ORIGINAL ARTICLE

Open Access



Constructing and validating a questionnaire on barriers to EFL learners' reflective writing

Fariba Salahi and Majid Farahian barahian barahi

*Correspondence: farahian@iauksh.ac.ir Department of ELT, Kermanshah Branch, Islamic Azad University, Kermanshah, Iran

Abstract

The purpose of the current study was to develop and validate a scale to assess the inhibitors to reflective writing of Iranian English as a Foreign Language (EFL) learners. The other aim of this study was to assess the reliability of the questionnaire. To prepare the first item pool of the questionnaire, the researchers reviewed the previous related literature and prepared the first item pool with 62 items. At the next stage, based on the judgments of some experts in the field regarding the items of the questionnaire, 31 items were deleted and the next draft included 31 items. Then, 265 EFL teachers were invited to fill out the questionnaire. As the next step, exploratory factor analysis (EFA) was conducted to investigate the construct validity of the scale. Based on the results of EFA, 10 items were deleted. The final draft of the questionnaire included 21 items with three factors including 'teachers' issues', 'students' issues', and 'institutions and educational system issues'. In addition, a Cronbach's alpha coefficient was run to measure the internal consistency of the scale and the findings indicated a satisfactory level of reliability. The findings have implications for pedagogy as well as further research.

Keywords: Barriers, EFL learners, Reflection, Reflective writing

Introduction

Writing is an essential tool in life for different purposes, such as communication, self-expression, and learning. Accordingly, developing writing has always been a fundamental aim in education. In today's world, with technological advances the importance of writing seems to be more than the past since writing is no longer conceived of the job of the small elite who create masterpieces for the educated people. In fact, in the online environment equipped with blogs, emails, and online courses an effective way to communicate with others is through written communication. Rao (2007) states that the writing skill in EFL teaching has two purposes. He asserted that " [writing] stimulates thinking, compels students to concentrate and organize their ideas, and cultivates their ability to summarize, analyze, and criticize. On the other hand, it reinforces learning in, thinking in, and reflecting on the English language" (p. 100).

With such a shift of attention from product to process-oriented writing in SL, the writing skill in SL came to embrace not only the result but also the act of writing, and writing was viewed as a process through which meaning is constructed; therefore, the process of how ideas are developed in writing was valued, and cognitive skills and processes which are



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responsible in the writing act were regarded to be critical. One of the important cognitive processes involved in writing is reflective thinking (Farahian et al., 2021).

Dewey (1933) coined the concept of reflective thinking and considered it as a process that education should strive to cultivate. He defined reflective thinking as "active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and the further conclusions to which it tends" (p. 9). Reflection is an important aspect of learning as learners are capable to internalize and reconstruct what they have learned (Lavoue et al., 2015). It refers to the cognitive and affective processes that take place when a task is accomplished (Lavoue et al., 2015). Reflection describes the capacity to engage in "a conscious exploration of one's own experiences" (Silver, 2013, p. 1).

Since reflectivity has an important role in education (Gelder, 2005) it has increasingly attracted researchers' attention. There have been attempts to develop instruments to measure the reflectivity of EFL learners and teachers (e.g. Akbari et al., 2010; Basol & Gencel, 2013; Kember et al., 2010). However, research on EFL learners' reflection on writing skill is scarce and no measure of EFL learners 'barriers to reflective writing has been developed. Accordingly, the present study aimed to develop a scale to measure EFL learners' reflection on writing. However, the impetus for conducting the present study came from Avarzamani and Farahian (2019) who studied Iranian EFL learners' reflective writing and the inhibitors of their reflective writing. Both students and teachers participated in this study. The researchers developed a questionnaire to assess EFL learners' reflection in writing. They asked the learners to write some essays and evaluated the texts to consolidate the results of the research. In the second part of the research, the researchers explored both learners' and teachers' perceptions about the inhibitors of reflection in EFL writing. To attain the purpose, the researchers used a semi-structured interview. Then, the teachers filled out a researcher-made scale to assess the inhibitors to EFL learners' reflective writing questionnaire. The results indicated that Iranian EFL writers have significant weaknesses in implementing higher-order thinking when writing a text and they are mostly at a low level of reflection.

