

Navigating Turn-Taking System in an Online Synchronous Course: The Case of Gender and Language Proficiency

Azizeh Chalak¹, Mahzad Karimi^{*2}

¹Associate Professor, Department of English, Isfahan (Khorasgan) Branch, Isfahan, Iran

²Ph.D. in TEFL, Department of English, Isfahan (Khorasgan) Branch, Isfahan, Iran

DOI: [10.30495/LCT.2022.1952423.1057](https://doi.org/10.30495/LCT.2022.1952423.1057)

Received: 12/02/2022

Revised: 02/03/2022

Accepted: 08/03/2022

Abstract

English learners' turn-taking system has been impacted due to the sudden shift from traditional face-to-face classes to virtual learning during the COVID-19 pandemic. The purpose of the study was to obtain a closer understanding of how students and teachers constructed turns during their interactions. The data were collected from the audio transcripts of 55 students of two intermediate and two advanced EFL classrooms that were held on the Zoom platform. After collecting the data, they were transcribed through the modified version of Sacks, Schegloff, and Jefferson's Model and analyzed by the SPSS, through the Chi-Square tests. The results showed that the students were mostly addressed by their teachers. Moreover, the male students took more turns, and there was a meaningful difference in the turn-taking system of the intermediate and advanced EFL learners. Therefore, both gender and the level of proficiency influenced the patterns of turn-taking in online classrooms. The results might contribute to raising teacher awareness towards the preferred turn-taking patterns in a virtual synchronous classroom.

Keywords: Conversation Analysis; Gender Differences; Level of Proficiency; Online Synchronous Classrooms; Turn-Taking

1. Introduction

Teaching and learning processes have shifted from the traditional face-to-face classroom into online distance learning, and this will undergo in post-pandemic. Due to the COVID-19 pandemic, E-learning adoption also known as web-based learning has been increasing all around the world

* Corresponding Author's E-mail address: Mahzad_ka2000@yahoo.com



(Greller & Drachsler, 2012; Racheva, 2018). E-learning is defined as a set of instructions delivered through the use of Information and Communication Technology (ICT). One of the drawbacks of E-learning is that many learners are reluctant to take part in online discussions (Wut & Xu, 2021). Therefore, a smooth turn-taking transition might be hindered (Seuren et al., 2020).

Taking turns, asking and answering questions, and providing feedback are essential components of classroom discourse. Sacks et al. (1974) elaborated the principles of turn-taking. According to their framework, the transition between speakers usually occurs at a transition relevance place (TRP) that speakers employ a handful of conversational techniques to assign the responsibilities of the interlocutors. Nicholls (1993) also claims that the dominant traditional turn-taking pattern in the L2 classroom discourse is Q-A-C (Question-Answer-Comment). Rymes (2009) argues that these traditional patterns reflect an unequal teacher-fronted discourse in the classroom. In other words, a teacher is the only one who knows, and they have the only ones who have the right to comment on the students' answers.

More recently, various researchers have investigated synchronous computer-mediated communication (CMC), interactions using verity of chatting programs, and preferred turn-taking strategies on online learning platforms (Jocuns et al. 2020, Lee, 2007; Rahmatika & Laila, 2021). Some researchers (Puri, 2012; Rezai & Zafari, 2010) have enumerated the benefits of synchronous CMC programs as follows: (a) encouraging students' participation, (b) allowing students to speak without any interruption, (c) providing personalized identification, and (D) creating substantial communication. However, there are some potential disadvantages that could impede smooth transition between the teachers and students (Darhower, 2002).

One of the main differences between women and men's speech can be related to the fact that men dominate exchanges through the use of interruptions and overlaps (Hussein, 2020). Men possess a speech style based on power and try to take more turns. According to sociolinguistic theories, gender-specific conversational strategies can emerge in conversation (Amani, 2020). According to Coates (1998), females are more curious to take a turn in conversation than men; meanwhile, males are more straightforward, being silent, and neglect the turn-taking offer. Sadker (1999) also maintains that classroom interactions between teachers and students put men in a spot-light, and relegated females to the sidelines, or to invisibility.

Therefore, research on turn-taking in regard to gender differences had addressed various results (Amir & Jakob, 2020; Chalak & Karimi, 2017; Yakushkina, 2018). Moreover, there are many issues with participation in online environments. For example, technology-related troubles such as delays and orientation disparities, the absence of some valuable resources, lack of immediacy in time and place, and lack of non-verbal behavior can affect the turn-taking system. Therefore, the existing account fails to address the EFL learners' strategies to take or hold a turn in an online environment.

The principal objective of this paper was to investigate the turn-taking system applied in an online synchronous course. Moreover, the study sought to discover the differences between males and females regarding the preferred strategies of turn-taking. Finally, two proficiency levels of intermediate and advanced were examined. The finding of this study could shed light on how males and females contribute differently in collaborative synchronous online classroom discourse, and it might empower teachers to give equal opportunities to all students and enhance students' motivation to interact more.

2. Literature Review

2.1. Conversation Analysis (CA) and Turn-Taking

Conversation analysis (CA) is a method for investigating the structure and process of social interaction among humans. Heritage (1984) proposed that the main goal of conversation analysis is description and elaboration of the competence that ordinary speakers use and rely on in participating in an intelligible socially organized interaction. CA is an organized system, as Seedhouse (2005) puts forward, there are some basic principles of CA that demonstrate this arrangement, and they include: (a) the systematically organized and deep order exist in interaction, (b) contributions to interaction are context-shaped and context-renewing, (c) no order of details can be dismissed a priori as disorderly, accidental, or irrelevant.

The best-known description of verbal turn-taking in conversation was proposed by Sacks et al. (1974). They consider CA as a great range of speech-exchange systems that has its roots in ethnomethodology. Accordingly, an account of turn-taking was improved to be independent of parameters of context, circumstances, topics of talk, the identities of participants in conversation; however, it was capable of great context-sensitivity because the conversation could be involved a wide range of situations, interactions, and changes among parties with any potential identities and familiarity.

Sacks et al. (1974) maintained that turn-taking is systematic and has been described in terms of two components, turn-construction and turn allocation. A turn is composed of various types of language units, such as sentences, clauses, phrases, and lexical items. These units which make up a turn are referred to the turn constructional units (TCUs). Turn allocation means the ways of selecting the next speaker, including addressing a specific party, asking tag questions, making reduced questions, and allowing someone immediately to be selected as a next speaker without a clear addressing.

