Cross-linguistic Validation of Processability Theory: The Case of EFL Iranian Students' Speaking Skill

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Abstract
This study investigated the validity of processability theory proposed by Pienemann (1998/2015) among Iranian EFL learners' oral performance. The theory defines six procedural stages for learners in the process of second language acquisition. In order to conduct the study, 10 intermediate EFL learners were selected based on their performance on Oxford Placement Test. Then, they participated in five tasks; namely, interview, spot-the- difference task, picture description, picture identification and story-telling task. Their speech was recorded and then transcribed according to predetermined structures (i.e., interrogatives, word order, and negation) called target structures. The frequency of the occurrence of target structures was calculated based on the emergence criterion. The results showed that Iranian EFL learners produced language structures in the predicted procedural stages as proposed by processability theory. Thus, processability theory can be valid for Iranian EFL learners too.

Keywords: second language acquisition, processability theory, task, oral performance

Introduction

Different studies have been performed to explore what the learners' knowledge is and how they attain that knowledge. Such attempts have led to approaches, theories and hypotheses in this regard. Although the real mechanisms and processes of second language learning which underlie the brain are not exactly clear, several researchers (e.g., Spada & Lightbown, 1993; Hatch & Lazarton, 1991; Long & Sato, 1984; Gass & Selinker, 2001; Cook, 1993; as cited in Buyl, 2010) have tried to explore some of its dimensions based on their perspective.

Different methods have been employed by the researchers to identify the developmental patterns of language acquisition. One of the most common methods is the obligatory occasion analysis. In this method, samples of the natural speech data are collected and then an obligatory situation is created to use the specific second language feature and finally the percentage of accurate use of the feature is calculated.

Another method is frequency analysis or interlanguage analysis within which the language learners are allowed to use the various linguistic devices to produce a particular grammatical feature and then the frequency with which each device is used at different points is calculated by the researcher. Implicational scaling is one of the most common methods for cross-sectional studies. The inter-learner variability of the learner's language corpus is used to determine which language features and in what order they are acquired. These studies support the idea that second language acquisition follows a regular and systematic developmental pattern in different contexts (Ellis, 2008).

Processability theory is one such fairly recent theory proposed by Pienemann (1998/2015). It is a psychological approach toward language acquisition processes indicating that language acquisition is dependent upon the acquisition of a set of procedural skills. The

language acquisition procedures pass through different stages; each of which processes specific structures and learners can only produce and comprehend those specific structures relevant to their current stage of language acquisition. Moving to the next stage requires processing of the former stages.

According to processability theory, there are specific procedural skills required for the processing and the production of utterances in second language. In the first stage, learners develop lexicon that is the basic to all language processing in later stages. Learners, in the second stage, use the bound morphemes to produce free morphemes. Disconnected phrases bring together, in the third stage, by intraphrasal components such as conjunctions. Yet, learners have no knowledge of syntactic structures and the order of words is based on pragmatics. In fourth and fifth stages, gradually lexical features emerge into phrases based on syntactic knowledge. The last stage is consistent with the automatic use of subordinate clauses. These parallel processing routines indicate that speech production is incremental

Processability theory has then shed new lights on second language acquisition studies. A number of different studies tested the validity of processability theory in German, English, Swedish, and Japanese contexts (Di Biase & Kawaguchi, 2002; Doi & Yoshioka, 1990; Johnston & Pienemann, 1986; Pienemann & Hakansson, 1999, as cited in Ellis, 2008) and provided evidence for the general hierarchy of implicational order of second language grammar acquisition. Processability theory was also applied in different areas of second language research such as interlanguage variation (Tarone & Liu, 1995) form-focused instruction (Pienemann, 1989; Spada & Lightbown, 1993), second language assessment (Pienemann & Johnston, 1987), and interaction studies (Mackey & Philp, 1998).

Although some significant studies of processability theory are mentioned, empirical evidence for English L2 processability hierarchy is sill limited (Yamaguchi, 2009). Also, a small number of studies has investigated the validity of processability theory and its implicational hierarchy in an EFL context. According to the current literature, and as far as this study investigated, no empirical evidence was found to study the processability theory on Iranian EFL learners' behaviors. Thus, it seems that it is necessary to develop an empirical study to validate the theory and provide enough supporting evidence in Iranian EFL learning situations, since as Krashen (1981) put it, different results might be yielded, if the same or similar tests were administered to EFL learners.

