

In-Field vs. Out-of-Field EFL Teachers' Self-Efficacy, Classroom Management Styles and Students' Performance

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Abstract

Given that teachers' academic qualification exerts significant effects upon their cognitive-behavioral conduct, especially in the teaching context, which, in turn, has an undeniable and crucial role in their learners' performance, the present study aimed at investigating the differences between In-Field-Teaching (IFT) EFL teachers and their Out-of-Field Teaching (OFT) counterparts with regard to their Classroom Management (CM) strategies and Teachers' Self-Efficacy (TSE) beliefs and their students' achievement. To this end, 60 (30 IFT and 30 OFT) EFL teachers from three different cities in Iran were conveniently selected, and a random sample of 64 EFL learners were picked from the students of both groups of teachers. Two questionnaires, namely, CM Techniques Scale and Teacher Efficacy Scale were used to gather data on CM and TSE, respectively. Moreover, an adapted version of the first certificate in English test was used to assess students' achievement before and after the instruction. Results revealed that the IFT EFL teachers majorly used positive CM strategies compared to the OFT EFL teachers who mainly used negative CM strategies. Further comparisons, moreover, showed that the IFT EFL teachers had a significantly higher sense of self-efficacy than their counterparts. Additionally, statistical tests indicated that the IFT EFL teachers had a better performance in comparison to the OFT-EFL teachers. Implications of these findings for quality education and quality teaching are discussed in terms of providing subject-specific skills and training programs, specifically for the OFT teachers.

1. INTRODUCTION

An ongoing discussion in the recent literature regarding teachers' certification is their subject matter knowledge (Hobbs & Törner, 2019). As Ríordáin, Paolucci, and Lyons (2019) and Porsch and Whannell, (2019) postulate, subject matter knowledge ensures high-quality teaching in classroom setting. Otherwise, specialized or In-Field (IF) teachers who have gained specific knowledge and skills through formal and academic qualifications are probably more qualified than

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non-specialist or Out-of-Field (OF) teachers who teach what does not match their qualification (Ingersoll, 2003). However, although education policy makers around the world have devoted many resources to ensure that schools are staffed by highly qualified teachers (Barbieri, Rossetti, & Sestito, 2011), varying degrees of OF teachers serve in many countries (Price et al., 2019), which may undermine the quality of teaching, as pointed out by Ingersoll (2003).

Whether OF teaching is a problem can be determined by examining the impact it exerts on learners and their ultimate performance. Darling-Hammond (2000) provides evidence indicating the strong relationship between teachers' certification and students' achievement. This raises the question (Hobbs & Torner, 2019) as to whether a teacher with no subject-specific knowledge may positively influence the students' interest in the subject.

Teachers' subject knowledge may also exert possible effects on their cognitive behavioral conditions, i.e., IF and OF teaching may have a differential effect on teachers' identity, self-efficacy, well-being, (Hobbs & Torner, 2019) and content knowledge. According to Abell (2007), it is a necessary element of Pedagogical Content Knowledge (PCK). Hobbs (2013) believes OF teachers may not confidently involve in more difficult contents because of their limited subject knowledge which affects some aspects of their teaching identity (e.g. self-efficacy). This view is justified where the stress of OF teaching brings about poor self-efficacy, and in Ríordáin et al.'s (2017) terms, a lower confidence, and disillusionment (Pillay et al. 2005).

From the perspective of self-efficacy theory (Bandura, 1977; Tschannen-Moran, Hoy & Hoy, 1998), in examining the OF phenomenon, it's vital to consider individual teacher's characteristics like Teachers' Self-Efficacy (TSE), i.e., beliefs in their capabilities to have control over their own functioning. This has an important role in establishing a positive learning environment in teaching profession.

