

Original Article

Designing and Validating an Evaluation Inventory of the Effect of Hidden Curriculum on Teacher Identity

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Abstract

Hidden curriculum might have a substantial effect on teachers' identity although the two variables might have been under-researched, and there appears to have been no instrument to uncover the issue more specifically. The present study aimed to develop and validate a potential inventory to examine the effect of the Hidden Curriculum on Teacher Identity (HCTI). To do so, 350 Iranian English as Foreign Language (EFL) teachers volunteered to be interviewed in semi-structured interviews to elicit the hidden factors that potentially affect teacher professional identity construction. The final inventory was a questionnaire with 51 items which was subject to reliability and construct validity issues. Reliability and factor analysis results indicated that the questionnaire enjoyed high psychometric properties. Besides, factor analysis indicated 44 items loaded on three components of 1) Hidden Curriculum and Self-Efficacy Dimension of EFL Teacher Identity, 2) Hidden Curriculum and Pedagogical Dimension of EFL Teacher Identity, and 3) Hidden Curriculum and Social Dimension of EFL Teacher Identity. Findings contributed to the effective roles that hidden curriculum could play in shaping and developing teachers' identity.

Keywords: Hidden Curriculum, Pedagogical performance, Self-efficacy, Social dimension, Teacher identity

1. Introduction

Teaching and practicing the English language cannot be neutral regarding the impact of cultural elements. In this regard, Cunningsworth (1995) stated that “If they have any subject content, course books will directly or indirectly communicate sets of social and cultural values which are inherent in their make-up” (p. 90). This is called a hidden curriculum that is included in any educational program. A hidden curriculum is related to the use of those attitudes and values, which are not intentionally maintained, but they influence both the content and image of the teaching practice and the whole curriculum (Jackson, 1968; Li, 2020; Margolis, 2001). A curriculum cannot be neutral since it should present a view of social order and suggest a value system, implicitly or explicitly (Dreeben, 1968; Salehiyan, 2010).

The emphasis on the rules and behaving in specific ways is usually reflected in the learning environment, in that particular forms of behavior signal student academic engagement to the teacher. This explicit prescription of what academic engagement looks like assumes that students’ learning behaviors are greatly affected by the hidden curriculum they are explicitly or implicitly exposed to (Hale, 2001). This is the transmission of the hidden curriculum and certain students are engaged to the hidden curriculum, which, therefore, reinforces students’ socio-cultural behavior, affecting their learning outcomes (Bray, Kobakhidze, Zhang, & Liu, 2018). It appears that hidden curriculum has much been concerned with the learners’ performance, while teacher’s practice teaching might also be affected by the hidden curriculum, which can affect the teacher identity as well.

Studying teacher identity is of significance due to the abundance of research studies carried out to identify the main components of teacher identity. Various equivalents have been emerged referring to teacher identity. For example, teachers’ self-image (i.e., the teacher understands his role as the teacher) equals teacher identity (Friesen & Besley, 2013; Kao & Lin, 2015). Teacher identity can also be related to the motivation of having a job as/or becoming a teacher (Zhang, Hawk, Zhang, & Zhao, 2016). Teacher identity was also an indicator of their sense of commitment and dedication to their profession (Abu-Alruz & Khasawneh, 2013). Teachers’ self-efficacy (i.e., teachers’ belief in their capability to perform teaching activities) was also defined for teacher identity (Lamote & Engels, 2010). What the teacher considers to be good

teaching is his/her task-perception, which is equal to teachers' identity as well (Fletcher, Mandigo, & Kosnik, 2013; Kao & Lin, 2015). It is worth mentioning that in order to develop the categories of teacher identity, researchers mainly benefitted from questionnaires including Teachers' Professional Identity Questionnaire (Kao & Lin, 2015), Teachers' Professional Identity Scale (Zhang et al., 2016), and Professional Identity Questionnaire (Abu-Alruz & Khasawneh, 2013). However, the notion of the hidden curriculum in relation to teacher identity seems to be a taken-for-granted area of research, particularly in an EFL context. Researchers in Iran (Barzegar, Paryad, Jafroudi, Kazem Nezhad Leyli, & Ghanbari Khanghah, 2018; Sazegar, Ashraf, & Motallebzadeh, 2021; Taghvaei, Yazd, & Rahimi, 2014) have almost been trying to cover some dimensions of hidden curriculum by taking into account teachers and students' perceptions about hidden curriculum.

The significance of the hidden curriculum as a sociocultural element of teachers' practicum can be acknowledged as it explicitly and explicitly affects the teachers' performance and the learners' success. On the other hand, teachers' identity has also been covered in the literature by being equivalent to similar concepts, such as teachers' self-efficacy or commitment. Nevertheless, the two variables of the hidden curriculum and teacher identity, as mentioned in the paragraph above and to the best of the researchers' knowledge, apparently have not been investigated together on the same continuum in an EFL context. Therefore, determining the components of hidden curriculum effect on EFL teacher identity development by considering a large number of EFL teachers in the context of Iran seems to be demanding.

2. Literature Review

This section is initially concerned with the significance of researching the hidden curriculum and its significance in a pedagogical context. Then, the potential relationship between teachers' identity and hidden curriculum is taken into consideration. Finally, previous related researches regarding the existing scales on exploring components of hidden curriculum or teachers' identity are reported to find the possible gaps in the literature and find the rationale for the current study.

2.1. Hidden Curriculum

The hidden curriculum generally refers to student learning that takes place in school as a result of actions by school personnel, parents, students, and other community agents (Zhang & Luo, 2016). What is learned in the classroom is largely a function of the prevailing school conditions and classroom dynamics as well as such demographic factors as the social class, race, ethnicity, language, gender, and condition of disability of all school participants. Compared with the formal school curriculum, the hidden curriculum is not written, does not have explicit objectives, and varies considerably from one school setting to another. The hidden curriculum often referred to as the covert or the informal curriculum, is a most powerful influence in the classroom; it is estimated that up to 90 percent of what is learned is due to this influence (Li, 2020; Massialas, 1996).