Overall, research on barriers to EFL learners' reflective writing is rare. The lack of such a study can be attributed to the lack of a valid and reliable instrument designed specifically for such a purpose. The current study is an attempt to fill this research gap and develop a valid instrument for assessing inhibitors to EFL learners, reflective writing. Therefore, the aim is to do an empirical study to barriers of EFL learners' reflective writing with the aim of constructing and validating a questionnaire in the Iranian EFL context. Accordingly, in the present study, there are two research questions:

- 1. Does Inhibitors to EFL Learners' Reflective Writing Questionnaire (IRWQ) enjoy validity?
- 2. Does Inhibitors to EFL Learners' Reflective Writing Questionnaire (IRWQ) enjoy reliability?

Literature review

John Dewey (1933) believed that reflection plays an important role in learning. Based on Dewey, reflection is the "active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and the further conclusions to which it tends" (p. 9). Dewey viewed reflection at the basic element needed for learning and clarifies that reflective thinking includes "a state of doubt, hesitation, perplexity, mental difficulty, in which thinking originates, and an act of searching, hunting, inquiring, to find material that will resolve the doubt, settle and dispose of the perplexity" (p. 12). According to Peltier et al. (2006), reflection is "a move beyond comprehension of learning material to a more active engagement in learning which evokes previous knowledge and experience, involves a questioning of what is learnt and may include a search for alternative explanations" (p.6). Van Manen (1991) viewed reflection as a basic notion in educational theory, and believed that it is another word for 'thinking'. He defined reflection as "engaging in a thinking process" (p. 98).

Schön (1987) categorized reflection into two types and discriminated between 'reflection-on-action' and 'reflection-in-action' by broadening the theory of reflection that was proposed by Dewey (1933). Schön (1987) states that reflection-in-action involves not only the individuals' thought about what he is doing when he is doing it, but also the stage of thinking back on what he has done, identifying errors, and working on this identification, and altering her manner to develop her proficiency.

Reflection-on-action is done upon experiencing the activity. The practitioner considers what the other individuals do and engages in an assessment to understand if the action was successful or not by judging on him or herself (Schön, 1991). Moreover, the person tries to consider if there is any other chance or option to reach the same or better results of the action (Schön, 1991). Schön (1983) argues that the person's reflection on his action improves the ability to theorize his exercises, to get a better understanding of the action, and develops the potential to improve it.

Kember et al. (2000) suggested that there reflective thinking is comprised of four major levels namely, habitual action, understanding, reflection, and critical reflection. One can assume that the levels are spread out on a spectrum and move from simplistic thinking to more sophisticated complex thinking. The definition for each category is provided below:

Habitual action/non-reflection

At this level, no understanding or reflection takes place. The writer tends to reproduce the work of others or gets involved in producing a fixed set of sentences in his/her text.

Understanding

There is a search for meaning at this level and deep learning starts here. However, although the writer intends to convey underlying meaning, he/she is not able to interpret the topic in relation to real-life experiences.

Reflection

At this level, the writer relates the topic to his/ her personal experiences and he/she moves beyond simple accounts of events.

Critical reflection

The writer can criticize his/her own assumptions and he/she is aware of the reasons behind his/her actions, perceptions, and emotions.

Writing is of great importance in education and in FL learning, writing is of the same, or even of more importance. As a productive skill, EFL writing is regarded as one of the four basic skills. Apart from its role as a means of communication, as learners engage in using elements of language to communicate their ideas effectively, their language acquisition is reinforced (Hirvela, 2004). However, despite such importance, for a long time writing was regarded as a product-oriented skill in which the final product is given the credit. The product-oriented approach focused on such mechanical aspects as syntactical structures involved in writing. Correctness was highly appreciated, and mistakes were not tolerated. Based on this approach, the writer was not asked to take into consideration the intended audience since he was required to mimic a pre-specified framework or a model text. Textbooks with such an orientation were mainly concerned with usage and style, demanding the learners to compose five paragraph essays each with its own topic sentence.

