高 大 人 文 學 報 第 8 期 NUK Journal of Humanities 2023年6月頁55-84 DOI: 10.6648/NUKJH.202306\_(8).0004

Acquisition of English Restrictive and Non-Restrictive Relative

**Clauses by Chinese EFL Learners** 

Shih-han Wang

Graduate student, National University of Kaohsiung, Taiwan

Abstract

English relative clauses are a complex sentence structure and often pose great difficulty for

English as a foreign language (EFL) learners to acquire. They have drawn researchers' attention

in the Western context. However, there have been comparatively fewer reports on the

acquisition of restrictive relative clauses (RRCs) and non-restrictive relative clauses (NRRCs)

in the Chinese EFL context. The current study aims to examine the acquisition of English RRCs

and NRRCs by Chinese-speaking EFL learners in Taiwan. Thirty-two EFL learners participated

in this study. They were sophomores and were divided into two groups, i.e., the intermediate

group and the advanced group, based on their English proficiency levels. They were invited to

take a sentence interpretation test, and their performance was compared and discussed in six

55

subject-modified object relative clauses (SO), object-modified subject relative clauses (OS), object-modified object of preposition relative clauses (SOPREP), and object-modified object of preposition relative clauses (OOPREP). The major results indicated that these EFL learners, despite their different English proficiency levels, shared similar preference patterns when interpreting these two types of relative clauses (i.e., RRCs and NRRCs). They had few difficulties in interpreting most of the subtypes, including

SS, SO, OS, SOPREP, and OOPREP. However, sentences of the OO type were more

challenging for these EFL learners, as they failed to identify appropriate antecedents in these

sentences. The results contribute both theoretically and empirically. Nevertheless, there are

limitations in this study, and suggestions for further research are provided.

different subtypes of relative clauses, including subject-modified subject relative clauses (SS),

**Keywords: Restrictive relative clause, Non-restrictive relative clause, EFL learners** 

## 1 Introduction

English relative clauses, as complex sentence structures, often present significant challenges for English as a foreign language (EFL) learners. Numerous scholars have conducted extensive research in this field (see, for example, Abdolmanafi & Rahmani, 2012; Gao, 2014; Khan & Al-Namer, 2017). Relative clauses represent intricate syntactic structures, typically used to specify the scope of a noun and to provide additional information about it. In the realm of second language acquisition (SLA) research, many scholars have proposed various hypotheses to explain the order of acquisition of relative clauses. Examples include Keenan and Comrie's (1977) Noun Phrase Accessibility Hierarchy Hypothesis (NPAH) and Kuno's (1974) Perceptual Difficulty Hypothesis (PDH), among others. These hypotheses are often employed and tested in subsequent research. The findings of Marefat and Rahmany (2009) indicated that relative clauses focusing on the subject (OS, SS) are less challenging than those focusing on the object (OO, SO), which is consistent with the Noun Phrase Accessibility Hierarchy Hypothesis (NPAH). Khan and Al-Namer (2017) also supported a similar perspective in their research. Moreover, Marefat and Rahmany (2009) noted that their results do not align with Kuno's (1974) Perceptual Difficulty Hypothesis (PDH). However, Gao (2014) found that their research results fully support PDH.

English relative clauses, aside from their complex structures, can be categorized into two

types: restrictive relative clauses (RRCs) and non-restrictive relative clauses (NRRCs). RRCs are essential clauses that help identify or define the noun they modify. On the contrary, NRRCs provide supplementary, non-essential details about the noun, and they can be omitted without altering the core meaning of the sentence. Despite this rich body of research, there has been a notable omission in the exploration of the acquisition of RRCs and NRRCs by Chinese EFL learners. To address this research gap, the current study aims to investigate the performance of Chinese EFL learners in acquiring RRCs and NRRCs, with a specific focus on the influence of English proficiency levels on their performance in acquiring these relative clauses.

## Research questions

There are three research questions:

- 1. How is the performance of Chinese EFL learners in acquiring RRCs?
- 2. How is the performance of Chinese EFL learners in acquiring NRRCs?
- 3. How does English proficiency level influence Chinese EFL learners' performance in acquiring RRCs and NRRCs?

