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Teacher Talk in Pre-Service English Teachers' Microteaching and Factors Affecting its Configuration*

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ABSTRACT

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The study aimed to investigate pre-service English teachers' teacher talk in microteaching and the factors affecting its configuration. To this end, it included i) more elaborated categorization of teacher talk, ii) more comprehensive research focus unbound by particular types of teacher talk, and iii) more factors beyond English proficiency that may affect the configuration of teacher talk. Thirty pre-service English teachers participated in the study and their microteaching was audio-taped. Based on the analysis of teacher talk using ANOVA, the study confirmed that the configuration of teacher talk varied both in terms of major types and sub-types. Among the major types, 'Instructing' was used the most while 'Cognitive structuring' was the least used during microteaching. Concerning sub-types, 'Neutral instructing' was used most among the 'Instructing' and 'Referential question' was used most among the 'Questioning.' The study using Kendall's tau-b correlation and a Fisher's Exact Test confirmed the factors affecting the teacher talk: the pre-service teachers' oral English proficiency, their experience as a teacher and as a student in an English-medium class. The results suggest that the pre-service teachers with higher oral proficiency, more teaching experience in English, and more learning experience in an English-medium class used the types of teacher talk that can better promote not only instruction but also interactions with their students.

I. INTRODUCTION

Microteaching has been acknowledged as a significant way of developing teaching skills in pre-service teacher training (H. J. Kim, 2008; Y. Lee, 2015; J. D. Ohn & N. Lee, 2020; S. Park & Y. Oh, 2012). Despite pre-service English teachers' fear and anxiety about performance in microteaching (H. J. Kim, 2009; Y. J. Lee & Davis, 2018; Y. Yim, 2017), microteaching has been positively perceived as beneficial (J. Choi, 2019; H. J. Kim, 2008; S. Park & Y. Oh, 2012). In particular, the effect of microteaching was empirically confirmed in comparative studies of pre- and post-experience of microteaching (K. Chang & Y. Jeon, 2015) and in the studies of teacher's self-efficacy (Arsal, 2015; S. Lee & M. Min, 2018; Y. J. Lee & Davis, 2018).

Previous research concerning microteaching has focused on teacher talk during microteaching (Y. H. Choe, 2015; H. J. Kim, 2010; E. J. Lee, 2011; K. H. Rha, 2010). The previous research has attempted to identify types and features of teacher talk in micro-teaching (e.g., 'Repair' in J. Lee, 2018; 'Directives' in E. J. Lee, 2011; 'Questions' in

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S. Lee, 2020). Although the previous research shed light on the configuration of teacher talk, there are some limitations. First, the research based on the qualitative analysis seems to rely on limited number of participants (e.g., three participants in J. Lee, 2018; four participants in K. H. Rha, 2015). Second, the research based on the quantitative analysis has been conducted with simplified classification (e.g., J. E. Kim, 2017) and with limited research scope (e.g., 'Directives' in E. J. Lee, 2011; 'Repair' in J. Lee, 2018). Third, not many attempts have been made to expand the research limited to the identification of the types of teacher talk to the investigation of the factors that may affect teacher talk. There have been a few attempts in previous research; however, the primary concern as a factor seems to be the pre-service teachers' English proficiency (e.g., Y. H. Choe, 2015; H. J. Kim, 2010). Considering the pre-service teachers' experience in (micro)teaching as a teacher and/or as a student in an English-medium class may also affect their teacher talk in microteaching, these factors need to be examined.

These limitations in previous research call for comprehensive investigation involving more elaborated categorization and other factors beyond English proficiency in order to scrutinize what shapes the teacher talk. To this end, the present study included a) more elaborated categorization of teacher talk, b) more comprehensive research focus unbound by particular types of teacher talk, and c) more factors beyond English proficiency that may affect the configuration of teacher talk. Furthermore, the study included various factors: a) the pre-service teachers' oral English proficiency which is more relevant to teacher talk performed orally in microteaching rather than TOEIC scores used in some studies (e.g., H. J. Kim, 2010), b) experience in (micro)teaching in English as a teacher, c) experience in learning as a student in an English-medium class. With this in mind, the research questions of the present study are as follows.

1) What is the configuration of the pre-service English teachers' talk in microteaching? Is there any specific type that is more favored or less favored?
2) Is there any relation between the configuration of teacher talk and the pre-service teachers' English proficiency?
3) Is there any relation between the configuration of teacher talk and the pre-service teachers' (micro) teaching & learning experience in an English-medium class?

