Research Article

Promoting Professional Identity Formation of Novice EFL Teachers in E-teaching Through Online Image Management (OIM) Strategies

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Abstract

Although the EFL teachers' challenges in developing and enhancing Professional Identity Formation (PIF) in face-to-face and virtual instruction contexts have extensively been explored, there was a limited set of practical and advantageous strategies, particularly for the novice teachers, in promoting their PIF in E-teaching especially since the emergence of changed priority of teaching contexts amid the COVID-19 outbreak. Accordingly, this study attempted to check the Iranian novice EFL teachers' PIF, uncover the potential impacts of utilizing Online Image Management (OIM) strategies in promoting their PIF, and identify the most-preferred OIM strategies. Based on the convenience sampling, 184 male and female Iranian novice EFL teachers were selected to participate in this quasi-experimental study. Two instruments, including a Questionnaire of Perceived Professional Identity (QPPI) and a series of Quantitative Online Interviews (QOIs), were used to collect the data via the virtual platform of Survey Planet. The descriptive statistics and Independent Samples t-Test packages in R were utilized to analyze the data. The results confirmed the low levels of professional identity among Iranian novice EFL teachers, verified the significant effects of OIM strategies in promoting PIF of Iranian novice EFL teachers. This study may provide implications for EFL teachers and trainers in helping novice EFL teachers to promote their PIF by using OIM strategies.

Keywords: distance education, E-teaching, image management strategy (OIM), novice EFL teachers, professional identity formation

Introduction

In the last two decades, the notion of the professional identity of EFL teachers has offered an innovative framework for actual practice, professional development, and personal progress. It captures "the complex ways in which teachers learn to be and become teachers, grow as teachers, and exercise their practices situated in socio-historical, cultural, and political contexts… offering a holistic lens to view teachers' knowledge, beliefs, values, priorities, and aspirations" (Yazan & Lindahl, 2020, p. 1) of EFL instructors. In particular, it deals with how these teachers, at the microlevel experience and describe their practice. When experiences in their job overlap with the those of others, a shared, collective professional identity, at the microlevel, is eventually shaped for the profession of language teaching in general and English teaching in particular.

Teaching English as a second or foreign language is a complicated and gentle endeavor, challenging heaps of training to make knowledgeable in-situ decisions and concurrently managing a myriad of parameters that directly affect learners' learning and progress (Danielewicz, 2001). Due to the higher teaching experience of the expert or professional teachers in comparison to the novice or amateur ones, they are more competent in forming their professional identity and even reflect it in various face-to-face instructional contexts but not necessarily in the virtual ones (Goodwyn, 2016). Thus, novice teachers' challenges in Professional Identity Formation (PIF) are more complicated. On the one hand, novice teachers have a restricted repertoire of methods or strategies to promote their PIF. On the other hand, there are very limited, less intricate, and efficient strategies to enhance their PIF, particularly in the dynamic setting of distance education in which there are many intervening variables influencing the process of PIF and even potentially raising the probability rate of real-world and online identities conflicts (Smith et al., 2019).

According to Jiang (2016), the challenges of PIF among EFL teachers as the instructors of a language other than their mother tongue are doubled compared to other teachers. Besides, Nagatomo (2016) stated that novice EFL teachers fail to promote their PIF, which decreases their academic performance, increases their sense of burnout, and paves the way for demotivated instruction. Moreover, Selby (2021) pointed out that the current methods of promoting teachers' identity are limited to some complex reflective practices specially designed for in-person instruction settings, which require noticeable meta-knowledge to successfully perform them, leaving novice teachers with no easy-to-use methods to move their PIF upward potentially. Recently, Yau et al. (2022) highlighted the possible

benefits and advantages of utilizing appropriate Online Image Management (OIM) methods as an efficient and beneficial strategy in promoting teachers' PIF, especially the novice ones in distance education during the Coronavirus outbreak, which needs more critical investigations.

OIM, online reputation management, or online identity management refers to some methods or strategies for developing or managing an eminent and professional web or electronic presence of a person or his identity in the virtual world of the Internet (Halpern & Murphy, 2009). According to Garbasevschi's (2020) taxonomy, OIM are divided into two main parts: identity-related and technology-related strategies. The identity-related strategies consist of self-regulation, self-efficacy, and self-reflection practices. The technology-related ones include enhancing digital, Internet, and computer literacy. According to Cash (2016), in terms of teachers' self-regulation methods in distance education, it is defined as following a set of disciplines such as planning (i.e., time management), rehearsing (i.e., outlining and rearranging materials), monitoring (i.e., listing), keeping records (i.e., making portfolio) and revising (self-consequating).

