The Influence of Mother Tongue on the Use of English Resumptive Pronouns by Iranian EFLLs

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Abstract

Understanding and producing relative clauses (RCs) presents significant challenges for second language learners, particularly when L1 and L2 relativization strategies differ. This study investigated the effect of Persian (L1) on resumptive pronoun (RP) usage in English RCs by Iranian EFL learners (N = 90 English Literature and Translation Studies majors), examining the Noun Phrase Accessibility Hierarchy Hypothesis (NPAHH). The study had two primary objectives. First, we hypothesized that lower-proficiency learners would demonstrate more negative transfer. Participants were categorized into high- and low-proficiency groups using the Oxford Placement Test. Results revealed significant between-group performance differences, though error patterns based on the RC head's grammatical function were similar across groups. Both groups showed highest accuracy for object-function RCs, suggesting strong L1 influence. Second, testing the NPAHH revealed that learners (regardless of proficiency) exhibited lowest error rates for object-position RCs, followed by subject, complement, and genitive positions. This pattern partially aligns with but does not exactly match the NPAHH's predicted difficulty hierarchy (subject > object > complement > genitive). The findings highlight how L1 transfer interacts with universal accessibility constraints in RC acquisition.

Introduction

Several studies have recognized wh-embedded forms as difficult structures that are learned towards the late stages of interlanguage development (Bettoni & Di Biase, 2015; Pienemann, 1999; Pienemann & Johnston, 1987; Saric, 2016; Spinner & Jung, 2018). Relative structure, as one of the most common and complicated syntactic structures in the world languages, has garnered significant attention from linguists and second language learning researchers. Gass and Selinker (2001) believe that relative structures are difficult for second-language learners to produce, comprehend, and imitate. The complexity of these structures is related to their intrinsic nature of subordination which is a basic and universal linguistic process. Kroeger (2005, 97) believes that a relative structure is made up of three important constituents: head, relative marker and modifier:

Pesari (head) [ke (relative marker) dar xijaban didi] (modifier)   baradare man ast.
 The boy   that   in the street saw-2nd per   brother   my   is
 The boy(head) [whom (relative marker) you saw in the street] (modifier)   is my brother

The third element, modifier or relative clause (RC) refers to a clause that modifies a noun phrase (Lehmann. 1986). The position of this clause and its elements are important universal factors for typological studies. English and Persian have post-nominal modifiers, but they have some differences in the form and function of the elements within RCs. One of the distinctive features of English and Persian RCs is their relativization strategies. Keenan (1985.179) believes that there are four universal strategies for relativization in all languages of the world including *full noun phrase, relative pronoun, gap* and *pronoun retention strategy.* Concerning the behavior of Persian and English RCs, it would be clear that English has the gap and relative pronoun strategies, while Persian employs gap and pronoun retention (resumptive pronoun) strategies. As table 1 show, English and Persian have a common strategy for relativization, called the gap strategy. Essentially, 'gap' is the common strategy in both languages contributing to reduced errors and aligning with the positive transfer in the strong version of Contrastive Analysis. In this case, it seems that the primary factor influencing the likelihood of error occurrence is related to pronoun retention or relative pronoun strategies. This challenge is exacerbated when L1 and L2 employ divergent relativization strategies, as in Persian and English.

Table 1. *Rrelativization strategies in English and Persian*

Language	Relativization strategies
Persian	1. Gap
	2. Pronoun retention
English	1. Gap
	2. relative pronoun
	3.

Among the two exclusive ways of relativization in English and Persian, pronoun retention strategy selected for the present study to explore its role in negative transfer from Iranian EFLLs. In other word, the present study tries to investigate the rate of error occurrences based on mother tongue RPs in the structure of English RCs as the primary goal. It was hypothesized that lower proficiency level learners use more negative transfer in their learning process, so

subjects were categorized into high and low proficiency based on the Oxford Placement Test. Then, for the second goal, the results of the first goal will be compared to NPAHH to ascertain their alignment with it. To address the two objectives of the study, the following questions are posed:

- Is there any difference between high and low proficiency level learners for using RP in four functions of English RC influenced by mother tongue?
- Is the behavior of Iranian EFLLs in alignment with the hierarchy of NPAHH for learning English RCs?