II. LITERATURE REVIEW

1. Microteaching and Teacher Talk

The importance of microteaching in pre-service teacher training has long been suggested (J. D. Ohn & N. Lee, 2020; S. Park & Y. Oh, 2012; Y. Yim, 2017). For example, pre-service English teachers' positive perceptions on micro-teaching have been confirmed in many studies (e.g., H. J. Kim, 2008; Y. Lee, 2015; S. Park & Y. Oh, 2012). Furthermore, microteaching has been found to promote their teaching competence (J. Choi, 2019), improve teaching performance (Y. Yim, 2017) and even enhance their accommodation skills for a more culturally diverse class (Lee et al., 2017). In comparison between the pre- and post- microteaching, K. Chang and Y. Jeon (2015) found empirical evidence supporting the positive effect of micro-teaching on the development of teaching skills. Furthermore, the effect extends to the improvement of their self-efficacy (e.g., S. Lee & M. Min, 2018; Y. J. Lee & Davis, 2018). Despite negative concerns such as pre-service teachers' anxiety over micro-teaching (e.g., H. J. Kim, 2009; Y. J. Lee & Davis, 2018; Y. Yim, 2017) derived from fear of criticism (H. J. Kim, 2009) and fear of losing face (Y. Yim, 2017), the significance of microteaching in the development of pre-service English teachers' teaching practice seems evident.

Previous research concerning microteaching has been twofold: issues of 'While-teaching' stage and 'Post-teaching' stage. The issue of 'While-teaching' stage is mainly about configuration of teacher talk (J. Lee, 2018; S. Lee, 2020; K. H. Rha, 2010, 2015) while the issues of 'Post-teaching' stage are concerned with evaluation and feedback of the microteaching (Y. Lee, 2015; J. Yi & Y. Kim, 2011; Y. Yim, 2017).

2. Configuration of Teacher Talk

The previous research concerning configuration of teacher talk in microteaching has been conducted with different research focus and research method (Y. H. Choe, 2015; J. A. Lee & H. Choe, 2020; K. H. Rha, 2015). First, in relation to research focus, the scope of analysis varies. For example, one particular feature of teacher talk 'Repair' was focused on in the analysis of J. Lee (2018), 'Directives' (direct and indirect) in E. J. Lee (2011), 'Questions' (types and functions) in S. Lee (2020), and two features 'The implementation of lesson plans' and 'Grammar errors in teacher talk' in K. H. Rha (2015). However, little research has explored pre-service teachers' talk with more comprehensive analysis, which leads to the need for more elaboration in the criteria of analysis in the present study.

Second, research method on this topic also varies in previous research. For example, a qualitative method was utilized in the analysis of K. H. Rha (2015) with four pre-service English teachers and J. Lee (2018) with three pre-service teachers. Semi-qualitative method was attempted in S. Lee (2020) with nine participants. In contrast, a quantitative research method using statistics was used in Y. H. Choe (2015) with thirty pre-service teachers, H. J. Kim (2010) with thirty-two pre-service teachers, and J. A. Lee and H. Choe (2020) with twenty-four pre-service teacher talks. Although qualitative analysis of a few teachers may be meaningful, a thorough investigation using statistical analysis may give more objectivity to the con-

figuration of teacher talk in microteaching in the present study.

Given the utilization of different research focus and method, the findings of previous research appear inconsistent. First, in relation to the classification of teacher talk, K. H. Rha (2010) found from the analysis of five pre-service teachers that 'Asking questions' was most frequently used in the teacher talk. From the comparison of three preservice teachers' 'Repair' in teacher talk, J. Lee (2018) suggested that 'Other-initiated self-repair' was used more by the teacher with higher scores of microteaching performance while 'Self-initiated self-repair' was favored by the one with lower scores. In addition, 'Instructing' was used the most in the individual practice of pre-service teacher group while 'Providing feedback,' 'Instructing,' and 'Modeling' were used more in the collaborative practice group in J. A. Lee and H. Choe (2020). Furthermore, in comparison with the corpus of native English-speaking teachers, E. J. Lee (2011) found that pre-service teachers used more 'Direct directives' with the lack of mitigators while native English-speaking teachers used 'Indirect directives' more frequently.

Second, in relation to the factor that may affect teacher talk, only a few studies (e.g., Y. H. Choe, 2015; H. J. Kim, 2010) explored such factors. The factor primarily investigated in the research is the pre-service teachers' English proficiency. For example, in the study of H. J. Kim (2010) 'Confirmation check,' 'Comprehension check,' and 'Recast' were more frequently found in the pre-service teachers with higher English proficiency while 'Repetition' and 'Clarification' were found in those with lower English proficiency. She interpreted these findings relating to different intentions: the intention to check the interaction for the proficient teachers vs. the intention to deliver message for the less proficient teachers. On the other hand, Y. H. Choe (2015) found that 'Direct repair,' 'Extended wait time,' 'Extended learner turn,' and 'Teacher interruption' were frequently used by more proficient pre-service teachers.

