



Comparing Native and Non-Native English Teachers’ Pedagogical Knowledge in an English as an International Language Context

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Abstract

This study examined the inner, outer, and expanding circle native as well as non-native English teachers’ Pedagogical Knowledge (PK) in an English as an International Language context. The data were collected from 14 native English teachers from the inner circle and 50 non-native teachers from the outer and expanding circle, using a Pedagogical Knowledge questionnaire and semi-structured interview. The quantitative results revealed that the participants in the three groups had high perceptions of pedagogical knowledge, and that there were significant differences between the inner, outer, and expanding circle teachers in terms of their total pedagogical knowledge except for the subscale of “knowledge of learners”. The participants considered English a communication tool while not finding it necessary but helpful to become familiar with all world Englishes and the knowledge type required in those contexts.

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1. Introduction

With the growing acceptance of English as a global language and changes in the way countries respond to this global English (Lee, Lee, & Drajeti, 2019), the traditional ELT models have been gradually weakening, and accordingly, the ownership of English has been questioned (Graddol, 2006). While English has quickly developed multifaceted relationships within the communities of speakers worldwide, different terms signifying present-day English as a global language have been proposed.

According to McKay (2010), these different terms are the reflections of different approaches offered by specialists in the field. One of the most prominent views that falls within the scope of the present research is English as an International Language (EIL). McKay (2010) refers to English as an International Language as an umbrella term, describing any instance of English use in interactions happening among people who are first or second language speakers of English, regardless of the fact that they may share the same culture. Another term close to EIL is World Englishes, which “aims to describe the phonological, grammatical, lexical, and pragmatic features of the current use of English as a factor of geographical region” (McKay, 2010, p. 89).

Kachru (1986) distinguishes three varieties of world Englishes in his description of the three concentric circles model. The first group comprises native English speakers in the inner-circle who speak English as their first language, like those in the United States, Canada, the United Kingdom, and Australia. The second group includes non-native English speakers who are in the outer circle and utilize English as their second language, like those in India, Kenya, and Singapore. The last group, the expanding-circle, involves those non-native speakers of English who employ English as a foreign language, like those in Korea, China, Egypt, and Japan.

Given that teachers are the fundamental agents in the success of any educational process, understanding native and non-native teachers' perceptions of pedagogical knowledge in teaching English as an International Language

context is urgently required. According to Shulman (1986, 1987), one of the essential qualities that any successful teacher must maintain is having a sufficient and up-to-date pedagogical knowledge base (Grieser & Hendricks, 2018). This important issue has been empirically investigated in different studies so far (e.g., Mathers, 2021; Soysal & Radmard, 2018; Wiens, Beck, & Lunsman, 2020). Pedagogical Knowledge (PK) can be explained as the “accumulated knowledge about the act of teaching, including goals, procedures, and strategies that form the basis for what teachers do in classroom” (Mullock, 2006, p. 48). In teacher education, the concept of pedagogical knowledge has been identified with the term Pedagogical Knowledge Base (PKB), describing the underlying theories, belief systems, and thought processes behind a teacher's instructional performance (Gatbonton, 1999).

Following Shulman, other researchers in the English Language Teaching (ELT) domain have addressed the centrality of Pedagogical Knowledge Base (PKB) as a criterion involved in making teacher recruitment decisions (e.g., Akbari & Dadvand, 2014). Despite the frequent use of English in various contexts as an international language, little attention has been paid to the pedagogical knowledge of English language instructors (Elbaz, 1981; Gatbonton, 1999; Mullock, 2006). Furthermore, investigating native and non-native teachers' perceptions of teaching English as an international language context is of paramount importance (Lee et al., 2019; Tajeddin, Atai, & Shayeghi, 2019); hence, this study has concentrated on comparing native and non-native English teachers' perceptions of pedagogical knowledge, based on the Kachru's model in the context of EIL.

2. Theoretical Framework

In the past decades, English has spread globally in such a way that has not happened to any other language in any period of time (Crystal, 2004; Jenkins, 2006). English has been nativized in countries where it was once the second language and had major roles in the lives of its bilingual speakers. According to Jenkins (2003), there have been attempts to give a comprehensive description of this phenomenon, and the growth of English has been discussed and conceptualized by many

specialists to date, including Kachru's (1985) three concentric circles model of World Englishes, McArthur's (1987) circle of world English, Modiano's (1999) centripetal circles of international English, Strevens' (1980) world map of English, as well as the Görlach's (1990) circle model of English. From among these models, the Kachru's world Englishes model (1985), distinguishing three English varieties in the inner, outer, and expanding circle countries, has been considered the most useful and influential one.