Regarding self-efficacy in instructional technology settings, it involves the instructors' belief in their E-teaching abilities and capacities to perform in distance education in a way that is necessary or adjusted to their goals or objectives (Hartnett, 2016). As the last component of identity-related strategies, self-reflection practices engage the ability to monitor, evaluate, and enhance the behavioral, mental, emotional, and cognitive aspects (Bisson, 2017).

Concerning the first component of technology-related strategies, digital literacy is the ability to seek, assess, create, and send or receive certain information successfully through different technological devices (Zhang, 2021). Regarding Internet literacy as the second component, it is defined as the knowledge and ability to use the Internet for different related purposes, such as working with online search engines, web browsers, websites, blogs, and sending and receiving emails (Diteeyont & Ku, 2021). Likewise, computer literacy as the last component is defined as the knowledge and ability to use computers efficiently for various associated objectives (Makhmudov et al., 2020).

While the dated frameworks considered Internet and computer literacies distinct components, a recent taxonomy (Jaeger & Taylor, 2021) has placed them in the upper-hand category of information literacy. According to Beck and Kosnik (2021), information literacy plays a crucial role for teachers in distance education that entails not only the mainstream skills in the field of computers and the Internet but also includes some new and advantageous techniques to demonstrate a well-established image of a teacher such as

creating a series of well-established profiles in social media sites, enhancing the possible ranking in google scholar according to related metrics, Search Engine Optimization (SEO), the personal identification information in the top-rated online search engines.

This study is significant for various reasons. First, different recently-conducted international studies (Li & De Costa, 2018) and some critical Iranian ones (Allami & Soleymani, 2022) demonstrated that most novice EFL teachers fail to form or even appropriately reflect their professional identities in both face-to-face and virtual contexts due to the various reasons, including considerable lack of appropriate strategies and low levels of how to utilize the grasped ones.

Second, according to some studies (Kalali Sani et al., 2021), the number of practical and efficient strategies to be used for novice EFL teachers, especially in distance education, to promote their professional identity formation regardless of their biological, contextual, and personal, or individual features is very limited, or the current ones are very complex or even inapplicable to virtual contexts of instruction.

Third, recently, since the start of the COVID-19 outbreak and the bolded use of distance education, the prioritized way of instruction around the world, most novice teachers have started their careers in E-teaching platforms such as Learning Management Systems (LMSs), in which lack of experience in teaching and the complicated procedures of representing or reflecting themselves through their professional identities in virtual instructional contexts have led to the rise of many problems in forming their professional identities, particularly for EFL teachers as the instructors of language. In sum PIF is regarded as a dynamic and complex phenomenon, especially in case of Iranian EFL teachers (Yau et al., 2022; Fallah et al., 2022). Finally, Supriadi et al. (2022) outlined that limited current studies in the literature address the potential benefits of OIM strategies to enhance teachers' identity formation and reflection, especially in the underdeveloped and developing contexts of distance education.

Two specific and distinct theories support this study: profession-associated identity formation (Coulmas, 2019; Rosenfeld, 2015) and identity reflection in cyberspace (Kaye, 2021; Whitty, 2016). Profession-associated identity formation states that the process of professional identity formation depends critically on the individual's literacy, proficiency, experience, and related skills in the profession in which they attempt to engage. In this study, as an attempt to help novice EFL teachers in teaching mainly in virtual contexts and especially in the developing contexts of distance education, they were selected to enhance their professional identity formation in E-teaching potentially. This study is informed and supported by yet another theory; namely, identity reflection in cyberspace, which centers around the

appropriate way of representing an actual, suitable, and well-established image of self in the virtual contexts through utilizing contextually, culturally, and personally valuable and appropriate strategies in synchronous and asynchronous settings. In this research, the OIM as a set of simple, easy-to-grasp, and efficient strategies was chosen to promote novice EFL teachers' PIF possibly.

The associated studies in the literature can be categorized into three distinct groups. The first group encompasses studies investigating the levels of professional identity as an indicator of PIF among EFL teachers with different proficiency levels and the potential factors that influence their professional identity in face-to-face settings. In a study conducted in the Iranian EFL context, Sardabi et al. (2018) attempted to reshape the professional identity of Iranian EFL teachers according to specific pedagogical activities in their teacher education courses. They found that most Iranian EFL teachers had acceptable levels of professional identity regardless of their teaching experience. Utilizing certain pedagogical activities in their training courses throughout their academic education career significantly improved their professional identity levels.