1. Literature Review

1-1. Resumptive pronoun

Pronoun retention strategy refers to a situation in which a pronoun called Resumptive Pronoun (RP) is used in the relative clause which is co-indexed by the head of relative structure. Cross linguistically, Resumptive pronouns look exactly like ordinary pronouns. As Rouveret (2011) mentioned Resumptive is an overt pronoun used in the structures such as Relative clause, Wh-Questions, Preposition Phrases and topicalized constructions. Asudeh (2007) defined RP as a pronoun that occupies the foot of an unbounded dependency. As he says, there is no underlying lexical difference between RP and the corresponding referential or bound pronouns. McCloskey (2006.22) introduced three kinds of resumption in RCs typologically including:

Class 1 Base-generated resumptives; Example languages: Irish (and other Celtic Langs.).

Class 2 Movement resumptives; Example languages: Vata, Gbadi.

Class 3 Processor resumptives (outside the grammar); Example languages: English (Sells 1984).

Siche (2014) believed that throughout the 1980s, Resumptive were taken to occur in relative clauses (henceforth, RCs), which do not involve movement. Now it is clear that this is incorrect, and that even within a single language the class of Resumptive pronouns is not necessarily uniform (Aoun, Choueiri, and Hornstein 2001). The above classification indicates that RP is an optional element in informal speech rendering RCs ungrammatical in Formal English. Sells (1984) believed that English RPs are not interpreted like bound variables and are rejected as ungrammatical by speakers in psycholinguistic tests, despite being produced by the speakers. While numerous studies about Language acquisition have extensively focused on the development of RCs in both first-language and second-language contexts (e.g., Diessel, 2004; Diessel & Tomasello, 2001; Kidd & Bavin, 2002; Shelson, 1974), few studies concentrated on studying RP in English RCs. The dearth of studies can be attributed to the fact that English, basically, does not have any RP in its formal relative structures. The likelihood of errors occurring in using RP in English structures is expected to increase by considering the fact that RPs are used in informal spoken English. In other words, while using RP in formal English relative structures always makes sentences ungrammatical, this pronoun is preferably used in informal English. According to McCluskey (2002.189), in some of the world's languages, like English, the native speakers use these pronouns in their speech to make understanding the complex sentences easier. In this situation (see Sentence 1), RP is called the *intrusive resumptive pronoun* (Beltrama and Xiang 2016.2).

1)   This is the girl that Peter said that John thinks that yesterday his mother had given some cakes to **her**

This is the girl that Peter said that John thinks that yesterday his mother had given some cakes to **Ø**

Therefore, Unlike English which does not use RP in any type of RC in formal style, Persian shows various behaviors in using RPs in different RCs. In the following example, 2a is an English relative structure and 2b is a Persian one. As mentioned, the first English relative structure is ungrammatical, since it used Pronoun retention strategy, means using Resumptive pronoun *him* in its relative clause. In contrary, using Pronoun retention strategy (**u ra** as a Resumptive pronoun in relative clause) for Persian in 2b is grammatical.

1)   a) The old man whom you saw **him** in the garden is my grandfather   ungrammatical)

The old man whom you saw in the garden is my grandfather

2)   b) Piremardi(head) [ke(relative marker) **u ra** dar baq Didi] (modifier) (grammatical) pedarbozogam ast

The old man whom him in the garden saw-you grandfather-my is

While using RP in formal English relative structures always makes ungrammatical sentences, it is preferably used in informal and spoken English. This difference may have negative transfer in the process of learning English for Iranian EFLLs. Mowlaei kuhbanani (2021) investigates RPs in Persian RCs on the basis of some universals. His study tries to challenge the findings of Keenan & Comeri (1977) for using RPs in Persian relative clauses. The results reveal that Persian RP is base-generated in their position inside the RCs. He also claims that although Keenan & Comeri (1977) claimed Persian inevitably uses just gap strategy in the subject position of the RCs, there are some RCs which use RPs (optionally and obligatory) in this position. Moreover, based on Keenan & Comeri (1977) in Persian, using RPs in the complement position is necessary. His results revealed there are some examples which show that in some object-complement and complement-complement relative clauses, using RP is not obligatory.