Giroux and Penna (1979) define the hidden curriculum as the “unstated norms, values and beliefs that are transmitted to students through the underlying structure and meaning in the social relations of the school and classroom life” (p. 22). In schools having lower income, and racial and ethnic minority students, the hidden curriculum is transferred largely through the rule-oriented disciplinary plan. The emphasis is on the rules that tend to work to the detriment of students’ personal and intellectual development in that a high rules emphasis tends to the excitement for learning (Hale, 1994). The disciplinary plan is reflected in behavior modification systems. Although some behavior modification techniques are helpful for teaching self-discipline, many schools with lower-income students use these techniques frequently and with great intensity (Van Tassell, 2005). This further facilitates disengagement from school, as the constant usage of these strategies serves to control students and ‘make them fit’ into a standard mode of behavior (Bear, 1998). Furthermore, when the opportunities for self-direction in the classroom are ignored, the students are more likely to academically disengage (Langhout, 2005), thus reinforcing the hidden curriculum.

2.2. Hidden Curriculum and Teacher Identity

According to Ebrahimi, Afraz, and Samimi (2019), identity is an individual’s self-definition that focuses on enduring characteristics of the self. Identity orientations refer to the relative importance that individuals place on various identity attributes or characteristics such as race, religion, culture, and language when constructing their self-

definitions (Choi & Lee, 2007). Literature is replete with studies on identity and language. Ellis (2008) asserts that as for age, the research findings show that younger learners are considered to be more successful than older learners. This is, in part, due to the fact that their identity is less threatened by the norms and culture of L2. Within the context of a socio-structural model, perceptions based on students' sense of ethnic identity impact learning by the extent of the interactions in which students participate (Ellis, 2008). A post-structural model fails to clearly make a distinction between ethnic identity and other forms of identity as it considers identity as a concept that is multiple and dynamic.

Teachers' identity is considered an organizing factor in teachers' professional lives (Beauchamp & Thomas, 2009). It is also viewed as a resource used by teachers to explain, justify, and make sense of themselves concerning others, and to the world as well (MacLure, 1993). Applying invisible yet forceful power over their instruction practices teacher identity provides a framework which teachers can use to build their impression of their beings, practices, and perceptions of their teaching practice as well as their place in society (Sachs, 2005). It is also a basis for their decision-making and meaning-making processes (Bullough Jr, 2001).

2.3. Previous Related Studies

Regarding the objectives of the study mainly concentrating on hidden curriculum and its impact on the aspects of teacher identity, main research studies in both foreign and second language contexts rarely focusing on English teachers and learners, either descriptive and literature-based or quantitative and qualitative designs, were taken into account to provide the rationale for the current study by maneuvering on the existing gaps regarding the development of the questionnaire that considers hidden curriculum effect on the teacher identity in an EFL context.

In their quantitative study, Taghvaei et al. (2014) investigated medical students' perceptions of the components of the hidden curriculum. The context of the study was Kashan University of Medical Sciences where 111 students were selected through random sampling. The hidden curriculum questionnaire developed by Karimi (2012) was used for data collection. Six components of teaching methodology, evaluation, teacher-student relationships, physical atmosphere, principles and rules, and critical thinking were the basic elements of the 36-item questionnaire. Quantitative analysis revealed that Medical

students' perceptions lied heavily on teacher-student relationships. However, the component of the physical atmosphere was the least component perceived by the students. The extent to which an effective and intimate relationship is created in the classroom might affect the learning quality. The researchers insisted on the teachers' awareness of the hidden curriculum and how it should be developed in educational contexts to result in higher educational efficiencies.

By conducting qualitative research, Zhang & Luo (2016) examined how hidden curriculum might affect the social exclusion of Chinese migrant children from attendance to urban schools. The study was ethnographic focusing on four migrant children. It was found that "1) access to school, 2) in-class participation, and 3) peer interactions" constituted the main aspects of exclusion in migrant children's experiences (p. 1). Besides, the researchers discovered that academic performance, considering migrant children as outsiders by the local educators, and urban children's involvement (in contrast to less involvement of migrant children) in the curricular activities formed the hidden curriculum of the urban school setting in Beijing, which led migrant children to experience marginalization in the urban school system. The study informed policymakers to pay careful attention to the development of hidden curriculum as a practical construct in helping rural education to be more integrated into successfully playing role in the urban schooling system.

Bandini et al. (2017) examined the perception of the Medical School students and faculty members on the effect of hidden curriculum on their psychological, moral, and spiritual challenges while receiving the medical training. The results gathered from interview data revealed that the participants were, to some extent, aware of the effect the hidden curriculum might have on their development "in terms of the hierarchy of medicine, behavioral modeling, and the value placed on research versus clinical work" (p. 1). They believed in the socio-cultural values aligned to their profession, which can be developed through the hidden curriculum. They also acknowledged the importance of the hidden curriculum "in recognizing the importance of research versus clinical work, and they also acknowledged other such values modeled in medicine such as efficiency, integrity, excellent patient care, and teamwork (p. 6). The researchers suggested that the hidden curriculum can be practiced as a practical treatment to help students overcome their professional and non-professional aspects, leading to their self-reflection.