## 2 Literature review

This chapter provides a review of the existing literature on relative clauses. The first section introduces relative clauses. This is followed by the impact of cultural and linguistic factors on EFL learners. The third section focuses on the acquisition of English relative clauses in

different ethnic group.

## 2.1 Relative clauses

A relative clause in English is a sentence structure embedded within another sentence, where the two sentences refer to the same noun simultaneously. An English relative clause is a type of dependent clause, sometimes referred to as an "adjective clause" because it functions as an adjective to modify a noun. More specifically, relative clauses clarify the meaning of the entire sentence or provide additional explanations and ideas by modifying the noun or noun phrase in the main clause. English relative clauses are head-modifying constituents, as they modify the noun or noun phrase that immediately precedes them.

English relative clauses can be categorized into two main types: restrictive relative clauses (RRCs) and non-restrictive relative clauses (NRRCs). RRCs provide essential information to define or identify the nouns in the main clause. Conversely, NRRCs offer additional information that, while potentially interesting or important to the sentence, can be omitted without significantly altering the sentence's core meaning.

## 2.2 The impact of cultural and linguistic factors on EFL learners

## 2.2.1 The impact of linguistic factors on the structure of relative clauses of Chinese EFL

#### learners

In terms of linguistic factors, there are significant structural differences between Chinese

and English clauses. Firstly, they differ in the relative clause's position in relation to the head noun. In Chinese, the relative clause appears to the left of the head noun, whereas in English, it appears to the right of the head noun. The second difference lies in the use of a relative marker. In Chinese, the particle "de" is often used to separate the relative clause from the head noun, while in English, various pronominal particles such as "who," "whom," "whose," "which," or "that" are used to mark the relative clause, depending on the characteristics of the head noun. The final distinction involves the presence of a pronominal reflex. English relative clauses do not contain a pronominal reflex, whereas in Chinese, a pronominal reflex remains in relative positions.

In addition to structural differences, native language interference is also one of the factors contributing to the challenges faced by Chinese EFL learners in learning English. Wang (2009) investigated internal factors affecting students' English proficiency, identifying native language interference as one of them. During the initial stages of learning a second language, individuals are particularly susceptible to the influence of cross-linguistic transfer or interference from their native language (Brown, 2000). Ping (2022) conducted an error analysis study on Chinese EFL learners' use of English relative clauses, seeking to understand the reasons for errors in the use of relative pronouns and adverbs. The study found that participants' errors in using English relative clauses, both in writing and speaking, were influenced by native language

interference. Due to the absence of concepts related to relative pronouns and adverbs in Chinese,
Chinese EFL learners are more prone to native language interference when learning English
relative clauses, making it challenging for them to grasp the meaning of sentences.

#### 2.2.2 The influence of culture factors on Chinese EFL learners

The impact of cultural factors on Chinese EFL learners is a crucial aspect that shapes their language acquisition journey. Cultural influences play a significant role in shaping language learning attitudes, preferences, and strategies among Chinese EFL learners. Rao (2006) found that Chinese EFL learners' learning strategies are associated with their cultural and educational background. Similarly, Wang (1993) also explored factors influencing Chinese EFL learners. He identified cultural differences, background knowledge, language shock, and other factors as potential contributors to the distance between learners and the target language.

# 2.3 Acquisition of English relative clauses in different ethnic groups

English relative clauses (RCs) represent a complex sentence structure in the English language and have been the subject of extensive research by numerous scholars. Due to their intricate structure, researchers have examined them from various perspectives. For example, they have explored the relative clause's position in relation to the head noun, the accessibility hierarchy of noun phrases within the relative clause, and the relative clause's placement within the sentence. Additionally, some researchers have chosen English as a Foreign Language (EFL)

learners as their research subjects to investigate their acquisition of relative clauses, studying aspects such as acquisition effectiveness and the order of difficulties.