The main purpose of the present study is to cross-linguistically validate processability theory, in general, and, to test the oral performance of Iranian EFL learners' use, in particular. This was achieved by analyzing the English speech data obtained from Iranian EFL students' oral performance on different tasks. In order to perform the present study, the following research question was formulated:

Q. Is processability theory valid cross-linguistically, in general, and for EFL Iranian learners' speaking skill, in particular?

Literature Review

Pienemann (1998) proposed a language processing model of second language acquisition called Processability Theory (PT). Put simply, PT is intended to explain why second language learners follow a similar path in the development of morphosyntactic structures (Plag, 2008). It paved the way for scholars to theoretically predict the order of acquisition for second language grammatical skills.

Pienemann (1998 envisaged specific procedural skills required for processing and production of utterances in second language. In the first stage, learners develop lexicon that is the

basic to all language processing in later stages. Learners, in the second stage, use the bound morphemes to produce free morphemes. Disconnected phrases bring together, in the third stage, by intraphrasal components such as conjunctions. Yet, learners have no knowledge of syntactic structures and the order of words is based on pragmatics. In fourth and fifth stages, gradually lexical features emerge into phrases based on syntactic knowledge. The last stage is consistent with the automatic use of subordinate clauses. These parallel processing routines indicate that speech production is incremental.

Processability theory was then extended in terms of its focus. The original version of PT (Pienemann, 1998) focused mainly on the developmental pattern of second language acquisition and why learners follow the same stages of acquisition. The extended version (Pienemann et al., 2005), on the other hand, pursued mainly the logical problem. In other words, the goal was defined as finding out what the origin of learners' linguistic knowledge was. The developmental and the logical problems are the main components of any theory of language acquisition, and PT viewed these issues in a modular form. One module addresses the developmental problem and the other, but connected module handles the logical problem (Pienemann, 2008).

An early application of the PT to the development of morphological and syntactic structures of ESL learners was done by Pienemann (1998). It was observed that learners started with one word phrases and they gradually acquired more complex structures in a special order. The results provided a hierarchy of processability, which corresponded to previous studies of Johnston (1985) and (Pienemann & Mackey, 1993, as cited in Pienemann, 1998).

As such, PT provided new perspectives on the L1-L2 to account for the major aspects of developmental differences. Such research led to Pienemann (1984)'s Teachability Hypothesis which predicts the learner's stage of learnability before he/she gains the ability to acquire certain grammatical structure. The Teachability Hypothesis is significantly related to the relative complexity of morpheme acquisition discussed by Ellis (2008).

Within this framework, Johnston (1995) investigated the acquisition of Spanish as a second language to predict the development of procedural stages. Seven different proposed sequences of development in the interlanguage of L2 Spanish learners were examined. The results of study confirmed that the assumed predictions happened. Similarly, Glahn et al. (2001) investigated the stages of L2 acquisition of three Scandinavian languages: Danish, Swedish, and Norwegian.

These languages have some similar structures. The results showed that there was an implicational pattern of acquisition conforming to PT predictions. Husseinali (2006) conducted a similar study on Arabic as foreign language (AFL).

The study focused on seven syntactic structures of Arabic and three stages of development were predicted. The results indicated that although no stage skipping was observed among the learners, there was the variability between structures within the same stage.

However, in a different study on AFL, Mansouri (2000, as cited in Mansouri, 2008) concluded that the overall findings of the development of syntax in beginners and intermediate learners were generally consistent with predictions of PT. But, there were also cases of violating the proposed hierarchy. In other words, some learners skipped certain stages while stage skipping is not possible according to PT, the contradiction of the main tenet of the theory- hierarchical processing. Hence, more cross-linguistic studies on different pairs of languages need to be conducted.

Method

Participants

The research was administered in Zabansara English Language Institute located in the city of Bushehr. The participants (n = 10) were male (n = 6) and female (n = *4*) EFL learners at the intermediate level of English language proficiency. They were all adult EFL learners. They also had different English learning experiences. In terms of education background, they were at different levels, but they were all at the same level in terms of English language proficiency. They were all native speakers of the Persian language.

Instrumentation

The instruments used to serve the purpose of study consisted of a proficiency test, five different tasks, with the target structures that were selected with predefined criteria in line with previous studies.