3. Factors Affecting Teacher Talk

Factors that may affect the configuration of teacher talk have been overlooked in previous research. There have been only two studies that explored the factors affecting the configuration of teacher talk. First, H. J. Kim (2010) found that pre-service teachers with higher English proficiency used 'Reciprocal understanding' more than the ones with lower English proficiency. It was also found that the teachers with higher anxiety avoided active interaction modification strategies more than the ones with lower anxiety. Regrettably, the analysis of teacher talk was limited to 'Interaction modification.'

Second, Y. H. Choe (2015) also investigated the relations between pre-service teachers' English proficiency and their teacher talk. It was found that the teachers with higher English proficiency used 'Direct repair,' 'Extended wait time,' and 'Extended learner turn' more than the ones with lower proficiency.

Beyond the pre-service teachers' English proficiency, their experience in (micro)teaching as a teacher and in learning as a student in an English-medium class need to be explored in the present study. In addition, rather than having English proficiency level measured by written TOEIC tests (e.g., H. J. Kim, 2010), pre-service teachers' oral English proficiency that is more relevant for microteaching needs to be considered in the present study.

III. METHOD

1. Subjects

A total of thirty university students (Male = 7, Female = 23) participated in the study. They were pre-service English teachers taking a course titled 'Teaching English to Speakers of Other Language (TESOL)' at a local university. They varied in English proficiency, experience in (micro)teaching, and experience in learning in an

TABLE 1
Demographic Information of Participants

Male = 7, Female = 23								***M***	***SD***
Oral English proficiency[1]	L1 (0)	L2 (0)	L3 (13)	L4 (6)	L5 (9)	L6 (2)	L7 (0)	4.00	1.02
Experience in (micro)teaching in an English-medium class	Experience (22)				No Experience (8)			0.27	.45
Experience in learning in an English-medium class	0 class (0)		1 class (10)		2 classes (10)		3 classes (10)	2.00	.83

[1] Oral proficiency was evaluated by two native English-speaking professors based on OPIc scales: L1 Novice mid, L2 Novice high, L3 Intermediate low, L4 Intermediate mid, L5 Intermediate high, L6 Advanced low, L7 Advanced mid (https://www.languagetesting.com/pub/media/wysiwyg/manuals/actfl-fam-manual-opic.pdf).

English-medium class as shown in Table 1. They were informed that the audio scripts of their microteaching were collected, and the data were treated anonymously and kept confidential.

The course they were taking was an English-medium class and the class met online twice a week using a real-time remote learning tool ZOOM platform. Each session lasted 75 minutes. The course was designed to promote the pre-service teachers' development of teaching skills based on various theoretical foundation including lectures, microteaching, and discussions. The pre-service teachers' microteaching included opening, instruction & an activity, and closing. Each microteaching session was conducted in English for 15 minutes.

2. Materials and Procedure

The criteria for teacher talk were adopted and revised from Gallimore and Tharp (1990) and J. A. Lee and H. Choe (2020) at the initial stage. They were 'Instructing' (for assisting performance or calling for specific action as in "First, select the card"), 'Modelling' (providing a model for imitation as in "If I were you"), 'Cognitive structuring' (providing a structure for thinking and acting as in "Think about the theme of this story"), and 'Questioning' (calling for an active response as in "What is this?"), and 'Feedback' (feedback on students' performance as in "Good job!").

Next, after the initial stage of selection, more elaboration was made in the criteria. First, based on corpus analysis of E. J. Lee (2011), the type 'Instructing' was further subdivided into 'Direct instructing' (e.g., 'don't,' 'must,' 'have to,' 'need to,' 'I want you to…') and 'Indirect instructing' (e.g., 'might,' 'could,' 'can,' 'would,' 'recommend,' 'hope'). Furthermore, 'Neutral instructing' (e.g., "It is called…," "There are three ways…") was added. Second, the type 'Questioning' was further subdivided based on Walsh (2011) into 'Clarification & confirmation' (to clarify what the student/teacher has said as in "Did you say…?"), 'Display question' (to repeat the student's/teacher's previous utterance as in "You *went* to the park?"), and 'Referential question' (seeking the answer the teacher does not know as in "Which card do you have?"). Third, the cases that did not belong to any of the criteria (e.g., Greetings, Jokes) were assigned to the type 'Others' in the criteria.

After the elaboration, the criteria of teacher talk were finalized. There are six types in major categories and six sub-categories, which is a total of 10 items as shown in Table 2. The internal consistency of the scales (10 items) with the Cronbach's alpha coefficient was also confirmed ($\alpha = .713$).