Under the influence of cognitivism and the paradigm shift towards progressive education, there was a great emphasis on problem solving (Mohanty, 2007) and experiential learning (Gold et al., 2012). Meanwhile, process-oriented theories of writing resulted in what Hairston (1982) called a paradigm shift in the writing theories. With the shift of attention from product to process-oriented writing in SL, the writing skill in SL came to embrace not only the result but also the act of writing, and writing was viewed as a process through which meaning is constructed; therefore, the process of how ideas are developed in writing was valued, and cognitive skills and processes which are responsible in the writing act were regarded to be critical. Meanwhile, it has been argued that writing is a problem-solving activity (Hayes & Flower, 1980; Kellogg, 2008) that needs cognitive processes of thinking and memory. As such, writers "need to keep simultaneously in focus their communicative goals, their writing plans, the nature of the targeted audience, and the conventions of writing" (Wong, 1991, p. 80). This shows that higherorder processing is of high importance. This is where reflective writing comes into play. The process through which individuals demonstrate their thinking about their own writing is reflective writing (Anson, 2000; Evans, 2007; Kathpalia & Heah, 2008). In addition, Yancey (1998) argues that reflective writing includes a constant, goal-oriented stage that involves self-assessment, revision, and the capability to show attitudes into one's own learning processes and experiences. This is more than just looking back at what has been written.

Although there has been growing attention to the role of higher-order thinking and reflective thinking in the learning process, there are debates over the usefulness and possibility of incorporating higher-order thinking into Asian nations' educational curricula. There are, as Farahian et al., (2021, P.2) argue, some "sociocultural factors such as an overemphasis on the rote and unfocused learning, a predisposed teacher-oriented

syllabus, and more importantly an authority-reverent culture that approvingly prevalent in Asian nations render higher-order instruction as problematic and somewhat difficult". As the researchers further maintain, "Asian students are so culturally different that they are less likely to actively engage in high levels of thinking". It seems that such an attitude towards Asian countries context is rooted in the fact that in the Asian context education is mainly centralized (Baniasad-Azad et al., 2016) and the tendency towards social conformity has placed no or little room for higher-order thinking (Janebi Enayat et al., 2015). In such a context, many teachers assume that "grammar and vocabulary training would be enough for writing instruction and thus the prominent role of processes in writing has been overlooked in EFL courses" (Avarzamani & Farahian, 2019). As a consequence of such attitude while EFL learners have paid scant attention to processes of constructing the text. As such, EFL writers do not consider writing as a problem-solving task. Perhaps, developing reflective thinking helps EFL learners monitor and attend to the process of writing.

Scant attention has been paid to the barriers of reflective thinking and those studied which have been carried out have dealt with reflective practice, that is teachers' reflectivity (e.g., Kavanoz & Akbaş, 2017; Moradkhani & Shirazizadeh, 2017; Sheikhbanooie & Farahian, 2021; Soodmand Afshar & Farahani, 2018; Tajik & Ranjbar, 2018).

Tajik and Ranjbar (2018) investigated the constraints and limits in applying reflective teaching principles in ELT settings in Iran from the teachers' perspective. Inductive analysis procedure resulted in the identification of 3 broad categories of obstacles of reflective teaching including institutional problems, self-directional problems, and problems with reflective teaching principles. In the same line, Sheikhbanooie and Farahian (2021) validated a questionnaire to assess the barriers to reflective practices of Iranian English for Specific Purposes. The developed scale included 27 items with three subscales, namely, learners, instructors and institutions' issues.

