

Clinical Versus Collaborative Supervision in EFL Contexts: Differential Effects on Teacher Resilience, Professional Identity, and Student Language Outcomes

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ABSTRACT

Objective: This study compared the effects of Clinical Supervision and Collaborative Supervision on EFL teachers' resilience, professional identity, and their learners' language achievement.

Methods: A mixed-methods design was employed, integrating quantitative and qualitative approaches. Quantitative data were collected from EFL teachers and their students to assess teachers' resilience, professional identity, and learners' language achievement. Qualitative data were obtained through open-ended questionnaires to explore teachers' experiences and perceptions of the two supervision models.

Results: The findings demonstrated that Collaborative Supervision was significantly more effective than Clinical Supervision in enhancing teachers' resilience and professional identity. Although Clinical Supervision contributed to immediate improvements in instructional practice, Collaborative Supervision fostered greater professional agency, collegial support, and reflective development. In addition, learners taught by teachers who participated in Collaborative Supervision achieved significantly higher language achievement than those taught by teachers receiving Clinical Supervision.

Conclusions: Collaborative Supervision provides a more effective framework for promoting teacher professional growth and improving student learning outcomes in EFL contexts. These findings underscore the value of collaborative and reflective supervisory practices and offer important implications for teacher education, educational leadership, and language education policy.

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Introduction

Effective supervision provides the basis for supporting teachers and fostering teaching excellence, along with ongoing professional growth. Baharom (2017) suggested that the fundamental purpose of supervision is to enable teachers to teach better and more effectively. Radi (2007) identified the importance of reflective post-observation conferences between supervisors and teachers since such dialogue enables teachers to recognize their areas of strength as well as those to be developed. Similarly, Zepeda (2013) maintained that supervision should be systematic and multidimensional—entailing observation, constructive criticism, and joint discussion—if it is to ensure continued teacher growth. In so far as this is carried out by principals or another form of designated supervisor, effective supervision remains imperative in determining teaching practice and enhancing general standards of education. The process of supervision is a comprehensive process that includes pre-observation planning, post-observation report writing, data analysis, and strategy formulation in addition to mere classroom teaching observation (Thomas, 2008; Zepeda, 2013). Through such structured and reflective approaches, supervisors are able to point out various strengths and weaknesses regarding teaching practice; as a result, instructional effectiveness enhances, and sustainable development in teachers' professionalism is ensured (Rahabav, 2016). Of the numerous models of teacher supervision, there are two dominant ones in the modern debate on education: the Clinical Supervision Model and the Collaborative Supervision Model. The Clinical Supervision Model, very popular in the United States since the 1960s (Pajak, 2012), has also been applied marginally in Iran (Ahmady et al., 2021). Over the years, it has been developed to include a range of approaches, such as collaborative, reflective, and didactic approaches, each aimed at an improvement of the professional discourse and pedagogical practice (Krajewski & Anderson, 2005; Pajak, 2012). In contrast, the Collaborative Supervision Model advocates for shared responsibility, where both teachers and supervisors in schools are partners of equal standing in supervision (Higgins et al., 2018). Centered upon the principles of cognitive psychology, the model advocates for an equilateral approach to developing reflective practice, transparent communication, and peer collaboration, culminating in a more supportive and development-focused professional community (Kemmis et al. 2013; Willegems et al. 2017).

These supervision models have gained popularity; however, more research is needed to compare their respective effects, particularly in less-researched educational settings like Iran. little research has explored the influence these supervision approaches have on key teacher attributes determining instructional effectiveness and well-being, like professional identity and resilience. In EFL contexts where teachers face distinct cultural, linguistic, and institutional complexities affecting theory professional identity and well-being, conducting comparative studies on supervision approaches would be of greater significance.

Teacher resilience, the ability of a teacher not lose their resolve and performance when encountering an adversity, has been reported to be associated with job satisfaction, higher self-efficacy of language teachers, as well as higher student engagement (Beltman, 2021; Tait, 2008; Xie & Derakhshan, 2021). Resilience should be noted as not being an individualistic personal characteristic but a dynamic process guided by contextual factors, professional relationships, and the broader support systems in which teachers are situated (Reich et al., 2010; Johnson et al., 2014). Similarly, TPI refers to teachers' perception of themselves as professionals, their values and beliefs, responsibilities, and commitments (Beauchamp & Thomas, 2009; Akkerman & Meijer, 2011). It has been shown that a crystallized and stable sense of professional identity increases a teacher's motivation, flexibility, quality of teaching, and, as a result, increases the meaningfulness of work and interaction with students (Beijaard et al., 2004; Day et al., 2005).

Although some research has focused on the constructs of professional identity and teacher resilience, relatively fewer have centered on how different supervision models maximize their development. What is more, the link between language teachers professional identity and resilience and learners' English proficiency has not been rigorously delved into. Instead, to date, the majority of the studies (e.g., Flores, 2018; Day, 2018) have focused on factors such as leadership, school culture, and teacher motivation in shaping resilience and professional identity. Even in these studies, it is normally overlooked that organized supervisory assistance is a core function which can directly enhance teaching professionals' development and indirectly improve the learning achievements of students.

Recent research has started to suggest that different forms of supervision have deep effects on professional attributes of teachers such as resilience and identity (e.g., Capello, 2020; Diacopoulos & Butler, 2020; Ping et al., 2021). These findings have not been examined in the terms of

comparing different styles of supervisions. In addition, empirical research is still scant regarding the indirect or secondary effect of supervision on achievement by students in EFL settings. Hence, there is a big gap in understanding how teacher support mechanisms play themselves out in actual learning outcomes.