Following the approach of the previous study and in a similar setting, Sheybani and Miri (2019) examined Iranian EFL teachers' levels of professional identity and their potential association with their critical thinking. Utilizing the outdated Beijaard et al.'s questionnaire of professional identity developed in 2000, they found that most Iranian EFL teachers had low levels of professional identity. There was a positive association between their critical thinking and levels of professional identity. Babanoglu and Agcam (2019) investigated Turkish EFL teachers' levels and perceptions of potential factors influencing their professional identity formation. They found that experienced EFL teachers had a higher level of professional identity than their amateur peers. Besides, most of them considered training, appropriate strategies, and language teaching experience as the most influential factors impacting professional identity formation among EFL teachers. Unlike these study in which different questionnaires were used as instruments to collect the required data, in the Columbian EFL context, Buendia-Arias et al. (2020) explored the EFL teachers' professional identity formation in terms of their levels of professional identity by conducting semi-structured interviews and according to different qualities. The findings revealed a direct relationship between EFL teachers' teaching expertise and their professional identity levels.

In another similar study for amateur EFL teachers in the Chinese EFL context, Wang (2021) evaluated their professional identity levels and the possible constraints that influence their PIF. He reported that almost all the Chinese amateur EFL teachers possessed low levels of professional identity,

mainly due to teaching experience-related issues. In a novel approach, Chien (2022) attempted to measure Taiwanese EFL teachers' professional identity and evaluate the use of famous education quotes to enhance their PIF. The results demonstrated that many Taiwanese EFL teachers had low levels of professional identity, and education quotes did not significantly benefit them in promoting their PIF.

Concerning novice EFL teachers in the Indonesian context, Hanifah (2022) examined their professional identity levels and discovered the most effective variables that influenced their PIF. He pointed out that Indonesian novice EFL teachers had low to acceptable levels of professional identity. In addition, it was found that insufficient knowledge of PIF methods, lack of practical and straightforward PIF strategies, low teaching experience, not sufficient self-esteem, and self-confidence were the most mentioned reasons by the Indonesian EFL learners with low levels of professional identity.

The second groups of studies include the ones that targeted the professional identity levels as an indicator of PIF among EFL teachers with various proficiency levels in E-teaching and the potential factors that influence their professional identity in the context of distance education. In the Hong Kongese EFL setting of distance education, Gu and Lai (2019) attempted to analyze the PIF of EFL teachers in E-teaching qualitatively. They found that the E-teaching experience is vital in forming these teachers' identities in distance education. Some personal and psychobehavioral factors, such as self-esteem and self-regulation, considerably impacted the PIF among these EFL teachers.

In the Iranian EFL context of distance education, Eslamdoost et al. (2020) examined the Iranian EFL teachers' PIF in distance education regarding their professional identity levels and the potential differences between their professional identity construction and reconstruction in face-to-face vs. virtual instructional contexts. They reported that while most Iranian EFL teachers showed appropriate levels of professional identity in face-to-face contexts of education according to their relative knowledge of PIF methods, they had no or very limited knowledge about the potential strategies to enhance PIF in distance education.

In the Indonesian EFL context amid the COVID-19 pandemic, Ashadi et al. (2022) investigated EFL teachers' professional identity in Online Distance Learning (ODL) through an interpretive phenomenological analysis. The findings revealed two critical points: first, most Indonesian EFL teachers had low levels of professional identity as they were not able to reflect on their professional identity in E-teaching, and second, some of the EFL teachers had created a repertoire of self-made communicational, emotional, and psychological

strategies to enhance their professional identity in the OIM amid the Coronavirus outbreak.

Recently, in an E-learning context in UAE, El-Soussi (2022) attempted to compare the PIF of the EFL teachers in the face-to-face vs. virtual setting of instruction. The results revealed that the participants were familiar with a limited set of strategies to promote their PIF in the face-to-face classes but were not proficient in utilizing certain methods to enhance their PIF in E-teaching.

The third group of studies, as few as they are in the literature, examines a set of suggested strategies to promote or enhance the PIF among EFL teachers in virtual instruction contexts. Focusing on improving digital literacy in the Chinese EFL contexts, Byfield et al. (2016) attempted to enhance the PIF of Chinese EFL teachers by training them according to specific courses about digital literacy. They reported that all Chinese EFL teachers acclaimed these courses, and they mentioned the significant changes in their professional identity as reflected in their online communication with their peers and students. Besides, they pointed out that more studies are needed to investigate the hidden potentials of utilizing different strategies in distance education to help EFL teachers create, develop, and maintain their levels of professional identity.