Each participant's microteaching (15 min) was recorded and transcribed manually. The analysis proceeded as follows. First, the researcher coded the data according to the categories (Gallimore & Tharp, 1990; J. A. Lee & H. Choe, 2020; Walsh, 2011) and analyzed each case using a structural coding method (Saldaña, 2009). In this analysis, the total number of words and sentences were counted and then the type of each teacher talk was identified and counted in each category (see Table 2). For example, an item "Which one did you pick?" was coded as QR since it belonged to the category 'Questioning' and the sub-category 'Referential question.' Second, it was cross-checked with another expert who is a professor with 15.5 years of experience in teacher training and research. Third, to investigate any factor that may affect the configuration of teacher talk, a questionnaire concerning their experience in (micro) teaching and experience in learning in an English-medium class was provided to the participants. The survey was conducted online in the first week of the semester.

TABLE 2
Types of Teacher Talk

Category	Sub-category	Example	Coding
Instructing	Direct	"Don't use the past tense" "I want you to use a polite word"	ID
	Neutral	"There are three ways to make a suggestion"	IN
	Indirect	"I hope you make a complete sentence"	II
Modelling		"Do what I do like this"	M
Cognitive structuring		"Think about the theme of this story"	CS
Questioning	Clarification & confirmation	"Did you say…?"	QC
	Display question	"You *went* to the park yesterday?"	QD
	Referential question	"Which card do you have?"	QR
Feedback		"Good job!"	F
Other	Greetings, Jokes, etc.	Greetings ("Hello"), Jokes	O
Cronbach's $\alpha = .713$ (10 items)			

3. Data Collection and Treatment

First, data from the analysis of teacher talk and questionnaire were manually collected and organized in Microsoft Excel 2016 and then fed into SPSS 21. Second, descriptive analysis was conducted for frequency of utterance in each type and then one-way Analysis of Variance (ANOVA) was conducted to explore any difference among the types of teacher talk. The same procedure was repeated to explore any difference among the sub-types of teacher talk. Third, regarding the factors that affect the pre-service teachers' teacher talk, Kendall's tau-b (τb) correlation was used to investigate any relations with oral English proficiency and with learning experience in an English-medium class respectively. A Fisher's Exact Test was used to investigate any relation with the pre-service teachers' experience in teaching.

IV. RESULTS

1. Configuration of Teacher Talk

The pre-service teachers' talk was analyzed in terms of six major categories. The types 'Instructing' and 'Questioning' were further analyzed based on three sub-categories in each type.

TABLE 3
Configuration of Teacher Talk

Category	Sub-category	*M*	*SD*	*M*	*SD*
Instructing	Direct	3.07	2.12	22.10	10.33
	Neutral	14.17	8.26		
	Indirect	4.87	4.23		
Modelling				5.80	3.45
Cognitive structuring				.07	.25
Questioning	Clarification & confirmation	1.13	1.66	7.13	4.88
	Display question	.50	.82		
	Referential question	5.50	3.68		
Feedback				5.07	2.91
Other				3.03	1.77

As shown in Table 3, among the major types 'Instructing' ($M = 22.10$, $SD = 10.33$) was used the most followed by 'Questioning' ($M = 7.13$, $SD = 4.88$). In contrast, 'Cognitive structuring' ($M = .07$, $SD = .25$) was the least used by the pre-service teachers during microteaching.

Among the sub-categories of 'Instructing,' 'Neutral instructing' ($M = 14.17$, $SD = 8.26$) such as "There are three ways to make a suggestion" was used the most. Among the sub-categories of 'Questioning,' 'Referential question' ($M = 5.50$, $SD = 3.68$) such as "Which card do you have?" was used the most.

TABLE 4
Difference among Major Types in Teacher Talk

Category	*n*	*M*	*SD*	*F*	*p*
Instructing	30	22.10	10.33	69.349*	.00
Modelling	30	5.80	3.45		
Cognitive structuring	30	.07	.25		
Questioning	30	7.13	4.88		
Feedback	30	5.07	2.91		
Other	30	3.03	1.77		

* The difference is significant at the .05 level.

In order to investigate the statistical difference among the major types of teacher talk, one-way Analysis of Variance (ANOVA) was conducted. As shown Table 4, there was a statistically significant difference at the $p < .05$ level in teacher talk for the six major types: $F(5, 174) = 69.349$, $p = .00$). The effect size, calculated using eta squared, was .67 indicating a large effect.

Post-hoc comparisons using the Tukey HSD test indicated that the mean score for 'Instructing' ($M = 22.10$, $SD = 10.33$) was significantly higher than other categories (e.g., 'Modelling' $M = 5.80$, $SD = 3.45$). The type 'Modelling' was significantly higher than 'Cognitive structuring' ($M = .07$, $SD = .25$). The type 'Cognitive structuring' was significantly lower than 'Questioning' ($M = 7.13$, $SD = 4.88$), and 'Feedback' ($M = 5.07$, $SD = 2.91$). The type 'Questioning' was significantly higher than 'Others' ($M = 3.03$, $SD = 1.77$). The type 'Feedback' was significantly lower than 'Instructing' and higher than 'Cognitive structuring.' The type 'Others' was significantly lower than 'Instructing' and 'Questioning.'