Brown and Lee (2015) states that interaction and turn-taking are the basis of learning, through which learners are engaged in enhancing their communicative skills and constructing their identities through collaboration and negotiation. In fact, the teaching process is one of conversation which happens through spoken discourse or talk-in-interaction (Seedhouse, 2005). Hook (1981) classifies different kinds of classroom interactions as follows: (a) student-teacher interaction, (b) student-student interaction, (c) small group interaction, and (d) entire classroom interaction.

2.2. Studies Conducted Turn-Taking System in the Classroom

Classroom interaction is basically viewed as a two-part interaction, in which the teacher is one party, and the whole class of students as a collective group is the other party (Lerner, 2002). Paoletti and Fele (2004) argued that there are some rules in the classrooms, but the rules are not always applied. According to the pedagogical program, teachers try to control turn-taking and avoid overlapping turns; for example, they do not accept answers that are called out. Markee (2000) criticized having a homogeneous point of view about classroom interaction. He maintains that students are not passive addresses and they can affect the design and structure of the turn-taking patterns.

Seedhouse (2005) worked on the patterns of classroom turn-taking and found that there was a variation in turn-taking organization in different L2 contexts. There was a relationship between interaction and pedagogy that participants showed through their orientation to the dynamic organization of the turn-taking in different contexts. According to Seedhouse, the most fixed organization of turn-taking was related to the form and accuracy context, in which the teacher was in strict control of the turn-taking process and decided who had to speak and when. Seedhouse (2005) also examined another L2 classroom context that was task-oriented with meaning and fluency exercises. The results were in contrast with the form and accuracy context, and there was less rigid turn ordering.

Lehtimaja (2011) outlined that giving the chance for a turn through raising one's hand in the classroom was an appropriate way for many students to demonstrate to the teachers that they most probably know the answer, and they are willing to participate in the classroom discussion. However, only one student was nominated. Lehtimaja concluded that students' hand-raising could happen in a variety of sequential places, other than in transition relevance place (TRP). He cited that students' hand-raising practices were depended on the nature and direction of the teacher's gaze during teacher initiations. Her analysis showed that when teachers directed their gaze towards the class collectively, students raised their hands to get the chance of taking a turn.

Generally speaking, crucial issues in classroom settings are how students construct turn-taking, what kinds of questions they ask, and who will initiate talking (Dewi et al., 2018; Gorjian & Habibi, 2015; Yoshida, 2008). Yoshida (2008) recorded spoken interaction between the teacher and student to analyze the classroom discourse regarding the discourse markers, interactional sequences, and speech acts. The results revealed that the language used in the classroom contained various functions of integrational sequences that exist in authentic and natural communication.

The general belief is that different from the natural conversation in which participants construct turn symmetrically, turn allocation in educational contexts is dominated by the teacher, which leads to an asymmetrical relation (Ansori, 2019; Evnitskaya & Berger, 2017; Garton, 2012; Sari, 2020). In addition, in face-to-face classroom interaction, teachers impose power structures and continuously ask questions to evaluate the responses of students. That is why Initiation, Response, Evaluation (IRE) or Initiation, Response, Feedback (IRF) are frequently observed (Brooks, 2016).

2.3. Studies Conducted on Turn-Taking, Gender, and Language Proficiency

Sunderland (1998) focused on males and females' talk to the teacher in the foreign language classroom. She claimed that although there has been much research on gendered discourse, there have been few studies of gender and interaction in EFL contexts. It has been generally presupposed that gender influences the process of teacher/student interactions in the classrooms.

Eighty-one meta-analysis studies on gender differences and student-teacher interaction have been done by Kelly (1998). Accordingly, teachers made eye contact more frequently with males than with females and permitted their classrooms to be male-dominated by calling on males

more frequently. It is argued that teachers allowed males to interrupt females and respond to males with attention. The results showed that the teachers tended to interact more with boys than girls. Teachers asked boys more questions and provided much more response opportunities.

It can be concluded that most studies are based on the theory of Lakoff (1975) and Wardhaugh (2006), who maintain that the words of the speech act of women are different from men. They assert that various linguistic features, such as tag questions, linguistic expletives, and question intonation correlate more with women than men. In other words, males are more direct and present concise ideas, while females use lengthy emotional sentences (Gregoria et al., 2021).

Ghilzai & Baloch (2016) believe that women take more turns in conversation that is a sign of assertiveness. In the contrary, men were more talkative in class when the teacher was female, while they tended to be passive when the teacher was a male. Thus, teachers' gender might affect students' participation (Iqbal & Azhar, 2019). Furthermore, men often take the floor in conversation through employing strategies, such as integration with women's ideas, changing the topics of discussion, and being silent to hesitate women (Hellum & Olah, 2018).

In Iranian contexts, some researchers (Rashidi & Naderi, 2012; Rashidi & Rafiee Rad, 2010) found that boys are more inclined to interact with their teachers, willing to respond to the questions, and take longer turns. In another study, Chalak and Karimi (2017) investigated the turn-taking and repair strategies used by Iranian EFL learners. The results of the study revealed that the female students were mostly addressed by their teachers; however, voluntarism was commonly observed among male students (Chalak & Karimi, 2017).

In a study conducted by Yarahmadi and Sadeghi (2012), the relationship between general proficiency and the turn-taking strategies was analyzed. The participants were intermediate and advance English Translation students. The researchers observed that used more techniques to take a turn in telling a short story. Similar results were reflected in Galaczi's (2013) study that demonstrates turn-taking management increased with proficiency level and learners become more efficient decoding their partner's utterances.

In EFL virtual classrooms, teachers try to enhance the students' participation by initiating linguistic exchanges, assigning turns, and having the right to the third move. In a study conducted by Jocuns et al. (2020), classroom discourse practices that emerged during the COVID-19 Pandemic crisis were analyzed. The researchers employed nexus analysis, an action-focused approach incorporating aspects of ethnography. They

concluded that the communication within the online environment was more between teachers and students, and the virtual classrooms negatively impacted the interaction between students. Similarly, Rahmatika and Laila (2021) analyzed the discourse structure of a classroom session during the Covid-19 Pandemic. They found that the interaction between teachers and students was not balanced. The teachers were too dominant, and they were not successful at constructing an interactive learning environment.