In the Iranian EFL context, Ghamoushi et al. (2020) used online discussion forums for EFL teachers to possibly share their E-teaching experience to enhance their professional identity. The results indicated that most Iranian EFL teachers engaged in this activity, and the use of these forums caused significant positive changes in the PIF of the EFL teachers. In another similar study conducted in the Chilean EFL context of online teaching, Lasekan and Alarcón (2022) evaluated the outcomes of International Computer Driving Licence (ICDL) courses in promoting the levels of professional identity among the Chilean EFL teachers during the COVID-19 pandemic in an experimental study. The results showed that the ICDL courses, which significantly increased the computer literacy of the EFL teachers, had a critical role in enhancing the PIF in E-teaching among them.

On the whole, having reviewed the associated studies found in the literature in terms of three major themes, including the investigation of professional identity levels as an indicator of PIF in the face-to-face setting, distance education, and examination of specific limited strategies to promote the PIF among EFL teachers in virtual contexts of instruction, it was revealed that while most of the studies considered analyzing the PIF of the EFL teachers in the in-person instructional contexts, a few studies investigated this phenomenon in distance education, highlighting the current gap in the literature. In addition, according to most of the studies in the second group of the literature review, more studies should investigate the PIF of EFL teachers in virtual instructional

contexts. Moreover, many studies in the first and second groups reported low levels of professional identity among novice EFL teachers. Furthermore, according to the studies in the third group, there is a lack of practical and scientific strategies to promote the PIF of novice EFL teachers. The present research may contribute to the disregarded field of promoting PIF in E-teaching among Iranian novice EFL teachers by suggesting the use of OIM strategies as a possibly beneficial way to enhance PIF among these teachers. Thus, this study is significant as it contributes to the abovementioned gaps.

In sum, the sudden COVID-19 pandemic clarified the dark areas of E-teaching and E-learning by emboldening the weak points in distance education which seems to be more critical in scientific fields where the means of communication is a language other than the mother tongue of the instructor and learners.The first objective of this study was to check the professional identity levels of Iranian novice EFL teachers as an indicator of their PIF in the virtual contexts of instruction. This study also attempted to recognize the most favored or the most-preferred OIM strategies to enhance PIF among Iranian novice EFL teachers.The results would shed light on the Iranian novice EFL teachers' low levels of professional identity. The second aim of this study was to examine whether using the OIM strategies would significantly affect the professional identity levels of Iranian novice EFL teachers with low levels of professional identity. Thus, this study atddressed the following Research Questions (RQs):

1. What are the Iranian novice EFL teachers' levels of professional identity as an indicator of their PIF?

2. Does using Online Image Manamement strategies significantly promote the PIF of Iranian novice EFL teachers in E-teaching?

3. What are the most favored Online Image Manamement strategies among Iranian novice EFL teachers to potentially promote their PIF?

Method

Participants

Using a convenience sampling procedure, in the first phase of selecting participants, 312 male and female Iranian EFL teachers aged 23 to 38 were selected from different universities and language institutes in Isfahan, Iran. Based on Ouellett's (2021) Taxonomy of Teachers' Experience (TTE), 209 EFL teachers with five years of English teaching experience or less were selected in the second phase of participants' selection. In the last phase, after considering the dropout rate, the pre-test results, and homogenizing the number of participants in the control and experimental groups, 184 male and female Iranian novice EFL teachers with low levels of professional identity were selected (based on the

results of the Perceived Professional Identity explained below). It should be mentioned that the researchers controlled the sample selection bias by selecting participants from various locations with different ages and gender. Besides, attrition bias was handled by tracking the dropped-out participants' reasons. Regarding ethical issues, the applicable guidelines of the National Committee for Research Ethics in the Social Sciences and the Humanities (NESH) in selecting the participants were followed. The participants were divided equally into two groups: the control group and the experimental one.

The control group included 92 Iranian male and female novice Iranian EFL teachers with low levels of professional identity. Their teaching experience was considered in the process of participant selection, and their professional identity levels were checked in the pre-test. During the intervention phase, they were asked not to participate in any virtual or face-to-face courses that possibly influence their professional identity, including those courses enhancing their digital skills, identity, or personality domains and improving their E-teaching skills in general. To have generalizable results, they were allowed to conduct their virtual classes, whether synchronous or asynchronous ones, just like the participants in the experimental group.

Like the control group, the experimental group consisted of 92 Iranian male and female novice Iranian EFL teachers with low levels of professional identity. Parallel to the participants in the control group, their teaching experience was examined while selecting the participants, and their levels of professional identity were checked in the pre-test phase. It should be mentioned that just like the control group participants, those in the experimental group were allowed to have their virtual courses during the intervention phase. They were aware not to participate in any courses except those held by the researchers. As the instruction process in online platforms did not require any particular skills, the researchers were not concerned about the potential effects of their mostly daily E-teaching on their professional identity.