TABLE 5
Difference Among Sub-Types in 'Instructing'

Instructing	*n*	*M*	*SD*	*F*	*p*
Direct	30	3.07	2.12	35.25*	.00
Neutral	30	14.17	8.26		
Indirect	30	4.87	4.23		

* The difference is significant at the .05 level.

Table 5 suggests the difference among the sub-categories in 'Instructing.' In one-way Analysis of Variance (ANOVA), there was a statistically significant difference at the $p < .05$ level in sub-types of 'Instructing': $F(2, 87) = 35.25$, $p = .00$). The effect size, calculated using eta squared, was .45 indicating a large effect. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for 'Direct instructing' ($M = 3.07$, $SD = 2.12$) was significantly different from 'Neutral instructing' ($M = 14.17$, $SD = 8.26$) but did not differ from 'Indirect instructing' ($M = 4.87$, $SD = 4.23$). The sub-type 'Neutral instructing' was significantly different from both 'Direct instructing' and 'Indirect instructing.'

TABLE 6
Difference of Sub-Types in 'Questioning'

Instructing	*n*	*M*	*SD*	*F*	*p*
Direct	30	1.13	1.66		
Neutral	30	.50	.82	39.28*	.00
Indirect	30	5.50	3.68		

* The difference is significant at the .05 level.

Table 6 suggests the difference among the sub-types in 'Questioning.' In one-way Analysis of Variance (ANOVA), there was a statistically significant difference at the $p < .05$ level in sub-types of 'Questioning': $F(2, 87) = 39.28$, $p = .00$). The effect size, calculated using eta squared, was .47 indicating a large effect. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for 'Clarification & confirmation' ($M = 1.13$, $SD = 1.66$) was significantly different from 'Referential question' ($M = 5.50$, $SD = 3.68$) but did not differ from 'Display question' ($M = .50$, $SD = .82$). The sub-type 'Display question' was significantly different from 'Referential question.'

2. Factors Affecting the Configuration of Teacher Talk

To identify the factors that may affect the configuration of teacher talk, the relations were examined with the pre-service teachers' oral English proficiency, teaching experience, and learning experience in an English-medium class.

Table 7 shows the relations between the types of teacher talk and the level of oral English proficiency. Kendall's tau-b (τb) correlation was used for a discrete variable (teacher talk) and an ordinal variable (the level of oral English proficiency). In relation to the quantity of teacher talk, positive relations were found with both 'Total words' ($r = .668$, $n = 30$, $p < .01$) and 'Total sentences' ($r = .842$, $n = 30$, $p < .01$), which suggests that the higher oral proficiency the pre-service teachers had, the more teacher talk they used in microteaching.

In relation to the types of teacher talk, the positive relations were found between oral English proficiency and 'Instructing' ($r = .716$, $n = 30$, $p < .01$), 'Modelling' ($r = .395$, $n = 30$, $p < .01$), 'Cognitive structuring' ($r = .344$, $n = 30$, $p < .05$), 'Questioning' ($r = .595$, $n = 30$, $p < .01$), 'Feedback' ($r = .437$, $n = 30$, $p < .01$), and 'Others' ($r = .328$, $n = 30$, $p < .05$). This suggests that the higher oral English proficiency the pre-service teachers had, the more teacher talk they

TABLE 7
Relations Between Teacher Talk and Oral English Proficiency

Category	Sub-category	*r*	*p*	*r*	*p*
Instructing	Direct	.223	.126	.716**	.000
	Neutral	.682**	.000		
	Indirect	.243	.106		
Modelling				.395**	.008
Cognitive structuring				.344*	.047
Questioning	Clarification & confirmation	.251	.117	.595**	.000
	Display question	.338*	.042		
	Referential question	.542**	.000		
Feedback				.437**	.003
Other				.328*	.034
Total words				.668**	.000
Total sentences				.842**	.000

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

TABLE 8
Relations Between Teacher Talk and Teaching Experience

Category	Sub-category	No Experience (%)	Experience (%)	*p*	No Experience (%)	Experience (%)	*p*
Instructing	Direct	4.46	3.73	.838	32.47	26.12	.654
	Neutral	20.09	18.36	.888			
	Indirect	7.92	4.03	.577			
Modelling					8.52	6.87	.718
Cognitive structuring					0.07	0.15	.469
Questioning	Clarification & confirmation	1.33	2.09	.087	8.45	12.99	.286
	Display question	0.47	1.19	.113			
	Referential question	6.65	9.70	.385			
Feedback					5.46	10.45	.00
Other					4.13	4.33	.544
Total words					47.25	52.75	1.000
Total sentences					44.30	55.70	.925

used in all types. Among the types of teacher talk, the correlation was the strongest with 'Instructing' followed by 'Questioning' (based on Cohen, 1988). This suggests that higher proficient teachers used significantly more instructing and questioning during their microteaching.