In a descriptive study, Bray et al. (2018) provided a literature review on the main contributions of shadow education and how it can play an important role as a part of the hidden curriculum. The researchers argue that shadow education can be explicitly or implicitly related to private classrooms in which the teachers can have more freedom in implementing the teaching methodology of their own. As to the context of Cambodia, which is the contextual focus of the study, the researchers believed in the recognition of shadow education as a supplementary educational approach in the main curriculum. It is worth noting that the authors suggested that “much more attention is needed to the dynamics and impact of shadow education, including relationships between actors and the values that shadow education transmits as part of the hidden curriculum” (p. 1).

In an EFL context, Barzegar et al. (2018) examined nursing students’ viewpoints about the effect of hidden curriculum on learning. The participants of the study include 300 nursing students of Guilan University of Medical Sciences studying in the Faculty of Nursing. The participants were in their second to the eighth semester. They were selected based on the random sampling procedure. As to data collection, a researcher-made 34-item questionnaire was administered to explore the university students’ perceptions. Findings revealed that the participants of the study recognized the effective role of hidden curriculum on their educational achievement. It was also found that the factors of “good student-professor relationship (88%), a chance to interact with experienced professors (82%), student humiliation (80%), equipping classes with up-to-date electronic teaching aids (80%), and attention to the peer group as a model of behavior (53%)” (p. 26) were considered as the major and effective parts of the hidden curriculum, which might affect their learning qualities. Both teachers and students should be provided with sufficient instruction regarding the benefits of the hidden curriculum and how it should be developed in order to result in more effective learning outcomes.

Framed in the Rasch model, Sazegar et al. (2021) designed and validated a scale to measure teachers’ perspectives on EFL hidden curriculum. The authors concurred that research on the hidden curriculum in both EFL and ESL contexts has been little-to-no, encouraging EFL researchers to conduct more interdisciplinary studies on hidden curriculum. The final questionnaire included 40 items involving three main components of “the social atmosphere (including 15 items), the organizational structure of the English Language Institute (consisting of 14 items), and the interaction between teachers and

learners (including 11 items)” (p. 1). By recommending further research on hidden curriculum, the researchers highlighted the contribution of hidden curriculum studies for material designers, policymakers, institutes’ administrators, decision-makers, and language teachers. The reliable and valid scale could also be used as a tool to be used in alignment with other scales to investigate the relationship between hidden curriculum and other variables as well.

The studied papers in this study suggest that hidden curriculum has, to a lesser extent, been attracted by Iranian researchers since they have attempted to elaborate on the existing challenges in the field and explore teacher and students’ perceptions towards hidden curriculum. However, specifying the components of hidden curriculum effect on EFL teacher identity in Iran, which can be an effective parameter to realize and recognize EFL teachers’ role, appears to have not been taken into account by the researchers, thus, paving the way to conduct a factor analysis to discover the emerging components of Iranian EFL teacher identity. Hence, the main research questions of the study can be addressed as:

1. What components of the EFL hidden curriculum affecting teachers’ identity can be included in the instrument?
2. Does the constructed instrument measuring the effects of hidden curriculum on EFL teachers’ identity enjoy validity and reliability?

3. Methodology

3.1. Context and Design of the Study

This study was conducted through exploratory research design in order to design and validate an instrument to measure the effect of hidden curriculum on EFL teachers’ identity. The context of the study was Kish, Safir, and Nsim Language Institutes located in Tehran and Karaj. EFL teachers from these institutes were selected as potential candidates for semi-structured interviews. As to the exploratory research design mentioned above, due to the existence of very few sources on the relationship between EFL teachers’ identity and hidden curriculum, the researchers benefited from surveying the limited sources on the topic and conducting semi-structured interviews with the EFL teachers to address the research questions of the study and fill the existing gaps in the literature..

3.2. Participants

The present study was conducted based on a non-experimental and exploratory design to categorize the main components of hidden curriculum effect on EFL teacher identity, and to develop a reliable and valid questionnaire. Thus, participants were selected through purposeful sampling (Dornyei, 2007) including 350 EFL teachers from both different language institutes of Tehran and Karaj who were teaching English to teenagers and adults. Table 1 shows the teachers' characteristics.

Table 1.

EFL Teachers' demographic information

City	N (teachers)	Male	Female
Tehran	225	100	125
Karaj	125	41	84
Total	350	141	209

3.3. Instruments

In order to develop HCTI, the researcher benefited from semi-structured interviews and the related literature. Semi-structured interviews were randomly done with 350 EFL teachers to extract the issues related to hidden curriculum and its effect on the teacher identity. The interview questions were adapted from (Barzegar et al., 2018; Fletcher et al., 2013; Taghvaei et al., 2014). To conduct the interviews, both online and face-to-face interviews were carried out. The interview questions were as follows:

1. Have you heard about hidden curriculum? Can you explain more?
2. Do you think that a hidden curriculum might affect your learners' personal and social values?
3. In what ways hidden curriculum might affect your teaching profession?
4. Hidden curriculum and teacher development; are they related?
5. Do you think that understanding the hidden curriculum might result in your teaching commitment?

6. To what extent your awareness of hidden curriculum might bring about learners' ultimate success in language learning? Please explain more.
7. Do you agree that an interactive learning environment necessitates your awareness of hidden curriculum? How?
8. Hidden curriculum and learners' motivation in classroom participation; does it work?
9. Is your social and professional status affected by understanding the hidden curriculum?

It is worth mentioning that the construct and face validity of the interview questions were confirmed by three experts in the field.

In addition to the semi-structured interviews, the raw items of HCTI were gathered by scrutinizing the literature, studying three key papers in the field of hidden curriculum (Barzegar et al., 2018; Taghvaei et al., 2014; Zhang & Luo, 2016) and three research studies on teachers' identity (Abu-Alruz & Khasawneh, 2013; Kao & Lin, 2015; Zhang et al., 2016). These studies have been focused due to the shortages of research on hidden curriculum concerning EFL teachers. More importantly, research on developing EFL teachers' identity construction appears to be rare. Besides, the above-mentioned studies benefited from qualitative and quantitative data collection tools to uncover issues related to hidden curriculum or teachers' identity uni-dimensionally. Last but not least, since no research appears to have been conducted concerning the relationship between hidden curriculum and teachers' identity, the literature could assist the researchers to discover the raw items for the instrument in this study.