Likewise, research shows that OF teaching has a differential effect on teacher's choice of strategies. According to cognitive behavioral theory of behavior management, a possession of such effective Classroom Management (CM) is vitally important within the classroom setting (Brophy, 2010). This helps well-educated and knowledgeable teachers in their choice of strategies to establish a positive learning environment and support learners to behave in ways that help them gain the most from their schooling. It is believed that if teachers are seeking for students' academic success in schools, it is crucial to have an appropriate CM style (Rosas & West, 2009). The most beneficial outcomes of CM are the result of the teachers' capability to establish a positive learning environment. In other words, teachers' perceptions of, or spontaneous thoughts about situations that influence their identity as well as their emotional and behavioral (and often physiological) reactions, determine the skills and techniques that they use for organizing learners' behavior and their attentive task performance during a class (Brophy, 2010).

Despite the growing interest in exploring aspects of teachers' identity and their behavioral conduct in teaching contexts, little attention has been paid to the possible effect of teachers' Related Academic Degree (RAD) in the subject they teach on TSE beliefs, their CM styles and students' performance in English as a Foreign Language (EFL) context. Accordingly, the major objective of this study was to identify the differences between specialist or IF EFL teachers and OF EFL teachers with regard to TSE, CM, and their students' ultimate performance.

2. LITERATURE REVIEW

Teachers' pedagogical content knowledge theory (Shulman, 1986), is about the forms of teachers' knowledge and appropriate ways of applying these forms in the classroom setting. In other words, it refers to teachers' knowledge of the facts and structures of the subject they teach. Shulman, furthermore, argues that teachers' content knowledge about a specific subject is more than just knowing about the facts or structures of that subject. From this perspective, according to

Shulman (1986) the knowledge base for teaching is more fundamentally complex, and means more than just an understanding of the general knowledge. It involves a variety of other types of expertise, such as designing curricular materials, understanding evaluation, and CM skills.

By understanding such pedagogical content knowledge, teachers can present their knowledge in the classroom and facilitate the students' learning. Baumert, Kunter, Blum, Brunner, Voss, and Jordan (2010) contend that such teachers' pedagogical content knowledge greatly depends on the type of qualification and training programs. Accordingly, as Nixon et al. (2017a) states, teachers are required to have a grasp of the subject matter before, for example, they deal with the students' problems with content or choose the appropriate pedagogy to aid their learning.

Previous research has demonstrated that more experienced teachers draw on PCK to scaffold their restricted subject knowledge when teaching OF (Sanders et al. 1993). However, researchers (e.g., Nixon & Luft, 2015) raise concerns around less qualified teachers teaching OF given their limited PCK and experience that may affect their teaching outcome, that is, their learners' ultimate achievement. This issue has attracted the attention of researchers for many years.

To determine the possible effects of teachers' RAD on students' achievement, Goldhaber and Brewer (2000) compared the students of teachers with no formal certification and training in the subject they teach to those of teachers with formal certification in the subject area. They found that the students of OF math and science non-certified teachers perform less well than those of teachers with a RAD in mathematics and science. The results showed that the phenomenon of OF could have a significant effect on the students' test scores.

OF teachers' content knowledge and their pedagogical knowledge exert influences on their classroom practices. In a qualitative, multi-perspective study, Du Plessis (2015) examined the OF teachers' experiences. Findings indicated that the OF teachers' quality of teaching was affected by the lack of PCK. Du Plessis observed that the OF teachers felt challenged and stressed when they were asked questions related to their subject knowledge. They hardly understood the application of the curriculum to be taught.

In a similar vein, Hammond (2000) collected data across 50 states in the USA and identified that teachers' RAD in the subject they teach and subject-specific preparation are the strongest factors that affect students' achievement in reading and mathematics. Several other studies have also identified that teachers' RAD in specific subjects is associated with enhanced level of students' achievement in that subject (e.g. Hoffmann & Richter 2016).

To find the possible effects of teachers' RAD on their individual characteristics such as TSE, which, in turn, affects learners' ultimate attainment, Prieto and Altmaier (1994) surveyed graduate psychology teacher assistants to gain information about their training, subject specific expertise and self-efficiency beliefs toward teaching. The researchers used self-efficacy toward teaching inventory (Prieto & Altmaier, 1994) and self-report measure to assess the participants' degree of confidence in their specific teaching behaviors. It was shown that the teacher assistants who received qualifications and formal training in psychology had a greater sense of self-efficacy than participants with no training courses.