Among the sub-types of 'Instructing,' there was positive correlation with 'Neutral instructing' ($r = .682$, $n = 30$, $p < .01$). This suggests that when the pre-service teachers with higher oral proficiency gave instructions, they used 'Neutral instructing' more. Among the sub-types of 'Questioning,' a positive correlation was found with 'Display question' ($r = .338$, $n = 30$, $p < .05$) and 'Referential question' ($r = .542$, $n = 30$, $p < .01$). This means that when the pre-service teachers asked the students questions, the teachers with higher oral proficiency used 'Display question' and 'Referential question' more.

Table 8 shows the relations between the types of teacher talk and teaching experience in English (either experience or no experience). Since chi-square assumption was violated (more than 20% of cells have expected frequency less than 5), a Fisher's Exact Test was used to discover if there was a relationship between the two variables. The statistically significant relation was found between teaching experience and 'Feedback' ($p = .00$). The teachers with teaching experience used 10.45% of 'Feedback' while the teachers without teaching experience used only 5.46% of 'Feedback.' However, the relations with other types of teacher talk did not reach statistical significance ($p > .05$). In relation to the quantity of teacher talk ('Total words and 'Total sentences'), the difference based on the teaching experience did not reach statistical significance ($p > .05$). This means that their teaching experience did not make a significant difference in the quantity of teacher talk.

Table 9 shows the relations between teacher talk and learning experience as a student in an English-medium class. Using Kendall's tau-b (τb) correlation, positive relations were found between experience in an English-medium class and 'Instructing' ($r = .299$, $n = 30$, $p < .05$), 'Modelling' ($r = .297$, $n = 30$, $p < .05$), 'Questioning' ($r = .646$, $n = 30$, $p < .01$), and 'Feedback' ($r = .492$, $n = 30$, $p < .01$). This suggests that the more learning experience in an English-medium class the pre-service teachers had as a student, the more 'Instructing,' 'Modelling,' 'Questioning,' and 'Feedback' they used in microteaching. However, the relation with 'Cognitive structuring' and 'Others' did not reach statistical significance ($p > .01$).

Among the sub-types of 'Instructing,' there was positive correlation with 'Neutral instructing' ($r = .354$, $n = 30$, $p < .05$). This suggests that when the pre-service teachers instructed in microteaching, the one with more learning experience used 'Neutral instructing' more than other types of instruction. Among the sub-types of 'Questioning,' a positive correlation was found with 'Display question' ($r = .475$, $n = 30$, $p < .01$) and 'Referential question' ($r = .675$, $n = 30$, $p < .01$). This suggests that when the pre-service teachers asked the students questions the one with more learning experience used 'Display question' and 'Referential question' more.

V. DISCUSSION

1. Configuration of Teacher Talk

The pre-service English teachers' teacher talk in microteaching was analyzed according to six major categories

TABLE 9
Relations Between Teacher Talk and Learning Experience

Category	Sub-category	*r*	*p*	*r*	*p*
Instructing	Direct	.116	.451	.299*	.042
	Neutral	.354*	.017		
	Indirect	-.050	.744		
Modelling				.297*	.049
Cognitive structuring				.000	1.000
Questioning	Clarification & confirmation	.190	.241	.646**	.000
	Display question	.475**	.005		
	Referential question	.675**	.000		
Feedback				.492**	.001
Other				.242	.122
Total words				.435**	.003
Total sentences				.496**	.001

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

(Instructing, Modelling, Cognitive structuring, Questioning, Feedback, and Others) and 6 sub-categories (Direct instructing, Neutral instructing, Indirect instructing, Clarification & confirmation, Display question, Referential question). Overall results of the study suggest that the pre-service English teachers used various types of teacher talk during microteaching [$F(5, 174) = 69.349$, $p = .00$] with differences among the types as follows.