The present study tries to investigate the rate of error occurrences based on mother tongue RPs in the structure of English RCs as a contrastive study. Contrastive Analysis (CA) is applied in the comparative synchronic investigation of two or more languages. The focus on differences is characteristic for the study of linguistic interference that is the impact of one language on another. As Khalifa (2018) notes, such impact can be positive or negative; in the latter case, it is called negative transfer, which is defined as brining a wrong linguistic feature from the mother tongue to the second, or target, language. The background for CA, as applied to language teaching, is the assumption that the native language plays a role in learning a second language. However, when we use a foreign language, we may make mistakes because of influence from our mother tongue often referred to as interference. These negative transfers are considered as one of the important barriers which block the process of foreign language learning.

1-2. NPAHH and Foreign Language RC Learning

The noun phrase accessibility hierarchy (hereafter NPAH) was originally suggested as a typological generalization that classifies languages according to the possibility of

relativization. Specifically, the NPAH concerns the relativizability of a noun phrase with respect to its structural position as follow:

Subject > direct object > indirect object > oblique > genitive

According to the NPAH constraints, if a language allows the relativization of indirect objects, it also allows relativization of subjects and direct objects. If a language allows relativization of objects of prepositions, it also allows relativization of subjects, objects, indirect objects, and so on down the hierarchy. This is because if a language can relativize any position on this hierarchy, it can relativize all higher positions. Kuno (1976) and also stated that the syntactic strategies for relativizing within a given language are closely tied to the Accessibility Hierarchy (AH). In general, the lower on the AH an NP's syntactic role is, the less likely a language is to use a gap rather than a Resumptive when relativizing that NP. In addition, for any position on the AH, if it can be relativized using a gap, all positions higher than it can too.

Scholars in second language acquisition suggest that the order in which individuals acquire strategies for forming relative clauses aligns with the implicational scale proposed by the NPAHH (Ellis, 2008. 566). Gass (1979) showed through an experiment that the NPAHH was significantly relevant to the order of difficulty in the second language acquisition process of English RCs too (see also Eckman, Bell, and Nelson 1988; Doughty 1991). According to the order of difficulty, the rate of error, and the difficulty of learning a second language RCs will increase from left to right of the hierarchy. In other word, based on NPAHH, in the production of RCs, languages follow a universal hierarchy. Therefore, language learning investigators presented a hypothesis by which the learning difficulty of the RCs in the second language can be predicted and then the potential situations for error occurrence would be prevented by foreign language teachers. As the second goal, this study intends to investigate which type of RCs has the highest and lowest error rate in using RP across four different grammatical functions of NP heads, including subject, object, complement and genitive. Different studies conducted to investigate this hierarchy in learning of foreign language RCs. Cho (2002) and Jang (2005) reported that Korean learners of English relative clauses conform to the NPAH as an order of difficulty. Since in their study, the order of difficulty for English learners is complement NP's function, then Genitive, Object and at last Subject NPs. Pavesi (2008) mentioned the fact that the NPAHH is used to predict the acquisition order of relative clauses in a second or foreign language. NPAH has been considered an important factor that has influence on the acquisition process of the English relative clauses (Gass, 1979, Eckman, Bell, and Nelson, 1988; Doughty, 1991). Abdolmanafi and Rahmany (2012) showed that the acquisition or frequency rank order of four types of English relative clauses for Persian-speaking students is object-subject > object-object > subject-subject > subject-object, and that object-subject and object-object relative clause types would be easier for learners to acquire rather than subject-subject and subject-object types. In the same way, Farsi and Zarei (2013) refers to the effect of mother tongue on Persian students while learning the English RCs. Enjavinezhad and Paramasivam (2014) investigated the development of the interlanguage grammar of Iranian speakers acquiring English as a second language at different proficiency levels, and specifically focused on English relative clauses, in the light of the FTFA hypothesis.