In the traditional models of English language pedagogy, teachers were obsessed with providing the students with only the native speaker English varieties since they were regarded as the ideal, legitimate, and esteemed ways of producing language by English learners. In the instructional context of English as an International Language, language instructors' practices must be informed by their sufficient knowledge of the diverse English varieties that exist (Lee, 2019). By considering the global spread of English, it is more effective if teachers equip students with the knowledge of other less-attended-to, but equally important, varieties besides the native-speaker varieties. As pointed out by Llurda (2004), in more modern approaches to ELT, nonnative English teachers are ascribed equal or even more significance compared with native speaker English teachers. It has been argued that since nonnative speaker English teachers have gone through the same processes of learning English as an international language as their students, they can be a better role model for effective English language learning of their students.

In one's PK, the knowledge of content and pedagogy are mixed to enhance the better realization of how specific issues, challenges, and topics are presented, organized, and modified with respect to the different and sometimes unique needs, interests, and ability levels of learners, and how they are prepared for teaching (Shulman, 1987). In this regard, Shulman (1986, 1987) evinced that teachers' pedagogical knowledge is a pivotal element of teachers' instructional effectiveness, which is expected to be attained by successful teachers (Worden, 2019). To understand PK, various scholars have divided PK into smaller conceptual units such as the knowledge of

language, content, context, teaching, students, professional self, technology, assessment/testing, self-reflection, classroom management, planning, and the knowledge of curriculum (Jahanshiri, 2018; Dadvand, 2013; Gatbonton, 2008; Mullock, 2006).

The most influential theoretical framework of teacher's knowledge was proposed by Shulman in 1987. Based on his examination of a group of secondary school teachers for their knowledge development, he introduced a teacher's knowledge model, including the seven components of:

1. **Subject Matter Content Knowledge:** It relates to the teacher's knowledge of the main concepts, ideas, facts, and relations within a specific subject discipline.
2. **Pedagogical Content Knowledge (PCK):** It pertains to the teacher's ability to make a point more understandable to students through using explanations, examples, analogies, and illustrations.
3. **Curricular Knowledge:** It has to do with the teacher's knowledge of a given instructional program and its content materials and input to teach a specified set of topics to learners at a certain level of ability.
4. **General Pedagogical Knowledge:** It is concerned with the teacher's knowledge of general skills, rules, and procedures, which are applicable to the teaching and learning of any subject matter.
5. **Knowledge of Educational Aims, Objectives, and Purposes.**
6. **Knowledge of Learners:** It is defined as the teacher's knowledge of learners' psychological, cognitive, social, educational, and personal features, interests, needs, and abilities.
7. **Knowledge of Other Subject Content:** This knowledge attends to the teacher's knowledge of content, which is not within the scope of the subject that the instructor is teaching.

Several attempts have been made to examine teachers' pedagogical knowledge (e.g., Malva, Leijen, & Baucal, 2020; Mathers, 2021; Soysal & Radmard, 2018; Wiens, Beck, & Lunsman, 2020). In a seminal study, Gatbonton (2000) explored the patterns of knowledge that experienced second language (L2) teachers used during their instruction. She was also

interested in identifying whether there was any consistency in the use of these patterns by the instructors. Through employing the stimulated recall technique for two sets of experienced teachers (N=7) in Canada, the researcher uncovered 21 categories of pedagogical knowledge reported to be used by the respondents. The most frequently used category was Language Management. This category was followed by the Knowledge of Students, Procedure Check, Progress Review, Beliefs, and Note Student Reaction/Behavior.

Mullock (2006) also replicated Gatbonton's research by utilizing a similar research design. However, the four teachers taking part in the study of Mullock showed diverse real-life contexts, as they were teaching general, advanced, and business English for Cambridge Advanced Certificate programs in Australia. The outcomes of this study were largely in line with the results of Gatbonton's study. The category identified by Mullock (2006) to be the main one was Language Management. The other categories in descending rank order were the knowledge of students, procedure check, progress review, and noting the student reaction/behavior.

Reves and Medgyes (1994) conducted a good sample study of the discrepancies between the perceptions of native and non-native English-speaking teachers. In their survey study, 216 native and non-native English-speaking instructors were targeted from ten countries. They hypothesized that native and non-native teachers differed in their instructional practices because of their language proficiency levels. The findings of their study evinced that native and nonnative teachers held different attitudes toward their instructional practices. The majority of the nonnative teachers believed that they faced challenges with regard to some linguistic aspects such as vocabulary, pronunciation, and fluency, and these challenges, in turn, affected their actual teaching in a negative way.

In a recent study examining the professional development of a group of English instructors in Thailand, Prabjandee (2020) investigated if teachers' perceptions of the Global Englishes language teaching (GELT) can be modified. To collect data, field notes, a questionnaire, and teacher reflections were employed, and the results revealed that the teachers provided

positive feedback for the activities; however, there was a slight change in their attitudes toward GELT. Teachers' own experiences in different contexts show that acceptance of the EIL approach and the ways of English use are very important, which is in line with Llurda's (2009) concern. To address this issue, the current research sought to scrutinize the perceptions and views that both English language learners and teachers hold toward teaching EIL. Put it simply, this study attempted to address two research questions.