Soodmand Afshar and Farahani (2018) studied Iranian EFL teachers' perception of their own reflective teaching, of inhibitors to their reflective teaching, of inhibitors to their students' reflective thinking. The results revealed that Iranian EFL teachers mainly considered three groups of factors as inhibitors to their reflective teaching: lack of knowledge inhibitors (e.g. unfamiliarity with reflection, not perceiving reflection to be advantageous, etc.); affective and emotional inhibitors (e.g. lack of motivation, suffering from burn-out, etc.); and language institute inhibitors (e.g. low and insufficient wage rate in language teaching institutes, job insecurity and job dissatisfaction, etc.). Moradkhani and Shirazizadeh (2017) explored the effect of contextual differences on the degree of EFL teachers' involvement in reflection and exploring context-related factors that may help/hinder the reflection process. Analysis of the interview data revealed that teachers' involvement in reflection, institutional demands, teachers' attitude toward teaching, availability of resources, and collegial support.

Methodology

Participants

The participants were 265 (135 males and 130 females) EFL teachers. All of them were EFL teachers from high schools and private language institutes which were chosen

through available sampling from a province in the West of Iran. The age range of teachers was between 25 and 50. They were native speakers of Persian and Kurdish. Their educational degrees were B.A., M.A., and Ph.D. The degrees of 59 participants were B.A., 152 participants were M.A., and 54 held Ph.D. Their teaching experience ranged from 1 to 25 years. The following Table 1 shows the participants teaching experience.

Procedure

To develop the IRWQ, the researcher studied the relevant studies (Avarzamani & Farahian, 2019; Soodmand Afshar & Farahani, 2018) on inhibitors to reflection and reflective practice (e.g. Akbari et al., 2010). The development of IRWO involved different stages. At the first stage after reviewing the related literature, the first item pool was generated. It was done using content sampling. Moreover, different questionnaires (e.g. Avarzamani & Farahian, 2019) were checked to find a proper sample of the items to prepare the first item pool. At the next stage, the researcher attempted to develop items, which were simple and brief and did not include any unclear words. It was also important for the researchers to avoid double-barreled items (the items that ask more than one issue in a single item). Moreover, a five-point Likert scale ranging from "strongly agree" to "strongly disagree" was employed. Then, after developing the initial item pool of the questionnaire that included 62 items, the researcher asked 5 experts to pass their judgments on the items of the questionnaire. The experts were also asked to say their ideas about omitting or keeping each item of the questionnaire. After completing this stage, which lasted about three months, the items of the questionnaire were reduced to 31 items. Accordingly, 31 items were deleted based on the experts' ideas and their reasons to keep or omit each item including the ambiguity, length and, irrelevance of the items. At the next stage, which was the initial piloting of the questionnaire, the researcher administered it to 310 EFL teachers and asked them to answer its items. 265 of the EFL teachers sent back the answers. The last stage included the analysis of the obtained data to ensure its reliability and construct validity. The stages of validation of the questionnaire have been done using EFA. The internal consistency of the questionnaire was measured using Cronbach alpha reliability estimate. The results are reported in Chapter Four.

Table 1 Descriptive statistics

	Frequency	Percent
1–5 years	75	28.3
5–10 years	53	20.0
10–15 years	49	18.5
15–20 years	36	13.6
20–25 years	32	12.1
Over 25 years	20	7.5
Total	265	100.0

Data analysis

Since we aimed to develop a scale, the construct validity of IRWQ was examined through EFA. The internal consistency of the questionnaire was measured using Cronbach alpha reliability estimate.

Results

As the first stage of the development of the scale, the first item pool consisting of 62 items was prepared. To determine the content validity of the questionnaire, 5 TEFL and education Ph.D. holders were invited to pass their judgments on the first draft. This led to the elimination of 47 items, hence the number of items in the questionnaire were reduced to 31. In the next step, EFA was used to assess the extent to which the variables can measure the structure or structures that were developed to measure them. For this purpose, an EFA was used employing a Principal Components Analysis (PCA) and Varimax rotation methods. Moreover, to measure the internal consistency of the scale, a Cronbach's Alpha coefficient was employed.

The first research question of the present study inquired whether Inhibitors to EFL Learners' Reflective Writing Questionnaire is a valid measure. The questionnaire at this stage consisted of 31 items and was administered to 265 Iranian EFL teachers. To answer the research question and to assess the validity of the questionnaire, an EFA was used to statistically check the validity of the questionnaire. The first step in factor analysis is to check whether the data is suitable for doing factor analysis. Pallant (2007) holds that to ensure the suitability of the data for factor analysis two criteria must be met: "sample size and the strength of association among the variables (or items)" (p.180). Regarding the sample size, the most conventional view states the larger the better. Therefore, in this study, two hundred and sixty five EFL teachers were recruited as the participants.