Table 1, demonstrates the demographic characteristics of the participants both in the control and experimental groups.

Table 1
Demographic Characteristics of the Participants

	Control Group (CG)	Experimental Group (EG)
No. of EFL teachers	92	92
Gender	Male and Female	Male and Females
Age range	23-38	23-38
Experience levels	Novice	Novice
Professional identity levels	Low	Low
Location	Isfahan, Iran	Isfahan, Iran

Instruments

Two main instruments were used in this study: The Questionnaire of Perceived Professional Identity (QPPI) (Lentillon-Kaestner et al., 2018) and a series of Quantitative Online Interviews (QOIs).

Questionnaire of Perceived Professional Identity (QPPI)

The QPPI consists of 11 items based on a five-point Likert scale that examines the perceived professional identity among teachers. The anchor of the Likert scale is not balanced and includes rarely (1 point), occasionally (2 points), sometimes (3 points), often (4 points), and always (5 points). The questionnaire outcome is interpreted in three ranges of professional identity: low-level (equal and lower than 22 points), moderate-level (23-45), and high-level (equal and higher than 46 points) professional identity. The face and content validity of the QPPI were checked by asking a panel of experts in applied linguistics and teacher education and a social psychologist. Different studies (such as Moradkhani & Ebadijalal's, 2021 in Iranian setting, and Lentillon-Kaestner et al's., 2018 in non-Iranian context) approved the reliability of the QPPI. In this study, to check the internal consistency ($\alpha>0.94$) of the questionnaire, a pilot study was conducted for 34 novice Iranian EFL teachers. As a comprehensive, accurate, and easy-to-use platform, Survey Planet was used to upload the questionnaire.

Quantitative Online Interviews (QOIs)

According to Flick (2021), a Quantitative Online Interview (QOI) is a one-way structured interview conducted online in the form of a list of pre-designed items with answer options. In this study, a QOI was used that included only one item asking the respondents to rank the OIM strategies from the most favored to the least favored one. The validity and reliability of the QOIs were checked according to Morgan's (2013) guidelines for conducting quantitative interviews in social science. The validity of the QOIs was approved by a panel experts, who were authorities in the related fields and were aware of the objectives of this study. Regarding reliability, the QOIs are highly reliable as they are structured, fixed, contain a series of specific options, and are conducted in a bias-free virtual environment. Like the platform on which QPPI was uploaded, Survey Planet was used d as the context of QOIs. Table 2 shows the characteristics of the instruments.

Table 2
Characteristics of the Instruments

	QPPI	QOI
Items (N)	11	1
Scale type	5-point Likert-scale	Ranking
Point range per each item	1-5	-
Min-Max points	11-55	-
Validit and Realibility (VR)	Established	Established
VR Framework	Lentillon-Kaestner et al. (2018)	Morgan (2013)
Platform	Survey Planet	Survey Planet

Data Collection Procedure

Due to the Coronavirus outbreak, this study faced different limitations, which changed how participants were selected, conducted, and collected the required data. In the first phase, the validity and reliability of the instruments were checked. Regarding content validity, the Average Congruency Percentage (ACP) was used, and for face validity, researchers asked the feedback from an expert panel. For the reliability of the QPPI, a pilot study was conducted with 26 Iranian EFL teachers, and the value of internal consistency confirmed the high reliability of this instrument (α>0.94). In the second phase, invitation letters were sent to different social media groups of EFL teachers, asking them to participate in a study by completing a registration form with their contact information, whether by providing an email or phone number. In the third phase, a pre-test was conducted over the Survey Planet platform, and 184 participants were identified as novice EFL teachers with low levels of professional identity. The fourth phase included a three-month intervention phase consisting of the OIM strategies instruction, identity- and technology-related ones in the Big Blue Button platform. In the fifth phase, the final step, a post-test was conducted to check the potential effects of the intervention phase on the Planet Survey platform.

Pre-test and Post-Test Phases

In the first step of the pre-test phase, 209 novice EFL teachers were supposed to participate in the pre-test. Considering the dropout rate, in the second step of the pre-test phase, 184 novice EFL teachers participated in the pre-test. The pre-test included one instrument, QPPI, which was conducted in the Survey Planet form. The pre-test aimed to identify the levels of professional identity among the participants. In the post-test phase, similar to the pre-test, QPPI was first conducted for the participants in the virtual platform of Survey Planet. As the items in the QPPI measured the opinions of the respondents and were not based on a true or false scale, they did not require any special knowledge or skill; thus,

it was not necessary to change the design of the study or the analysis procedure as the chance of pre-test sensitization was low. The QPPI were also used to evaluate the professional identity levels of the participants after the intervention phase. In the second step of the post-test phase, a series of QOIs were conducted for 42 randomly selected participants, forming about half of the participants in the experimental group. This step aimed to check the most favored OIM strategies among the participants.