It was found that advanced learners can successfully reconstruct their grammar according to the L2 setting. Marefat and Abdollahnejad (2008) also verify this claim by providing evidence from Iranian-speaking learners of English as an L2. Their results, tracing the effect of proficiency on different RC types, suggest that as their proficiency improves, learners become more native-like.

As the above researches showed, the level of proficiency has a significant role in using RPs of English RCs. High proficiency level learners use more grammatical RCs in comparison. However, the present study tries to determine this fact that whether the level of proficiency has any effect on the errors which are related to the function of RC in light of negative transfer from mother tongue. This goal can lead us to the second goal which is examining the alignment of Iranian EFLLs with the hierarchy of NPAHH.

2. Method

2-1. Design of the Study

Random sampling method was employed in the present research for data collection. Questionnaires were randomly distributed among the Iranian students of English Literature and Translation Studies and 90 samples were finally collected using valid and verifiable questionnaires.

2-2. Participants

This study involved 90 Translation Studies and literature students from Vali-E-Asr University of Rafsanjani, selected randomly regardless of age or gender. Participants were classified into high and low proficiency groups based on their Oxford Placement Test (OPT) scores using SPSS's standard deviation method. The grouping procedure was as follows: after calculating the mean OPT score, students scoring one standard deviation above the mean were assigned to the high proficiency group (n=30), while those scoring one standard deviation below were placed in the low proficiency group (n=30). This method ensured a clear distinction between groups based on score distribution. The remaining participants were excluded from further analysis to maintain focus on comparing these two distinct proficiency levels.

Table 2. *Demographics of Participants.*

Characteristic	Type	Frequency
Gender	Male	16
	Female	74
Age	19>	8
	19-21	41
	>21	41
Years of Learning English	4>	12
	4-7	22
	>7	56
Proficiency level	high	30
	mid	30
	low	30

2-3. Materials and Instruments

The Oxford Quick Placement Test comprises 60 multiple-choice items assessing reading skills, vocabulary, and grammar knowledge. The test is divided into two sections: the first 40 items

evaluate learners at or below upper-intermediate level, while the remaining 20 items target upper-intermediate and advanced learners. As a standardized instrument, the test has demonstrated high reliability in previous research (e.g., Geranpayeh, 2003). In the current study, the test demonstrated high reliability ($\alpha = 0.85$). The multiple-choice test (MC) contained 32 English relative clause structures, distributed equally across eight relative structures (RSs) for each grammatical function of the head noun: subject (8), object (8), genitive (8), and complement (8). All verbs in both the relative clause (RC) and matrix clause were in the present tense. All noun phrases were animate to control for potential animacy effects, as animacy significantly impacts comprehension (e.g., Gibson et al., 2005). This design prevented participants from relying solely on semantic cues while bypassing grammatical knowledge. Specifically, in English, inanimate nouns can only be relativized using 'which,' whereas animate nouns require different wh-words depending on their grammatical function. Since this study did not focus on relative marker forms (wh-words), this approach ensured participants primarily engaged their grammatical knowledge. Additionally, all noun phrases shared the same person and number to eliminate verb agreement cues.

Each MC question presented four relative structures, with only one grammatically correct option. Participants selected their answer based on the grammaticality of each sentence.

The CR test required translation of 32 Iranian relative clauses into English, similarly distributed across eight RSs for each head noun function (subject, object, genitive, complement). A key feature of this test was the presence or absence of relative pronouns (RPs) across structures. Importantly, testing conditions were identical for both proficiency groups.

2-4. Procedure

MC and CR tests were administered to participants. Using NPAH, the study examined how Iranian EFL learners at different proficiency levels judged the position of RPs in English sentences. First, the MC and CR tests were developed, and their reliability was estimated using pre-test data from both proficiency groups. The MC test was administered in one session, with approximately 50 minutes allotted for completion. The production test (i.e., CR) was conducted in a separate session, with an equal time allocation for translating relative clauses.