Proficiency Test

As the proficiency test, the Oxford Placement Test (2007) was employed in order to determine the participants' current level of language proficiency. Oxford placement test was developed after consultation with teachers and is designed to assess students' knowledge of the key language as well as their receptive and productive skills. It also enables researchers to have a greater understanding of what level their participants are at. The test contains 50 multiple choice questions which assess students' knowledge of key grammar and vocabulary from elementary to intermediate levels, a reading text with 10 graded comprehension questions (true-false and multiple choice items) and an optional writing task that assesses testees' ability to produce the language.

Target Structures

Target structures are those structures which were specifically investigated in this study. These included interrogatives, word order, and negation, used in Pienemann (1998) and Pienemann and Johnston (1987, as cited in Sakai, 2008).

Tasks

The key instruments to run the research procedure were the tasks. Each student was obliged to do five tasks during the course of research. The five tasks used in this study were (a) interview task, (b) spot the difference task, (c) picture description task, (d) picture identification task, and (e) story telling task. These speaking-based tasks were utilized to elicit the target structures.

Interview Task

Six general topics; namely, music, friends, family, dreams, sport and food were introduced to the participants and they were asked to talk about one of them.

Spot the Difference Task

This task is designed to check the language production of participants. It was designed specifically to extract negation structure in learners' utterances of target language. It consists of two similar pictures with small differences. Teacher holds one of the pictures and the students hold another one. The areas of difference were identified and the necessary vocabulary is provided. The participants are required to pinpoint the differences.

Picture Description Task

Two sets of identical pictures are provided for this task, one for the researcher and the other for participants. The participants should select one of the face-down pictures in a set of papers, and describe it in English in such a way that the researcher can identify that picture among his set of pictures.

Picture Identification Task

The same pictures used in picture description task are employed in this task. First, the researcher selects one of the pictures and keeps it hidden from the participants. Then, the participants ask questions in English to realize the picture.

Story Telling Task

In story telling task, six successive pictures are provided. The task of participants is to tell a story in English indicating the series of events in these pictures.

Model of Analysis

The present study adopted the procedures of processability theory as the basic model for data collection and analysis. The study used five different contexts to extract speech data. The following is a review of the original processability hierarchy proposed by Pienemann (1998):

1) No procedure (word or lemma access): at this stage, learners are capable of producing words as the structural outcome.
2) Category procedure: learners are expected to produce lexical morphemes such as –ed or –s plural at this stage.
3) Noun phrase procedure: learners attain the ability to match the acquired lexical morphemes to words within the phrase.
4) Verb phrase procedure: learners can arrange the syntactic functions (subject, object) of a phrase.
5) Sentence procedure: learners can arrange the syntactic functions of a sentence.
6) Subordinate clause procedure: learners can make distinction between the main clause and subordinate clause attached to it.

These six procedures are commonly referred to as implicational procedures. It means that language is developed by passing through these stages. Moreover, these stages are not independent of each other and each of which is a prerequisite for the next one.

Procedures

In order to measure the validity of processability theory regarding the oral performance of EFL learners a structured procedure was adopted to collect data. The data collection was conducted in three stages during normal class schedule. It was done during a week period in November 2011.

In order to determine the language learners' proficiency level, as mentioned before, the Oxford placement test was administered and only 10 students who were determined to be at the intermediate level were selected to participate in the study.

It was arranged for the participants (n = 10) to take part individually in class where the tasks were performed. Initially, the learners wrote down their background information such as name, age, level of education and English learning experience. Following completion of the background questionnaire, the participants were asked to select one of the interview topics (music, friends, family, dreams, sport and food) to talk about it. The length of task was different

among learners ranging from 5 to 10 minutes. They were allowed for thinking and planning their talk up to two minutes. Their voices were recorded from the beginning.

Then a picture was submitted to every participant and an identical one was held by the researcher. There were some subtle differences between these pictures that were circled in advance. They were asked to compare these pictures in English to locate the differences. Since the purpose of the task was not measuring vocabulary items, the essential vocabulary was provided in every task. This task is called spot the differences and it was specifically intended to elicit wh-questions.

The necessary instruction was provided before performing picture description task. Papers containing different pictures were provided for each participant. They were arranged face down and the participants were told to select one of them and describe it clearly in English. The participants knew that their description had to be comprehensive enough so that the researcher could identify that picture from the identical set of pictures. It was expected to elicit indirect questions.

In picture identification tasks, the researcher selected one of the pictures used in picture description task. The participants could not see the picture. The participants' task was to ask questions in order to elicit information about the picture.

In the final stage, a paper containing six pictures was submitted to the participants. These pictures showed a series of events. The participants were asked to make a story and present it orally. They were allowed to spend five minutes to think about story.