Despite the ample studies done on the turn-taking system, little attention has been paid to the analysis of the turn-taking system in virtual classrooms. Moreover, much uncertainty still exists about the relationship between language proficiency and the preferred strategies of taking turn. The present study aimed to address the following research questions:

- 1) What is the turn-taking system of Iranian virtual EFL classroom used by teachers and students?
- 2) What is the effect of gender on the students' turn-taking system, in Iranian virtual EFL classrooms?
- 3) What are the differences between the intermediate and advanced levels of Iranian EFL students at applying the turn-taking system?

3. Methodology

3.1. Design and Context of the Study

The basic factor of analyzing turn-taking system was conversation analysis (CA), and the focus of CA is on analyzing conversation and interaction in natural conditions. There was no intervention, or suggestion to the teachers to use a special method of teaching. Therefore, the design of the study was descriptive, because it was the best method for collecting the data. Due to the outbreak, the context of the study was limited to the Zoom Platform, which provided synchronous interactions between educators and students.

3.2. Participants

This study was conducted on two proficiency levels of intermediate and advanced in the academic year 2020-2021. The Iranian EFL male and female students were 18-30 years old, and each classroom had 12-15 students. All participants (N=55) were university students or graduated in various fields of the study. They were all native speakers of Persian. Four virtual EFL classrooms were chosen based on the proficiency level, the number of students, and appropriate distribution of male and female students. During the observation of four EFL classrooms, the students and

the teachers were not aware of the topic of the research, and the classrooms were held normally as always.

3.3. Instruments

The researchers utilized the framework proposed by Sacks et al. (SSJ) in 1974. By considering SSJ's turn-taking system, the ways of selecting the next speaker and self-selection can be identified. It should be noted that in this study, some slight modifications were made to make the framework more applicable to the current online situation. For instance, unmuting the microphones was added as a strategy of self-selection. The Cronbach's alpha was calculated, and the reliability of the framework was at .81, which was an acceptable level. Moreover, to assess its validity, the researchers interviewed two English teachers who were experts at handling virtual classrooms. According to the consensus collected from the experts, the components of the framework were clear and concrete. Table 1 depicts the framework used in this research.

Table 1. *Turn-taking System*

| Level of Proficiency | Male Students | Female Students |
|------------------------------|--------------------------------------|---|
| Teacher selects next speaker | Addressing | Gaze Vocative |
| | Tag questions | |
| | Reduced questions | Confirmation questions Interrogative questions |
| students' self-selection | Hand-raising Unmuting microphones | |

In addition, the Zoom Platform was the leading application utilized in this study. The teachers started a zoom meeting as a host and clicked the Record Button. In order to identify the teachers' gazing direction, the Thumbnail View opted in a way that the teacher view was scaled down, and the thumbnails showed the participants who were most recently the active speakers. Furthermore, the researchers, as the hosts of the meeting, allow the participants to mute or unmute themselves.

3.3. Data Collection Procedure

Iranian EFL classrooms of Kalam Melal Institute were selected to examine the turn-taking system applied by the teacher and students. the researchers made contact with the manager of the institute to obtain an authorization to observe the recorded EFL classrooms held via Zoom. In order to collect the data, discussion classrooms were selected. They were held three times a week. The topic of discussion was adopted from the

book, *Speak Now*. Each session lasted one hour and a half. Five sessions of each class were observed by the researchers, two intermediate and two advanced classes. By observing the classes, the checklist was marked.

The teachers had to share the lesson plan by *Screen-Sharing* a document or slide at the beginning of the course to have a homogenous classroom syllabus. This gave students a clear idea of how the session would progress. The teachers also discussed the online etiquettes and expectations in the first session. For instance, the participants' microphones had to be mute upon entry to avoid background noise; However, they were allowed to unmute them whenever they wanted to take a turn. In addition, they had to keep their cameras on and create eye contact with their teachers. Regarding the teachers' responsibilities, they were allowed to use the *Whiteboard* or *Annotate* to share documents.

3.4. Data Analysis Procedure

After observing five sessions of four Iranian virtual EFL classrooms and filling out the prepared checklist, the checklist of each session was classified to analyze which situation took place more. All of these aspects were recorded in a detailed description. In addition to the verbal cues, such as vocatives and reduced questions, the non-verbal cues such as hand-raising and unmuting microphones performed by the students were also examined. After collecting the data, Statistical Package for Social Sciences (SPSS) version 22.0 and Chi-Square Test were used to examine all obtained information.

4. Results

Descriptive statistics were run to gain basic information, such as mean scores, maximum and minimum numbers, and standard deviation. Tables 2 and 3 present the results of descriptive statistics for primary information of turn-taking system and the time of holding turn in the Iranian virtual classrooms.

Table 2. *Descriptive Statistics*

| | | Minimum | Maximum | Mean | Std. deviation |
|-------------|------------------------------|---------|---------|---------|----------------|
| Turn-taking | Male | .00 | 47.00 | 14.2941 | 11.32961 |
| | Female | .00 | 32.00 | 12.4118 | 7.44579 |
| | Intermediate | 5.00 | 33.00 | 15.3214 | 6.26420 |
| | Advanced | .00 | 47.00 | 11.9750 | 11.19898 |
| | Teacher selects next speaker | .00 | 33.00 | 12.5263 | 7.53565 |
| | Self-selection | .00 | 47.00 | 14.4000 | 11.68688 |

Table 3. *Time of Holding Turns*

| Time of holding turn | Level | | Minimum | Maximum | Mean | Std. Deviation |
|----------------------|--------------|------|---------|---------|---------|----------------|
| | Intermediate | Male | | 8.00 | 13.00 | 10.4706 |
| Female | | | 13.00 | 17.00 | 14.9054 | 1.25269 |
| Teachers | | | 40.00 | 49.00 | 45.4159 | 3.06319 |
| Advanced | Male | | 20.00 | 28.00 | 24.7388 | 2.34982 |
| | Female | | 10.00 | 19.00 | 15.1361 | 2.48734 |
| | Teachers | | 30.00 | 40.00 | 35.4489 | 2.97524 |

According to Table 2, the mean score of turn-taking indicated that male students took more turns than female students, and turn-taking strategies were used by students and teachers at advanced proficiency level were more than intermediate level. In order to analyze the group differences, the Chi-Square Test was administered.