To ensure participant cooperation, the tests were incorporated as part of their grammar course evaluations. The primary objective was to determine the acceptability rate of each relative clause structure. This was calculated by counting the number of sentences each participant correctly identified as grammatical for each relative clause type. Participants received a score of 1 for correctly identifying grammatical sentences and 0 for incorrectly rejecting them.

Data analysis was performed using SPSS 27. The first research question was addressed through independent samples t-tests. The second research question examined the frequency of negative transfer cases by quantifying instances of negative transfer in participants' responses.

3. Results

To answer the research questions, we conducted a series of independent samples t-tests. First, we compared the mean performance of high- and low-proficiency groups across MC and CR items. Next, we analyzed group performance across different RP types, independent of test methods.

Table 3 presents the means and standard deviations for both proficiency groups across different test formats. As it is shown, participants in the high proficiency group scored significantly higher on both MC (M = 12.95) and CR (M = 29.35) items compared to those in the low proficiency group (MC: M = 5.83, CR: M = 25.23).

Table 3. *Descriptive Statistics for Proficiency Levels on MC and CR.*

Proficiency Level	*n*	Mean	SD	SE
MC – Low	30	5.83	2.15	0.39
MC – High	20	12.95	2.13	0.47
CR – Low	30	25.23	4.51	0.82
CR – High	20	29.35	2.90	0.65

To further explore the differences between the two groups, independent samples t-tests were conducted. The results are summarized in Table 4.

Table 4. *Independent Samples t-Test for MC and CR Scores.*

Measure	*T*	*df*	*p*	Mean Difference	SE	95% CI (LL, UL)	η^2
MC	-11.50	48	< .001	-7.12	0.62	[-8.36, -5.87]	.513
CR	-3.60	48	.001	-4.12	1.14	[-6.41, -1.82]	.261

The results demonstrated significant differences in mean scores for both the MC and CR conditions ($p < 0.05$). In the MC condition, under the assumption of equal variances, the t-test yielded a significant difference (t (48) = -11.50), ($p < 0.001$), with a large effect size (eta^2 = 0.513), indicating substantial practical significance. Similarly, in the CR condition, significant differences were found between both the high and low proficiency groups under the assumption of equal variances (t (48) = -3.60), ($p = 0.001$), with a strong effect size (eta^2 = 0.261). These findings suggest significant differences between the high and low proficiency groups across the two test types, particularly in the MC condition.

To address the first research question, we compared the performance of high- and low-proficiency groups across various RP types (means head of NP in Subject, Object, Genitive & Complement Grammatical Functions) in the subsequent phase. Due to space limitations, Tables 3 and 4 present only those RP types for which the groups showed statistically significant differences in performance. Table 5 specifically displays the means and standard deviations for RP usage in different syntactic positions across both proficiency groups.

Table 5. *Descriptive Statistics for Position and Proficiency Levels.*

Position	Proficiency Level	*n*	Mean	SD	SE
SO	Low	30	1.90	0.96	0.18
	High	20	2.70	0.66	0.15
OO	Low	30	2.15	0.73	0.13
	High	20	2.46	0.37	0.08
CO	Low	30	1.95	0.63	0.11
	High	20	2.23	0.39	0.09
CC	Low	30	2.17	0.79	0.14
	High	20	2.80	0.52	0.12
GG	Low	30	1.60	0.49	0.09
	High	20	2.03	0.68	0.15

As shown in Table 5, when comparing the performance of high- and low-proficiency groups across different RP types, a consistent pattern emerges. On average, the high-proficiency group

achieved higher mean scores than the low-proficiency group across all conditions, suggesting a general trend of superior performance among individuals with higher proficiency levels. Additionally, the dispersion of scores varied between groups. The low-proficiency group exhibited higher standard deviations than the high-proficiency group, indicating greater performance variability and less consistency among lower-proficiency individuals. Independent samples t-tests were conducted to determine whether significant differences in RP usage existed between the two groups.

Due to a violation of the assumption of homogeneity of variances, as indicated by a significant Levene's test, the results of the Welch's *t*-test (i.e., the "Equal variances not assumed" row in SPSS output) are reported for the comparisons in Table 4.