The tasks of this study were performed in different lengths of time. So, the first five minutes of interview test and the first five minutes of other tasks were considered for data analysis. After data collection procedure, the audio recordings were transcribed carefully. Then, a detailed and delicate linguistic analysis based on a distributional analysis of information regarding the target structures samples was done. The speech data and transcription were then submitted to a colleague to check them and provide some modification. Then, the final version of transcription was ready for analysis.

Results

To provide a general picture of speech data, the descriptive statistics of T-units, turns and T-unit per turn are illustrated in Table 1. There were a total of 182 minutes recordings of the participants' speech for the whole study. Every participant is represented with a number that is fixed in this study. The total number of T-units was 683 and it was 308 for t-turns for all tasks. The number of T-units per turn across all tasks was 2.21. As Table 1 shows in the interview task, the number of T-units per task was 45.7. It was the highest ratio among all tasks. It indicates the lower rate of mutual interaction in this task, according to the number of turns.

On the other hand, the number of T-units per turn ratio was the lowest in picture identification task (T-units/turn = 0.83). Picture description task elicited 201 T-units and storytelling task elicited 69 T-units indicating, respectively, the maximum and minimum of phrases and clauses in which students produced during their performance on tasks. The number of turns was the highest in picture identification task (n = 140) and lowest in storytelling (n = 28).

Table 1. *Number of AS-Units and Turns Per Tasks Produced by Participants*

	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	Total
Interview T-units	22	26	29	18	12	18	19	9	13	10	176
Turns	3	4	8	2	10	4	3	12	4	3	53
T-units/Turn	7.3	6.5	3.6	9	1.2	4.5	6.3	0.75	3.25	3.3	6.76
Spot Diff. T-units	9	12	14	11	16	12	9	12	11	14	120
Turns	7	5	9	6	4	4	5	2	3	4	49
T-units/Turn	1.2	2.4	1.5	1.8	4	3	1.8	6	3.6	3.5	2.44
Pic. Des. T-units	31	24	16	13	16	14	25	15	19	28	201
Turns	6	4	11	8	14	2	4	5	4	7	65
T-units/Turn	5.1	6	1.45	1.62	1.14	7	6.25	3	4.75	4	3.09
Pic. Ident.											
T-units	16	13	16	10	9	5	12	10	14	12	117
Turns	18	11	19	14	12	8	12	18	13	15	140
T-units/Turn	0.88	1.18	0.84	0.71	0.75	0.62	1	0.55	1.07	0.8	0.83
Story Telling T-units	5	8	7	9	4	8	6	9	7	8	69
Turns	3	3	2	5	3	3	1	4	2	2	28
T-units/Turn	1.6	2.6	3.5	1.8	1.3	2.6	6	2.25	3.5	9	2.46

Note. Pic.: picture, Des.: description, Ident.: identification

The target structures studied in this investigation are interrogatives (questions), word order, and negation. These structures are shown in Table 2 according to the developmental processes of processability theory. According to this table, the leaner would not be able to activate, for example, the sentence procedure without having acquired the phrasal procedure, the category procedure and the Lemma access.

Table 2. *Developmental Hierarchy of Processability Theory*

Stage	**Processing procedures**	**Target structures**		
		interrogatives	**Word order**	**negation**
6	Subordinate clause		Cancel-Inversion	
5	Sentence procedure	Aux-2^{nd}		Do-2^{nd}
4	Verb phrase procedure	Pseudo-Inversion/Yes/no-Inversion		
3	Noun phrase procedure	Do-Fronting/WH Fronting	Adverb-fronting	Don+V
2	Category procedure	SVO	SVO	No/No + X
1	No procedure(word or lemma access)	Words	Words	Words

The frequency of the use of target structures among the participants of this study is shown in Table 3 below. The blank cells indicate the non-occurrence of that structure in learners' speech production. Some of the fields are filled with denominators and numerators. Denominators are the number of the frequency of the structures and numerators are the number of correct production of those structures. Details of the analyses and quantified results with respect to the stages predicted by processability theory are presented and discussed below.