This research, therefore, attempts to fill these gaps by investigating the differential impact of clinical and collaborative supervision approaches on EFL teachers in terms of their resilience and professional identity and how these factors together influence students' language learning outcomes. The ways in which different supervision approaches may differently impact resilience and professional identity are explored-a dynamic that had not received much emphasis in previous research. By examining these interrelated aspects, this study endeavors to offer an enhanced understanding of how supervision influences the development of teachers and, consequently, learning in students. Based on the objectives outlined above, the following are the research questions formed for the purposes of this study:

RQ1: Is there a significant difference in the effects of clinical supervision and collaborative supervision on EFL teachers' resilience in the two experimental groups?

RQ2: Do clinical supervision and collaborative supervision differ in respect of effects on the professional identity of the EFL teachers in the two experimental groups?

RQ3: Is there any significant difference between the effect of clinical supervision and collaborative supervision of teachers on the learners' language achievement?

Qualitative Research Questions:

RQ4: What factors do teachers report influencing their resilience after participating in clinical supervision?

RQ5: What factors do teachers report influencing professional identity formation after participating in clinical supervision?

RQ6: What factors do teachers identify that influence their resilience following collaborative supervision?

RQ7: What factors do teachers identify as influencing the construction of their professional identity after collaborative supervision?

Literature Review

Clinical vs. Collaborative Supervision Models

Although collaborative and clinical models of supervision both develop from the developmental and humanistic grounding, they differ considerably in structure, orientation, and application. What follows is a critical comparison of the two models and their respective roles in the professional development of EFL teachers. Clinical supervision excels at providing formalized, one-on-one guidance that is most valuable for beginning teachers who require focused feedback. It offers opportunities for concentrated professional development through direct observation and target setting. It elicits teacher agency and collective responsibility and is, therefore, highly applicable to advanced teachers in dynamic contexts. It does, however, rely rather heavily upon the presence of a trusting, collegial culture and can founder without strong institutional support.

Table 1. Empirical Comparative Findings of the Two Models

Aspect	Clinical Supervision	Collaborative Supervision
Structure	Formal, cyclical (pre/post observation)	Informal, ongoing interactions
Supervisor's Role	Facilitator/Observer	Partner/Co-learner
Focus	Individual teacher development	Shared inquiry and collective growth
Reflection	Structured, guided by supervisor	Co-constructed and dialogic
Power Dynamics	Asymmetric but supportive	Symmetric and democratic
Ideal Context	Novice teachers, skill refinement	Experienced teachers, PLCs
Limitations	Time-intensive, may reinforce hierarchy	Requires time, openness, and peer engagement

In EFL contexts, the concurrent application of both models may offer optimal coverage. While clinical supervision offers organization and structure for teaching enhancement, collaborative supervision constructs teacher identity, robustness, and autonomy through peer contact. Awareness of the distinct and complementary facets of both models provides a conceptual foundation for understanding their relative influences in this research.

Teacher Resilience

Teacher Resilience is the capacity of individuals to recover and adjust despite adversity. There is a reasonably recent but growing field of study that tries to explore the variables that enable teachers to survive challenging circumstances (Day & Gu, 2014). Resilience is a psychological phenomenon that has been defined as the process of, capacity for or outcome of returning and flourishing in spite of challenging situations and/or adverse environments. Tait (2008) also identified that various protective factors such as emotional intelligence, social support, and

professional development are of very great importance in the growth of resilience lowering the level of stress by training and educating profession which enhances the ability to fight career daily challenges and improves occupational commitment. Furthermore, compared to various other developed resilience models in the timeframe Day and Gu (2014) introduced a person-process-context model of resilience that mainly focused on the interaction among personal attributes, the situation, and the process of resilience.

Through dynamic interaction brought about by the person in between, personal qualities such as enthusiasm or stability, professional support by authorities, and emotional context as practice setting, resilience is developed according to this model. Day and Gu concluded at the end that resilience is not an individual process but much broader-a social and organizational practice. On the other hand, Kostoulas and Lämmerer (2018) gave a resilience model based on systems in which resilience is understood as a complex interplay of the personal, social, and organizational systems. This model emphasizes that resilience is not only an individual issue depending on personal characteristics and personal techniques and methods for the better but also has to be considered within a social and organizational context as a network in the field of education. Kostoulas and Lämmerer stated quite strictly that resilience is a matter of being taken care of groups and developing them within dynamic teamwork, cooperating and sharing experiences and information.

Teacher Professional Identity

Professional identity involves one's own perception and identification that emerge from sense-making and remaking his or her professional existence. Because it is a socio-construction by-product of a process of interaction among many factors, such as individuals' subjective experience and critical self-reflection, professional identity is not in a permanent state. However, despite its great instability, some researchers claim that individuals try to have personal expectations and aspirations (Ruohotie-Lyhty & Moate, 2016). Moreover, in the process of building professional identity, negotiation of their various identities as a student, pre-service teacher, and peer was experienced by student teachers. Despite the context of intended and facilitated teamwork amongst them, most of their conflicts were settled positively with the development of their teaching identities. Besides, numeral factors influence the construction and reconstruction and transformation of teacher professional identity which can be categorized into personal and

contextual dimensions. Since an intrinsic factor, the teacher's personal past and early experiences can be moulding in forming a self-recognition developing the professional identity.

On the other hand, the teacher's educational status and social role and necessary corresponding interactions and additional constructed roles such as parenthood or caring child or even a couple can change each person's self-perception as an external factor to construct and reconstruct another level of professional identity within the career (Fejes & Köpsén, 2012). Teachers thrived under a supportive environment by loved ones and also career professionals top to bottom can form their professional identity that is certainly strong in their practice in class (Van Veen & Slegers, 2009). But narrow work and practice spaces with narrow fixed expectations can be conceived as an obstacle and challenge in building and rebuilding a suitable bettering teacher professional identity (Ruohotie-Lyhty & Moate, 2016). Also, according to Liou (2008), the professional identity of teachers is constructed by a variety of factors and socially, contextually, and historically. Also, it was suggested that the people with a comprehensive sense of personal identity will be in a better position to initiate the process of developing a professional identity, a social and developmental psychological process. Therefore, the construction of teachers' professional identity may involve the interplay of personal values and experience, social context, organizational culture, and professional experience. With regards to the reconstruction of teachers' professional identity, though teachers as professionals have been increasingly subject to external standards and professional codes, teachers' own agency is a powerful defense for the construction of their professional identity and for motivating them.