Intervention Phase

After selecting and dividing the participants into an experimental group (92 Iranian novice EFL teachers) and a control group (92 Iranian novice EFL teachers), the participants in the experimental group entered an intervention phase. In this phase, which lasted from the first day of August to the last day of October 2021, a series of online courses were conducted on the BigBlueButton platform on Thursday and Friday nights (as these days are not considered working days in Iran) from 8 pm to 11 pm. The intervention phase lasted for a total of 78 hours, in which 25 hours were allocated for teaching identity-related strategies, and 53 hours were associated with instruction of technology-related strategies. Concerning the identity-related strategies, including self-regulation, self-efficacy, and self-reflection practices, the related topics were taught from Moran's (2021) book. Regarding the technology-related ones, including enhancing digital, Internet, and computer literacy, some related chapters from Isaias et al.'s (2020) book were selected as the instruction source. As a solution for the absence of some participants in a few sessions, the recorded files in the form of Scalable Vector Graphics (SVG) clips were sent to their emails. The validity and reliability of the courses were checked by consulting a panel of experts about the topics and the way of instruction scheduled to be taught for each session. To better understand the intervention phase, Table 3 illustrates its features.

Table 3
Features of the Intervention Phase

Topic	Identity-related strategies	Technology-related strategies
Hours of instruction	25 hrs	53 hrs
Hours per session	3 hrs	3 hrs
Duration	August 2021 (Thursdays and Fridays)	September and October 2021 (Thursdays and Fridays)

Source of instruction	Moran (2021)	Isaias et al. (2020)
Platform	The BigBlueButton	
VR of courses	Established	

Note. VR stands for validity and reliability.

Design and Context of the Study

Regarding the objectives of this study and the restrictions in providing randomized samples amid the COVID-19 pandemic, a quasi-experimental design (pre-test, intervention, control groups, post-test) was employed to conduct this study in the virtual context of the Internet using different online platforms. This study was conducted in Isfahan, Iran, from June 2021 to February 2022 amid the COVID-19 pandemic.

Results

To check the content validity of the QPPI, ACP was used according to Bukve's (2019) guidelines in estimating the ACP of the instruments in social science. In this study, the items in the QPPI were evaluated and rated according to specific qualities by a panel of experts in the associated fields, such as the appropriateness of the items in measuring their subsequent constructs. According to the findings, the total ACP (82.8%) was higher than the critical value (80%), which confirmed the content validity of the QPPI in the Iranian EFL context. After ensuring the validity of the QPPI, its reliability was checked according to a pilot study conducted on 26 randomly-selected Iranian EFL teachers. The internal consistency of the QPPI was checked based on Cronbach's alpha. The internal consistency of the QPPI (.92) was in the acceptable range ($\alpha > 85\%$); thus, the QPPI enjoyed acceptable reliability in the Iranian EFL context.

The study participants had two features; first, they were required to have five years or less experience in EFL teaching to be considered novice EFL teachers. In the first attempt to select participants conveniently, 312 Iranian male and female EFL teachers were selected to participate in this study; in which 209 of them were identified as novice EFL teachers. The participant were also required to have low professional identity levels. The QPPI was conducted for 219 participants to ensure low professional identity levels. Concerning their levels of professional identity and having homogenous control and experimental groups in terms of the number of participants; finally, 184 Iranian novice male and female EFL teachers with low levels of professional identity were selected in the third attempt. To have a better

understanding of the selection attempts, Table 4 is a representation of the related results.

Table 4
Attempts in Selecting the Participants

	1st Attempt	2nd Attempt	3rd Attempt
Participants (N)	312	209	184
Framework		Five years or less experience (novice)	Novices with low professional identity levels

Concerning the results of the pre-test, descriptive statistics were used. In addition, the values of skewness and kurtosis were calculated to check the normality's assumption. Table 5 demonstrates the results of the pre-test.