The second criterion for conducting factor analysis is the inter-correlations among the items in the questionnaire. Bartlett's Test of Sphericity and the Kaiser- Meyer-Olkin (KMO) measure can be used for such a purpose. These two options indicate factorability for the data only when two criteria are met. First, when Bartlett's test of Sphericity is significant, that is, p < 0.05 and second if KMO index that ranges from 0 to 1 is not below 0.6; otherwise, the data will not be deemed suitable for running factor analysis.

Results of KMO and Bartlett's Test can be found in the following Table 2.

After descriptive analysis of the data by removing 10 weak items which were not loaded on any factor (items: 12–13–14–24–29–31–10–9–7–4) analysis with orthogonal rotation (varimax) on the 21 newly developed items was carried out.

Table 2 Results of KMO and Bartlett's test

KMO and Bartlett's test					
Kaiser–Meyer–Olkin measure of sampling adequacy .834					
Bartlett's test of sphericity	Approx. Chi-square	2830.278			
	df	465			
	Sig	.000			

Table 3 Results of KMO and Bartlett's test

KMO and Bartlett's test				
Kaiser–Meyer–Olkin measure of sampling adequacy		.872		
Bartlett's test of sphericity	Approx. Chi-square	1885.892		
	Df	210		
	Sig	.000		

Table 4 The communalities of the items of the questionnaire

NO	Items	Initial	Extraction
Communalities			
VAR00001	EFL learners lack the power of imagination and creativity	1.000	.487
VAR00002	EFL learners seldom have any idea about reflective writing	1.000	.462
VAR00003	EFL learners are not motivated enough to write	1.000	.361
VAR00005	EFL learners write their ideas without questioning them or considering them in depth	1.000	.474
VAR00006	EFL learners often start writing without planning for it	1.000	.368
VAR00008	EFL learners often write just to fulfill an assignment since they seldom have a real purpose in mind	1.000	.509
VAR00011	EFL learners lack adequate motivation to write reflectively	1.000	.455
VAR00015	EFL teachers seldom train EFL learners to be reflective	1.000	.590
VAR00016	EFL teachers cannot develop reflective thinking among EFL learners	1.000	.519
VAR00017	EFL Teachers are not familiar with the concept of reflection	1.000	.588
VAR00018	Before writing, teachers do not pose challenging questions to promote curiosity	1.000	.421
VAR00019	EFL teachers do not encourage EFL learners to monitor or evaluate their writings	1.000	.584
VAR00020	EFL teachers do not support reflective practice during their writing courses	1.000	.599
VAR00021	EFL teachers lack the motivation to practice reflection	1.000	.508
VAR00022	EFL teachers are not able to develop reflective thinking among students	1.000	.529
VAR00023	Customary writing courses focus on the product of writing rather than the process	1.000	.506
VAR00025	Type of assessments does not lead to reflection	1.000	.434
VAR00026	EFL learners' personal views are not valued in the educational system	1.000	.398
VAR00027	EFL learners' creativity in writing is not encouraged in EFL curriculum	1.000	.599
VAR00028	There is a conflict between the present educational habits and reflective practice in EFL contexts	1.000	.411
VAR00030	The educational system does not provide the appropriate condition for reflective practice	1.000	.539

As it is illustrated in the Table 3, KMO value is 0.87. This means that the sample is adequate for factor analysis.

In the next stage of factor analysis, the variance of each item the commonalities of the components of the scale was carried out. This was done to compute the variance of each item. The results can be found in Table 4

Based on the analysis of the extracted factors in Table 4 three factors have the eigenvalues above 1.0. The 3 factors accounted for 50.229% of the total variance. The Eigenvalues of the first, second, and third factors are 6.159, 2.489, and 1.690, respectively and the factors account for 29.328%, 11.852%, and 9.049% of the total variance of the items of the questionnaire.