Material and Methods

Design of the Study

This study benefited from explanatory sequential mixed-methods design in which the quantitative phase of the study was carried out first, and based on the results of that, the qualitative part was implemented. The quantitative phase revealed whether and to what extent the two models differed in their effects on resilience, identity and learner proficiency, and the qualitative complimentary findings explain why and how these differences emerged from the teachers' perspectives. A quasi-experimental pretest-posttest design with two groups was employed in the quantitative phase. The independent variable was supervision type (clinical vs. collaborative), and the dependent variables

were (a) EFL teachers' resilience, (b) EFL teachers' professional identity, and (c) their learners' language achievement. This design was selected because of non-random convenience sampling of the participants from intact language institutes.

The qualitative phase was conducted after the quantitative data collection and analysis was accomplished to explain the statistical results based on the participants' perceptions and experiences. The qualitative data were shared by volunteer teachers in both groups informed this research about how the supervision model they experienced influenced their resilience and professional identity.

Participants

In this research, a total of 30 volunteering teachers (11 males and 19 females) were selected via convenience sampling from four different language institutes in Tehran (Pardisan, Fanavaran, Hoor, and Iranmehr). After being informed about the purpose and procedure of the study and considering the benefits of their participation in the in-service program offered by the project, the institute administrators gave permission for the teachers to take part. The teachers voluntarily underwent one semester of supervisory instruction under the researcher's supervision at their respective language schools. They were informed of the general purpose of the study and reassured that their participation was solely for academic purposes with no consequences for their occupational status. They were then randomly divided into two groups of 15 teachers: one receiving clinical supervision and the other collaborative supervision.

From the same institutes, 273 intermediates-level students (out of 317) were selected through convenience sampling – a method chosen because the researcher could not manipulate intact classes, as students were already registered and administrative changes were impossible. The students were homogenized based on their Preliminary English Test (PET, 2020) scores; all were female EFL learners with scores within $\pm 2SD$ of the mean ($M = 78.91$). Their ages ranged from 20 to 30 (all in their twenties). They voluntarily participated, taking pre- and post-course exams, and could leave the study at any time. The students were divided into two groups according to the type of supervision their teachers received.

Instrumentation

To carry out the research, the following instruments were used to measure the dependent variables of the study:

Resilience Questionnaire: The participants' resilience was assessed using the Teacher Resilience Scale, TRS, developed by Daniilidou and Platsidou (2018). According to Daniilidou & Platsidou (2018, p. 32), the TRS assessed "the prevailing internal or external protective factors that can help teachers overcome the adversities in the school context". The scale is made up of 26 five-point Likert-scale items ranging from 1 (not true at all) to 5 (almost always true) and assesses four dimensions of teachers' resilience, namely, teachers' "Personal Competencies and Persistence" assessed by 9 items, their "Spiritual Influences" (3 items), "Family Cohesion" (7 items), and "Social Skills and Peer Support" (7 items). Daniilidou and Platsidou (2018) reported that the components of the questionnaire, namely, Personal Competencies and Persistence ($\alpha = .83$), Family Cohesion ($\alpha = .81$), Spiritual Influences ($\alpha = .71$), and Social Skills and Peer Support ($\alpha = .78$), enjoyed an acceptable level of reliability as measured by Cronbach's alpha ($\alpha > .70$). In addition, the overall reported Cronbach's alpha in the present study was .72 as was measured based on the data collected from the 30 teachers in the two supervision groups, which was within the acceptable range (Robertson & Evans, 2020).

Professional Identity Questionnaire: TPIS developed by Kao and Lin's (2015) was used to measure the teachers' self-perceived identity. It includes 22 five-point Likert-scale items ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). It measures teachers' Self-Expectation (five items), Teachers' Duties (three items), External Influential Factors (4 items), Pedagogy (three items), Instructional Skills and Knowledge (four items), and Teachers' Citizenship Behavior (three items). Kao and Lin (2015) reported that the reliability of TPIS was .81 using Cronbach's alpha in their study. The same index was observed to be .76 in this study as was measured based on the data collected from the 30 teachers in the two supervision groups, which was within the acceptable range (Robertson & Evans, 2020).

Preliminary English Test (PET): To answer the research question related to tracking the changes made in the learners' general language proficiency over the period in which their teachers were supervised, two parallel forms of Preliminary English Test (PET) released in 2020 were given to the participating learners at the beginning, and at the end of the treatment of the course. This was a standardized test which includes 4 sections. Section 1, reading section, had 6 parts and 32 questions, lasted for 45 minutes, and comprised 25 percent of the overall score. Section 2, writing section, lasted for 45 minutes and included 2 parts and 2 questions. This section included 25

percent of the total score and showed if the learners could use vocabulary and structure correctly. Section 3, listening section, lasted for 30 minutes and learners had to be able to follow and understand a range of spoken materials including announcements and discussions about everyday life in order to answer the 32 questions of this section included in 6 parts and includes 25 percent of the scoring. The test also included speaking section which lasted 12-17 minutes for every pair of test takers. This section counted toward 25 percent of the total score and showed how good the learner's spoken English was as they took part in conversation by asking/answering questions and talking; for example, about their likes and dislikes. Their test was conducted face to face with one or two other candidates and two examiners.