1. What are the inner, outer, and expanding circle native and non-native teachers' perceptions of pedagogical knowledge, in the teaching English as an international language context?
2. Are there any significant differences between the inner, outer, and expanding circle native and non-native English teachers' perceptions of pedagogical knowledge in the teaching English as an international language context?

3. Methodology

3.1. Participants

As for the participants, 64 (out of 100) native (inner-circle) and non-native (outer and expanding circles) English teachers took part in the first phase (questionnaire) of this study. From among the participants, there were 14 native English teachers who were selected from the United States, Canada, the United Kingdom, and Ireland (inner-circle), and 50 non-native instructors who were selected from Hong Kong, Malaysia (Outer circle, 14), Iran and Turkey (expanding circle, 36). The age range of the participants was about 20-45 years. Their level of education varied from high school to Ph.D., and they were all majored in English-related fields such as; English translation, literature, teaching English, and linguistics. These participants were all chosen from English-related majors in order to minimize and control the variability of their background knowledge. They were both males and females, teaching mostly at intermediate levels in different English language institutes. The sampling strategy employed for finding access to the participants was convenience sampling, and the selected participants were notified of the voluntary

basis of their cooperation in the present study (Dörnyei & Csizér, 2012).

3.2. Instrumentation

3.2.1. *The Teacher's Pedagogical Knowledge Questionnaire*

This scale, designed by Dadvand (2013), was employed to evaluate the participants' degree of pedagogical knowledge. The criterion for the selection of this questionnaire was its high frequency of use. This questionnaire included two parts. The first part of the questionnaire intended to gather demographic information of the participants. The second part of the questionnaire consisted of 50 items aiming to determine the teachers' pedagogical knowledge. This questionnaire entailed the nine components of (a) knowledge of the subject matter, (b) knowledge of learners (c) knowledge of second language teaching, d) knowledge of second language learning, (e) knowledge of assessment/testing (f) knowledge of classroom management assessed, (g) knowledge of educational context, (h) knowledge of equity and diversity, and finally (I) knowledge of (professional) self. All of the 50 items were close-ended, identifying the participants' responses on a five-point Likert scale varying from "1" (not at all) to "5" (to a great extent). As for the scoring of the questionnaire items responses, the highest score a participant could obtain in this questionnaire was 250, and the lowest was 50.

3.2.2. *The Follow-up Interview*

Some other parts of the data in this study were collected from running semi-structured interviews with both the native and non-native teachers. The aim of these interview sessions was to provide the teachers with an opportunity to explain their attitudes toward the items of the questionnaire more clearly and comprehensively, resulting in the triangulation of the data results. The interview questions were developed by the researchers of the study. Next, three language experts in the field of applied linguistics examined the purposes, as well as the appropriateness of language and content of the interview questions. There were eight interview questions that focused on the areas pertaining to the native and non-native English teacher's perceptions of pedagogical knowledge, the necessary knowledge for effective teaching, where this necessary

knowledge has come from, the importance of learning all varieties of World Englishes, and its impact on teachers' pedagogical practices. The interviews took around 20 to 30 minutes for each interviewee. They were held via Skype and were recorded during the video, and voice calls and voice messages.

3.3. Data Collection and Analysis

Several steps were taken to carry out this sequential explanatory mixed-methods research study. The data were gathered by employing a close-ended items scale (Dadvand, 2013) and holding semi-structured interview sessions with the participants. To elaborate on these two data collection phases, first, the data were collected from the participants through responding to the questionnaire. Subsequently, a sub-group of the participants took part in the semi-structured interview sessions aimed to triangulate the findings obtained in the first phase of the study. Before distributing the questionnaire among our main participants, the questionnaire went through a pilot-phase analysis with 30 native and nonnative English teachers. This action was taken to ensure the reliability of the scale. After ensuring its reliability, an online version of the questionnaire was created through Google forms and emailed to many native and non-native English teachers along with a message to inform them of the study purpose and the voluntary basis of their cooperation.

In the main phase of the study, 64 native and non-native English teachers belonging to the inner, outer, and expanding circle countries, filled out the scale. The quantitative data were analyzed through SPSS software. Afterward, the participants, who showed their inclination and consent to participate, were asked to take part in an interview. At this stage, nine (three participants from each circle) native and non-native English teachers were interviewed. As mentioned, each interview took 20 to 30 minutes to be conducted, and all interview sessions were recorded by means of Skype, video and voice call, and voice messages. At the end, the interviews were transcribed, summarized, categorized, coded, and then analyzed. Qualitative data analysis was done inductively, as the codes and themes emerged completely from the data and were not based on any pre-specified theoretical framework. All the qualitative data analyses were done

manually. The codes were initially analyzed jointly by the present study researchers. Subsequently, an expert in the field with sufficient knowledge of qualitative data analysis independently analyzed the whole dataset again, which demonstrated full agreement between the two groups of coders and approved the inter-coder agreement in this study. Besides, to ensure the credibility of the findings (Nassaji, 2020), three of the participants were randomly asked to check the linguistic and content appropriateness of the codes and themes against the actual statements and data provided by the participants. Based on this member checking/participant validation technique, it was found that all of them approved the credibility and confirmability of the obtained codes and themes. To increase the dependability of the data and findings (Nassaji, 2020), all the data collection and analysis procedures were explained in sufficient detail so that by following them, future researchers will arrive at results and interpretations similar to those presented in this study.