In the realm of CM, it is also important to focus on the importance of teachers' specific academic degree in the subject. Soheili, Alizadeh, Murphy, Bajestani, and Ferguson (2015), probed the effect of specialized knowledge on teachers' CM strategies and students' achievement. They examined both students' perception of CM concept and their final grades. Their analyses of 745 students' perception of classroom environment and their relationship with teacher revealed that the qualified training programs had positive effects on teachers' behavior in classroom which can also satisfy the students with the classroom environment, enhance teacher-student interactions, and improve the students' academic performance.

A thorough and in-depth assessment of the relevant literature indicates that few researchers have explored the teachers' characteristics more particularly from an OF perspective in relation to their students' ultimate achievement over the years (Abu-Tineh, Khasawneh, & Khalaileh, 2011). This study, hence, was determined to identify the differences between IF-EFL teachers and OF-EFL teachers with regard to TSE, CM, and students' performance. Accordingly, the following research questions guided the current investigation:

- 1) Is there any significant difference between the OF EFL teachers and the IF EFL teachers with regard to their CM techniques?
- 2) Is there any significant difference between the OF EFL and the IF EFL teachers with regard to their TSE beliefs?

Is there any significant difference between the performances of the IF EFL teachers' students vs. the OF EFL teachers' students?

3. METHODS

A. Participants Teacher-participants (N=60) included 41 males and 19 females with the age range between 26 and 30. Based on their field of study, they were assigned to two groups of IF EFL and OF EFL teachers (with 30 members in each group). They reported teaching to EFL learners of different levels of English language proficiency. The first group (i.e., IF EFL teachers) held MA degree in TEFL; the second group (i.e., OF EFL teachers), on the other hand, held MA degrees in fields other than English language teaching. The teacher-participants had 2-4 years of teaching experience and none of them in either group participated in any teacher training courses.

In addition to the teacher-participants, there were also 64 student-participants, including 43 males and 21 females. Student-participants, aged between 14-17 years, were selected from the students of a random sample of teacher-participants (n =16). Table 1 presents a summary of the participants' profile.

Table 1: Participants' profile

	Gender		
	Male	Female	Total
IF-EFL teachers	19	11	30
OF-EFL teachers	22	8	30
Total	41	19	60
IF- students	21	11	32
OF- students	19	13	32
Total	43	21	64

The CM techniques (Lewis, 2001) questionnaire was used to measure the teachers' application of CM techniques in the teaching contexts. It encompassed 24 items that assessed five CM techniques, including involvement, punishment, recognition and reward, aggression, and discussion. The 16-item version of the Teacher Efficacy Scale (TES) questionnaire (Gibson & Dembo, 1984) was also used to measure teacher-participants' level of self-efficacy. The alpha measures obtained as the index of internal consistency of the questionnaires were .98 and .96, respectively.

The students' performance in English language was tested, before and after the instruction, by the cloze tests adapted from the first certificate in English test, namely, Use of English Paper, that

functions as an integrative measure of language proficiency. The Use of English Paper with 24 items included some cloze (open and multiple-choice) passages which assess different elements of language. The first part of the paper, which consisted of 12 items, encompassed reading a cloze passage and choosing the best option from among the given options for each gap. The second part included a passage with 12 gaps in which the participants were asked to read the passage and think of the word which best fits each gap.

4. RESULTS AND ANALYSIS

This investigation explored the differences between two groups of teachers namely, the IF EFL and the OF EFL teachers regarding their CM techniques, TSE beliefs and students' performance. The first question sought any significant difference between the two groups with regard to their CM techniques. The descriptive statistics associated with teachers' CM techniques are reported in Table 2.