Different research groups have explored the acquisition of English relative clauses by various ethnic groups, each offering its unique perspective. For example, Marefat and Rahmany (2009) and Abdolmanafi and Rahmani (2012) both investigated the acquisition of English relative clauses by Persian EFL learners. They both proposed that SO types are the most challenging, while OS types are the easiest for Persian EFL learners to acquire. Additionally, Marefat and Rahmany (2009) not only examined the acquisition of different types of relative clauses, including OS, OO, SS, and SO, but also attempted to determine whether Kuno's (1974) Perceptual Difficulty Hypothesis (PDH) could support their findings. The PDH theory posited that sentences with a relative clause embedded within the main subject position are more challenging than those where the relative clause is embedded in the main object position. However, Marefat and Rahmany (2009) revealed that center-embedded relative clauses are not inherently more complex than right-embedded relative clauses, contradicting the PDH theory. In contrast, Gao (2014), focusing on Chinese EFL learners, presented an opposing viewpoint, as their research results fully supported the PDH theory. Furthermore, the proficiency in English is considered one of the factors influencing the acquisition of English relative clauses. Khan and Al-Namer (2017), who examined Arabic-speaking EFL learners, and Al-Maani and Al-Haija (2019), who focused on Jordanian EFL learners, both found that English proficiency can impact the acquisition performance.

As shown in the above literature review, existing research in the acquisition of RRCs and NRRCs has ignored the role of Chinese EFL learners. Hence, in order to help bridge this gap in our knowledge, the purpose of this study aims to investigate the performance of Chinese EFL learners in acquiring RRCs and NRRCs. The impact of English proficiency levels on the performance of Chinese EFL learners in acquiring RRCs and NRRCs will also be investigated.

## 3 Methodology

This chapter describes how the research will be collected and how the data will be analyzed the data. The first section introduces the participants in the current study, followed by the instruments and procedures that utilized in this study. The final section shows the measurement and analysis for the data.

## 3.1 Participants

Thirty-two students participated in this study. These participants were from a university in Kaohsiung, and they were native speakers of Chinese. All of the participants were sophomores and learned English as a second language (EFL learners). Participants were recruited through a teacher in her Introduction to Linguistics class. For the sake of convenience

sampling, only sophomores were included. According to the TOEIC score and English ability comparison table, participants were divided into two groups, that is, the intermediate level group and the advanced group. The scoring in the range of 405-785 was placed in the intermediate group, and the scoring in the range of 785-990 was placed in the advanced group.

# 3.2 Instruments and procedures

The aim of this study is to investigate the performance of Chinese EFL learners in learning restrictive relative clauses (RRCs) and non-restrictive relative clauses (NRRCs). To collect the data, each participant was invited to participate in a sentence interpretation test (see Appendix), which was adapted from the methodology utilized in the study conducted by Amornwongpeeti and Pongpairoj (2014) concerning the acquisition of RRCs and NRRCs by Thai students. The rationale for applying the methodology of Amornwongpeeti and Pongpairoj (2014) is to gain insights into the learners' acquisition process by examining their comprehension of these two types of relative clauses. In this test, participants were presented with a sentence containing a relative clause and were subsequently provided with another statement, for which they were required to determine whether it could be inferred from the given sentence. An illustrative example is provided below in (1).

(1) The dog which is sleeping is mine.

I have at least one dog.

These two statements were specifically designed to assess the participants' comprehension of both RRCs and NRRCs. For instance, in example (1), the first statement is considered true because the RRC "which is sleeping is mine" explains that I have a dog.

In the sentence interpretation test, participants encountered three primary categories: Subject (Sub), Direct Object (DO), and Object of Preposition (OPREP), as well as six types of RCs: SS, SO, OS, OO, SOPREP, and OOPREP. Each pairing consisted of the head noun's function as the first part, followed by the relative pronoun. The test encompassed a total of 44 items, as depicted in Table 1 below, including various types of both RRCs and NRRCs. Any grammatical or vocabulary errors were meticulously eliminated from the test.