In relation to the major types, 'Instructing' ($M = 22.10$, $SD = 10.33$) was most frequently used while 'Cognitive structuring' ($M = .07$, $SD = .25$) was the least used by the pre-service teachers during microteaching. The finding of 'Instructing' in the present study is in line with J. A. Lee and H. Choe (2020). Their findings in comparison between 'Individual practice' and 'Collaborative practice' conditions suggested that 'Instructing' was used most in the individual practice group. Considering the microteaching was conducted on an individual basis in the present study similar to their 'Individual practice,' the result of this study is in line with their findings. It should be noted that due to the different criteria and different research methods used in previous research, there is little research whose results can be comparable with the present study. For example, the type 'Asking questions' was most frequent in K. H. Rha (2010); however, the analysis was based on different criteria (directive teacher talk, non-directive teacher talk, student talk, and others) using data from five pre-service teachers. In addition, since the criteria was limited to 'Repair' (J. Lee, 2018) and 'Directives' (E. J. Lee, 2011) in previous research with no 'Instructing' in the criteria of the studies, a simple parallel comparison with this study can be hard. Overall, the findings of the present study suggest that the pre-service teachers predominantly used 'Instructing' such as "First, choose one picture" while 'Cognitive structuring' such as "Think about the organization of the story" was not favored in microteaching. This suggests that their microteaching was heavily weighted in favor of providing information rather than facilitating their learning by providing cognitive scaffolding.

In relation to sub-types of teacher talk, the study elaborated the detailed criteria of 'Instructing' and 'Questioning.' First, 'Instructing' was further sub-categorized into 'Direct instructing,' 'Neutral instructing' and 'Indirect instructing.' The findings suggest that there was an overall difference among the sub-categories of 'Instructing' [$F(2, 87) = 35.25$, $p = .00$]. In particular, 'Neutral instructing' was used most; however, the difference between 'Direct instructing' and 'Indirect instructing' did not reach statistical difference. The results suggest that the pre-service teachers instructed primarily in a 'Neutral' way (e.g., "There are many ways to express gratitude. First, …") rather than in a 'Direct' (e.g., "Don't use the present tense.") or an 'Indirect' way (e.g., "I hope you use the past tense."). As E. J. Lee (2011) suggested, the transition from direct to indirect way of giving instruction means transition of the teacher role from "Rule dictator" to "Facilitator" (p. 204). In this sense, the results of the present study suggest that the pre-service teachers are in the process of transitioning to facilitators. In fact, the results seem hopeful in that the teachers did not rely on 'Direct instructing' (e.g., "Don't …") which is not effective for lowering the students' affective filter.

Second, in relation to the sub-types of 'Questioning' ('Clarification & confirmation,' 'Display question,' and 'Referential question'), the findings suggest that there was an overall difference among the sub-types of 'Question-

ing' [$F(2, 87) = 39.28$, $p = .00$]. Among them, 'Referential question' was the most favored; however, the difference between 'Display question' and 'Clarification & confirmation' did not reach statistical difference. Since 'Questioning' was not addressed in previous research (e.g., E. J. Lee, 2011; J. Lee, 2018) nor was sub-categorized in the criteria (e.g., K. H. Rha, 2010), parallel comparison with this study can be hard. Nevertheless, the finding suggesting the predominant use of 'Referential question' among the sub-types of 'Questioning' in this study can be explained as follows. Considering that 'Display question' and 'Clarification & confirmation' are more relevant to the promotion of successful interaction with their students than 'Referential question' in order to seek an answer that the teacher does not know (e.g., "What color did you pick?"), the pre-service teachers at the beginning stage of teaching practice do not seem skillful enough at promoting interaction. Thus, it can be speculated that the pre-service teachers were not able to afford to promote interactions using 'Clarification & confirmation' to check the students' understanding or using 'Display question' to repeat the utterance in the form of a question. Instead, they were absorbed in hastily proceeding with the teaching content for which they had prepared. In fact, there were some observed cases in the microteaching in which the pre-service teachers did not provide repetition when the students were confused. In other cases, they did not ask the students for clarification when it was crucial which consequently led to the failure of the class activity.

2. Factors Affecting Teacher Talk

To overcome the limitations in previous research, the study explored various factors that may affect the configuration of teacher talk. Correlations were found with the pre-service teachers' oral English proficiency, teaching experience, and learning experience in an English-medium class.

The first factor affecting teacher talk is the pre-service teachers' oral English proficiency. In relation to the quantity of teacher talk, positive correlations were found with oral English proficiency. This means, the higher oral English proficiency the pre-service teachers had, the more teacher talk they used in both 'Total words' ($r = .668$, $n = 30$, $p < .01$) and 'Total sentences' ($r = .842$, $n = 30$, $p < .01$). This is in line with Y. H. Choe (2015) suggesting that higher English proficiency contributed to higher quantity of teacher talk during micro-teaching.