Table 6. *Independent Samples t-Tests for different conditions in resumptive pronoun usage.*

Condition	*T*	*df*	*p* (2-tailed)	Mean Difference	Std. Error Difference	95% CI Lower	95% CI Upper	η^2
SO	-3.25	48	.001	-0.80	0.229	-1.26	-0.34	.180
OO	2.02	45.20	.049	0.32	0.157	0.00	0.63	.083
CO	1.96	47.89	.055	0.28	0.144	-0.01	0.57	.075
CC	-3.40	48	.001	-0.63	0.186	-1.01	-0.26	.186
GG	2.46	31.91	.020	0.43	0.177	0.07	0.79	.129

Note: SO = subject in main clause, object in relative clause; OO = object in both main and relative clauses; CO = complement in main clause, object in relative clause; CC = complement in both main and relative clauses; GG = genitive in both main and relative clauses.

The results indicated statistically significant differences between groups in the SO condition (t(48) = -3.25), (p = 0.001); (eta^2 = 0.180), OO condition (t(45.20) = 2.02), (p = 0.049); (eta^2 = 0.083), CC condition (t(48) = -3.40), (p = 0.001); (eta^2 = 0.186), and GG condition (t(31.91) = 2.46), (p = 0.020); (eta^2 = 0.129). Additionally, the difference observed in the CO condition approached significance (t (47.89) = 1.96), (p = 0.055); (eta^2 = 0.075), suggesting a marginal effect.

4. Discussion

As mentioned in the first part, to address the two objectives of the present study, two main questions were posed. First, we hypothesized that lower-proficiency learners would demonstrate more negative transfer in the process of English relative clause learning. So, the first question presented as follow:

-   Is there any difference between high and low proficiency level learners for using RP in four functions of English RC influenced by mother tongue?

The findings for the first question are consistent with several studies (e.g., Bennett et al., 1991; Hancock, 1994; Lukhele et al., 2005; Wainer & Thissen, 1993; Walstad & Becker, 1994) examining the impact of test method on language test performance. These investigations have demonstrated that multiple-choice (MC) and constructed-response (CR) methods tend to assess the same underlying trait. These findings reveal that the high proficiency group consistently performed significantly better than the low proficiency group across all types of RPs. Effect sizes ranged from moderate to large, indicating meaningful differences between groups.

However, the percentage of two groups revealed that in both levels (high and low proficiency) there is a consistent pattern which showed the least number of errors happened in RCs with the

object head function. This finding could be related to mother tongue; due to optional usage of RP in Persian RCs. As mentioned, in Persian RCs, RP is obligatory in RCs with complement and genitive grammatical function heads and is forbidden in RCs that their head is subject. It seems that Iranian EFLLs (in both levels) consider the optional use of RP in Persian RCs with the head function of object as a pattern for English RCs too. It would be more acceptable if we know that in Persian RCs with head function of object, the RP could be appeared as a clinic in addition to a single pronoun which makes Persian RCs more similar to English ones:

3)   Pesari$_{(head)}$ ra [ke $_{(relative\ marker)}$ dar xijaban didi^j] $_{(modifier)}$ baradare man ast.

The boy that in the street saw-you $_{(nomin)}$ he$_{(accus)}$ brother   my   is

The boy$_{(head)}$ [whom $_{(relative\ marker)}$ you saw **him** in the street] $_{(modifier)}$ is my brother

The claim of positive transfer of Persian RP influence on English RCs by Iranian EFLLs will be boosted in another case. Although using RP in both Persian and English RCs makes the ungrammatical form and subject function is the easiest position for learning foreign RCs; Iranian EFLLs had the least of error rate for English RCs with head function of object.