Table 5
Descriptive Statistics of the Pre-test

Group	N	Min	Max	Mean	SD	Z-Kurtosis	Z-Skewness
Control	92	11	20	15.5	4.12	-.118	.399
Experimental	92	14	19	15.2	4.01	-.453	.661

As seen in Table 5, the mean score of the novice EFL teachers in the control group (M = 15.5, SD = 4.12, n = 92) is not somehow different from those in the experimental group (M= 15.2, SD = 4.01, n = 92). In addition, the z-values of the kurtosis and skewness are between ±1.5 and ±2, which confirms the presence of normality assumption in the pre-test scores (Buisson, 2021). Thus, the parametric Independent Samples t-Test was used to check whether the difference between the groups in the pre-test was significant. Table 6 illustrates the associated results.

Table 6
Independent Samples t-Test for the Pre-test

F	Sig.	T	df	Sig. (2-tailed)	Mean Diff	St. Error	Lower	Upper
.019	.449	1.289	14	.124	1.560	.527	-2.127	12.412
		1.289	13.560	.124	1.560	.527	-2.127	12.441

As shown in Table 6, according to Levene's test F (14) = 0.019, p = 0.449, the variances of the two populations are approximately the same; consequently, the first row was considered in analyzing the related results. The Independent Samples t-Test was not significant, t (14) = 1.289, p = .124, confirming that there is no significant difference in the scores of QPPI between the control and experimental groups in the pre-test. After the intervention phase, descriptive statistics were used regarding the post-test results. In addition, similar to the pre-

test, skewness and kurtosis values were estimated to check the normality assumption. Table 7 is a demonstration of the related results.

Table 7
Descriptive Statistics of the Post-test

Group	N	Min	Max	Mean	SD	Z-Kurtosis	Z-Skewness
Control	92	12	19	15.1	3.97	-.324	.440
Experimental	92	49	54	53.6	5.69	-.396	.529

According to Table 7, the mean score of the novice EFL teachers in the control group (M = 15.1, SD = 3.97, n = 92) differs from those in the experimental group (M= 53.6, SD = 5.69, n = 92). Besides, the z-values of the kurtosis and skewness are between ±1.5 and ±2, which approves the normality assumption in the post-test scores (Buisson, 2021). Thus, the parametric Independent Samples t-Test was used to check whether the difference between the groups in the pre-test was significant. Table 8 shows the results of the post-test.

Table 8
Independent Samples t-Test for the Post-test

F	Sig.	T	df	Sig. (2-tailed)	Mean Diff	St. Error	Lower	Upper
.023	29.631	4.597	14	.002	38.645	.241	-5.328	23.287
		4.597	13.297	.002	38.645	.241	-5.328	23.287

As seen in Table 8, according to Levene's test F (14) = 0.023, p = 29.631, the variances of the two populations are approximately equal; thus, the first row was considered in analyzing the related results. The Independent Samples t-Test was significant, t (14) = 4.597, p = .002, confirming a significant difference in the scores of QPPI between the control and experimental groups in the post-test. To investigate the most favored OIM strategy among the Iranian novice EFL teachers, the researchers cross-tabulated the results of the QOIs in Table 9. It should be mentioned that 76 out of 92 participants in the experimental group participated in the QOIs. Table 9 indicates the related results.

Table 9
Most-favored OIM Strategies among Iranian Novice EFL Teachers

OIM Strategies	OIM Sub-strategies			
Identity-related Strategies	Self-regulation Strategies	Self-efficacy Strategies	Reflection Practices	
	7%	29%	64%	100%
Technology-related Strategies	Enhancing Digital Literacy	Enhancing Internet Literacy	Enhancing Computer Literacy	
	72%	19%	9%	100%

As Table 9 demonstrates, in the first category of the OIM strategies, among the identity-related ones, Iranian novice EFL teachers rated reflection practices (64%), self-efficacy strategies (29%), and self-regulation ones (7%) respectively as their most-preferred strategies to promote their PIF in E-teaching. In the second category, technology-related strategies, most of the Iranian novice EFL teachers favored enhancing digital literacy (72%), enhancing Internet literacy (19%), and computer literacy (9%), respectively, their PIF in distance education. The results imply the significant roles of reflection practices and enhancing digital literacy as the most easy-to-grasp, appropriate, and beneficial ways for novice EFL teachers to build their professional identity at a high level in virtual courses of EFL instruction.

Discussion

All in all, the results demonstrated that using OIM strategies significantly promoted the professional identity levels of Iranian novice EFL teachers. Furthermore, regarding which type of OIM strategies had the highest beneficial impact, It was found that most of the Iranian novice EFL teachers involved in the study preferred reflection among identity-related strategies, and digital literacy, among technology-related ones. The results found for Research Question One indicated that most Iranian novice EFL teachers had low levels of professional identity. The results of this study are in agreement with those of some studies, including the ones conducted in the Iranian EFL context (Eslamdoost et al., 2020; Sheybani & Miri, 2019) and non-Iranian settings (Babanoglu & Agcam, 2019; Hanifah, 2022; Wang, 2021). In addition, the results do not align with those of Sardabi et al. (2018), in which the Iranian novice EFL teachers had acceptable levels of professional identity in some virtual courses.