3.4. Data Collection Procedures

In order to develop the main components of HCTI, step-by-step measures were taken. Initially, the researcher conducted administrative affairs and developed a meeting session with the head of the selected institutes to interview the EFL teachers and administer the raw version of HCTI. Informed consent was also obtained to regard confidentiality issues of the participants. Then, the related literature concerning hidden curriculum (Barzegar et al., 2018; Taghvaei et al., 2014; Zhang & Luo, 2016) and teacher identity ((Abu-Alruz & Khasawneh, 2013; Kao & Lin, 2015;

Zhang et al., 2016) was studied to design the questions for interviewing and develop the raw items. Online and face-to-face semi-structured interviews were done. By analyzing the literature and examining the interview data, the repeated items were removed, resulting in 51 items for the raw questionnaire. After that, participants were thoroughly provided with sufficient information regarding the purpose of the study in general and scrutinizing hidden curriculum in particular. The raw questionnaire was administered among 350 EFL teachers. The researcher answered to any ambiguities posed by the participants. Then, the researcher appreciated the teachers' participation and initiated factor analysis of the collected data in order to develop the main question of hidden curriculum effect on teacher identity. Finally, the items of HCTI were categorized into three main components of 1) Hidden Curriculum and Self-Efficacy Dimension of EFL Teacher Identity; 2) Hidden Curriculum and Pedagogical Dimension of EFL Teacher Identity; and 3) Hidden Curriculum and Social Dimension of EFL Teacher Identity, and the reliability and validity of HCTI was checked as well.

3.5. Data Analysis Procedure

Concerning the objectives of the study, factor analysis (Harman, 1976) was run to take into account teachers' responses to the raw questionnaire with 51 items. Harman argues that using factor analysis can be beneficial when the purpose is to investigate internal correlations among a large number of variables for categorizing them into limited components. When doing factor analysis, all the variables are simultaneously analyzed to keep their value. The present study benefitted from factor analysis to categorize the raw items and categorize them into main components to develop a reliable and valid HCTI.

4. Results

The present research intended to develop HCTI from among 350 EFL teachers in Tehran and Karaj. In order to analyze the raw questionnaire with 51 items, factor analysis was run. Prior to factor analysis, descriptive statistics of the items are provided in Table 2.

Table 2.

Descriptive Statistics for the Raw Items

Factors	Mean	Std. Deviation	N
1	3.15	0.84	350
2	3.14	0.73	350
3	3.20	0.81	350
4	3.41	0.78	350
5	3.18	0.70	350
6	3.30	0.72	350
7	3.09	0.80	350
8	3.31	0.60	350
9	3.22	0.81	350
10	3.21	0.79	350
11	3.56	0.60	350
12	3.52	0.64	350
13	2.91	0.90	350
14	3.33	0.81	350
15	2.82	0.87	350
16	3.35	0.75	350
17	3.40	0.68	350
18	3.14	0.80	350
19	2.90	0.81	350
20	2.78	0.90	350
21	3.07	0.80	350
22	2.69	0.92	350
23	3.06	0.87	350
24	2.90	0.91	350
25	3.01	0.89	350
26	3.12	0.75	350
27	3.04	0.85	350
28	3.05	0.85	350
29	3.49	0.70	350
30	3.16	0.80	350
31	3.84	0.41	350
32	3.73	0.49	350
33	3.37	0.72	350
34	2.77	0.98	350
35	3.02	0.84	350
36	3.11	0.75	350
37	3.38	0.76	350
38	3.54	0.64	350
39	3.1	0.78	350
40	3.1	0.86	350
41	2.95	0.86	350
42	3.25	0.76	350
43	3.06	0.79	350
44	3.47	0.73	350
45	3.14	0.87	350
46	3.01	0.71	350
47	3.24	0.78	350
48	2.91	0.93	350
49	3.56	0.84	350
50	3.58	0.82	350
51	3.52	0.74	350

Factor analysis provided the rationale for item identification to determine an appropriate pattern for the related items. Initially, data adequacy has to be met to consider the justifiability of data for doing factor analysis. Therefore, Kaiser-Meyer-Olkin (KMO) and Bartlett measures were presented in Table 3. If the adequacy of data is more than .7 and the significance level for Bartlett’s test is less than .05, factor analysis can be conducted.

Table 3.
The Results of Primary and Secondary Exploratory Factor Analysis

Test	KMO	Bartlett's Test of Sphericity			EC	Number of items	Extraction	Rotation	Deleted Item	% Variance
		Approx.								
		Chi-Square	df	sig						
First	0.841	9644.63	1275	0.000	More than 0.5	51	PCA	Varimax with Kaiser normalization	---	71.039
Second	0.605	6132.555	946	0.000	More than 0.5	44	PCA	Varimax with Kaiser normalization	9-13-20-23-25-30-36	56.163

Table 3 showed that KMO is .841 and .605 for both factor analyses were more than .05, thus confirming the adequacy of the sample for doing factor analysis. In addition, the significance level for Bartlett’s test is .00, acknowledging the running of factor analysis as an appropriate test to identify the components as the assumption of unitary matrix correlation is rejected. In other words, the variables or the items in factor analysis were correlated. In exploratory factor analysis, main component extraction was applied to identify the components Varimax with Kaiser normalization was used for components rotation to determine the communalities of the raw items. Table 4 presented the communalities.