 Table 5
 Total variance explained

Component	Initial eigen values			Extraction sums of squared loadings			Rotation sums of squared loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
Total variance explained									
1	6.159	29.328	29.328	6.159	29.328	29.328	4.219	20.090	20.090
2	2.489	11.852	41.180	2.489	11.852	41.180	3.191	15.195	35.285
3	1.690	9.049	50.229	1.690	9.049	50.229	2.928	14.944	50.229
4	.965	3.597	53.826						
5	.930	4.430	58.256						
6	.849	4.045	62.301						
7	.814	3.875	66.176						
-	-	-	-						
20	.283	1.347	98.806						
21	.251	1.194	100.000						

Table 6 Factor loading based on PCA

No	Items	Compone		nt	
		1	2	3	
17	EFL Teachers are not familiar with the concept of reflection	.738			
15	EFL teachers seldom train EFL learners to be reflective	.733			
20	EFL teachers do not support reflective practice during their writing course	.726			
19	EFL teachers do not encourage EFL learners to monitor or evaluate their writings	.711			
21	EFL teachers lack the motivation to practice reflection	.707			
16	EFL teachers cannot develop reflective thinking among EFL learners	.706			
22	EFL teachers are not able to develop reflective thinking among students	.643			
18	Before writing, teachers do not pose challenging questions to promote curiosity	.583			
1	EFL learners lack the power of imagination and creativity		.687		
8	EFL learners often write just to fulfill an assignment since they seldom have a real purpose in mind		.685		
5	EFL learners write their ideas without questioning them or considering them in depth		.670		
2	EFL learners seldom have any idea about reflection on their writing		.654		
11	EFL learners lack adequate motivation to write reflectively		.648		
6	EFL learners often start writing without planning for it		.575		
3	EFL learners are not motivated enough to write		.570		
30	The educational system does not provide the appropriate condition for reflective practice			.728	
27	EFL learners' creativity in writing is not encouraged in EFL curriculum			.719	
23	Customary writing courses focus on the product of writing rather than the process			.691	
25	Type of assessments does not lead to reflection			.588	
26	EFL learners' personal views are not valued in the educational system			.552	
28	There is a conflict between the present educational habits and reflective practice in EFL contexts			.544	

As the results of factor analysis based on PCA (Table 5) indicates, a more proper grouping of the items in the scale can be achieved through a three factor solution. As the next stage of EFA, the rotated matrix of the items of the questionnaire should be assessed to find out the items that load on each factor.

As Table 6 illustrates, 8 items loaded on the first factor (teachers' issues), 7 items loaded on the second factor (learners' issues) and 6 items loaded on the third factor (Institutional or educational system issues). As such, the three factor questionnaire can be regarded as a valid scale to assess the barriers of EFL learners' reflective writing. Accordingly, the final version of the questionnaire included 28 items with three subscales (see "Appendix").

The second research question of the study examined if the scale is a reliable measure. To measure the internal consistency of the questionnaire in this study, Cronbach's Alpha coefficient was employed. The results are reported in the following table.

The level of reliability of the questionnaire and the individual extracted factors was measured through Cronbach alpha, a widely employed internal-consistency measure of reliability (Dörnyei, 2003). Results are presented in Table 7.

As it is illustrated in the table, the alpha coefficient for each component and the whole questionnaire exceeded 0.88. Accordingly, the developed scale enjoys an acceptable internal consistency.

Discussion

In the present study, there was an attempt to develop a scale to measure the barriers to EFL learners' reflective writing. In addition, we inquired whether the scale was a valid and reliable measure. Based on the findings, there are three subscales in the scale including *learners' issues, teacher' issues*, and *educational system issues*. EFA was run to assess the questionnaire. According to the obtained results of the PCA, three factors accounting for 50.229 percent of the total variance were extracted. The results of the exploratory factor analysis demonstrated that 8 items loaded on the first factor (teachers' issues). In addition, it was revealed that 7 items loaded on the second factor (learners' issues) and 6 items loaded on the third factor (Institutional or educational system issues). The final scale consisted of 21.