Table 4. *Frequency and Test Statistics of Turn-Taking*

| | Observed N | Expected N | Residual |
|------------------------------|------------|------------|----------|
| Teacher selects next speaker | 952 | 908.0 | 44.0 |
| Self-selection | 864 | 908.0 | -44.0 |
| Total | 1816 | | |
| Chi-Square | | 4.264 | |
| Df | | 1 | |
| Asymp. Sig. | | .039 | |

As Table 4 demonstrates, the p-value was .039, that was less than .05.; therefore, there was a meaningful difference between the number of next speakers who were selected by the teacher and the students' self-selection. It indicated that the frequencies of turn-taking subcomponents employed by the teachers were more than the students' self-selection. In addition, the researchers concentrated on the turn-taking system in more detail. Selecting the next speaker by the teachers included different strategies, and the types of self-selection were limited to two ways. Table 5 reveals the results.

Table 5. *Frequency and Test Statistics of Different Types of Turn-Taking*

| | Observed N | Expected N | Residual |
|----------------------|------------|------------|----------|
| Addressing gaze | 402 | 363.2 | 38.8 |
| Addressing vocatives | 488 | 363.2 | 124.8 |
| Reduced Questions | 62 | 363.2 | -301.2 |
| Hand-raising | 204 | 363.2 | -159.2 |
| Unmuting mics | 660 | 363.2 | 296.8 |
| Total | 1816 | | |
| Chi-Square | | 609.132 | |
| df | | 4 | |
| Asymp. Sig. | | .000 | |

Observing 20 virtual EFL classes and filling out the framework demonstrated the frequency of each item of the turn-taking system. The Chi-Square was 609.132, and the p-value was less than .05. Thus, there were meaningful differences among applying all types of turn-taking to choose the next speaker. The noticeable point was that the teachers did not use tag questions and confirmation questions to select the students as the next speaker. To find out which types of turn-taking strategies were not meaningfully different from each other, pair-comparison of each item with other items was made. Tables 6 and 7 demonstrate the results of pair-comparison.

Table 6. *Frequency and Test Statistics of Pair-Comparison of Each Turn-taking Items with Other Items*

| | Observed N | Observed N | Observed N | Observed N | Observed N |
|----------------------|---------------|---------------|---------------|---------------|---------------|
| Addressing gaze | 402 | 402 | 402 | 402 | - |
| Addressing vocatives | 488 | - | - | - | 488 |
| Reduced questions | - | 62 | - | - | 62 |
| Hand raising | - | - | 204 | - | - |
| Unmuting mics | - | - | - | 660 | - |
| Total | 890 | 464 | 606 | 1062 | 550 |
| Chi-Square | 8.310 | 249.138 | 64.693 | 62.678 | 329.956 |
| df | 11 | 1 | 1 | 1 | 1 |
| Asymp. Sig. | .004 | .000 | .000 | .000 | .000 |

Table 7. *Frequency and Test Statistics of Pair-comparison of Each Turn-taking Items with other Items*

| | N | N | N | N |
|-------------------|---------|--------|--------|---------|
| Using vocatives | - | - | - | - |
| Reduced questions | 488 | 488 | - | - |
| Addressing gaze | - | - | 62 | 62 |
| Hand raising | 204 | - | 204 | - |
| Unmuting the mics | - | 660 | - | 660 |
| Total | 692 | 1148 | 266 | 772 |
| Chi-square | 116.555 | 25.770 | 75.805 | 495.296 |
| Df | 1 | 1 | 1 | 1 |
| Asymp. Sig. | .004 | .000 | .000 | .000 |

Checking out the data presented in Tables 6 and 7 revealed that the pair-comparison of each two item had a p-value of less than .05, and the

strategies employed for taking the turn were meaningfully different. Unmuting the mics which was the subcategory of the students' selection had been used the most, and asking interrogative questions which was the subcategory of the reduced question was the least preferred strategy.

Table 9. *Frequency and Test Statistics of Applying Different types of Turn-taking by Male Students*

| | Observed N | Expected N | Residual |
|----------------------|------------|------------|----------|
| Addressing gaze | 238 | 194.4 | 43.6 |
| Addressing vocatives | 245 | 194.4 | 50.6 |
| Reduced questions | 36 | 194.4 | -158.4 |
| Hand raising | 82 | 194.4 | -158.4 |
| Unmuting the mics | 371 | 194.4 | 176.6 |
| Total | 972 | | |
| Chi-Square | | 377.434 | |
| Df | | 4 | |
| Asymp. Sig. | | .000 | |

By considering the Chi-Square of 377.434 and the p-value if .000, all types of turn-taking had meaningful distinctions with each other. In order to understand which two types of turn-taking that were employed by the male students were meaningfully different, the pair-comparison was done between each two items. The findings of these comparisons are shown graphically in Figure 1.

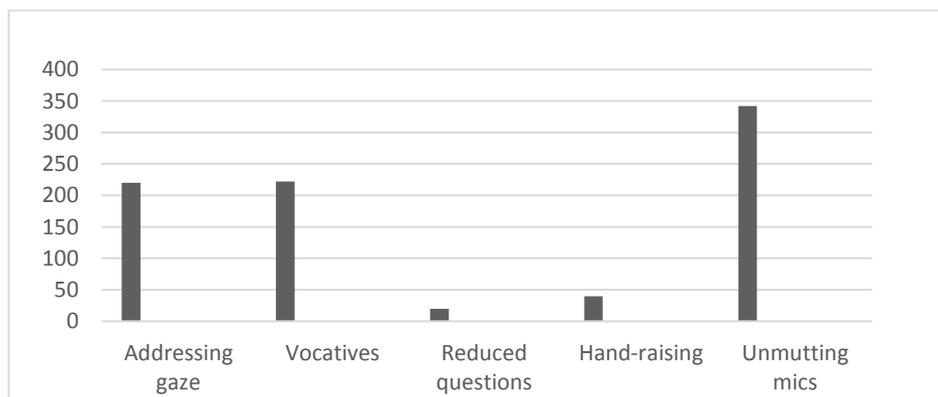


Figure 1. The pair-comparison of each turn-taking item with other items applied by male students.

According to the figure, there was no meaningful difference between the two types of teacher-selection that are addressing gaze and vocatives.

In order to analyze the females', turn-taking system, the same statistical procedures were applied.

Table 9. *Frequency and Test Statistics of Applying Different Types of Turn-taking by Female Students*

| | Observed N | Expected N | Residual |
|----------------------|------------|------------|----------|
| Addressing gaze | 164 | 168.8 | -4.8 |
| Addressing vocatives | 243 | 168.8 | 74.2 |
| Reduced questions | 26 | 168.8 | -142.8 |
| Hand raising | 122 | 168.8 | -46.8 |
| Unmuting mics | 289 | 168.8 | 120.2 |
| Total | 844 | | |
| Chi-Square | | 252.126 | |
| df | | 4 | |
| Asymp. Sig. | | .000 | |

A p-value of less than .05 indicated significant differences among the usage of various types of turn-taking by the female students. To examine the data, pair-comparison of each type was made. The findings are shown in Figure 2.