Table 4

Communalities for the Initial Extraction of Factors

Factors	Extraction
1	0.741
2	0.718
3	0.712
4	0.605
5	0.716
6	0.674
7	0.656
8	0.768
9	0.400
10	0.642
11	0.660
12	0.670
13	0.448
14	0.735
15	0.659
16	0.825
17	0.667
18	0.658
19	0.623
20	0.301
21	0.711
22	0.666
23	0.441
24	0.675
25	0.383
26	0.710
27	0.719
28	0.560
29	0.638
30	0.399
31	0.767
32	0.797
33	0.679
34	0.693
35	0.739
36	0.372
37	0.644
38	0.700
39	0.768
40	0.751
41	0.739
42	0.732
43	0.666
44	0.610
45	0.819
46	0.623
47	0.684
48	0.619
49	0.765
50	0.678
51	0.740

Table 4 showed that given the initial communalities assumed to be 1.00 prior to factor analysis, the items or factors in the second column that have high levels of loading extraction are considered as better determiners of the components of HCTI. If the extraction level is found to be lower than .5, the factor can be removed. Therefore, the items of 9, 13, 20, 23, 25, 30, and 36 were considered for removal. Then, the remaining 44 items of the questionnaire were factor-analyzed and rotated to distinguish the main components of the 44-item questionnaire. The rotation matrix is provided in Table 5.

Table 5.

Final Factor Analysis

	Factors	EC	%Variance
	I believe that a hidden curriculum helps a teacher to think that teaching is a rewarding profession.	-0.485	
	I assume that hidden curriculum provides a developmental space for the teacher profession	0.428	
	I think the hidden curriculum causes teacher’s work to be very interesting.	-0.508	
	I believe that the hidden curriculum provides a sense of admiration regarding the way the teacher lives and works.	0.456	
	I think that the hidden curriculum helps the teacher to consider teaching as a fulfilling sense of achievement.	-0.408	
Hidden Curriculum and Self-Efficacy Dimension of EFL Teachers’ Identity	I believe that the hidden curriculum provides an atmosphere for me to frequently pay attention to the information about the teaching professional and developmental courses to increase my expertise.	-0.602	36.956
	I think that hidden curriculum is in direct relationship with active participation in training and lectures for teachers and teaching for promotion.	-0.464	
	I think that the hidden curriculum encourages teachers to often read books that are related to teacher and teaching.	0.347	
	Even if there is no policy constraint (e.g., future job assigning), I will still choose to be a teacher when I try to raise my awareness of hidden curriculum.	-0.601	
	I feel part of a community of teachers because personal values are respected in the hidden curriculum.	0.530	
	A hidden curriculum in teaching assists me to choose to work as a teacher all my life.	0.347	
	The understanding of the hidden curriculum encourages me to be committed to the institutional mission, vision, and goals.	-0.550	

	I have a thorough understanding of policies and procedures in the institute if I know about the covert aspect of the hidden curriculum.	0.532	
	I am committed and dedicated to the profession when I am thoroughly aware of the hidden curriculum.	-0.468	
	I have a strong passion for teaching, which is one of the strongest dimensions of a hidden curriculum.	-0.513	
	A hidden curriculum causes me to feel proud of myself working in an institutional setting.	0.403	
	I think that being aware of the hidden curriculum helps me develop students' language performance.	0.741	
	I am willing to expend additional time to help students solve their learning problems because responsiveness is part of the hidden curriculum	-0.654	
	I am actively involved in the official curriculum decisions (planning, designing, leading, and controlling) while understanding the hidden curriculum matters.	0.488	
	I maintain updated knowledge about current educational policies because I know that it plays an important part in the hidden curriculum.	0.461	
	I establish an effective support network for students as the hidden curriculum strongly adheres to it.	-0.474	
	I believe that hidden curriculum is in favor of creating and maintaining a flexible and harmonious learning environment for students	0.561	
Hidden Curriculum and Pedagogical Dimension of EFL Teachers' Identity	I establish a trusting and caring relationship with my students since the teacher-learner relationship matters in the hidden curriculum.	0.614	10.594
	I think being responsible for curricula and instruction is one of my professional duties, which is highlighted in the hidden curriculum	0.640	
	I believe that by knowing about the hidden curriculum I find satisfaction in supporting the lifelong learning of students.	0.576	
	I tailor my teaching to fit the needs, interests, and abilities of my students because I know the covert aspect of the curriculum.	0.560	
	I always consider suitable educational materials to help students in language production as one of the major elements of the hidden curriculum.	-0.493	
	I discuss the progress of my students with colleagues because teacher-teacher interactions matter in the hidden curriculum.	0.526	
	I know that the hidden curriculum supports sharing ideas and experiences with other teachers in the field.	-0.535	
	When a teacher is aware of the hidden curriculum, his/her	0.594	

	students and colleagues regard him/her as an effective faculty member in teaching language courses.		
	I promote harmonious and collaborative staff relationships to enhancing the quality of work because it is an important part of the hidden curriculum.	-0.611	
	I have a passion for continuous learning and excellence as it is practiced in the hidden curriculum program.	0.648	
	It is important to me to develop my knowledge and teaching skills because I know hidden curriculum emphasizes it.	0.701	
	I believe that hidden curriculum triggers my preference to be a more knowledgeable and skillful member of the institute	0.501	
	I believe that teachers should be able to use appropriate teaching methods to stimulate students' interest in learning as a highlighting point in the hidden curriculum.	-0.494	
	I believe that understanding the hidden curriculum enables teachers to use appropriate teaching methods to deliver the content of teaching material.	-0.513	
	I think the work environment and condition for the teacher is great because it is pointed out in the hidden curriculum implicitly.	0.608	
	If I understand the hidden curriculum, I think teachers' social status is high.	0.483	
	A hidden curriculum implies that being a teacher is a highly respected occupation in the community.	-0.566	
	My students regard me as a role model because of my positive social values and my concern for local and global issues, which are the social values in the hidden curriculum	0.602	
Hidden Curriculum and Social Dimension of EFL Teachers' Identity	I believe that knowing the hidden curriculum causes the teacher to enjoy social recognition as a member of the institute.	0.724	8.613
	Within the scope of professional ethics, I am willing to interact with students actively to establish trust with them because the hidden curriculum is concerned with teacher's social status.	-0.650	
	When I am aware of the hidden curriculum, I am willing to expend additional time to help students solve problems in their lives.	0.473	
	I believe that being responsible for society is one of my professional duties and one of the major issues in the hidden curriculum as well.	-0.526	