Table 3. *Frequency of target structure distribution*

stage	Target structure	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10
6	Cancel-Inversion	1/2		3/3				0/1	0/2	2/2	2/3
5	Do-2^{nd}	6/7	5/5	8/8	2/4	5/7	2/5	4/4	5/6	3/3	10/12
5	Aux-2^{nd}	2/2	1/1	1/3	0/1		2/2	0/3			1/2
4	Pseudo-Inversion	5/5	3/4	4/6	7/7	5/6	4/4	5/6	4/7	5/6	9/9
4	Yes/no-Inversion	5/5	2/2	1/2	2/2		1/1	0/3	2/2	1/1	4/4
4	Don+V	2/2	3/4	1/1	0/2	2/2	4/7	6/8	2/5	6/6	6/7
3	Adverb-fronting	8	2	17	7	7	1	2	6	5	11
3	Do-Fronting	2/3		4/4	0/1					0/2	2/3
3	WH Fronting	6/8	4/5	9/12	2/7	2/4	6/6	4/5	4/8	1/6	14/16
2	No + X	3	2	5	1	2			1		3
2	SVO	54	30	67	21	56	46	28	33	57	86
2	SVO?	3	2	1	5			1	1	2	3
1	Words	107	69	116	65	66	72	91	86	68	125
1	Words?	8	6	4	7	9	5	6	11	9	5

Table 3 shows that the acquisition of a higher processing procedure requires the acquisition of all the ones below it. The participants showed different ways to use the words in making interrogatives in stage 1. The frequency of fixed and isolated phrases and chunks is also provided. Stage 1 included in the speech production of all the participants. In stage 2, the use of syntactic functions such as noun, verb in the correct order of the English language (SVO) was evident in both interrogatives and affirmative statements. It is required for learners to distinguish between different syntactic functions. Two of participants did not use the structure SVO? The use of No + X structure in stage 2 to make negative statements was a less frequent kind of structure used by participants. Participants number 6, 7 and 9 did not use any No + X structure. The learners' use of grammatical and lexical morphemes such as –ed or –s plural was seen during the task performance at this stage. In other words, at this stage learners were able to use these structures by recognizing the proper words. The accurate use of these morphemes regarding the other constituents was not considered in this stage.

As the Table 3 indicates some of the participants did not use specific structures in the third stage. The learners favored WH-fronting structure (fronting of wh-question words in phrase) more than Do-fronting (fronting of do in initial position in direct questions) in interrogative sentences. Participants number 2, 5, 6, 7 and 8 did not use Do-fronting structure in their speech. The accurate use of those structures was varied among participants. For example, participant number 9 used just one correct Do-fronting form out of 6. Adv-fronting (fronting of adverbs or adverbials), and don + V structures were two other structures representing word order and negative sentences utilized by learners respectively. The unification process or matching the syntactic morphemes with the head of phrases is the significant characteristic of this stage.

In stage 4, the structures for interrogatives were studied. The frequency for the use of Yes/no-Inversion structure (inversion of the subject and the auxiliary in direct questions) was higher than pseudo-inversion structure (fronting of question words and the inversion of subjects and auxiliaries in wh-questions with to-be verbs). One of the participants (number 5) did not use any Yes/no inversion structure. The learners' speech at stage 5 was analyzed according to interrogative and negation structures. The difference between Aux-second structure and pseudo-inversion structure is the use of to be auxiliary verbs in the former and other auxiliary verbs in the latter. The learners used mostly 'can' and 'should' for the Aux-second structure at stage 5. Generally, they were able to produce proper structures in terms of word order rules beyond the phrase level. Learners at stage 6 produced more complex phrases and clauses consisting of main clause and subordinate clause in addition to accurate use of these structures. The Cancel-Inversion structure is the indirect question structure with no auxiliary inversion embedded in a clause. Thirteen cases of Cancel-Inversion structure was observed in participants' speech data. There were four learners who did not produce this structure and two learners who improperly utilized it.

Discussion

Although an attempt was made to provide the linguistic context for appearing the target structures, in some cases, they were absent. The non-application of some rules and structures in learners' speech data was the matter of learner's preference to select the specific type of a structure. Therefore, it does not contradict Pienemann's processability hierarchy.

Regarding the present study, learners at stage 1 of processability theory, word/lemma access, were able to map ''conceptual structures onto individual words and fixed phrases" (Pienemann, 1998). Results, as shown above, indicate that all the participants used words and fixed phrases or unanalyzed chunks.