Teacher Attitude Open-ended Questionnaires (researcher-made)

A researcher-made open-ended questionnaire was used to assess teachers' perceptions of the supervision process at the end of the course of instruction. It elicited their perceptions of the type of supervision they received and its probable effects on their resilience and professional identity. The questions focused on their general perception about clinical/collaborative supervision, whether the extent to which they perceive is similar to or different from the supervision they have experienced, the aspect of supervision program they may find most significant, the changes they expect to make in their practice due to the supervision program, their perceptions about these changes to be long lasting, the extent to which the changes they made in their classes may affect their students achievement, the extent of effectiveness of the type of the supervision on their resilience, and the extent of effectiveness of the type of the supervision on their professional identity, as well. This questionnaire contained 12 items. Three TEFL experts reviewed the first draft of the questionnaire to assess its content validity to see whether or not the questions addressed the key elements of teacher perceptions, professional development, resilience, and how the clinical or collaborative supervision they received influenced these two variables. Accordingly, content validity index (CVI) of the questionnaire was calculated. That is, the three experts rated each item of the questionnaire on a three-point scale ranging from (1 = not relevant, 2 = moderately relevant, and 3 = relevant). Then, 5 teachers from various schools participated in pilot testing phase. The observed CVI of this questionnaire was equal to .87.3, which was within acceptable range (Wang & Sahid, 2024). Their feedback on the clarity of the questions was collected, and improvements

particularly in terms of simplifying some of the wording around complex concepts such as “resilience” and “professional identity” were made to remove any confusion in the questionnaire.

Procedure

Participant selection was the first step of the study. To collect a population of at least 30 teachers, the EFL teachers teaching in some accessible language schools in Tehran were requested to participate in this study voluntarily under the supervision of their institutes (Convenience sampling). Then, they were assigned into two experimental groups of clinical supervision and collaborative supervision based on random sampling method at the beginning of the course of instruction. Then, both groups took the two questionnaires of teacher resilience and teacher professional identity at the beginning the term. In addition, considering the pretest-posttest design in the quantitative phase, to gather the pre-test scores, in the beginning of the study, the learners took PET (2020) to measure their proficiency level prior to the intervention (clinical supervision and collaborative supervision). The PET scores were used to ensure the homogeneity of the learners prior to the intervention. The scores were also recorded as pre-test scores. Another version of PET (2020) was applied to check the rate of learners' language achievement as post-test at the end of the course of instruction.

The same procedure was followed after the course of supervision to explore how each type of teacher supervision affected the participating teachers' resilience and professional identity. To accomplish the other objective of the study, qualitative data were collected through distributing the open-ended attitude questionnaire among the participating teachers at the end of the course. They were first informed about the purpose of this stage and then signed a consent form which, above all, guaranteed the confidentiality of the data gathered in this stage. They filled the questionnaire in their institutes under the guidance of the researcher.

Results

The following null hypotheses was formulated according to the first research question of the study: H01: There is no statistically significant difference in the effects of clinical and collaborative supervision on EFL teachers' resilience in the two experimental groups.

In order to test H₀₁, a comparison of resilience pretest and posttest scores of the two groups was conducted.

Table 2. Descriptive statistics for resilience

		Descriptive					Kolmogorov-Smirnov Test		
		M	N	SD	Skewness	Kurtosis	Statistic	N	p
Clinical	Pretest	84.40	15	2.77	.58	.16	.16	15	.20
	Posttest	92.93	15	2.37	1.19	.22	.22	15	.05
Collaborative	Pretest	86.00	15	2.50	.50	.18	.18	15	.20
	Posttest	95.80	15	2.14	.01	.17	.17	15	.20

According to Table 2, the mean resilience score collected from the Clinical Supervision group, and the Collaborative Supervision group increased after they had undergone the interventions. Moreover, the statistics reported for skewness and kurtosis in Table 4.1 demonstrate that most likely the pretest and posttest scores enjoyed normal distribution, as the statistics were between -1 and +1. Neither the Clinical nor the Collaborative groups' pretest and posttest scores were not statistically significant at the .05 level. This indicates that the assumption of normality was met for the data sets, and the use of parametric statistical tests for further analysis of resilience data is justified. Paired-Samples T-test was used to examine the difference between pretest and posttest results in Clinical and Collaborative experimental groups.

Table 3. Paired samples t-test for resilience

Group		t	df	p
Clinical	Pretest-Posttest	-9.66	14	.00
Collaborative	Pretest-Posttest	-10.34	14	.00

The results of the paired-samples t-test which was employed to evaluate within-group changes in resilience from pretest to posttest are shown in Table 3. Based on the results, it can be argued that there is a statistically significant increase in resilience for both Clinical group, $t(14) = -9.66$, $p = .00$, and Collaborative group, $t(14) = -10.34$, $p = .00$. In other words, the results confirm that both treatments were effective in making a significant improvement in teachers' resilience. An Independent-Samples T-test was used to compare the means of the difference between pretest and posttest scores of resilience observed in Clinical and Collaborative experimental groups.

Table 4. Independent samples t-test for resilience

	F	Sig.	t	df	p
Resilience	.05	.82	-3.74	28	.00

The independent-samples t-test results, displayed in Table 4, compare the mean difference scores in resilience between the two groups. The result of Levene's test ($F = .05$, $p = .82$) was not

significant. This confirms the assumption of homogeneity of variance. A statistically significant result ($t(28) = -3.74$, $p = .00 < .05$) was reported. This indicates that there was a significant difference between the two groups in terms of their resilience level after the intervention. Therefore, it can be concluded that first null hypothesis (H_{01}) was rejected.

The second null hypothesis of the study was:

H_{02} : No statistically significant difference was found between the effects of clinical supervision and collaborative supervision on EFL teachers' professional identity.

Steps similar to the ones taken for testing H_{01} were conducted to test H_{02} . Table 5 depicts the descriptive indices of professional identity scores of the teachers in the two groups.

