p. 210).

Theoretically, the findings of the present study are in line with the propositions which advocate the existence of a strong relationship between emotions and cognition (e.g., Crocker et al., 2013; Storbeck & Clore, 2007), which in turn results in enhancing teachers' teaching and learners' learning. For example, by acknowledging the close relationship between emotions and cognition, it has been suggested that emotionality provides teachers with opportunities to shape firm cognitive processing of pedagogic concepts and strategies in their mind which improves their teaching practice (Demetriou et al., 2009; Hargreaves, 1998), and, as a result, affect their students' learning. A term which emphasizes the interdependence of emotion and cognition is Vygotsky's *perezhivanie* which "comprises the cognitive-emotive unity that is necessary for understanding the full richness of human experience" (Poehner & Swain, 2017, p. 221). In order to challenge the present "either-or" logic of the contemporary research which has resulted in a deep gap between emotion and cognition, Vygotsky (1994) introduced *perezhivanie* to emphasize the importance of the unity of cognition and emotion in all aspects of human life, especially the relation between individuals and their environment. As a matter of fact, what Vygotsky is proposing is that *perezhivanie* is the dialectical unity of emotion and cognition. As Lantolf and Swain (2019) point out, "each of the poles that comprise the unity cannot be fully appreciated and understood without taking the other pole into consideration" (p. 102). In this way, this term can be applied to educational contexts, generally, and L2 contexts, specifically.

Another concept which is of particular interest to the field of L2 education is the multisensory learning approach which has been found to have a significant effect on L2 learners learning by arousing their senses (e.g., Baltova, 1999; Massaro, 2004). According to this approach, instruction techniques should be designed and practiced by teacher in such a way so that they would attract the learners' attention and get them engaged in the act of learning (Baines, 2008). As these instruction techniques in the multisensory learning approach aim to affect different senses of the learners, such as their hearing, seeing, smelling, touching, and tasting in different contexts, it leads to a better learning in comparison to the usual practices of teaching (Baines, 2008). As there is a close relationship between senses and emotions and they both affect each other mutually (Pishghadam & Shayesteh, 2017), it is not far from reality to propose that EBLI, by its emphasis on emotions, has the same effect on learners in L2 contexts as the multisensory learning approach, by its emphasis on senses.

Experimentally, many previous studies have suggested that applying EBLI in L2 classroom contexts affects different aspects of students' language development positively. For instance, Adel et al. (2020) study indicated that if learners receive vocabulary through EBLI, their vocabulary production increases which consequently develops their speaking and writing skills. In the same vein, Heydarnejad et al. (2019) also found that applying EBLI had a positive impact on oral skills of university students in EFL contexts. That means that the participants in the experimental group which received EBLI significantly outperformed their peers in the control group with respect to their speaking and listening skills. The results of Jajarmi and Pishghadam's (2019) study revealed that the participants who were taught through the involvement condition of EBLI recalled the words far better than those participants who were taught through the exvolvement condition of EBLI which is currently practiced in most of the L2 classrooms. They then suggested that "language teachers reflect on their dominant approach to the instruction of new vocabulary and avoid communicating their subject matter in a sensory-deprived learning environment" (Jajarmi & Pishghadam, 2019, p. 221).

Another strand of research in the field of L2 education, which is of particular relevance to the findings of the present study, has tried to find out about the effect of Emotional Intelligence (EI) on the development of language skills. In this way, Khooei (2014) found that EI has a positive effect on oral task in terms of its

accuracy, fluency, and complexity in an Iranian EFL context. Similarly, Genç et al. (2016) also revealed that EI and productive language skills are closely related and they affect each other positively. Soodmand Afshar and Rahimi (2016) who aimed to investigate the relationship among reflective thinking, EI, and speaking ability in Iranian EFL learners argued that EI is a strong predictor of speaking skill. It has been shown that listening skill of both males and females is significantly influenced by various components of EI such as interpersonal flexibility, stress tolerance, and relationship (Jahandar et al., 2012). Some other studies have found close relationship between EI and reading skill (e.g., Abdolrezapour & Tavakoli, 2012; Majidi Dehkordi & Shirani Bidabadi, 2015).

Conclusion

As the findings of the present study suggest, EBLI can be quite beneficial in stimulating students' emotions in L2 contexts leading to the development of the four main skills. The results indicate that more attention should be given to the role of emotions in L2 learning process. However, emotion is the area of research which has been least investigated in the field of L2 education so that "researchers understand the least" (Scovel, 2001, p. 140) about it. This view is supported by Ross (2015) who points out that, "in much the same fashion as within mainstream psychology and educational psychology, the field of applied linguistics and second language acquisition research has also suffered from a lack of understanding of the role of emotions in learning" (p. 17).

One more point which deserves special attention is the unique role of teachers in applying EBLI in the L2 classrooms. As it has been advanced that successful teachers not only consider their students' cognitive development but also their emotional experiences (Pishghadam et al., 2016a), it is suggested that L2 teachers should be equipped with knowledge about this influential factor (i.e., emotions) in pre- and in-service teacher education programs. In other words, L2 teachers should be trained in such a way so that they will be able to adopt a teaching methodology which, on the one hand, decreases the detrimental effects of negative emotions and, on the other hand, increases the beneficial effects of positive emotions. In this way, the learning environment will take advantage of more fruitful ideas and strategies presented by both teachers and students (Fried, 2011).

Limitations and Suggestions for Future Research

One limitation of the present study could be attributed to its quasi-experimental design which used intact groups as sampling procedure. Moreover, rather small number of participants in both control and experimental groups makes the generalizability of the results limited.

Future research can investigate the effect of emotions on other areas of L2 such as grammar, vocabulary, and pronunciation. Moreover, the role of gender can be of particular interest to the researchers and future studies might investigate the effect of emotions on male and female L2 learners with respect to their skills. Furthermore, the relationship between EFL learners' different socio-cultural backgrounds and the emotions they experience in classroom contexts can be further explored in future studies.

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