The scale might act as a document showing that there are inhibitors which inhibit EFL learners writing reflectively. There might be several possible reasons for this, one of which might originate from the personal factors which prevents EFL learners' reflectivity. The other category of obstacles is related to teachers and their inability, lack of training, or lack of incentive to practice reflective thinking in EFL writing courses. The third

Table 7 Questionnaire components, and their reliability indices

Scale	N of items	Cronbach's alpha	Inter-item correlations	Low correlated items*
Learners' issues	13	0.81	0.25	4–12–13
Teachers' issues	9	0.86	0.42	14
Educational system issues	9	0.77	0.28	24-29-31
Total	31	0.88	0.20	

group of obstacles stems from educational system of the country under the influence of inappropriate educational policies and programs (Farhady et al., 2010; Hayati & Mashhadi, 2010a, 2010b), one of which is an insufficient knowledge base of reflective practice.

The items on the first factor are concerned with the barriers related to EFL learners. The study's results lend support to the literature since it was found that Iranian EFL students have not received adequate training for thinking reflectively (Avarzamani & Farahian, 2019; Farahian et al., 2021) in that as. The findings might be discussed from this perspective that there is no inclinations among Asian students in general and Iranian EFL students in particular to question their teachers' authority (Spronk, 2004). Meanwhile, as discussed in the literature, during their schooling and even in universities they have not been taught to deal with problem-solving activities (Rear, 2017). On top of that, in Iran, students' higher-order thinking may be impeded by their adherence to social conformity (Enayat et al., 2015). It seems that such conditions can inhibit students' participating in classroom discussions or asking thought provoking questions. This leads students to remain passive (Avarzamani & Farahian, 2019; Farahian et al., 2021) and consider writing as a product rather than a process (Beiki, et al., 2020; Firoozi, et al., 2019). As the consequence, they have less impetus to practice reflection in their writings and hand in assignments which are laden with either sentences borrowed from internet sources or unskillful translations from Persian to English. Future research can shed more light on the issue.

The second factor included the items related to teachers' issues. The findings are compatible with Soodmand Afshar and Farahani (2018), and Sheikhbanooie and Farahian (2021), who concluded that teachers' unfamiliarity with reflective practice, their lack of motivation, and absence of adequate training on reflection are among the major inhibitors of teachers' reflective practices. The results of the present study have also extended prior research by Jaeger's (2013) since he found that some of the major inhibitors to reflective practice are teachers' certain personal characteristics, their lack of skills and experience, school and district structures that negatively affects reflective behaviour, and teachers' limitations of the profession (Jaeger, 2013). Also, our findings lend support to Farahian et al. (2021) who reported argued that a hierarchical system is prevalent in the educational system in Iran. Based on such a claim, teachers tend to follow the conventional centralized teaching methods and have no role in the process of curriculum development (Rahimi & Askari Bigdeli, 2015). The results of the second subscale could be interpreted in light of the argument that teachers' absence of practical competence and lack of required skills to engage in reflection can inhibit their reflectivity (Calderhead, 1989). Similarly, Tajik and Ranjbar (2018) reported that there are three categories of obstacles, namely self-directional problems, institutional problems, and problems associated with reflective teaching principles in the Iranian EFL context that impede EFL teachers practice reflectivity.

The last loaded factor on the scale was "educational system issues". The findings might be discussed from this perspective that inappropriate policies adopted by the educational system (Atai & Mazlum, 2012; Farahian, et al., 2021; Hayati & Mashhadi, 2010a, 2010b) has a negative impact on both teachers' and students' reflectivity. Furthermore, the

dominant educational system in Iran like many other Asian educational contexts is centralized (Rahimi et al., 2015; Rahimi & Chabok, 2013). This has coupled with the collectivist view of education (Atai & Mazlum) and teachers are under the pressure to follow the top down curriculum imposed by the educational system (Avarzamani & Farahian, 2019). On the other hand, teachers' working conditions and occupational concerns is a problem that can be found in both public and private Iranian EFL context (Moradkhani & Shirazizadeh, 2017) that has affected teachers' reflectivity. Moreover, the authoritarian atmosphere in the educational setting, known as managerialism, has turned the atmosphere to be ineffective and dehumanized (see Soodmand and Farahani, 2018, p.59). Such a widespread condition in the Iranian EFL context (Safari, 2016) has to lead to ineffective reflective practice (Baldwin, 2004) which can adversely affect students' reflectivity. Future studies can shed more light on the issue.