Table 5 indicated that 44 factors can be summarized and categorized into three components after rotation. It should be noted that the more absolute value of each factor, the more important role it plays in the overall importance of the related component.

Item categorization of factors of HCTI is done according to the common features they are explaining. Regarding Table 5, 16 items (1, 3, 6, 7, 8, 9, 18, 19, 20, 25, 26, 27, 30, 32, 33, and 41) can be labeled under component 1 as Hidden Curriculum and Self-Efficacy Dimension of EFL Teacher Identity. This component constitutes 36.95% of the total variance (see Table 5). Component 2 makes up 20 items (2, 5, 12, 13, 16, 17, 21, 22, 23, 28, 29, 34, 35, 36, 38, 39, 40, 42, 43, and 44), which determines 10.59% of the total variance (see Table 5). The second component can be categorized as Hidden Curriculum and Pedagogical Dimension of EFL Teacher Identity. Finally, eight items (4, 10, 11, 14, 15, 24, 31, and 37) were summarized into component 3 entitled as Hidden Curriculum and Social Dimension of EFL Teacher Identity. The third component shows 8.61% of the total variance (see Table 5). Figure 1 shows the screen plot for the items.

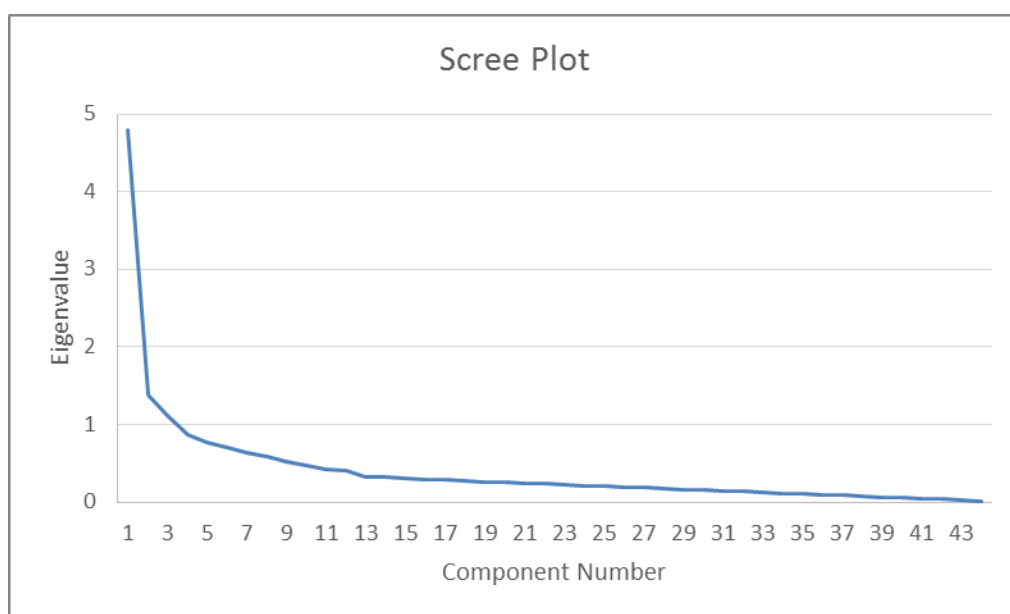


Figure 1. Scree plot of the items of the questionnaire

The scree plot showed the eigenvalues of a component or an agent in descending order of the number of components. The aggregate diagram in the principal component analysis is used to explain the visual analysis of factors, use of component evaluation, or many factors. The above diagram shows that the first 3 factors have the most change

because the line after factor 3 remains straightforward and represents a very small portion of the changes. So, it can be concluded that factor 3 is less important afterward.

The content (convergence) and construct (divergence) validity of HCTI were taken into consideration. The former was checked and consulted by three Ph.D. experts in the field of Teaching English as Foreign Language (TEFL) as well as three statisticians, pointing out the content validity of HCTI. The latter is assumed that the items directly measure the related component in HCTI, denoting that each component can be distinguished from the other. The construct validity of HCTI was investigated through Average Variance Extracted (AVE), which is the determination of the extracted or obvious variable within a hidden item. To meet AVE, the calculated values for each component of HCTI (see Table 6) have to be more than .5. Table 6 provides information on AVE and the reliability coefficients.

Table 6

Cronbach's Alpha, Composite Reliability, and Average Variance Extracted

Components	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Hidden Curriculum and Self-Efficacy Dimension of EFL Teachers' Identity	0.802	0.851	0.727
Hidden Curriculum and Pedagogical Dimension of EFL Teachers' Identity	0.743	0.802	0.767
Hidden Curriculum and Social Dimension of EFL Teachers' Identity	0.760	0.881	0.744

Table 6 indicated that the AVE for the three components of HCTI is more than 0.5, thus, confirming the construct validity of HCTI. As to the reliability of HCTI, Cronbach's alpha for the three components is more than 0.7, which demonstrates the acceptability of the reliability estimate of HCTI (Farhady, Jafarpur, & Birjandi, 1994).