Table 2: Descriptive statistics: IF and OF teachers' CM techniques

CM styles	Teachers	M	SD
Involvement	IF	32.76	5.56
	OF	23.03	4.62
Punishment	IF	11.06	2.94
	OF	13.93	3.87
Reward	IF	15.73	3.01
	OF	12.03	2.59
Aggression	IF	6.31	2.44
	OF	10.03	2.31
Discussion	IF	7.23	2.41
	OF	8.66	2.55
Total	IF	73.16	69.10
	OF	67.70	6.34

N= 30

As displayed in Table 2, the IF teachers had the higher mean in involvement and reward. The OF teachers, however, had higher mean at punishment, aggression, and discussion. Further MANOVA statistics (Table 3) with all the satisfactory underlying assumptions was used to check whether these differences were significant.

The obtained MANOVA results with Lambda value of .466, ($p < .05$) indicate a statistically significant difference between the IF and OF teachers in terms of their CM styles. We further checked whether they differ on all of the dependent measures, or just some. To this end, between-subjects effects test (Table 4) was used.

Table 3: MANOVA test for IF vs. OF teachers' CM techniques

Effect	Value	F	Df	Error df	Sig.	Partial Eta Squared	
Intercept	Pillai's Trace	.989	939.866b	5.000	54.000	.000	.989
	Wilks' Lambda	.011	939.866b	5.000	54.000	.000	.989
	Hotelling's Trace	87.025	939.866b	5.000	54.000	.000	.989
	Roy's Largest Root	87.025	939.866b	5.000	54.000	.000	.989
	Pillai's Trace	.534	12.391b	5.000	54.000	.000	.534
CM	Wilks' Lambda	.466	12.391b	5.000	54.000	.000	.534
	Hotelling's Trace	1.147	12.391b	5.000	54.000	.000	.534
	Roy's Largest Root	1.147	12.391b	5.000	54.000	.000	.534

Between-subjects effects test indicates that the two groups do differ in all aspects of CM. To be more specific, in terms of involvement and reward, the IF group scored higher (with $M=32.76$, $SD= 5.56$ for involvement and $M= 15.73$, $SD=3.01$ for reward) than the OF teachers (with $M=23.03$, $SD= 4.62$ for involvement and $M= 12.03$, $SD=2.59$ for reward). However, the results are vice versa for punishment, aggression and discussion, that is, the OF teachers (with $M= 13.93$, $SD= 3.87$ for punishment, $M= 10.03$, $SD= 2.31$ for aggression and $M= 8.66$, $SD=2.55$ for discussion) scored higher than the IF teachers (with $M= 11.06$, $SD= 2.94$ for punishment, $M= 6.34$, $SD= 2.44$ for aggression and $M= 7.23$, $SD=2.41$ for discussion).

Descriptive statistics associated with the second question that probed possible differences between groups with regard to their TSE beliefs are summarized in Table 5.

Table 4: Between-subjects effects test: IF vs. OF teachers' CM

Source	Dependent Variable	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	Involvement	522.150	1	522.150	14.754	.000
	Punishment	132.017	1	132.017	11.084	.002
	Reward	81.667	1	81.667	7.916	.007
	Aggression	201.667	1	201.667	35.668	.000
	Discussion	30.817	1	30.817	4.992	.029
Intercept	Involvement	52392.150	1	52392.150	1480.365	.000
	Punishment	9450.150	1	9450.150	793.402	.000
	Reward	11760.000	1	11760.000	1139.967	.000
	Aggression	4034.400	1	4034.400	713.545	.000
	Discussion	3792.150	1	3792.150	614.313	.000

Table 5: Descriptive statistics: IF and OF teachers' TSE beliefs

		Levene's Test for Equality of Variances	t-test for Equality of Means				Mean Difference
		F	Sig	T	Df	Sig.(2-tailed)	
TSE	Equal Variances assumed	8.841	.004	6.416	58	.000	18.10000
	Equal Variances not assumed			6.416	42.461	.000	18.10000

Table 6: Independent samples t-test: IF vs. OF teachers' TSE beliefs

		Teachers	M	SD	N
TSE	IF		68.23	13.84	30
	OF		50.13	6.86	30

Table 7: Descriptive statistics for IF and OF teachers' students' performances before and after instruction

		Students Performance	Mean	SD	N
Pre test	IFT		10.34	2.88	32
	OFT		10.59	3.26	32
Post test	IFT		14.56	4.08	32
	OFT		13.46	4.77	32

The IF teachers, as displayed in Table 5, had higher mean in TSE beliefs compared to the OF teachers. Further independent samples t-test (Table 6) approved this difference ($t=6.41$; $p<0.05$).