Table 5. Descriptive statistics for professional identity

		Descriptive					Kolmogorov-Smirnov Test		
		M	N	SD	Skewness	Kurtosis	Statistic	N	p
Clinical	Pretest	63.86	15	2.09	-.01	.12	.12	15	.20
	Posttest	66.20	15	1.69	-.35	.11	.11	15	.20
Collaborative	Pretest	64.66	15	2.22	-.14	.21	.21	15	.06
	Posttest	69.06	15	1.38	.50	.17	.17	15	.20

As demonstrated in Table 5 the Clinical group's professional identity mean score increased from 63.86 (SD = 2.09) in the pretest to 66.20 (SD = 1.69) in the posttest. In a similar manner, professional identity mean score of the Collaborative group increased from 64.66 (SD = 2.22) to 69.06 (SD = 1.38). The skewness and kurtosis statistics reported for in Table 4.5 were between -1 and +1. The Kolmogorov-Smirnov test results in Table 5 showed that all of the sets of scores collected on the pretest and posttest were distributed normally since the observed p-value was over .05, the critical value. That is, the assumption of normality for running a parametric test was not violated.

Table 6. Paired samples t-test for professional identity

Group		t	df	p
Clinical	Pretest-Posttest	-2.95	14	.01
Collaborative	Pretest-Posttest	-7.87	14	.00

The results of paired-samples t-test for professional identity are depicted in Table 6. A statistically significant increase from pretest to posttest for both Clinical group, $t(14) = -2.95$, $p = .01$, and Collaborative group, $t(14) = -7.87$, $p = .00$ is confirmed by the results. They testify that both

methods of supervision could exert a statistically significant constructive change in participants' professional identity in this research.

Table 7. Independent samples t-test for professional identity

	F	Sig.	t	df	p
Resilience	.64	.42	-5.06	28	.00

Table 7 reports the results of the independent-samples t-test comparing the professional identity of the two groups after the intervention. The significant result of Levene's test ($F = .64$, $p = .42$), indicates that the assumption of homogeneity of variance, as one of the prerequisites of running an independent samples t-test for comparison of the two groups, was met. The statistically significant t-test result ($t(28) = -5.06$, $p = .00 < .05$) demonstrate a difference between the Clinical and Collaborative supervision groups, which means the second null hypothesis (H_02) was rejected. The third null hypothesis of the study was: H_03 : There is no statistically significant difference in EFL students' language achievement based on whether or not their teachers are provided with clinical or collaborative supervision.

Table 8. Descriptive statistics for students' language achievement

		Descriptive					Kolmogorov-Smirnov Test		
		M	N	SD	Skewness	Kurtosis	Statistics	N	p
Clinical	Pretest	77.53	133	2.58	.27	-1.51	.17	133	.20
	Posttest	82.93	133	1.62	.01	-.35	.14	133	.20
Collaborative	Pretest	78.73	140	2.96	-.66	-.62	.17	140	.20
	Posttest	84.53	140	1.68	.55	-.29	.55	140	.20

As shown in Table 8 the mean achievement score of the Clinical group increased from 77.53 ($SD = 1.58$) to 82.93 ($SD = 1.62$) after the intervention. The Collaborative group demonstrated a greater gain, though as the mean score rose from 78.73 ($SD = 2.96$) to 84.53 ($SD = 1.68$). based on the skewness and kurtosis statistics in Table 8, it was concluded that the data approximated a normal distribution, and parametric analysis could be conducted. The statistics in Table 8 are evidence for the fact that the sets of achievement tests scores collected from both the Clinical and Collaborative groups were normal in terms of their distribution. Accordingly, a paired-samples and independent-samples t-test was used to test the null hypothesis (see Table 9).

Table 9. Paired samples t-test for students' language achievement

Group		t	df	p
Clinical	Pretest-Posttest	-15.15	132	.00
Collaborative	Pretest-Posttest	-9.56	139	.00

Based on what is reported in Table 9, a statistically significant increase is observable for both groups for both Clinical group ($t(132) = -15.15$, $p = .00 < .05$), and Collaborative group ($t(139) = -9.56$, $p = .00 < .05$). In conclusion, the learners who were taught by the teachers receiving both supervisory conditions made significant progress after the intervention with regard to their L2 achievement.

Table 10. Independent samples t-test for students' language achievement

	F	Sig.	t	df	p
Resilience	7.37	.00	2.66	265.63	.00

The assumption of homogeneity of variance was not met as shown by the significant results of Levene's test ($F = 7.37$, $p = .00 < .05$). The significant results of the independent-samples t-test ($t = 2.66$, $p = .00 < .05$) depict the students whose teachers who underwent Collaborative supervision outperformed those whose teachers received Clinical supervision, and therefore, H_03 was rejected. The qualitative data collected via open-ended questionnaires from the collaborative and clinical supervision groups were analyzed through thematic analysis. The following subsections are dedicated to the presentation of the themes occurred pertaining to each research question. To have an orderly presentation of the results, the extracted themes are presented and explained after each research question is restated.

The fourth research question of the study probed the factors teachers reported influencing their resilience after participating in clinical supervision.

As mentioned earlier, a thematic analysis of the provided qualitative data from the Teacher Attitude open-ended questionnaires was conducted. The data were coded and thematized in order to explore the factors influencing teacher resilience after participating in clinical supervision. Two major themes were identified: (1) enhanced effort towards professional improvement, and (2) learning from corrective feedback.

A majority of teachers (53.3%) reported that taking part in the clinical supervision program could tangibly enhance their effort towards professional development. Specifically, they articulated that

the clinical supervision program they underwent in this study compelled them to *"try harder to learn and engage more seriously to develop their teaching skills to be a better teacher"* as stated by Participant 3. This factor can be speculated to be rooted in the development of a sense of directed agency among teachers. That is, as stated by Participant 1, clinical supervision program could re-structure the teachers' repertoire.

"I think it [clinical supervision program helped me because of its detailed nature. I mean [clinical supervision] could provide me clear pathways for self-development." (Participant 1)

Also, in the same line, a number of teachers such as Participant 4 stated that:

"The suggestions given in this program really helped me find a better way of teaching the grammar which I found challenging both for me and for my learners."