5. Discussion

The present study attempted to develop and validate a questionnaire regarding hidden curriculum effect on EFL teacher identity. Data were gathered through the participation of 350 teachers who filled out the raw 51-item questionnaire developed according to the teachers' semi-structured interview data and the related literature. The raw items were

factor-analyzed to develop the final version of the questionnaire. Finally, a 44-item HCTI was extracted, and its reliability and validity were ensured. It is worth mentioning that HCTI made up three components of 1) Hidden Curriculum and Self-Efficacy Dimension of EFL Teachers' Identity; 2) Hidden Curriculum and Pedagogical Dimension of EFL Teacher Identity; and 3) Hidden Curriculum and Social Dimension of EFL Teacher Identity.

The findings of the study can acknowledge the results of the previous research studies in the area of hidden curriculum (Barzegar et al., 2018; Sazegar et al., 2021; Taghvaei et al., 2014; Zhang & Luo, 2016) and teacher identity development (Friesen & Besley, 2013; Zhang et al., 2016) because the literature on hidden curriculum and teacher identity has probably encountered a paucity of research to consider the development of a questionnaire targeting hidden curriculum effect on teachers' identity, particularly in the context of Iran in which hidden curriculum has rarely been investigated merely on university teachers and students (Barzegar et al., 2018; Taghvaei et al., 2014). Findings of the study demonstrated that EFL teachers appeared to be aware of the effect of hidden curriculum on three aspects of their identity in terms of self-efficacy, pedagogy, and social conditions in developing their identities. Put it simply, a hidden curriculum might affect EFL teachers' identity development regarding a variety of issues that emerged in HCTI. Comparing contrasting the findings of the study, the present study was in alignment with studies conducted by (Kao & Lin, 2015; Zhang et al., 2016) who have pointed out the undeniable role of self, pedagogical factors, and socio-cultural issues teachers' identity research. However, findings of the study cannot be in contrast with the literature as it has provided innovative insights in the literature of hidden curriculum and teacher identity by developing a questionnaire, which seemed to have not been made up to the present, yet.

6. Conclusion and Implications

The present study identified three components of 1) Hidden Curriculum and Self-Efficacy Dimension of EFL Teachers' Identity, 2) Hidden Curriculum and Pedagogical Dimension of EFL Teachers' Identity, and 3) Hidden Curriculum and Social Dimension of EFL Teacher Identity. The content and construct validity of each component were confirmed. In addition, the reliability coefficient of HCTI was acknowledged. Factor analysis concluded that hidden curriculum and teachers' identity can be correlated in terms

of teachers' self-efficacy, teachers' pedagogical behavior, and the teachers' social understanding of their profession all of which might be a determining factor in developing the teachers' identity as an EFL or ESL teacher.

The findings of the study can be beneficial for language educators and EFL researchers to study the effect of hidden curriculum on teacher identity by administering a reliable and valid questionnaire. Moreover, the results of the study inform teacher education authorities to hold awareness-raising programs in order to familiarize EFL teachers regarding hidden curriculum and how it might be practical in the development of their identities in various dimensions including personal, vocational, and social issues. In this regard, teachers' understanding of the effect of hidden curriculum might be practical for EFL learners to enhance their realization of the hidden curriculum and how it might pave the way for them to be more successful in their language learning. Similar to teacher identity, the EFL learners' identity formation can be shaped by the hidden curriculum, which demands the development of a similar questionnaire to investigate whether hidden curriculum might impact EFL learner identity, producing fruitful contributions. The results of future studies in administering HCTI can be significant since it can provide useful information for policymakers to be more concerned with EFL teacher identity in Iran affected by hidden curriculum and take the necessary measures accordingly to help teacher self-develop their identity. Last but not least, the findings of the study can be promising in self-directing EFL and even ESL teachers not to differentiating between hidden and the obvious curriculum in the sense that both are required to be implemented in EFL or WSL pedagogy, while directly or indirectly affecting their professional identity.

The limitation of the study can be directed to the context of Iran, focusing on two cities in Iran, gathering data based on the small number of participant teachers, which might not fulfill the generalizability of findings. Similar to teachers of the institutes, English for Academic and Specific Purposes (EAP and ESP) teachers' identity can also be studied when they are provided with sufficient information concerning hidden curriculum. In this regard, another similar questionnaire can be constructed by doing further research since hidden curriculum and teacher identity have been an under-researched area of research in EFL contexts, such as Iran. More importantly, the current study was merely concerned with teacher identity affected by the hidden curriculum, while the teachers' pedagogic performance can also be taken into consideration since the literature suggests

developing a reliable and valid questionnaire in this dimension. Most significantly, the current study was an attempt to take into account a broader aspect of HCIT in terms of teachers' self-efficacy, pedagogical, and social issues. However, it might be practical for prospective researchers to provide a detailed division of each component in order to state a more vivid image of the hidden curriculum and its influence on teachers' identity.