Conclusion

In the last decades, the concept of reflection has attracted considerable attention to itself and many researchers have attempted to develop some scales to assess it from different perspectives in different contexts (e.g. Akbari et al., 2010; Avarzamani & Farahian, 2019; Kember et al., 2000). In line with the previous studies, the aim of the present study was to construct and validate a questionnaire to assess inhibitors to EFL learners' reflection on writing.

The present study makes some contributions to the field of educational psychology and SL acquisition. First of all, although in recent years few research studies have made attempt to contribute to providing a more coherent picture of the construct of reflection in EFL writing (e.g., Avarzamani & Farahian, 2019), no attempt has been made to investigate teachers' views regarding the barriers to EFL learners' writing reflectively. Thus, the report presented here may contribute to a better understanding of the nature of reflection in a domain-specific area as FL writing. Meanwhile, the findings may inform research in the area of reflection since due to the abstract nature of reflection its operationalization sheds light on the nature of the construct. This may contribute to reflective thinking research and at the same time pave the way for further study of reflection in EFL setting.

As any other research, the present study had some limitations. The first limitation of the study is the inclusion of EFL learners from a province in the West of Iran as such they are not representative of EFL teachers of all provinces in the country. Further studies may use the questionnaire among EFL teachers chosen from a wide variety of institutions across the country. Moreover, factors such as teaching experience, age, gender, and educational degree which may have impact on the EFL teachers' attitudes regarding reflection were not considered in this study. Future studies can investigate the effect of such factors on teachers' opinion on EFL learners' reflection on writing.

Appendix

Barriers to EFL lear	ners'	reflective writing questionnaire
Learners, issues	1	EFL learners lack the power of imagination and creativity
	2	EFL learners often write just to fulfil an assignment since they seldom have a real purpose in mind
	3	EFL learners write their ideas without questioning them or considering them in depth
	4	EFL learners have seldom have any idea about reflection on their writing
	5	EFL learners lack adequate motivation to write reflectively
	6	EFL learners often start writing without planning for it
	7	EFL learners are not motivated enough to write
Teachers, issues	8	EFL Teachers are not familiar with the concept of reflection
	9	EFL teachers seldom train EFL learners to be reflective
	10	EFL teachers do not support reflective practice during their writing course
	11	EFL teachers do not encourage EFL learners to monitor or evaluate their writings
	12	EFL teachers lack the motivation to practice reflection
	13	EFL teachers cannot develop reflective thinking among EFL learners
	14	EFL teachers are not able to develop reflective thinking among students
	15	Before writing, teachers do not pose challenging questions to promote curiosity
Institutional or	16	The educational system does not provide appropriate condition for reflective practice
educational system	17	EFL learners' creativity in writing is not encouraged in EFL curriculum
issues	18	Customary writing courses focus on the product of writing rather than the process
	19	Type of assessments does not lead to reflection
	20	EFL learners' personal views are not valued in the educational system
	21	There is a conflict between the present educational habits and reflective practice in EFL contexts

Abbreviations

 $\hbox{\it EFL: English as a Foreign Language teachers; EFA: Exploratory factor analysis.}$

Acknowledgements

Not applicable.

Authors' contributions

Mrs. Salahi conducted the study and prepared the first draft. Dr. Farahian revised the text. Both authors read and approved the final manuscript.

Funding

Not applicable.

Availability of data and materials

Not applicable.

Declarations

Competing interests

The authors declare that they have no competing interests.

Received: 15 October 2021 Accepted: 6 November 2021

Published online: 01 December 2021

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