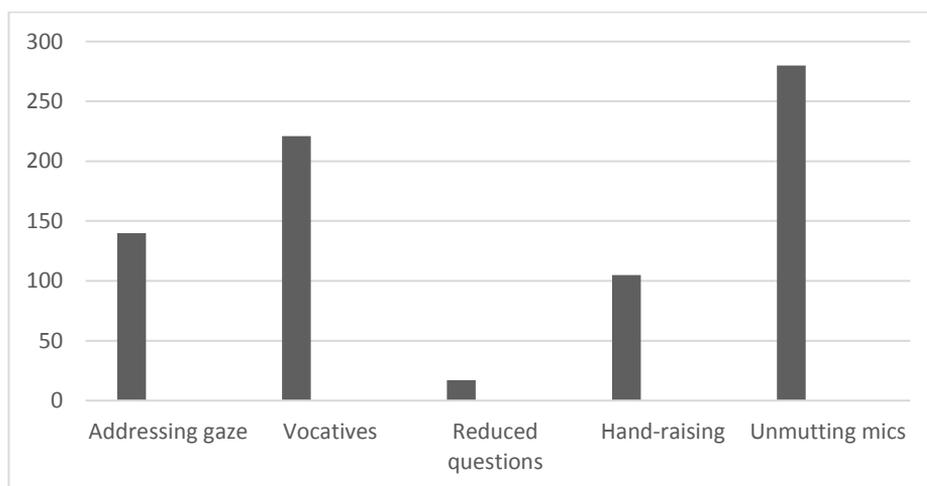


Figure 2. The pair comparison of each turn-taking item with other items applied by female students.

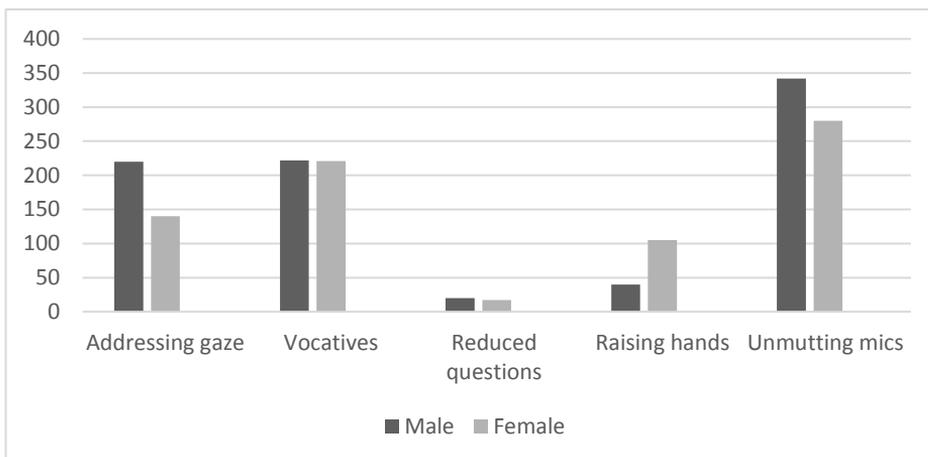


Figure 3. Males and females turn-taking.

The Chi-Square Test was run to measure the frequency distribution of various turn-taking types used by both genders. Table 10 represents the p-value. As can be seen, the p-value is less than .05, and it indicated the significant differences between males and females regarding the turn-taking items employed in online classrooms.

Table 10. *Chi-Square Test*

| | Value | df | Asymp. Sig. (2-sided) |
|--------------------|--------|----|-----------------------|
| Pearson Chi-Square | 24.373 | 4 | .000 |

The second research question refers to the relationship between the level of proficiency and applying different types of turn-taking in EFL virtual classrooms. The Chi-square Test was administered to measure the frequency of turn-taking at two proficiency levels of intermediate and advanced. Table 11 shows the results.

Table 11. *Frequency and Test Statistics of Turn-Taking in Intermediate and Advanced Levels*

| | Observed N | Expected N | Residual |
|--------------|------------|------------|----------|
| Intermediate | 858 | 908.0 | -50.0 |
| Advanced | 958 | 908.0 | 50.0 |
| Total | 1816 | | |
| Chi-Square | | 5.507 | |
| df | | 1 | |
| Asymp. Sig | | .019 | |

The p-value of .019 points that the amount of turn-taking was significantly different at two proficiency levels. Table 12 shows the descriptive statistics run on the turn-taking system applied at the intermediate level.

Table 12. *Frequency and Test Statistics of Applying Different Types of Turn Taking at Intermediate Level*

| | Observed N | Expected N | Residual |
|---------------------|------------|------------|----------|
| Addressing gaze | 178 | 214.5 | -36.5 |
| Addressing vocative | 321 | 214.5 | 106.5 |
| Hand raising | 171 | 214.5 | -43.5 |
| Unmuting mics | 188 | 214.5 | -26.5 |
| Total | 858 | | |
| Chi-Square | | 71.184 | |
| Df | | 3 | |
| Asymp. Sig. | | .000 | |

The p-value of .000 means that there was a meaningful difference in the frequency of each turn-taking type applied at this level. It should be mentioned that the reduced and integrative questions were not used. The next step was to implement a pair-comparison of each turn-taking type. Figure 4 illustrates the results.

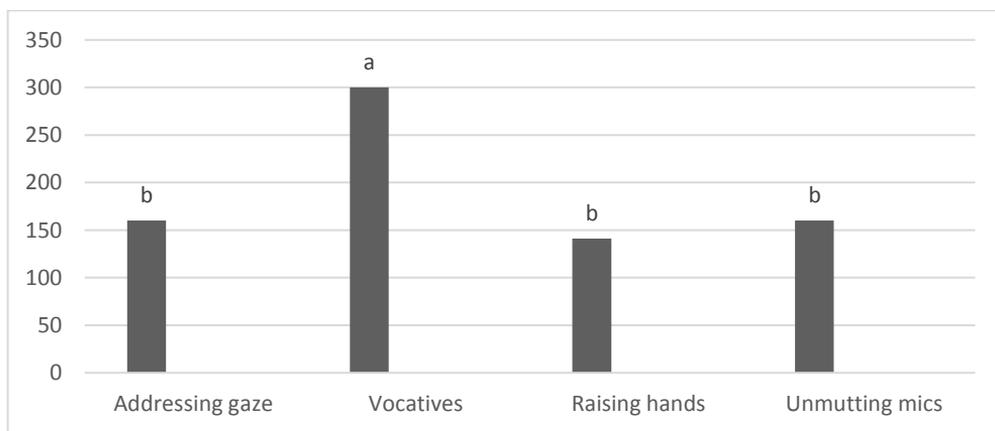


Figure 4. The pair-comparison of each turn-taking item with other items at the intermediate level.