For answering the first question, one can conclude that mother tongue has a significant effect on using RPs in English relative clauses in two respects. Firstly, Object NP Head is the only optional position for using RP in Persian (as shown in sentence 3). While, other 3 positions have a fixed rule in this case; using RP in Subject NP Head is forbidden, in Genitive and Complement NP Head is obligatory. This situation may make interface for Iranian EFLLs due to this fact that although using RP is forbidden in formal English, it may be used as intrusive pronoun in informal English. So, Persian Object NP Head is the most similar Persian head position to English ones in formal and informal English. In this case it is the easiest position for Iranian EFLLs. For second conclusion, it should be mentioned firstly that Subject NP Head have the same behavior in English and Persian since in both languages using RP is forbidden. Naturally, this condition reduces the error occurrence possibility based on strong version of CA. it could be concluded that the optional usage of RP in Object position again has a direct effect in this interference. As most Iranian EFLLs consider Subject and object positions the same in relative clauses. This error is related to this fact that relative pronoun *WHO* can be used for both Subject NP head and Object NP head positions in English. In other words, although there is two relative pronouns WHO and WHOM in English used respectively for subject and object positons, the relative pronouns WHO can be used in both positions. Therefore, the general conclusion for the first answer question reveals that more error occurrences in English subject NP head position in comparison to Object NP position has both interlingual and intralingual factors. The first conclusion based on interligngual factor, the effect of mother tongue (persian) and the second one based on both interlingual and intralingual factors. In this case, the interlingual factor is the effect of Persian optional RP usage in Object NP position and the Intralingual factor is the usage of WHO for both Subject and Object NP positions.

As the second question, the present study tries to investigate the alignment of NPAHH to the behavior of Iranian EFLLs. So, the next question presented as follow:

Is the behavior of Iranian EFLLs in alignment with the hierarchy of NPAHH for learning English RCs?

As mentioned, the NPAH concerns the relativizability and learnability of a noun phrase with respect to its structural position as follows:

Subject> direct object> indirect object> oblique> genitive

To explain this purpose, there is a need to extract a general hierarchy based on the results. To achieve such a hierarchy, the average of the results of ungrammatical relative clauses in which the RP is in the subject position of the relative clause (in both the MCT and RC) was calculated. In a similar way, the average percent of object, complement, and genitive positions were counted regardless of the level of proficiency. Finally, based on these averages, the following hierarchy was derived:

Object > subject > complement > genitive

Based on this hierarchy, it can be understood that there are just one difference between the NPAH and the hierarchy of the present study. This means that the subject and object positions do not follow the NPAH hierarchy. Do. It would be concluded that the present research results are not in exact alignment with NPAHH.

Conclusion

As discussed, the study contributes to the literature by focusing on two significant questions. The first research question concerned the difference between high and low proficiency level learners for using RP in four functions of English RC influenced by mother tongue. To this purpose the subjects were divided into high and low proficiency groups based on their performances on the Oxford Placement Test. The results showed that when the groups are compared across the constructed response (CR) and multiple-choice test (MC) methods, the high proficiency group significantly outperformed the low proficiency group. The present findings are consistent with several studies (e.g., Bennett et al., 1991; Hancock, 1994; Lukhele et al., 1994; Wainer & Thissen, 1993; Walstad & Becker, 1994) examining the impact of test method on language test performance. It seems that negative transfer could be the factor for the differences between high and low proficiency level groups. Persian and English RCs have different behavior in respect to Resumptive pronoun; so, lower proficiency learners used RP in English RCs in analogy to Persian RCs. However, the comparison of two groups' results showed that their behavior is the same in using more grammatical RCs whenever the head function is object, then subject and then complement and genitive. This consistent hierarchy of both groups led us to this conclusion that although using RP in both Persian and English RCs makes the ungrammatical form and subject function is the easiest position for learning foreign RCs; Iranian EFLLs had the lowest of error rate for English RCs with head function of object.

The second goal was to investigate if the NPAHH holds true in the present study or not. For this sake, the rate of errors was analyzed based on RCs type. The results of the research for this goal revealed that while NPAHH claimed the learnability of subject RP is easier than object, object is easier than complement and genitive is the most difficult one, Iranian EFLLs had the least rate of error for object and then for subject position. The rate of error in complement and genitive RP confirms the order of NPAHH. The reversal order of subject and object in this study in comparison to NPAHH may be related to the optional usage of RP in Persian object position. As it was mentioned for the first question, it may be the effect of mother-tongue.

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