4. Results

4.1. The Native and Non-native Teachers' Perceptions of Pedagogical Knowledge

In order to answer the first research question, it was required to calculate the observed mean total score of the participants of each native speaker group for each subscale and the total scale of the pedagogical knowledge questionnaire.

To begin with, the descriptive statistics of the three groups of the teachers (belonging to inner, outer, and expanding circles) with regard to the total scale and subscales of the pedagogical knowledge questionnaire were computed (Table 1). Then, skewness and kurtosis ratios were computed by dividing the kurtosis and skewness values by their standard errors. For those ratios within ± 1.96 , the one Sample t-test was run; for those ratios beyond ± 1.96 , the one-sample Wilcoxon Signed Ranks test was run. All these statistics are presented for each subscale/total scale under separate headings in the following table.

Table 1
Descriptive Statistics for Each Subscale and Total Scale of the PK Questionnaire across the Groups

Group		N	Mean	Std. Deviation	Skewness	Kurtosis		
						Std. Error	Std. Error	
Expanding	*Subject.Matter	36	55.11	9.52	.98	.39	-.31	.76
	Learners	36	34.88	4.55	.16	.39	-.39	.76
	SLT	36	14.38	2.88	.58	.39	-1.10	.76
	*SLL	36	25.44	4.62	.90	.39	-.77	.76
	Assessment	36	15.97	3.01	.74	.39	1.35	.76
	Class.Management	36	8.19	.85	.47	.39	1.37	.76
	Edu.Context	36	7.55	1.20	.32	.39	1.82	.76
	Equity	36	11.16	1.73	-.27	.39	1.51	.76
	Self	36	7.36	1.51	.59	.39	-.83	.76
	Total.Ped	36	180.08	24.84	.88	.39	-.70	.76
	Valid N (listwise)	36						
Outer	*Subject.Matter	14	71.50	9.44	-1.47	.59	1.85	1.15
	Learners	14	37.00	5.30	-.02	.59	-1.28	1.15
	SLT	14	17.21	2.32	-.60	.59	.23	1.15
	SLL	14	30.92	3.87	-.87	.59	.47	1.15
	Assessment	14	21.35	3.31	-.79	.59	.18	1.15
	Class.Management	14	9.14	.94	-.95	.59	.34	1.15
	*Edu.Context	14	9.21	1.25	-1.84	.59	2.83	1.15
	Equity	14	13.07	2.01	-.90	.59	-.45	1.15
	*Self	14	8.85	1.46	-1.27	.59	.34	1.15
	*Total.Ped	14	218.28	23.45	-1.25	.59	1.42	1.15
	Valid N (listwise)	14						
Inner	*Subject.Matter	14	72.21	9.77	-1.47	.59	1.66	1.15

Learners	14	37.21	6.37	-.58	.59	-.81	1.15
*SLT	14	18.35	2.34	-1.76	.59	3.28	1.15
*SLL	14	32.64	3.65	-2.27	.59	5.44	1.15
Assessment	14	21.14	3.25	-.53	.59	.30	1.15
Class.Management	14	9.14	1.02	-.82	.59	-.54	1.15
*Edu.Context	14	8.92	1.63	-1.33	.59	.89	1.15
Equity	14	13.50	1.40	-.68	.59	-.53	1.15
*Self	14	9.14	1.16	-1.67	.59	3.06	1.15
*Total.Ped	14	222.28	21.82	-1.72	.59	3.76	1.15
Valid N (listwise)	14						

Note. * shows data not meeting normality assumption.

Tables 2 to 4 present the one-sample t-test and Wilcoxon Signed Ranks Test results for Total

Pedagogical Knowledge.

Table 2

The One-Sample T-Test Statistics

Group		N	Mean	Std. Deviation	Std. Error Mean
Expanding	Total.Ped	36	180.08	24.84	4.14
Outer	Total.Ped	14	218.28	23.45	6.26
Inner	Total.Ped	14	222.28	21.82	5.83

Table 3

The One-Sample T-Test Results

Group		t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
						Lower	Upper
Test Value = 150							
Expanding	Total.Ped	7.26	35	.00	30.08	21.67	38.48

Table 4

The Wilcoxon Signed Ranks Test (Group = Outer) Results

Group	Null Hypothesis	Test	Sig.	Decision
Outer	The median of Total.Ped equals to 150.00	One sample Wilcoxon Signed Ranks	.001	Reject the null hypothesis
Inner	The median of Total.Ped equals to 150.00	One sample Wilcoxon Signed Ranks	.001	Reject the null hypothesis

Asymptotic significances are displayed. The significance level is .05

Given the observed means in Table 2 and the significant results in the following tables for the theoretical mean/median (i.e., 150), it is concluded that all the three teacher groups have higher than average Total Pedagogical Knowledge.