The small English letter of b which was written above the three graphs was the sign of applying these three subcategories of turn-taking without a significant difference. Table 13 indicates the information of the turn-taking system applied by advanced online learners.

Table 13. *Frequency and Descriptive Statistics of Applying Different Types of Turn-Taking at Advanced Level*

| | Observed N | Expected N | Residual |
|---------------------------------|------------|------------|----------|
| Addressing gaze | 224 | 191.6 | 32.4 |
| Vocatives | 167 | 191.6 | -24.6 |
| Reduced-interrogative questions | 62 | 191.6 | -129.6 |
| Hand-raising | 33 | 191.6 | -158.6 |
| Unmuting mics | 472 | 191.6 | 280.4 |
| Total | 958 | | |
| Chi-Square | | 637.939 | |
| df | | 4 | |
| Asymp.Sig. | | .000 | |

The p-value less than .05 indicates that there was a significant difference in applying the various subcategories of the turn-taking system at the advanced level. Figure 5 shows the results of the pair-comparison of each type of turn-taking with others.

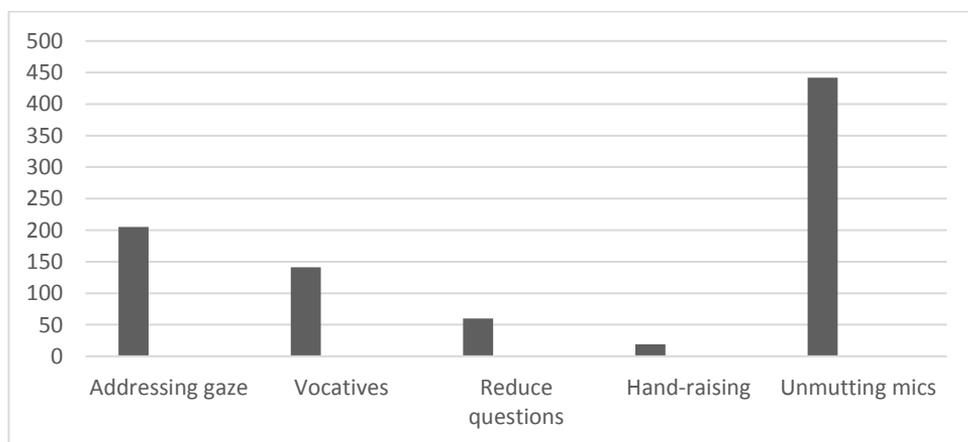


Figure 5. The pair-comparison of each turn-taking item with other items at advanced level.

To analyze the rate of turn-taking distribution at intermediate and advanced levels, the Chi-Square Test was applied. Figure 6 represents the data. The advanced learners took more turns by unmuting their mics, and the intermediate participants never were chosen as the next speaker by asking questions.

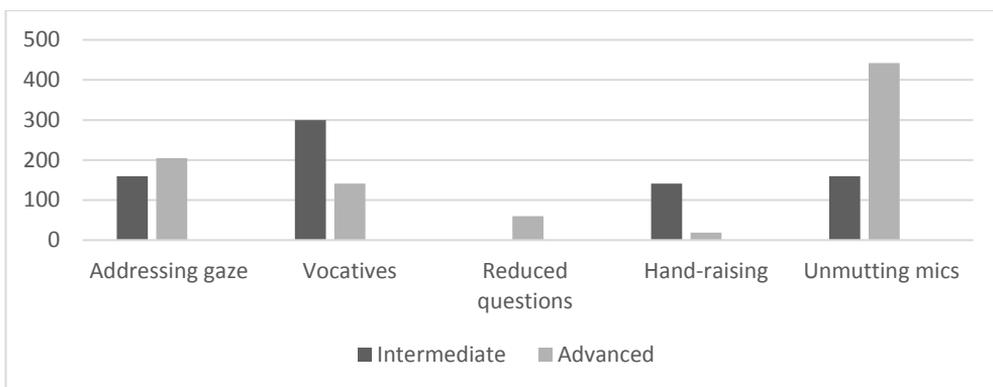


Figure 6. Turn-taking in intermediate and advanced proficiency levels.

Table 14 shows the results of the Chi-Square Test. the p-value of .000 demonstrated the significant difference in using the subcategories of the turn-taking system that were applied by intermediate and advanced EFL learners in a virtual classroom.

Table 12. *Chi-Square Test*

| | Value | df | Asymp. Sig. (2-sided) |
|--------------------|---------|----|-----------------------|
| Pearson Chi-Square | 326.906 | 4 | .000 |

5. Discussion

The Covid-19 Pandemic has an undeniable impact on the structure of EFL classrooms. For decades, researchers attempted to figure out how the turn-taking system is applied in conventional face-to-face classrooms. However, recent studies have shifted their attention to the turn-taking strategies applied in virtual settings. Throughout this study, the researchers investigated how Iranian English learners employed the subcategories of the turn-taking system on the Zoom Platform, and they scrutinized the effect of gender and language proficiency as well.

To answer the first question, which aimed at investigating the most prevalent turn-taking system in Iranian online classrooms, the researchers recorded and observed the online sessions, filled out the framework, categorized the data, and analyzed them by running descriptive statistics and Chi-Square Test. As the results suggested, there was a significant difference between the frequencies of self-selection and teacher selection ($p < .05$). Accordingly, the order of frequency was as follows: unmutting the microphones, using vocatives by the teachers, addressing gaze by the teachers, hand-raising, and asking questions.

The results of this study indicated an asymmetrical relation that existed in the virtual classrooms. Similar to face-to-face educational settings, the

teachers were too dominant in assigning the turns and imposing power by initiating the intentions. Much of the available literature on discourse analysis in EFL classrooms indicates the same results (Ansori, 2019; Evnitskaya & Berger, 2017; Garton, 2012; Sari, 2020; Rahmatika & Laila, 2021).