The last question probed the differences between the performance of the IF teachers' students vs. the OF teachers' students. Table 7 represents descriptive statistics associated with the students' performance across the two main groups, that is, the IF teachers vs. the OF teachers.

The IF teachers' students performed better than those of the OF teachers' at the end of the instruction. ANCOVA test (Table 8), with students' pre-test performance scores as the covariate, indicated that there is a significant difference between the two groups of teachers with regard to their students' performance ($F=10.47$, $p=.00$, partial eta squared=.147).

Table 8: One-way ANCOVA test for IF and OF teachers' students' performances

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	776.621a	2	388.311	50.574	.000	.624
Intercept	84.880	1	84.880	11.055	.002	.153
Pre test	757.481	1	757.481	98.655	.000	.618
Students_Performance 1	80.406	1	80.406	10.472	.002	.147
Error	468.363	61	7.678			
Total	13817.000	64				
Corrected Total	1244.984	63				

5. DISCUSSION

The main purpose of the current study was, first, to find out the possible differences between the OF and IF teachers with regard to their use of the CM strategies of 'involvement', 'punishment', 'reward', 'aggression', and 'discussion'. For this purpose, the researcher applied MANOVA test. The results revealed that the two groups differed in the use of the CM strategies of 'involvement', 'punishment', 'reward', 'aggression', and 'discussion'. However, more detailed results from descriptive statistics revealed that specialist teachers used more positive CM strategies such as 'involvement' and 'reward' to manage their classroom. On the other hand, non-specialist teachers applied mainly negative CM strategies, such as 'punishment', 'aggression', and 'discussion' to do so. In other words, EFL teachers with a related academic degree in English language used more holistic CM techniques, which according to Horner, Sugai, and Anderson (2010), use more positive techniques when good students' behaviors occur and more supportive techniques when disruptive behaviors occur. In contrast, EFL teachers with no related academic degree and training in English language teaching use more traditional CM techniques which, according to Ross and Horner (2007), get more punitive when disruptive behaviors occur. This finding implies that certified teachers with a related academic degree in the subject that they teach, use mainly positive and effective CM strategies, which according to Allen (2010), Reupert and Stuart Woodcock (2014) can lead to a positive relationship with students and, in turn, positive learning environment. The result in this part is consistent with the findings of Darling-Hammond (2001), who argued that teachers' academic degree in their subject area ensure that they have professional knowledge about pedagogical techniques. This finding is also in line with Saleh and Darmawan's (2013) research that indicated the IF teachers use higher levels of positive interaction to deal with disruptive behaviors. One explanation for this finding is that teachers with related academic degree in English language teaching have participated in lots of practice-based professional courses on theoretical and practical teaching which mostly encompass effective management skills.

Our second aim was to find out the differences between the IF and OF teachers' TSE beliefs. T-test analysis was used to examine the differences between both groups of teachers. The results showed that the two groups differed significantly in their TSE beliefs; the IF teachers had significantly higher TSE beliefs. This outcome may suggest that the EFL teachers who have a related academic degree in English language teaching have a high sense of self-efficacy than those who do not have a related academic degree in English language teaching. The findings accord with

the studies (e.g., Denham & Michael, 1981) depicting that teachers with training in the fields that they teach and a related academic degree in their teaching fields have a higher self-efficacy and degree of confidence in their abilities, compared to the teachers with no such qualifications in their specialty areas. As the OF teachers have no professional training courses on English language teaching (Michel, 1981), they may possess lower sense of self efficacy beliefs. This view is justified by Pillay et al. (2005), and Schueler et al (2016) who maintain that the stress of OF teaching may end in teacher's stress, poor self-efficacy and disillusionment. Thus, the reality is that the OF teachers might feel the additional tension associated with learning to teach a new subject (Bosse & Törner, 2013).