Such examples of the excerpts from the teachers who participated in the clinical supervision program indicate that the prescriptive guidance which is inherent in clinical supervision model can directly motivate sustained teacher effort to improve teaching skill. This suggests that teachers who participate in clinical supervision can partly bolster their resilience by gaining a sense of progress and mastery over time. That is external, expert-driven instruction they receive in this program strengthens their sense of resilience.

The second, which was to some extent more prevalent as cited by 60% of teachers, was learning by receiving feedback. This theme mirrors the formative role feedback they receive during the program as far as it is critical and detailed. As mentioned by Participant 2, the feedback in clinical program helps teachers build a capacity to persevere and adapt:

"... the feedback helped me reconsider my practice, and sometime drop the old technique and shift to a new one suggested by the supervisor."

The analysis showed that the teachers welcomed the opportunity to have their errors identified and corrected by the supervisor. The process of being monitored and receiving feedback, to a great extent, reduced their professional uncertainty and increased their confidence, which in turn lead to enhanced self-confidence. As Participant 6 teacher noted:

"I was not aware of my mistakes in teaching grammar... that made my learners feel confused about their function."

The acknowledgment of their own mistake and subsequent correction of their errors through clinical supervision appears to have helped the teachers in the clinical program enhance their resilient mindset. In other words, transforming perceived failures into actionable learning opportunities or transforming threats to opportunities was a great lesson or strategy they learned

during the clinical supervision program. In this context, resilience did not mean to be passive and merely endure challenges, but meant to actively engage with and overcome specific pedagogical shortcomings under the structured support of clinical supervisory process.

The fifth research question examined the factors teachers reported influencing their professional identity formation after participating in clinical supervision.

The thematic analysis of the qualitative data from the Teacher Attitude open-ended questionnaire revealed that there were two primary factors influencing their professional identity formation after joining the clinical supervision program: (1) the development of a more realistic orientation toward teaching, and (2) the internalization of professional responsibility.

The first factor which was “development of a more realistic orientation toward teaching” was more prominent as reported by a majority of the participants (66.6%). This factor can be explained as the cultivation of a factual perception of teaching. It seems that clinical supervision helps teachers switch from intuitive (habitual) practice toward a more evidence-based (conscious) professional self-concept. As Participant 5 articulated:

“The feedback I received in [the clinical supervision program] was structured and detailed so I could think more realistically (factually) about teaching.”

In the same vein, Participant 7 stated:

“The feedbacks helped me see the advantages and disadvantages of my career, ... now, I think, I can better define myself as a teacher now.”

These excerpts indicate that the clinical supervision program acted as a mirror for teachers and objectively reflected their professional strengths and weaknesses. In other words, it helped them reshape their identity from one which had been based on assumption to one which was grounded in concrete self-knowledge they gained in during the program. The detailed and frequent nature of clinical supervision could be identified as the main mechanism which produces factual reorientation of teacher professional identity, and aids teachers to construct a more realistic and coherent sense of professionalism.

The second factor, internalization of a more responsible teacher identity was expressed by 40% of the teachers taking part in the clinical supervision program. Based on the thematic coding, it was indicated that clinical supervision was not merely a pathway to transmit technical skills. It also fostered a sense of duty and accountability among the participants. For instance, participant 2

reported that the clinical supervision program helped them *"learn about characteristics of a more responsible teacher."*

In the same vein, Participant 4 stated:

"... responsibility is one of the key factors of being a successful teacher, and the feedbacks I received in this [clinical supervision] program and helped me to feel it better."

Participant 8 elaborated that:

"The support and corrections led me to understand how to teach more responsibly and I feel I know how to stay on my duties in the class as a more functional teacher."

Accordingly, it can be argued that the top-down nature of clinical supervision which is characterized by its corrective and directive supervision reinforces a moral and professional commitment to teacher's role. As teachers explicitly connect this type of supervision to a deepened sense of ownership and reliability in their professional conduct, it can be concluded that an identity shift which occurs in the clinical supervision program is not only cognitive but also affective. In conclusion, these inherent factors of clinical supervision influence teacher professional identity through clarification of teachers' self-perception and arising their sense of ethical responsibility.

The sixth research question explored the factors that teachers identified influencing their resilience following collaborative supervision.

Based on a thematic analysis of the qualitative data from Teacher Attitude open-ended questionnaire, three primary factors that influenced teachers' resilience in collaborative supervision group: (1) learning from mistakes through collaborative discussion, (2) enhanced effort toward professional improvement, and (3) the cultivation of creative problem-solving in classroom practice.

A majority of teachers (53.3%) found the collaborative supervision program an opportunity to learn from (their) mistakes through collaborative dialogue. The interactive discussions which occurred in a supportive, co-constructive environment, and were not as directive as those of clinical supervision enabled them to identify and understand their pedagogical faux pas. The collaborative supervision is not as supportive as clinical model, and allows teachers to have more interaction, *"discuss freely about issues"* as stated by Participant 4. Also, the teachers felt freer to talk about their mistakes, as Participant 8 stated:

"When the researcher and I discussed the problems of the class I could see something I had not seen before and I could clarify the reasons for the problems my students had in retaining the new words."

Another teacher elaborated that:

"The feedbacks helped me even understand more about other class problems. For example, when we discussed about grammatical issues, I could understand the problems in teaching reading comprehension questions."

Accordingly, it can be argued that a transfer of learning across different teaching domains existed in the discussion and interactions occurring in the collaborative supervision group which could build up resilience. In other words, the teachers in this group were equipped with transferable analytical skills which enabled them to generalize their insights from one context to another.

The second factor, the motivation to try harder to learn how to be a better teacher, was endorsed by 33.3% of teachers. In this regard, teacher resilience is anchored in self-directed professional growth and a sense of empowerment. The teachers in the collaborative supervision group reported that the collaboration could enhance their sense of agency as they co-constructed solutions instead of being engaged in top-down directives which are common in clinical supervision. As noted by Participant 2, collaborative process bolstered self-efficacy:

"This supervision model supported me to learn better about my abilities to manage my class and give better class activities."