The results of this research are in line with Markee (2000) who claimed that there was little opportunity for the participants to self-select to take the next turn, except for the teacher and students had a pre-allocated turn-taking organization. These findings are also in agreement with the viewpoint of Paoletti and Fele (2004) who argued that teachers tried to take the control of turn-taking system.

To address the second research question, which focused on the impact of gender on the turn-taking system, the frequency of turn-taking and p-value were calculated. The p-value less than .05 indicated a significant difference between males and females regarding the ways used for taking a turn. Accordingly, male students took turns more than females, and it was in line with many researchers' (Hellum & Olah, 2018; Rashidi & Naderi, 2012; Rashidi & Rafiee Rad, 2010) findings that showed that male students were more likely to interact with others.

The third research question aimed at identifying the impact of language proficiency on the turn-taking system in an EFL virtual course. The results indicated that the advanced students took more turns than the students of intermediate level. Moreover, the interrogative questions were not applied by the intermediate students to select the next speaker. The pair-comparison results showed that there was no significant difference in being selected as the next speaker by addressing the gaze, hand-raising, and unmuting the mics in the intermediate level of proficiency.

The intermediate students tended to take the next turn by being nominated by teachers more than other types of turn-taking. On the contrary, the advanced individuals un-muted the mics to take the next turn the most. The results of this study are in line with the findings of some researchers (Galaczi's (2013) Yaraahmai & Sadeghi, 2012) who conducted studies on the relationship between EFL learners' language proficiency and turn-taking. They realized that turn-taking management increased with proficiency level and learners become more efficient decoding their partner's utterances.

6. Conclusion

Turn-taking is the basic part of each conversation to maintain the interaction. Turn-taking analysis could broaden our horizon about how students' participation and interaction can be facilitated not only in the

conventional face-to-face classrooms but also in online educational settings. EFL learners take various interactional processes to find an opportunity for participation and learning.

The findings of the present investigation have provided evidence that teachers played an important role in controlling the turn-taking system in virtual classrooms. Among different subcategories of the turn-taking system, the most preferred strategy for turn-taking was unmuting the microphones to initiate or continue a conversation. This subcategory of turn-taking was more observed among the male participants who tended to be addressed as the next speaker, and the teachers allowed them the next turn; therefore, the chances of taking turns by the female students decreased.

Besides gender, the level of proficiency had a considerable impact on the preferred strategies employed for turn-taking. The intermediate students were waiting to be nominated by their teachers the most, while the advanced students unmuting their mics immediately whenever they wanted to take part in a discussion. On the other hand, the intermediate learners used to hand-raise more than their advanced counterparts.

These findings have some resemblance to the traditional classroom settings. First, teachers dominate the turn-taking system by assigning the turns. Among various subcategories of teacher selection, vocatives or using addressees' names was the primary strategy to control or manipulate the interlocutors. Regarding the gaze cues, the teachers were often looking at the whole context, and their gaze shift was not frequent. Although in face-to-face classrooms, eye gaze plays a vital role in turn transitions, the virtual gaze was not very coherent.

Finally, a number of limitations need to be considered. First, the small sample size might negatively affect the generalizability of the results. Furthermore, the framework of the research was limited in the number of subcategories of both could not concretely elaborate on the events self-selection and teacher selection. More elaborated frameworks could pave the way for the researchers to have an in-depth investigation of the turn-taking system applied in virtual classrooms. Considering these limitations, it is vital that researchers replicate the study with a larger research population. It would also be interesting to integrate other aspects of the Zoom platform that have an effect on turn-taking strategies into the existing framework. Finally, collecting quantitative and qualitative data together can provide more in-depth information about the learners' attitudes towards online learning.

Funding: This research received no external funding from any agency.

Conflicts of Interest: The authors declare no conflict of interest.

References

- Amani, M. H. (2020). Turn-taking and gender dominance issue. *International Journal of Research in Social Sciences and Humanities*, 10(2), 172-177.
- Amir, S. H. & Jakob, C. J. (2020). Male and female teachers' turn taking strategies in EFL classroom interaction. *International Journal of Progressive Sciences and Technologies*, 19(1), 176-182. <https://doi.org/10.52155/IJPSAT.V19.1.1626>
- Ansori, M. (2019). English teachers' efficacy in using pedagogical techniques to promote higher order thinking skills. *Celtic: A Journal of Culture, English Language Teaching, Literature, and Linguistics*, 6(2), 1-13. <https://doi.org/10.22219/CELTIC.V6I2.9860>
- Azhar, A. K. & Iqbal, N. (2018). Turn-taking and gender differences in language classroom. *Journal of Nelta*, 23, 54-67.
- Brooks, C. F. (2016). Role, power, ritual, and resistance: A critical discourse analysis of college classroom talk. *Western Journal of Communication*, 80(3), 384-369. <https://doi.org/10.1080/19463014.2020.1761847>
- Brown, H. D., & Lee, H. (2015). *Teaching by principles: An interactive approach to language pedagogy* (3d ed). Englewood Cliffs, NJ: Prentice-Hall Regents.
- Chalak, A. & Karimi, M. (2017). Analysis of turn taking and repair strategies among male and female Iranian intermediate EFL learners. *Journal of Applied Linguistics and Language Research*, 4(2), 1-9.
- Coates, J. (1998). *Language and gender: A reader*. Blackwell Publishing.
- Darhower, M. (2002). International features of synchronous computer-mediated communication in the intermediate L2 class: A sociocultural case study. *CALICO Journal*, 19(2), 249-277.
- Dewi, F. R., Suharsono, S., & Munir, A. (2018). Turn taking strategies and it relations to the learners' personality and power in the interaction of English conversation class. *Eternal*, 4(2), 288-305. <https://doi.org/10.24252/Eternal.V42.2018.A12>
- Evnitskaya, N., & Berger, E. (2017). Learners' multimodal displays of willingness to participate in classroom interaction in the L2 and CLIL contexts. *Classroom Discourse*, 8(1), 71-49. <https://10.1080/19463014.2016.1272062>