References

- Abu-Alruz, J., & Khasawneh, S. (2013). Professional identity of faculty members at higher education institutions: A criterion for workplace success. *Research in Post-Compulsory Education, 18*(4), 431-442.
- Abu-Alruz, J., & Khasawneh, S. (2013). Professional identity of faculty members at higher education institutions: A criterion for workplace success. *Research in Post-Compulsory Education, 18*(4), 431-442.
- Bandini, J., Mitchell, C., Epstein-Peterson, Z. D., Amobi, A., Cahill, J., Peteet, J., ... Balboni, M. J. (2017). Student and faculty reflections of the hidden curriculum: How does the hidden curriculum shape students' medical training and professionalization? *American Journal of Hospice and Palliative Medicine, 34*(1), 57-63.
- Barzegar, F., Paryad, E., Jafroudi, S., Kazem Nezhad Leyli, E., & Ghanbari Khanghah, A. (2018). Nursing students' viewpoints: Effect of hidden curriculum on learning. *Journal of Holistic Nursing And Midwifery, 28*(1), 26-34.
- Bear, G. G. (1998). School discipline in the United States: Prevention, correction, and long-term social development. *School Psychology Review, 27*(1), 14-32.
- Beauchamp, C., & Thomas, L. (2009). Understanding teacher identity: An overview of issues in the literature and implications for teacher education. *Cambridge Journal of Education, 39*(2), 175-189.
- Bray, M., Kobakhidze, M. N., Zhang, W., & Liu, J. (2018). The hidden curriculum in a hidden marketplace: relationships and values in Cambodia's shadow education system. *Journal of Curriculum Studies, 50*(4), 435-455.
- Bullough Jr, R. V. (2001). Pedagogical content knowledge circa 1907 and 1987: A study in the history of an idea. *Teaching and Teacher Education, 17*(6), 655-666.
- Choi, Y. H., & Lee, H. W. (2007). A model of English teacher development in Asia based on surveys on teacher qualifications and education programs. *Journal of Asia TEFL, 4*(4), 1-34.
- Cunningworth, A. (1995). *Choosing your coursebook*. Heinemann: Oxford University Press.
- Dornyei, Z. (2007). *Research methods in applied linguistics*. New York: Oxford University Press.
- Dreeben, R. (1968). *On what is learned in school*. Addison Wesley Publishing Company.
- Ebrahimi, S., Afraz, S., & Samimi, F. (2019). On the Development of a Model of Cultural Identity and Language Achievement among Iranian Advanced EFL Learners. *International Journal of Foreign Language Teaching and Research, 7*(26), 117-135.

- Ellis, R. (2015). *Understanding second language acquisition 2nd Edition-Oxford applied linguistics*. Oxford university press
- Farhady, H., Jafarpur, A., & Birjandi, P. (1994). *Testing language skills: From theory to practice*. Tehran: SAMT Publications.
- Fletcher, T., Mandigo, J., & Kosnik, C. (2013). Elementary classroom teachers and physical education: Change in teacher-related factors during pre-service teacher education. *Physical Education and Sport Pedagogy, 18*(2), 169-183.
- Friesen, M. D., & Besley, S. C. (2013). Teacher identity development in the first year of teacher education: A developmental and social psychological perspective. *Teaching and Teacher Education, 36*, 23-32.
- Giroux, H. A., & Penna, A. N. (1979). Social education in the classroom: The dynamics of the hidden curriculum. *Theory & Research in Social Education, 7*(1), 21-42.
- Hale, J. E. (1994). *Unbank the Fire. Visions for the education of African American children*. Baltimore: Johns Hopkins University Press.
- Hale, J. E. (2001). *Learning while Black: Creating educational excellence for African American children*. Baltimore: JHU Press.
- Harman, H. H. (1976). *Modern factor analysis*. University of Chicago press.
- Jackson, P. (1968). *Life in classrooms*. New York, NY: Holt, Rinehard and Winston Inc.
- Kao, Y., & Lin, S. (2015). Constructing a structural model of teachers' professional identity. *Asian Journal of Management Sciences & Education, 4*(1), 69-81.
- Karimi, F. (2012). Hidden curriculum: Emphasis on social education. *Journal of Education Strategies in Medical Sciences, 5*(2), 125-130.
- Lamote, C., & Engels, N. (2010). The development of student teachers' professional identity. *European Journal of Teacher Education, 33*(1), 3-18.
- Langhout, R. D. (2005). Acts of resistance: Student (in) visibility. *Culture & Psychology, 11*(2), 123-158.
- Li, Y. (2020). The hidden curriculum of an English for academic purposes reform in Chinese universities. *Critical Education, 11*(11), 1-14.
- MacLure, M. (1993). Arguing for your self: Identity as an organising principle in teachers' jobs and lives. *British Educational Research Journal, 19*(4), 311-322.
- Margolis, E. (2001). *The hidden curriculum in higher education*. New York: Psychology Press.
- Massialas, B. G. (1996). The hidden curriculum and social studies. *Crucial Issues in Teaching Social Studies, K-12. Belmont, CA: Wadsworth Publishing Company, 2*, 61-80.
- Sachs, J. (2005). The End of Poverty: Economic possibilities for our time. *International Journal, 60*(3), 849.
- Salehiyan, M. (2010). View to teacher and hidden curriculum. *Journal of Teacher Development, 1*, 48-49.
- Sazegar, Z., Ashraf, H., Motallebzadeh, K. (2021). Constructing and validating an EFL hidden curriculum scale using the Rasch Model. *Applied Research on English Language, 10*(1), 1-32.
- Taghvaei, Y. Z., Yazd, K. A., & Rahimi, H. (2014). A study of hidden curriculum in Kashan University of Medical Sciences based on students' views. *Journal of Medical Education Development, 6*(12), 14-23. [Persian].

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- Van Tassell, G. (2005). Classroom management. *The international child and youth care network*. <https://cyc-net.org/cyc-online/cycol-0305-classroom.html>
- Zhang, D., & Luo, Y. (2016). Social exclusion and the hidden curriculum: The schooling experiences of Chinese rural migrant children in an urban public school. *British Journal of Educational Studies*, *64*(2), 215-234.
- Zhang, Y., Hawk, S. T., Zhang, X., & Zhao, H. (2016). Chinese preservice teachers' professional identity links with education program performance: The roles of task value belief and learning motivations. *Frontiers in Psychology*, *7*, 573. doi: 10.3389/fpsyg.2016.00573