Table 1: The distribution of the different RC types

RCs	Relativizers	SS	os	SO	00	SOPREP	OOPREP
RRCs	Wh-operator	2	2	2	2	2	2
	That	2	2	2	2	2	2
	Null	-	-	2	2	2	2
NRRCs	Wh-operator	2	2	2	2	2	2
	That	-	-	-	-	-	-
	Null	-	-	-	-	-	-

# 3.3 Data analysis

The analysis of sentence interpretation test data involved employing descriptive analysis techniques. Scores from both the intermediate and advanced groups were converted into frequencies and percentages, facilitating a thorough comparison and analysis.

## 4 Results

In this section, the frequency and percentage were used to judge the students' preference of each subtype of RRCs and NRRCs. Therefore, the frequency and percentage of each subtype of RRCs and NRRCs in intermediate and advanced groups are presented. The frequency and percentage are further analyzed and discussed whether student's English proficiency affect their acquisition of English RRCs and NRRCs.

# 4.1 Results of statistical analysis

# The frequency of subtype of RRCs

Table 2: The frequency of subtype of RRCs in sentence interpretation test

Group / RO	SS	os	SO	ОО	SOPREP	OOPREP		
relativi								
Intermediate	wh	0	20	28	18	6	20	20
		X	24	16	26	38	24	24
	that	0	6	18	12	23	17	4

		X	38	26	32	21	27	40
	null	0	-	-	2	23	24	22
		X			42	21	20	22
Advanced	wh	0	10	14	10	6	12	11
		X	10	6	10	14	8	9
	that	0	3	5	6	9	10	3
		X	17	15	14	11	10	17
	null	0	-	-	1	17	11	9
		X			19	3	9	11

# The percentage of subtype of RRCs

Table 3: The percentage of subtype of RRCs in sentence interpretation test

Group / RC	Group / RC types /		SS	os	SO	00	SOPREP	OOPREP
relativiz	zers							
Intermediate	wh	$\circ$	45.45%	63.63%	40.90%	13.63%	45.45%	45.45%
		X	54.54%	36.36%	59.09%	83.36%	54.54%	54.54%
	that	0	13.63%	40.90%	27.27%	52.27%	38.63%	9.09%
		X	86.36%	59.09%	72.72%	47.72%	61.36%	90.90%
	null	$\circ$	-	-	4.54%	52.27%	54.54%	50%

		X			95.45%	47.72%	45.45%	50%
Advanced	wh	0	22.72%	31.81%	22.72%	13.63%	27.27%	25%
		X	22.72%	13.63%	22.72%	31.81%	18.18%	20.45%
	that	0	6.81%	11.36%	13.63%	20.45%	22.72%	6.81%
		X	38.63%	34.09%	31.81%	25%	22.72%	38.63%
	null	0	-	-	2.27%	38.63%	25%	20.45%
		X			43.18%	6.81%	20.45%	25%

Table 2 and Table 3 shows the frequency and percentage of subtype of RRCs in sentence interpretation test. In the intermediate group, it was noted that a significant increase in both frequency and percentage occurred among participants who opted for interpretations not deducible from the given sentence, as compared to those who chose meanings that could be inferred. In the advanced group, we observed a similar trend where a larger number of participants opted for meanings that were not readily inferred from the provided sentence, both in terms of frequency and percentage.

# The frequency of subtype of NRRCs

Table 4: The frequency of subtype of NRRCs in sentence interpretation test

Group / RC types /	SS	OS	SO	00	SOPREP	OOPREP
relativizers						

Intermediate	wh	$\circ$	31	25	29	11	37	42
		×	13	19	15	33	7	2
Advanced	wh	0	16	13	14	5	19	20
		×	4	7	6	15	1	0

# The percentage of subtype of NRRCs

Table 5: The percentage of subtype of NRRCs in sentence interpretation test

Group / RC	Group / RC types /		SS	os	SO	00	SOPREP	OOPREP
relativizers								
Intermediate	wh	0	70.45%	56.81%	65.90%	25%	84.09%	95.45%
		X	29.54%	43.18%	34.09%	75%	15.90%	4.54%
Advanced	wh	0	36.36%	29.54%	31.81%	11.36%	43.18%	45.45%
		X	9.09%	15.90%	13.63%	34.09%	2.27%	0

Table 5 and Table 6 presents the frequency and percentage of subtype of NRRCs in sentence interpretation test. In the intermediate group, we consistently noticed a higher frequency of participants selecting meanings that could be inferred from the provided sentence compared to choosing meanings that could not be inferred, except for the OO subtype. This pattern is similarly observed in the advanced group, where the frequency of selecting inferred meanings exceeds that of non-inferred meanings, once again, with the exception of the OO

subtype.