To enrich the research findings, triangulate the results, and provide a comprehensive response to the first research question, a semi-structured

interview was conducted. To do so, three participants from each group (the inner, outer, and expanding circle countries) were asked to participate in an online interview through Skype, video call, and voice call. The first interview question dealt with the necessary knowledge for effective teaching. The results for this interview question and the extracted themes are presented in Table 5.

Table 5
The Participants' Answers to the First Question of the Interview

Related Interview Question	Theme	Inner	Frequency Outer	expanding
Q1: Necessary Knowledge for Effective Teaching	1. Different Kinds of Knowledge	3	2	3
	2. Awareness of different Approaches and Methodology	2	3	2
	3. Creativity and scaffolding	2	2	2
	4. Psychology	3	3	3
	5. Setting a context	0	0	3
	6. Time Management and Lesson Plan	3	2	3

As Table 5 shows, all the teachers from the three group types (i.e., the inner, outer, and expanding circles) referred to the knowledge of grammar, vocabulary, pronunciation, content knowledge, psychology, subject matter, lesson plan and time management, individual differences in learners, and learner psychology as necessary knowledge bases for effective teaching. However, as Table 5 shows, the knowledge of setting a context is not specified by teachers of the inner and outer circle countries. Presumably, this knowledge has already been defined for them. It is better to say that, by default, they have it; however, the teachers of the expanding circle countries named it as a necessary knowledge basis that they should have had. Some of the teachers' answers to this interview question are presented as follows:

Teacher (1) from the inner circle: *In my idea, the knowledge of grammar, vocabulary, pronunciation, content knowledge, psychology, I mean how to deal with different students, creativity, when each teacher goes to class he/she should have a lesson plan to arrange the class accordingly.*

Teacher (7) from the outer circle: *I think a good teacher should be aware of different approaches and methodologies and know about scaffolding, other things which are necessary such as knowledge of grammar, vocabulary, pronunciation, time management lesson plan.*

Teacher (5) from the expanding circle: *Teachers should have different kinds of knowledge, like vocabulary, grammar, pronunciation, management of the classroom. But to me, as a non-native teacher, knowing how to create a context for our learners matters.*

The second interview question, which was also related to the first one, was about the sources of this necessary knowledge and how teachers acquire them. As Table 6 (below) shows, the teachers pointed to the academic training courses that every teacher should pass before being a teacher, and to the experiences that they had during the process of teaching; extending the knowledge by collaborating with their colleagues, considering the students' feedback, and through observation.

Table 6
The Participants' Answers to Other Interview Questions

Related Interview Question	Theme	Inner	Frequency Outer	expanding
Q2: where does teacher's knowledge come from?	1. Academic and Training Course	2	3	3
	2. Experience and feedback	2	2	3
	3. Observation and learning From Colleagues	2	2	2
Q3: Necessary to Learn Different Varieties of World English to increase Teachers General Knowledge	1. Not necessary	2	3	3
	2. That is helpful	2	3	3
	3. Know the differences Among Variety	2	3	3

Q4: Necessary to Learn	1. Not necessary	2	3	3
Different Varieties of World English to increase Teachers Pedagogical Knowledge	2. It would be useful	2	3	3
	3. Know the differences to inform the students	2	3	3

Some of the teachers' responses to this question are presented as follows:

Teacher (1) from the inner circle: *This knowledge comes from training courses that you have; some of them can come from experience, reading academic books, feedback from our own teaching, and observation.*

Teacher (2) from the outer circle: *Learning in the classroom, professional courses, from the books, from different teachers, different students, and university academic qualifications.*

Teacher (6) from the expanding: *learning from our teachers during the process of learning during school and university. Observation of our colleagues and feedback from the students.*

Question 3 and 4 of the interview both examined if knowing varieties of world Englishes is necessary for an English native/non-native teacher to develop general and pedagogical knowledge bases. As Table 6 shows, the majority of the teachers (90%) believed that knowing the varieties of world Englishes was not necessary, but it would be helpful for teachers in order to explain the cultural differences to their students. Some of the teachers' remarks are presented as follows:

Teacher (3) from the expanding circle: *I find it very useful to be familiar with varieties of word Englishes, because English is not just used by American or British people. So, it is very useful to know*

and identify the cultural differences and explain them to the students.

Teacher (7) from the outer circle: *I don't think it is necessary to learn all other varieties of English, but you can concentrate on the differences only.*

The qualitative results revealed that there existed slight differences between the native and non-native teachers belonging to the inner, outer, and expanding circle countries in terms of their pedagogical knowledge.