At the category procedure stage (stage 2), learners gained the ability to connect the unanalyzed chunks and words and produce the affirmative and interrogative statements regarding the canonical word order for English, that is, SVO (SVO or SVO?). To consider the Processability theory prediction for the second stage, learners were familiar with different parts of speech such as nouns or verbs to arrange words in the canonical word order manner. The (accurate or inaccurate) use of lexical and syntactic morphemes, such as –s plural, is another feature of the category procedure stage which was evident in the participants' speech data. Moreover, the use of such structures is not cared regarding the word boundaries within a phrase.

At stage 4, the learners were supposed to produce the phrasal morphemes such as adverbs or adverbials, do and wh-question word, and use them at the front or the end of the canonical word order. The target structures of this stage was Adverb-Fronting (Usually, she looks at the sun), Do-Fronting (Do they work?), and WH-Fronting (what you see?). At this stage, just the proper position of these structures is important. The relationship between these morphemes and

other constituents of phrase was not attended to. Thus, the sentence 'Do he like it?' is a valid example of Do-Fronting. Some learners did not use 'Do-Fronting' in this study. They preferred to use other question forms. Learners at fourth stage or verb phrase procedure could understand other constituents of a sentence and produce grammatical sentences with regard to proper positioning of that structure. The featured structures for this stage are Yes/no-Inversion (inversion of the subject and the auxiliary in direct questions, e.g., are you free?) and Pseudo-Inversion (fronting of question words and the inversion of subjects and auxiliaries in wh-questions with to-be verbs, e.g., what is he looking for?). This stage was also seen in the participants' speech data.

Fifth stage or S-procedure was justified by learners' ability to produce morphemes which connect two or more phrases with accurate word order. Aux-2nd structure is developed form of pseudo-inversion structure in previous stage. Learners made wh-interrogatives with the correct positioning of auxiliary verbs, e.g., 'what should they do?' Participants' number 3 and 7 used inaccurate form of these structures.

Final stage of second language processes, stage 6, dealt with the subordinate clause procedure. Few learners in this study could make distinction between the main clause and subordinate clauses. At this stage, learners embedded indirect questions into a clause, without any inversion. In other words, the initial inversion made to form interrogative which is cancelled, that is why this procedure is called Cancel-Inversion. Thus, the learner could produce indirect questions without inversion such as 'The man wanted to know what he won' instead of producing 'The man wanted to know what did.

There were also some cases of non-application of the rules. Following is the discussion of reasons for the non-application of rules. For example, at the stage 2, two of the participants did not produce the structure SVO?, this does not mean participants were not able to use this structure to ask questions, but it only indicates that the participants did not use canonical word order in asking questions. Since those three learners extensively used the affirmative structure of SVO, so they were able to apply structure SVO? In a similar manner, three of the participants did not use no + X, but they produced other types of negation like don + V and Do-٢nd at higher stages. Thus, the use of similar structures for higher stages does not indicate that they could not produce the structures of lower stages. It solely refers to the fact that they prefer not to use no + X for negation. To conclude, these cases of absence for specific structures do not indicate the structure non-application in the presence of contexts. Thus, these evidences do not actually contradict the Processability theory.

There were four cases of non-application for Do-Fronting structure at the stage 3. Do-Fronting and WH-Fronting structures are two alternatives of the same target structure in stage 3, thus this is also the matter of preference in the learners' use of interrogatives. Therefore, the use of non-application for Do-Fronting is safely rejected

The interpretation of data for stage 6 is rather different, since the numerator is the base of analysis while for other stages denominator is important for analysis. The numerators refer to target-like use of the structures. In other words, the learner's target-like application of Cancel-Inversion structure (is shown by numerator) was the criteria for analysis, but for other stages the (target-like or non-target-like) use of Cancel-Inversion structure (is shown by dominator) was the criteria for analysis. Six of the participants, P1, P3, P7, P8, P9, and P10, used Cancel-Inversion structure. Therefore, four learners did not apply the structure Cancel-Inversion in their performance. It indicates that they are at stage 5 of their language development according to processability theory.

Conclusion

Analysis of data revealed that Iranian EFL learners passed through definite stages in processing foreign language development. Their development was progressed hierarchically. These stages were acquired cumulatively in an order predicted by processability theory. There was no counterevidence for the above assumptions behind the theory. Generally, the processability theory could be said to be valid for Iranian EFL learners.

Findings of this study are consistent with the predictions made by processability theory. It was found that there are clear stages in processing foreign language development which are progressed hierarchically. These stages are acquired cumulatively in an order predicted by processability theory. There was no counterevidence for the above assumptions behind the theory. Generally, the processability theory showed to be valid for Iranian EFL learners.

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