#### 4.2 Discussion

This section offers a general discussion based on the results of statistical analysis.

To address the first research question regarding the performance of Chinese EFL learners in acquiring RRCs, the results indicate noteworthy trends in both the intermediate and advanced groups.

In the intermediate group, we observed that the frequency and percentage of participants choosing meanings that could not be inferred from the provided sentence were notably higher than those selecting meanings that could be inferred. This suggests that a substantial portion of intermediate learners struggled to grasp the implied connections within RRCs. In the advanced group, a similar pattern emerged, with a higher frequency and percentage of participants opting for meanings that could not be inferred from the sentence. Interestingly, the frequency gap between the two groups remained relatively consistent. This implies that both intermediate and advanced learners faced comparable challenges in comprehending RRCs.

In summary, the performance of Chinese EFL learners in acquiring RRCs appears to exhibit similar trends in both the intermediate and advanced groups. The majority of participants in both groups tended to select meanings that were not readily inferred from the provided sentences, indicating a common difficulty in comprehending the subtleties of RRCs.

To address the second research question regarding the performance of Chinese EFL learners in acquiring NRRCs, the data reveals interesting trends in both intermediate and advanced groups for different NRRC subtypes.

In the intermediate group, the frequency of selecting meanings that can be inferred from the given sentence is consistently higher than the frequency of choosing meanings that cannot be inferred, except for the OO subtype. A similar pattern is observed in the advanced group, where the frequency of choosing inferred meanings exceeds that of non-inferred meanings, again with the exception of the OO subtype. Examining the percentages for each subtype of NRRCs, we find a significant preference for choices that can infer meaning from the given sentence in both intermediate and advanced groups, except for the OO subtype. In the OO subtype, both groups exhibit a different pattern. This is different from the studies conducted by Marefat and Rahmany (2009) and Abdolmanafi and Rahmani (2012), which proposed that SO types are the most challenging.

In summary, Chinese EFL learners in both the intermediate and advanced groups generally excel in selecting meanings that can be inferred from the given sentence when dealing with various NRRC subtypes. This is evident in the higher frequency and percentage of choices aligned with inferred meanings, except for the OO subtype, where a distinct pattern emerges. Therefore, Chinese EFL learners exhibit strong comprehension skills when it comes to

meanings that can be inferred from NRRCs, particularly within the context of subtypes other than OO.

To address the third research question regarding the influence of English proficiency level on Chinese EFL learners' performance in acquiring RRCs and NRRCs. Based on the results, it appears that English proficiency level influences the performance of Chinese EFL learners in acquiring both RRCs and NRRCs.

Firstly, in the case of RRCs, participants in both the intermediate and advanced groups tend to choose meanings that cannot be readily inferred from the given sentence more frequently than those that can be inferred. This suggests that learners at both proficiency levels face similar challenges in grasping the implied connections within RRCs. Additionally, the frequency gap between the two groups remains relatively consistent, indicating comparable difficulties.

Secondly, when dealing with NRRCs, there is a difference in the ability to choose meanings that can be inferred from the given sentence between the two groups. Generally, both intermediate and advanced learners excel in selecting meanings that can be inferred from NRRCs, except in the case of a specific subtype known as "OO." In the "OO" subtype of NRRCs, both groups exhibit a distinct pattern, highlighting a unique challenge faced by learners at both proficiency levels.

In summary, English proficiency level appears to impact Chinese EFL learners' performance in acquiring RRCs and NRRCs. It does not significantly affect the difficulty of comprehending RRCs, as both intermediate and advanced learners struggle similarly to infer meanings. Regarding NRRCs, both groups perform well in inferring meanings from the given sentence, except for the "OO" subtype, which presents a challenge for learners at both proficiency levels.