4.2. Differences Between the Native and Non-native English Teachers' Perceptions of Pedagogical Knowledge

The response to this research question required to compare the three native speaker groups in terms of the mean total score for each subscale and total scale of the pedagogical knowledge questionnaire. To begin with, the descriptive statistics of the three groups in the pedagogical knowledge questionnaire, its total scale, and all its subscales were computed (Table 1). Then, to check the normality assumptions, the Skewness and kurtosis ratios were computed by dividing the kurtosis and Skewness values by their standard error. For those ratios within -1.96 , the one-way ANOVA was run; for those ratios beyond -1.96 , the one sample Kruskal Wallis Test was run.

One assumption of ANOVA is the homogeneity of variances which was tested by running Levene's test, whose results in Table 7 show the assumption is met ($p > .05$).

Table 7
The Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Learners	1.89	2	61	.16
Assessment	.16	2	61	.84
Class. Management	1.21	2	61	.30
Equity	1.05	2	61	.35

Table 8 presents the main ANOVA findings, showing that the three groups do not differ with regard to the knowledge of learners ($p >$

$.05$), but they do differ in terms of the knowledge of assessment, class management, as well as equity ($p < .05$).

Table 8
ANOVA Results for Comparing the Groups for Each Subscale of Pedagogical Knowledge

		Sum of Squares	df	Mean Square	F	Sig.
Learners	Between Groups	77.82	2	38.91	1.46	.23
	Within Groups	1621.91	61	26.58		
	Total	1699.73	63			
Assessment	Between Groups	439.03	2	219.51	22.32	.00
	Within Groups	599.90	61	9.83		
	Total	1038.93	63			
Class.Management	Between Groups	14.16	2	7.08	8.46	.00
	Within Groups	51.06	61	.83		
	Total	65.23	63			
Equity	Between Groups	72.00	2	36.00	11.97	.00
	Within Groups	183.42	61	3.00		
	Total	255.43	63			

In order to see which groups exactly differed, post hoc pairwise comparison tests were done

through Bonferroni adjustment for multiple comparisons to avoid Type I error (Table 9).

Table 9
The Multiple Comparisons Bonferroni for Each Subscale of Pedagogical Knowledge

Dependent Variable	(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Assessment	Expanding	Outer	-5.38*	.98	.00	-7.81	-2.95
		Inner	-5.17*	.98	.00	-7.60	-2.73
	Outer	Expanding	5.38*	.98	.00	2.95	7.81
		Inner	.214	1.18	1.00	-2.70	3.13
	Inner	Expanding	5.17*	.98	.00	2.73	7.60
		Outer	-.214	1.18	1.00	-3.13	2.70
Class.Management	Expanding	Outer	-.94*	.28	.005	-1.65	-.23
		Inner	-.94*	.28	.005	-1.65	-.23
	Outer	Expanding	.94*	.28	.005	.23	1.65
		Inner	.00	.34	1.00	-.85	.85
	Inner	Expanding	.94*	.28	.005	.23	1.65
		Outer	.00	.34	1.00	-.85	.85
Equity	Expanding	Outer	-1.90*	.54	.003	-3.24	-.56
		Inner	-2.33*	.54	.000	-3.67	-.98
	Outer	Expanding	1.90*	.54	.003	.56	3.24
		Inner	-.42	.65	1.00	-2.04	1.18
	Inner	Expanding	2.33*	.54	.00	.98	3.67
		Outer	.42	.65	1.00	-1.18	2.04

*. The mean difference is significant at the 0.05 level.

The results in Table 9 show that the inner and outer groups do not differ in terms of their knowledge of assessment, class management, and equity ($p > .05$), but they are of significantly much higher mean scores in terms of the knowledge of assessment, class management, and equity than the expanding group ($p < .05$).

Table 10 presents the main Kruskal Wallis Test outcomes, showing that the groups differ significantly with regard to the total Pedagogical Knowledge, knowledge of Subject matter, Second Language Teaching, Second Language Learning, Educational Context, and Self ($p < .05$).

Table 10*Kruskal Wallis Test for Comparing the Groups' Pedagogical Knowledge*

	Subject.Matter	SLT	SLL	Edu.Context	Self	Total.Ped
Chi-Square	27.10	20.09	22.66	17.09	15.49	26.21
Df	2	2	2	2	2	2
Asymp. Sig.	.00	.00	.00	.00	.00	.00

In order to see which groups exactly differed, post hoc pairwise comparison tests were run, whose results in Table 11 show that the inner and outer circle groups do not differ concerning their Total Pedagogical Knowledge, knowledge of the Subject matter,

SLT, SLL, Educational Context, and Self ($p > .05$), but they are of significantly much higher mean scores in terms of the total Pedagogical Knowledge, knowledge of the Subject matter, SLT, SLL, Educational Context, and Self than the expanding group ($p < .05$).