- Galaczi, D. E. (2013). Interactional competence across proficiency levels: How do learners manage interaction in paired speaking tests? *Applied Linguistics*, 1-33. Doi: 10.1093/applin/amt017
- Garton, S. (2012). Speaking out of turn? Taking the initiative in teacher-fronted classroom interaction. *Classroom Discourse*, 3(1), 29-45. <https://doi.org/10.1080/19343014.2012.666022>
- Ghilzai, A. Sh. & Baloch, M. (2016). Conversational analysis of turn taking behavior and gender difference in multimodal conversation. *Perspectives in Language, Linguistics and Media*, 1(2016), 1-13.
- Gorjian, B., & Habibi, P. (2015). The effect of conversation strategies on the classroom interaction: The case of turn taking. *Journal of Applied Linguistics and Language Learning*, 1(1), 14-23. <https://doi.org/10.5923/j.jall.20150101.03>
- Gregoria, B. L., Escandallo, C. J., & Suan, G. E. (2021). Language of Adam and Eve: A comparative analysis on linguistic representation of gender. *International Journal of Innovative Science and Research Technology*, 6(7), 605-656.
- Greller, W., & Drachsler, H. (2012). Translating learning into numbers: A generic framework for learning analytics. *Journal of Educational Technology and Society*, 15(3), 42-57.
- Hellum, M., & Olah, L. S. (2018). Doing gender and gender equality through emotional expressions during a research interview. Views of highly educated Swedish young adults. *Journal of Gender Studies*, 28(3), 304-317. <https://doi.org/10.1080/09589236.2018.1441018>
- Heritage, J. (1984). Introduction. In J. Atkinson & J. Heritage (Eds.), *structure of social action* (pp. 1-15). Cambridge: Cambridge University Press.
- Hook, C. (1981). *Studying classrooms*. Deakin University Press.
- Hussein, M. A. turn-taking and gender dominance issue. *International Journal of Research in Social Sciences and Humanities*, 10(2), 172-177.
- Jocuns, A., Shi, L., Zhang, L., Yin, T., Gu, X., Huang, X., Zhang, Y., & Zhang, Y. (2020). Translocating classroom discourse practices during the Covid-19 pandemic in China: A reflective nexus analysis account. *Iranian Journal of Language Teaching Research*, 8(3), 121-142. <https://doi.org/10.30466/ijltr.2020.120937>
- Kelly, A. (1988). Gender differences in teacher-pupil interactions: A meta-analytic review. *Research in Education*, 39, 1-23.
- Lakoff, R. (1975). *Language and women's place*. Cambridge University Press.

- Lee, L. (2007). Fostering second language oral communication through constructivist interaction in desktop video conferencing. *Foreign Language Annals*, 40(4), 635-649.
- Lehtimaja, I. (2011). Teacher-oriented address terms in students' reproach turns. *Linguistics and Education*, 22, 348-363.
- Lerner, G. H. (2004). *Conversation analysis: studies from the first generation*. John Benjamin Publishing.
- Markee, N. (2000). *Conversation analysis*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Nicholls, J. (1993). Exchange structure in the EDL classroom: Q-A-C and Q-CQ-A-C sequences in small group interaction. *Pragmatics and Language Learning*, 4, 183-191.
- Paoletti, I., & Fele, G. (2004). Order and disorder in the classroom. International Pragmatics Association. *Pragmatics*, 14(1), 69-85.
- Puri, G. (2012). Critical success factors in E-learning-an empirical study. *International Journal of Multidisciplinary Research*, 2(1), 149-161.
- Sacks, H., Schegloff, E. A., & Jefferson, G. (1987). A simplest systematics for the organization of turn taking for Conversation. *Studies in the Organization of Conversational Interaction*, 7-55. <https://doi.org/10.1016/b978-0-12-623550-0.50008-2>
- Sadkar, D. (1999). Gender equity: still knocking at the classroom door. *Educational Leadership*, 56(7), 6-22.
- Sari, C. C. (2020). Conversation analysis: Turn-taking mechanism and power relation in classroom setting. *A Journal of Culture, English Language Teaching, Literature, & Linguistics*, 7(2), 118-136. <https://doi.org/10.22219/celtic.v7i2.12598>
- Seedhouse, P. (2005). Conversation analysis and language learning. *Language Teaching*, 38, 165-187.
- Seuren, M. L., Wherton, J., Greenhalgh, T., & Shaw, E. S. (2020). Whose turn is it anyway? Latency and the organization of turn-taking in video-mediated interaction. *Journal of Pragmatics*, 172(2021), 63-78.
- Sunderland, J. (1989). Girls being quiet: a problem for foreign language classrooms? *Language Teaching Research*, 2(1), 48-82.
- Racheva, V. (2018). *Social aspects of synchronous virtual learning environments*. AIP Conference Proceedings. <https://doi.org/10.1063/1.5082050>.
- Rashidi, N., & Rafiee rad, M. (2010). Analyzing patterns of classroom interaction in EFL classrooms in Iran. *The Journal of Asia TEFL*, 7(3), 93-120.

- Radhidi, N., & Naderi, S. (2012). The effect of gender on the patterns of classroom interaction. *Education*, 3(13), 30-36. [https:// doi. org/ 10.4923/J.EDU.20120203.02](https://doi.org/10.4923/J.EDU.20120203.02)
- Rezai, A., & Zafari, N. (2010). The impact of synchronous computer-mediated communication (SCMC) on the oral proficiency of Iranian EFL learners. *IJAL*, 13(2), 101-119.
- Rymes, B. (2009). *Classroom discourse analysis: A tool for critical reflection*. Cresskill, NJ: Hampton Press.
- Rahmatika, L. & Malikatul, L. (2021). Discourse structure of classroom session during Covid-19 pandemic. *Ethical Lingua*, 8(1), 218-227. <https://doi.org/10.30605/25409190.257>
- Wardhaugh, R. (2006). *An introduction to sociolinguistics*. Blackwell Publishing.
- Wut, T, M., & Xu, J. (2021). Person-to-person interactions in online classroom settings under the impact of COVID-19. *Asia Pacific Education Review*, 22, 371-383. <https://doi.org/10.1007/s12564-021-09673-1>
- Yarahamdi, M., & Sadeghi, M. (2012). Iranian EFL learners' turn taking. *Journal of Basic and Applied Scientific Research*, 2(1), 874-877.
- Yakushkina, M. (2018). Gender performance through turn-taking organization in a foreign language classroom. *The Language Learning Journal*, 49, 176-188. [https:// doi. Org /10.1 080/095 71736.2018.1520915](https://doi.org/10.1080/09571736.2018.1520915)
- Yoshida, R. (2008). *Overt and covert participation of learners in Japanese language classroom* (doctoral dissertation). University of New South Wales, Sydney.