Clearly, both intermediate and advanced Chinese EFL learners exhibit similar performance results when dealing with restrictive and non-restrictive relative clauses, facing challenges across different clause types. Apart from language proficiency as a potential influencing factor, metacognitive factors of learners could also be among the contributing elements. According to Flavell (1979), metacognition consists of three components: metacognitive awareness, metacognitive regulation, and metacognitive experiences. Metacognitive factors involve individuals' awareness and understanding of their own learning and cognitive activities. If Chinese EFL learners can enhance their awareness of the syntactic structures of relative clauses and proactively adjust their learning strategies, it will contribute to a more effective handling of English relative clauses.

#### **5** Conclusion

In conclusion, the research findings shed light on the performance of Chinese EFL learners

in acquiring RRCs and NRRCs and the influence of English proficiency levels on their comprehension of these grammatical structures.

For RRCs, both intermediate and advanced learners faced similar challenges. They tended to choose meanings that could not be readily inferred from the provided sentences, indicating a common difficulty in grasping the implied connections within RRCs. The performance across two proficiency levels indicates comparable difficulties in comprehending RRCs. When it comes to NRRCs, the picture is somewhat different. Both intermediate and advanced learners generally excelled in selecting meanings that could be inferred from the given sentences, except for the "OO" subtype. The "OO" subtype presented a unique challenge for learners at both proficiency levels, indicating that this specific subtype of NRRCs posed difficulties.

For future research recommendations, it is suggested to broaden the scope of study participants, including individuals from diverse ethnic backgrounds, not limited to sophomore English learners whose native language is Chinese. Additionally, expanding the sample size is advised, as the current study involved only 32 participants. Such an approach would contribute to a more comprehensive and robust analysis of relevant research questions. Furthermore, considering that metacognitive factors may influence learners' proficiency in relative clauses and non-relative clauses, it is recommended that future research incorporates an investigation into metacognitive factors.

# 台灣英語學習者對英文限制型關係子句與非限制型關係子句之習得

## 王詩涵

# 國立高雄大學研究生

# 摘要

英文的關係子句是一種複雜的句子結構,對於英語作為外語(EFL)學習者而言經常具有很大的難度。這一主題在西方背景下一直引起研究者的關注。然而,在中文 EFL 背景下,對於限制型關係子句 (RRCs) 和非限制型關係子句 (NRRCs) 的習得研究相對較少。本研究旨在探討台灣中文母語的 EFL 學習者對英語 RRCs 和 NRRCs 的習得情況。總共有32 名 EFL 學習者參與了這項研究,他們是大二學生,根據他們的英語水平被分為兩組,即中級組和高級組。他們被邀請參加句子理解測試,並且在六種不同類型的關係子句中進行比較和討論,包括主語修飾主語關係句 (SS),主語修飾賓語關係句 (SO),賓語修飾主語關係句 (OS),賓語修飾實語關係句 (OO),主語修飾介詞賓語關係句 (SOPREP),以及賓語修飾介詞賓語關係句 (OOPREP)。主要結果表明,儘管這些 EFL 學習者的英語水平不同,但在解釋這兩類關係子句 (即 RRCs 和 NRRCs) 時,他們在大多數子類型上都有相似的偏好模式。他們在解釋大多數子類型時並未遇到太多困難,包括 SS,SO,OS,SOPREP 和 OOPREP。然而,對於 OO 類型的句子,這些 EFL 學習者的挑戰較大,因為他們

未能識別這些句子中的適當先行詞。這些結果在理論和實證方面均有貢獻。然而,本研究存在一些限制,並提出進一步研究的建議。

關鍵詞:限制型關係子句,非限制型關係子句,EFL學習者

## References

- Abdolmanafi, S.J., & Rahmani, Z. (2012). An investigation of the learnability of relative clauses by EFL learners. *World Journal of English Language*, 2.