Table 11*The Kruskal Wallis Test on Comparison in terms of Pedagogical Knowledge*

Component	Sample-Sample2	Test Statistics	Std. Error	Std. Test Statistics	Sig.	Adj. Sig
Subject Matter	Expanding-Outer	-22.98	5.80	-3.96	.00	.00
	Expanding-Inner	-25.27	5.80	-4.35	.00	.00
	Outer-Inner	-2.28	6.96	-.32	.74	1.00
SLT	Expanding-Outer	-16.34	5.78	-2.82	.00	.01
	Expanding-Inner	-23.91	5.78	-4.13	.00	.00
	Outer-Inner	-7.57	6.94	-1.09	.27	.82
SLL	Expanding-Outer	-18.39	5.76	-3.19	.00	.00
	Expanding-Inner	-24.71	5.76	-4.28	.00	.00
	Outer-Inner	-6.32	6.92	-.91	.36	1.00
Educational Context	Expanding-Outer	-17.44	5.54	-3.14	.00	.00
	Expanding-Inner	-19.19	5.54	-3.45	.00	.00
	Outer-Inner	1.75	6.65	.26	.79	1.00
Self	Expanding-Outer	-16.30	5.70	-2.85	.00	.01
	Expanding-Inner	-19.37	5.70	-3.39	.00	.00
	Outer-Inner	-3.07	6.84	-.44	.65	1.00
Pedagogical Knowledge	Expanding-Outer	-22.61	5.81	-3.88	.00	.00
	Expanding-Inner	-24.93	5.81	-4.28	.00	.00
	Outer-Inner	-2.32	6.98	-.33	.73	1.00

All in all, a potential conclusion is that the null hypothesis related to the second research question was almost rejected. That is to say, there were significant differences between the expanding, inner, and outer circles of native and non-native teachers in terms of their pedagogical knowledge subscales/total scale in the English as an International Language context except for the subscale of knowledge of learners.

5. Discussion

This section is concerned with the discussion of the main findings of this study in light of the theoretical underpinning of the study and previous studies presented in the extant literature. Regarding the first research question, the one-sample t-test and Wilcoxon

signed ranks test results revealed that all the three circles of English teachers (inner, outer, expanding) had higher than average total pedagogical knowledge, and the null hypothesis for each group and all the subscales except the knowledge of assessment was rejected. In particular, only the outer and inner groups had higher than average knowledge of assessment ($p < .05$). The expanding group just had an average knowledge of assessment ($p > .05$), and the null hypothesis was supported in terms of the knowledge of assessment in the expanding group.

The results of the present study are in line with the findings of the other studies which have been done in this field (e.g., Malva et al., 2020; Mathers, 2021; Worden, 2019). In a study of teachers' pedagogical knowledge,

Gatbonton (2000) examined the patterns of knowledge that experienced second language (L2) teachers used during their instruction. Using the stimulated recall technique, 21 categories of pedagogical knowledge, as reported to be used by the respondents, were determined. Mullock (2006) also replicated Gatbonton's research by utilizing a similar research design. The outcomes were to a large extent in line with the results of Gatbonton's study. The category identified by Mullock (2006), which is the main one, was Language Management. The other categories in descending rank order were the knowledge of students, procedure check, progress review, and noting the student reaction/behavior, respectively.

The interview results, exploring the native and non-native English teacher's perceptions of pedagogical knowledge in the EIL context, showed that they were generally aware of the knowledge required for effective teaching, and all the three groups of teachers belonging to the inner, outer, and expanding circle countries pointed to the different kinds of the pedagogical knowledge, which is in line with the studies referring to the importance of investigating perceptions of native and non-native English teachers in the English as an international context (Lee et al., 2019; Tajeddin et al., 2019). In particular, they referred to the knowledge of grammar, vocabulary, pronunciation, learner, and how to deal with individual differences, awareness of different approaches and methodologies, and other types of explicit and implicit knowledge. They believed that teachers have to change a lot of things and understand the differences between the requirements of the education systems and what is needed in the class. Subject knowledge, scaffolding, lesson planning, and time management were also mentioned as other types of knowledge essential for the teachers, which is in line with previous findings (Soysa & Radmard, 2018; Wiens et al., 2020).

As for the resources of teachers' knowledge, they believed that this knowledge came from academic courses that they attended, experiences that every teacher had before becoming a teacher, colleagues, and the feedback that they received from students. The vast majority of the three groups of teachers

(i.e., inner (66%), outer (100%), and expanding(100%)) considered English a communication tool and did not regard learning all varieties of world Englishes along with the native speaker model of English to be necessary for increasing their general or pedagogical knowledge and believed that it is sufficient to know the differences of varieties of WE to better introduce various cultural stereotypes to the students and develop pedagogical knowledge. These findings support the results of Gatbonton's (1999) think-aloud study in which two experienced English language teacher groups were examined for their beliefs about their pedagogical knowledge and the effects such beliefs might have on their instructional practices. Similar categories of pedagogical knowledge emerged from these teachers' reports.