The effect of English proficiency was evident in relation to the types of teacher talk. The study confirmed the effect of oral proficiency on all major types of teacher talk. However, concerning the sub-types of 'Instructing,' the positive correlation was found only in 'Neutral instructing.' This suggests that when the pre-service teachers instructed in microteaching, 'Neutral instructing' was used more by the ones with higher oral proficiency. Regrettably, no previous studies used the detailed sub-types of 'Instructing,' which makes it challenging to compare the results. However, the study confirmed that the highly proficient teachers were able to successfully manage instruction in a neutral way. Among the sub-types of 'Questioning,' the positive correlations were found with 'Display question' and 'Referential question.' When the pre-service teachers with higher oral proficiency asked the students questions, they used 'Display question' and 'Referential question' more. Considering 'Display question' is to repeat the student's/teacher's previous utterance as in "You *went* to the park yesterday?," the results in the present study seem to be relevant to H. J. Kim (2010) suggesting that 'Recast' was favored by the pre-service teachers with higher English proficiency. In addition, considering 'Questioning' and 'Feedback' in the present study, 'Teacher interruption' in Y. H. Choe (2015) may be relevant. The positive correlations with English proficiency found in these types of teacher talk in the present study are in line with Y. H. Choe (2015) that confirmed the effect of English proficiency on the frequent use of 'Teacher interruption.'

The second factor affecting teacher talk is the pre-service teacher's teaching experience in English. The effect of teaching experience in English was found only in 'Feedback.' The teachers with teaching experience used approximately twice more of 'Feedback' than the teachers without teaching experience. As H. J. Kim (2010) suggested, less proficient teachers focused on the delivery of message while the proficient teachers focused on the interaction with their students during microteaching. Although her study did not examine the effect of teaching experience, her interpretation may be applied to the effect of teaching experience in this study. That is to say, it is possible to assume that the pre-service teachers with no teaching experience had no composure to interact with their students because they were anxiously preoccupied with the delivery of the message in English. In comparison, the pre-service teachers with teaching experience in English could afford to attend to successful interactions with their students because they could manage the delivery of information during the microteaching.

The third factor affecting teacher talk is the pre-service teachers' experience in learning as a student in an English-medium class. Based on the positive correlations, the study confirmed that the more learning experience in an English-medium class the pre-service teachers had as a student, the more 'Instructing,' 'Modelling,' 'Questioning,' and 'Feedback' they used in microteaching. Since this factor has not been considered in previous research, the direct comparison seems hard. However, it can be deduced that the teacher talk they observed as a student in an English-medium class positively affected their teacher talk in return, particularly in 'Instructing,' 'Modelling,' 'Questioning,' and 'Feedback.' That is, the English-medium classes they experienced may have set a good example of 'How to instruct,' 'How to model,' 'How to ask questions,' and 'How to provide feedback to students.' Consequently, they may have learned consciously or observed subconsciously and applied those observations to their own microteaching.

VI. CONCLUSION

Previous research concerning teacher talk has been limited to the qualitative analysis with limited number of participants (e.g., three participants in J. Lee, 2018; four participants in K. H. Rha, 2015), with simplified classification (e.g., J. E. Kim, 2017) and with limited research scope (e.g., 'Directives' in E. J. Lee, 2011; 'Repair' in J. Lee, 2018). To overcome these limitations, the present study utilized elaborated classification in the analysis of teacher talk. Based on the findings, the study confirmed that the configuration of teacher talk varied both in terms of major types and sub-types. Among the major types, 'Instructing' was used the most while 'Cognitive structuring' was the least used by the pre-service teachers during microteaching. Concerning sub-types, 'Neutral instructing' was used most among the 'Instructing' and 'Referential question' was used most among the 'Questioning.'

Beyond the pre-service teachers' English proficiency as a primary factor that may affect teacher talk in the previous research (e.g., Y. H. Choe, 2015; H. J. Kim, 2010), the present study investigated various factors beyond English proficiency. The factors found in this study were the pre-service teachers' oral English proficiency, teaching experience, and learning experience in an English-medium class. It was confirmed that the pre-service teachers with higher oral proficiency, more teaching experience in English, and more learning experience in an English-medium class used the types of teacher talk that can better promote not only instruction but also interactions with their students.

The findings of the study have some pedagogical implications. First, the pre-service teachers' oral English proficiency seems critical for the teacher talk in their microteaching and thus this should be better recognized both in teacher training programs. Second, the pre-service teacher's teaching experience in English seems essential. Rather than microteaching that rely on the unsystematic use of L1, teaching practice needs to be promoted in English. Third, for their development of teacher talk in English, providing good examples of teacher talk in an English-medium class may be useful so that the pre-service teachers can model and apply the successful teacher talk they observed as a student to their own teaching.

The study yielded convincing findings; yet it has some limitations. Since not many participants had teaching experience, the quantity and the quality of the teaching experience in English could not be investigated. Future research involving the pre-service teachers with various teaching experience may enlighten the effect of this variable on teacher talk. Second, since the majority of the participants were female pre-service teachers, hence the gender difference could not be investigated. This aspect as well may be taken into consideration in future research.

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