  <a href="http://doi.org/10.5430/wjel.v2n3p29">http://doi.org/10.5430/wjel.v2n3p29</a></a>
- Al-Maani, A., & Al-Haija, L. A. (2019). The acquisition of English relative clauses by university students of English in Jordan. *Jordanian Educational Jorunal*, 4(1), Article 14. http://digitalcommons.aaru.edu.jo/jaes/vol4/iss1/14
- Amornwongpeeti, A., & Pongpairoj, N. (2014). The acquisition of English restrictive and non-restrictive relative clauses by L1 Thai learners. *NIDA Journal of Language and Communication*, 19(21), 1-54.
- Brown, H. D. (2000). *Principles of language learning and teaching* (4<sup>th</sup> ed.). New York: Addison Wesley Longman.
- Chang, Y.-F. (2004). Second language relative clause acquisition: An examination of cross-linguistic influences. (ED491551). ERIC.
- Diessel, H., & Tomasello, M. (2005). A new look at the acquisition of relative clauses.

  Language 81(4), 882-906. <a href="http://doi.org/10.1353/lan.2005.0169">http://doi.org/10.1353/lan.2005.0169</a>
- Flavell, J. H. (1979). Metacognition and cognitive monitoring: A new area of cognitive—developmental inquiry. *American psychologist*, *34*(10), 906.
- Gao, Q. Q. (2014). Chinese EFL learners' acquisition of English relative clauses. *International Journal of English Linguistics*, 4(3), 82.
- Keenen, E.L. & Comrie, B. (1977). Noun phrase accessibility and universal grammar. Linguistic Inquiry, 8, 63-99.
- Khan, S. S., & Al-Namer, L. A. S. (2017). The comprehension of English relative clauses by Arabic-speaking EFL learners. *International Journal of Education*, *9*(1), 92-207.

- Kuno, S. (1974). The position of relative clauses and conjunction. *Linguistic Inquiry*, *5*, 117-136.
- Lin, C. Y., & Chuang, S. Y. (2014). Taiwanese EFL Learners' English Relative Clauses

  Learning. *International Journal of English Linguistics*, 4(4), 99.
- Marefat, H., & Rahmany, R. (2009). Acquisition of English relative clauses by Persian EFL learners. *Journal of Language and Linguistic Studies*, 5(2), 0-48.
- Ping, W. (2022). The analysis of Chinese intermediate students' error in using relative clauses. *encounter*, *5*(3), 73-78.
- Rao, Z. (2006). Understanding Chinese students' use of language learning strategies from cultural and educational perspectives. *Journal of Multilingual and Multicultural Development*, 27(6), 491-508.
- Suh, J.-S. (2000). A difficulty ordering for the learning of English relative clauses. *The Journal of English Grammar 4*(1), 5-22.
- Wang, H. (2009). An exploration of internal factors influencing students' English proficiency.

  National Taichung University of Education Journal: Humanities and Arts, 23(1), 69-81.

  (王珩 [2009]。〈影響學生英語能力之內部因素探討〉,《臺中教育大學學報: 人文藝術類》, 23, 1: 69-81。)
- Wang, Z. (1993). Factors that affect Chinese EFL learner's acquisition. Retrieved from <a href="http://eric.ed.gov/?id=ED363130">http://eric.ed.gov/?id=ED363130</a> on June 30, 2017.
- Yang, Y. (2020, October). A corpus-based analysis of Chinese relative clauses produced by Japanese and Thai learners. In *Proceedings of the 34th Pacific Asia Conference on Language, Information and Computation* (pp. 348-357).

# Appendix

I. Background information
*填答說明: 請逐題打勾單選; 需填文數字部分, 請簡要填寫。
1. 性別:□男生 □女生
2. 年龄:
3. 年級: □一年級 □二年級 □三年級 □四年級 □其他
4. 主修科系:
5. 英語程度:多益成績:□10~215 □220~465 □470~725 □730~855 □
860~990 □無參加過 □其他
II. Sentence comprehension test
根據以下給的句子,判斷每個句子底下給出的陳述是否可以從句子中推斷
出來。如果可以從句子中推斷出來,請打√,如果不能從句子中推斷出
來,請打×。
1. The dog which is sleeping is mine.
I have at least one dog.
2. I really like the plant that grows by your window.
The other plants do not grow by your window.
3. The exporter I contacted told me that the products would arrive in two weeks
I also contacted some other exporters.