We finally attempted to find out the differences between the students' achievement of two main groups of teachers. The results of a set of ANCOVA tests revealed that the IF teachers' students' achievement were significantly better than those of the OF teachers. This corroborates with Goldhaber and Brewer (2000), as well as Dee and Cohodes (2008) who reported that the EFL teachers' related academic degree in the subject that they teach can have a significantly positive impact on the students' achievement in comparison to the teachers with no certification in their subject area. Accordingly, the outcomes may reflect that the subject-qualified EFL teachers have developed their content knowledge about English language teaching. This reflects Shulman's (1986) contention that teachers with specific content knowledge possess the knowledge of the facts and structures of the subject that they teach and can also present their knowledge in the classroom and facilitate their students' learning. In sum, the findings proposed in this research may imply that the EFL teachers with subject-specific training in English language teaching and the phenomenon of OFT can affect the TSE beliefs, the teachers' use of CM strategies, and their students' achievement.

6. CONCLUSION

The findings of this study made it clear that teaching English would be more effective when qualified teachers are involved in teaching. This can be an implication of the fact that qualified EFL teachers' awareness about positive CM strategies can enhance their students' achievement and lead to a positive student-teacher relationship in the classroom. The findings call for situated and practice-based professional development programs for the OF teachers. Such focused programs can hugely affect the student-teacher interrelationship and the quality of education which, in turn, may also affect the students' performance. Teacher trainers, English language institutes that support students' successes and seek positive learning environment, should, therefore, offer OFT EFL teachers some training programs or courses that focus on the special needs of teachers, including CM strategy-training. The teachers can, thus, extend the CM strategies that they learnt from the suggested training programs to their daily teaching. Moreover, the findings of this study also suggest that teachers' certification and academic degree can affect their TSE beliefs. One way of strengthening the sense of self-efficacy beliefs is through vicarious experiences. One such experience can be observing the social models that can enhance the observers' sense of self-efficacy beliefs. As in the context of the present study, non-specialist teachers can enhance their self-efficacy beliefs by observing the teaching of other successful teachers. Therefore, this can be an implication of the necessary opportunities that the English language institutes are to provide for the OF teachers to participate and observe the teaching of other successful teachers. Another way of helping the OFT EFL teachers to develop their sense of self-efficacy beliefs is that they can be given supportive feedbacks. Those in charge of running English language institutes, hence, are suggested to emphasize more on frequent observations of the OFT EFL teachers' teaching and providing them with supportive feedback.

The researcher took every precaution to make this study flawless; however, the present study suffered from some unintentional limitations, which may provide insights for further studies. One of the limitations of this study is related to the main data collection tools. Due to the practical reasons, the researcher used two questionnaires to collect data about teachers' CM styles and TSE beliefs. The response format of the TSE questionnaire was Likert-type which ranged from strongly agree to strongly disagree. According to Revilla, Saris, and Krosnick (2014), agree-disagree rating scales have a few shortages such as the possibility of biased responses, enhancing cognitive burden, and yielding to low-quality data. Another major concern of the researcher that has to be mentioned is related to the use of the adapted version of the first certificate in English test for collecting data about the students' achievement. Due to practicality issues, the researcher decided to only use one section of the first certificate in English test and omit other sections. Furthermore, observing a few sessions of both groups of teachers was another limitation of this study which may prevent generalizing the results of the classroom observation. To overcome the limitations of this study and expand the knowledge provided through this investigation, the following suggestions for conducting further studies are recommended. It is recommended that further investigations use other types of data collection tools such as interviews, study both teachers as well as students, and do more classroom observation which can lead to a richer description of the features of the variables involved in the present study. In addition, to make the findings of the study more generalizable, it is recommended that for further and clearer implications, researchers make use of a large number of participants in the future. Researchers are recommended to carry out such studies in the different contexts such as schools to see whether the same or different results are obtained. Conducting similar studies in different contexts can make generalizing the findings of the study more plausible. Finally, further treatment-based experimental studies that use more elaborate achievement tests and provide more thorough results about students' achievement are suggested.

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