The results found for Research Question Two confirmed the significant effect of OIM strategies, including identity-related and technology-related ones, in promoting the PIF of Iranian novice EFL teachers. The results of this study are in harmony with those of some limited and recently-conducted studies (Ghamoushi et al., 2020; Hanifah, 2022; Lasekan & Alarcón, 2022) which indicated the significant roles of self-esteem-related strategies as well as computer/Internet literacy techniques in promoting the PIF of EFL teachers involved in distance education. It can be elucidated that due to the restricted and complex strategies to promote PIF in the EFL context of distance education and the sudden shift in the means of instruction from face-to-face or in-person contexts to virtual platforms in distance education, whether synchronous or asynchronous ones, recently, scholars have started to investigate the potential benefits of easy-to-use, accessible, and highly

beneficial strategies to not only enhance the PIF of EFL teachers but showing them the right way to reflect their professional identity in distance education.

The results of the third research question demonstrated that among the identity-related strategies, reflection practices, and technology-related ones, enhancing digital literacy was the most preferred or most-favored strategy to promote PIF in E-teaching among Iranian novice EFL teachers. The results align with those of Lasekan & Alarcón (2022), the only related study available in the literature in which enhancing digital literacy related to the techniques in ICDL courses was the most essential, effective, and preferred way of enhancing PIF among EFL teachers. The reason behind the results of this question is reflected in Sellars (2017), in which he stated that reflective practices such as discussing teaching goals with colleagues, and students, then receiving feedback and revising them expand the experience range of teachers and provide a well-established persona of them among teachers, students, and teaching community.

More specifically, in the EFL context, Mann and Walsh (2017) found that the EFL teachers who used reflective practices had higher self-esteem and were more competent in regulating themselves in reaching a well-established image of themselves in distance education. There seems to be a linear cause-and-effect association between utilizing reflective practice, higher self-esteem, more ability in self-regulation, and developing and reflecting a high level of professional identity, which needs further investigation. The reasons behind the significant effect of enhancing digital literacy in promoting PIF in E-teaching among novice EFL teachers are reflected in Lutge and Merse's (2021), in which they pointed out enhancing digital literacy as an umbrella term that includes different technology-related literacy such as computer, Internet, and 21st-century skills build a valuable repertoire that provides different benefits among them is the development of a well-established, high-prestige professional identity.

To conclude, this study contributed to the field of PIF among novice EFL teachers by investigating the effects of different OIM strategies on their professional identity levels. This study led to the development of three general outcomes. First, it revealed that many Iranian novice EFL teachers have low levels of professional identity. It can be concluded that experience might have positive influence on the professional identity formation of novice EFL teachers. While the studies in the literature mainly focused on the experience of the EFL teachers as an indicator of their professional identity, more studies are needed to look at the PIF of the EFL teachers from different biological, cultural, contextual, psychosocial, and cyberpsychological lenses. The second outcome of this study shed light on the significant effects of the OIM strategies

on promoting the PIF of novice EFL teachers. It can be interpreted that the use of OIM strategies is a beneficial way to substitute the complex practices developed from different psycho-behavioral theories to work on teaching behaviors and engage in complex self-image-related practices.

Another implication of the study is that integration of identity- and technology-related strategies could significantly enhance the PIF of novice EFL teachers. As the results confirmed the significant effects of the OIM strategies on the PIF of novice EFL teachers, the instructional materials, which were employed in the present study to teach technology- and identity-related strategies, could be examined by further investigations to check their potential effects in various settings.

The third outcome of this study indicated that among the OIM strategies, the most favored one was reflection practices among the identity-related sub-strategies. As for the technology-related ones, most of the novice EFL teachers selected enhancing digital literacy as their most preferred way of promoting PIF in E-teaching. It can be concluded that more than just basic language-related Teacher Training Courses (TTC) courses are needed to make novice EFL teachers familiar with the beneficial strategies of PIF in E-teaching. It should be mentioned that various pandemic-related variables restricted the selection of participants and administration of the present study. It is recommended that future studies consider examining the possible association between sub-strategies of OIM strategies in promoting PIF of the EFL teachers and their Professional Identity Reflection (PIR) in both face-to-face and virtual contexts of instruction.

Declaration of interest: none

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