4. Pat disliked the ending of the movie, which most reviewers praised.
There was also another ending, and most reviewers hated it.
5. The bakery which you talked about was just shut down.
You did not talk about other bakeries.
6. The villagers cut the tree that an evil spirit lived inside.
There were probably some other trees with an evil spirit as well.
7. The factory the government closed hired illegal employees.
The government also closed some other factories.
8. The band had to fire the drummer, who(m) the police found using drugs last
week.
This drummer was the only drummer in the band.
9. The woman who(m) you used to be in love with just got married to a
billionaire.
You were also in love with other women.
10. This morning Jim visited the school that Amy and he went to.
There were also some other schools that Amy and Jim went to.
11. The shareholders do not like the product you manufacture.
You do not manufacture the other products.
12. The actress, who(m) you might not have heard of, is a YouTube celebrity.
It is possible that you might not have heard of some other
actresses as well.

13. I just found the supermarket which your sister worked at.
If there were other supermarkets, your sister did not work there.
14. The rose that came from your garden was so beautiful.
Apart from this rose, some other roses also came from your
garden.
15. I do not think you fully understand the article she wrote.
There might be some other articles, but she did not write them.
16. The book, which the movie was based on, was little known before the movie
came out.
The movie was based on this book.
17. I know the professor who(m) you are looking for.
You are also looking for the other professors.
18. The thermometer that was wrapped in paper did not work anymore.
If there were other thermometers, they were also wrapped in
paper.
19. The information you're looking for is not available on our database.
There might be other information, and you are looking for it as
well.
20. The institute is forced to end the project, which John has been working on
since he first worked here.
What John has been working on since he first worked here was

this project.
21. The postman who often came here just left his job.
The other postmen also came here often.
22. Apple just released the application that allows its users to upload data from
anywhere.
The other applications do not allow their users to upload data from
anywhere.
23. The grandmother you borrowed money from just called an hour ago.
An hour ago, this grandmother just called.
24. We have been avoiding the woman, who(m) Jane is still angry at.
Jane is angry at this woman.
25. I just ate the cake which was in the fridge.
There might be some other cake outside the fridge.
26. The theory that Sir Isaac Newton proposed marked the beginning of science
If there were other theories, Sir Isaac Newton did not propose
them.
27. The government continued the policy people protested against anyway.
People also protested against the other policies.
28. The dictionary, which has more than 300,000 entries, is the most expensive
of its kind.
This dictionary is probably not the only one with more than

300,000 entries.
29. A policeman fined the driver who was driving too fast.
The other drivers were not driving too fast.
30. The hamster that I kept was called Tyler.
I also kept some other hamsters.
31. A dark forest with dangerous animals lay in the direction Kim was heading
for.
There were other directions, but Kim was not heading those ways.
32. The suspect, who was 26, drove a red car towards the expressway.
What this suspect drove was a red car.
33. The fridge which Jane bought did not fit the space.
Jane also bought the other fridges.
34. My poodle broke the vase that I made.
If there were other vases, I also made them.
35. The earthquake caused the tsunami, which is expected to hit the shore in two
days.
If there are some other tsunamis, they might hit the shore in two
days as well.
36. The thief who(m) the girl saw ran out the back door.
If there were other thieves, the girl did not see them.
37. Rosa clearly did not like the dress that her daughter was wearing.

Her daughter might have some other dresses, but she was not
wearing them.
38. People seemed to hate the minister, who had no previous experience in
politics.
People seemed to hate this inexperienced minister.
39. The storm destroyed the park which the city people loved.
The city people also loved the other parks.
40. The plan that the government intended to carry out was criticized.
The government did not intend to carry out other plans.
41. The band, which Thai people love so much, started out with only three
members.
Thai people love this band so much.
42. She liked the teacher who(m) all of her friends hated.
The other teachers were not hated by all of her friends.
43. The man that Danielle went out with called her again.
Danielle did not go out with other men.
44. The burglar, who(m) no one managed to catch, was arrested this morning.
There was another burglar.