Participant 4 stated that:

"Collaborative supervision gave me a better perspective in having a better [lesson] plan for a 90-minute class."

Accordingly, it can be argued that not only external correction, but also the internalization of a growth-oriented mindset could help the teachers in the collaborative supervision group foster their resilience. Also, since teachers felt they were capable of independently improving their practice, they could perceive to have a higher level of resilience after the intervention.

The third factor, development of creative thinking about class issues, was reported by 33.3% of the teachers in this group, too. Collaborative supervision was thought to cultivate resilience by encouraging teachers to come up with innovative solutions to overcome classroom challenges. In other words, collaborative supervision program *"supports creativity"*, as cited by 4 teachers, and provide *"new ideas"* as cited by 8 teachers). As teachers learn to see obstacles as opportunities for innovation, and rely on their (co-constructive) creativity, their resilience enhances. As Participant 8 stated:

"I could not find a suitable way to combine listening and speaking, but I learned how to ask my students to discuss about what they heard in the audio track in their peer group in the class. I reached this point during the session I had with the researcher."

The seventh research question examined the factors teachers identified as influencing the construction of their professional identity after collaborative supervision.

Based on the analysis of the data from the Teacher Attitude open-ended questionnaire collected from the teachers in the collaborative supervision group, two factors that influence the construction of their professional identity in collaborative supervision were identified: (1) the development of a more realistic and multifaceted understanding of teaching, and (2) the internalization of an innovative and creative professional self-concept.

The most dominant factor, reported by a majority of the teachers in this group (80%), is that collaborative supervision could shift how teachers perceived themselves and their professional roles. The clinical supervision program also promoted factual thinking through directive feedback; however, collaborative supervision fostered realistic thinking among the participants through symmetrical dialogue and open (free) discussion. Teachers had the opportunities to experience identity transformation as they engaged in collaborative process. As participant 3 stated:

"The discussion sessions helped me go deeper in my thoughts and my perspective about my job positively changed and I think I like more to be a teacher now."

Accordingly, the co-construction of professional identity in the collaborative supervision group was not only cognitive but also affective, so that the teachers' sense of professional commitment and self-affirmation were renewed. Participant 5 elaborated that:

"The way I learned to think about different aspects of my career was somehow innovative for me."

Also, it can be claimed that collaborative supervision enabled a multidimensional reappraisal of professional role among the participants, as 8 teachers identified *"discussing issues freely"* as the key aspect of collaborative supervision, and 8 teachers noted that the *"teachers could talk more than the supervisor."* These structural features of collaborative supervision ignited a dialog through which teachers' professional selves were co-constructed as they moved beyond surface-level compliance to deeper self-understanding.

The second factor, the internalization of characteristics associated with an innovative teacher, was endorsed by 33.3% of teachers. It can be argued that collaborative supervision did not merely transmit existing professional norms. This program actively encouraged teachers to reconceptualize themselves as creative agents. This factor emphasizes divergence, originality, and the capacity for pedagogical invention of teachers. With this in mind, Participant 6 highlighted:

"I think it is very important to learn how to think creatively about teaching and try to be a more creative teacher."

This aspiration of becoming a creative professional teacher was also evident in Participant 9's statement:

"Discussion sessions with the researcher helped me see things more deeply from different aspects when I think about my career."

The contribution of collaborative supervision to a broad professional vision has recurrently been observed on the questionnaire data as 8 teachers identified *"unlimited ideas"*, 4 teachers highlighted that this program *"supported creativity,"* and 7 teachers expected to become *"more creative in ideas"* in the future. It can be concluded that collaborative supervision fosters teacher professional identity via investing on teacher innovation, and making teachers view creativity not as an option but as a core characteristic of their profession.

Discussion

A statistically significant difference was observed between the effects of clinical supervision and collaborative supervision on EFL teachers' resilience. Based on the findings reported above, the teachers who received collaborative supervision benefited from a more substantial positive effect of the intervention. This is in line with previous research emphasizing the impact of collegial and supportive professional environments on raising teacher resilience (e.g., Gu & Day, 2007; Tait, 2008). It can be argued that mutual reflection, shared decision-making, and peer support, which characterize collaborative supervision are consistently associated with increased teacher resilience (Hancock & Scherff, 2010). Due to the fact that collaborative supervisory approaches encourage teachers to have a stronger sense of agency and collective responsibility, they grow immunity against burnout and foster stronger psychological endurance (Patterson et al., 2004).

On the other hand, clinical supervision, which is a more directive and evaluative supervisory model, may not be adequately supportive of teacher emotional and professional need, especially in high-stress environments (Sergiovanni & Starratt, 2007). In spite of structured feedback and performance monitoring, the relational depth and collaborative spirit necessary for teachers to navigate challenges are ignored. In other words, since peer support and shared leadership are rare in this supervisory approach, teacher resilience may not be strengthened considerably. However, the potential benefits of clinical supervision, especially when implemented with a developmental

rather than evaluative focus are noteworthy (Goldhammer et al., 1993). With regard to its developmental nature, clinical supervision can promote reflection as targeted feedback is given to the teachers.

Furthermore, cultural and contextual factors should not be neglected when the difference in effectiveness between the two models is discussed. If in a setting, collaboration is valued and institutionally supported, collaborative supervision is expected to be integrated into school culture more naturally and organically, which contributed to its enhanced impact (Kelchtermans, 2005). In contrast, if an institution features a rigid or hierarchical educational system, collaborative approach might not work better than clinical approaches. It is also noteworthy that the prescriptive nature of clinical supervision may explain why it has not been as successful as collaborative supervision. Although clinical supervision is appreciated for its structure and clarity, as a few teachers subtly indicated in this study and Johnson et al. (2014), its rigid frame restrict teacher pedagogical autonomy and their capacity to make independent decisions. That is, teacher flexibility and creativity to adapt to complex classroom realities, which is essential for sustaining long-term resilience, is ignored in clinical supervision.