Concerning the second research question, using one-way ANOVA, Kruskal Wallis, and pairwise comparison tests, the results indicated that the null hypothesis to this research question was almost rejected. That is to say, there were significant differences between expanding, inner, and outer circles of native and non-native teachers in terms of pedagogical knowledge subscales/total scale in the English as an international language context except for the subscale of knowledge of learners. Results have shown that the three groups did not differ in terms of knowledge of learners ($p > .05$), but they did differ in terms of knowledge of assessment, class management, and equity ($p < .05$). The inner and outer groups did not differ with regard to the knowledge of assessment, class management, as well as equity ($p > .05$), but they were of significantly much higher mean scores regarding the knowledge of assessment, class management, as well as equity than the expanding group ($p < .05$). The three groups differed significantly concerning the Total Pedagogical Knowledge, Knowledge of the Subject Matter, SLT, SLL, Educational Context, and Self ($p < .05$). The inner and outer groups did not differ in terms of Total Pedagogical Knowledge, Knowledge of the Subject Matter, SLT, SLL, Educational Context, and Self ($p > .05$), but they were of significantly much higher mean scores in terms of Total Pedagogical Knowledge, Knowledge of the Subject Matter, SLT, SLL,

Educational Context, and Self than the expanding group ($p < .05$).

Regarding the divergence between native and non-native instructors, Reves and Medgyes (1994) reported that the non-native teachers have been in difficult situations as a result of language deficiencies, and therefore they suggested that there should be efforts to improve the language proficiency of the non-native teachers to minimize these deficiencies. Considering the importance of teachers' self-confidence in teaching, they suggested that non-native teachers must be cognizant of their potentialities and accept the differences they have with their native counterparts, which is quite normal and sound. Medgyes (1994) has considered native and non-native instructors as "two different species" (p. 27), and that native and non-native instructors are dissimilar with regard to their language proficiency and instructional practice while stressing the fact that the differences do not mean "better or worse" (p. 76).

In sum, the outcomes showed that generally, all of the teachers belonging to the inner-, outer-, and expanding-circle countries have had good and high perceptions of pedagogical knowledge. They have seen both the benefits and drawbacks of being a native and/or non-native instructor. To them, pedagogical practices do not rely on being a native or non-native; rather, they depend on being well prepared and knowledgeable in teaching.

By drawing on the findings of this study, it is concluded that teachers belonging to inner, outer, and expanding circle countries have had high perceptions of pedagogical knowledge, and that many other types of knowledge can enhance their teaching and practices in the class, mainly the knowledge of subject matter (pedagogical content knowledge). Statistically significant differences were also found between the inner, outer, expanding circle teachers, meaning that there existed a variety of perceptions of PK between native and non-native teachers.

Hence, in line with previous findings (Lee, 2019; Lee et al., 2019; Mathers, 2021; Soysal & Radmard, 2018; Wiens, Beck, & Lunsman, 2020), the outcomes of the present research have offered language researchers and teacher educators great insights into the assumptions

held by the teachers regarding the different aspects of pedagogical knowledge. For instance, teacher education programs in the expanding circle can make adjustments in their current practices to expose the pre- and in-service teachers to a range of English varieties. Teacher educators are also required to design and prepare workshops and training sessions for instructors and teacher students to make them aware of their own pedagogical knowledge and responsibilities, in addition to the potential contributions that they can have in the teaching and learning process. As international communication involves an extensive range of English users worldwide, EIL-oriented approaches are required to be implemented in ELT and, more specifically, in its materials development and use (Nguyen, Marlina, & Cao, 2020).

One limitation of the present study was the feasibility of access to native (inner-circle) and non-native (outer and expanding circle) teachers. The teachers who were representative of the 3 circle countries and were willing to cooperate and join this study. If the data could have been collected from different inner, outer, and expanding countries, the results could have allowed for stronger conclusions. Considering the large population of EIL teachers around the world, drawing any general conclusions based on the study findings must be done with caution. The other limitation was related to the participants' interview, which had to be conducted online through Oovo, Skype, or video conferencing. The semi-structured interviews with non-native teachers from Iran were face-to-face, as a result, more comprehensive data were collected during the interactions.

Despite the mismatches between the current status and functions of EIL and the conventional assumption of ELT, as Seidlhofer (1999) states, it may be a lot useful to carry out future research studies to evaluate the efficacy of teacher education programs, training teachers of inner, outer, and expanding circle countries. It is necessary to explore in what ways these programs educate future teachers about the principles of EIL and various types of teachers' knowledge. This can determine and assess the formation of teachers' knowledge. As there were inconsistencies in the findings, more studies

are required to identify the gaps between teachers' perceptions and practices of PK for teachers in inner, outer, and expanding circle countries.

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