Clinical and collaborative supervision could improve teacher professionalism, as well. Some teachers receiving clinical supervision noted that it stimulated thinking more factually about teaching, and helped them realize the characteristics of a more responsible teacher better. Accordingly, clinical supervision can be seen as a process which led to the clarification of teacher role expectations, and institutional norms, in addition to reflection on professional standards. As stated by Akkerman and Meijer (2011) and Beijaard et al. (2004), professional identity is not static but dynamic. That is, it is constantly shaped through social interactions teachers experience in an institution. Clinical supervision with its structured feedback sets a framework for evaluating and refining teacher professional self-concepts. Nevertheless, clinical supervision is criticized for reinforcing a compliance-oriented professional identity since it encourages teachers to adhere to context-sensitive understandings of teaching rather than innovative meaning-making and identity exploration.

The rise in professionalism among the teachers who underwent collaborative supervision and their superiority in professionalism after the intervention may be justified by the impact of joint reflection and shared goal-setting as proactive measures toward solving instructional challenges.

Collaborative discussions reframe problems in advance and increase teacher self-efficacy as teachers gain a greater sense of control over their instructional practice prior to entering their class (Greenier et al., 2020; Flores, 2018). Collaborative supervision validates teachers' existing expertise which promotes reflective activities in groups, teacher autonomy (Beijaard et al., 2004) thanks to abundant social interaction, and constant consideration of popping contextual factors. This is especially reflected in the excerpts in this study where the teachers reported that collaboration encouraged them to gain ownership of their own philosophy and redefine their professional values as they participated in discussions with peers and supervisors. As emphasized by Akkerman and Meijer (2011), critical self-examination is the consequence of the articulation of personal beliefs about teaching, which forms a more integrated and confident professional self-concept. Therefore, the dialogic and negotiative nature of collaborative supervision is a key to professional identity construction.

Conclusion

The main concluding remark of the present study could be the fact that although collaborative supervision found to be more effective and constructive in developing more resilient professional EFL teachers, clinical supervision may turn out to be more effective for short-term improvements in student language achievement. What has to be emphasized here is that the context where a supervision program is developed has to be borne in mind. On the one hand, EFL teachers under clinical supervision have the opportunity to refine their teaching techniques and deliver more targeted instruction. On the other hand, collaborative supervision which supports a broader, learner-centered pedagogical shift, increases EFL teacher motivation, engagement, and autonomy over time. In sum, the supervision model which best suits teachers' institutional goals and classroom contexts has to be selected.

What is emphasized here is that the superiority of collaborative model over clinical model or vice versa is not well-documented and obviously more research is required. In addition, it has to be noted that the superiority was found in terms of developing stronger sense of resilience and professional identity among EFL teachers, and little do we know about the existence of the same significant difference in terms of other teacher characteristics. Also, it has to be borne in mind that supervision models are open to implementation; that is, although they are theoretically well-defined and their frameworks are well-mapped, when it comes to implementation, it can be hardly

claimed that every minor aspect of the models are implemented in practice. For instance, observation modalities like video recording and CCTV or observation scheduling may shift the results the other way. Additionally, teachers who undergo supervision play a critical role. The question is if all EFL teachers welcome collaborative activities or fit in a clinical supervisory framework. Based on the fact that both of these supervisory regimes were found effective, it is proposed that a practical framework which merge the characteristics of both models be developed for a context so that a flexible context-sensitive supervisory program can be developed for EFL teachers.

The findings of this study have significant pedagogical implications for teachers, supervisors, administrators, and teacher educators in the field of teaching EFL. With regard to the effect of collaborative supervision on teacher resilience and professional identity, it is recommended that in-service teacher training programs encourage peer interaction, shared reflection, and professional dialogue so that EFL teachers have opportunities to co-plan lessons, observe peers, and engage in post-observation reflection.

In accordance with the fact that both types of supervision exerted significant effects on teacher resilience, teacher educators and supervisors are recommended to build up collaborative learning environments via prioritizing emotional support and providing constructive feedback, as long as teacher mental well-being is significant for their institutes. Establishing positive relationships, reducing isolation, and encouraging adaptive coping strategies, are possible measures by which teacher educators and supervisors can give the social-emotional support teachers need to build a resilient teaching context. Furthermore, teacher educators and supervisors are invited to reconsider teacher self-reflection, voice, and provide structured opportunities for pre-service and in-service EFL teachers to reflect on their teaching philosophies, experiment with their innovations, and share their professional experiences.

Considering the results of this study pertaining to the effect of supervision on student achievement and teacher development, educational leaders and policymakers are addressed to invest on supervisory systems not only as evaluative tools but as dynamic frameworks for growth, mentorship, and capacity-building. Practicing supervisors need to be equipped with emotionally intelligent leadership skills, feedback literacy, and coaching techniques to effectively supervise

teachers. Moreover, supervision has to be institutionalized in a way that a continuous, collaborative, and formative process of supervision exist as a routine school culture.

More research is needed pertinent to this study for a thorough understanding of this issue and for confirmation of the findings stated in this research. This study included a small sample due to a number of experimentation constraints; future research is needed to replicate a larger sample in order to make the findings more generalizable. The context in which this study was conducted seems to be unique in terms of participants' gender, religion, and socio-economic, experience, and educational backgrounds. Studies are needed with teachers at other, more heterogeneous, institutes and language schools.

Data availability statement

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

Ethics statement

The studies involving human participants were reviewed and approved by the ethics committee of Islamic Azad University. The patients/participants provided their written informed consent to participate in this study.

Author contributions

All authors contributed to the study conception and design, material preparation, data collection, and analysis. All authors contributed to the article and approved the submitted version.

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Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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